#### Minutes Board of Trustees Meeting University of Central Florida July 20, 2017

Chairman Marcos Marchena called the meeting of the Board of Trustees to order at 1:17 p.m. in the Live Oak Event Center on the UCF Orlando campus.

Chairman Marchena reminded the board that the meeting was covered by the Florida Sunshine Law and that the public and press were invited to attend.

#### **WELCOME**

He welcomed the board members and called on Rick Schell, Associate Corporate Secretary, to call the roll. Schell determined that a quorum was present.

The following board members attended the meeting: Chairman Marcos Marchena, Vice Chair Robert Garvy, Ken Bradley, Clarence Brown, Joseph Conte, Nicholas Larkins, John Lord, Beverly Seay, William Self, John Sprouls, David Walsh, and William Yeargin. Trustee Alex Martins attended via teleconference.

#### PUBLIC COMMENT

There were no requests for public comment.

Marchena welcomed new trustee, John Lord. Marchena reported that Ray Gilley continued to serve as trustee about 14 months beyond the end of his term and after moving out of state. Marchena expressed his appreciation for Gilley's level of commitment on behalf of the university.

#### **MINUTES**

Marchena called for approval of the May 18, 2017, and June 23, 2017, meeting minutes, which were approved.

Marchena called on President John C. Hitt for remarks and introductions.

#### **REMARKS**

Hitt welcomed and congratulated new board member, John Lord, who is a trustee of the Alfred I. duPont Trust and the past chair of the board of directors of the Nemours Foundation. Trustee Lord retired in 2000 from his position with Bank of America after a 32-year banking career to join the duPont Trust. Hitt presented him with a gold Pegasus pin and welcomed him to the board.

#### **INTRODUCTIONS**

Hitt congratulated the following members of the UCF community.

#### A. Students

The Association for Computing Machinery hosted the 41<sup>st</sup> World Finals of the International Collegiate Programming Contest. UCF won the national championship and placed 13th in the world. MIT, Rochester, UC Berkeley, Washington University, Cornell, Virginia Tech, and others came behind. Hitt referred the board to the complete list of rankings included in their meeting materials. He noted that Beverly Seay gave a presentation at the World Finals and also served as a deputy. Hitt thanked Seay for her support at the finals.

#### B. Faculty

In 2002-03, the Board of Trustees funded the trustee chairs initiative to retain and to attract exceptional faculty. There are currently eight UCF faculty members who hold trustee chairs. Three faculty members were selected as the 2017 Trustee Chairs. These chairs have five-year appointments and receive an annual stipend of \$50,000 with the potential for renewal with sustained preeminence.

Sudipta Seal, a professor in the College of Engineering and Computer Science, was the only appointee able to attend the meeting. He joined UCF in 1997 and was recognized as a Pegasus Professor in 2012. He has served as the director of the Advanced Materials Processing Analysis Center and Nanoscience Technology Center since 2009, and he has served as the interim chair of Materials Science and Engineering since 2014.

Judy Simms-Cendan is the director of International Experiences and Associate Professor of Obstetrics and Gynecology at the UCF College of Medicine. Simms-Cendan's leadership in providing healthcare to uninsured migrant farm workers earned her an inaugural award from the U.S. Public Health Service and the Inter-professional Education Collaborative.

Hitt recognized the following members of her team: Robin Kohn, Geraldine Luzincourt, Sven Normann, Erin Onge, Patrick Pabian, Jennifer Tucker, and Tracy Wharton.

Rebekah McCloud, the director of the University of Central Florida Student Development and Enrollment Services TRiO Center, announced that UCF will receive \$3.8 million over five years for three TRiO Upward Bound program grants. McCloud was the primary proposal writer for the TRiO Upward Bound programs that are designed to assist low-income, first-generation high school students by providing a pipeline to post-secondary education.

Jerry Johnson is the co-director of the Institute for the Advancement of Research, Innovation and Practice in Rural Education. A national research report, "Why Rural Matters," was released in March at the National Press Club in Washington D.C. as part of a Congressional briefing. Featured prominently on the cover of the report is Johnson's UCF affiliation.

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C. Staff

University Marketing recently won two notable awards. Marketing won its first national American Advertising Award, and *Pegasus Magazine* won for its overall design and layout.

News and Information also won top honors at the Orlando chapter of Florida Public Relations Association annual awards. Competing against Central Florida industry and organizations, the team won the top overall award for a communications campaign to grow UCF's research reputation.

D. Employee of the Month

The Employee of the Month for May was Elba Miscannon, an executive administrative assistant to the director of the Learning Support Center of Student Development and Enrollment Services. She has been with UCF for 17 years.

The Employee of the Month for June was Jerry Archambault, an accountant for Activity and Service Fees of Student Development and Enrollment Services. He has been with UCF for 15 years.

#### **REPORTS**

Marchena introduced Scott Cole, Vice President and General Counsel, who gave an informational report on the following item.

• INFO-1 Public Records and Sunshine Laws Update

#### ADVANCEMENT COMMITTEE REPORT

Clarence Brown, Chair of the Advancement Committee, reported the highlights from the committee meeting held earlier in the day.

Brown reported that updates relating to INFO-2 were presented by the following individuals.

- Dan Holsenbeck, Senior Vice President for University Relations, introduced Gregory A. Schuckman, Assistant Vice President for University Relations and Director for Federal Relations and Research Advancement, who is the UCF lobbyist in Washington, D.C. Schuckman provided an update on federal funding.
- Mike Morsberger, Vice President for Advancement and CEO of the UCF Foundation, provided an update on the IGNITE campaign.

#### COMPENSATION AND LABOR COMMITTEE REPORT

John Sprouls, Chair of the Compensation and Labor Committee, reported the highlights from the committee meeting held earlier in the day.

- Sprouls reported that the committee discussed two items on the consent agenda.
  - CLC-1 Amendments to University Regulations, UCF-3.035 University Closings Due to Emergency Conditions and UCF-3.040 Benefits and Hours of Work. Sprouls stated that the amendments contained nothing material. The committee approved the amendments to the regulations.
  - CLC-2 Performance Unit Plan Incentive Measures and Goals. Paul McConnell, McConnell and Company, a compensation specialist, presented a draft of the 2017-18 Performance Unit Plan. An amendment was accepted to increase the weight of "Excellence" to 40 percent and to reduce the weight of "Scale" and "Impact" to 30 percent.
- Maureen Binder, Associate Vice President and Chief Human Resources Officer, reported on additional compensation for exempt personnel (INFO-1).
- Sprouls noted that a Presidential performance review takes place every year. Every third year an external consultant performs the review and years in between the UCF Human Resources Department performs the review. He called attention to the information item (INFO-2) that consists of the questions Binder will ask the trustees for the review.

#### EDUCATIONAL PROGRAMS COMMITTEE REPORT

Robert Garvy, Chair of the Educational Programs Committee, reported the highlights from the committee meeting held earlier in the day.

- A. Dale Whittaker, Provost and Executive Vice President, reported on the Conferral of Degrees (EPC-1) that was unanimously approved. He indicated that a total of 3,699 baccalaureate, master's, and doctoral degrees will be conferred at the Summer 2017 commencement ceremonies on August 5, 2017, as follows:
  - 3,051 baccalaureate degrees
    - 524 master's degrees

<u>124</u> doctoral and specialist degrees

3,699 Total

- Elizabeth Klonoff, Vice President for Research and Dean, reported on the New Degree Program-Master of Athletic Training (EPC-2) that was unanimously approved.
- Whittaker reported on the 2017-18 Tenure with Hire (EPC-3). Thirteen faculty members were unanimously approved.
- Paige Borden, Associate Provost for Academic Program Quality and Associate Vice President for Institutional Knowledge Management, reported on Performance Based Funding–Metric 10 Recommendation (EPC-4) that was unanimously approved.
- Youndy Cook, Deputy General Counsel, reported on Amendment to Chapter 5-University Regulations: UCF-5.006 (Student Rights and Responsibilities); UCF-5.007 (Office of Student Conduct; Scope; Definitions; Student Conduct Records; Special Student Panels); UCF-5.008 (Rules of Conduct); UCF- 5.009 (Student Conduct Review Process; Sanctions); UCF-5.010 (Student Conduct Appeals); UCF-5.011 (Scope; Authority; Principles of Group Responsibility; Violations of Law and Rule of Conduct Violations; Definitions; Student Organizational Conduct Records); UCF-.012 (Organizational Rules of Conduct); UCF-5.013 (Organizational Conduct Review Process; Sanctions; Appeals); UCF-5.015 (Student Academic Behavior Standards); UCF-5.016

(Student Academic Appeals); UCF-5.017 (Appeals of Graduate Program Actions or Decisions) (EPC-5). She noted the changes to various sections of the chapter. The amendment to Chapter 5 was unanimously approved.

- Borden reported on the UCF 2017 Textbook and Instructional Materials Affordability Annual Report (EPC-6), which was unanimously approved.
- Whittaker introduced Gregory Welch, Assistant Professor and Florida Hospital Endowed Chair in Healthcare Simulation in the College of Nursing, who reported on Healthcare Simulation (INFO-1), virtual patients, and experiential training. Welch studied Electrical Technology at Purdue University and Computer Science at UNC Chapel Hill.
- Whittaker reported on Mythbuster-Digital Learning (INFO-2), providing an update on access, quality, and the success of digital learning.

#### FINANCE AND FACILITIES COMMITTEE REPORT

Alex Martins, Chair of the Finance and Facilities Committee, via teleconference reported the highlights from the committee meeting held on June 14, 2017, and earlier in the day.

- Martins reported that at the June 14, 2017, meeting the committee unanimously approved the following items that are on the consent agenda.
  - o 2017-18 College of Medicine Faculty Practice Plan Budget (FF-13).
  - o 2017-18 College of Medicine Self-insurance Program Budget (FF-14).
  - Amendments to University Regulation UCF-4.0293 Use of University Facilities (FF-15) an update to the procedures for using university facilities and to articulate more clearly limitations on outside individuals and entities who wish to use university facilities.
- Martins noted that the following information items were presented at the June 14, 2017, committee meeting.
  - Direct Support Organizations' 2016-17 Third-Quarter Financial Reports (INFO-1) for the period ended March 31, 2017, was provided as an information item.
  - UCF Investments Quarterly Report Ended March 31, 2017, Including Annual Review (INFO-2).
- Martins stated that in response to public comments made at the May 18, 2017, Board of Trustees meeting, the committee was provided background information and an update on the housekeeping operations staff and schedule changes, and that the committee accepted the report.

Martins presented the following items for board approval.

- FF-1 Campus Bookstore Contract—A motion was unanimously passed approving a 10year bookstore agreement with Barnes and Noble.
- FF-2 Release of Unrestricted UCF Stadium Corporation Revenues—A motion was unanimously passed approving the release of revenues above budgeted obligations from the UCF Stadium Corporation to the UCF Athletics Association for 2017-18.

- FF-3 2017-18 Direct Support Organizations' Budgets—A motion was unanimously passed approving the 2017-18 operating budgets for the following DSOs: UCF Athletics Association, UCF Convocation Corporation, UCF Finance Corporation, UCF Foundation, UCF Limbitless Solutions, UCF Research Foundation, and UCF Stadium Corporation.
- FF-4 Five-year Capital Improvement Plan—A motion was unanimously passed approving the capital improvement plan for 2018-19 through 2022-23, with the understanding that several line items could have name changes.
- FF-5 Finance and Facilities Committee Charter Review—A motion was unanimously passed approving the updated Finance and Facilities Committee charter.
- FF-6 2017-18 Updated University Operating Budget—A motion was unanimously passed approving the revised 2017-18 operating budget.
- FF-7 Refinancing of UCF Finance Corporation Series 2007 Bonds—A motion was unanimously passed approving the UCF Finance Corporation's request to refinance the outstanding Series 2007 bonds.
- FF-8 Campus Concessions Food Services Management Agreement—A motion was passed 12 for and with John Sprouls recusing himself due to a conflict of interest approving a 10-year negotiated agreement to provide concessions at Spectrum Stadium, CFE Arena, and other UCF Athletics venues.
- FF-9 Amendment to Sublease Agreement between UCF and Pegasus Hotel LLC—A motion was unanimously passed approving the amendment to the sublease agreement with Pegasus Hotel LLC for an on-campus hotel and conference center.
- FF-10 Financing of Solar Farm—This item was tabled until such time that university staff completes further investigation into the use of the land, educate the trustees in greater detail about the project, and bring recommendations from an energy consultant back to the committee.
- FF-11 Baseball Stadium Expansion—A motion was unanimously passed approving UCF to fund internally up to \$3.6 million in construction costs to expand and renovate the baseball stadium.
- FF-12 Amendment to the Revised and Restated Development Agreement with Osceola County Including Appendix B Lease Agreement—A motion was unanimously passed approving the amended and restated development agreement and lease for the advanced manufacturing research center in Osceola County.

#### NOMINATING AND GOVERNANCE COMMITTEE REPORT

William Yeargin, Chair of the Nominating and Governance Committee, reported that on May 9, 2017, the Nominating and Governance Committee unanimously recommended that Marcos Marchena be reelected chairman and that Robert Garvy be reelected vice chair, both for terms of two years. He asked for nominations from the floor. There being no other nominations, the election was held.

- NG-1 Chair and Vice Chair Elections, UCF Board of Trustees—A motion was unanimously passed approving the recommendations of the Nominating and Governance Committee to elect Trustee Marcos Marchena for an additional twoyear term as chairman of the UCF Board of Trustees, and elect Trustee Robert Garvy for an additional two-year term as vice chair of the UCF Board of Trustees.
- Yeargin reported that a recommendation to confer an honorary doctorate of public service degree on Leonard Williams was on the consent agenda as NG-2.

Marchena expressed his appreciation for the confidence shown and stated he looked forward to working with everyone in the future.

Marchena stated that on-line learning is one of the ways that we are going to be able to continue to have impact, and he requested that the university dedicate some funding to expand distance learning with a three-year goal to increase on-line learning from our current 42 percent to 50 percent by the year 2020.

#### STRATEGIC PLANNING COMMITTEE REPORT

Clarence Brown, Chair, noted the report that was given to the Strategic Planning Committee. It detailed the plan to infuse the strategic plan into the university culture.

#### CONSENT AGENDA

A motion was made to accept the consent agenda, and members of the board unanimously approved the following actions.

- CL-1 Amendments to University Regulations UCF-3.035 University Closings Due to Emergency Conditions and UCF-3.040 Benefits and Hours of Work—Approval of the amendments to University Regulations UCF-3.035 and UCF-3.040
- CL-2 Performance Unit Plan Incentive Measures and Goals— Approval of the 2018-20 performance incentive measures and goals for the president and senior officials
- EP-1 Conferral of Degrees—Approval of degrees at the Summer 2017 commencement ceremonies

- EP-2 New Degree Program-Master of Athletic Training—Approval of new degree program–Masters of Athletic Training
- EP-3 2017-18 Tenure with Hire—Approval of tenure with hire
- EP-4 Performance-based Funding-Metric 10 Selection—Approval of three replacement options
- EP-5 Amendment to Chapter 5 University Regulations—Approval of amendment to university regulations relating to student conduct rules, student organization conduct rules, and review proceedings for violations of the conduct rules by students or student organizations, student academic behavior standards and student academic appeals. The Chapter 5 regulations to be amended are:
  - UCF-5.006 Student Rights and Responsibilities
  - UCF-5.007 Office of Student Conduct; Scope; Definitions; Student Conduct Records; Special Student Panels
  - UCF-5.008 Rules of Conduct
  - UCF-5.009 Student Conduct Review Process; Sanctions
  - UCF-5.010 Student Conduct Appeals
  - UCF-5.011 Scope; Authority; Principles of Group Responsibility; Violations of Law and Rule of Conduct Violations; Definitions; Student Organizational Conduct Records
  - UCF-5.012 Organizational Rules of Conduct
  - UCF-5.013 Organizational Conduct Review Process; Sanctions; Appeals
  - UCF-5.015 Student Academic Behavior Standards
  - UCF-5.016 Student Academic Appeals
  - UCF-5.017 Appeals of Graduate Program Actions or Decisions
- EP-6 UCF 2017 Textbook and Instructional Materials Affordability Annual Report—Approval of the Textbook and Instructional Materials Affordability Annual Report
- FF-13 2017-18 College of Medicine Faculty Practice Plan Budget—Approval of the 2017-18 College of Medicine Faculty Practice Plan budget presented by the College of Medicine
- FF-14 2017-18 College of Medicine Self-insurance Program Budget—Approval of approval of the 2017-18 Self-insurance Program budget presented by the College of Medicine
- FF-15 Amendments to University Regulation UCF-4.0293 Use of University Facilities—Approval of amendments to existing university regulation UCF-4.0293
- NG-2 Honorary Doctor in Public Service Degree for Leonard Williams—Approval of an Honorary Doctor of Public Service Degree for Leonard Williams

#### <u>NEW BUSINESS</u>

Marchena presented the following informational item to the board. He indicated that he expects to make some adjustments to the assignments to the committees.

INFO-3 Board Committee and Direct Support Organization Assignments ٠

Bradley reported that the university will host the American Heart Walk in September, and the organizers anticipate over 20,000 people will participate.

#### ANNOUNCEMENTS AND ADJOURNMENT

Marchena announced the following upcoming meetings:

Commencement
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August 5, 2017 (CFE Arena) Class of 2021 White Coat Ceremony August 7, 2017 (Pegasus Ballroom) UCF Football Kickoff Luncheon August 18, 2017 (CFE Arena) Please let Rick Schell know if you would like to attend. Board of Governors meeting August 30-31, 2017 (University of Florida) Board of Trustees teleconference September 27, 2017 meeting (President's Boardroom) Board of Governors committee meetings October 3, 2017 (Florida Gulf Coast University) Board of Trustees meeting October 26, 2017 (FAIRWINDS Alumni Center) Board of Trustees retreat October 27, 2017 (FAIRWINDS Alumni Center) **Board of Governors Trustee Summit** 

November 8, 2017 (UCF Student Union) Board of Governors meeting

November 8-9, 2017 (FAIRWINDS Alumni Center)

Marchena adjourned the board meeting at 2:46 p.m.

Respectfully submitted: \_\_\_\_

Date: \_\_\_\_\_

John C. Hitt Corporate Secretary

	IM OF VOTING CONFLICT
LAST NAME-FIRST NAME-MIDDLE NAME SPROULS, JUHN R MAILING ADDRESS 622P BLAKEFERD DR	NAME OF BOARD, COUNCIL, COMMISSION, AUTHORITY, OR COMMITTEE UCE BOALD OF TRUSTEES NAME OF STATE AGENCY
CITY WINDERMORE, FL 3478L ORAMLE DATE ON WHICH VOTE OCCURRED JULY 20, 2017	MY POSITION IS: LECTIVE

#### WHO MUST FILE FORM 8A

This form is for use by any person serving at the State level of government on an appointed or elected board, council, commission, authority, committee, or as a member of the Legislature. It applies to members of advisory and non-advisory bodies who are presented with a voting conflict of interest under Section 112.3143, Florida Statutes.

Your responsibilities under the law when faced with voting on a measure in which you have a conflict of interest will vary greatly depending on whether you hold an elective or appointive position. For this reason, please pay close attention to the instructions on this form before completing and filing the form.

#### **INSTRUCTIONS FOR COMPLIANCE WITH SECTION 112.3143, FLORIDA STATUTES**

#### ELECTED OFFICERS:

As a person holding elective state office, you may not vote on a matter that you know would inure to your special private gain or loss. However, you may vote on other matters, including measures that would inure to the special private gain or loss of a principal by whom you are retained (including the parent or subsidiary or sibling organization of a principal by which you are retained); to the special private gain or loss of a relative; or to the special private gain or loss of a business associate. If you vote on such a measure or if you abstain from voting on a measure that would affect you, you must make every reasonable effort to disclose the nature of your interest as a public record in a memorandum filed with the person responsible for recording the minutes of the meeting, who shall incorporate the memorandum in the minutes. If it is not possible for you to file a memorandum before the vote, the memorandum must be filed with the person responsible for recording the minutes of the meeting no later than 15 days after the vote.

For purposes of this law, a "relative" includes only your father, mother, son, daughter, husband, wife, brother, sister, father-in-law, motherin-law, son-in-law, and daughter-in-law. A "business associate" means any person or entity engaged in or carrying on a business enterprise with you as a partner, joint venturer, coowner of property, or corporate shareholder (where the shares of the corporation are not listed on any national or regional stock exchange).

A member of the Legislature may satisfy the disclosure requirements of this section by filing a disclosure form created pursuant to the rules of the member's respective house if the member discloses the information required by this subsection, or by use of Form 8A,

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#### APPOINTED OFFICERS:

As a person holding appointive state office, you are subject to the abstention and disclosure requirements stated above for Elected Officers. You also must disclose the nature of the conflict before voting or before making any attempt to influence the decision by oral or written communication, whether made by you or at your direction.

For purposes of this law, a "relative" includes only your father, mother, son, daughter, husband, wife, brother, sister, father-in-law, motherin-law, son-in-law, and daughter-in-law. A "business associate" means any person or entity engaged in or carrying on a business enterprise with you as a partner, joint venturer, coowner of property, or corporate shareholder (where the shares of the corporation are not listed on any national or regional stock exchange).

IF YOU INTEND TO MAKE ANY ATTEMPT TO INFLUENCE THE DECISION PRIOR TO THE MEETING AT WHICH THE VOTE WILL BE TAKEN:

- You must complete and file this form (before making any attempt to influence the decision) with the person responsible for recording the minutes of the meeting, who will incorporate the form in the minutes.
- A copy of the form must be provided immediately to the other members of the agency.
- The form must be read publicly at the next meeting after the form is filed.
- IF YOU MAKE NO ATTEMPT TO INFLUENCE THE DECISION EXCEPT BY DISCUSSION OR VOTE AT THE MEETING:
- · You must disclose orally the nature of your conflict in the measure before participating.
- You must complete the form and file it within 15 days after the vote occurs with the person responsible for recording the minutes of the meeting, who must incorporate the form in the minutes. A copy of the form must be provided immediately to the other members of the agency, and the form must be read publicly at the next meeting after the form is filed.

DISCLOSURE OF STATE OFFICER'S INTEREST SPROULS hereby disclose that on \_\_\_\_\_\_ 700 20 R , <sub>20</sub> 17 JONN A measure came or will come before my agency which (check one or more) inured to my special private gain or loss; inured to the special gain or loss of my business associate, inured to the special gain or loss of my relative, inured to the special gain or loss of COMCAST INC. PALENE COMPANY OF MY EMPLOYER X whom I am retained; or inured to the special gain or loss of . which is the parent, subsidiary, or sibling organization of a principal which has retained me. (b) The measure before my agency and the nature of my conflicting interest in the measure is as follows: NOW 10. YEAR AGREEMENT WAS NEGOTIATED WITH SPECTRA FOR CONCESSIONS ACROSS ALL UCF ATHLETTE VENUES. SPECTRA IS A WHOLLY-OWNED SUBSIDIARY DE COMCAST INC. COMCAST ALSO WHOLLY OWINS NBCUMNERSAL, MY EMPLOYER. THEREFORE, I RECUSED MYSELF FROM VOTING ON THE APPROVAL OF THE CONTRACT WHEN IT BEFORE THE BOARD. COME If disclosure of specific information would violate confidentiality or privilege pursuant to law or rules governing attorneys, a public officer, who is also an attorney, may comply with the disclosure requirements of this section by disclosing the nature of the interest in such a way as to provide the public with notice of the conflict. NON DU. 144 Signature Date Filed NOTICE: UNDER PROVISIONS OF FLORIDA STATUTES §112.317, A FAILURE TO MAKE ANY REQUIRED DISCLOSURE ONSTITUTES GROUNDS FOR AND MAY BE PUNISHED BY ONE OR MORE OF THE FOLLOWING: IMPEACHMENT, ŔEMOVAL OR SUSPENSION FROM OFFICE OR EMPLOYMENT, DEMOTION, REDUCTION IN SALARY, REPRIMAND, OR A CIVIL PENALTY NOT TO EXCEED \$10,000.



# Fixed Capital Outlay Budget Request

2018 - 2019



UNIVERSITY OF CENTRAL FLORIDA

#### **Office of the President**

P.O. Box 160002 Orlando, FL 32816-0002

August 1, 2017

Mr. Tim Jones Chief Financial Officer Board of Governors State University System of Florida 325 West Gaines Street, Suite 1614 Tallahassee, Florida 32399-0400

#### Dear Mr. Jones:

In accordance with your request dated April 28, 2017, to the University Presidents, enclosed is the University of Central Florida's (UCF) Five-Year Fixed Capital Improvement Plan for the years 2018-23. This list revises UCF's priorities of previous years in accordance with the funding allocated by the Board of Governors (BOG), and it also includes additional facilities consistent with recent program developments and needs of the university. Utilization of existing space was considered in the prioritization of UCF's projects. PECO funding to meet critical maintenance needs and improve the condition of existing space and campus infrastructure is, as always, UCF's top priority. Our other top priorities (with the order reversed from 2017-18) are Research Building I and the continued renovation of Engineering Building I. All projects have been prioritized in accordance with the needs of the university, with research space and renovations of existing buildings of high priority, as they are essential to meeting the goals of our Collective Impact Strategic Plan and success on our path to preeminence.

The following is a summary of changes:

- Project costs have been increased due to the inflation in construction costs.
- College of Nursing and Allied Health has been added to the three year window.
- Interdisciplinary Research and Incubator Facility has been renamed Research Building I. Incubator research has been removed from the program; therefore UCF has elected to change the name, which in turn changes the name of the other research buildings.
- Research Buildings I and II have been renamed Research Building II and III.
- Interdisciplinary Research Building II has been renamed Research Building IV.
- Arts Complex II-Performance was split into two phases, with the first phase now named Arts Complex Phase I-Performance.
- All projects referencing Lake Nona have been changed to Health Sciences Campus.
- UCF is committed to funding fifty percent of Research Building I, resulting in a change in our request for PECO Projects and Request From Other State Sources to half the amount reflected in 2017-18.

The UCF Five-Year Fixed Capital Improvement Plan was reviewed and approved by the University Board of Trustees on July 20, 2017.

Please have members of your staff contact Lee Kernek at (407) 823-3801 or Gina Seabrook at (407) 823-5894 if they have questions or need additional information.

ordially yours, Jøhn C. Hitt President

Attachments

cc: Mrs. Lee Kernek Mr. William F. Merck II Mr. William Martin Mrs. Gina Seabrook

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Project Summary of Agency CIP (CIP-2)

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### STATE UNIVERSITY SYSTEM Five-Year Capital Improvement Plan (CIP-2) and Legislative Budget Request Fiscal Years 2018-19 through 2022-23 CIP-2, Summary of Projects

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University of Central Florida

#### PECO-ELIGIBLE PROJECT REQUESTS

	2018-19	2019-20	2020-21	2021-22	2022-23	Academic or Other Programs to Benefit	Net Assignable Square Feet	Gross Square Feet (GSF)	Project Cost	Project Cost Per GSF (Proj. Cost/ GSF)	Educational Approved Plant Survey Law - Include Recommended reference Date/Rec No.
No Project Title	Year 1	Year 2	Year 3	Year 4	Year 5	from Projects	(NASF)	(GSF)	70000000	#DIV/0!	June-16
1 UTILITIES, INFRASTRUCTURE, CAPITAL RENEWAL AND ROOFS (P,C)	\$14,000,000		\$14,000,000		\$14,000,000	Total Campus	N/A 31559	46704	23639773	#D10/01 506.16	June-16
2 RESEARCH BUILDING I (P,C,E)	\$3,353,680		\$3,021,334			Engrg-Arts Sciences		130885	22799679	174.20	February-11 HB 5001 Section
3 ENGINEERING BUILDING I RENOVATION (C,E)	\$17,745,473					Clge of Engineering	118186	130885	83216700	563.42	June-16
4 COLLEGE OF NURSING AND ALLIED HEALTH (P,C,E) HEALTH SCIENCES CAMPUS	\$8,321,670		\$8,321,670			Cige of Nursing	99000			166.53	February-11 HB 5001 Section
5 MATHEMATICAL SCIENCES BUILDING REMODELING AND RENOVATION (C,E)	\$11,970,963	\$890,181				CAS-CHPA	100368	106523	17739039	280.24	June-16
6 TREVOR COLBOURN HALL AND COLBOURN DEMOLITION (P,C,E)	\$38,000,000					CAS-CHPA	90515	135600	38000000		June-16
7 JOHN C. HITT LIBRARY RENOVATION PHASE II (P,C,E)	\$2,411,142	\$34,735,896	\$4,121,208			Total Campus	144097	228387	42978312	188.18	
8 ARTS COMPLEX PHASE I (PERFORMANCE) (P,C,E)	\$3,060,000	\$27,172,800	\$3,060,000			CAS-CHPA	54401	72553	33292800	458.88	June-16
9 CHEMISTRY RENOVATION (P,C,E)		\$700,241	\$12,731,680	\$700,241		Clge Arts Sciences	43265	49073	14132162	287.98	June-16
10 FLORIDA SOLAR ENERGY CENTER RENOVATION (P,C,E)		\$11,322,000				Clge of Engineering	37777	56666	11322000	199.80	1
11 INFRASTRUCTURE CHILLED WATER REPLACEMENT (P,C)		\$5,100,000	\$10,200,000	\$7,401,120		Total Campus	N/A N		22701120	#DIV/0!	June-16
12 RESEARCH BUILDING II (P,C,E)			\$6,859,773	\$54,878,187	\$6,859,773	Clge of Engineering	85019	126258	68597733	543.31	
13 VISUAL ARTS RENOVATION AND EXPANSION (P,C,E)			\$3,891,362	\$31,130,899	\$3,891,362	Clge Arts Sciences	43000	60850	38913623	639.50	June-16
14 WASTEWATER, WATER, NATURAL GAS REPLACEMENT (P,C)			\$7,140,000	\$10,200,000	\$12,780,600	Total Campus	N		30120600	#DIV/0!	June-16
15 MILLICAN HALL RENOVATION (P,C,E)			\$1,472,991	\$11,783,935	\$1,472,991	Total Campus	88586	87752	14729917	167.86	June-16
16 BUSINESS ADMINISTRATION RENOVATION (P,C,E)			\$640,779	\$12,291,313	\$640,779	Total Campus	119074	121074	13572871	112.10	June-16
17 FACILITIES & SAFETY COMPLEX RENOVATION (P,C,E)			\$6,287,805			Total Campus	17400	26100	6287805	240.91	June-16
18 RESEARCH BUILDING III (P.C.E)			\$7,483,389		\$7,483,389	Clge of Engineering	91929	136623	74833891	547.74	
19 MULTI-PURPOSE RESEARCH AND EDUCATION BUILDING (P,C,E)			\$3,604,940		\$3,604,940	Total Campus	51817	77726	36049431	463.80	June-16
20 UCF DOWNTOWN CAMPUS BUILDING II (P,C,E)			87991555			Clge Arts Sciences	150325	222000	87991555	396.36	
20 OCF DOWNTOWN CAMPUS BUILDING II (P,C,E) TOTAL	\$98,862,928	\$178,935,548			\$50,733,834	-					

#### CITE PROJECT REQUESTS

IF PROJECT REQU	2010				<u> </u>		Academic or	Net	Gross		Project Cost	Committee
Priority	Destant Title	Year 1	Year 2	Year 3	Year 4	Year 5	Other Programs to Benefit from Projects	Assignable Square Feet (NASF)	Square Feet (GSF)	Project Cost	Per GSF (Proj. Cost/ GSF)	Approval Date
No 1 JOHN C. HITT LIBF	Project Title RARY RENOVATION PHASE II (P,C,E)	41268246		16010		10010	Total Campus Total Campus	144097 8787	226506 12901	42978312 6000000	\$ 190 \$ 465	5/17/12 11/1/12
2 CREATIVE SCHOO	DL FOR CHILDREN (P,C,E) T <b>OTAL</b>	41268246	6000000 6000000	0	(	0 0	Total Campus	0/0/	12001	0000000	¢ ioo	

rity	OTHER STATE SOURCES						Academic or Other Programs to Benefit	Assi Squa	Net ignable are Feet	Gross Square Feet	Project Cost	Project Cost Per GSF (Proj. Cost/
0	Project	Year 1	Year 2	Year 3	Year 4	Year 5	from Projects	(N	ASF) 31560	(GSF) 46704	23639773	GSF) 506.16
1 RESEARCH BL	UILDING I (P,C,E)	\$3,353,680	\$17,264,759	\$3,021,334			Engrg-Arts Sciences		38500	57500	27540000	500.1 5 479
2 ARA RESEARC	CH BUILDING (P,C,E)	27540000					Engrg-Arts Sciences	N/A	36500 N/A		2153996	, #DIV/0!
3 CAMPUS ENT	RYWAYS PHASE I (P,C,E)	2153996					Total Campus	N/A N/A	N/A		5015978	#DIV/0!
4 CAMPUS ENTE	RYWAYS PHASE II (P,C,E)		5015978				Total Campus	N/A	11650	16210	8768771	
5 WELCOME CE	ENTER EXPANSION (P,C,E)		8768771		4505007		Total Campus		33450	48840	26008411	
6 CIVIL AND ENV	VIRONMENTAL ENGINEERING (P,C,E)		1535637	22937137	1535637		Cige of Engrg		56903	64619	9165322	
7 HOWARD PHIL	LLIPS HALL RENOVATION (P,C,E)		9165322				Total Campus		103194	116607	10189800	
	SCIENCES RENOVATION (P,C,E)		10189800				Clge of Sciences		19014	28520	7253771	-
9 FERRELL CON	MMONS (E AND G SPACE) RENOVATION (P,C,E)		7253771				Total Campus		1703	2593	2010000	
10 TRANSGENIC	ANIMAL FACILITY (P,C)		2010000				Cige of Sciences	N/A	1703 N/a		13219200	, //3 #DIV/0!
11 CAMERA ACC	ESS CONTROL (P,C)		13219200		00044470	0055500	Total Campus CAS-CHPA	N/A	54401	72553	38555220	
12 ARTS COMPLE	EX PHASE II (PERFORMANCE) (P,C,E)			3855522	30844176	3855522			43857	65666	29394773	-
	BUILDING III (P,C,E)			3052049	23290675	3052049	Total Campus Total Campus		10000	15000	7630122	
14 FACILITIES AN	ND SAFETY BUILDING AT HEALTH SCIENCES CAMPUS (P,C,E)			7630122	000000.40	0004000			46675	59160	29248802	
15 RECYCLING C	CENTER (P,C)			2924880	23399042	2924880	Total Campus Total Campus		40675	60396	28746915	• •••
16 HUMANITIES A	AND FINE ARTS II (P,C,E)			3525566	21695783	3525566			40024 45700	66150	30520489	•
17 SOCIAL SCIEN	NCES FACILITY (P,C,E)			3052049	24416391	3052049	Total Campus		45700 14500	21750	12716870	•
18 UCF HEALTH	EXPANSION AND WELLNESS CENTER (P,C,E)			1271687	10173496	1271687	Cige of Medicine		17544	26316	6358435	-
19 COASTAL BIO	DLOGY STATION (P,C,E)			6358435			Clge of Sciences		17544	222000	87991555	₽ 242 Б 396
20 UCF DOWNTC	DWN CAMPUS BUILDING II (P,C,E)			87991555	0704073		Clge Arts Sciences		6570	222000 9855	3781674	•
21 TECHNOLOGY	Y COMMONS II RENOVATION (P,C,E)				3781674		Total Campus		0070	9000	5761074	, 30

June-16

				4091598		Clge Arts Sciences	16998
22 COLLEGE OF SCIENCES BUILDING RENOVATION (P,C,E)				3014325	23412234	Clge of Engr	52425
23 SIMULATION AND TRAINING BUILDING (P,C,E)						Clge of Business	28091
24 BUSINESS ADMINISTRATION III BUILDING (P,C,E)				2015023	15650667	•	
25 EDUCATION BUILDING II (P,C,E)				2428390	18361845	Clge Education	33620
26 BAND BUILDING II INFRASTRUCTURE (P,C)				578675	3561078	Total Campus	9587
27 ARTS COMPLEX III (P.C.E)				1889327	13995013	Total Campus	27800
28 RESEARCH BUILDING IV (P,C,E)				2927203	25291037	Engrg-Arts Sciences	38550
29 THEATRE BUILDING RENOVATION (P, C,E)					4338335	Clge Arts Sciences	22064
30 SUSTAINABILITY CENTER (P,C,E)					6358435	Total Campus	8800
31 WET TEACHING LAB AND EXPANDED STEM FACILITY (P,C,E)					16143188	Total Campus	164500
32 UTILITY INFRASTRUCTURE AND SITE WORK CLINICAL FACILITIES HEALTH SCIENCES CAMPUS (P,C)					13230632	Total Campus	N/A
TOTAL 330476	76	74423238	145620336	156081415	158024217		

### REQUESTS FROM NON-STATE SOURCES, INCLUDING DEBT

TS FROM NON-STATE SOURCES, INCLUDING DEBT	Year 1	Year 2	Year 3	Year 4	Year 5	Academic or Other Programs to Benefit from Projects	Assi Squa	Net gnable ire Feet ASF)	Gross Square Feet (GSF)	Project Cost	Project Cost Per GSF (Proj. Cost/ GSF)	Expected Source of Funding (if known)	Master Pla Approval Date
DOWNTOWN WELCOME CENTER (P,C,E)	3060000					Total Campus	\		····	3060000	#DIV/0!	PRIVATE	Noven
UCF SOLAR FARM (P,C,E)	15300000					Total Campus	N/A	N/A	4	15300000	#DIV/0!	AUXILIARY	
INSTITUTE FOR HOSPITALITY IN HEALTHCARE (P,C,E) HEALTH SCIENCES CAMPUS	15300000					Total Campus		24000	36000	15,300,000	\$ 42	5 PRIVATE/GRANT	Nover
UCF DOWNTOWN CAMPUS GARAGE II (P,C,E)	16983000					Total Campus	١	N/A	200000	16983000		5 BONDS	Nover
SPECIAL PURPOSE HOUSING AND PARKING GARAGE (P,C,E)	30569400					Total Campus	1	N/A	168000	30569400	\$ 182	2 BONDS	Nove
	9782208					Total Campus		42857	60000	9782208	\$ 16	BONDS	Nove
SPECIAL PURPOSE HOUSING II (P,C,E)	20787192					Total Campus	1	N/A	168000	20787192	\$ 124	4 BONDS	Nove
PARKING DECKS (P,C,E)	61138800					Total Campus	-	107142	150000	61138800	\$ 40	BONDS	Nove
GRADUATE HOUSING (P,C,E)	61138800					Total Campus		160000	224000	61138800	•	3 BONDS	Nove
STUDENT HOUSING (P,C,E)	8559432					Total Campus	1	N/A	60000	8559432	*	3 BONDS	Nove
PARTNERSHIP GARAGE (P,C,E)						Athletics		N/A	9192	3396600		) PRIVATE	Nove
BASEBALL STADIUM EXPANSION PHASE II (P,C,E)	3396600					Athletics	1	6522	9783	1850000	<b>T</b>	9 PRIVATE	Nove
GARVY CENTER FOR STUDENT-ATHLETE NUTRITION	1850000					Athletics		5000	7000	1132200	÷	2 PRIVATE	Nove
BASEBALL CLUBHOUSE EXPANSION AND RENOVATION (P,C,E)	1132200					Athletics		5000	45000	16685798	+	1 PRIVATE	Nov
FOOTBALL BUILDING (P,C,E)	16685798					Athletics			40000	2000000	#DIV/0!	PRIVATE	
GOLF TRAINING FACILITY (P,C,E)	2000000						N/A	N/A	^	8823000	#DIV/0!	PRIVATE	
SPECTRUM STADIUM RUST REMEDIATION (P,C,E)	8823000					Total Campus	N/A N/A	N//	-	2800000	#DIV/01	PRIVATE	
VENUE HVAC (P,C)	2800000					Total Campus	N/A N/A	N/A	-	800000	#DIV/0!	PRIVATE	
VENUE EXPANSION AND RENOVATION (P,C)	8000000					Total Campus	N/A	IN/A	-	5661000		4 PRIVATE	Nov
PARKING DECK (P,C,E)	5661000					Total Campus		100010	168000		•	5 PRIVATE	Nov
MULTI-PURPOSE MEDICAL RESEARCH AND INCUBATOR FACILITY (P,C,E)	139635343					Clge of Medicine		132018	198027	139635343	•	6 PRIVATE	Nov
OUTPATIENT CENTER (P,C,E) HEALTH SCIENCES CAMPUS	91708200					Total Campus		78833	119750	91708200	•		Nov
CAMPUS ENTRYWAYS PHASE I (P,C,E)	2153996					Total Campus	N/A	N//	•	2153996	#DIV/0!	AUXILIARY	Nov
CREATIVE SCHOOL FOR CHILDREN (P,C,E)		600000				Total Campus		9887	14831	600000	<b>T</b>	5 AUXILIARY	יטא Noי
CAMPUS ENTRYWAYS PHASE II (P,C,E)		5015978				Total Campus	N/A	N//	-	5015978	#DIV/0!	AUXILIARY	
ROSEN EDUCATIONAL FACILITY (P,C,E)		17225000				Clge of Hospitality		34666	52000	17225000	+	1 PRIVATE	Nov
CIVIL AND ENVIRONMENTAL ENGINEERING (P,C,E)		1535637	22937137	1535637		Clge of Engrg		33450	48940	26008411	+	1 AUXILIARY	Nov
HEALTH SCIENCES CAMPUS PARKING GARAGE I (P,C,E)		16983000				Total Campus			402000	16983000		2 BONDS	Nov
BIO-MEDICAL ANNEX RENOVATION AND EXPANSION (P,C,E)			14492160			Clge of Sciences		103194	116607	14492160	•	4 AUXILIARY	No
FACILITIES AND SAFETY BUILDING AT HEALTH SCIENCES CAMPUS (P,C,E)			7630122			Total Campus		21053	31579	7630122		2 BONDS	Nov
PARKING GARAGE VII (P.C.E)			25433741			Total Campus			447000	25433741	+ -	7 BONDS	Nov
COASTAL BIOLOGY STATION (P,C,E)			6358435			Clge of Sciences		16544	23161	5728320	\$ 24	7 PRIVATE	Nov
UCF DOWNTOWN CAMPUS BUILDING II (P,C,E)			87991555			Total Campus		150325	222000	87991555	\$ 39	6 PRIVATE	Nov
UCF HEALTH EXPANSION AND WELLNESS CENTER (P,C,E)			1271687	10173496	1271687	Clge of Medicine		14500	21750	12716870	\$ 58	5 PRIVATE	Nov
DENTAL SCHOOL (P,C,E) HEALTH SCIENCES CAMPUS				73000000		Total Campus		111166	166750	73000000	\$ 43	8 PRIVATE	Nov
SUSTAINABILITY CENTER (P.C.E)					6358435	Total Campus		8800	13200	6358435	\$ 48	2 PRIVATE	Nov
WET TEACHING LAB AND EXPANDED STEM FACILITY (P,C,E)					16143188	Total Campus		164500	240950	161431885	\$ 67	0 PRIVATE	Nov
UTILITY INFRASTRUCTURE AND SITE WORK CLINICAL FACILITIES (P,C) HEALTH SCIENCES C/					13230632	Total Campus	N/A	N/	A	13230632	#DIV/0!		Nov
					16416900	Total Campus		15240	21337	16416900	\$ 76	9 PRIVATE	Nov
SPECTRUM STADIUM EXPANSION AND IMPROVEMENTS PHASE I (P,C,E)					44905316	Total Campus			80000	44905316		1 PRIVATE	Nov
SPECTRUM STADIUM EXPANSION AND IMPROVEMENTS PHASE II (P,C,E)	526464969	46759615	166114837	84709133	98326158	i o cali o calipuo							

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16998		25497	4091598	\$ 160
52425		52431	26426559	\$ 504
28091		41782	17665690	\$ 423
33620		50430	20790235	\$ 412
9587		12714	4139753	\$ 326
27800		38421	15884340	\$ 413
38550		57825	28218240	\$ 488
22064		29469	4338335	\$ 147
8800		13200	6358435	\$ 482
164500		240950	161431885	\$ 670
	N/A		13230632	#DIV/0!

Short-Term Plan: 2017 – 2022 (CIP-3)

214

Summary Narrative for Agency Projects

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CIP-3 PROJECT EXPLANATION (Expansion and Remodeling Projects)

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Projects Requiring Legislative Approval

## Projects Requiring Legislative Approval

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### FACILITIES & SAFETY RECRUITMENT REQUEST FORM (RRF)

PROCESS: To su	bmit a request for recruitment,	please complete	the following actions:
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- **1.** Fill out this form completely
- 2. E-sign as the Requestor, then obtain your Director's e-signature
- 3. Email this form and an updated Position Description to the F&S Human Resources staff at UCFDG-FS-HR@ucf.edu
- 4. An F&S HR team member will: Review the request and forward to the Business Office, Process e-PAF (as appropriate), follow up with you via email once these actions are completed

<b>REQUEST:</b>				
-	OPS USPS A&P			
	Create a new position			
	Fill a vacant position Previous employee name: <u>N/A</u>			
	Previous employee name:	Term	ination da	ate:
<b>POSITION IN</b> enter position # 9	NFORMATION: If you do not b 00000 for all OPS positions.	nave vacant position #, please leave that so	ection blan	k for the F&S HR Staff to complete. Please
Position Title:	Civil Engineer	Position #:		
Department:	UES	Funding Account	nt #:	JX Split
Annual Salary:	\$ 102,631.00	Annual Salary + (Multiply annual )		
JUSTIFICAT	IONG.	(Multiply annual )	rule by 547	
		your request (ie. explain departmenta	al need fo	r this position)
1				nd distribution piping systems
for complian system grow	ice in accordance with DC /th. This requires a Florid	DT, 49 CRF 192, and F.A.C. 2	25-12. s I Engin	standards with the utility load and evelop
requirement	S	,		
<b>Budget:</b> Please will be used to su	identify the source of recurring fu apport the position; particularly in	nds by percentage split (if applicable v consideration of any further budget re	when usin ductions t	g more than one funding source) that hat may be forthcoming.
Split 40% 02	2830323, 20% 02830326	, 40% 02830325		
	N			
SIGNATURES		Digitally signed by Curt Wade DN: cn=Curt Wade, o=Utilities and Energy Services,		
Requestor:	Curt Wade	ou=Finance and Administration, email=curtis.wade@ucf.edu, c=US Date: 2018.08.23 09:23:50 -05'00'	Date:	8/23/18
Director:	Curt Wade	Digitally signed by Curt Wade DN: cn-Curt Wade, o=Utilities and Energy Services, ou=Finance and Administration, emaili≃curtis wade@ucf.edu, c=US Date: 2018.08.23 09:24:17 -05'00'	Date:	8/23/18
Asst. Director, Business Office:			Date:	

	-	PROJECT EXPLANATION ATIVE DESCRIPTION			
AGENCY <u>Univer</u> BUDGET ENTITY PROJECT TITLE	sity of Central Florida SUS Utilities Infrastructure, Capital Renewal, and Roofs	AGENCY PRIORITY DATE BLDG PROGRAM APPROVED	Page <u>1</u>	of <u>3</u>	

PURPOSE, NEED, SCOPE, RELATIONSHIP OF PROJECT TO AGENCY OBJECTIVES

UCF strives to be a good steward of state funds, and as such has historically had the challenge of balancing the maintenance and operations of its buildings with the need to repair, replace and upgrade its utilities and infrastructure. In the recent past, when faced with years of legislative budget cuts and reduced funding, UCF placed its highest priority on repairs and projects related to life safety and the Americans with Disabilities Act (ADA). Consequently, a multitude of other maintenance issues were necessarily deferred, creating a backlog of utilities, infrastructure, plant modernization, capital renewal, and roofing needs.

Further delay in funding utilities infrastructure and continuing to defer maintenance will result in financial and technical risk, with unpredictable mechanical and utility failures and impacts to human health, causing operations to respond in a costlier, reactive versus proactive way.

To reduce UCF's impact on GHG emissions, building operation, and utility costs, the university owns and operates a diverse utility production and distribution network portfolio that includes: water, chilled water, thermal storage, waste-water transportation, re-use, renewable energy, and distributed generation, with an annual operating budget of \$43,000,000. Institutional ownership and operation of these assets are viable from both financial and operational perspectives. These facilities provide the majority of utility services to the main campus, or offset a fractional balance from each third-party utility provider.

One of the major challenges facing UCF's utility production and distribution portfolio is instructionallyowned utility systems that lack years of dedicated capital funding to replace long-lived and expensive utilities infrastructure in a timely manner. These utility production and distribution facilities, which are composed of unseen capital assets, directly support the mission-critical objectives of UCF's main campus, and require periodic major investments. Building and utility production and distribution systems inevitably deteriorate, become obsolete, and require replacement. Underfunding of routine repair, preventative maintenance, and capital renewal and replacement leads to a backlog of deferred maintenance, which results in unreliable infrastructure. All of this can lead to poorly functioning buildings, unsightly grounds, faulty utility production, and distribution systems that jeopardize the programmatic usability of mission-critical research and academic facilities. Additionally, energy and natural resources are wasted as these systems become less efficient over time.

Even though condition needs for UCF's infrastructure and utility operations were granted in late 2013, to operate as an auxiliary unit to support the university's mission, capital renewal remains a major constraint. With this separate auxiliary funding mechanism, UCF established perpetual "break even" utility operation models for the cost of plant production and personnel. Currently, this model does not account for depreciation of millions of dollars of existing assets and capital replacement

and renewal of plant production buildings and systems that are up to 45 years old.

In order to reduce the burden of utility peak demands or flows that negatively impact UCF's distribution systems and reliability, the university has identified key energy demand drivers through our growing campus population that are influenced by building size, complexity, occupancy, and classification. Equally important is UCF's charge to become carbon neutral by 2050 and conserve the State of Florida's precious water resources.

UCF's <u>Green Building Construction and Renovation Requirements</u> prescribe the minimum facility energy reduction and water conservation requirements, using ASHRAE standards as a baseline. Depending on size and building complexity, many of UCF's newly constructed buildings are LEED certified, often using 10-30% less energy and 15-35% less water than the ASHRAE baseline building, in support of the President's Climate Action Plan. While designing and constructing facilities with energy- and water-conscious features in mind to reduce UCF's utility system demands, we must remain vigilant about replacing end-of-life systems and growing infrastructure needs.

Since 2011, the university has used its 600 utility sub-meters to collect data for monitoring, billing, energy management, and cost recovery. Data analysis has provided an understanding of diversified peaks that include load factor, annual electricity, cooling units consumed, and natural gas consumed and normalized, as well as current load duration curves. The data is also used to approach new construction and facility improvement projects with a focus on reducing water and energy consumption, to help curb infrastructure and distribution demands. Within UCF's green building design, technologies are selected based on historical and current data analysis, industry best practices, and a comparison of the costs and benefits associated with environmental impact.

To summarize, deferring maintenance dramatically reduces the normal expected life cycle of materials, systems, and buildings, thus increasing operational costs in the long run. As the university continues to grow and construct facilities, an organized, systematic approach to scheduling and funding deferred maintenance is essential to protect university assets for future generations.

#### SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

### EDUCATIONAL PLANT SURVEY

The Educational Plant Survey was conducted October 6-7, 2015 and approved January 28, 2016. See recommendation No. 1.3, Utilities Infrastructure Improvements.

#### Higher Educational Facilities Return on Investment

This is a tool developed by a collaborative group of stakeholders designed to facilitate the identification of return on investment metrics for higher education facilities. Check any box(es) that apply, provide a quantitative explanation, and identify the term or years in which ROI information is provided.

Institution: University of Central Florida Project: Utilities Infrastructure Total Project Cost: <u>\$70,000,000 M</u> Previous Funding (State and Local): <u>\$0.0 M</u> Current Request: <u>\$14,000,000 M</u> STEM (Yes or No): No Contact Person (Name, Position, Office and Cell Phone No., Email): Dr. Daniel Holsenbeck, Senior Vice President of University Relations Office: (407) 823-2387; Cell: (407) 247-9421; daniel.holsenbeck@ucf.edu

Check any box(es) that apply and provide a quantitative explanation. Identify the term or years in which ROI information is projected.

- 1. Number of Additional Degrees and Certificates Produced and How Those Degrees are Meeting the Needs of our State (Job Openings, Average Wages of those Job Openings, etc)
  - Explanation:
  - a. In 2015-16 UCF awarded 14,348 degrees (12,118 bachelor's and 2,230 graduate) for students who completed courses on the main campus.
  - b. Based on enrollment projections and expected growth (2%), UCF anticipates awarding an additional 2,133 degrees by 2022-23.
- 2. Number of Additional Students Served and the Benefits/Efficiencies Created (increase graduation rate, alleviate waitlist, increase academic support, etc) Explanation:
  - a. Fall 2016 enrollment at UCF main campus was 53,183.
  - b. Based on the UCF Enrollment Projection Model, there is expected to be an increase of over 5,500 students on the main campus by Fall 2022.
- 3. Amount of Additional Research Funding to be Obtained; Patents Awarded Explanation: N/A
- 4. Project is in an Area of Strategic Emphasis as Determined by the Board of Governors' Gap Analysis or the Department of Economic Opportunity's National Occupational Forecast

Explanation:

- a. In 2015-16 UCF awarded 7,695 degrees (6,249 bachelor's and 1,446 graduate) in all five areas of strategic emphasis for students who completed courses on the main campus. Based on enrollment projections and expected growth (2%), UCF anticipates awarding nearly 1,144 additional degrees in areas of strategic emphasis by 2022-23.
- b. In 2015-16 UCF awarded 1,277 degrees (1,183 bachelor's and 94 graduate) in Gap Programs for students who completed courses on the main campus. These programs include: Accounting with 442 degrees, Finance with 487 degrees, and Communications with 348 degrees. Based on enrollment projections and expected growth (2%), UCF anticipates awarding 190 additional degrees in Gap Programs by 2022-23.
- Improves the Ranking of a Preeminent Program or Improves on a Performance Funding Model Metric Explanation: N/A
- 6. Increase Business Partnerships Which Will Lead to Guaranteed Internships and Jobs for Students Explanation: N/A
- 7. X Project Improves the Use, either Operationally or Academically, of Existing Space

Explanation:

- a. Modernization of campus utilities will address both critical and noncritical issues, and provide for greater reliability of utility distribution.
- b. Deferred maintenance throughout the campus has been verified by a third-party Facility Condition Assessment (FCA) company ISES Corp. These deferred maintenance projects include modernization of building systems, upgrades to lighting systems, building automation, ADA compliance, building envelope repairs, interior finishes, flooring, egress, exterior lighting and utility service entrance upgrades. Information technology upgrades are also required in order to meet current and future requirements.
- 8. Contribution of Local Funds Through Matching Grants, Property Donations, etc.

Explanation: N/A

9. Reduces Future Deferred Maintenance Cost and Extends the Life of the Facility by Bringing the Project up to Existing Standards (cost-benefit analysis of renovation or new facility vs. maintenance)

Explanation:

- a. Further delay in funding utilities infrastructure and deferring maintenance will result in unpredictable mechanical and utility failures, causing operations to respond in a more costly, reactive versus proactive way.
- b. Deferred maintenance dramatically reduces the normal expected life cycle of materials, systems, and buildings, thus increasing operational costs in the long run. As the university continues to grow and construct facilities, an organized, systematic approach to scheduling and funding deferred maintenance is essential to protect university assets for future generations.

Other Pertinent Information not included above:

- The university maintains and operates over 42,000 linear feet of commodity networks of utility distribution and collection infrastructure, covering over 1400 acres on the main campus. These utility distribution and collection systems include natural gas, electric, renewable energy sites, chilled water, transportation of effluent, and domestic water.
- The construction will provide short-term impact to local economy, as follows:
  - Year 1: \$25,363,983 82 construction jobs, 85 other sectors
  - Year 2: \$25,363,983 82 construction jobs, 85 other sectors
  - Year 3: \$ 25,363,983 82 construction jobs, 85 other sectors
- Approximately 74 percent of the main campus is served by three centrallylocated district cooling plants, averaging 27.2 years old, with the main central energy plant turning 50 in 2019. Centrally-located plants reduce building energy consumption and eliminate less-efficient standalone cooling at each building.
- On-campus energy demands for electricity, potable water, natural gas and chilled water are increasing. The 2015 Campus Master Plan identifies future campus development, associated energy and peak utility demands, and the supply-related facilities needed to adequately provide these services to future campus populations.
- The potable water distribution plant is outdated and requires replacement of distribution piping and isolation valves.
- The sewage distribution system was updated 10 years ago by installing a master lift station, and now requires many new mechanical floats, probes and SCADA updates. Secondary lift stations require upgrading to install secondary power for emergency backup and replacement of distribution piping throughout campus, because some piping has been in the ground for over 40 years.

• UCF owns and operates over 24,000 linear feet of natural gas distribution infrastructure. This distribution system is held to the same rigorous regulation and standards as a public gas utility since UCF is master metered with residual pressures containing low, medium and high pressures. Through annual valve exercise programs, leak detection inspections, and third party assessment of pipelines, UCF has identified a need for new isolation valves, repair of a defective cathodic protection system, the addition of pressure transducers to provide critical alarming, and the need to increase the size of the supply pipe on the west side of campus to support peak flows at an estimated cost of \$750,000.

<b>CIP-3 SHORT-TERM PROJECT EXPLANATION</b>
CIP-3, A – NARRATIVE DESCRIPTION

			Page 1 0	of 4
AGENCY Univers	ity of Central Florida			
BUDGET ENTITY	SUS	AGENCY PRIORITY	2,21	
PROJECT TITLE	Research Building I (formerly	DATE BLDG PROGRAM	·	
	known as Interdisciplinary	APPROVED		
	Research and Incubator			
	Facility)			

#### PURPOSE, NEED, SCOPE, RELATIONSHIP OF PROJECT TO AGENCY OBJECTIVES

UCF has a critical need for research space to accelerate scientific discovery in a collaborative environment, increase research funding, support Science, Technology, Engineering and Math (STEM) and increase the number of STEM graduates, and produce high-paying jobs to help drive Florida's economy. UCF is severely hampered in research activities by the lack of adequate research space. To date, the state has provided 407,000 net assignable square feet, half the space needed as calculated by the state's formula. Programs to be located in Research Building I (formerly known as Interdisciplinary Research and Incubator Facility, or IRIF) currently produce \$29.5 million in external funding. Subsequent funding should increase dramatically with this new space. The dollar value of the project to the local economy will be \$10.3 million in the first year, \$60.1 million in the second year, and \$10.8 million recurring in the third year and beyond, as estimated by the UCF Institute for Economic Competitiveness. Two hundred and twenty-nine construction jobs and two-hundred and thirteen other sector jobs will be created.

Multidisciplinary research is a critical component in addressing many of the issues facing today's new economy. Traditional academic boundaries inherently slow the creative process necessary to solve today's complex issues in research and delay technology transfer and commercial exploitation. Interdisciplinary research has led the way in the discovery and creation of new disruptive technologies that have fueled economic growth and prosperity in the US. Florida is building a strong base of faculty with a broad base of technological expertise in key areas of science and technology. The ability to leverage the talents of faculty from various disciplines creates synergies, value, and opportunities well beyond the sum of the individual parts.

Research Building I is a multidisciplinary research building with space allocated for programs in nanoscience technology, advanced materials processing and analysis, optics and lasers, energy research, and it will host UCF's new cluster initiatives. The Faculty Cluster Initiative was designed to leverage our existing strengths and foster the development of strong, diverse, interdisciplinary teams, focused on solving today's most challenging scientific and societal problems. The strength of this initiative comes from faculty depth, the ability to translate depth across disciplines and to industry, and the diversity of lived experiences. Faculty from most of UCF's colleges will be present in this building: College of Arts and Humanities (CAH), College of Business Administration (CBA), College of Medicine (COM), College of Optics and Photonics (COP), College of Health and Public Affairs (COHPA), College of Sciences (COS), and the College of Engineering and Computer Science (CECS), as well as individual researchers in the CECS and the COS. Centers and institutes from the Office of Research and Commercialization will also occupy space in Research Building I.

All of these groups are highly collaborative, recognizing that dividing lines between various traditional

disciplines are blurring and new disciplines are emerging, leading to more rapid innovation. The best way to spur this new paradigm is to provide interdisciplinary research facilities like Research Building I, where the various disciplines are housed together to create a new culture of interaction and collaboration. Specific collaborative spaces will allow faculty and students to creatively discuss ideas, a process which is paramount to the success of interdisciplinary endeavors. This facility will enable the university to cost-effectively share capital and equipment investments, enhance researcher collaboration, and reduce the time to move discoveries to commercial markets.

UCF has developed a number of highly successful partnerships, research centers, and a nationally ranked technology incubator, which have resulted in expansion into the adjacent Central Florida Research Park. This growth has enabled research centers to develop in their own right. However, that physical growth has been "ad-hoc" in leased, off-campus dislocated facilities, which inhibits the fulfillment of the centers' potential. Further, the separation of on and off-campus facilities has created barriers for crossing disciplines. By developing a research facility on the main campus that will focus on multiple disciplines, creativity and research will be enhanced, and the environment within Research Building I will create collaborations between UCF disciplines as well as industry partners.

Basic and applied research by our faculty is the bedrock for the spinoff of new products to the commercial sector and the spinoff of new companies. The most impactful research advances usually involve multidisciplinary teams of researchers. This facility enables such multidisciplinary projects and advances, and positions UCF to compete for increasingly larger research projects, which in turn will generate jobs in our community and state. UCF is making great strides in implementing the cycle described herein; however, additional quality research is severely limited by our desperate need for additional research space.

This facility will provide the infrastructure, atmosphere, and culture necessary to build strong interdisciplinary teams and programs in research, technology transfer, and commercialization. Research Building I will provide facilities and laboratories for multi-scale materials research, cyber security and privacy, as well as development related to innovative and efficient energy production, storage, and utilization. Additionally, the facility will enable fundamental and applied interdisciplinary research, create a bridge between technology development and technology transfer and commercialization, and enable UCF to become an integral partner in economic development activities in the region and state.

As a metropolitan research university serving the needs of Central Florida, the addition of this building and its associated research activities will advance the university's goals of:

Offering the best undergraduate education available in Florida; Achieving international prominence in key programs of graduate study and research; Providing international focus to our curricula and research programs; Becoming more inclusive and diverse; and Being America's leading partnership university.

The building will provide researchers with laboratory space conducive for interaction, collaboration

and professional development. Research Building I will promote multidisciplinary research by placing faculty, research scientists/postdocs, and students in the same building where they will interact on a daily basis, learn each others' "language," and build collaborations. Many of the "grand challenges" in today's society must be solved by multidisciplinary teams. It is essential that we teach the next generation of academics and researchers how to work cooperatively, to dramatically increase research efficiency, potentially taking years off the time required to produce new technology.

Research labs are essential for STEM-centered research and for thesis and dissertation work by students in disciplines with active graduate programs, especially at the doctoral level. Many cases exist on campus where the same lab is used both for graduate coursework, thesis and/or dissertation work, and faculty research. Core graduate student academic work in STEM areas focuses on thesis and/or dissertation that is, in fact, mostly faculty-led research activities.

Space utilization exceeds the current statutory requirement of 60% student stations occupied at a minimum of 40 hours per week, and research labs are operating "at or above capacity." Based on the 2015 educational plant survey analysis for space needs, the university has a shortfall of research labs, especially wet labs and teaching labs, and requires this new building to meet the current and growing demands of the university. UCF's need for research space and a lack of state funding has forced us to reallocate the space that would have been assigned to industry or startup companies in the building to our incoming new faculty. Making full use of regular academic buildings, which in some cases includes utilization of spaces designed originally for other purposes (laboratories, theaters, library study areas, etc.), the university has been forced over the past several years to rent temporary facilities off campus for research.

Delayed funding of this facility would have many negative consequences. Research will be impacted as space is critical; research faculty lines cannot be filled as there is no available research space to accommodate the additional faculty; current faculty are falling behind in progress on current contracts due to inadequate space; and UCF's ability to increase its output of STEM graduates is affected.

Past experience has shown that quality research facilities generate \$400 to \$500 per square foot per year in external funding, Research also shows that a new patent disclosure is generated for every \$2,000,000 in research funding.

#### SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction

and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

#### Research/Laboratory

The space classification is predominately laboratory type, with office type minimized. The project will achieve LEED Gold certification with the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. Laboratories will have continuous variable air flow valves with air flow reset capabilities. Domestic and laboratory hot water needs shall be provided primarily by solar thermal energy. The project will utilize the district cooling loop for space cooling needs and will look at alternative measures to provide dehumidification with the classifications of lab spaces and related energy use, and all heating and reheating will be hydronic.

#### EDUCATIONAL PLANT SURVEY

The Educational Plant Survey was conducted October 6-7, 2015 and approved January 28, 2016. See recommendation No. 3.1, Interdisciplinary Research and Incubator Facility.

CIP-3 SHORT TERM	PROJECT E	XPLANATION							Pageof
GEOGRAPHIC LOCA		rsity of Centra	Florida, Orlar	ndo			COUNTY: Orang	je	
PROJECT DESCRIP	ION/TITLE:	Research Building I (known as)Interdisciplinary Research and Inc				Inc. Fac.	PROJECT BR N	o. (if assigned)	<u> </u>
-		Net to							
Facility/Space	Net Area	Gross	Gross Area	a Unit Cost	Construction	Assumed	Occupancy		
Туре	(NASF)	<u>Conversion</u>	<u>(GSF)</u>	(Cost/GSF)*	Cost	Bid Date	Date		
Classrooms		1.5	0	274	0				
Teaching Labs		1.5	0	268	0				
Research Labs	36,355	1.5	54,533	375	20,449,688				
Study		1.4	0	286	0				
nstructional Media		1.5	0	215	0				
Auditorium/Exhibition		1.2	0	310	0				
Symnasiums		1.2	0	225	0		Space Detail for	Remodeling Pr	niecte
Offices	14,059	1.5	21,089	284	5,989,134	B	FORE	Treniodening Fi	
Campus Support Serv		1.4	17,787	276	4,909,212	-	Net Area		AFTER
Fotals	63,119		93,408	2/0	31,348,034	Space		Space	Net Area
Apply Unit Cost to tot		on primary sp			51,346,034	Туре	(NASF)	<u>Түре</u>	(NASF)
Remodeling/Renovation	on								
Fotal Construction - N	w & Rem./R	enov.			31,348,034	Total	0	Total	0
CHEDULE OF PRO.	ECT COMPO	DNENTS	Funded to			ESTIMA	ATED COSTS		
asic Construction Co	st		Date	2018-19	2019-2020	2020-21	2024 22	2022.22	Evented 0.1-0
. a.Construction Cost			Duio	2010-13		2020-21	2021-22	2022-23	Funded & In C
		1	-		31,348,034				31,348,0
Add'l/Extraordinary (									
b.Environmental Im	acts/Mitigatio	n							
c.Site Preparation				-	245,566				245,5
d.Landscape/Irrigait	on				250,000				250,0
e.Plaza/Walks									
f.Roadway Improver	nents								
g.Parking space	s								
h.Telecommunicatio	n			-	362,541				362,5
i.Electrical Service					002,011				502,0
j.Water Distribution									
k.Sanitary Sewer Sy	stem								•
I.Chilled Water Syste									-
									-
m.Storm Water Syst									-
n.Energy Efficient E				664,693					664,6
otal Construction Cos	ts			0 664,693	32,206,141	0	0		32,870,
. Other Project Costs									
a.Land/existing facilit	y acquisition								-
b.Professional Fees				4,932,641					4,932,6
c.Fire Marshall Fees				94,258					94,2
d.Inspection Services				493,358					493,3
e.Insurance Consulta	nt			20,518					20,5
f.Surveys & ⊺ests				45,000					45,0
g.Permit/Impact/Envi	onmental Fe	es		109,616					109,6
h.Artwork					100,000				100,0
i.Moveable Furnishin	gs & Equipme	ent				6,042,667			6,042,6
j.Project Contingency				347,276	2,223,378	.,,,			2,570,6
otal - Other Project C	sts		-	6,042,667	2,323,378	6,042,667	<u> </u>	(	
LL COSTS 1+2				0 6,707,360	34,529,519	6,042,667	0	C	47,279,5
	Appropriation	s to Date	<u></u>		Project Costs Bey	and CIP Period			Total Davis
		Fiscal Year	Amount		Source	Fiscal Year	Amount		Total Project I
		2015-2016		0	Source	i iscai ('eal	Amount		CIP & Beyond
		2010-2010		•					47,279,
	TOTAL	_		_	TOTAL				<u> </u>
			-		TOTAL		0		47,279,

#### Higher Educational Facilities Return on Investment

This is a tool developed by a collaborative group of stakeholders designed to facilitate the identification of return on investment metrics for higher education facilities. Check any box(es) that apply, provide a quantitative explanation, and identify the term or years in which ROI information is provided.

Institution: University of Central Florida Project: Research Building I (formerly known as Interdisciplinary Research and Incubator Facility (IRIF)) Total Project Cost: \_\_\_\_\_\_\_\$ 47,279,546 Previous Funding (State and Local): \$0.0 M Current Request: \_\_\_\_\_\_\$ 3,353,680 STEM (Yes or No): Yes Contact Person (Name, Position, Office and Cell Phone No., Email): Dr. Daniel Holsenbeck, Senior Vice President of University Relations Office: (407) 823-2387; Cell: (407) 247-9421; daniel.holsenbeck@ucf.edu

Check any box(es) that apply and provide a quantitative explanation. Identify the term or years in which ROI information is projected.

- 1. Number of Additional Degrees and Certificates Produced and How Those Degrees are Meeting the Needs of our State (Job Openings, Average Wages of those Job Openings, etc)
  - Explanation:
  - a. In 2015-16, UCF awarded 3,090 STEM degrees.
  - b. The new facility will support programs in nanoscience technology, and advanced materials processing. Additionally the building will house 5 of the newly created multidisciplinary academic clusters: Rationale Design of Materials for Energy Conversion and Propulsion, Cyber Security and Privacy, Resilient, Intelligent and Sustainable Energy Systems, Sustainable Coastal Systems, and Human Augmented Robotics, as well as additional "high profile" researchers from the College of Sciences, and CECS..
  - c. It will enable the departments to accommodate 700 additional STEM students per year.
- 2. Number of Additional Students Served and the Benefits/Efficiencies Created (increase graduation rate, alleviate waitlist, increase academic support, etc) Explanation:

This building will house 22 new tenured/tenure track faculty; all of which will be involved in teaching classes in their home unit thus increasing course offerings, reducing class waitlist time and mentor more graduate and under graduate students. Using typical numbers for a research faculty member, they will be supporting an additional 100 graduate research students, in addition to the students they will teach in a traditional classroom. These graduate students will participate in cuttingedge research thanks to the new and expanded programs made possible by this facility. Additional postdoctoral and technical staff will also be housed in this facility to support students.

- 3. Amount of Additional Research Funding to be Obtained; Patents Awarded Explanation:
  - a. UCF is ranked as a "highest research activity" university by the Carnegie Foundation.
  - b. This facility will house five of the newly created multidisciplinary clusters. The Faculty Cluster Initiative was designed to leverage our existing strengths and foster the development of strong, interdisciplinary, and diverse teams focused on solving today's most challenging scientific and societal problems. The strength of this initiative comes from faculty depth, the ability to translate depth across disciplines, and the diversity of lived experiences. We expect these diverse teams to compete for major research funding that requires expertise from several disciplines to facilitate solving highly complex and in-depth research questions. For example, faculty associated with the Sustainable Coastal Cluster representing the areas of biology, geography, engineering, sociology and education were awarded a 1.6 million dollar research grant from the National Science Foundation to investigate long-term human impact and restoration effects in the Indian River Lagoon in Volusia County. Cybersecurity and data analytics initiatives are currently in very high demand. UCF's new data analytics academic programs, combined with the cluster initiative, will put UCF in a leadership position for increased research funding.

Existing programs generate \$29.5M in external funding. While grant funding typically takes one year to secure, a significant increase in proposals will be submitted in anticipation of acquiring the new space. A moderate influx of new funding is expected in the first year the building is operational. Within three to five years of its completion, UCF will realize \$20M annually in new external Research and Development (R&D) funding. UCF's ability to compete for and procure prestigious research grants will be dramatically increased with the physical availability of new space where research can be performed. UCF will then be in a position to compete successfully against international institutions that currently have state-of-the-art research facilities. The Interdisciplinary Research and Incubator facility is designed to increase collaboration between UCF faculty as well as commercial organizations, both big and small. UCF is ranked 22<sup>nd</sup> in the country for its Tech Transfer program. It has demonstrated success in technology transfer, startups, and incubation. Ten to fifteen new patent applications are anticipated annually from activities in this facility. This will lead to one to two new startups annually in addition to licensing arrangements with larger established industry partners.

4. Project is in an Area of Strategic Emphasis as Determined by the Board of Governors' Gap Analysis or the Department of Economic Opportunity's National Occupational Forecast

Explanation:

Nanotechnology MS, Optics MS, and Optics PhD programs are designated as STEM. STEM is identified as a critical area in the 2013 "Methodology for Updating Programs of Strategic Emphasis In the State University System of Florida, Board of Governors 2012 – 2025 Strategic Plan" document. Specifically:

"Science, Technology, Engineering, and Math (STEM) is a category in the current version of the strategic plan and it is proposed that it be retained and renamed Economic Development – STEM to emphasize the importance of these programs to Florida's economy. The broad category of STEM encompasses programs associated with the six subcategories listed below.

• Mechanical science and manufacturing • Natural science and technology • Medical science and technology

• Computer science and technology • Design and construction • Electronic media and simulation"

# 5. Improves the Ranking of a Preeminent Program or Improves on a Performance Funding Model Metric

Explanation:

- The programs slated for this facility typically produce a significant number of patents, enabling UCF to remain in the top 20 universities nationally in patent production. Based on historical data, \$20M in new funding equates to approximately 20 new patents.
- Past experience has shown that quality research facilities generate \$400 to \$500 per square foot per year in external funding.
- Graduates of the Professional Science Master's in Nanotechnology (MS), Optics MS, Optics PhD, Physics PhD, Computer Sciences PhD, Engineering (BS, MS, and PhD), Biology (BS, MS, and PhD, and

Chemistry PhD programs contribute to Metric 8A of the Performance Funding Model (graduate degrees awarded in areas of strategic emphasis (includes STEM)).

6. X Increase Business Partnerships Which Will Lead to Guaranteed Internships and Jobs for Students

Explanation:

Business partnerships will include collaborative projects with large and small business partners. Some of these businesses will require an International Traffic in Arms Regulation (ITAR) facility to address export issues, and industry support for research (estimated at 25% of the funds expended in the facility each year). Students will be working on applied research programs or company projects, either on funded research for the company or as interns. A high percentage of these students receive job offers from these companies upon graduation.

7. Project Improves the Use, either Operationally or Academically, of Existing Space

Explanation: N/A

8. Contribution of Local Funds Through Matching Grants, Property Donations, etc.

Explanation: Within three to five years, research funding will be increased by \$20M annually.

9. Reduces Future Deferred Maintenance Cost and Extends the Life of the Facility by Bringing the Project up to Existing Standards (cost-benefit analysis of renovation or new facility vs. maintenance) Explanation: N/A

Other Pertinent Information not included above:

- Projected Facility Utilization Rate The facility will be 100% utilized. UCF has a serious shortage of lab space and is in the process of hiring 100 additional research-oriented faculty members. According to the state's formula, UCF has only 32.51% of its research space needs met.
- Current/Projected Campus Utilization Rate Based on UCF's Educational Plant Survey, which was conducted on October 6-8, 2015, the BOG is projecting that by 2020-2021, UCF will

require additional square footage in all of the 9 space categories. The following estimates represent the current deficits of square footage for space categories: Research Lab – 629,057 (67.49%)

Office – 271,443 (27.25%) Support Services – 104,103 (50.74%)

- UCF has a critical need for research space to accelerate scientific discovery in a collaborative environment, support STEM, help drive Florida's economy, and assist our state in producing high-paying jobs. UCF is competing for the best and brightest faculty, and recruitment is challenging, at best, without facilities. Our programs and research activities are limited by space as top researchers have their pick of worldclass facilities at other institutions. Top recruits desire two things: state-ofthe-art facilities where they can thrive and succeed, and the opportunity to participate in a nationally-ranked program.
- Because of UCF's lack of high-tech research space, leading-edge research in critical areas, such as engineering, nanoscience, and mechanical sciences, has been postponed or cannot be performed at all. Faculty lines cannot be filled because of the lack of space to house their research. In many instances, recruited faculty have not been provided laboratories upon their arrival, further weakening our ability to compete for grants and recruit new top-notch researchers. In order to attract top faculty talent, UCF must get ahead of its space deficit and be able to show potential hires the research labs in which they would be working.
- Space comprising 60 research and incubator labs; 23 material characterization labs; and lecture halls, conference rooms, offices, and ancillary spaces are planned within the building. The new facility will create a place where collaborations occur between faculty, researchers, entrepreneurs, investors, and industry. Labs will be configured for accelerated scientific discovery in a collaborative environment, with ease of reconfiguration based on projects and evolving research requirements. The facility will promote industry collaborations with a range of companies, from startups to large multi-national corporations.
- The Interdisciplinary Research and Incubator Facility will leverage talents from different disciplines; dramatically increase research efficiency; create a core environment to serve faculty and industry partners; and optimize capital equipment investments through shared use.

- The construction will provide short-term impact to local economy, as follows:
  - Year 1: \$10,286,411 30 construction jobs, 27 other sectors
  - Year 2: \$58,779,481 169 construction jobs, 159 other sectors
  - Year 3: \$11,417,916 33 construction jobs, 31 other sectors
- This facility, combined with UCF's academic, research, and technology transfer and commercialization activities that focus on moving innovations out of the lab and into the marketplace, will provide significant economic impact to the region and the state. The UCF Business Incubation program alone created more than \$2.5 billion in economic impact, and accounts for more than 4,700 jobs in the area.

		SHORT-TERM PROJECT EXPLANATION P-3, A – NARRATIVE DESCRIPTION		
AGENCY <u>Univers</u> BUDGET ENTITY PROJECT TITLE	sity of Central Florida SUS Engineering Building I Renovation	AGENCY PRIORITY DATE BLDG PROGRAM APPROVED	Page <u>1</u> of 3	<u>3</u>

PURPOSE, NEED, SCOPE, RELATIONSHIP OF PROJECT TO AGENCY OBJECTIVES

Engineering I, a 130,885 GSF facility, has seen continuous use since it was built over 30 years ago, and is in dire need of renovation and modernization. A renovation of the building will support continued, essential instruction in the Science, Technology, Engineering, and Math (STEM) disciplines, optimize space occupancy and utilization, enhance the quality of the academic programs, allow for more sophisticated sponsored research opportunities, attract the best students and faculty, and produce excellent graduates. The current electrical capacity of the building has been reached; the addition of any equipment is preceded by an analysis by Facilities Planning & Construction. An increasingly serious concern is the antiquated and no longer serviceable electronic lock system which must be replaced before it completely fails. Further delay of the renovation is detrimental to the experience of students and researchers at UCF, as well as the reputation of the preeminent College of Engineering and Computer Science (CECS).

The importance of CECS to UCF and to the State of Florida cannot be overstated. The college is consistently the most productive unit at UCF in terms of research expenditures. In FY 2016, CECS acquired new research funding of over \$35.6 million. All of the programs in the college are STEM programs, and graduates of these programs are successful at finding well-paid positions in industry, most of them in Florida. In 2016, the UCF Programming Team won the Southeastern U.S. Region for the fourth time in a row, finished 3<sup>rd</sup> in the U.S., and placed 28<sup>th</sup> in the world. The UCF Collegiate Cyber Defense Team won the Southeast Region for the fourth year in a row, and the national championship for the third year in a row. The National Security Agency and the Department of Homeland Security recently designated UCF as a National Center of Academic Excellence in Cyber Defense Education. Limbitless Solutions, a non-profit started by CECS students, continues to provide 3D-printed prosthetic arms to children free of charge.

CECS is home to the Center for Advanced Turbomachinery and Energy Research (CATER), the Interactive Systems & User Experience Research Cluster of Excellence, the Center for Advanced Transportation System Simulation, and the Center for Research in Computer Vision (CRCV). Six faculty members are National Academy of Engineering members. CECS has contributed substantially to UCF's achievement of "emerging preeminence" status. Despite the remarkable achievements of CECS students and faculty, the continued success of the college is now jeopardized by a facility that was at one time instrumental to the college's success, but is now an albatross that constrains the college's staffing, creativity, and philanthropic efforts. A renovated, modernized, and more efficiently configured Engineering I Building would enable CECS to enjoy even greater success in the future.

The facility currently houses classrooms, instructional and research labs, micro-fabrication clean rooms, offices, administrative suites, conference rooms, and support space for such critical STEM programs as the Engineering Leadership and Innovation Institute (ELI2); Mechanical and Aerospace

#### CIP-3 SHORT-TERM PROJECT EXPLANATION CIP-3, A – NARRATIVE DESCRIPTION

Engineering (MAE); Civil, Environmental and Construction Engineering (CECE); Materials Science and Engineering (MSE); and Electrical and Computer Engineering (ECE).

MAE and MSE, the two academic units based in Engineering I, alone serve 2,917 undergraduate and nearly 300 graduate students. Significant renovation of the facility is needed to accommodate the expansion of these very productive departments. These programs have unique facility needs for teaching and research laboratories and, because of the age of the facility, renovation is imperative. Research accomplished by these departments serves dozens of high technology industrial firms located throughout Florida and across the nation. These units would make an even greater impact on the Central Florida region and the country, with up-to-date facilities designed to support 21<sup>st</sup> century research programs, rather than the more modest research programs of the early 1980s.

The College of Engineering and Computer Science at UCF represents the core of UCF's STEM programs. It currently enrolls 8,813 undergraduate students (Fall 2016 enrollment), making it the largest in Florida and the 9<sup>th</sup> largest in the country. The undergraduate students in the college account for over 15.7% of the UCF undergraduate student population. Similarly, the college is home to 1,455 graduate students (or 18% of the graduate students at UCF). Students from other UCF colleges attend classes in pool classrooms that are not designed for the more interactive and technology-based teaching and learning styles of today.

The university contracted with the ISES Corporation to conduct a Facilities Condition Assessment (FCA) to benchmark the condition of its E&G facilities. The Engineering I renovation will address both critical and non-critical issues identified in the FCA. These issues encompass deficiencies such as indoor air quality, fire alarm modernization, potable water and plumbing distribution systems, electrical service, asbestos, HVAC modernization, elevator modernization, lighting upgrades, building automation, ADA compliance, building envelope repairs, interior finishes, flooring, egress, exterior lighting, and utility service entrance upgrades. Information technology upgrades are also required in order to meet current and future requirements.

# SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

# Classroom/Office

The space classification is predominately classroom or office type, with laboratory or research type minimized. The project will achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use. All heating and reheating will be hydronic.

## EDUCATIONAL PLANT SURVEY

The Educational Plant Survey was conducted and approved in February 2011. See recommendation No. 2.1 Engineering Building Renovation.

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TION/TITLE: Net Area	Engineerin Net to	na Buildina I Rei							
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	Conversion	<u></u>	(Cost/GSF)*	Cost	Bid Date	<u>Date</u>			
	1.5	0	305	0					
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	1.5	0	386	0					
	1.4	0	298	0					
	1.5	0	222	0					
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#### Higher Educational Facilities Return on Investment

This is a tool developed by a collaborative group of stakeholders designed to facilitate the identification of return on investment metrics for higher education facilities. Check any box(es) that apply, provide a quantitative explanation, and identify the term or years in which ROI information is provided.

Institution: University of Central Florida Project: Engineering Building I Renovation Total Project Cost: <u>\$22,542,507</u> Previous Funding (State and Local): <u>\$3,620,723</u> Current Request: <u>\$17,745,473</u> STEM (Yes or No): Yes

Contact Person (Name, Position, Office and Cell Phone No., Email): Dr. Daniel Holsenbeck, Senior Vice President of University Relations Office: (407) 823-2387; Cell: (407) 247-9421; daniel.holsenbeck@ucf.edu

Check any box(es) that apply and provide a quantitative explanation. Identify the term or years in which ROI information is projected.

1. Number of Additional Degrees and Certificates Produced and How Those Degrees are Meeting the Needs of our State (Job Openings, Average Wages of those Job Openings, etc.)

Explanation:

The College of Engineering and Computer Science (CECS) awarded 1,858 engineering and computer science degrees in 2015-16. Florida Education & Training Placement Information Program (FETPIP) data for 2014-15 indicates that 60% of bachelor's recipients were employed in Florida, with an average salary of \$58,771; and 50% of master's recipients were employed in Florida, with an average salary of \$73,714. CECS is the lead institution, partnering with FIU and UCF, on a BOG Targeted Educational Attainment (TEAm) Grant Initiative, the goal of which is to increase the number of baccalaureate degrees earned in computer science, information technology, and computer engineering. The National Science Foundation has also provided funding for these partners as they endeavor to prepare students for jobs in these fields in Florida.

2. Number of Additional Students Served and the Benefits/Efficiencies Created (increase graduation rate, alleviate waitlist, increase academic support, etc)
 Explanation:
 This building houses the preeminent College of Engineering and

Computer Science, the largest in Florida and 9<sup>th</sup> largest in the nation, with

8,813 undergraduate students and 1,455 graduate students (based on Fall 2016 enrollment figures).

3. Amount of Additional Research Funding to be Obtained; Patents Awarded Explanation:

The renovation will allow annual research expenditures to increase by \$1,200,000 within two years of project completion.

4. Project is in an Area of Strategic Emphasis as Determined by the Board of Governors' Gap Analysis or the Department of Economic Opportunity's National Occupational Forecast

Explanation:

All programs in the CECS are designated as STEM programs.

5. Improves the Ranking of a Preeminent Program or Improves on a Performance Funding Model Metric

Explanation:

- a. Graduates of the CECS programs contribute to Metrics 6 (bachelor's degrees awarded in areas of strategic emphasis) and 8A (graduate degrees awarded in areas of strategic emphasis (includes STEM)) of the Performance Funding Model.
- b. The UCF CECS is ranked 75<sup>th</sup> in the nation (2<sup>nd</sup> in Florida) according to US News and World Report's Best Graduate Schools 2018.
- c. The completion of overdue renovations will likely have a modest impact on rankings. However, the views of visiting deans and distinguished faculty from other institutions, as well as officers of corporate partners and employers, are important in determining our overall ranking. When visitors see a modern, well-maintained facility, their views of the CECS can only be enhanced. Conversely, further delays in carrying out the renovations will only impact the views of visitors negatively.
- 6. X Increase Business Partnerships Which Will Lead to Guaranteed Internships and Jobs for Students

Explanation:

A newly renovated facility will allow UCF to solicit philanthropic donations, giving donors the opportunity for naming rights to the Engineering Building I. Additional philanthropic funds will be used to enhance the lab infrastructure, resulting in expanded funding opportunities from corporations and other funding agencies. Corporations that fund our research are eager to support internship opportunities for our students and potentially offer them employment upon graduation. 7. X Project Improves the Use, either Operationally or Academically, of Existing Space

Explanation:

- a. The Engineering Building I is currently, and will remain, 130,885 GSF and 77,671 NASF.
- b. This renovation creates and upgrades classrooms, instructional and research labs, clean rooms, and ancillary spaces. It provides long-term energy efficiency and extends the life of a 32-year-old building.
- 8. Contribution of Local Funds Through Matching Grants, Property Donations, etc.

Explanation: N/A

9. Reduces Future Deferred Maintenance Cost and Extends the Life of the Facility by Bringing the Project up to Existing Standards (cost-benefit analysis of renovation or new facility vs. maintenance)

Explanation:

- a. A cost-benefit analysis revealed that construction of a new facility would cost \$65.7M, while a renovation of the existing facility would cost \$18.5M.
- b. The renovation prevents costly, stop-gap repair measures to antiquated building systems. An independent study identified that all mechanical systems are past their lifespan, and that the building needs to be upgraded to meet current building and life-safety codes. The current electrical capacity of the building has been reached; the addition of any equipment is preceded by an analysis by Facilities Planning & Construction. An increasingly serious concern is the antiquated and no longer serviceable electronic lock system which must be replaced before it completely fails.
- c. Inevitable increases in enrollment will further stress antiquated building systems and will lead to still more costly, stop-gap repairs. Undergraduate enrollment is increasing significantly faster in CECS than it is at UCF overall. An extensive renovation will substantially curtail repeated repair and deferred maintenance expenses that are due to the age and extensive use of the building.

Other Pertinent Information not included above:

- Projected Facility Utilization Rate
  - Engineering I is currently, and will remain after renovation, fully utilized. All offices are assigned; in some cases employees are sharing an office. Classes are held from 7:30 am until 9:30 pm Monday through Thursday and from 7:30 am until 5:30 pm on Friday. Faculty and student researchers use the laboratories at

all hours. Student teams working on design projects and other group assignments are working around the clock in the building. Enrollment growth in the College of Engineering and Computer Science regularly outpaces the growth of UCF overall. Much-needed new faculty hires are contributing to an even higher utilization of this facility. Forty-five new faculty have joined CECS over the last two years. A similar number of additional faculty is expected over the next two years, providing additional demand on a facility that is becoming increasingly fragile.

Current/Projected Campus Utilization Rate

Based on UCF's Educational Plant Survey, which was conducted on October 6-8, 2015, the BOG is projecting that by 2020-2021, UCF will require additional square footage in all of the 9 space categories. The following estimates represent the current deficits of square footage for space categories within this building: Classroom – 83,904 (25.88%) Teaching Lab – 324,648 (52.45%) Research Lab – 629,057 (67.49%)

Office – 271,443 (27.25%)

Support Services - 104,103 (50.74%)

- In 2016-16, UCF produced the third-largest number of STEM graduates in the State University System of Florida.
- UCF is ranked in the top 20 among the world's 100 patent-producing universities by IEEE; and the Industrial Engineering graduate program is ranked 39<sup>th</sup> in the country.
- The renovation will provide short-term impact to the local economy, as follows:
  - Year 1: \$ 32,149,706 103 construction jobs, 108 other sectors
  - Year 2: \$ 2,131,138
- 7 construction jobs, 7 other sectors
- The College of Engineering was ranked 7th best graduate engineering school for Hispanics by *Hispanic Business Magazine* (2014).

#### CIP-3 SHORT-TERM PROJECT EXPLANATION CIP-3, A – NARRATIVE DESCRIPTION

AGENUT PRIORITY 4				
PROJECT TITLE College of Nursing and Allied DATE BLDG PROGRAM	AGENCY Univers	ity of Central Florida		Page _ 1 _ of _ 2
		College of Nursing and Allied	DATE BLDG PROGRAM	4

PURPOSE, NEED, SCOPE, RELATIONSHIP OF PROJECT TO AGENCY OBJECTIVES

The College of Nursing (CON) has grown 231% in the past thirteen years, growing from 1,199 students in 2003 to 2,772 in 2016. Growth has been attributed to the addition of several academic offerings: an accelerated 2<sup>nd</sup> degree baccalaureate program (BSN), two doctoral programs (PhD and DNP), a master's program, and two regional sites. By 2010, the CON had outgrown its former space in the Health and Public Affairs Building, and leased a building in the Central Florida Research Park to provide better teaching and learning facilities. The College is now at maximum capacity in this leased space. The total laboratory and classroom space available is inadequate, and students frequently practice their skills in the hallways and lunchrooms. Total enrollment has remained flat for the past 5 years, partially due to the fact that there is no room to expand programs requiring face-to-face classes and laboratories. Growth is essential to meet community needs of educating additional nurses at the BSN level, while addressing the university's strategic plan of increasing the number of graduate degrees awarded and increasing its research productivity. This necessitates increased space for teaching and learning, faculty and staff offices, and research and clinical laboratories.

Similar enrollment growth challenges are seen in the health professions of Physical Therapy, Athletic Training, and Communication Sciences and Disorders. These programs are housed in the College of Health and Public Affairs. Limited space has prevented the ability of these programs to grow to meet local, state, and national needs for projected growth in these fields. Enrollment in these programs has also remained flat for the past 5 years.

In order to provide the best educational experience for inter-professional education (IPE), including nurses, physicians, and other health professions, the CON will be located in close proximity to the College of Medicine at the UCF Health Sciences Campus at Lake Nona. Using proximal and shared facilities, students across the health professions, including medicine, will learn and work together to ensure the best patient outcome and experience. A unique opportunity exists to build space that facilitates IPE at the Health Sciences Campus that maximize experiences in the planned UCF teaching hospital. A new CON building will provide adequate laboratory, classrooms, simulation, computer, research, and conference spaces, supporting educational and research needs as well as IPE. While CON currently leases space in the Central Florida Research Park, comparable space is not available near the Health Sciences Campus.

A CON and Allied Health building will meet the needs of the student population, provide the highest quality educational and research programs, and allow its programs to expand and accommodate the ever-increasing needs of the community and the state of Florida for nurses and health professionals. Populations in both Central Florida and the state are growing. We must increase the capacity of the nursing and health-related programs to meet the increased workforce demands for such professionals. The proposed facility will also support expansion of the research programs and facilitate increased external funding for research to support doctoral students' and faculty members' research efforts.

#### CIP-3 SHORT-TERM PROJECT EXPLANATION CIP-3, A – NARRATIVE DESCRIPTION

The Florida Center for Nursing predicts a shortage of 50,000 nurses by 2025. UCF needs to prepare nurses at all levels to meet these shortages, and clinical agencies are increasingly making preferential hires of nurses with BSN and higher degrees. Bureau of Labor Statistics growth projections for the health professions also exceed 20%. UCF's flat enrollments across nursing and the health professions provide evidence of the need for space to meet these projected increased demands. Delays in this project will seriously limit any growth in terms of new faculty hires, new programs, the ability to teach using state-of-the art simulation, and the ability to meet the increasing demands for graduates and research opportunities.

## SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

## Classroom/Office

The space classification is predominately classroom or office type, with laboratory or research type minimized. The project will achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use. All heating and reheating will be hydronic.

#### Research/Laboratory

The space classification is minimally laboratory type, with office type maximized. Laboratories will have continuous variable air flow valves with air flow reset capabilities. Domestic and laboratory hot water needs shall be provided primarily by solar thermal energy.

## EDUCATIONAL PLANT SURVEY

The Educational Plant Survey has not been addressed for this project. As the planning year approaches, this project will be addressed.

#### STATE UNIVERSITY SYSTEM CIP-3 SHORT TERM PROJECT EXPLANATION

Page \_\_\_\_of \_\_\_\_

GEOGRAPHIC LO			l Florida, Orlan Nursing and Al				COUNTY: Orang PROJECT BR N		
		Net to						o. (il assigned)	·
Facility/Space	Net Area	Gross	Gross Area	Unit Cost	Construction	Assumed	Occupancy		
Type	(NASF)	Conversion	(GSF)	(Cost/GSF)*	Cost	Bid Date	Date		
Classrooms	17,850	1.5	26,775	305	8,166,375	Dia Dato	Dute		
Feaching Labs	21,510	1.5	32,265	376	12,131,640				
Clinic	14,140	1.5	21,210	600	12,726,000				
Research Labs	5,730	1.5	8,595	386	3,317,670				
Clinic Research	1,000	1.5	1,500	600	900,000				
Study	8,020	1.4	11,228	298	3,345,944				
Special Use	3,425	1.5	5,138	375	1,926,563				
Offices	25,526	1.5	38,289	331	12,673,659				
Campus Support Se		1.4	0	282	0		Space Detail for R	emodeling Pro	jects
Totals	97,201		145,000	-	55,187,851	BEF	ORE		AFTER
Apply Unit Cost to 1	otal GSF based	l on primary sp	ace type	-		Space	Net Area	Space	Net Area
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Remodeling/Renova		] [		ſ					
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d.Landscape/Irrig	aiton				550,000				3,262,0
e.Plaza/Walks					550,000				550,0
f.Roadway Improv	ements								-
g.Parking 3 <u>00</u> spa					350,000				-
h.Telecommunica					1,046,370				350,0
i.Electrical Service					1,040,570				1,046,3
j.Water Distributio									-
k.Sanitary Sewer									-
I.Chilled Water Sy									-
m.Storm Water Sy									-
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				163,105					163,10
d.Inspection Servic e.Insurance Consu				999,634					999,63
f.Surveys & Tests	nam			34,961					34,96
	vironmontal Ea	~~		216,538					216,5
g.Permit/Impact/Er h.Artwork	wionnentai Fe	69		138,578	400 000				138,5
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otal - Other Project				1,156,098 8,321,670	3,262,095	8,321,670			4,418,19
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LL COSTS 1+2			0	8,321,670	66,573,360	8,321,670	0		0 83,216,7
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	TOTAL			т	OTAL		0		83,216,7
	IUIAI								

### Higher Educational Facilities Return on Investment

This is a tool developed by a collaborative group of stakeholders designed to facilitate the identification of return on investment metrics for higher education facilities. Check any box(es) that apply, provide a quantitative explanation, and identify the term or years in which ROI information is provided.

Institution: University of Central Florida College of Nursing Project: College of Nursing and Allied Health Total Project Cost: \_\_\_\_\_\_\_\_\$ 83,216,700 Previous Funding (State and Local): <u>\$ 0.0 M</u> Current Request: \_\_\_\_\_\_\_\$ 8,321,670 STEM (Yes or No): Yes Contact Person (Name, Position, Office and Cell Phone No., Email): Dr. Daniel Holsenbeck, Senior Vice President of University Relations Office: (407) 823-2387; Cell: (407) 247-9421; daniel.holsenbeck@ucf.edu

The proposed building would house the UCF College of Nursing and health professional programs from the College of Health and Public Affairs (Physical Therapy, Athletic Training, and Communication Sciences and Disorders). Additional space would also provide an opportunity to add new health profession programs in high demand. Programs in the health professions are mandating interprofessional education (IPE) and training. When students of different disciplines learn together, communication and collaboration are enhanced (Brashers, 2016; Institute of Medicine; WHO), resulting in improved patient outcomes. Establishing this building adjacent to the College of Medicine and the recently-approved UCF Lake Nona Medical Center would enhance IPE and other opportunities for research and collaboration across the health disciplines. This summary incorporates data from nursing, physical therapy, and communication science.

Check any box(es) that apply and provide a quantitative explanation. Identify the term or years in which ROI information is projected.

1. Number of Additional Degrees and Certificates Produced and How Those Degrees are Meeting the Needs of our State (Job Openings, Average Wages of those Job Openings, etc) Explanation:

**Nursing:** The College of Nursing (CON) awarded 865 degrees in 2015-16: bachelor of science (BSN), 741; master of science (MSN), 100; clinical doctorate (DNP), 14; and research doctorate (PhD), 10. UCF produces the most BSN graduates of all SUS schools. The Florida Education & Training Placement

Information Program (FETPIP; 2013-2014) indicates that 85% of the state's BSN graduates are employed within Florida.

Florida is the 4<sup>th</sup> largest employer of registered nurses (RNs). The average salary for RNs in Florida is \$64,630/year (Bureau of Labor Statistics, 2016). Nurses with graduate degrees make more than \$80,000 per year, and the average salary for nurse practitioners in Florida is \$95,650 (Bureau of Labor Statistics, 2016), with many of these individuals earning over \$100,000 per year. Nurses in administrative positions earn over \$92,810 per year (Bureau of Labor Statistics, 2016).

Florida is expecting a shortage of 50,000 RNs by the year 2025 (Florida Center for Nursing [FCN], 2010). There is a high demand for programs that prepare nurses entering the profession at the baccalaureate level (BSN) (pre-licensure BSN programs) as well as those to facilitate progression of nurses with Associate Degrees to achieve the BSN (RN to BSN).

The National Academy of Medicine (formerly National Institute of Medicine) recommends that 80% of the RN workforce achieve a BSN by 2020, (IOM, 2010). Better patient outcomes (lower mortality, reduced readmission, and shorter lengths of stay) occur when care is provided by nurses with a BSN or higher (Yakusheva, 2014). Only 35% of newly-licensed nurses in Florida have a BSN, as the majority of nursing programs in Florida educate nurses at the Associate Degree level. Despite widespread availability of RN to BSN programs, only 45.6% of nurses in the state have a BSN or higher degree (FCN, 2016), well below the 80% target.

The need for nurses with a BSN degree or higher will continue to increase as the state's population increases (FCN, 2010). The increased need for primary care providers in the community, coupled with an increase in retirements among an aging nursing workforce, has led to a greater demand for nurse educators, researchers, and advanced practice nurses.

A faculty shortage looms on the horizon as the average age of faculty members is 57 years and the average age of the highest-ranking faculty is 61.6 years (AACN, 2015). Qualified faculty, especially those with a doctoral degree, are needed to ensure the future of the nursing workforce. The Florida Advanced Nursing Practice Supply Report (FCN, 2016) recommends educational programs to increase enrollments to meet consumer demands and to replace retiring advanced practice nurses.

#### **Health Professions:**

**Physical Therapy.** The Doctor of Physical Therapy (DPT) degree is the entrylevel degree to practice physical therapy in all states within the U.S. The profession of physical therapy is experiencing an overall shortage in physical therapists due to the aging of its population. Florida will have a shortage of more than 19,500 jobs in physical therapy through 2030 (Zibleman, 2010). The U.S. Bureau of Labor Statistics projects a growth of 34% in physical therapist jobs through 2024. This results in an annual average of 730 new jobs each year in the state of Florida, making Florida the 4<sup>th</sup> highest state in demand for physical therapists. Entry-level salary for a physical therapist in Florida is \$65,000, and the median annual salary is \$84,020 (U.S. Bureau of Labor Statistics).

Doctoral education in physical therapy is in high demand. The DPT program at UCF received 800 qualified applications last year, and was only able to admit 36 due to space restrictions on the main campus, marking a 5% acceptance rate. Currently, the mean number of students admitted for accredited DPT programs in the country is 44 per cohort. Other DPT programs in the SUS admit between 44 and 70 students per cohort. Additional teaching facilities conducive to program expansion could easily serve 20-40% more students. This increase in enrollment and subsequent graduates would assist in serving the growing need for DPT graduates in the state of Florida.

The Graduate Certificate in Anatomical Sciences administrated by the UCF DPT Program would be expanded. This 22-credit graduate certificate fills the need for graduate level anatomy/gross anatomy instruction, which is the foundation of many graduate healthcare programs, such as medicine, pharmacy, physician assistant, occupational therapy, and physical therapy, to name a few.

Athletic Training. The current Bachelor of Science in Athletic Training (BS in AT) degree will be phased out, and a newly approved Master of Athletic Training (MAT) degree will begin in 2019, in response to a national accreditation mandate that all programs be at the graduate level. As this mandate is implemented over the next 7 years, the profession expects that many smaller programs will not transition, and that the new paradigm will be fewer, larger programs. This allows UCF to capitalize on the changing market by increasing enrollment and/or recruiting faculty.

The MAT degree program is valuable to the SUS Programs of Strategic Emphasis in both education and healthcare. Most ATs hired in the Florida school systems work as teachers who teach science/health courses (Biology, HOPE, PE, Anatomy, and/or Care & Prevention depending on coursework on transcript) while completing the Alternate Certification Program (ACP) to become fully certified as a teacher.

ATs are health professionals that are licensed in the state of Florida. The 2015 Bureau of Labor Statistics predicts 21% growth (much faster than average) for 2014-2024. The Central Florida area, Miami, and Jacksonville are the three areas in Florida with the largest number of ATs (Bureau of Labor, 2015).

The current BS in AT Program alumni data (n=184) provides evidence that graduates successfully found employment in Central Florida (n=63; 34%) and that many more are staying within the state of Florida (n=42; 23%) through their AT employment or placement in graduate programs. The Orange and Seminole County Public School Systems are a consistent source of employment for current BS in AT graduates, as each high school employs two to four ATs (Bureau of Labor, 2015). The mean wage for an athletic trainer in Florida is \$43,930 to \$45,820.

**Communication Sciences and Disorders.** The master's degree is the entry-level degree to practice speech-language pathology in all states within the U.S. The profession of speech-language pathology is experiencing an overall shortage in therapists due to the aging of our population, as well as improved early identification of children at risk for, or having, a communication disorder. About 2 out of 5 speech-language pathologists worked in schools in 2014. Most others worked in healthcare facilities, such as hospitals or skilled nursing facilities. Florida is one of five states which employs the greatest number of speech-language pathologists (n = 7,260 in 2014); yet, it is one of the three states with the greatest shortage of speech-language pathologists (.88 therapists/1000 persons). The U.S. Bureau of Labor Statistics projects a growth of 28% in speech-language pathologist jobs in Florida. The median annual salary for a speech-language pathologist in the United States in 2015 was \$73,410; in Florida it was \$53,692 (U.S. Bureau of Labor Statistics).

Graduate education in speech-language pathology is in high demand. The master's degree program at UCF received approximately 650 qualified applications last year across three admissions cycles, and was only able to admit 35 per cohort due to space restrictions on the main campus, marking a ~15% acceptance rate. Nationally, the acceptance rate into speech-language pathology graduate programs is 22%, and the acceptance rate into audiology graduate programs is 32% (Council on Academic Programs in Communication Sciences and Disorders, 2016). The addition of teaching, research, and clinical service facilities conducive to program expansion could serve 20% more students than current. This increase in enrollment and subsequent graduates would assist in

serving the growing need for speech-language pathologists in Florida. Presently, the program at UCF produces the largest number of master's level graduates within the SUS (approximately 30% of all graduates of Florida programs).

<u>Proposed Interdisciplinary PhD Program.</u> A new PhD program in Rehabilitation Sciences is proposed once adequate space is secured. Rehabilitation science is a core foundation of physical therapy, as well as other disciplines such as nursing and communication science. The program focuses on interdisciplinary teaching and research on patient populations across disciplines.

2. X Number of Additional Students Served and the Benefits/Efficiencies Created (increase graduation rate, alleviate waitlist, increase academic support, etc) Explanation:

**Nursing:** Additional classroom, clinical laboratory, and simulation space would allow the CON to increase the capacity of its undergraduate pre-licensure program by a minimum of 32% (40 students per year). These students would add to the current 125 students admitted each year on the Orlando campus. Each year, UCF admits approximately 500 students who declare nursing as a major ("nursing pending"). Increasing capacity by at least 40 students per year would partially alleviate the wait list, increase the 4- and 6-year graduation rates, and reduce the number of students who transfer to other schools, including state colleges. We would be able to admit 40% of qualified applicants as compared to the current 30% statistic.

The CON will continue to offer its exceptional online RN to BSN program to ensure that those with an Associate Degree achieve the BSN goal. Additional office space for faculty who teach in this program would allow 10% program growth.

A strategic goal of the CON is to grow graduate program enrollment by 38% by 2020 (total enrollment of 500 students per year). Additional space would enable us to expand our signature master's programs in nursing leadership and management, and nursing and healthcare simulation. There are less than 10 programs in simulation nationwide, and the field is growing. A goal is to achieve national recognition for these two programs.

Starting Fall 2017, the doctor of nursing practice (DNP) will be the only option for nurse practitioner education. Additional space is needed for clinical and simulation instruction to expand enrollment. The CON denies admission to over 20 qualified nurse practitioner applicants each year due to lack of capacity. These students generally opt to enroll in more expensive, out-of-state programs. The CON is also expanding capacity for its PhD program to ensure preparation of faculty and scientists to meet workforce demands. The CON has been admitting 10 students per year; however, the goal is to admit at least 15 per year. Additional research laboratory space is needed for students who will be conducting research.

The CON conservatively estimates that the number of master's, professional doctorate, and research doctorate graduates can increase by 30 degrees per year within 5 years. This will assist UCF in achieving its goal of increasing the number of graduates with these degrees.

#### **Health Professions:**

**Physical Therapy.** One immediate impact of additional space would be a 20-40% increase in DPT graduates. Admitting more students into the program would also increase the number of students served, as currently the program is solely limited in its capacity due to space restrictions. This would improve 4-and 6-year graduation rates, and increase the number of professional doctorates — two priority initiatives.

Athletic Training. Athletic Training at UCF is already one of the largest programs in the country; on average 57 students are matriculating yearly. However, the capacity for clinical placement exists in Central Florida. Space constraints limit program growth, and existing space capacity has limits of 20 to 32 students. Additional classroom, clinical laboratory, and simulation space would allow Athletic Training to increase capacity by up to 22 students per year, yielding 50 MAT graduates yearly.

<u>Communication Science Disorders</u>. A 20% increase in speech-language pathology graduates would have an immediate impact. Admitting more students into the program would increase the number of patients and clients served in the community, as the program is limited in its capacity due to space restrictions on the UCF main campus and in the Communication Disorders Clinic located in the Central Florida Research Park.

<u>All Programs.</u> Co-location of the CON, the DPT program (and the Anatomical Sciences Certificate), the Communication Sciences and Disorders master's program, and the PhD Program in Rehabilitation Sciences would promote interdisciplinary research and practice. The proximity to the planned UCF Lake Nona Medical Center, the VA Medical Center, Nemours Children's Hospital, and UF College of Pharmacy, would also facilitate collaboration and partnerships for impactful research, increasing the likelihood of success in securing extramural funding. These partnerships and clinical opportunities would create immense

efficiency in clinical research, entry-level education, clinical education, and service delivery, benefitting not only the students enrolled in the programs, but the university, region, and state.

3. Amount of Additional Research Funding to be Obtained; Patents Awarded Explanation:

Co-location of nursing and health professional programs in close proximity to the UCF College of Medicine, UF College of Pharmacy, and nearby hospitals and health facilities would enhance collaborative research opportunities. The Lake Nona area is becoming a hub for sports and health-related initiatives, providing further opportunities.

**Nursing:** The CON has identified core research clusters to promote research with high potential for federal funding and patent generation. One of these areas is simulation. The additional space would promote research in this field and other areas of strategic emphasis. This innovative space would enhance our ability to conduct research, increase interprofessional research initiatives, and hire the best-qualified faculty members. It would foster success in securing additional extramural research funding. Another area of emphasis is on issues related to care/needs of the elderly. This would enhance partnerships with both physical therapy and communication sciences faculty.

Conservatively, the CON estimates that research funding would increase by \$500K per year within 5 years of relocating. Additional space would provide increased opportunities for collaboration and partnerships with the College of Medicine, health professions programs, the UCF Lake Nona Medical Center, the VA, Nemours Children's Hospital, and other partners.

Nursing also employs faculty from other disciplines (e.g., engineering). Through the enhanced collaboration for research, at least 2 patent applications would be generated over a 5-year period.

Health Professions: Local clinical partnerships and interprofessional foci, along with new and enhanced research space, would promote impactful and meaningful clinical research that will be valued by federal funding agencies, such as the National Institute of Child Health and Human Development (NICHD) and the National Center for Medical Rehabilitation Research (NCMRR). Conservatively, we estimate funding at approximately \$500K within the first 3 years after the PhD program is initiated, which is comparable to other PhD program funding within the FL SUS.

4. Project is in an Area of Strategic Emphasis as Determined by the Board of Governors' Gap Analysis or the Department of Economic Opportunity's National Occupational Forecast Explanation:

**Nursing:** The FL BOG Gap Analysis (2015) shows a continued demand for nurses at all levels, including RNs, advanced practice nurses, and scientists (who also assume faculty roles). Projections include 6,979 annual openings for registered nurses and 357 openings for nurse practitioners.

**Health Professions:** The FL BOG Supply/Demand Workforce Gap Analysis Report (2015) reveals that physical therapy is in high demand. At the time of the last report, physical therapist education programs were producing 110 fewer graduates than there were annual openings in physical therapy in the state. For athletic training, the 2015 Bureau of Labor Statistics predicts 21% growth (much faster than average) for 2014-2024. The Central Florida area, Miami, and Jacksonville are the three areas in Florida with the largest number of ATs (Bureau of Labor, 2015). Likewise, graduates of speech-language pathology programs are also in high demand. At the time of the last FL BOG report, speech-language pathology education programs were producing 80 less graduates than there were annual openings in speech-language pathologists in the state.

5. Improves the Ranking of a Preeminent Program or Improves on a Performance Funding Model Metric Explanation:

Additional space will assist in increasing undergraduate enrollment in nursing's limited-access program. Many qualified students are denied admission, which prolongs time to graduation. Increasing capacity in limited-access, pre-licensure undergraduate programs will increase 4- and 6-year graduation rates, and increase the number of graduates who will earn high incomes.

Additional space will also support enrollment growth in nursing and healthrelated disciplines, resulting in an increase of doctoral graduates (professional and research.)

Space to enhance and facilitate research across disciplines will increase research opportunities and funding. Opportunities for post-doctoral study will be developed.

Innovative, collaborative space in the expanding Medical City environment will increase recruitment and retention of both faculty and students. It will also increase opportunities for improvement in national rankings.

6. Increase Business Partnerships Which Will Lead to Guaranteed Internships and Jobs for Students Explanation:

**Nursing and Health Professions:** Relocation to the UCF Lake Nona Health Sciences Campus would increase opportunities for undergraduate and graduate internships for nursing and associated health professions with UCF-HCA teaching hospital, the Veterans Administration (VA) Hospital, and Nemours Children's Hospital.

It would increase the number of partnerships in the healthcare simulation area. Nursing has established an interdisciplinary graduate certificate in nursing and healthcare simulation. The relocation of the national VA SimLearn Center would enhance opportunities for graduate student internships and research.

 Project Improves the Use, either Operationally or Academically, of Existing Space Explanation:

**Nursing:** The CON is currently housed in approximately 50,000 square feet of space in the Central Florida Research Park, which is rented from the UCF Foundation. This existing space includes a 150-seat classroom, an 80-seat classroom, a 35-seat classroom, four conference rooms, numerous offices, three large clinical-type teaching laboratories, one wet lab, and storage. Leased space in the Central Florida Research Park is currently very limited, and is in high demand. Upon relocation of the CON, its space would become available to other UCF entities through the UCF Foundation.

**Health Professions:** Physical Therapy, Athletic Training, and Communication Science Disorders are housed on the UCF main campus within the College of Health and Public Affairs. Two clinical skills laboratories, a human gross anatomy laboratory, and precious office space would become available on the UCF main campus if the DPT program was able to relocate. Space on the main campus for teaching and research is very limited and this additional space would provide teaching, research, and laboratory space to accommodate students.

 Contribution of Local Funds Through Matching Grants, Property Donations, etc. Explanation: All disciplines: The addition of a new CON building would provide an opportunity to seek donations to outfit and name the simulation areas, laboratory areas, clinical areas, conference rooms, and classrooms. The CON and health professional programs estimate seeking and receiving at least \$15 million in funds to support such efforts.

9. Reduces Future Deferred Maintenance Cost and Extends the Life of the Facility by Bringing the Project up to Existing Standards (cost-benefit analysis of renovation or new facility vs. maintenance) Explanation: N/A

Other Pertinent Information not included above:

• Projected Facility Utilization Rate

All disciplines: Space for the CON and health professions programs is estimated to be at approximately 80% utilization upon opening. The projected growth in faculty hires, research, and student enrollments would ensure maximum utilization within 5 years. Classes would be held throughout the week, including evening hours as dictated by programs. Faculty and student researchers would be able to use the designated laboratory space at all hours.

**Nursing:** Student teams working on projects would have access to the building during extended building hours. Currently, students must vacate the CON space at 5:00 pm, and the space for group work is extremely limited. Nine new faculty members and three new staff have joined the CON over the last two years. At least five additional hires are projected over the next three years, further increasing demand for space.

Current/Projected Campus Utilization Rate

Based on the 2015 Educational Plant Survey, the BOG is projecting that by 2020-2021, UCF will require additional square footage in all nine space categories. The following estimates represent the current deficits of square footage for space categories:

Classroom - 83,904 (25.88%) Teaching Lab - 324,648 (52.45%) Research Lab - 629,057 (67.49%) Office - 271,443 (27.25%) Support Services - 104,103 (50.74%)

- The construction will provide short-term impact to local economy, as follows:
  - Year 1: \$ 14,165,950
- 41 construction jobs, 38 other sectors
- Year 2: \$ 113,327,601 326 construction
- 326 construction jobs, 306 other sector

## • Year 3: \$ 14,165,950 41 construction jobs, 38 other sectors

- The College of Nursing's consistently high pass rate on the RN licensure exam (NCLEX) places it in the top 4% of schools nationwide and within the SUS, with pass rates ranging from 92% to 97% annually.
- CON nurse practitioner students exceed the national pass rate on certification exams; during 2016, the pass rate was 100%.
- The graduate nursing and doctor of nursing practice programs are in the top 100 of the *US News and World Report* ratings. Our ratings increased substantially in 2017 and our goal is to be in the top 50.
- The CON and DPT programs have been participating in IPE activities with the College of Medicine, College of Health and Public Affairs, and the University of Florida College of Pharmacy. These experiences have been coordinated on the UCF Health Science Campus, but require detailed coordination and scheduling. Having the CON and health professions programs in close proximity with other programs would provide more opportunities for shared coursework, collaborative research and clinical projects, and additional IPE exercises.
- The UCF Doctor of Physical Therapy Program has exceeded state and national averages for licensure pass rates, both on ultimate (three-year) average, and first attempt. UCF has achieved 100% first attempt pass rates on the national licensure examination for the last two years, which was only achieved by 17 of the 240 (7%) U.S. academic institutions (Federation of State Boards of Physical Therapy).

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<b>CIP-3 SHORT-TERM PROJECT EXPLANATION</b>	I
CIP-3, A – NARRATIVE DESCRIPTION	

AGENCY Univers	ity of Central Florida		Page	1	of	2
BUDGET ENTITY PROJECT TITLE	SUS Mathematical Sciences Building Remodeling and Renovation	AGENCY PRIORITY DATE BLDG PROGRAM APPROVED	5			

# PURPOSE, NEED, SCOPE, RELATIONSHIP OF PROJECT TO AGENCY OBJECTIVES

The Mathematical Sciences Building is a 46-year old, 106,523 GSF teaching facility. Its classrooms, teaching and research labs, study rooms, offices, and conference rooms are used by nearly 30,000 students annually. This facility lays the foundation for UCF's Science, Technology, Engineering, and Math (STEM) programs, and provides limited research areas for Mathematics and other building occupants. This building requires a total renovation of its interior space to better support research applications and optimize space occupancy and classroom utilization.

The university contracted with the ISES Corporation to conduct a Facilities Condition Assessment (FCA) to benchmark the condition of its E&G facilities. The Mathematical Sciences renovation will address both critical and non-critical issues identified in the FCA. These issues encompass deficiencies such as indoor air quality, fire alarm modernization, potable water and plumbing distribution systems, electrical service, asbestos, HVAC modernization, lighting upgrades, building automation, ADA compliance, building envelope repairs, interior finishes, flooring, egress, exterior lighting, and utility service entrance upgrades. Information technology upgrades are also required in order to meet current and future requirements.

#### SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

#### **Classroom/Office**

The space classification is predominately classroom or office type, with laboratory or research type minimized. The project will achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices

#### CIP-3 SHORT-TERM PROJECT EXPLANATION CIP-3, A – NARRATIVE DESCRIPTION

and related energy use. All heating and reheating will be hydronic.

#### **Research/Laboratory**

Despite the fact that the predominant space classification of this building is classroom and office type, there are a number of research and teaching laboratories, and research support spaces belonging to multiple colleges. Laboratories will have continuous variable air flow valves with air flow reset capabilities. Domestic and laboratory hot water needs will be provided primarily by solar thermal energy.

# EDUCATIONAL PLANT SURVEY

The Educational Plant Survey was conducted and approved in February 2011. See recommendation No. 2.2 Math Sciences Building Remodeling and Renovation (formerly known as Math and Physics Building).

CIP-3 SHORT TERM	PROJECT EX	PLANATION							Pageof
GEOGRAPHIC LOCA			il Florida, Orlan nces Building R				COUNTY: Orang PROJECT BR No		
		Net to						<u></u>	
Facility/Space	Net Area	Gross	Gross Area	Unit Cost	Construction	Assumed	Occupancy		
Type	(NASF)	<u>Conversion</u>	<u>(GSF)</u>	(Cost/GSF)*	Cost	Bid Date	Date		
Classrooms		1.5	0	305	0				
Feaching Labs		1.5	0	376	0				
Research Labs		1.5	0	386	0				
Study		1.4	0	298	0				
nstructional Media		1.5	0	222	0				
uditorium/Exhibition		1.2	0	329	0				
Symnasiums		1.2	0	226	0		Space Detail for F	Remodeling Proje	cts
Offices		1.5	0	331	õ	BI	EFORE		FTER
ampus Support Sen	lices	1.4	õ	282	ő	Space	Net Area		
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		=		-	U	Туре	(NASF)	Type	(NASF)
Apply Unit Cost to to	al GSF based	on primary s	pace type			Teaching Labs		Teaching Labs	1,986
						Research Lab	s 7,719	Research Labs	7,719
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emodeling/Renovati									
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otal Construction - N	ew & Rem./Re	enov.			11,834,601	Total	15,184	Total	15,184
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CHEDULE OF PRO	IECT COMPO	NENTS				ESTIM	ATED COSTS		
			Funded to			LOTIW	(TED 00313		
Basic Construction Co	st		Date	<u>2018-19</u>	<u>2019-2020</u>	<u>2020-21</u>	<u>2021-22</u>	2022-23	Funded & in CIP
. a.Construction Cos	t (from above)		2,896,788	8,937,813					11,834,601
Add'I/Extraordinary	Const. Costs								-
b.Environmental Im	pacts/Mitigatio	'n							
c.Site Preparation			69,802	176,740					246 542
d.Landscape/Irrigai	ion.		00,002	110,140					246,542
e.Plaza/Walks									-
									-
f.Roadway Improve									-
g.Parking spac									-
h.Telecommunication	n								-
i.Electrical Service									-
j.Water Distribution									-
k.Sanitary Sewer S	/stem			134,667					134,667
I.Chilled Water Syst	em			37,393					37,393
m.Storm Water Sys				67,333					
n.Energy Efficient E				350,000					67,333
otal Construction Co	• •		2 066 500		•				350,000
otal Construction Co			2,966,590	9,703,946	0	(	) 0	0	12,670,536
. Other Project Costs									
a.Land/existing facili	ty acquisition								-
b.Professional Fees			269,492	979,230					1,248,722
c.Fire Marshall Fees			8,725	22,092					30,817
d.Inspection Service	s		25,000	195,348					220,348
e.Insurance Consult	ant		1,738	4,666					6,404
f.Surveys & Tests			51,157	•					51,157
g.Permit/Impact/Env	ironmental Fe	es	31,677	65,534					
h.Artwork			0,,017						97,211
i.Moveable Furnishir		ant		-	000 404				-
			E00 400	1 000 117	890,181		•		890,181
j.Project Contingenc			523,496	1,000,147	000 10/				1,523,643
otal - Other Project C	OSIS		911,285	2,267,017	890,181			-	4,068,483
LL COSTS 1+2			3,877,875	11,970,963	890,181	C	0	0	16,739,019
	Appropriation	s to Date			Project Costs Bey	ond CIP Period			Total Project In
		Fiscal Year	Amount		Source	Fiscal Year	Amount		CIP & Beyond
		2012-13	3,877,895				7 anount		
	00	2012-10	0,077,000						16,739,019
		_	3,877,895	-	TOTAL		0		3,877,895
	TOTAL								20,616,914

#### Higher Educational Facilities Return on Investment

This is a tool developed by a collaborative group of stakeholders designed to facilitate the identification of return on investment metrics for higher education facilities. Check any box(es) that apply, provide a quantitative explanation, and identify the term or years in which ROI information is provided.

Institution: University of Central Florida

Project: Mathematical Sciences Building Remodeling and Renovation Total Project Cost: <u>\$16,739,039</u> Previous Funding (State and Local): <u>\$3,877,895</u>

Current Request: \_\_\_\_\_\_\$ 11,970,963

STEM (Yes or No): Yes

Contact Person (Name, Position, Office and Cell Phone No., Email): Dr. Daniel Holsenbeck, Senior Vice President of University Relations Office: (407) 823-2387; Cell: (407) 247-9421; daniel.holsenbeck@ucf.edu

Check any box(es) that apply and provide a quantitative explanation. Identify the term or years in which ROI information is projected.

1. Number of Additional Degrees and Certificates Produced and How Those Degrees are Meeting the Needs of our State (Job Openings, Average Wages of those Job Openings, etc)

Explanation:

The Mathematical Sciences Building is a 46-year old, 106,523 GSF teaching facility that also houses the academic and administrative office for the mathematics department, the Mathematics Assistance and Learning Lab (MALL), physics teaching labs, and the iSTEM offices. All physical anthropology teaching lab courses are also taught in the Mathematical Sciences building.

- a. The building directly supports all Math program graduates (45 in 2015-16) and Anthropology program graduates (106 in 2015-16). It also provides the required foundational and advanced mathematics courses required by all of UCF's Science, Technology, Engineering and Math (STEM) degrees (3,135 in 2015-16), and the general education mathematics courses required for all majors.
- b. Based upon enrollment projections and expected growth (2%) of the program, UCF anticipates awarding an additional 7 degrees in the Math program, 16 in Anthropology and 466 in all STEM programs by 2022-23.
- c. Mathematicians generally work is a variety of industries including the federal government, universities, and corporate research and development organizations. The U.S. Bureau of Labor Statistics (BLS)

projects that mathematician's employment opportunities will increase by 21 percent through 2024. BLS also states that mathematicians have a 2016 median annual wage of \$105,810. The Florida Department of Education (FETPIP) data indicates that UCF mathematics bachelor's graduates had an average salary of \$48,212 and anthropology bachelor's graduates had an average salary of \$27,292 within one year of graduation.

- 2. Number of Additional Students Served and the Benefits/Efficiencies Created (increase graduation rate, alleviate waitlist, increase academic support, etc) Explanation:
  - a. The Mathematics Department has a program enrollment of 337 (Fall 2016). Fall 2016 enrollment for the Anthropology department was 349. This building also serves as the main facility for all math coursework used by a variety of majors, plus coursework in biological sciences, computer sciences, engineering, statistics, and physical sciences. There were 622 sections offered in the Mathematical Sciences Building during 2015-16 with 29,666 enrollments.
  - b. Based on a 2% projected university-wide enrollment growth, an increase of 2,256 STEM students is expected by Fall 2022.
  - c. This building not only serves all of the undergraduate and graduate students in Mathematics, but also serves the entire undergraduate population of UCF through service courses in Mathematics for the GEP requirements. Fall 2016 enrollment at UCF main campus was 53,183. Based on the UCF Enrollment Projection Model, an increase of over 5,500 students is expected on the main campus by Fall 2022.
- 3. Amount of Additional Research Funding to be Obtained; Patents Awarded Explanation:

Over the past 3 years, the Department of Mathematics has garnered over \$2.5 million dollars in new research funding. Additionally, faculty from the Department of Physics and the College of Engineering who occupy specialized laboratories in this building have brought in significant external funding. Renovation of this building's systems and facilities which support these laboratories is critical to the future of such funding opportunities.

4. Project is in an Area of Strategic Emphasis as Determined by the Board of Governors' Gap Analysis or the Department of Economic Opportunity's National Occupational Forecast

**Explanation**:

The building directly supports STEM majors in mathematics while also providing a wide range of foundation and advanced mathematics courses required by all STEM majors. All programs offered in the Mathematical Sciences are designated as STEM programs. The Department offers bachelors, masters and doctoral degrees in Mathematics as well as a graduate certificate degree program to better prepare K-12 teachers in Mathematics

The Building houses the Math Assistance & Learning Lab [MALL] which provides fundamental mathematics instruction to over 2600 undergraduates per year

The Building also houses the iSTEM Center, a partnership initiative between the COS and CECS.

The Building also houses the STEAM initiative: the Science, Technology, Engineering, Art and Math partnership initiative.

The Building also houses the nationally recognized "Scale Up-Studio" specialized instructional classroom for teaching college Physics. Over 1500 students take Physics courses in this facility each academic year.

The Building also houses the Data Mining Lab for Statistics. In addition to serving as a research lab, the Statistics M.S. uses this lab for courses and student research, serving 50 masters students annually (Fall 2016). In addition, this lab supports several cornerstone courses of the Big Data Analytics Ph.D. program (9 active Fall 2019, increasing to 24 by Fall 2023).

5. Improves the Ranking of a Preeminent Program or Improves on a Performance Funding Model Metric

Explanation:

Contributes to Performance Funding Metrics 7 and 8 with an expected increase of 328 STEM bachelor's degrees and 114 STEM graduate degrees awarded by 2021-22.

Graduates from the Department of Mathematics programs contribute to Metrics 6 (bachelor's degrees awarded in areas of strategic emphasis) and 8A (graduate degrees awarded in areas of strategic emphasis (including STEM) of the Performance Funding Model.

 Increase Business Partnerships Which Will Lead to Guaranteed Internships and Jobs for Students Explanation: N/A

- 7. Project Improves the Use, either Operationally or Academically, of Existing Space
  - Explanation:
  - a. This building requires a total renovation of its interior space to better support research applications, optimize space occupancy and classroom utilization, and re-configure internal spaces to meet current and future teaching and research needs.
  - b. The renovation creates and upgrades classrooms, teaching labs, research labs, study rooms, and ancillary spaces.
  - c. The Mathematical Sciences building is currently, and will remain, 106,523 GSF. The NASF is 63,413 and is expected to increase with the renovations.
- 8. Contribution of Local Funds Through Matching Grants, Property Donations, etc.

Explanation: N/A

9. Reduces Future Deferred Maintenance Cost and Extends the Life of the Facility by Bringing the Project up to Existing Standards (cost-benefit analysis of renovation or new facility vs. maintenance)

Explanation:

- a. An independent study identified that the mechanical systems are past their life-span, and that the building needs to be upgraded to extend its useful life, and meet current building codes.
- b. The renovation will prevent costly stop-gap repair measures to antiquated building systems, and provide long-term energy efficiency.

Other Pertinent Information not included above:

- Its classrooms, teaching and research labs, study rooms, offices, and conference rooms are used by approximately 30,000 students annually.
- Mathematics instruction in this facility provides a core foundation for UCF's Science, Technology, Engineering, and Math (STEM) students, and provides limited research areas for Mathematics and other academic programs.
- Space utilization exceeds the current statutory requirement of 60% student stations occupied at a minimum of 40 hours per week.
- A renovated facility will allow UCF to continue to produce over 7,500 Florida STEM graduates per year in Mathematical Sciences.
- The construction will provide short-term impact to local economy, as follows:
  - Year 1: \$ 21,687,951 70 construction jobs, 72 other sectors
  - Year 2: \$ 1,612,753 5 construction jobs, 6 other sectors

	PROJECT EXPLANATION RATIVE DESCRIPTION	· · · · · · · · · · · · · · · · · · ·	
AGENCY University of Central Florida BUDGET ENTITY SUS PROJECT TITLE Trevor Colbourn Hall and Colbourn Hall Demolition	AGENCY PRIORITY DATE BLDG PROGRAM APPROVED	Page <u>1</u> of <u>2</u> 6	

Trevor Colbourn Hall will be an academic building, intended to match the overall space categories of the existing Colbourn Hall, while adding additional square footage for departmental growth. The new building will support, as closely as possible, the academic programs and support units currently housed in Colbourn Hall, along with additional space for expanding departments on campus. The new building will be pragmatic in concept, functional, and maintainable, while maximizing useable square footage to the fullest.

From a facilities perspective, Colbourn Hall (built in 1974 with some renovation work in the early 1990s) is in poor condition. The university has calculated the Facilities Condition Index (FCI) (the cost of repairs as compared to the cost to replace the building) for the building to be 86%. From an economic perspective, buildings can be demolished when their FCI exceeds 40%. Therefore, the university proposes that Colbourn Hall be demolished.

Departments and offices moving from Colbourn Hall to Trevor Colbourn Hall are: English, Writing and Rhetoric, History, Modern Languages, Texts and Technology; Judaic Studies, Africana Studies, Women's Studies, Latin American Studies; the College of Arts & Humanities Advising Office, the College of Arts & Humanities Tech Office, College of Arts and Humanities offices, , the University Writing Center, the Center for Humanities and Digital Research, the Graduate Student Center; offices for new faculty being hired, and seven (7) classrooms. Departments and offices moving into Trevor Colbourn from various locations around main campus include: Interdisciplinary Studies; Office of Undergraduate Research; Pre-Professional Advising; Academic Advancement Programs; Burnett Honors College; First Year Advising and Exploration; Sophomore and Second Year Center; Transfer and Transition Services; and the Student Academic Resource Center.

## SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

## Classroom/Office

The space classification is predominately classroom or office type, with laboratory or research type minimized. The project will achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use. All heating and reheating will be hydronic.

## EDUCATIONAL PLANT SURVEY

The Educational Plant Survey was conducted October 6-7, 2015 and approved January 28, 2016. See recommendation No. 3.3, Trevor Colbourn Hall.

CIP-3 SHORT TERM F									Pageof
GEOGRAPHIC LOCAT PROJECT DESCRIPT		rsity of Centra Trevor Colbu	l Florida, Orlando Im Hall and Colbo	ourn Hall Demolit	on		COUNTY: Orange PROJECT BR No.	(if assigned):	
Facility/Space	Net Area	Net to Gross	Gross Area	Unit Cost	Construction	Assumed	Occupancy	<u>`</u> <u>`</u>	
<u>Type</u>	(NASF)	Conversion	( <u>GSF</u> )	(Cost/GSF)*	<u>Cost</u>	<u>Bid Date</u>	Date		
Classrooms	7,425	1.5	11,138	253	2,817,788				
Feaching Labs	1,975	1.5	2,963	240	711,000				
Research Labs	0	1.5	0	375	0				
Study	1,725	1.4	2,415	214	516,810				
nstructional Media	•	1.5	0	206	0				
Auditorium/Exhibition	0	1.2	0	275	0				
Gymnasiums	0	1.2	0	195	0		Space Detail for R	emodeling Pro	jects
Offices	79,390	1.5	119,085	249	29,652,165		FORE		AFTER
Campus Support Serv	0	1.4	0	223	0	Space	Net Area	Space	Net Area
Apply Unit Cost to tota	90,515 I GSF based	on primary sr	135,600 ace type	-	33,697,763	<u>Type</u>	(NASF)	<u>Type</u>	(NASF)
		, <b>,</b> - F							
emodeling/Renovatior ۲	1	1 г		г					
L otal Construction - Nev				L					
	v a Rem./Re	310V.		=	33,697,763	Total	0	Total	0
CHEDULE OF PROJE	ECT COMPC	DNENTS				ESTIMA	TED COSTS		—· ,· ,
			Funded to						
asic Construction Cos			Date	<u>2018-19</u>	<u>2019-20</u>	<u>2020-21</u>	<u>2021-22</u>	<u>2022-23</u>	Funded & In C
. a.Construction Cost (			-	33,697,763					33,697,7
Add'I/Extraordinary Co									
b.Environmental Impa	acts/Mitigatio	'n							_
c.Site Preparation				156,408					156,40
d.Landscape/Irrigaito	n			-					150,40
e.Plaza/Walks									-
f.Roadway Improvem	ents								-
g.Parking spaces	J.								-
h.Telecommunication				348,641					-
i.Electrical Service				,					348,64
j.Water Distribution									-
k.Sanitary Sewer Sys	tem								-
I.Chilled Water Syster									-
m.Storm Water Syste	m								-
n.Energy Efficient Equ	upment								-
otal Construction Costs			0	34,202,812		0	0	0	34,202,8
Other Project Costs									
a.Land/existing facility	acquisition								-
b.Professional Fees				1,737,082					1,737,08
c.Fire Marshall Fees				73,750					73,75
d.Inspection Services				69,799					69,79
e.insurance Consultan	t			17,700					17,70
f.Surveys & Tests				25,000					25,00
g.Permit/Impact/Enviro	nmental Fee	35		100,309					100,30
h.Artwork				100,000					100,00
i.Moveable Furnishing	3 & Equipme	nt		1,083,518					1,083,51
j.Project Contingency				590,030					590,03
otal - Other Project Cos	its		-	3,797,188			-		3,797,18
L COSTS 1+2				38,000,000	0	0	0	0	38,000,00
		s to Date		P	roject Costs Beyor	nd CIP Period	<u> </u>		Total Project In
A	ppropriations								
A		Fiscal Year	Amount		Source	Fiscal Year	Amount		CIP & Revord
A			Amount 0		Source	Fiscal Year	Amount		•
					Source	Fiscal Year	Amount		CIP & Beyond 38,000,00

#### Higher Educational Facilities Return on Investment

This is a tool developed by a collaborative group of stakeholders designed to facilitate the identification of return on investment metrics for higher education facilities. Check any box(es) that apply, provide a quantitative explanation, and identify the term or years in which ROI information is provided.

Institution: University of Central Florida Project: Trevor Colbourn Hall and Colbourn Hall Demolition Total Project Cost: \_\_\_\_\_\_\_\$ 38,000,000 M Previous Funding (State and Local): <u>\$ 0.0 M</u> Current Request: \_\_\_\_\_\_\$ 38,000,000 M STEM (Yes or No): Yes Contact Person (Name, Position, Office and Cell Phone No., Email): Dr. Daniel Holsenbeck, Senior Vice President of University Relations Office: (407) 823-2387; Cell: (407) 247-9421; daniel.holsenbeck@ucf.edu

Check any box(es) that apply and provide a quantitative explanation. Identify the term or years in which ROI information is projected.

1. Number of Additional Degrees and Certificates Produced and How Those Degrees are Meeting the Needs of our State (Job Openings, Average Wages of those Job Openings, etc)

Explanation:

- a. Trevor Colbourn Hall will house the following departments that currently occupy the existing Colbourn Hall: Africana Studies, English, History, Judaic Studies, Latin American Studies, Modern Languages & Literatures, Women's Studies and Writing & Rhetoric. In 2015-16 programs in these departments awarded 636 degrees and certificates (441 bachelor's, 67 master's and 128 certificates).
- b. Based upon enrollment projections and expected growth (2%) of these programs, UCF anticipates awarding an additional 95 degrees in these programs by 2022-23.
- c. Projected growth and average annual wages for graduates in these programs include:

Occupation	Projected	Mean Annual
	Growth	Wage
Interpreters and Translators	28.7%	\$42,480
Middle School Teachers	5.9%	\$49,260
Secondary School Teachers	5.8%	\$49,420
Writers and Authors	2.3%	\$66,020

Sources: US Bureau of Labor Statistics May 2016 Metropolitan and Nonmetropolitan Area Occupational Employment and Wage Estimates, Orlando-Kissimmee-Sanford, FL; Florida Department of Economic Opportunity 2017-18 Regional Demand Occupation List

- d. The Florida Department of Education (FETPIP) data indicates that within one year of graduation UCF bachelor's graduates in English had an average salary of \$33,248 and bachelor's graduates in History had an average salary \$35,128.
- 2. Number of Additional Students Served and the Benefits/Efficiencies Created (increase graduation rate, alleviate waitlist, increase academic support, etc) Explanation:
  - a. Fall 2016 enrollment for the programs housed in Colbourn Hall was 1,745. There were 141 sections offered in Colbourn Hall during 2015-16 with enrollment of 2,721.
  - b. Based on a 2% projected university-wide enrollment growth, an increase of 220 students is expected by Fall 2022.
- 3. Amount of Additional Research Funding to be Obtained; Patents Awarded Explanation: N/A
- Project is in an Area of Strategic Emphasis as Determined by the Board of Governors' Gap Analysis or the Department of Economic Opportunity's National Occupational Forecast Explanation: N/A
- 5. Improves the Ranking of a Preeminent Program or Improves on a Performance Funding Model Metric Explanation: N/A
- 6. Increase Business Partnerships Which Will Lead to Guaranteed Internships and Jobs for Students Explanation: N/A
- 7. Project Improves the Use, either Operationally or Academically, of Existing Space

Explanation: N/A

8. Contribution of Local Funds Through Matching Grants, Property Donations, etc.

Explanation: N/A

- 9. Reduces Future Deferred Maintenance Cost and Extends the Life of the Facility by Bringing the Project up to Existing Standards (cost-benefit analysis of renovation or new facility vs. maintenance)
  - Explanation:
  - a. Trevor Colbourn Hall will be an academic building, intended to match the overall space categories and square footage of the existing Colbourn Hall, while adding additional space to account for departmental growth.

Other Pertinent Information not included above:

The construction will provide short-term impact to local economy, as follows:
 o Year 1: \$ 68,845,099 221 construction jobs, 231 other sectors

CIP-3 SHORT-TERM PROJECT EXPLANATION	
CIP-3, A – NARRATIVE DESCRIPTION	

AGENCY _University of Central Florida		Page <u>1</u> of <u>2</u>
BUDGET ENTITY SUS PROJECT TITLE John C. Hitt Library Renovation Phase II	AGENCY PRIORITY DATE BLDG PROGRAM APPROVED	7 , CITF 1

The John C. Hitt Library, built in 1967 when enrollment was 1,948 students, is woefully inadequate 50 years later to meet the growing needs of current and future student populations. The existing library, with a collection of over 1.2 million print volumes, is open 105 hours per week, and has a patron count of almost 1, million visits per year. During a typical midterm week 39,000 people frequent the library. The existing Library presently has 1,903 reader seats, which represents about 7% of the main campus FTE, and is significantly less than the minimum requirements recommended by the Association of College and Research Libraries.

The university contracted with the ISES Corporation to conduct a Facilities Condition Assessment (FCA) to benchmark the condition of its E&G facilities. The John C Hitt Library renovation will address both critical and non-critical issues identified in the FCA. These issues encompass deficiencies such as indoor air quality, fire alarm modernization, potable water and plumbing distribution systems, electrical service, asbestos, HVAC modernization, lighting upgrades, building automation, ADA compliance, building envelope repairs, interior finishes, flooring, egress, exterior lighting, and utility service entrance upgrades. Information technology upgrades are also required in order to meet current and future requirements.

The 21st Century Library project involves the construction of a 41,000 sq. ft. addition on the north side of the building and the complete renovation of the existing building (consisting of the original 1967 building and the adjoining 1984 addition). This project will accommodate 3,394 seats, about 10% of the main campus FTE. The new construction will consist of a four-story automated retrieval system (ARC) that will provide quick access to a computer-managed storage system with a capacity of 1,250,000 items. This will allow lesser used material to be stored in the ARC and free up valuable square footage for user space in the Library. Although approximately 75% of the materials will be housed in the ARC, library users will still have open access to more than 270,000 materials, including items within the reference collection, general collection, and government documents. The most current and heavily used items, as well as those most suited to browsing, will remain on open shelves. The retrieval system will provide the library with space to grow collections.

When completed, the renovated and expanded facility will include redesigned, more efficient and flexible interior spaces featuring greatly increased seating in information literacy classrooms; triple the number of group study rooms; a 24/7 study area; a digital initiatives center; additional Special Collections and University Archives space; and more than twice the number of technology workstations. Additional features will include dedicated graduate study space and quiet study areas. The library will integrate advances in technology seamlessly with library services and collections.

#### CIP-3 SHORT-TERM PROJECT EXPLANATION CIP-3, A – NARRATIVE DESCRIPTION

#### SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

#### Classroom/Office

The space classification is predominately open stack study rooms, stacks, or office type, with laboratory or research type minimized. The project will achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use. All heating and reheating will be hydronic.

#### EDUCATIONAL PLANT SURVEY

The Educational Plant Survey was conducted October 6-7, 2015 and approved January 28, 2016. See recommendation No. 2.2, John C. Hitt Library Renovation, Phase II.

#### STATE UNIVERSITY SYSTEM CIP-3 SHORT TERM PROJECT EXPLANATION

GEOGRAPHICIO	CATION! Unive								Pageof
GEOGRAPHIC LO PROJECT DESCR	PTION/TITLE:	John C. Hi	al Florida, Orland itt Library Renova	io ation Phase II			COUNTY: Orang		
		Net to					PROJECT BR No	<ol><li>(if assigned):</li></ol>	<del></del>
Facility/Space	Net Area	Gross	Gross Area	Unit Cost	Construction	Assumed	Occupancy		
Туре	<u>(NASF)</u>	<u>Conversion</u>	(GSF)	(Cost/GSF)*	Cost	Bid Date	Date		
Classrooms	0	1.5	0	305	0	Big Bate	Date		
Teaching Labs		1.5	0	376					
Research Labs		1.5			0				
Study			0	386	0				
		1.4	0	298	0				
nstructional Media		1.5	0	222	0				
Auditorium/Exhibitio	n	1.2	0	329	0				
Gymnasiums		1.2	0	226	õ		<b>-</b>		
Offices		1.5	õ			<b></b>	Space Detail for Re		
Campus Support Se	wices			331	0		ORE		AFTER
Fotals		1.4	0	282	0	Space	Net Area	Space	Net Area
	0	-	0		0 -	Туре	(NASF)	Type	(NASF)
Apply Unit Cost to i	otal GSF based	on primary s	pace type	. *		Classrooms		1160	<u>Invoi I</u>
			1			1	27,274		
						Library/Study	134,113		
Comodolina/Donova	1					Inst Media	15,000	1	
Remodeling/Renova				_		Office/Computer	50,000		
	L	J	2262387	Γ	30029333		-,0		
		•		L		1			
otal Construction -	New & Rem./Re	enov.			0	Total			
				=	0	Total	226,387	Total	0
CHEDULE OF PRO									
CHEDULE OF PRI	DIECTCOMPC	NENIS				ESTIMAT	ED COSTS		
			Funded to						
lasic Construction (	ost		Date	<u>2018-19</u>	<u>2019-2020</u>	<u>2020-2021</u>	<u>2021-22</u>	0000.00	F 1 101 0
. a.Construction Co	st (from above)					2020-2021	2021-22	<u>2022-23</u>	<u>Funded &amp; In CI</u>
Add'I/Extraordinary	Const. Costa				30,029,333				30,029,33
									-
b.Environmental I	npacts/Mitigatio	n							
c.Site Preparation					673,900				-
d.Landscape/Irriga	iton								673,90
e.Plaza/Walks									-
									-
f.Roadway Improv									_
g.Parking spa									-
h.Telecommunicat	ion				936,370				•
i.Electrical Service					550,570				936,37
j.Water Distribution									-
									-
k.Sanitary Sewer S									
I.Chilled Water Sys	tem								•
m.Storm Water Sy									-
					168,475				168,47
n.Energy Efficient I	quipment								
otal Construction Co	sts		0	0	31,808,078	0	0	0	24 000 07
			· · · · · · · · · · · · · · · · · · ·					U	31,808,07
Other Project Cost									
a.Land/existing faci									
b.Professional Fees			4 740 000	4 465					-
			1,710,066	1,496,054					3,206,12
c.Fire Marshall Fee				84,237					
d.Inspection Servic	es			295,790					84,23
e.Insurance Consul									295,79
f.Surveys & Tests				18,018					18,01
				146,152					146,15
g.Permit/Impact/En	/ironmental Fee	s		101,101					
h.Artwork				-					101,10
Moveable Furnishi	ngs & Equipmen	nt				4 101 000			-
Project Contingend				360 300		4,121,208			4,121,208
				269,790	2,927,818				3,197,608
tal - Other Project (	JUSIS		-	2,411,142	2,927,818	4,121,208	-	-	11,170,234
L COSTS 1+2			0	2,411,142	34,735,896	4,121,208	0	0	42,978,31
<u> </u>	Appropriations	to Date							
			A	Pi	oject Costs Beyo				Total Project In
		iscal Year	Amount		Source	Fiscal Year	Amount		CIP & Beyond
	CITF 2	017-18	1,710,066						•
									42,978,31
	TOTAL			т/	DTAL	-	0	_	1,710,06 41,268,24

#### Higher Educational Facilities Return on Investment

This is a tool developed by a collaborative group of stakeholders designed to facilitate the identification of return on investment metrics for higher education facilities. Check any box(es) that apply, provide a quantitative explanation, and identify the term or years in which ROI information is provided.

Institution: University of Central Florida Project: John C. Hitt Library Renovation Phase II Total Project Cost: <u>\$42,978,312</u> Previous Funding (State and Local): <u>\$1,710,066</u> Current Request: <u>\$2,411,142</u> STEM (Yes or No): No Contact Person (Name, Position, Office and Cell Phone No., Email): Dr. Daniel Holsenbeck, Senior Vice President of University Relations

Office: (407) 823-2387; Cell: (407) 247-9421; daniel.holsenbeck@ucf.edu

Check any box(es) that apply and provide a quantitative explanation. Identify the term or years in which ROI information is projected.

1. Number of Additional Degrees and Certificates Produced and How Those Degrees are Meeting the Needs of our State (Job Openings, Average Wages of those Job Openings, etc)

Explanation:

- a. In 2015-16 UCF awarded 14,348 degrees (12,118 bachelor's and 2,230 graduate) to students who completed courses on the main campus.
- b. Based on enrollment projections and expected growth (2%), UCF anticipates awarding an additional 2,133 degrees by 2022-23.
- 2. Number of Additional Students Served and the Benefits/Efficiencies Created (increase graduation rate, alleviate waitlist, increase academic support, etc) Explanation:
  - a. Fall 2016 enrollment at UCF main campus was 53,183.
  - b. Based on the UCF Enrollment Projection Model, an increase of over 5,500 students is expected on the main campus by Fall 2022.
- 3. Amount of Additional Research Funding to be Obtained; Patents Awarded Explanation: N/A
- 4. Project is in an Area of Strategic Emphasis as Determined by the Board of Governors' Gap Analysis or the Department of Economic Opportunity's National Occupational Forecast

Explanation:

- a. In 2015-16 UCF awarded 7,695 degrees (6,249 bachelor's and 1,446 graduate) in all five areas of strategic emphasis for students who completed courses on the main campus. Based on enrollment projections and expected growth (2%), UCF anticipates awarding nearly 1,144 additional degrees in areas of strategic emphasis by 2022-23.
- b. In 2015-16 UCF awarded 1,277 degrees (1,183 bachelor's and 94 graduate) in Gap Programs for students who completed courses on the main campus. These programs include: Accounting with 442 degrees, Finance with 487 degrees, and Communications with 348 degrees. Based on enrollment projections and expected growth (2%), UCF anticipates awarding 190 additional degrees in Gap Programs by 2022-23.
- Improves the Ranking of a Preeminent Program or Improves on a Performance Funding Model Metric Explanation: N/A
- Increase Business Partnerships Which Will Lead to Guaranteed Internships and Jobs for Students Explanation: N/A
- 7. Project Improves the Use, either Operationally or Academically, of Existing Space

Explanation:

The John C. Hitt Library is currently 226,506 GSF and 144,097 NASF. When completed, the renovated and expanded facility will add 42,753 GSF and an estimated 30,000 NASF. It will include redesigned, more efficient, and flexible interior spaces featuring greatly increased student seating, information literacy classrooms, triple the number of group study rooms, a 24/7 study area, a digital initiatives center, additional Special Collections and University Archives space, and more than twice the number of technology workstations. Additional features will include dedicated graduate student study space and quiet study areas.

8. Contribution of Local Funds Through Matching Grants, Property Donations, etc.

Explanation: N/A

9. Reduces Future Deferred Maintenance Cost and Extends the Life of the Facility by Bringing the Project up to Existing Standards (cost-benefit analysis of renovation or new facility vs. maintenance) Explanation: The project involves the complete renovation of the existing building (consisting of the original 1967 building and the adjoining 1984 addition) and the construction of a 42,000 sq. ft. addition on the north side of the building.

Other Pertinent Information not included above:

- The John C. Hitt Library, built in 1967 when enrollment was 1,948 students, is inadequate 50 years later to meet the growing needs of current and future student populations.
- The existing library, with a collection of over 1.2 million print volumes, is open 105 hours per week, and has a patron count of almost 1.3 million visits per year. During a typical midterm week 39,000 people frequent the library.
- The existing library has 1,903 reader seats, which represents about 7% of the main campus FTE, and is significantly less than the minimum requirements recommended by the Association of College and Research Libraries. This project will accommodate 3,394 seats, about 10% of the main campus FTE.
- The new construction will consist of a four-story automated retrieval system (ARC) that will provide quick access to a computer-managed storage system with a capacity of 1,250,000 items. This will allow lesser-used material to be stored in the ARC and free up valuable square footage for user space in the library.
- The construction will provide short-term impact to local economy, as follows:
  - Year 1: \$4,368,297
- 14 construction jobs, 15 other sectors 202 construction jobs, 211 other sectors
- Year 2: \$ 62,931,478
- 24 construction jobs, 25 other sectors
- Year 3: \$ 7,466,447

		M PROJECT EXPLANATION RRATIVE DESCRIPTION	
AGENCY <u>Univer</u> BUDGET ENTITY PROJECT TITLE	sity of Central Florida SUS Arts Complex Phase I (Performance)	AGENCY PRIORITY DATE BLDG PROGRAM APPROVED	Page <u>1</u> of <u>2</u> 8

This project is the first phase of a three-phased Arts Complex. Phase I will provide performance space for the Departments of Music and Theatre. Currently, for music performances, there is a 150-seat Rehearsal Hall, which is not suitable for orchestral performances, and a 450-seat auditorium in the Visual Arts Building. The auditorium, which was originally designed as a lecture hall, is also used as a performance venue for concerts. Similarly, the Theatre department performs in an awkwardly-shaped, 300-seat room that was originally a lecture hall, and in a 106-seat black box theatre. The Theatre performances regularly sell out, leaving students with limited opportunities to see performances. Additionally, none of the on-campus performance venues are suitable for dance performances.

This state-of-the-art facility will include a 600-seat concert hall, a 263-seat recital and lecture hall, a 520-seat proscenium theatre, and a 225-seat black box theatre. These spaces will be functional, attractive, comfortable, and technologically advanced, with special emphasis given to acoustics, lighting, and stagecraft. This facility will also provide teaching and lab space for performing arts students, such as scene shops, costume shops, and welding areas. With facilities built to professional standards that include the most advanced technology, these spaces can be accessed, shared, and experienced on many different platforms besides the traditional live setting. These spaces will attract more regional community activities to the UCF campus, which is a potential boon to local businesses as well as the university.

Phase I will enrich all UCF programs by emphasizing the critical importance of the arts, thus encouraging creativity and innovation across other academic disciplines. This convergence between the arts and other fields of study is among the Arts Complex's most important contributions to UCF's vision of creating opportunity through access, partnerships, interdisciplinary endeavors, and community engagement. The need for the university to embrace and promote cultural activity and diversity is essential to its educational mission, which is reaffirmed by the recommendation that the School of Performing Arts "develop opportunities and partnerships to make UCF a destination campus for the arts."

Degrees offered by the School of Performing Arts are destination degrees, and Orlando is an international entertainment destination. Students who graduate with degrees in the Performing Arts, both at the undergraduate and graduate levels, possess the skills to contribute to the local economy by virtue of their marketability as employees.

The benefits of the Arts Complex will extend far beyond the UCF campus. Because of Orlando's prominence as an international tourist destination, the Arts Complex will help UCF students and faculty expand their reach and promote greater recognition of UCF internationally. The Arts Complex will enhance collaborations with community-based industry partners, such as Walt Disney World, Universal Studios, and Cirque du Soleil, and open the door to other potential partnerships.

The Arts Complex Phase I would assist UCF in meeting state performance goals (skilled graduates earning competitive wages) and align with the Collective Impact Strategic Plan goal of transforming lives and livelihoods through UCF's impact on the students and communities it serves.

#### SUSTAINABILITY AND LEED

The University of Central Florida is committed to the efficient use of natural resources. As energy costs and demands continue to grow, achieving energy efficiency has become increasingly important to the university's mission. Appropriate policies and procedures that govern the use of environmental resources and facilities have enabled UCF to achieve the improvements necessary to ensure a productive environment for all and establish itself as a national leader in energy research, education, and stewardship.

#### EDUCATIONAL PLANT SURVEY

The Educational Plant Survey was conducted and approved in February, 2011. See recommendation No. 3.2, Performance Arts Center (Phase II).

#### STATE UNIVERSITY SYSTEM CIP-3 SHORT TERM PROJECT EXPLANATION

	TION/TITLE:		al Florida, Orlar plex Phase I (Pe				COUNTY: Oran	-	
		Net to	INA T HASE T (PE					lo. (if assigned):	
Facility/Space	Net Area	Gross	Gross Area	Unit Cost	Construction	A	000		
Type		Conversion			Construction	Assumed	Occupancy		
Classrooms	8,584	1.5	<u>(GSF)</u> 12,876	(Cost/GSF)* 205	<u>Cost</u>	Bid Date	Date		
Feaching Labs	10,293	1.5		305	3,927,288				
Research Labs			15,440	376	5,805,252				
	0	1.5	0	386	0				
Study	0	1.4	0	298	0				
nstructional Media	0	1.5	0	222	0				
uditorium/Exhibition	30,164	1.2	36,197	329	11,908,747				
Symnasiums	0	1.2	0	226	0		Space Detail for	r Remodeling Pr	ojects
Offices	5,360	1.5	8,040	331	2,661,240	B	EFORE		AFTER
Campus Support Serv	/ 0	1.4	0	282	0	Space	Net Area	Space	Net Area
otals	54,401		72,553		24,302,528	Type	(NASF)	Туре	(NASF)
Apply Unit Cost to to		on primary s	pace type	-					
Remodeling/Renovati	on	[		] [					
otal Construction - N	ew & Rem./Re	nov.		_	24,302,528	Total	0	Total	0
CHEDULE OF PRO	JECT COMPO	VENTS	Funded to			ESTIM	ATED COSTS		
Basic Construction Co			Date	<u>2018-19</u>	<u>2019-20</u>	<u>2020-21</u>	<u>2021-22</u>	2022-23	Funded & In CIP
. a.Construction Cos	t (from above)				24,302,528				24,302,52
Add'!/Extraordinary									24,002,02
b.Environmental Im		n							-
c.Site Preparation	paaron	•			300,000				-
d.Landscape/Irrigai	ton				250,000				300,000
e.Plaza/Walks					250,000				250,000
f.Roadway Improve	monto								-
									-
g.Parking spac									-
h Telecommunication	on				350,000				350,000
i.Electrical Service									-
j.Water Distribution									-
k.Sanitary Sewer S	/stem								-
I.Chilled Water Syst	em								
m.Storm Water Sys									-
n.Energy Efficient E					538,560				-
otal Construction Co			0	0	25,741,088	C	,	0	538,560
				0	25,741,088		, 	0(	0 25,741,08
. Other Project Costs									
a.Land/existing facili	ty acquisition								-
b.Professional Fees				2,287,819	-				2,287,819
c.Fire Marshall Fees				66,586					66,586
d.Inspection Service				129,671					
e.Insurance Consult				14,582					129,67
f.Surveys & Tests				200,000					14,582
•	ironmontal Fra								200,000
g.Permit/Impact/Env	nonmental ree	3		95,000	400.00-				95,000
h.Artwork	аа 0 <b>Г</b> анијана	- 4		-	100,000				100,000
i.Moveable Furnishir		π				3,060,000			3,060,000
j.Project Contingenc				266,342	1,331,712				1,598,054
otal - Other Project C	osts		-	3,060,000	1,431,712	3,060,000	-	-	7,551,712
LL COSTS 1+2			0	3,060,000	27,172,800	3,060,000	) (	o (	33,292,80
		to Date		r	Project Costo Dour				T-1-1 B
<u> </u>	Annropriatione	IS Dale		F	Project Costs Beyo				Total Project In
	Appropriations	Ticoni Voor	Amo+						
	Source F	iscal Year	Amount		Source	Fiscal Year	Amount		CIP & Beyond
		iscal Year	Amount 0		Source	Fiscal Year	Amount		CIP & Beyond
<u> </u>	Source F	Fiscal Year			Source OTAL	Fiscal Year	Amount	_	CIP & Beyond

Page \_\_\_\_of \_\_\_\_

## Higher Educational Facilities Return on Investment

This is a tool developed by a collaborative group of stakeholders designed to facilitate the identification of return on investment metrics for higher education facilities. Check any box(es) that apply, provide a quantitative explanation, and identify the term or years in which ROI information is provided.

Institution: University of Central Florida Project: Arts Complex Phase I (Performance) Total Project Cost: \_\_\_\_\_\_\_\_\$33,292,800 Previous Funding (State and Local): \$ 0.0 M Current Request: \_\_\_\_\_\_\_\$ 3,060,000 STEM (Yes or No): No Contact Person (Name, Position, Office and Cell Phone No., Email): Dr. Daniel Holsenbeck, Senior Vice President of University Relations Office: (407) 823-2387; Cell: (407) 247-9421; daniel.holsenbeck@ucf.edu

Check any box(es) that apply and provide a quantitative explanation. Identify the term or years in which ROI information is projected.

1. Number of Additional Degrees and Certificates Produced and How Those Degrees are Meeting the Needs of our State (Job Openings, Average Wages of those Job Openings, etc)

Explanation:

- a. The Arts Complex is used by the Music and Theatre departments. In 2015-16, programs in these departments awarded 148 degrees and certificates (130 bachelor's and 18 master's).
- b. Based upon enrollment projections and expected growth, UCF anticipates awarding an additional 83 degrees per year in these programs by 2022-2023.
- c. Projected growth and average annual wages for graduates in these programs include:

Occupation	Projected Growth	Mean Annual Wage
Music Directors and Composers	3%	\$60,630
Producers and Directors	9%	\$93,840

Sources: US Bureau of Labor Statistics May 2016 Metropolitan and Nonmetropolitan Area Occupational Employment and Wage Estimates, Orlando-Kissimmee-Sanford, FL Florida Department of Economic Opportunity 2015-16 Regional Demand Occupation List

- 2. Number of Additional Students Served and the Benefits/Efficiencies Created (increase graduation rate, alleviate waitlist, increase academic support, etc) Explanation:
  - a. Fall 2016 enrollment for the programs housed in the Performing Arts Center was 662 students.
  - b. Based on university-wide enrollment growth, an increase of 91 students is expected by Fall 2022.
- 3. Amount of Additional Research Funding to be Obtained; Patents Awarded Explanation:
  - a. Current Research/Grant funding is approximately \$5,000 annually, but with the completion of Arts Complex, could grow to between \$50,000 and \$100,000 annually within five years of project completion.
  - b. These projections are contingent upon constructing the proper facilities to attract manufacturers, publishers, researchers, and producers in the performing arts to collaborate on new works, equipment, and research studies that are impossible in the current facilities.
- 4. X Project is in an Area of Strategic Emphasis as Determined by the Board of Governors' Gap Analysis or the Department of Economic Opportunity's National Occupational Forecast

Explanation:

The facility will provide spaces for motion capture; areas to train performers as avatar controllers (critical to the STEM Model and Simulation Industry); video game design; and computer-assisted design within performing arts. The training of performers, practitioners and educators is needed for the tourism industry, and will aid in attracting high-skilled workers and high-tech businesses to the Central Florida region.

5. Improves the Ranking of a Preeminent Program or Improves on a Performance Funding Model Metric

Explanation:

This project will increase and improve opportunities for our students to successfully compete in performing arts industries. Walt Disney, Universal Studios, and Sea World have a long history of recruiting performers, designers, and managers from UCF's School of Performing Arts. Some of our students have won positions on Broadway, with major symphony orchestras, and in the recording industry. The Arts Complex will help improve a program that is already recognized by leaders in the performing arts industry as outstanding. The completion of the project will improve the quality of program recruitment, which would lead to higher retention and graduation rates (Performance Funding Metric).

6. X Increase Business Partnerships Which Will Lead to Guaranteed Internships and Jobs for Students

Explanation:

Completing these spaces will allow us to partner with local performing organizations, potentially creating up to 50 new performing arts and arts education internships within the first two years of completion. We have several local organizations that continue to reach out to partner with us, but we cannot pursue these excellent opportunities in our current facilities. We have successful partnerships with the Orlando Shakespeare Theater, the Orlando Repertory Theater, and the Orlando Philharmonic that include guaranteed jobs and internships. The new facilities will allow these existing programs to expand their numbers, while also providing the opportunity for UCF to partner with new organizations.

7. Project Improves the Use, either Operationally or Academically, of Existing Space

Explanation:

This is the second phase of the Arts Complex, which includes state of the art performance space, ensemble rehearsal space, and performance support space. The initial investment in Phase I has provided us with state of the art teaching and office spaces and small rehearsal spaces. We cannot maximize the advantage Phase I provides us without the spaces (especially performance) included in Phase II. In order for our faculty and students to get the full benefit of the teaching and office spaces, the performance and supports spaces are critical.

8. Contribution of Local Funds Through Matching Grants, Property Donations, etc.

Explanation:

The Foundation has identified quite a few donors for this project. We need to get the project started for these donors to step up and contribute to the project. Some of the donor prospects include estate planning and include matching funds through their employers.

9. Reduces Future Deferred Maintenance Cost and Extends the Life of the Facility by Bringing the Project up to Existing Standards (cost-benefit analysis of renovation or new facility vs. maintenance)

Explanation:

Our current performance and rehearsal spaces are renovated spaces which were not originally designed for rehearsal and performance. Every 1-2

years, we are engaging in renovating projects to try to get the spaces closer to performance spaces and we are able to improve, but not resolve issues, as many of the problems are inherent in the original layout and design of the buildings. Completing this project would allow us to vacate these spaces, returning them to the type of activities for which they were originally designed and are much better suited. Over the last five years, the maintenance and operation costs have cost over \$250,000. This cost would be eliminated with the completion of Phase II.

Other Pertinent Information not included above:

- Construction costs of performing arts venues are expensive. In addition to the fact that performing arts programs usually require annual subsidies and it is an expensive proposition in both the short and long term. In the current economic climate, construction costs are lower than usual and the quality is higher as fewer projects make more experienced workers available for the work site. The state can capitalize on Orlando's reputation as an entertainment center by building a world class Performing Arts Center at the university located in the heart of the industry.
- The programs housed in the spaces will maximize the partnerships with tourism and entertainment businesses and allow the state to achieve this at the lowest prices with the highest quality. As the economy continues to recover, this investment will pay big dividends because there will be a need for highly trained workers and performers in the performing arts. These spaces will also offer the return on investment by providing opportunities for "arts-making" experiences across all disciplines will stimulate creativity and innovation.
- The arts attract residents and businesses: The density of arts organizations and prevalence of arts events may play a role in attracting residents and businesses to (re)locate to a community by improving its image and making it more appealing. This is especially true for attracting highly skilled, high-wage residents, who will have a larger economic impact than less-skilled people. Businesses, especially those that employ highly trained mobile personnel, may consider the presence of art venues when making (re)location decisions (Cwi 1980b: 18-19). The presence of the arts (i.e., improved image of an area) may work to enhance the impact of tax incentives for business location decisions (Costello 1998: 147-9). High concentrations of artists and/or high-skilled workers may produce agglomeration effects, where businesses (especially those in the fastgrowing 'creative industries' (Walesh 2001)) are drawn to an area because

of the availability of creative talent and/or high-skilled workers, and vice versa.

- The arts attract investments: By improving a community's image, people may feel more confident about investing in that community. So for example, people might be more likely to buy property in an area that they feel is "up-and- coming" because of the presence of the arts. Or, banks may be more likely to lend to businesses in areas perceived as more secure and stable, and so on.
- The construction will provide short-term impact to local economy, as follows:
- 15 construction jobs, 14 other sectors 133 construction jobs, 125 other sectors 15 construction jobs, 14 other sectors
- Year 2: \$46,256,163
- Year 3: \$ 5,209,027
- Year 1: \$ 5,209,027

CIP-3 SHORT-TERM PROJECT EXPLANATION
CIP-3, A – NARRATIVE DESCRIPTION

AGENCY University of Central Florida		Page	1	of	2
BUDGET ENTITY         SUS           PROJECT TITLE         Chemistry Renovation	AGENCY PRIORITY	9			-
	APPROVED				

The College of Sciences is the largest college at UCF, and its Chemistry program is one of the major participants that represent the core of UCF's STEM initiative. The existing Chemistry Building was constructed in 1969 and is in need of a major renovation.

The university contracted with the ISES Corporation to conduct a Facilities Condition Assessment (FCA) to benchmark the condition of its E&G facilities. The Chemistry renovation will address both critical and non-critical issues identified in the FCA. These issues encompass deficiencies such as indoor air quality, fire alarm modernization, potable water and plumbing distribution systems, electrical service, asbestos, HVAC modernization, lighting upgrades, building automation, ADA compliance, building envelope repairs, interior finishes, flooring, exterior lighting, and utility service entrance upgrades. Information technology upgrades are also required in order to meet current and future requirements. The most critical issue in this building is the teaching labs, as all supporting lab building systems have become inadequate and require modernization to meet current safety regulations, codes and egress requirements.

The university also contracted with TLC Engineering in 2015, to conduct a Campus-Wide Laboratory Evaluation Program on all critical lab buildings, including Chemistry. The program evaluated the construction parameters and current usage of all laboratories in order to assess and categorize the existing laboratories, based on their current conditions. This evaluation corroborates the FAC findings that the labs do not fully meet the current standards of the National Fire Protection Association. Areas that are lacking include proper lab exhaust fans, gas shut off valves, generator capacity, fire suppression systems, smoke control systems, additional room exits, fire dampers, and other HVAC issues. These issues need to be addressed in order for the teaching and research labs to meet code requirements.

Where research labs, classrooms, and teaching labs are concerned, the UCF main campus already is operating "at or above capacity." Based on the 2015 Educational Plant Survey analysis for space needs, the university has a shortfall of classroom space, research labs, and teaching labs. The university has been forced over the past several years to rent temporary research facilities both on and off campus.

Research and teaching labs are essential for thesis and dissertation work by students in disciplines with active graduate programs, especially at the doctoral level. The Chemistry Department has a doctoral program that provides exceptionally high-level training for students who subsequently enter outstanding industrial, academic, and post-doctoral positions. Many cases exist on campus where the same lab is used interchangeably for graduate coursework, thesis and/or dissertation work, and faculty research. The labs in the Chemistry Building are in poor condition but still must serve all of the functions noted.

# SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

#### Classroom/Office

The space classification is predominately class laboratory, with research labs and minimal office space. The project will achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use. All heating and reheating will be hydronic.

#### **Research/Laboratory**

There are a significant number of research and teaching laboratories in the building. Laboratories should have continuous variable air flow valves with air flow reset capabilities and fume hoods should have SAV's, to properly track exhaust and maintain the labs slightly negative. The fume hoods should also be exhausted through high plume exhaust fans. Domestic and laboratory hot water needs shall be provided primarily by solar thermal energy.

# EDUCATIONAL PLANT SURVEY

The Educational Plant Survey was conducted October 6-7, 2015 and approved January 28, 2016. See recommendation No. 2.5, Chemistry Renovation.

GEOGRAPHIC LO PROJECT DESCR Facility/Space	CATION: Univer	rsity of Centra							
		Chemistry	Renovation	do			COUNTY: Orang		
Facility/Space		Net to					PROJECT BR N	o. (if assigned):	
	Net Area	Gross	Gross Area	Unit Cost	Construction	Assumed	0		
Type	(NASF)	<u>Conversion</u>	(GSF)	(Cost/GSF)*	Cost	Bid Date	Occupancy		
Classrooms		1.5	0	305	0	Did Dale	Date		
Teaching Labs		1.5	0	376	õ				
Research Labs		1.5	0	386	0				
Study		1.4	0	298	0				
Instructional Media		1.5	õ	238					
Auditorium/Exhibitio	n	1.2	õ		0				
Gymnasiums		1.2	0	329	0				
Offices		1.5	0	226	0		Space Detail for R	emodeling Proje	ects
Campus Support Se	envices	1.4		331	0	BEF	ORE		AFTER
Totals	0			282	0	Space	Net Area	Space	Net Area
		. =	0		0	Type	(NASF)	Type	(NASF)
Apply Unit Cost to t	Iotal GSP based	on primary sp	ace type			Offices	10,049	Offices	
Remodeling/Renova									
	43,265	L	49,073		10,162,433				
Fotal Construction -	New & Rem./Re	nov.			10,162,433	Total	10,049	Total	
								Iotal	10,049
CHEDULE OF PRO	DJECT COMPO	NENTS				ESTIMAT	ED COSTS		
asic Construction C	`oot		Funded to			LOTIMAT	20 00313		
			Date	<u>2018-19</u>	<u>2019-20</u>	<u>2020-21</u>	2021-22	2022-23	Funded & In CIP
. a.Construction Co	st (from above)					10,162,433		LULL LV	
Add'I/Extraordinary	Const. Costs								10,162,433
b.Environmental Ir	npacts/Mitigatior	1							-
c.Site Preparation									-
d.Landscape/Irriga	aiton								-
e.Plaza/Walks						100,000			100,000
f.Roadway Improv	ements								-
g.Parking spa									
h.Telecommunicat									-
	1011					-			-
i.Electrical Service									-
j.Water Distributior	ı								-
k.Sanitary Sewer S	System								-
I.Chilled Water Sys									-
m.Storm Water Sy									-
n.Energy Efficient	quipment								-
otal Construction Co	osts		0	0	0	10,262,433	0	0	- 10,262,433
Other Project Cost	s								
a.Land/existing facil									
D.Professional Fees					546,228	400,090			-
Fire Marshall Fees					24,673	,			946,318
Inspection Service					58,183	357,712			24,673
e.Insurance Consul	tant				4,973	007,712			415,895
Surveys & Tests					4,070				4,973
g.Permit/Impact/Env	vironmental Fees				- 66,184				-
1.Artwork					00,104				66,184
.Moveable Furnishii	ngs & Equipment					-			-
Project Contingence	V						700,241		700,241
tal - Other Project C			-		700,241	<u>1,711,445</u> 2,469,247	700 011		1,711,445
LCOSTS 1+2	····						700,241		3,869,729
			0	0	700,241	12,731,680	700,241	0	14,132,162
	Appropriations t	o Date		P	roject Costs Beyon	d CIP Period			T-1-10
		scal Year	Amount		Source	Fiscal Year	Amount		Total Project In
	PECO 20	12-13	0			. Jour real	Amount		CIP & Beyond
			-						
									14,132,162

CIP-3 SHORT-TERM PROJECT EXPLANATION	
CIP-3, A – NARRATIVE DESCRIPTION	

AGENCY Univers	ity of Central Florida		Pag	e _	1	of	2
BUDGET ENTITY	SUS						
	Florida Solar Energy Center	_ AGENCY PRIORITY DATE BLDG PROGRAM		0			
	Renovation	APPROVED	i				

The Florida Solar Energy Center (FSEC) is owned and maintained by the University of Central Florida and located in Cocoa Beach, Florida. While the campus comprises many different buildings, state allocated funding is limited to three: B2001, B2002, and B2003, all built in 1995. The facility currently houses classrooms, instructional and research labs, offices, conference rooms, and support space for critical Engineering programs. Research accomplished by these departments serves dozens of high-level technology industrial firms located throughout Florida and across the nation.

B2001, the office building, is a two-story, steel-frame structure with horizontal corrugated metal siding, containing a large atrium lobby and reception area with various open plans and individual offices. There is also a single-story auditorium on its north elevation. This structure comprises 56,666 GSF.

B2002, the lab building, is a single-story, steel-frame building, housing a large warehouse and storage space, as well as various research facilities, including a fuel cell laboratory and two hydrogen laboratories. The chilled water HVAC system is being used extensively for laboratory research with a growing demand. This structure comprises 27,482 GSF.

B2003, the mechanical building, is a single-story, steel-frame building, housing two 1,000-ton chillers, associated piping, pumps, automation equipment, and electrical switchgear. Two cooling towers on the outside of the building are also used to support the chilled water production. This chiller system supports B2001 and B2002 for all HVAC needs. This structure comprises 2,080 GSF.

FSEC has seen continuous use since it was built 21 years ago, and is in dire need of a complete chilled water HVAC system replacement and modernization, and requires roof and building envelope repairs. The HVAC equipment is both obsolete and deteriorated beyond repair. A complete chilled water HVAC system replacement, including automation and air handlers, will support continued, essential instruction in the Engineering field; optimize space occupancy and utilization; enhance the quality of the academic programs; allow for more sophisticated sponsored research opportunities; attract the best students and faculty to the program; and produce successful graduates.

Building 2001 should be re-roofed within three years, and many corroded metal wall panels (the exterior building envelope) need to be replaced. Building 2002 requires repair of the metal wall flashings and underlayment, and Building 2003 requires repair to six curb penetrations, and coating of the entire roof.

#### CIP-3 SHORT-TERM PROJECT EXPLANATION CIP-3, A – NARRATIVE DESCRIPTION

The university contracted with the ISES Corporation to conduct a Facilities Condition Assessment (FCA) to benchmark the condition of its E&G facilities. The FSEC renovation will address both critical and non-critical issues identified in the FCA.

#### SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

#### Research/Laboratory

The space classification is predominately laboratory type, with office type minimized.

## EDUCATIONAL PLANT SURVEY

The Educational Plant Survey has not been addressed for this project. As the planning year approaches, this project will be addressed.

#### STATE UNIVERSITY SYSTEM CIP-3 SHORT TERM PROJECT EXPLANATION Page \_\_\_\_of \_\_\_\_ GEOGRAPHIC LOCATION: University of Central Florida, Orlando COUNTY: Orange PROJECT DESCRIPTION/TITLE: Florida Solar Energy Center Renovation PROJECT BR No. (if assigned): Net to Facility/Space Net Area Gross Gross Area Construction Unit Cost Assumed Occupancy Туре (NASF) **Conversion** (GSF) (Cost/GSF)\* <u>Cost</u> Bid Date <u>Date</u> Classrooms 1.5 0 305 ٥ Teaching Labs 1.5 0 376 0 Research Labs 1.5 0 386 0 Study 1.4 0 298 0 Instructional Media 1.5 0 222 0 Auditorium/Exhibition 0 1.2 329 0 Gymnasiums 12 0 226 0 Space Detail for Remodeling Projects Offices 1.5 0 331 0 BEFORE AFTER Campus Support Services 1.4 0 282 0 Space Net Area Space Net Area Totals Ω 0 Туре (NASF) Type (NASF) \*Apply Unit Cost to total GSF based on primary space type <u>Offices</u> Remodeling/Renovation 43,265 49,073 7,916,542 Total Construction - New & Rem./Renov. 7,916,542 Total Total SCHEDULE OF PROJECT COMPONENTS ESTIMATED COSTS Funded to **Basic Construction Cost** Date <u>2018-19</u> <u>2019-20</u> <u>2020-21</u> 2021-22 2022-23 Funded & In CIP 1. a.Construction Cost (from above) 7,916,542 7,916,542 Add'I/Extraordinary Const. Costs b.Environmental Impacts/Mitigation c.Site Preparation d.Landscape/Irrigaiton 100,000 100,000 e.Plaza/Walks f.Roadway Improvements g.Parking \_\_\_\_ spaces h.Telecommunication i.Electrical Service j.Water Distribution k.Sanitary Sewer System I.Chilled Water System m.Storm Water System n.Energy Efficient Equipment Total Construction Costs 0 0 0 8,016,542 0 0 8,016,542 2. Other Project Costs a.Land/existing facility acquisition b.Professional Fees 919,448 919,448 c.Fire Marshall Fees 23,578 23,578 d.Inspection Services 79.165 79.165 e.Insurance Consultant 4,750 4,750 f.Surveys & Tests g.Permit/Impact/Environmental Fees 60,135 60,135 h.Artwork i.Moveable Furnishings & Equipment 727,303 727,303 j.Project Contingency 1,491,079 1,491,079 Total - Other Project Costs 3,305,458 3,305,458 ALL COSTS 1+2 0 0 11,322,000 0 11,322,000 Appropriations to Date Project Costs Beyond CIP Period Total Project In Source Fiscal Year Amount Source Fiscal Year Amount CIP & Beyond PECO 0 11,322,000 TOTAL TOTAL 0 11,322,000

CIP-3 SHORT-TERM PROJECT EXPLANATION	
CIP-3, A – NARRATIVE DESCRIPTION	

			D	4 -1	2
AGENCY Univers	sity of Central Florida		Page _	<u> </u>	_2
BUDGET ENTITY	SUS	AGENCY PRIORITY	11		
PROJECT TITLE	Infrastructure Chilled Water	DATE BLDG PROGRAM			—
	Replacement	APPROVED			
		-			—

UCF strives to be a good steward of state funds, and as such has historically had the challenge of balancing the maintenance and operations of its buildings with the need to repair, replace, and upgrade its utilities and infrastructure. In the recent past, when faced with years of legislative budget cuts and reduced funding, UCF placed its highest priority on repairs and projects related to life safety and the Americans with Disabilities Act (ADA). Consequently, a multitude of other maintenance issues were necessarily deferred, creating a backlog of utilities, infrastructure, plant modernization, capital renewal, and roofing needs. Continuing to defer these maintenance issues adds risk to human health, and increases replacement and repair costs.

UCF has identified over \$22,456,000 in plant production and distribution needs that include replacing end-of-life pipe, increasing the size of existing pipes to provide additional heat transfer, capital renewal for new heat exchangers, and replacing defective valves and vaults.

Approximately 74% of the main campus is served by three centrally-located district cooling plants and one thermal energy storage tank that provide general comfort-cooling to critical research and academic buildings. The university also maintains and operates over 10,077 linear feet of chilled water distribution infrastructure, covering over 1,400 acres on the main campus. The three centrally-located district energy plants average 29.2 years old, with the main central energy plant turning 50 in 2019. Centrally-located plants reduce building energy consumption and greenhouse gas emissions, and also eliminate less-efficient standalone cooling systems at each building.

In addition to the chilled water plants, piping, controls improvements, and capital replacements, the grounding system of the chilled water and water production facilities, and associated distribution pipes are an essential part of any electrical system at the four locations where chilled water is produced and stored. Grounding systems protect both human life and facilities during normal and fault conditions by limiting step and touch potential. While the systems may have met the intent of the National Electrical Code at the time they were installed, many of the existing systems are inadequate, or are at end of life. To bring UCF's utility generation facilities up to today's code, a recent third-party licensed engineering firm estimated \$356,000 (current market conditions) of capital would be required for corrective and defective repairs and improvements.

Central Florida summers produce many short, intense afternoon lightning storms. It is imperative for UCF to be able to dissipate these lighting strikes and stabilize voltage during transient conditions to minimize the probability of flashover during these transient voltages that affect campus operations, sensitive lab equipment, communication and computer equipment to UCF's mission-critical functional units, and emergency response.

On-campus chilled water demands are rapidly increasing. The 2015 Campus Master Plan identifies future campus development, associated energy and peak cooling demands, and the supply-related facilities needed to adequately provide these services to future campus populations.

Further delay in funding chilled water infrastructure and deferred maintenance will result in financial and technical risk with unpredictable mechanical and utility failures that affect the thermal environments of critical research.

# SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

	IPROJECT E								Pageof
GEOGRAPHIC LOC PROJECT DESCRIP	ATION: Unive	Infrastructur	al Florida, Orlan e Chilled Water	do Replacement			COUNTY: Orang PROJECT BR N		
Facility/Space	Net Area	Net to Gross	Gross Area	Unit Cost	Construction	Assumed	0		
Type	(NASF)	Conversion	( <u>GS</u> F)	(Cost/GSF)*	<u>Co</u> st		Occupancy		
Classrooms		1.5	0	305	0	<u>Bid Date</u>	Date		
Teaching Labs		1.5	õ	376	0				
Research Labs		1.5	õ	386	0				
Study		1.4	õ	298					
Instructional Media		1.5	Ö		0				
Auditorium/Exhibition		1.3		222	0				
Gymnasiums			0	329	0				
Offices		1.2	0	226	0		Space Detail for R	emodeling Proje	ects
Campus Support Sei	, inco	1.5	0	331	0	BE	ORE		AFTER
Totals		1.4	0	282	0	Space	Net Area	Space	Net Area
	0		0	-	0	Type	(NASF)	Туре	(NASF)
Apply Unit Cost to to	tal GSF based	on primary s	pace type					Offices	
Remodeling/Renoval	ion								
		[	0	ĺ					
Total Construction - N	lew & Rem./Re	nov.		=	0	Total	·	Total	
SCHEDULE OF PRO									
		INEN IS	Funded to			ESTIMAT	ED COSTS		
Basic Construction C			Date	<u>2018-19</u>	<u>2019-20</u>	<u>2020-21</u>	<u>202</u> 1-22	2022-23	Funded & In Ci
. a.Construction Cos									
Add'I/Extraordinary									-
b.Environmental Im	pacts/Mitigation	n							-
c.Site Preparation					0				-
d.Landscape/Irrigai	ton				Ŭ				-
e.Plaza/Walks						-			-
f.Roadway Improve	ments								-
g.Parking space									-
h.Telecommunicatio									-
i.Electrical Service						-			-
									-
j.Water Distribution									-
k.Sanitary Sewer S	/stem								-
I.Chilled Water Syst	em				3,550,000	10 200 000	7 404 400		-
m.Storm Water Sys					3,330,000	10,200,000	7,401,120		21,151,12
n.Energy Efficient E									-
otal Construction Co			-						-
nar construction Co	315		0	0	3,550,000	10,200,000	7,401,120	0	21,151,1
Other Project Costs									
a.Land/existing facili									
	y acquisition								-
b.Professional Fees					1,174,790		-		1,174,79
c.Fire Marshall Fees					45,607		-		45,60
d.Inspection Service	S				50,000				
e.Insurance Consult	ant				9,918		-		50,00
Surveys & Tests							-		9,91
g.Permit/Impact/Env	ronmental Eco	6			45,000		-		45,00
	ronnentai ree	3			82,304		-		82,30
1.Artwork	–						-		-
Moveable Furnishin		nt					-		-
Project Contingency					142,381		-		142,38
tal - Other Project C	osts			_	1,550,000		• •	-	1,550,000
L COSTS 1+2			0	0	5,100,000	10,200,000	7,401,120	0	22,701,12
	Appropriations	to Date		Pi	oject Costs Beyon	d CIP Period			Total Davis st 1
		iscal Year	Amount		Source	Fiscal Year	Amount		Total Project In
	PECO		0				Anount		CIP & Beyond
			-						22,701,12
	TOTAL			т	DTAL	-	0	-	
					2 1 / NE		0		22,701,1

		M PROJECT EXPLANATION RRATIVE DESCRIPTION	
BUDGET ENTITY	ity of Central Florida SUS Research Building II	AGENCY PRIORITY DATE BLDG PROGRAM APPROVED	Page <u>1</u> of <u>2</u> 12

UCF has a critical need for research space that can help drive Florida's innovation economy and assist our state in producing high paying jobs. Crosscutting research is a critical component in addressing many of the issues facing today's innovation based economy. Interdisciplinary research, which crosses traditional academic disciplinary lines, has led the way in the discovery and creation of new and innovative technologies that fuel economic growth and prosperity in the US. Florida is building a strong base of faculty with a broad base of technological expertise in key areas of science and technology based on strong clusters in sectors vital to Florida. The ability to leverage the talents of faculty from various disciplines creates synergies, value, and opportunities well beyond the sum of the individual parts.

UCF aspires to be a preeminent state research university and has set strategic goals to be a Top 50 research university by 2035. UCF is committed to a robust portfolio of research, scholarship, and creative activities across all disciplines, contributing to the creation of new knowledge. Specific metrics have been designed to meet preeminence, including doubling research awards from \$133 million to \$250 million and achieving a level where at least 25% of graduate degrees awarded are research-focused. Strategies to meet these objectives include: reaching at least 200 post-doctoral research appointees; increasing undergraduate participation in some form of research by 50%; winning ten proposals per year exceeding \$1M, five of which exceed \$3M; creating 16 start-up companies annually and executing 36 licenses and options for UCF intellectual property; and achieving 200 patents awarded over three years.

UCF must accelerate the growth of its research enterprise in people, funded research expenditures, and facilities in order to expand the university's research scale and impact. According to the UCF Educational Plant Survey conducted in October 2015, a deficit of 618,214 NASF exists in laboratory space. Construction of Research Building II is necessary to reduce the current deficit, and is advantageous to UCF and the State of Florida as we strive to achieve top-tier, preeminent state research university status.

This facility will provide the infrastructure, atmosphere, and culture necessary to build strong, creative, and innovative teams and programs in research, technology transfer, and commercialization. Focusing on relevant technology in emerging areas, the facility will enable fundamental and applied research across traditional disciplines to create clusters. It will act as a bridge between technology development and technology transfer and commercialization, and become an integral component of economic development activities in the region and state.

## SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission.

#### CIP-3 SHORT-TERM PROJECT EXPLANATION CIP-3, A – NARRATIVE DESCRIPTION

Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

#### Research/Laboratory

The space classification is predominately laboratory type, with office type minimized. The project will achieve LEED Gold certification with the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. Laboratories will have continuous variable air flow valves with air flow reset capabilities. Domestic and laboratory hot water needs shall be provided primarily by solar thermal energy. The project will utilize the district cooling loop for space cooling needs and will look at alternative measures to provide dehumidification with the classifications of lab spaces and related energy use, and all heating and reheating will be hydronic.

#### EDUCATIONAL PLANT SURVEY

The Educational Plant Survey has not been addressed for this project. As the planning year approaches, this project will be addressed.

CIP-3 SHORT TERM PRC	JECT EX	PLANATION							Pageof
	N: Univer	sity of Central	Florida, Orland	lo			COUNTY: Orange		
PROJECT DESCRIPTION	/IIILE:		laing II				PROJECT BR No	b. (if assigned):	
		Net to							
Facility/Space N	et Area	Gross	Gross Area	Unit Cost	Construction	Assumed	Occupancy		
<u>Type</u> (	VASF)	Conversion	(GSF)	(Cost/GSF)*	Cost	Bid Date	Date		
Classrooms		1.5	0	305	0				
eaching Labs		1.5	õ	376	ŏ				
•	0 755	1.5	-		-				
	8,255		72,383	386	27,939,645				
tudy		1.4	0	298	0				
nstructional Media		1.5	0	222	0				
uditorium/Exhibition		1.2	0	329	0				
ymnasiums		1.2	0	226	0		Space Detail for I	Remodelina Proi	ects
	4,059	1.5	36,089	331	11,945,294	BE	FORE		FTER
	2,705	1.4	17,787	282	5,015,934	L			
		1.4		202		Space	Net Area	Space	Net Area
	5,019		126,258	_	44,900,873	<u>Type</u>	<u>(NASF)</u>	<u>Type</u>	<u>(NASF)</u>
Apply Unit Cost to total G	SF based	on primary sp	ace type						
emodeling/Renovation		r		-1					
L		L							
otal Construction - New &	Rem./Re	nov.			44,900,873	Total	0	Total	0
						-			
CHEDULE OF PROJECT	COMPO	NENTS	Funded to			ESTIMA	TED COSTS		
asic Construction Cost			Date	2018-19	2019-2020	2020-21	2021 22	2022.22	Fundad 8 in O
			Dale	2010-19	2019-2020	2020-21	<u>2021-22</u>	<u>2022-23</u>	Funded & In Cli
a.Construction Cost (from			-				44,900,873		44,900,87
Add'l/Extraordinary Cons	. Costs								-
b.Environmental Impacts	/Mitigatio	n							-
c.Site Preparation	v			-			2,689,031		2,689,03
d.Landscape/Irrigaiton				_					
• •							300,000		300,00
e.Plaza/Walks									-
f.Roadway Improvement	s								-
g.Parking 300 spaces							594,717		594,71
h.Telecommunication				-			948,641		948,64
i.Electrical Service									
j.Water Distribution									_
•									-
k.Sanitary Sewer System	I								-
I.Chilled Water System									-
m.Storm Water System									-
n.Energy Efficient Equip	nent						2,969,875		2,969,87
otal Construction Costs				o o	0	0	52,403,137	0	52,403,1
									02,100,1
. Other Project Costs a.Land/existing facility ac	quisition								-
b.Professional Fees						4,786,575			4,786,57
c.Fire Marshall Fees						134,452			134,45
d.Inspection Services						675,447			675,44
e.Insurance Consultant						28,772			28,77
f.Surveys & Tests						350,000			350,00
g.Permit/Impact/Environr	nental Fee	es				134,660			134,66
h.Artwork							100,000		100,00
i.Moveable Furnishings 8	Fouinme	nt					.00,000	6,859,773	6,859,77
j.Project Contingency	-quipine					749,867	0.075.050	0,009,773	
otal - Other Project Costs			-	-	-	6,859,773	2,375,050 2,475,050	6,859,773	3,124,91 16,194,59
LL COSTS 1+2				0 0	0	6,859,773	······································	6,859,773	68,597,73
						<u> </u>			
Арр	ropriations				Project Costs Bey	ond CIP Period			Total Project In
S	ource	Fiscal Year	Amount		Source	Fiscal Year	Amount		CIP & Beyond
PEC				0					68,597,7
,	-			-					55,007,75
		-			TOTAL		0		68,597,73
тот									

CIP-3 SHORT-TERM PROJECT EXPLANATION CIP-3, A – NARRATIVE DESCRIPTION							
AGENCY Univer- BUDGET ENTITY PROJECT TITLE	sity of Central Florida SUS Visual Arts Building Renovation and Expansion	AGENCY PRIORITY DATE BLDG PROGRAM APPROVED	Page <u>1</u> 13	of	<u>2</u> -		

The Visual Arts Building was constructed in 1991 and is in need of renovation. An expansion has also been proposed to support its educational programs.

The university contracted with the ISES Corporation to conduct a Facilities Condition Assessment (FCA) to benchmark the condition of its E&G facilities. The Visual Arts renovation will address both critical and non-critical issues identified in the FCA. This renovation will require less than a complete remodel in that the utility services are adequate for the next 15 years. These issues encompass deficiencies such as indoor air quality, fire alarm modernization, elevator modernization, asbestos abatement and remediation, HVAC modernization and air filtration system for the ceramic lab, lighting upgrades, building automation, ADA compliance, building envelope repairs for window glazing, interior finishes, and flooring. Information technology upgrades are also required in order to meet current and future technology requirements. Interior finishes and art studios are inefficient and require modernization for lighting and air quality.

The current facility is not suitably sized or outfitted to house the School of Visual Arts and Design's undergraduate studio arts activities or accommodate the high growth areas of film, and graphic configuration limits impedes development, desian. The current impact, curricular recruitment/retention, and learning outcomes. The expansion to the building for the visual arts will alleviate current limits and fulfill university goals/metrics by providing: larger research studios, dedicated studios for senior capstone projects, a cold-desk space for upper-division courses, flex spaces (project assembly, installations, digital projections, critiques, etc.), a spray booth, a media room, a multi-purpose study, administrative and advising spaces, offices, conference rooms, faculty offices and research labs/studios, two art galleries (one large, school-operated and one small, student-run) student retail enterprise initiative, wider hallways with abundant seating, and increased storage for supplies and projects. Depending on the size of the new facility and school-wide enrollment projections/goals for the school with current unmet needs and forecast growth, some or all of the film area (currently housed in the Nicholson School of Communication) may occupy the expansion and consolidate in VAB with graphic design. The expansion would return our Studio Art and the Computer Graduate program to the main campus with access to SVAD faculty, technical shops, and undergraduate studio labs.

If the project is not approved, parts of the building will be rendered unusable over time due to unresolved environmental health and safety issues associated with deferred maintenance.

# SUSTAINABILITY AND LEED

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## Classroom/Office

The space classification is predominately classroom or office type, with laboratory or research type minimized. The project will achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use. All heating and reheating will be hydronic.

## EDUCATIONAL PLANT SURVEY

The Educational Plant Survey was conducted October 6-7, 2015 and approved January 28, 2016. See recommendation No. 2.7, Visual Arts Renovation, and No. 3.6 Visual Arts Addition.

#### STATE UNIVERSITY SYSTEM CIP-3 SHORT TERM PROJECT EXPLANATION

GEOGRAPHIC I OCATION	l Iniver	sity of Contr-	Elorido Otto						
GEOGRAPHIC LOCATION PROJECT DESCRIPTION	TITLE:	Visual Arts	Ren. & Expans	ion			COUNTY: Orange PROJECT BR No		
Epoilitu/Cases N		Net to					THOSE OF BITHO	. (ir assigned)	
	et Area	Gross	Gross Area	Unit Cost	Construction	Assumed	Occupancy		
	NASF)	<u>Conversion</u>	<u>(GSF)</u>	(Cost/GSF)*	<u>Cost</u>	Bid Date	Date		
Classrooms		1.5	0	305	0				
	8,500	1.5	27,750	376	10,434,000				
Research Labs		1.5	0	386	0				
Study 8	3,000	1.4	11,200	298	3,337,600				
nstructional Media		1.5	0	222	0				
Auditorium/Exhibition	9,500	1.2	11,400						
Gymnasiums	,000	1.2		329	3,750,600				
	7,000		0	226	0		<u>Space Detail for Re</u>	modeling Proje	<u>cts</u>
Campus Support Services	,000	1.5	10,500	331	3,475,500	BEF	ORE	T T	FTER
	000	1.4	0	282	0	Space	Net Area	Space	Net Area
	3,000	_	60,850	_	20,997,700	Type	(NASF)	Туре	(NASF)
Apply Unit Cost to total GS	F based	on primary sp	ace type	-		Offices	16,575	Offices	
Remodeling/Renovation		г		г					
L		L		L	7,079,838				
Fotal Construction - New & I	Rem./Rei	nov.		=	28,077,538	Total	16,575	Total	16,5
CHEDULE OF PROJECT	COMPO	VENTS	Eucledia			ESTIMATE	DCOSTS		
asic Construction Cost			Funded to	0040 45	00/00		•		
			<u>Date</u>	<u>2018-19</u>	<u>2019-20</u>	<u>2020-21</u>	<u>2021-22</u>	<u>2022-23</u>	Funded & In Cl
. a.Construction Cost (from							28,077,538		28,077,5
Add'I/Extraordinary Const.							, ,		
b.Environmental Impacts/	Mitigatior	1 IIII							
c.Site Preparation							238,000		-
d.Landscape/Irrigaiton									238,00
e.Piaza/Walks							250,000		250,00
f.Roadway Improvements	•								-
g.Parking spaces									-
									-
h.Telecommunication							348,641		348,64
i.Electrical Service									
j.Water Distribution									-
k.Sanitary Sewer System									-
I.Chilled Water System									-
•									-
m.Storm Water System									
n.Energy Efficient Equipm	ent						821,852		821,85
otal Construction Costs			0	0	0	0	29,736,031	0	29,736,0
Other Project Costs									
a.Land/existing facility acqu	Jisition								
b.Professional Fees						<b>.</b>			-
						2,469,417			2,469,41
c.Fire Marshall Fees						70,115			70,11
d.Inspection Services						420,305			420,30
e.Insurance Consultant						15,484			15,48
f.Surveys & Tests						45,000			45,00
g.Permit/Impact/Environme	ental Fees	6				98,688			
h.Artwork						-			. 98,68
.Moveable Furnishings & E	auiomen	t				-			-
j.Project Contingency	- Asibiliteli	•						3,891,362	3,891,36
otal - Other Project Costs			-			772,353	1,394,868		2,167,22
dal - Other Project Costs				-		3,891,362	1,394,868	3,891,362	9,177,59
L COSTS 1+2			0	0	0	3,891,362	31,130,899	3,891,362	38,913,62
Aporo	priations	to Date		D	roject Costs Beyo	nd CIP Period			
		iscal Year	Amount	•	Source	Fiscal Year	Amount		Total Project In
00.			0		Source	riscarfear	Amount		CIP & Beyond
			U						
		_		-	0741			_	
TOTA	L,		-		OTAL		0		38,913,62

CIP-3 SHORT-TERM PROJECT EXPLANATION	
CIP-3, A NARRATIVE DESCRIPTION	

AGENCY Univers	ity of Central Florida		Page	1	of .	2
BUDGET ENTITY	SUS	AGENCY PRIORITY	14			
PROJECT TITLE	Wastewater, Water, Natural	DATE BLDG PROGRAM	 			
-	Gas Replacement	APPROVED	 			

UCF strives to be a good steward of state funds, and as such has historically had the challenge of balancing the maintenance and operations of its buildings with the need to repair, replace and upgrade its utilities and infrastructure. In the recent past, when faced with years of legislative budget cuts and reduced funding, UCF placed its highest priority on repairs and projects related to life safety and the Americans with Disabilities Act (ADA). Consequently, a multitude of other maintenance issues were necessarily deferred, creating a backlog of utilities, infrastructure, plant modernization, capital renewal, and roofing needs. Continuing to defer these maintenance issues adds risk to human health, and increases replacement and repair costs.

These utility capital improvement projects include: replacing and increasing the size of aging water, waste-water, and natural gas pipes, valves, pumps, appurtenances, and controls; and facility improvements and modernization to generation facilities within each commodity's distribution network.

#### Natural Gas

The university has identified over \$380,000 of cathodic protection devices and new valves needed to support and properly isolate the system.

Other protection schema to UCF's utility distribution include upgrades to existing cathodic protection (CP) devices to UCF's natural gas and water services' circuits. Cathodic protection uses low-DC voltage techniques to control corrosion of UCF's distribution pipes by making a cathode of an electrochemical cell. By employing this technique, the cathode provides the sacrificial metal for corrosion to occur, which prevents pitting and resulting pipe leaks due to corrosion. This year, the department is evaluating capital replacement of the utility-owned CP devices to our 24,000 linear feet of low-, high-, and medium-pressure gas lines. This methodology will also apply to water and chilled water distribution circuits as funding and resources become available.

#### Waste / Wastewater

Many parts of the campus core's water infrastructure are approaching 40 years old, and capacity within waste water infrastructure requires upgrading pipe size and lift stations, along with purchasing additional effluent capacity. UCF's waste water capacity is currently capped at 1,000,000 gallons per day; to purchase an additional 100,000 gallons per day would exceed our existing agreement with the county by over \$875,000. UCF has identified over \$28,700,000 in capital renewal for its oldest campus commodity network.

The potable water distribution plant is outdated, and requires over \$1,000,000 in equipment and SCADA upgrades. In addition, both systems require replacement of distribution piping and isolation valves that are at end of life. The effluent transportation system was updated 15 years ago by

installing a master lift station, and now requires many new mechanical floats, probes, and SCADA upgrades. Secondary lift stations require upgrading to install secondary power for emergency backup and replacement of distribution piping throughout campus, because a majority of the distribution piping has been in the ground for 25-40 years.

# SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

CIP-3 SHORT TERM F	ROJECT EX	PLANATION							Pageof
GEOGRAPHIC LOCA PROJECT DESCRIPT	FION: Univer ION/TITLE:	sity of Centra Wastewater	l Florida, Orlano - Water, Natura	do Il Gas Replacen	nent		COUNTY: Orang PROJECT BR N		
		Net to						<u>. (ii dooigiiod).</u>	
Facility/Space <u>Type</u>	Net Area ( <u>N</u> ASF)	Gross Conversion	Gross Area	Unit Cost	Construction	Assumed	Occupancy		
Classrooms	<u>(INASE)</u>	1.5	( <u>GSF)</u>	(Cost/GSF)*	Cost	Bid Date	Date		
Teaching Labs		1.5	0	305	0				
Research Labs		1.5	0 0	376	0				
Study		1.5 1.4		386	0				
nstructional Media		1.4	0	298	0				
Auditorium/Exhibition		1.5	0	222	0				
Symnasiums		1.2	0	329 226	0		0		
Offices		1.5	õ	331	0		Space Detail for R		
Campus Support Servi	ces	1.4	õ	282	0		FORE		AFTER
otals	0		0	202	0	Space <u>Type</u>	Net Area <u>(N</u> ASF)	Space	Net Area
Apply Unit Cost to tota	GSF based	on orimary s					(NASE)	<u>Type</u>	(NASF)
								Offices	
Remodeling/Renovation	n								
]		[	0			_			
rotal Construction - Ne	w & Rem./Rei	nov.			C	Total		Total	-
								1000	
CHEDULE OF PROJE	ЕСТ СОМРОІ	NENTS				ESTIMA	TED COSTS		
Basic Construction Cos	•		Funded to	2010 10	0040.00				_
. a.Construction Cost (			Date	<u>2018-19</u>	<u>2019-20</u>	<u>2020-21</u>	<u>2021-22</u>	<u>2022-23</u>	Funded & In CIP
						4,419,835	9,690,000	12,141,570	26,251,405
Add'I/Extraordinary Co									-
b.Environmental Impa	acts/Willigation	I							-
c.Site Preparation	-				0				-
d.Landscape/Irrigaito	n					-			-
e.Plaza/Walks	onto								-
f.Roadway Improvem									-
g.Parking spaces h.Telecommunication									-
						-			-
i.Electrical Service									-
j.Water Distribution									-
k.Sanitary Sewer Sys									-
I.Chilled Water Syster									-
m.Storm Water Syste	m								-
n.Energy Efficient Equ									-
otal Construction Cost	<u> </u>		0	0	0	4,419,83	9,690,000	12,141,570	26,251,405
. Other Project Costs									
a.Land/existing facility	acquisition					•			-
b.Professional Fees						2,170,544	-		2,170,544
c.Fire Marshall Fees						60,512			60,512
d.Inspection Services						150,000			
e.Insurance Consultar	t					13,377			150,000
Surveys & Tests							-		13,377
g.Permit/Impact/Enviro	onmental Fee	\$				45,000	-		45,000
h.Artwork	amonai r ee	0				91,816	-		91,816
	P Carlera						-		-
i.Moveable Furnishing:	s ∝ ⊨quipmer	π					-		-
j.Project Contingency otal - Other Project Cos	ats					188,916	510,000	639,030	1,337,946
		<u>_</u>	-		-	2,720,165	510,000	639,030	3,869,195
LL COSTS 1+2			0	0	0	7,140,000	10,200,000	12,780,600	30,120,600
A	ppropriations	to Date		•	Project Costs Bey	ond CIP Period			Total Project In
		iscal Year	Amount		Source	Fiscal Year	Amount		CIP & Beyond
P	ECO		0				Anount		30,120,600
									50,120,000
	OTAL				TOTAL				

CIP-3 SHORT-TERM PROJECT EXPLANATION CIP-3, A NARRATIVE DESCRIPTION							
AGENCY Univer	sity of Central Florida		Page <u>1</u> of <u>2</u>				
BUDGET ENTITY	SUS	AGENCY PRIORITY	15				
PROJECT TITLE	Millican Hall Renovation	DATE BLDG PROGRAM	<u> </u>				
		APPROVED					

The Millican Hall administration building was built in 1969-70, and is one of the first two buildings on campus. This 87,742 GSF facility houses the Office of the President, Provost, university Vice Presidents, Academic Affairs, University Registrar, Student Development and Enrollment Services, and Administration and Finance, among others.

The university contracted with the ISES Corporation to conduct a Facilities Condition Assessment (FCA) to benchmark the condition of its E&G facilities. The Millican Hall renovation will address both critical and non-critical issues identified in the FCA. These issues encompass deficiencies such as indoor air quality, fire alarm modernization, potable water and plumbing distribution systems, electrical service, asbestos, HVAC modernization, lighting upgrades, building automation, ADA compliance, building envelope repairs, interior finishes, flooring, egress, exterior lighting, and utility service entrance upgrades. Information technology upgrades are also required in order to meet current and future requirements. This renovation will require commissioning to a LEED Silver level in order to meet the university's sustainability requirements.

# SUSTAINABILITY AND LEED

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# Classroom/Office

The space classification is predominately office type, with laboratory or research type minimized. The project will achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use. All heating and reheating will be hydronic.

# EDUCATIONAL PLANT SURVEY

The Educational Plant Survey was conducted October 6-7, 2015 and approved January 28, 2016. See recommendation No. 2.4, Millican Hall Renovation.

#### STATE UNIVERSITY SYSTEM CIP-3 SHORT TERM PROJECT EXPLANATION

GEOGRAPHIC LOC	ATION: Univer TION/TITLE:		il Florida, Orlan Il Renovation	do			COUNTY: Orange PROJECT BR No		
		Net to					I ROJECT BR NO	. (ir assigned):_	
Facility/Space	Net Area	Gross	Gross Area	Unit Cost	Construction	A	0.000		
Type	(NASF)	Conversion	(GSF)	(Cost/GSF)*		Assumed Bid Data	Occupancy		
Classrooms	<u></u>	1.5	0	<u>(COSI/GSF)</u> 305	Cost 0	<u>Bid Date</u>	<u>Date</u>		
Teaching Labs		1.5	0						
Research Labs		1.5		376	0				
			0	386	0				
Study		1.4	0	298	0				
Instructional Media		1.5	0	222	0				
Auditorium/Exhibition		1.2	0	329	0				
Gymnasiums		1.2	0	226	0	و	Space Detail for Re	modeling Proje	ote
Offices		1.5	0	331	o [	BEF			AFTER
Campus Support Ser	/ices	1.4	0	282	ō	·			
Totals	0		0	202	0	Space	Net Area	Space	Net Area
*Apply Unit Cost to to	-	on primary s				<u>Type</u> Offices	( <u>NASF)</u> 87,752	<u>Type</u> Offices	<u>(NASF)</u> 87,7
Remodeling/Renovati	on 86783	г	87752						01,1
		Ľ	07752						
Total Construction - N	ew & Rem./Re	nov.		:	9,512,443	Total	87,752	Total	87,7
SCHEDULE OF PRO	JECT COMPO	NENTS			····	ESTIMATE	D COSTS		
Basic Construction Co			Funded to				00010		
			Date	<u>2018-19</u>	<u>2019-20</u>	<u>2020-21</u>	<u>2021-22</u>	<u>2022-23</u>	Funded & In C
<ol> <li>a.Construction Cos</li> </ol>	(from above)						9,512,443		9,512,4
Add'I/Extraordinary	Const. Costs						-1		0,012,4
b.Environmental Im		n							-
	pactoriningation								-
c.Site Preparation							230,965		230,96
d.Landscape/Irrigai	on						133,991		133,99
e.Plaza/Walks									100,00
f.Roadway Improve	ments								-
									-
g.Parking space									-
h.Telecommunicatio	n						350,000		350,00
i.Electrical Service							,		000,00
j.Water Distribution									-
-									-
k.Sanitary Sewer Sy									-
I.Chilled Water Syst	em								
m.Storm Water Sys									-
n.Energy Efficient E									-
			_				979,123		979,12
otal Construction Cos	is		00	0	0	0	11,206,522	0	11,206,5
. Other Project Costs a.Land/existing facilit	vacquisition								
b.Professional Fees	, addining i								-
						1,107,366			1,107,36
c.Fire Marshall Fees						28,871			28,87
d.Inspection Service						141,119			141,11
e.Insurance Consulta	ant					6,294			6,29
f.Surveys & Tests						45,000			
g.Permit/Impact/Envi	ronmental Fee	s				65,870			45,00
h.Artwork		-				05,670			65,87
i.Moveable Furnishin	as & Fauinmor	nt					-		-
								1,472,991	1,472,99
j.Project Contingency otal - Other Project C	rests		_			78,471	577,413		655,88
LL COSTS 1+2						1,472,991	577,413	1,472,991	3,523,39
			0	0	0	1,472,991	11,783,935	1,472,991	14,729,9
	Appropriations	to Date		F	Project Costs Beyor	nd CIP Period			Total Project Ir
	Source F	iscal Year	Amount		Source	Fiscal Year	Amount		CIP & Beyond
		016-17	0			, local i cal	Anount		CIP & Beyond 14,729,91
		_							
	TOTAL			-	OTAL		0	_	14,729,9

Page \_\_\_of \_\_\_\_

		ORT-TERM PROJECT EXPLANATION 3, A – NARRATIVE DESCRIPTION	
AGENCY Univer	sity of Central Florida		Page <u>1</u> of <u>2</u>
BUDGET ENTITY	SUS	- AGENCY PRIORITY	16
PROJECT TITLE	Business Administration	DATE BLDG PROGRAM	
	Renovation	APPROVED	

The College of Business Administration (CBA) offers degrees at the bachelor's, master's, doctoral and executive levels. All programs, including the Kenneth G. Dixon School of Accounting, are accredited by The Association to Advance Collegiate Schools of Business (AACSB International). Only 5% of the world's 13,000 business programs have achieved such distinction through rigorous standards of achievement. AACSB-accredited schools are globally recognized for their outstanding mission, faculty contributions, operations and more. Degrees from such schools are constantly increasing in value, giving students a competitive edge.

Business Administration, a STEM facility, houses six academic units: the School of Accounting and the Departments of Economics, Finance, Integrated Business, Management, and Marketing. The College of Business Administration serves 7,765 undergraduate and 721 graduate students. Technology plays an integral role in the curriculum through state-of-the-art computer labs, tech support, and multi-media classrooms, and students graduate with the technical knowledge and entrepreneurial skills necessary to compete in today's global marketplace. The College's core business curriculum is extremely sound, and the faculty deliver excellence and opportunity to the students. However, the aging facility must also support the College's mission and vision. In order to give future students a competitive edge, the existing building must be renovated as the world of business is changing the way students learn and receive information. The renovation will produce a state-of-the-art educational facility that cultivates a learning environment promoting collaboration, engagement, risk taking and data-driven decision making.

The university contracted with the ISES Corporation to conduct a Facilities Condition Assessment (FCA) to benchmark the condition of its E&G facilities. The Business Administration I renovation will address both critical and non-critical issues identified in the FCA. These issues encompass deficiencies such as indoor air quality, fire alarm modernization, potable water and plumbing distribution systems, electrical service, asbestos, HVAC modernization, lighting upgrades, building automation, ADA compliance, building envelope repairs, interior finishes, flooring, egress, exterior lighting, and utility service entrance upgrades. Information technology upgrades are also required in order to meet current and future technology requirements.

Space utilization exceeds the current statutory requirement of 60% student stations occupied at a minimum of 40 hours per week. Where classrooms are concerned, the UCF main campus already is operating "at or above capacity." Based on the 2011 educational plant survey analysis for space needs, the university has a shortfall of classroom space. The university has been forced over the past several years to rent temporary facilities, both on and off campus, for classrooms and other purposes. UCF students are also taking summer classes and online classes in order to meet graduation requirements.

# SUSTAINABILITY AND LEED

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## Classroom/Office

The space classification is predominately classroom or office type, with laboratory or research type minimized. The project will achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use. All heating and reheating will be hydronic.

# EDUCATIONAL PLANT SURVEY

The Educational Plant Survey was conducted October 6-7, 2015 and approved January 28, 2016. See recommendation No. 2.3, Business Administration Renovation.

#### STATE UNIVERSITY SYSTEM CIP-3 SHORT TERM PROJECT EXPLANATION Page \_\_\_\_of \_\_\_\_ GEOGRAPHIC LOCATION: University of Central Florida, Orlando COUNTY: Orange PROJECT DESCRIPTION/TITLE: Business Administration Renovation PROJECT BR No. (if assigned): Net to Facility/Space Net Area Gross Gross Area Unit Cost Construction Assumed Occupancy Туре (NASF) Conversion (GSF) (Cost/GSF)\* <u>Cost</u> Bid Date <u>Date</u> Classrooms 1.5 0 305 0 Teaching Labs 1.5 0 376 0 Research Labs 1.5 0 386 0 Study 1.4 0 298 0 Instructional Media 1.5 0 222 0 Auditorium/Exhibition 1.2 0 329 0 Gymnasiums 1.2 0 226 0 Space Detail for Remodeling Projects Offices 1.5 0 331 BEFORE 0 AFTER Campus Support Services 1.4 0 282 0 Space Net Area Space Net Area Totals 0 0 <u>Type</u> (NASF) (NASF) Түре \*Apply Unit Cost to total GSF based on primary space type **Offices** 24,978 Offices 24,978 Remodeling/Renovation 118624 121074 10075582 Total Construction - New & Rem./Renov. 10,075,582 Total 24,978 Total 24,978 SCHEDULE OF PROJECT COMPONENTS ESTIMATED COSTS Funded to **Basic Construction Cost** Date <u>2018-19</u> <u>2019-20</u> 2020-21 2021-22 <u>2022-23</u> Funded & In CIP 1. a.Construction Cost (from above) 10,075,582 10,075,582 Add'I/Extraordinary Const. Costs b.Environmental Impacts/Mitigation c.Site Preparation 100,000 100,000 d.Landscape/irrigaiton e.Plaza/Walks f.Roadway Improvements g.Parking \_ spaces h.Telecommunication i.Electrical Service j.Water Distribution k.Sanitary Sewer System I.Chilled Water System m.Storm Water System n.Energy Efficient Equipment **Total Construction Costs** 0 0 0 0 10,175,582 0 10,175,582 2. Other Project Costs a.Land/existing facility acquisition b.Professional Fees 550,665 373,519 924,184 c.Fire Marshall Fees 23,642 23,642 d.Inspection Services 124,473 124,473 e.Insurance Consultant 4,763 4,763 f.Surveys & Tests g.Permit/Impact/Environmental Fees 61,709 61,709 h.Artwork i.Moveable Furnishings & Equipment 640.779 640,779 j.Project Contingency 1,617,<u>7</u>39 1,617,739 Total - Other Project Costs 640,779 2,115,731 640,779 3,397,289 ALL COSTS 1+2 0 0 640,779 12,291,313 13,572,871 640,779 Appropriations to Date Project Costs Beyond CIP Period Total Project In Source Fiscal Year Amount Source Fiscal Year CIP & Beyond Amount PECO 2012-13 0 TOTAL TOTAL 0 13,572,871

CIP-3 SHORT-TERM PROJECT EXPLANATION CIP-3, A – NARRATIVE DESCRIPTION						
AGENCY Univer	sity of Central Florida		Page <u>1</u> of <u>2</u>			
BUDGET ENTITY	SUS	AGENCY PRIORITY	17			
PROJECT TITLE	Facilities & Safety Complex	DATE BLDG PROGRAM				
	Renovation	APPROVED				

The Facilities and Safety Complex was constructed over a number of years, with the first building completed in 1969, and is approximately 103,286 gross square feet (GSF). The complex consists of five buildings: A) offices/shops; B) Fleet Maintenance, Landscape, and Locksmith Shop; C) Landscape; D) Housekeeping and Utilities & Energy Services; and E) Warehouse.

The university contracted with the ISES Corporation to conduct a Facilities Condition Assessment (FCA) to benchmark the condition of its E&G facilities. The Facilities and Safety Complex renovation will address both critical and non-critical issues identified in the FCA. These issues encompass deficiencies such as potable water and plumbing distribution systems, electrical service, HVAC modernization, lighting upgrades, ADA compliance, building envelope repairs, interior finishes, flooring, egress, exterior lighting, utility service entrance upgrades, and hardening of some building areas. The complex is manned 24/7; thus, improvements are necessary, as it is integral to operations for all natural disaster mitigation. It houses the majority of all operational equipment, and does not provide adequate space for a university with one of the largest student populations in the nation. Information technology upgrades are also required in order to meet current and future requirements.. Failure to provide current and functional facilities at the core of the university's operational needs will degrade current systems even further.

## SUSTAINABILITY AND LEED

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## Classroom/Office

The space classification is predominately office type, with laboratory or research type minimized. The project will achieve LEED Operations and Maintenance certification from the U.S. Green Building Council (USGBC). The project will use the LEED campus credits applicable to the renovation scope with focus on optimizing energy, and reducing potable water consumption.

# EDUCATIONAL PLANT SURVEY

The Educational Plant Survey was conducted October 6-7, 2015 and approved January 28, 2016. See recommendation No. 2.6, Facilities and Safety Complex Renovation.

		(PLANATION							Pageof
GEOGRAPHIC LOC PROJECT DESCRIF		rsity of Centra Facilities ar	l Florida, Orlan nd Safety Com	do plex Ren.			COUNTY: Orange PROJECT BR No.	(if assigned).	
Feelliku/Career		Net to						(ii doolgilod)	<u> </u>
Facility/Space <u>Type</u>	Net Area (NASF)	Gross Conversion	Gross Area	Unit Cost	Construction	Assumed	Occupancy		
Classrooms	(INASE)	1.5	<u>(GSF)</u> 0	(Cost/GSF)*	Cost	<u>Bid Date</u>	<u>Date</u>		
Feaching Labs		1.5	0	305	0				
Research Labs		1.5	0	376	0				
Study		1.4	0	386	0				
nstructional Media		1.4	0	298	0				
uditorium/Exhibition		1.2	0	222	0				
Symnasiums		1.2	0	329 226	0				
Offices		1.5	0	331	0 0 [		Space Detail for Rer		
Campus Support Ser	vices	1.4	0	282	0	BEF			FTER
otals	0		0	202	0	Space	Net Area	Space	Net Area
Apply Unit Cost to to	-	on primary sp				<u>Type</u> Offices	(NASF) 17,039	<u>Type</u> Offices	(NASF) 17,039
						<u> </u>			
Remodeling/Renovat	on								
_		L	103286		4595377				
Total Construction - N	ew & Rem./Re	nov.		:	4,565,377	Total	17,039	Total	17,039
CHEDULE OF PRO	ЈЕСТ СОМРО	NENTS	·			ESTIMATI	ED COSTS		······
asic Construction Co	net		Funded to	2019 10	2040.00				
. a.Construction Cos			Date	<u>2018-19</u>	<u>2019-20</u>	2020-21	<u>2021-22</u>	<u>2022-23</u>	Funded & In CIP
Add'I/Extraordinary						4,565,377			4,565,377
b.Environmental im		-							-
c.Site Preparation	pacis/initigatio								-
									-
d.Landscape/Irrigai e.Plaza/Walks	ion					-			-
									-
f.Roadway Improve									-
g.Parking spac									-
h.Telecommunication	n					-			-
i.Electrical Service									-
j.Water Distribution									-
k.Sanitary Sewer S	/stem								_
I.Chilled Water Syst	em								-
m.Storm Water Sys									-
n.Energy Efficient E									-
otal Construction Co			0	0	0	4 505 077			-
· · · · · · · · · · · · · · · · · · ·			0		0	4,565,377	0	0	4,565,377
Other Project Costs a.Land/existing facili									
b.Professional Fees						587,592			-
c.Fire Marshall Fees						11,957			587,592
d.Inspection Service	s					-			11,957
e.Insurance Consult						2,439			-
f.Surveys & Tests						-			2,439
g.Permit/Impact/Env h.Artwork	ironmental Fee	s				43,038			- 43,038
i.Moveable Furnishir	as & Faulomo	nt				-			-
j.Project Contingenc		in in				333,683			333,683
tal - Other Project Contingenc						743,719			743,719
						1,722,428			1,722,428
L COSTS 1+2			0	0	0	6,287,805	0	0	6,287,805
	Appropriations	to Date		F	Project Costs Beyon	d CIP Period			Total Project In
		iscal Year	Amount		Source	Fiscal Year	Amount		CIP & Beyond
		2012-13	0						6,287,805
									0,200,0000

CIP-3 SHORT-TERM PROJECT EXPLANATION
CIP-3, A – NARRATIVE DESCRIPTION

AGENCY University of Central Florida		Page _	1	of	2
BUDGET ENTITY         SUS           PROJECT TITLE         Research Building III	AGENCY PRIORITY DATE BLDG PROGRAM APPROVED	18			

UCF has a critical need for research space that can help drive Florida's innovation economy and assist our state in producing high paying jobs. Crosscutting research is a critical component in addressing many of the issues facing today's innovation based economy. Interdisciplinary research, which crosses traditional academic disciplinary lines, has led the way in the discovery and creation of new and innovative technologies that fuel economic growth and prosperity in the US. Florida is building a strong base of faculty with a broad base of technological expertise in key areas of science and technology based on strong clusters in sectors vital to Florida. The ability to leverage the talents of faculty from various disciplines creates synergies, value, and opportunities well beyond the sum of the individual parts.

UCF aspires to be a preeminent state research university and has set strategic goals to be a Top 50 research university by 2035. UCF is committed to a robust portfolio of research, scholarship, and creative activities across all disciplines, contributing to the creation of new knowledge. Specific metrics have been designed to meet preeminence, including doubling research awards from \$133 million to \$250 million and achieving a level where at least 25% of graduate degrees awarded are research-focused. Strategies to meet these objectives include: reaching at least 200 post-doctoral research appointees; increasing undergraduate participation in some form of research by 50%; winning ten proposals per year exceeding \$1M, five of which exceed \$3M; creating 16 start-up companies annually and executing 36 licenses and options for UCF intellectual property; and achieving 200 patents awarded over three years.

UCF must accelerate the growth of its research enterprise in people, funded research expenditures, and facilities in order to expand the university's research scale and impact. According to the UCF Educational Plant Survey conducted in October 2015, a deficit of 618,214 NASF exists in laboratory space. Construction of Research Building III is necessary to reduce the current deficit, and is advantageous to UCF and the State of Florida as we strive to achieve top-tier, preeminent state research university status.

This facility will provide the infrastructure, atmosphere, and culture necessary to build strong, creative, and innovative teams and programs in research, technology transfer, and commercialization. Focusing on relevant technology in emerging areas, the facility will enable fundamental and applied research across traditional disciplines to create clusters. It will act as a bridge between technology development and technology transfer and commercialization, and become an integral component of economic development activities in the region and state.

# SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission.

Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

# **Research/Laboratory**

The space classification is predominately laboratory type, with office type minimized. The project will achieve LEED Gold certification with the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. Laboratories will have continuous variable air flow valves with air flow reset capabilities. Domestic and laboratory hot water needs shall be provided primarily by solar thermal energy. The project will utilize the district cooling loop for space cooling needs and will look at alternative measures to provide dehumidification with the classifications of lab spaces and related energy use, and all heating and reheating will be hydronic.

# EDUCATIONAL PLANT SURVEY

The Educational Plant Survey has not been addressed for this project. As the planning year approaches, this project will be addressed.

		PLANATION							Pageof		
GEOGRAPHIC LOCAT	CLOCATION: University of Central Florida, Orlando SCRIPTION/TITLE: Research Building III						COUNTY: Orange PROJECT BR No. (if assigned):				
Facility/Space	Net Area	Net to Gross	Gross Area	Unit Cost	Construction	Assumed	Occupancy				
<u>Type</u> Classrooms	(NASF)	Conversion	(GSF)	(Cost/GSF)*	Cost	Bid Date	<u>Date</u>				
		1.5	0	305	0						
eaching Labs	55 405	1,5	0	376	0						
Research Labs	55,165	1.5	82,748	386	31,940,535						
Study		1.4	0	298	0						
nstructional Media		1.5	0	222	0						
Auditorium/Exhibition		1.2	0	329	0						
Gymnasiums		1.2	0	226	0		Space Detail for	Remodeling Proj	ects		
Offices	24,059	1.5	36,089	331	11,945,294		FORE	Ā	FTER		
Campus Support Serv	12,705	1.4	17,787	282	5,015,934	Space	Net Area	Space	Net Area		
Totals	91,929		136,623	-	48,901,763	<u>Type</u>	(NASF)	<u>Type</u>	(NASF)		
Apply Unit Cost to total	GSF based	on primary sp	bace type								
Remodeling/Renovation		Г		Г	·····						
	& Rem./Re	nov.			48,901,763	Total	0	Total	0		
						-			`		
CHEDULE OF PROJE	СТ СОМРО	NENTS	Funded to			ESTIMA	TED COSTS				
asic Construction Cost			_Date	<u>2018-19</u>	2019-2020	2020-21	2021-22	<u>20</u> 22-23			
. a.Construction Cost (fi	om above)		Build	2010 10	2010-2020	2020-21		2022-23	Funded & In C		
Add'l/Extraordinary Co			-				48,901,763		48,901,7		
b.Environmental Impa		<b>.</b>							-		
c.Site Preparation	cia/imitgatio								-		
d.Landscape/Irrigaiton				-			2,933,489		2,933,4		
e.Plaza/Walks							600,000		600,0		
									-		
f.Roadway Improveme	ints								-		
g.Parking 300 spaces							379,856		379,8		
h.Telecommunication				-			1,048,641		1,048,6		
i.Electrical Service									-		
j.Water Distribution									-		
k.Sanitary Sewer Syste									-		
I.Chilled Water System									-		
m.Storm Water Syster									-		
n.Energy Efficient Equi	pment						2,969,875		2,969,8		
otal Construction Costs				0	0	0	56,833,624	0	56,833,6		
Other Project Costs											
a.Land/existing facility a	acquisition								-		
b.Professional Fees						5,213,040			5,213,0		
c.Fire Marshall Fees						149,346			149,3		
d.Inspection Services						911, <b>11</b> 7			911,1		
e.Insurance Consultant						31,412			31,4		
f.Surveys & Tests						391,192			391,1		
g.Permit/Impact/Enviror	nmental Fee	s				255,598			255,5		
h.Artwork							100,000		100,0		
i.Moveable Furnishings	& Equipme	nt						7,483,389	7,483,3		
j.Project Contingency						531,584	2,933,489	.,	3,465,0		
otal - Other Project Cos	s		-		-	7,483,289	3,033,489	7,483,389	18,000,16		
LL COSTS 1+2			0	0	0	7,483,289	59,867,113	7,483,389	74,833,7		
Δr	propriations	to Date			Project Costs Bey	and CIP Ported			Total Data At		
۰٬۴		Fiscal Year	Amount		Source	Fiscal Year	Amount		Total Project In		
PF			0		Goulde	i lacal i Cal	Amount		CIP & Beyond		
1 -			0						74,833,7		
	TAL	_	-		TOTAL		0	-	74 000 7		
тс	1 AL						U		74,833,7		

<b>CIP-3 SHORT-TERM PROJECT EXPLANATION</b>
CIP-3, A – NARRATIVE DESCRIPTION

AGENCY Univers	ity of Central Florida		Page _	<u>1</u> of	2
BUDGET ENTITY PROJECT TITLE	SUS Multi-Purpose Research and Education Building	AGENCY PRIORITY DATE BLDG PROGRAM APPROVED	19		_

The Multi-Purpose Research and Education Building must be a state-of-the-art facility, capable of supporting university research and administrative functions. It will be a shared-space facility, providing general research and office space with multimedia capabilities of the highest available technological quality. The facility will house a variety of valuable services for the academic community, while also serving as a temporary space for departments while their buildings are being renovated. Extensions of campus utilities and roadways are being requested separately to meet the needs of this and other campus construction projects.

Where research labs, classrooms, and teaching labs are concerned, the UCF main campus is already operating "at or above capacity." Based on the 2015 Educational Plant Survey, the university is at a deficit for classroom space and research and teaching labs, and requires this new building to meet current and growing demands. The university has been forced over the past several years to rent temporary facilities, both on- and off-campus.

Research labs are essential for thesis and dissertation work by students in disciplines with active graduate programs, especially at the doctoral level. Many cases exist on campus where the same labs are used for graduate coursework, thesis and/or dissertation work, and faculty research.

# SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

# Classroom/Office

The space classification is a combination of classroom and laboratory type. The project will achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. Laboratories will have continuous variable air flow valves with air flow reset capabilities. Domestic and laboratory hot water needs

shall be provided primarily by solar thermal energy. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use. All heating and reheating will be hydronic.

# EDUCATIONAL PLANT SURVEY

The Educational Plant Survey was conducted October 6-7, 2015 and approved January 28, 2016. See recommendation No. 3.5, Multi-Purpose Research and Education.

#### STATE UNIVERSITY SYSTEM CIP-3 SHORT TERM PROJECT EXPLANATION

#### GEOGRAPHIC LOCATION: University of Central Florida, Orlando COUNTY: Orange PROJECT DESCRIPTION/TITLE: Multi-purpose Research and Education PROJECT BR No. (if assigned): Net to Facility/Space Net Area Gross Gross Area Unit Cost Construction Assumed Occupancy (NASF) Type Conversion (GSF) (Cost/GSF)\* Bid Date <u>Cost</u> <u>Date</u> Classrooms 20,117 1.5 30,176 305 9,203,744 **Teaching Labs** 6,700 1.5 10,050 376 3,778,800 Research Labs 4.000 1.5 6.000 386 2,316,000 Study 1.4 0 298 0 Instructional Media 1.5 0 222 0 Auditorium/Exhibition 1.2 0 329 0 Gymnasiums 1.2 0 226 0 Space Detail for Remodeling Projects Offices 21,000 1.5 31,500 331 10,426,500 BEFORE AFTER Campus Support Services 1.4 0 282 0 Space Net Area Net Area Space Totals 51.817 77,726 25,725,044 (NASF) <u>Type</u> Туре (NASF) \*Apply Unit Cost to total GSF based on primary space type Remodeling/Renovation Total Construction - New & Rem./Renov. 25,725,044 Total Tota SCHEDULE OF PROJECT COMPONENTS ESTIMATED COSTS Funded to **Basic Construction Cost** Date 2018-19 <u>2019-20</u> 2020-21 2021-22 2022-23 Funded & In CIP 1. a.Construction Cost (from above) 25,725,044 25,725,044 Add'I/Extraordinary Const. Costs b.Environmental Impacts/Mitigation c.Site Preparation 238,000 238,000 d.Landscape/Irrigaiton 250,000 250,000 e.Plaza/Walks f.Roadway Improvements g.Parking \_\_\_\_ spaces h.Telecommunication 348,681 348,681 i.Electrical Service j.Water Distribution k.Sanitary Sewer System -I.Chilled Water System m.Storm Water System n.Energy Efficient Equipment 421,431 421,431 **Total Construction Costs** 0 0 0 26,983,156 0 0 26,983,156 2. Other Project Costs a.Land/existing facility acquisition b.Professional Fees 2,483,527 2,483,527 c.Fire Marshall Fees 63,655 63,655 d.Inspection Services 323,403 323,403 e.insurance Consultant 14,011 14,011 f.Surveys & Tests 45,000 45,000 g.Permit/Impact/Environmental Fees 94,356 94,356 h.Artwork 100,000 100.000 i.Moveable Furnishings & Equipment 3,604,940 3,604,940 j.Project Contingency 581,988 1,273,097 1,855,085 Total - Other Project Costs 3,605,940 1,373,097 3,604,940 8,583,977 ALL COSTS 1+2 0 0 0 3,605,940 28,356,253 3,604,940 35,567,133 Appropriations to Date Project Costs Beyond CIP Period Total Project In Source Fiscal Year Amount Source Fiscal Year Amount CIP & Beyond PECO 0 TOTAL TOTAL 0 35,567,133

Page \_\_\_\_of \_\_\_\_

<b>CIP-3 SHORT-TERM PROJECT EXPLANATION</b>
CIP-3, A – NARRATIVE DESCRIPTION

AGENCY Universit	y of Central Florida		Page 1 of 2
PROJECT TITLE	SUS UCF Downtown Campus Building II	AGENCY PRIORITY DATE BLDG PROGRAM APPROVED	20 , 40

The University of Central Florida is planning to expand our downtown Orlando presence in 2019 with a Type I campus that will focus on student instruction and services. The new campus will transform our current downtown offerings by strategically relocating programs from our main campus in east Orlando to downtown. The project also expands the university's long-standing partnership with Valencia College, which would relocate complementary programming and offer non-duplicated, lower-division coursework. UCF's downtown expansion will create a world-class, best-in-the-nation site for digital media, communication, public service, and health-related programs in an innovative, urban environment.

This expanded campus will allow UCF to significantly enhance the academic experience through innovative learning environments and engaged location-based education. Partnering with Valencia College will enable students to earn a bachelor's degree at a lower cost, while also providing greater opportunity for degree attainment in a historically underserved area. Finally, the expansion will help UCF to meet the needs of the city-state by creating additional space that is necessary for the university to grow in Areas of Strategic Emphasis. UCF plans to open the new campus in 2019 with the construction of a new Academic Building and the renovation of the existing Center for Emerging Media. When the campus opens, it is projected to enroll approximately 7,700 UCF and Valencia students, and when completed, Building 2 will serve approximately an additional 2,500 students from both schools.

Building 2 will build on the success of the new downtown campus, and will be home to academic programs such as advertising and public relations, emerging media and graphic design, journalism, radio/television, and film. Building 2 will add an additional 1,600 UCF students to the downtown campus. Programs that are currently planned to occupy Building 2 are in high demand and will prepare students for occupations in growing industries. The U.S. Department of Labor Bureau of Labor Statistics predicts high growth from 2014 to 2024 for the following occupations linked to this building's academic programs: 6% growth in Public Relations Specialists and 9% growth in Advertising and Promotions Managers. In addition to strong growth, these occupations have recorded strong annual earnings. Advertising and Promotions Managers earn an average salary of \$117,810, and Public Relations Specialists earn an average salary of \$58,020. In addition, Building 2 will serve 900 students from Valencia College in programs strategically aligned with UCF's degree programs. Valencia will relocate the Associate of Science in Graphic Design and offer additional courses to support the anticipated growth of the Associate of Arts degree within the facility.

Students studying in Building 2 will be within a 15-minute walk of many valuable experiential learning opportunities they would not find in such close proximity to UCF's main campus. For example, journalism majors could intern at the Orlando Sentinel in its digital newsroom or at the 24-hour broadcast station Central Florida News 13. Additionally, the building will provide space for several of UCF's community-facing operations, such as its public radio and television stations.

Building 2 will be 222,000 gross square feet dedicated to flexible learning environments, teaching laboratories, and collaborative learning spaces that encourage interdisciplinary education and problem solving. In addition, this facility will feature state-of-the-art production studios and editing facilities to support the highly technical communication programs housed within the building. This facility will break down traditional brick-and-mortar barriers and encourage synergy among faculty, staff, and students through intentional space design. In addition, this facility will be designed to flexibly adapt to new trends related to innovative teaching and learning and flexibly share studios between all academic programs.

Building 2, as part of the UCF Downtown campus, will create a dynamic learning environment for students in strategically selected programs, in addition to meeting the needs of growing occupations within the region and across the state.

# SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

## Classroom/Office

The space classification is predominately classroom or office type, with laboratory or research type minimized. The project will achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use. All heating and reheating will be hydronic.

## EDUCATIONAL PLANT SURVEY

The Educational Plant Survey has not been addressed for this project. As the planning year approaches, this project will be addressed.

# STATE UNIVERSITY SYSTEM CIP-3 SHORT TERM PROJECT EXPLANATION

									Pageof
GEOGRAPHIC LOCATION: PROJECT DESCRIPTION/TI	University of TLE:	Central Flori UCF Downto	da, Orlando <u>own C</u> ampus B	uilding II			COUNTY: Or		
		Net to					PROJECT BE	R No. (if assigne	d):
Facility/Space	Net Area	Gross	Gross Area	Unit Cost	Construction	Assumed	000		
Type	(NASF)	Conversion	(GSF)	(Cost/GSF)*			Occupancy		
Classrooms	37,740	1.5	56,610		<u>Cost</u>	<u>Bid Date</u>	<u>Date</u>		
Feaching Labs	38,851	1.5	58,277	305	17,266,050				
Research Labs	0	1.5		376	21,911,964				
Study			0	386	0				
	11,193	1.4	15,670	298	4,669,720				
nstructional Media	32,876	1.5	49,314	222	10,947,708				
uditorium/Exhibition	7,893	1.2	9,472	329	3,116,156				
Symnasiums	0	1.2	0	226	0		Snace Detail fo	or Remodeling P	
Offices	21,772	1.5	32,658	331	10,809,798	PE	ORE		
Campus Support Services	0	1.4	ò	282	0				AFTER
otals	150,325		222,000	202	68,721,396	Space <u>Type</u>	Net Area (NASF)	Space	Net Area
Apply Unit Cost to total GSF	based on pri	mary space t	уре	=		1490	(((A3)))	<u>Түре</u>	(NASF)
Remodeling/Renovation		Г		Г					
		L.,		L					
otal Construction - New & Re	em./Renov.			=	68,721,396	Total	<u>0</u>	Total	<u>0</u>
CHEDULE OF PROJECT CO						COTIN			
			Funded to			ESIIN	ATED COSTS		
asic Construction Cost			<u>Date</u>	<u>2018-19</u>	<u>2019-20</u>	<u>2020-21</u>	2021-22	2022-23	Eurode d. A. L. C
a.Construction Cost (from a	ibove)					68,721,396	2021-22	2022-23	Funded & In C
Add'I/Extraordinary Const. C	osts					00,721,390			68,721,3
b.Environmental Impacts/Mi									-
c.Site Preparation						-			-
d.Landscape/Irrigaiton						728,000			728,0
e.Plaza/Walks						864,000			864,0
						512,960			512,9
f.Roadway Improvements									512,5
g.Parking spaces						-			-
h.Telecommunication						2,180,000			-
i.Electrical Service									2,180,0
j.Water Distribution						179,212			179,2
k.Sanitary Sewer System						111,489			111,4
I.Chilled Water System						323,379			323,3
						-			,-
m.Storm Water System						-			
n.Energy Efficient Equipmen	nt					2,624,349			-
tal Construction Costs			0	0	0	76,244,785	0	0	2,624,34 76,244,7
Other Project Costs									
Land/existing facility acquis	sition								
.Professional Fees						3,749,941			-
.Fire Marshall Fees						150,930			3,749,94
I.Inspection Services									150,93
Insurance Consultant						547,500			547,50
Surveys & Tests						-			-
.Permit/Impact/Environment	al Fees					-			-
.Artwork	011005					315,074			315,07
						100,000			100,00
Moveable Furnishings & Equ	upment					3,863,431			3,863,43
Project Contingency						3,019,894			
tal - Other Project Costs				-		11,746,770		-	3,019,89 11,746,77
LCOSTS 1+2			0	0	0	87,991,555	0	0	87,991,5
Ao	propriations	to Date			niect Costa D-				
		iscal Year	Amount 0	PI	oject Costs Be Source	yond CIP Peric Fiscal Year	Amount		Total Project In CIP & Beyond
то	TAL			т	DTAL		0	_	87,991,55

CIP-3 SHORT-TERM PROJECT EXPLANATION	
CIP-3, A – NARRATIVE DESCRIPTION	

AGENCY _University of	Central Florida		Page <u>1</u> of <u>2</u>
BUDGET ENTITY SUS PROJECT TITLE Crea	Sative School for Children	AGENCY PRIORITY DATE BLDG PROGRAM APPROVED	CITF 2

The current facility, consists of three aging standalone buildings (41, 36, and 23 years old) that are in very poor condition. The school is accredited by the National Association for the Education of Young Children, and a new facility is critical to maintain this valued accreditation. The Creative School expanded services to include enrollment for children under the age of two in August 2014 by repurposing existing space. However, a new facility is needed to accommodate more children under the age of two, as well as address concerns with the aging facility.

The Creative School provides early childhood educational services to children of UCF students, faculty, staff, and alumni. It supports UCF's academic programs by providing more research and preservice internship opportunities to students, as well as supporting the development of more resources and partnerships in the UCF community through an expanded parent base. As the university's enrollment increases, it will be necessary to add space to accommodate more children.

The present structures consist of a main building, which includes two classrooms (constructed in 1976), a two-classroom wing constructed in 1981, and two additional classrooms constructed in 1994. The initial building, which includes a kitchen and reception area, was designed to support 15 families. However, due to demand, the facility has expanded or repurposed space to support over 130 families. The school currently has a waitlist of over 200 children, and a new center designed to support 170 families is desperately needed.

Building a new permanent structure will support an expanding and much-needed educational space. It will assist in recruiting faculty and research scholars, as well as providing pre-service teacher internships, in-service learning hours, and opportunities for educational research by UCF faculty and graduate students. In 2016, over 900 students logged 31,200 hours of observation, service learning, and internships at the Creative School.

The new building will employ the same safety and security measures that have been in place for the existing Creative School since 1976. These measures include: a completely fenced-in facility; identification badges for all teachers; sign-in and -out of children by only parents or designated guardians; mandatory visitor check-in; and alerts to staff when visitors enter the premises. More technologically-advanced security measures will also be installed, such as a security camera system, which records all individuals entering the facility, and a door security system, which requires a key card and PIN to enter the building.

# SUSTAINABILITY AND LEED

The University of Central Florida is committed to the efficient use of natural resources. As energy costs and demands continue to grow, achieving energy efficiency has become increasingly important

to the university's mission. Appropriate policies and procedures that govern the use of environmental resources and facilities have enabled UCF to achieve the improvements necessary to ensure a productive environment for all and establish itself as a national leader in energy research, education, and stewardship.

In line with the university policy for new construction, this project will be designed and constructed to achieve LEED Silver certification.

# EDUCATIONAL PLANT SURVEY

The Educational Plant Survey was conducted and approved in February, 2011.

#### STATE UNIVERSITY SYSTEM CIP-3 SHORT TERM PROJECT EXPLANATION Page \_\_\_\_of \_\_\_\_ GEOGRAPHIC LOCATION: University of Central Florida, Orlando COUNTY: Orange PROJECT DESCRIPTION/TITLE: Creative School For Children PROJECT BR No. (if assigned): Net to Facility/Space Net Area Gross Gross Area Unit Cost Construction Assumed Occupancy <u>Туре</u> (NASF) Conversion (GSF) (Cost/GSF)\* <u>Cost</u> Bid Date Date Classrooms 2,789 4,184 1.5 305 1,275,968 Teaching Labs 2,998 1.5 4,497 376 1,690,872 Research Labs 1.5 0 386 0 Study 1.4 0 298 0 Instructional Media 1.5 0 222 0 Auditorium/Exhibition 650 1.2 780 329 256,620 Space Detail for Remodeling Projects BEFORE Gymnasiums 1.2 0 226 0 Offices 1,500 1.5 2.250 331 744,750 AFTER Campus Support Serv 850 1.4 1,190 282 335,580 Space Net Area Space Net Area Totals 8.787 12,901 4,303,790 <u>Type</u> (NASF) Туре (NASF) \*Apply Unit Cost to total GSF based on primary space type Remodeling/Renovation Total Construction - New & Rem./Renov. 4,303,790 Total 0 Total 0 SCHEDULE OF PROJECT COMPONENTS ESTIMATED COSTS Funded to **Basic Construction Cost** Date 2018-19 <u>2019-20</u> 2020-21 <u>2021-22</u> <u>2022-23</u> Funded & In CIP 1. a.Construction Cost (from above) 4,303,790 4,303,790 Add'I/Extraordinary Const. Costs b.Environmental Impacts/Mitigation c.Site Preparation 100,000 100.000 d.Landscape/Irrigation 150,000 150,000 e.Plaza/Walks f.Roadway Improvements g.Parking \_\_\_\_ spaces h.Telecommunication 150,000 150,000 i.Electrical Service j.Water Distribution k.Sanitary Sewer System I.Chilled Water System m.Storm Water System n.Energy Efficient Equipment **Total Construction Costs** 0 0 4,703,790 0 0 0 4,703,790 2. Other Project Costs a.Land/existing facility acquisition **b**.Professional Fees 381,334 381,334 c.Fire Marshall Fees 11,760 11,760 d.Inspection Services 82,000 82,000 e.Insurance Consultant 2.424 2,424 f.Surveys & Tests 15,000 15,000 g.Permit/Impact/Environmental Fees 51,092 51,092 h.Artwork 29,400 29,400 i.Moveable Furnishings & Equipment 488,000 488,000 Project Contingency 235,200 235,200 Total - Other Project Costs 1,296,210 1,296,210 ALL COSTS 1+2 0 0 6,000,000 0 0 0 6,000,000 Appropriations to Date Project Costs Beyond CIP Period Total Project In Source Fiscal Year Amount Source Fiscal Year Amount CIP & Beyond 0 PECO TOTAL TOTAL 0

CIP-3 SHORT-TERM PROJECT EXPLANATION CIP-3, A – NARRATIVE DESCRIPTION					
AGENCY University of Central Florida BUDGET ENTITY SUS PROJECT TITLE ARA Research Building	AGENCY PRIORITY DATE BLDG PROGRAM APPROVED	Page <u>1</u> of <u>2</u> 22			

UCF has a critical need for research space that can help drive Florida's innovation economy and assist our state in producing high paying jobs. Crosscutting research is a critical component in addressing many of the issues facing today's innovation based economy. Interdisciplinary research, which crosses traditional academic disciplinary lines, has led the way in the discovery and creation of new and innovative technologies that fuel economic growth and prosperity in the US. Florida is building a strong base of faculty with a broad base of technological expertise in key areas of science and technology based on strong clusters in sectors vital to Florida. The ability to leverage the talents of faculty from various disciplines creates synergies, value, and opportunities well beyond the sum of the individual parts.

UCF aspires to be a preeminent state research university and has set strategic goals to be a Top 50 research university by 2035. UCF is committed to a robust portfolio of research, scholarship, and creative activities across all disciplines, contributing to the creation of new knowledge. Specific metrics have been designed to meet preeminence, including doubling research awards from \$133 million to \$250 million and achieving a level where at least 25% of graduate degrees awarded are research-focused. Strategies to meet these objectives include: reaching at least 200 post-doctoral research appointees; increasing undergraduate participation in some form of research by 50%; winning ten proposals per year exceeding \$1M, five of which exceed \$3M; creating 16 start-up companies annually and executing 36 licenses and options for UCF intellectual property; and achieving 200 patents awarded over three years.

UCF must accelerate the growth of its research enterprise in people, funded research expenditures, and facilities in order to expand the university's research scale and impact. According to the UCF Educational Plant Survey conducted in October 2015, a deficit of 618,214 NASF exists in laboratory space. Construction of the Ara Research Building is necessary to reduce the current deficit, and is advantageous to UCF and the State of Florida as we strive to achieve top-tier, preeminent state research university status.

This facility will provide the infrastructure, atmosphere, and culture necessary to build strong, creative, and innovative teams and programs in research, technology transfer, and commercialization. Focusing on relevant technology in emerging areas, the facility will enable fundamental and applied research across traditional disciplines to create clusters. It will act as a bridge between technology development and technology transfer and commercialization, and become an integral component of economic development activities in the region and state.

## SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission.

Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

## **Research/Laboratory**

The space classification is predominately laboratory type, with office type minimized. The project will achieve LEED Gold certification with the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. Laboratories will have continuous variable air flow valves with air flow reset capabilities. Domestic and laboratory hot water needs shall be provided primarily by solar thermal energy. The project will utilize the district cooling loop for space cooling needs and will look at alternative measures to provide dehumidification with the classifications of lab spaces and related energy use, and all heating and reheating will be hydronic.

# EDUCATIONAL PLANT SURVEY

The Educational Plant Survey has not been addressed for this project. As the planning year approaches, this project will be addressed.

#### STATE UNIVERSITY SYSTEM CIP-3 SHORT TERM PROJECT EXPLANATION

GEOGRAPHIC LOC PROJECT DESCRIF	TION/TITLE:	ARA Resea	Florida, Orland arch Building	10			COUNTY: Or PROJECT BE	ange <u>R N</u> o. (if assigned)	
		Net to	ĭ					(ii assigned)	<u></u>
Facility/Space	Net Area	Gross	Gross Area	Unit Cost	Construction	n Assume	d Occupanc	y	
<u>Type</u>	(NASF)	Conversion	<u>(GSF)</u>	(Cost/GSF)*	Cost	Bid Date			
Classrooms		1.5	0	305	0				
Teaching Labs		1.5	0	376	0				
Research Labs	32,000	1.5	48,000	386	18,528,000				
Study		1.4	0	298	0				
nstructional Media		1.5	0	222	0				
Auditorium/Exhibition		1.2	0	329	0				
Gymnasiums		1.2	0	226	õ		Space Dotail	for Remodeling Pr	-11-
Offices	6,500	1,5	9,750	331	3,227,250		BEFORE		
Campus Support Ser	vices	1.4	0	282	0	Space	Net Area		AFTER
otais	38,500		57,750		21,755,250		(NASF)	Space	Net Area
Apply Unit Cost to to	tal GSF based	on primary sp	ace type	=				<u>Type</u>	(NASF)
Remodeling/Renovati	on								
otal Construction - N	L (D					$\neg$			
	ew & Rem./Re	enov.			21,755,2	50 Total	0	Totai	0
CHEDULE OF PRO	JECT COMPC	NENTS	Fundad to			ESTI	MATED COSTS		
asic Construction Co	net		Funded to	0040.40					
			Date	<u>2018-19</u>	<u>2019-20</u>	<u>2020-21</u>	<u>2021-22</u>	<u>2022-23</u>	Funded & In C
a.Construction Cos			-	21,755,250					21,755,2
Add I/Extraordinary	Const. Costs								2.,.00,2.
b.Environmental Im	pacts/Mitigatio	n							_
c.Site Preparation				208,640					208,64
d.Landscape/Irrigai	on								200,0
e.Plaza/Walks									-
f.Roadway Improve	ments								-
g.Parking space	es								-
h.Telecommunicatio	n			248,250					-
i.Electrical Service				210,200					248,25
j.Water Distribution									-
k.Sanitary Sewer Sy	stem								-
I.Chilled Water Syst									-
m.Storm Water Syst									-
n.Energy Efficient E									-
tal Construction Cos									-
al Construction Cos			0	22,212,140		0	0	0 (	22,212,1
Other Project Costs									
a.Land/existing facilit	y acquisition								-
p.Professional Fees				2,079,388					2,079,38
Fire Marshall Fees				53,978					53,97
Inspection Service				250,000					250,00
e.Insurance Consulta	ant			11,390					
Surveys & Tests				45,000					11,39
g.Permit/Impact/Envi	ronmental Fee	s		109,616					45,00
n.Artwork									109,61
Moveable Furnishin	gs & Equipme	nt		1,698,920					-
Project Contingency	,			1,079,568					1,698,92
tal - Other Project C			-	5,327,860	-	-		^	1,079,56
L COSTS 1+2		<u> </u>	0	27,540,000			<u>_</u>	0	
							0	0 0	27,540,00
	Appropriations	to Date		F	Project Costs Be	yond CIP Perio	od		Total Project In
		iscal Year	Amount		Source	Fiscal Year			
	PECO		0				Anount		CIP & Beyond
			-						27,540,0(
	TOTAL		-	г	OTAL		·	0	27,540,00

Page \_\_\_\_of \_\_\_\_

<b>CIP-3 SHORT-TERM PROJECT EXPLANATION</b>
CIP-3, A – NARRATIVE DESCRIPTION

AGENCY University of Central Florida BUDGET ENTITY SUS PROJECT TITLE Campus Entryways Phase I	AGENCY PRIORITY DATE BLDG PROGRAM APPROVED	Page <u>1</u> of	1
	—		

The University of Central Florida has recognized for some time that the construction of appropriate entry features has lagged behind the university's tremendous growth. Over the past twenty years, UCF has become the largest university in Florida and the second largest university in the nation, but the campus lacks entry features that announce arrival to this major institution. Substantial, emblematic entry features are essential for announcing arrival, expressing identity, and building connections to the surrounding community. They also contribute to first impressions and wayfinding and navigation for visitors. Every major university in the state of Florida has substantial entry features at their main entrances that enhance the arrival experience and relate to the overall architectural features of their main campuses. Currently, UCF has a single, small entry feature at the University Boulevard entrance, but this attractive feature is not scaled appropriately for the large four-way intersection with Alafaya Trail, that encompasses over 30 lanes of traffic. The entry feature at this location needs to be much larger to stand out against the background of this large intersection. A revised entry gateway at University Boulevard is also viewed as an essential part of the major revisions planned by Orange County to improve pedestrian safety and traffic flow along Alafaya Trail. None of the other campus entries have notable entry features that announce arrival to the campus.

To address the important need for unified campus entry features, the university hired an architectural firm to develop conceptual designs for significant structures at each of the entrances to main campus. The conceptual elements draw inspiration from the campus architectural vernacular of buildings throughout campus, boldly display UCF lettering and the Pegasus logo, and express the five university values. The features include sweeping curved walls of brick, concrete, and steel, adjacent to widened pedestrian walkways that are set back from the road, which creates a more favorable pedestrian environment. The preferred design involves significant reworking of the entrance roadway, creating a signature element and improving traffic flow into campus. The final designs were vetted through a collaborative process, with broad input from key members of the university community. Final construction documents will be developed from the revised plans, and the entry features will be built as funds become available.

		PLANATION							Pageof		
GEOGRAPHIC LOCATION: University of Central Florida, Orlando PROJECT DESCRIPTION/TITLE: Campus Entryways Phase I							COUNTY: Orange PROJECT BR No. (if assigned):				
Facility/Space	Net Area	Net to Gross	Gross Area	Unit Cost	Construction						
Type	(NASF)	Conversion	(GSF)	(Cost/GSF)*	Construction	Assumed Bid Data	Occupancy				
Classrooms	<u> </u>	1.5	0	305	0	Bid Date	<u>Date</u>				
Teaching Labs		1.5	õ	376	0						
Research Labs		1.5	ő	386	0						
Study		1.4	ő	298	0						
Instructional Media		1.5	0	290	0						
Auditorium/Exhibition		1.0	0	329	0						
Gymnasiums		1.2	0	226	0		0				
Offices		1.5	0	331	0 0 [		Space Detail for F				
Campus Support Servic	es	1.4	0	282	L		FORE		AFTER		
Totals	0	1.4	0	202	0	Space	Net Area	Space	Net Area		
Apply Unit Cost to total		on primary s		:		Түре	(NASF)	<u>Түре</u>	(NASF)		
Remodeling/Renovatior	·	ſ		ſ							
Fotal Construction - Nev	v & Rem./Re	nov.		L	0	Total					
						TOTAL	<u>     0</u>	Total	<u>0</u>		
SCHEDULE OF PROJE		NENTS	Freedord			ESTIMA	TED COSTS				
Basic Construction Cost			Funded to	2010 10	0040.00						
. a.Construction Cost (			Date	<u>2018-19</u>	<u>2019-20</u>	<u>2020-21</u>	2021-22	2022-23	Funded & In C		
				1,354,833					1,354,8		
Add'I/Extraordinary Co		-							-		
b.Environmental Impa	acts/iviitigatio	n							-		
c.Site Preparation	_			50,000					50,0		
d.Landscape/Irrigaitor	ו			177,190					177,1		
e.Plaza/Walks									-		
f.Roadway Improvem									-		
g.Parking spaces									-		
h.Telecommunication									-		
i.Electrical Service									-		
j.Water Distribution									-		
k.Sanitary Sewer Syst									-		
I.Chilled Water Syster	n										
m.Storm Water Syste	m								_		
n.Energy Efficient Equ											
otal Construction Costs	5		0	1,582,023	0		00		) 1,582,0		
. Other Project Costs											
a.Land/existing facility	acquisition								-		
b.Professional Fees				187,065					187,0		
c.Fire Marshall Fees				4,750					4,7		
d.Inspection Services				-							
e.Insurance Consultan	t			813					8		
f.Surveys & Tests				-							
g.Permit/Impact/Enviro	nmental Fee	s		31,269					31,20		
				-					,=		
h.Artwork	s & Equipmer	nt		-					-		
i.Moveable Furnishings			<u> </u>	348,076 571,973					348,07		
i.Moveable Furnishings j.Project Contingency	te			5/1,9/3					571,97		
i.Moveable Furnishings j.Project Contingency otal - Other Project Cos	its		•	0.450.000							
i.Moveable Furnishings j.Project Contingency	its		0	2,153,996	0	(	)	0	2,153,9		
i.Moveable Furnishings j.Project Contingency otal - Other Project Cos LL COSTS 1+2	opropriations	to Date	0				)	0			
i.Moveable Furnishings j.Project Contingency otal - Other Project Cos LL COSTS 1+2	opropriations	to Date Fiscal Year	0 Amount		0 Project Costs Beyor Source	nd CIP Period		0	Total Project I		
i.Moveable Furnishings j.Project Contingency otal - Other Project Cos LL COSTS 1+2	opropriations		· · · · · · · · · · · · · · · · · · ·	F	Project Costs Beyor Source		) Amount	0	Total Project I CIP & Beyond		
i.Moveable Furnishings j.Project Contingency otal - Other Project Cos LL COSTS 1+2	opropriations		Amount	F	roject Costs Beyor	nd CIP Period		0	Total Project I		

CIP-3 SHORT-TERM PROJECT EXPLANATION	
CIP-3, A – NARRATIVE DESCRIPTION	

AGENCY Univers	sity of Central Florida
BUDGET ENTITY	SUS
PROJECT TITLE	Campus Entryways Phase II

Page 1 of 1

# PURPOSE, NEED, SCOPE, RELATIONSHIP OF PROJECT TO AGENCY OBJECTIVES

The University of Central Florida has recognized for some time that the construction of appropriate entry features has lagged behind the university's tremendous growth. Over the past twenty years, UCF has become the largest university in Florida and the second largest university in the nation, but the campus lacks entry features that announce arrival to this major institution. Substantial, emblematic entry features are essential for announcing arrival, expressing identity, and building connections to the surrounding community. They also contribute to first impressions and wayfinding and navigation for visitors. Every major university in the state of Florida has substantial entry features at their main entrances that enhance the arrival experience and relate to the overall architectural features of their main campuses. Currently, UCF has a single, small entry feature at the University Boulevard entrance, but this attractive feature is not scaled appropriately for the large four-way intersection with Alafaya Trail, that encompasses over 30 lanes of traffic. The entry feature at this location needs to be much larger to stand out against the background of this large intersection. A revised entry gateway at University Boulevard is also viewed as an essential part of the major revisions planned by Orange County to improve pedestrian safety and traffic flow along Alafaya Trail. None of the other campus entries have notable entry features that announce arrival to the campus.

To address the important need for unified campus entry features, the university hired an architectural firm to develop conceptual designs for significant structures at each of the entrances to main campus. The conceptual elements draw inspiration from the campus architectural vernacular of buildings throughout campus, boldly display UCF lettering and the Pegasus logo, and express the five university values. The features include sweeping curved walls of brick, concrete, and steel, adjacent to widened pedestrian walkways that are set back from the road, which creates a more favorable pedestrian environment. The preferred design involves significant reworking of the entrance roadway, creating a signature element and improving traffic flow into campus. The final designs were vetted through a collaborative process, with broad input from key members of the university community. Final construction documents will be developed from the revised plans, and the entry features will be built as funds become available.

#### STATE UNIVERSITY SYSTEM CIP-3 SHORT TERM PROJECT EXPLANATION Page \_\_\_of \_\_\_ GEOGRAPHIC LOCATION: University of Central Florida, Orlando COUNTY: Orange PROJECT DESCRIPTION/TITLE: Campus Entryways Phase II PROJECT BR No. (if assigned): Net to Facility/Space Net Area Gross Gross Area Unit Cost Construction Assumed Occupancy Туре (NASF) **Conversion** (GSF) (Cost/GSF)\* <u>Cost</u> Bid Date <u>Date</u> Classrooms 1.5 0 305 0 Teaching Labs 1.5 0 376 0 Research Labs 1.5 0 386 0 Study 1.4 0 298 0 Instructional Media 1.5 0 222 0 Auditorium/Exhibition 1.2 0 329 0 Gymnasiums 0 1.2 226 0 Space Detail for Remodeling Projects Offices 1.5 0 331 BEFORE 0 AFTER Campus Support Services 1.4 0 282 0 Space Net Area Space Net Area Totals 0 0 <u>Type</u> (NASF) <u>Type</u> (NASF) \*Apply Unit Cost to total GSF based on primary space type Remodeling/Renovation Total Construction - New & Rem./Renov. 0 Total 0 Total 0 SCHEDULE OF PROJECT COMPONENTS ESTIMATED COSTS Funded to **Basic Construction Cost** <u>Date</u> 2018-19 <u>2019-20</u> <u>2020-21</u> 2021-22 2022-23 Funded & In CIP 1. a.Construction Cost (from above) 3,801,828 3,801,828 Add'I/Extraordinary Const. Costs b.Environmental Impacts/Mitigation c.Site Preparation 250,000 250,000 d.Landscape/irrigaiton 200,000 200,000 e.Plaza/Walks f.Roadway Improvements g.Parking spaces h.Telecommunication i.Electrical Service j.Water Distribution k.Sanitary Sewer System I.Chilled Water System m.Storm Water System n.Energy Efficient Equipment **Total Construction Costs** 0 0 4,251,828 0 0 0 4,251,828 2. Other Project Costs a.Land/existing facility acquisition b.Professional Fees 341,006 341,006 c.Fire Marshall Fees 11,189 11,189 d.Inspection Services e.Insurance Consultant 2,281 2,281 f.Surveys & Tests 10.000 10,000 g.Permit/Impact/Environmental Fees 31,269 31,269 h.Artwork i.Moveable Furnishings & Equipment --Project Contingency 368,405 368,405 Total - Other Project Costs 764,150 764,150 ALL COSTS 1+2 0 0 5,015,978 0 0 5,015,978 Appropriations to Date Project Costs Beyond CIP Period Total Project In Source Fiscal Year Amount Source Fiscal Year CIP & Beyond Amount 0 PECO 5,015,978 TOTAL -TOTAL 5,015,978

AGENCY University of Central Florida BUDGET ENTITY SUS PROJECT TITLE Welcome Center Expansion Page 1 of 2

# PURPOSE, NEED, SCOPE, RELATIONSHIP OF PROJECT TO AGENCY OBJECTIVES

The expansion of the university's Welcome Center will enhance UCF's rankings in several Board of Governors Performance Funding measures. The expansion will improve the university's ability to recruit top undergraduate and graduate students, with an emphasis on encouraging students to enroll in strategic programs. The expansion will also focus on recruiting under-represented student populations and advising students how to efficiently progress toward a timely graduation. The specific Board of Governors Performance Funding measures impacted by this expansion are:

- 4. FTIC Six-Year Graduation Rate 7.
- Bachelor's Degrees with Strategic Emphasis
- 5. Academic Progress Rate
- Graduate Degrees with Strategic Emphasis
- 6. University Access Rate
- Bachelor's Degrees Awarded Annually

The current Welcome Center serves only undergraduate students, hosts approximately 40,000 visitors annually, and is at capacity for certain functions. Without the planned 11,000 square feet expansion, welcoming and serving graduate students and other visitors in this facility is impossible.

8.

10.

Located adjacent to the main UCF administration building, the expansion will allow students, families, and visitors convenient access to multiple services, including financial aid information, campus tours, housing and parking information, academic counseling, and more. The expansion will also accommodate office space for support staff and serve as a venue for alumni and fundraising events, which will encourage private donations to support the university's mission.

# SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

# Classroom/Office

The space classification is predominately classroom or office type, with laboratory or research type minimized. The project will achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE

90.1-2010, and water consumption will be at least 30% less than that of a comparable building. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use. All heating and reheating will be hydronic.

# EDUCATIONAL PLANT SURVEY

The Educational Plant Survey was conducted October 6-7, 2015 and approved January 28, 2016. See recommendation No. 3.10, Welcome Center Addition.

#### STATE UNIVERSITY SYSTEM CIP-3 SHORT TERM PROJECT EXPLANATION

#### GEOGRAPHIC LOCATION: University of Central Florida, Orlando COUNTY: Orange PROJECT DESCRIPTION/TITLE: Welcome Center Expansion PROJECT BR No. (if assigned): Net to Facility/Space Net Area Gross Gross Area Unit Cost Construction Assumed Occupancy Type (NASF) **Conversion** (GSF) (Cost/GSF)\* <u>Cost</u> Bid Date <u>Date</u> Classrooms 1.5 0 305 0 Teaching Labs 1.5 0 376 0 Research Labs 1.5 0 386 0 Study 1.4 0 298 0 Instructional Media 1.5 Ω 222 0 Auditorium/Exhibition 4,000 1.2 4,800 329 1,579,200 Space Detail for Remodeling Projects BEFORE Gymnasiums 1.2 0 226 0 Offices 7,000 1.5 10.500 331 3,475,500 AFTER Campus Support Serv 650 1.4 910 282 256,620 Space Net Area Space Net Area Totals 11,650 16,210 5,311,320 Туре (NASF) Type (NASF) \*Apply Unit Cost to total GSF based on primary space type Remodeling/Renovation Total Construction - New & Rem./Renov. 5,311,320 Total 0 Total 0 SCHEDULE OF PROJECT COMPONENTS ESTIMATED COSTS Funded to **Basic Construction Cost** Date <u>2018-19</u> 2019-20 <u>2020-21</u> <u>2021-22</u> 2022-23 Funded & In CIP 1. a.Construction Cost (from above) 5,311,320 5,311,320 Add'I/Extraordinary Const, Costs b.Environmental Impacts/Mitigation c.Site Preparation 342,781 342,781 d.Landscape/Irrigaiton 271,964 271,964 e.Plaza/Walks f.Roadway Improvements . g.Parking \_\_\_\_ spaces h.Telecommunication 450,000 450,000 i.Electrical Service j.Water Distribution k.Sanitary Sewer System I.Chilled Water System m.Storm Water System n.Energy Efficient Equipment Total Construction Costs 0 0 6,376,065 0 0 0 6,376,065 2. Other Project Costs a.Land/existing facility acquisition b.Professional Fees 806,334 806,334 c.Fire Marshall Fees 30,902 30,902 d.Inspection Services 252,992 252,992 e.Insurance Consultant 6,579 6,579 f.Surveys & Tests 45,000 45,000 g.Permit/Impact/Environmental Fees 51,865 51,865 h.Artwork 38,709 38,709 i.Moveable Furnishings & Equipment 717,120 717,120 j.Project Contingency 443,205 443,205 Total - Other Project Costs 2,392,706 2,392,706 ALL COSTS 1+2 0 0 8,768,771 0 0 0 8,768,771

Appropriations to Date Source Fiscal Year Amount	0	Project Costs Beyc Source PECO	ond CIP Period Fiscal Year	Amount	Total Project In CIP & Beyond
TOTAL		TOTAL			0

Page \_\_\_\_of \_\_\_\_

<b>CIP-3 SHORT-TERM PROJECT EXPLANATION</b>
CIP-3, A – NARRATIVE DESCRIPTION

AGENCY <u>University of Central Florida</u>		Page 1 o	of
BUDGET ENTITY SUS PROJECT TITLE Civil and Environmental Engineering	AGENCY PRIORITY DATE BLDG PROGRAM APPROVED	26	

The construction industry in Florida continues on an upswing, and industry executives in the Central Florida region report that there is a severe shortage of leaders in this field. Simply put, existing educational programs within the state will not be able to sustain and support the projected growth without an investment in additional educational resources. There are only three state universities in Florida that offer a construction management degree program, and UCF is the only school to offer a construction engineering degree program. UCF's program is one of only 16 accredited programs in the nation.

The College of Engineering & Computer Science (CECS) will soon start a capital campaign to secure external funding for its present construction engineering and anticipated construction management undergraduate programs. Part of the campaign will be for a new building to showcase the construction engineering and construction management programs.

Because of the importance of civil infrastructure and the environment and their relationship to responsible construction, it would be ideal for the new building to house the entire Department of Civil, Environmental, and Construction Engineering (CECE). A 50,000 square feet or larger structure housing multimedia classrooms, laboratories, faculty offices, and one auditorium is expected to require an investment of \$18.4 million: \$1.9 million in 2018-19, \$16.6 million in 2019-20, and \$1.9 million in 2020-21. CECS expects to raise about half of the funds for this building from campaign contributions, with the other half coming from the university.

The building will serve as the focal point of construction education and research in Central Florida. Construction, due to its very nature, is multidisciplinary. There is a unique opportunity to build a facility that serves as a "mecca" for students interested in a variety of aspects of construction, including the technical, sustainability, economic, environmental, political, and legal aspects. In addition, significant multidisciplinary research will be conducted; for example, in the areas of hurricane resistant buildings and energy efficient buildings that will benefit all Floridians.

This smart building will expose its systems to students and visitors in a "living lab" of the various systems and controls in modern buildings. It will be a model of energy efficiency, utilizing power from traditional sources in addition to wind and solar power. It will also use a variety of materials and finishes to highlight its various architectural aspects and construction details. The uniqueness and "transparency" of this building will make the academic programs offered in CECE even more attractive to prospective students. Enrollment in CECE programs is expected to increase by at least 120 undergraduate students (i.e., at least 12.9% over the 929 students in CECE programs in Fall 2015), and those students will have new opportunities for undergraduate research experiences under faculty direction and internships with key UCF partners. At the same time, new opportunities

for funded research, including collaborations across disciplines, will bring greater national attention to the work done by UCF faculty and students. Increased extramural research expenditures of approximately \$2 million per year is anticipated, which will provide additional research opportunities for graduate students. When combined with the widely claimed work CECE faculty have done in the transportation and water resources and quality areas, the increased national and international visibility that UCF will enjoy will result in higher national rankings for the programs in CECE and for the entire CECS.

Florida's current and projected economic growth compound ever-present issues associated with infrastructure and the environment. Any delay of this project limits the ability of UCF CECS faculty educators to apply their knowledge, expertise, and skills for the full benefit of the State of Florida. UCF looks forward to a positive response to this important project.

# SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved. This building will highlight UCF's commitment to sustainability and energy efficiency and serve as a "living lab" that benefits faculty, students, and UCF's partners.

# Classroom/Office

Space classification will be predominately classroom and office types, with some additional space for educational laboratories and research laboratories. The project will achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use. All heating and reheating will be hydronic.

# EDUCATIONAL PLANT SURVEY

The Educational Plant Survey was conducted October 6-7, 2015 and approved January 28, 2016. See recommendation No. 3.9, Civil and Environmental Engineering.

STATE UNIVERSITY SYST CIP-3 SHORT TERM PROJ	IECT EXPLANATIO								Pageof
GEOGRAPHIC LOCATION: PROJECT DESCRIPTION/	University of Centry of Ce	onmental E	, Orlando ngineering				COUNTY: Ora PROJECT BR	ange <u>No. (</u> if assigne	d):
Facility/Space <u>Type</u> Classrooms Teching Labs	Net Area <u>(NASF)</u> 13,000 10,000	Net to Gross <u>Conversion</u> 1.5 1.5	Gross Area ( <u>GSF)</u> 19,500 15,000	Unit Cost ( <u>Cost/GSF)*</u> 305 376	Construction <u>Cost</u> 5,947,500 5,640,000	Assumed Bid Date	Occupancy Date	·····	
Research Labs Study Instructional Media Auditorium/Exhibition Gymnasiums	- - 4,450 -	1.5 1.4 1.5 1.2 1.2	- - 5,340 -	386 298 222 329 226	- - 1,756,860		Space Detail fo	r Remodeling F	trojecte
Offices Campus Support Services	6,000	1.5	9,000	331	2,979,000		ORE		AFTER
Totals	33,450	1.4	48,840	282		Space	Net Area	Space	Net Area
*Apply Unit Cost to total GSF	based on primary	space type	40,040		16,323,360	<u>Τγρε</u>	(NASF)	Type	(NASF)
Remodeling/Renovation		Ε		Į					
Total Construction - New & R	Rem./Renov.			-		Total		Total	
SCHEDULE OF PROJECT (	COMPONENTS					ESTIMAT	ED COSTS		
Basic Construction Cost 1. a.Construction Cost (from a Add'I/Extraordinary Const. (	Costs		Funded to <u>Date</u>	<u>2018-19</u>	<u>2019-20</u>		2021-22	2022-23	<u>Funded &amp; In CiP</u> 16,323,360 0
b.Environmental Impacts/M c.Site Preparation d.Landscape/Irrigaiton e.Plaza/Walks f.Roadway Improvements	uugauon					550,000 300,000			0 550,000 300,000 0 0
g.Parking spaces h.Telecommunication i.Electrical Service j.Water Distribution k.Sanitary Sewer System I.Chilled Water System						950,000			0 950,000 0 0 0
m.Storm Water System n.Energy Efficient Equipme	nt					2,578,588			0 0
otal Construction Costs					00	20,701,948			2,578,588 20,701,948
<ul> <li>Other Project Costs         <ul> <li>a.Land/existing facility acqui</li> <li>b.Professional Fees</li> </ul> </li> </ul>	isition								
c.Fire Marshall Fees d.Inspection Services					1,088,279 52,251 190,508	788,442 201,729	•		1876721 52251 392237
e.Insurance Consultant f.Surveys & Tests g.Permit/Impact/Environmen	ital Fees				1,431 30,000 70,603	100,000			1431 130000
h.Artwork i.Moveable Furnishings & Ec					79,603	100,000	1,535,637		79603 100000 1535637
j.Project Contingency otal - Other Project Costs				0	93,565 1,535,637	1,045,018 2,235,189	1,535,637	0	1138583
LL COSTS 1+2				0	1,535,637	22,937,137	1,535,637	0	
	Appropriations to D Source Fis	Date cal Year	Amount	F	roject Costs Bey Source	ond CIP Period Fiscal Year	Amount		Total Project Iri CIP & Beyond
	TOTAL	_		т	OTAL				

		ERM PROJECT EXPLANATION	
AGENCY Univer BUDGET ENTITY PROJECT TITLE	sity of Central Florida SUS Howard Phillips Hall Renovation	AGENCY PRIORITY DATE BLDG PROGRAM APPROVED	Page <u>1</u> of <u>2</u> 27

PURPOSE, NEED, SCOPE, RELATIONSHIP OF PROJECT TO AGENCY OBJECTIVES

Howard Phillips Hall (HPH), built in 1969, is 46 years old and was partially remodeled in 1990 and 2000. It is in poor condition and requires attention to its building systems as well as changes to existing interior space configurations. As a result of other newer buildings being completed (Health & Public Affairs Buildings I & II and the Psychology Building), some academic departments moved out, and other College of Sciences academic units now occupy the 3<sup>rd</sup> and 4<sup>th</sup> floors of this building. There are also other academic-affiliated units (such as Global Perspectives) located within in the building.

It is critical that the academic units currently housed in HPH expand. This can be accomplished by the renovation of the building with spaces being reconfigured to optimize efficiency. Once Colbourn Hall is renovated or a Social Sciences building is constructed, the renovated spaces in HPH will be reassigned to central administration units. The location of Howard Phillips Hall is especially suitable for central administrative usage, given its proximity to the existing Administration Building. If the project is not approved, the building will not effectively support the changing needs of the university.

The university contracted with the ISES Corporation to conduct a Facilities Condition Assessment (FCA) to benchmark the condition of its E&G facilities. The Howard Phillips Hall renovation will address both critical and non-critical issues identified in the FCA. These issues encompass deficiencies such as indoor air quality, fire alarm modernization, potable water and plumbing distribution systems, electrical service, asbestos, HVAC modernization, lighting upgrades, building automation, ADA compliance, building envelope repairs, interior finishes, flooring, egress, exterior lighting, and utility service entrance upgrades. Information technology upgrades are also required in order to meet current and future requirements.

#### SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core beliefs including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

#### Classroom/Office

The space classification is predominately classroom or office type, with laboratory or research type minimized. The project should achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption should be at least 30% less than that of a comparable building. The project should utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use. All heating and reheating should be hydronic.

### EDUCATIONAL PLANT SURVEY

GEOGRAPHIC LOCATION: PROJECT DESCRIPTION/I	TIF Howard	Phillips Hall Rend	do wation			COUNTY: Orange		
	Net to					PROJECT BR No	. (if assigned):	
Facility/Space Net	Area Gross	Gross Area	Unit Cost	Construction				
	ASF) Conversio		(Cost/GSF)*		Assumed	Occupancy		
Classrooms	1.5	0	305	<u>Cost</u> 0	<u>Bid Date</u>	Date		
Feaching Labs	1.5	0 0	376	0				
Research Labs	1.5	0	386	0				
Study	1.4	0	298	0				
nstructional Media	1.5	0	222	ő				
uditorium/Exhibition	1.2	0	329	õ				
Gymnasiums	1.2	0	226	õ		Space Detail for Re	modeling Brei	anta
Offices	1.5	0	331	0	BE	FORE		AFTER
Campus Support Services	1.4	0	282	0	Space	Net Area	Space	Net Area
	0	0		0	Type	(NASF)	<u>Type</u>	(NASF)
Apply Unit Cost to total GSF	based on primary	space type	:		Offices	12,461	Offices	<u>12,46</u>
Remodeling/Renovation								
	56903	64619	ĺ					
otal Construction - New & R	em./Renov.			6,565,853	Total	<u>12,461</u>	Total	12,46
CHEDULE OF PROJECT C								
	OMPONENTS	Funded to			ESTIMA	TED COSTS		
asic Construction Cost		Date	<u>2018-19</u>	<u>2019-2020</u>	<u>2020-21</u>	2021-22	2022-23	Funded & in CIF
. a.Construction Cost (from a Add'I/Extraordinary Const. (				6,565,853				6,565,85
b.Environmental Impacts/M c.Site Preparation	litigation							-
d.Landscape/Irrigaiton								-
e.Plaza/Walks				-				-
f.Roadway Improvements								-
g.Parking spaces								-
h.Telecommunication				-				-
i.Electrical Service								-
j.Water Distribution								-
k.Sanitary Sewer System								-
I.Chilled Water System								-
								-
m.Storm Water System								-
n.Energy Efficient Equipme otal Construction Costs	nt							
Dial Construction Costs		0	0	6,565,853	0	0	0	6,565,85
Other Project Costs								
a.Land/existing facility acqui	sition							
b.Professional Fees				752,151				
c.Fire Marshall Fees				19,311				752,151
d.Inspection Services				73,967				19,311
e.Insurance Consultant				3,940				73,967
Surveys & Tests				-10.10				3,940
g.Permit/Impact/Environmer	ital Fees			52,499				
h.Artwork				-				52,499
.Moveable Furnishings & Ec	luipment			538,921				538,921
Project Contingency				1,158,680				1,158,680
otal - Other Project Costs				2,599,469			-	2,599,469
LCOSTS 1+2		0	0	9,165,322	0	0	0	9,165,322
Approp	riations to Date		F	roject Costs Beyo	nd CIP Period			Total Project In
Sour		Amount		Source	Fiscal Year	Amount		Total Project In CIP & Beyond
						Amount		•
								9,165,322
TOTAL		-	Т	OTAL		0	-	9,165,322
						V		0,100,02/

Page \_\_\_\_of \_\_\_\_

CIP-3 SHORT-TERM PROJECT EXPLANATION CIP-3, A – NARRATIVE DESCRIPTION								
AGENCY University of Central Florida			Page <u>1</u> of <u>2</u>					
BUDGET ENTITY	SUS	AGENCY PRIORITY	28					
PROJECT TITLE	Biological Sciences							
	Renovation	APPROVED						

#### PURPOSE, NEED, SCOPE, RELATIONSHIP OF PROJECT TO AGENCY OBJECTIVES

The Biological Sciences Building is a four-story, reinforced concrete and masonry structure originally built in 1975. In 2001, it was doubled in size with the addition of the "annex", totaling 116,607 gross square feet. This building houses research laboratories, teaching laboratories, office space, a vivarium, and associated support facilities. This research facility is the single largest user of energy at the main campus with an energy use intensity (EUI) of 806 kBtu/sqft) and an energy expenditure over \$2.3M annually.

The university contracted with the ISES Corporation to conduct a Facilities Condition Assessment (FCA) to benchmark the condition of its E&G facilities. The Biological Sciences Building renovation will address both critical and non-critical issues identified in the FCA. These issues encompass deficiencies such as indoor air quality, fire alarm modernization, potable water and plumbing distribution systems, normal and emergency electrical services, HVAC modernization, lighting upgrades, building automation for energy conservation, ADA compliance, exterior structure repairs, interior finishes, flooring, egress, exterior lighting, and utility service entrance upgrades. Information technology upgrades are also required in order to meet current and future requirements.

Several code compliance issues currently exist in the building that endanger the health and life safety of building occupants. The State Fire Marshal identified code compliance issues in 2013 and 2015, including an "imminent hazard" due to conditions in the first floor museum specimen storage space. A review conducted by a third-party engineering consultant reported that labs are being used in ways that do not comply with The National Fire Protection Association's standard NFPA 45, Fire Protection for Laboratories Using Chemicals. The current electrical loads connected to the emergency distribution system are not in compliance with NFPA 70, National Electrical Code.

As a result of constructing the annex in 2001, the building now employs two different HVAC systems that distribute air through several zone variable air volume terminal units. The air distribution ductwork supported by all five air handlers has created a high static pressure scenario to support single pass air, and pressurization to the lab and vivarium spaces, which also includes one-pass air to many of office spaces. This is unnecessary to maintain code ventilation requirements, and also wastes energy.

Original building HVAC equipment and systems including the controls and boilers are approaching end of life. The controls are complex with a mix and match of legacy systems. Steam boilers provide critical dehumidification to maintain research environmental controls for sensitive experiments and are also used for process equipment. The building also employs several small auxiliary heating and cooling packaged units added over the last 15 years. All five air handling units, exhaust air valves, building hot water, steam boilers, and chilled water pumps should be re-designed as single comprehensive building HVAC system.

#### SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

#### Research/Laboratory

The space classification is predominately laboratory type, with office type minimized. The project will achieve LEED Gold certification with the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. Laboratories will have continuous variable air flow valves with air flow reset capabilities. Domestic and laboratory hot water needs shall be provided primarily by solar thermal energy. The project will utilize the district cooling loop for space cooling needs and will look at alternative measures to provide dehumidification with the classifications of lab spaces and related energy use, and all heating and reheating will be hydronic.

#### EDUCATIONAL PLANT SURVEY

	PROJECT EX								Pa	geof
GEOGRAPHIC LOCA PROJECT DESCRIPT	FION: Univers	Biological Sc	Florida, Orlando iences Renovatio	n			COUNTY: Orang PROJECT BR N		ed):	
		Net to								
Facility/Space	Net Area	Gross	Gross Area	Unit Cost	Construction	Assumed	Occupancy			
Туре	(NASF)	<u>Conversion</u>	<u>(GSF)</u>	(Cost/GSF)*	Cost	Bid Date	Date			
Classrooms		1.5	0	305	0					
Teaching Labs		1.5	0	376	0					
Research Labs	0	1.5	0	386	0					
Study		1.4	0	298	0					
nstructional Media		1.5	0	222	0					
Auditorium/Exhibition		1.2	0	329	0					
Gymnasiums		1.2	0	226	õ		Space Detail for	Pamadalina	Projecto	
Offices	0	1.5	0	331	ů 0	B	EFORE	Terribueiiiig	AFTE	
Campus Support Servi	ces	1.4	0	282	0 0	Space	Net Area			
Totals	0	· · · · ·	0		0	<u>Type</u>		Space		Net Area
Apply Unit Cost to tota	GSF based o	on primary sp	ace type	:		TYPE	(NASF)	<u>Type</u>		(NASF)
Remodeling/Renovatio ]	n 103194	Г	116607	ſ	8388033					
Total Construction - Ne	w & Rem /Rer	עסע		L	······	1		]	_	
					8,388,033	Total	0	Total	<u> </u>	0
SCHEDULE OF PROJI	ECT COMPON	NENTS				ESTIM	ATED COSTS			
Basic Construction Co			Funded to	00.40						
Basic Construction Cos			<u>Date</u>	<u>2018-19</u>	<u>2019-20</u>	<u>2020-21</u>	<u>2021-22</u>	<u>2022-23</u>	<u>Fu</u>	nded & In CIP
. a.Construction Cost (			-		8,388,033					8,388,033
Add'I/Extraordinary Co										-
b.Environmental Imp	acts/Mitigation	l								-
c.Site Preparation					231,966					231,966
d.Landscape/Irrigaito	n									
e.Plaza/Walks										-
f.Roadway Improvem										-
g.Parking spaces	5									-
h.Telecommunication					-					-
i.Electrical Service										-
j.Water Distribution										-
k.Sanitary Sewer Sys	tem									-
I.Chilled Water Syster										-
m.Storm Water Syste										-
n.Energy Efficient Equ										-
otal Construction Cost			0	0	8,619,999	C			•	-
					0,013,333		00		0	8,619,999
. Other Project Costs a.Land/existing facility	acquisition									
b.Professional Fees	asquisition				000 0 10					-
					869,049					869,049
c.Fire Marshall Fees d.Inspection Services					22,469					22,469
e.Insurance Consultar					103,880					103,880
f.Surveys & Tests	i.				5,033					5,033
	nmontel Carr				45,000					45,000
g.Permit/Impact/Enviro	nimental Fées	6			75,000					75,000
h.Artwork										-
i.Moveable Furnishing	s & ⊨quipmeni	τ			-					-
j.Project Contingency					449,370					449,370
otal - Other Project Co	sts		<u> </u>	-	1,569,801				0	1,569,801
LL COSTS 1+2			0	0	10,189,800	0	0		0	10,189,800
	ppropriations t	to Date		F	Project Costs Beyo	ond CIP Period				tal Project In
A			A							
A	Source Fi	scal Year	Amount		Source	FISCAL TEAL	Amount		~	D & Doursed
	Source Fi ECO	scal Year	Amount 0		Source	Fiscal Year	Amount		Cl	IP & Beyond
		scal Year			Source	riscal fear	Amount		Cl	IP & Beyond 10,189,800

•	CIP-3 SHORT-TERM CIP-3, A – NARR	PROJECT EXPLANATION ATIVE DESCRIPTION	
AGENCY <u>Univer</u> BUDGET ENTITY PROJECT TITLE	sity of Central Florida SUS Ferrell Commons (E and G Space) Renovation	AGENCY PRIORITY DATE BLDG PROGRAM APPROVED	Page <u>1</u> of <u>1</u> 29

PURPOSE, NEED, SCOPE, RELATIONSHIP OF PROJECT TO AGENCY OBJECTIVES

The Ferrell Commons renovation will address both critical and non-critical issues that exist within the facilities. These issues encompass deficiencies such as office design and ADA compliance, indoor air quality, fire alarm modernization, potable water and plumbing distribution systems, electrical service, asbestos, HVAC modernization, lighting upgrades, building automation, interior finishes, flooring, egress, and exterior lighting. Information technology upgrades are also required in order to meet current and future requirements.

#### SUSTAINABILITY AND LEED

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#### Classroom/Office

The space classification is predominately classroom or office type, with laboratory or research type minimized. The project will achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use. All heating and reheating will be hydronic.

#### EDUCATIONAL PLANT SURVEY

									Pageof
GEOGRAPHIC LOCAT PROJECT DESCRIPTI		sity of Centra Ferrell Co	al Florida, Orlan mmons (E & G	do Space) Ren.			COUNTY: Orange PROJECT BR No.	(if assigned):	
Facility/Space	Net Area	Net to	Cross Area		0				
Type	(NASF)	Gross	Gross Area	Unit Cost	Construction	Assumed	Occupancy		
Classrooms	<u>INASE</u> ]	Conversion		(Cost/GSF)*	Cost	Bid Date	Date		
		1.5	0	305	0				
Teaching Labs		1.5	0	376	0				
Research Labs		1.5	0	386	0				
Study		1.4	0	298	0				
nstructional Media		1.5	0	222	0				
Auditorium/Exhibition		1.2	0	329	0				
Gymnasiums		1.2	Ō	226	0		Space Detail for Rer	nodolina Droi	+ -
Offices		1.5	0 0	331	i õ		ORE		
Campus Support Service	es	1.4	õ	282	ů i				AFTER
Totals	0		<u>0</u>	202	0	Space	Net Area	Space	Net Area
Apply Unit Cost to tota		on primary s				<u>Type</u> Offices	<u>(NASF)</u> 20,014	<u>Type</u> Offices	<u>(NASF)</u> 20,01
_									
Remodeling/Renovation	n 86,149	!	93,860		5,196,456				
Total Construction - New	w & Rem./Re	nov.			5,196,456	Total	20,014	Total	20,01
									20,01
SCHEDULE OF PROJE	ECT COMPO	NENTS	Funded to			ESTIMAT	ED COSTS		
Basic Construction Cos				2018 40	0040.00	0000.04			
			Date	<u>2018-19</u>	<u>2019-20</u>	<u>2020-21</u>	<u>2021-22</u>	<u>2022-23</u>	Funded & In CI
. a.Construction Cost (					5,196,456				5,196,45
Add'I/Extraordinary Co	onst. Costs								
b.Environmental Impa	acts/Mitigatio	n							_
c.Site Preparation	Ū.								-
d.Landscape/Irrigaito	n								-
e.Plaza/Walks						-			
									-
f.Roadway Improvem									-
g.Parking spaces									-
h.Telecommunication						-			
i.Electrical Service			*						-
j.Water Distribution									
k.Sanitary Sewer Sys	tem								-
									-
I.Chilled Water Syster									-
m.Storm Water Syste	m								-
n.Energy Efficient Equ	uipment								
otal Construction Cost			0	0	5,196,456	0	0	0	5,196,4
. Other Project Costs									···· ··· ··· ··· ··· ··· ··· ···
a.Land/existing facility	acquisition								
b.Professional Fees					600,872				-
c.Fire Marshall Fees									600,87
d.Inspection Services					15,284				15,28
					47,136				47,13
e.Insurance Consultar	IL .				3,118				3,11
f.Surveys & Tests					-				-
g.Permit/Impact/Enviro h.Artwork					47,361				47,36
i.Moveable Furnishing	s & Equipme	nt			426,522				426,52
j.Project Contingency					917,022				
otal - Other Project Co	sts		-	-	2,057,315		-		917,02
LL COSTS 1+2			0	0	7,253,771	0	0	0	
		<u> </u>							
A	ppropriations				Project Costs Beyo	ond CIP Period			Total Project In
	Source F	Fiscal Year	Amount		Source	Fiscal Year	Amount		CIP & Beyond
-		2012-13	0						
۲									
Ч									
	OTAL				TOTAL	-	0		7,253,77

AGENCY Univer	sity of Central Florida	ATIVE DESCRIPTION	Page 1 of 1
	SUS		
PROJECT TITLE	Transgenic Animal Facility	AGENCY PRIORITY DATE BLDG PROGRAM	30
		APPROVED	

PURPOSE, NEED, SCOPE, RELATIONSHIP OF PROJECT TO AGENCY OBJECTIVES

HVAC renovations are required at the Transgenic Animal Facility to ensure appropriate space temperature, humidity, air-changes, and ventilation of the facility. The existing HVAC unit has reached the end of its life cycle, and this renovation will tie one new air handing unit into the campus chilled water loop. This system will support the controlled environments necessary for the care and maintenance of these research animals. A new, reliable system will reduce failure, downtime, or disruption, thereby minimizing risk to the animals and associated research projects.

#### SUSTAINABILITY AND LEED

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#### **Research/Laboratory**

The space classification is predominately laboratory type, with office type minimized. The project will achieve LEED Gold certification with the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. Laboratories will have continuous variable air flow valves with air flow reset capabilities. Domestic and laboratory hot water needs shall be provided primarily by solar thermal energy. The project will utilize the district cooling loop for space cooling needs and will look at alternative measures to provide dehumidification with the classifications of lab spaces and related energy use, and all

#### EDUCATIONAL PLANT SURVEY

#### STATE UNIVERSITY SYSTEM CIP-3 SHORT TERM PROJECT EXPLANATION Page \_\_\_\_of \_\_\_\_ GEOGRAPHIC LOCATION: University of Central Florida, Orlando COUNTY: Orange PROJECT BR No. (if assigned): PROJECT DESCRIPTION/TITLE: Transgenic Animal Facility Net Area Facility/Space Gross Gross Area Unit Cost Construction Assumed Occupancy Type (NASF) Conversion (GSF) (Cost/GSF)\* <u>Cost</u> Bid Date <u>Date</u> Classrooms 1.5 0 305 0 Teaching Labs 1.5 0 376 0 Research Labs 0 1.5 0 386 0 Study 1.4 0 298 0 Instructional Media 1.5 0 222 0 Auditorium/Exhibition 1.2 0 329 0 Gymnasiums Space Detail for Remodeling Projects BEFORE 1.2 0 226 0 Offices 0 1.5 0 331 0 AFTER Campus Support Services 1.4 0 282 0 Space Net Area Space Net Area Totals 0 0 (NASF) <u>Туре</u> Type (NASF) \*Apply Unit Cost to total GSF based on primary space type Remodeling/Renovation 1534179 Total Construction - New & Rem./Renov. 1,534,179 Tota 0 Total 0 SCHEDULE OF PROJECT COMPONENTS ESTIMATED COSTS Funded to Basic Construction Cost Date 2018-19 2019-20 <u>2020-21</u> <u>2021-22</u> <u> 2022-23</u> Funded & in CIP 1. a.Construction Cost (from above) 1,534,179 1,534,179 Add'I/Extraordinary Const. Costs b.Environmental Impacts/Mitigation c.Site Preparation 150,000 150,000 d.Landscape/Irrigaiton e.Plaza/Walks f.Roadway Improvements g.Parking \_\_\_\_ spaces h.Telecommunication i.Electrical Service j.Water Distribution k.Sanitary Sewer System I.Chilled Water System m.Storm Water System n.Energy Efficient Equipment **Total Construction Costs** 0 0 1,684,179 0 0 0 1,684,179 2. Other Project Costs a.Land/existing facility acquisition b.Professional Fees 179,197 179,197 c.Fire Marshall Fees 4.432 4,432 d.Inspection Services 15,342 15,342 e.insurance Consultant 2,440 2,440 f.Surveys & Tests g.Permit/Impact/Environmental Fees 25,000 25,000 h.Artwork i.Moveable Furnishings & Equipment j.Project Contingency 99.410 99.410 Total - Other Project Costs 325,821 ٥ 325,821 ALL COSTS 1+2 0 0 2,010,000 0 0 0 2,010,000 Appropriations to Date Project Costs Beyond CIP Period Total Project in Source Fiscal Year Amount Source Fiscal Year Amount CIP & Beyond PECO 0 2,010,000 TOTAL TOTAL 0 2,010,000

<b>CIP-3 SHORT-TERM PROJECT EXPLANATION</b>	
CIP-3, A – NARRATIVE DESCRIPTION	

AGENCY Unive	rsity of Central Florida
BUDGET ENTITY	SUS
PROJECT TITLE	Camera Access Control

APPROVED

Page 1 of 2

## PURPOSE, NEED, SCOPE, RELATIONSHIP OF PROJECT TO AGENCY OBJECTIVES

The UCF Department of Security and Emergency Management inventoried the existing access control and security camera systems on campus, performed security survey and risk assessments, and subsequently identified security deficiencies. Funding is requested for replacement of obsolete security cameras, installation of new security cameras and access control in 32 buildings, and a license plate recognition system. With additional funding, UCF would be able to monitor critical facilities and infrastructure, improve safety and security, and reduce crime. Enhanced access control would allow for better accountability, less reliance on keys, and the ability to lock down buildings immediately in an emergency situation. Without this funding, security gaps will continue to exist, putting UCF students, staff, faculty, and the university community at risk.

Access Control: UCF facilities must meet or exceed minimum or enhanced campus security standards, based on the results of security surveys and risk assessments. At a minimum, the university should provide electronic card access in all buildings for ground level entrances, data rooms, electrical rooms, and mechanical rooms. Additionally, obsolete or non-compatible access control systems (e.g., Persona, Onity, Intellikey, Cipher/Simplex, Continental) should be migrated to Open Options/DNA Fusion, the campus standard.

Most campus buildings lack sufficient automated access control and still rely heavily on physical key control, contributing to an inability to lock down the campus during an emergency situation, such as an active shooter event. First responders are still using multiple sets of keys and different access cards for routine or emergency access. Additionally, there are hundreds of physical keys across campus. Installing electronic card access throughout the university will allow us to grant staff access with enhanced security, while reducing the number of Great Grand Master (GGM) keys that are checked out and returned each work shift.

Cameras/Closed-circuit television (CCTV): UCF facilities must meet or exceed minimum or enhanced standards, based on the results of security surveys and risk assessments. At a minimum, security cameras must be installed at high-risk facilities, on Emergency Blue Light Phones, in open or green space areas, around building perimeters, on heavily travelled pedestrian areas, in view of busy roadways, and as part of the License Plate Recognition system. The centralized new system would replace older, stand-alone digital video recorders (DVRs) and network video recorders (NVRs) that exist across multiple departments and campuses. Those cameras and recordings would then be migrated to the new centralized servers proposed at CS&T, and available to view on Milestone, the campus video management software (VMS). Additionally, the existing campus security cameras lack the required recording retention and failover redundancy. The storage and management of these camera recordings are decentralized, located on aging servers, and not consistently maintained. The following 32 buildings, identified as "CRITICAL," require cameras and access control:

	Building	Name
1	135	SPECTRUM STADIUM
2	1	MILLICAN HALL
3	2	JOHN C. HITT LIBRARY
4	3	UTILITY BUILDING 1 - UTILITY PLANT/HVAC
5	16	FACILITIES & SAFETY BUILDING
		COUNSELING AND PSYCHOLOGICAL
6	27	SERVICES
7	40	ENGINEERING I
8	45	BUSINESS ADMINISTRATION I
		LABORATORY AND ENVIRONMENTAL
9	48	SUPPORT
10		EMERGENCY OPERATIONS CENTER
11	accession and a second	CFE ARENA
12		STUDENT UNION
13	NAM TOPODADE DESCRIPT	COLLEGE OF SCIENCES BUILDING
14	65	LAKE CLAIRE
1 6	70	UTILITY BUILDING 2 - SATELLITE UTILITY
15		
16 17	73 75	HOUSING AND RESIDENCE LIFE
18	Contra Antonia Canada	NICHOLSON SCHOOL OF COMMUNICATION
19		WAYNE DENSCH (North Switch Room)
20	/9 91	CLASSROOM I ENGINEERING II
21		
<b>4</b> .1		
22	1	UNDERGRADUATE ADMISSIONS/DUKE
23	And the state of the second second second	CLASSROOMII
24	The second s	STUDENT HEALTH CENTER
25	State of the second	POLICE/PUBLIC SAFETY
26	AND MARKAWAY AND INC.	HOUSING AND RESIDENCE LIFE
27	CONCERNMENT OF LATER AND A DESCRIPTION OF A DESCRIPTION O	HOUSING AND RESIDENCE LIFE
28		SOUTH TELECOM SWITCH BUILDING
29	A REAL PROPERTY AND ADDRESS OF THE A	BOOSTER PUMP STATION
30		MASTER LIFT STATION
31		THERMAL ENERGY STORAGE TANK
32		PARTNERSHIP II

									Pageof
GEOGRAPHIC LOCATI PROJECT DESCRIPTIC	ON: Unive DN/TITLE:	ersity of Centra Camera Acc	al Florida, Orlai cess Control	ndo			COUNTY: Oran		
		Net to					PROJECT BR N	lo. (if assigned):	
Facility/Space	Net Area	Gross	Gross Area	Unit Cost	Construction	Assumed	Occupancy		
Туре	(NASF)	<u>Conversion</u>	( <u>GSF)</u>	(Cost/GSF)*	Cost	Bid Date	<u>Date</u>		
Classrooms		1.5	0	305	0		Date		
Teaching Labs		1.5	0	376	0				
Research Labs		1.5	0	386	0				
Study		1.4	0	298	Ō				
Instructional Media		1.5	0	222	Ō				
Auditorium/Exhibition		1.2	0	329	0				
Gymnasiums		1.2	0	226	0		Space Detail for I	Permodoling Droi	
Offices		1.5	0	331	0	8	EFORE		
Campus Support Service	es	1.4	0	282	0	Space	Net Area	Space	AFTER
Totals	0	=	0		0	<u>Type</u>	(NASF)	Type	Net Area <u>(N</u> ASF)
Apply Unit Cost to total	GSF based	on primary s	pace type	-				Offices	<u></u>
Remodeling/Renovation		-							
		] [	0		10622578				
Fotal Construction - New	& Rem./Re	enov.			10,622,578	Total		Total	
CHEDULE OF PROJEC		NENTS				ESTIM	ATED COSTS		
Basic Construction Cost			Funded to	2040 40					
. a.Construction Cost (fr	om obovo)		Date	<u>2018-19</u>	<u>2019-20</u>	<u>2020-21</u>	<u>2021-22</u>	<u>2022-23</u>	Funded & In C
Add'I/Extraordinary Con					10622578			-	10,622,5
b.Environmental Impac	ts/iviitigatio	n							-
c.Site Preparation								-	-
d.Landscape/Irrigaiton								-	_
e.Plaza/Walks									
f.Roadway Improvement	nts								
g.Parking spaces									-
h.Telecommunication								_	-
i.Electrical Service					762,766				-
j.Water Distribution									762,70
k.Sanitary Sewer Syste	m								-
I.Chilled Water System									-
m.Storm Water System									-
n.Energy Efficient Equip									-
tal Construction Costs	ment		•						-
Other Project Costs			0	0	11,385,344		00	0	11,385,3
a.Land/existing facility a	cauisition								
p.Professional Fees	•				105(500				-
.Fire Marshall Fees					1056529		-	-	1,056,52
					29796		-	-	29,79
d.Inspection Services					58232		-	-	58,23
e.Insurance Consultant					6374		-	-	6,37
Surveys & Tests					45000		-	_	45,00
g.Permit/Impact/Environ	mental Fee	s			42000		_	-	
.Artwork							-	-	42,00
Moveable Furnishings &	& Equipmer	nt					-		-
Project Contingency					595925		-	-	-
tal - Other Project Costs				-	1,833,856				595,92
LCOSTS 1+2			0	0	13,219,200		0 0	0	13,219,20
Apr	ropriations	to Date	<u> </u>		Project Costs Beyo	nd CIP Pariad			
		iscal Year	Amount		Source	Fiscal Year	A ma a		Total Project In
PEC			0		Junce	riscal Year	Amount		CIP & Beyond
			5						13,219,20
тот	AL	-			TOTAL		<u>0</u>	-	13,219,20

Page of

		CIP-3, A NARRATIVE DESCRIPTION				
			Page	1 (	of _	2
AGENCY Univers	sity of Central Florida					
BUDGET ENTITY	SUS	AGENCY PRIORITY	32			
PROJECT TITLE	Arts Complex Phase II	DATE BLDG PROGRAM			—	
	(Performance)	APPROVED				

**CIP-3 SHORT-TERM PROJECT EXPLANATION** 

PURPOSE, NEED, SCOPE, RELATIONSHIP OF PROJECT TO AGENCY OBJECTIVES

This project is the second phase of a three phase Arts Complex. Phase II will provide supporting offices, rehearsal spaces, storage, and classrooms. Currently, the Departments of Music and Theatre reside in a classroom and studio structure that was constructed in 2010. Due to consistent growth of academic offerings and an increase in student population, the facility is operating above capacity.

The Arts Complex Phase II will contain specialized production areas, teaching studios, storage, classrooms, faculty offices, and parking. These spaces will also attract more regional community activities to campus, which is a potential boon to local businesses. Phase II will enrich all UCF programs by emphasizing the critical importance of the arts and education, thus encouraging creativity and innovation across other academic disciplines. This convergence between the arts and other fields of study is among the new Center's most important contributions to UCF's vision of creating opportunity through access, partnerships, interdisciplinary endeavors, and community engagement. The need for the university to embrace and promote cultural activity and diversity is essential to its educational mission, which is reaffirmed by the recommendation that the School of Performing Arts "develop opportunities and partnerships to make UCF a destination campus for the arts."

This facility will contain teaching and lab space for performing arts students in the performing arts. With facilities built to professional standards that include the most advanced technology, these spaces can be accessed, shared, and experienced on many different platforms besides the traditional live setting. By using technology to create an innovative laboratory experience for undergraduate and graduate students, UCF can attract and retain exceptional students, faculty, and staff whose collective contributions strengthen the programs as well as promoting partnerships in the community.

Degrees offered in the School of Performing Arts are destination degrees, and Orlando is an international entertainment destination. Students who graduate with degrees in the Performing Arts, at both the undergraduate and graduate levels, possess the skills to contribute to the local economy by virtue of their marketability as employees.

The benefits of the Arts Complex will extend far beyond the UCF campus. Because of Orlando's prominence as an international tourist destination, the Arts Complex will help UCF students and faculty expand their reach and promote greater recognition of UCF internationally. The Arts Complex will enhance collaborations with community-based industry partners, such as Walt Disney World, Universal Studios, and Cirque du Soleil, and open the door to other potential partnerships. Furthermore, community-based partner organizations like the Orlando Philharmonic, Orlando Shakespeare Theater, and Orlando Repertory Theatre would also be able to use the new technologies as they support UCF's graduate programs. The Arts Complex Phase II would assist UCF in meeting state performance goals (skilled graduates earning competitive wages) and align with the Collective Impact Strategic Plan goal of transforming lives and livelihoods through UCF's impact on the students and communities it serves.

#### CIP-3 SHORT-TERM PROJECT EXPLANATION CIP-3, A – NARRATIVE DESCRIPTION

#### SUSTAINABILITY AND LEED

The University of Central Florida is committed to the efficient use of natural resources. As energy costs and demands continue to grow, achieving energy efficiency has become increasingly important to the university's mission. Appropriate policies and procedures that govern the use of environmental resources and facilities have enabled UCF to achieve the improvements necessary to ensure a productive environment for all and establish itself as a national leader in energy research, education, and stewardship.

#### Classroom/Office

Space classification shall be predominately classroom or office type, with laboratory or research type minimized. Project should achieve Gold LEED certification with the US Green Building Council. Energy consumption should be at least 30% less than a comparable building. Water consumption should be at least 50% less than a comparable building. Project should utilize the district cooling loop for space cooling needs. All heating and reheating should be hydronic type.

In line with the university policy for new construction, this project will be designed and constructed to achieve LEED Silver certification.

#### EDUCATIONAL PLANT SURVEY

The Educational Plant Survey was conducted and approved in February, 2011. See recommendation No. 3.2, Performance Arts Center (Phase II).

#### STATE UNIVERSITY SYSTEM CIP-3 SHORT TERM PROJECT EXPLANATION Page \_\_\_\_of \_\_\_\_ GEOGRAPHIC LOCATION: University of Central Florida, Orlando COUNTY: Orange PROJECT DESCRIPTION/TITLE: Arts Complex Phase II (Performance) PROJECT BR No. (if assigned): Net to Facility/Space Net Area Gross Gross Area Unit Cost Construction Occupancy Assumed (NASF) <u>Type</u> **Conversion** (GSF) (Cost/GSF)\* <u>Cost</u> Bid Date <u>Date</u> Classrooms 8,584 1.5 12,876 305 3,927,288 **Teaching Labs** 10,293 1.5 15 440 376 5,805,252 Research Labs 0 1.5 0 386 0 Study 0 1.4 0 298 0 Instructional Media 0 1.5 0 222 0 Auditorium/Exhibition 30.164 1.2 36,197 329 11,908,747 Gymnasiums 0 1.2 0 226 Space Detail for Remodeling Projects 0 Offices 5,360 1.5 8,040 331 2,661,240 BEFORE AFTER Campus Support Serv 0 1.4 0 282 0 Space Net Area Space Totals 54,401 72,553 24,302,528 <u>Type</u> (NASF) Type \*Apply Unit Cost to total GSF based on primary space type Remodeling/Renovation

24,302,528

Total

0

Total

Total Construction - New & Rem./Renov.

Net Area

(NASF)

0

24,302,528

-

-

300,000

250,000

850,000

-

-

2.538.560

28,241,088

2,812,510

66,586

329,671

14,582

235,285

130,546

100,000

5,026,898

1,598,054

10,314,132

38,555,220

-

SCHEDULE OF PROJECT COMPONENTS ESTIMATED COSTS Funded to Basic Construction Cost Date <u>2018-19</u> <u>2019-20</u> <u>2020-21</u> <u>2021-22</u> <u>2022-23</u> Funded & In CIP 1. a.Construction Cost (from above) 24,302,528 Add'I/Extraordinary Const. Costs b.Environmental Impacts/Mitigation c.Site Preparation 300.000 d.Landscape/Irrigaiton 250,000 e.Plaza/Walks f.Roadway Improvements g.Parking \_\_\_\_ spaces h.Telecommunication 850,000 i.Electrical Service j.Water Distribution k.Sanitary Sewer System I.Chilled Water System m.Storm Water System n.Energy Efficient Equipment 2,538,560 **Total Construction Costs** 0 0 28,241,088 0 0 0 2. Other Project Costs a.Land/existing facility acquisition **b.Professional Fees** 2,812,510 c.Fire Marshall Fees 66.586 d.Inspection Services 329,671 e.Insurance Consultant 14,582 f.Surveys & Tests 235,285 g.Permit/Impact/Environmental Fees 130,546 h.Artwork 100,000 i.Moveable Furnishings & Equipment 1,171,376 3,855,522 i.Project Contingency 266,342 1,331,712 Total - Other Project Costs 3,855,522 2,603,088 3,855,522 ALL COSTS 1+2 0 3,855,522 30,844,176 3,855,522 0 0 Appropriations to Date Project Costs Beyond CIP Period Source Fiscal Year Amount Source Fiscal Year Amount

Total Project in CIP & Beyond PECO 0 TOTAL TOTAL 0 38,555,220

#### CIP-3 SHORT-TERM PROJECT EXPLANATION CIP-3, A -- NARRATIVE DESCRIPTION

AGENCY University of Central Florida BUDGET ENTITY SUS PROJECT TITLE Classroom Building III

AGENCY PRIORITY DATE BLDG PROGRAM	33
APPROVED	

Page 1 of 1

PURPOSE, NEED, SCOPE, RELATIONSHIP OF PROJECT TO AGENCY OBJECTIVES

Classroom Building III will provide general classrooms, faculty offices, and support services for enhanced teaching and learning. This facility will house a variety of advanced-technology classrooms and ubiquitous network access and multimedia facilities that will foster innovative teaching and learning practices. This building must be a "state-of-the-art" facility that allows for reconfiguration of classrooms to accommodate varied instructional settings.

Based on the 2015 Educational Plant Survey analysis for space needs, the university has a shortage of classroom space and requires this new building to meet the growing need. UCF students are also taking summer classes in order to meet graduation requirements.

The effects of a delay in constructing Classroom Building III will limit class offerings that are needed to ensure student progress to graduation.

#### SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

#### **Classroom/Office**

The space classification is predominately classroom or office type, with laboratory or research type minimized. The project will achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use. All heating and reheating will be hydronic.

#### EDUCATIONAL PLANT SURVEY

The Educational Plant Survey was conducted October 6-7, 2015 and approved January 28, 2016. See recommendation No. 3.8, Classroom III.

Page \_\_\_of \_\_\_

DBO JEOT DESODI		asity of Central	l Florida, Orland	0				1	
PROJECT DESCRIP	TION/TITLE:	Classroom					COUNTY: Orange PROJECT BR No		
Facility (Case		Net to						<u></u>	
Facility/Space	Net Area	Gross	Gross Area	Unit Cost	Construction	Assumed	Occupancy		
<u>Type</u>	(NASF)	<u>Conversion</u>	(GSF)	(Cost/GSF)*	<u>Cost</u>	<u>Bid Date</u>	<u>Date</u>		
Classrooms	30,000	1.5	45,000	305	13,725,000				
Teaching Labs	1,000	1.5	1,500	376	564,000				
Research Labs		1.5	0	386	0				
Study		1.4	0	298	0				
Instructional Media		1.5	0	222	õ				
Auditorium/Exhibition	0	1.2	ő	329					
Gymnasiums	U U	1.2			0				
Offices	11 057		0	226	0 _		Space Detail for R	emodeling Pro	jects
	11,857	1.5	17,786	331	5,887,001	BE	FORE	, A A A A A A A A A A A A A A A A A A A	\FTER
Campus Support Sei		1.4	1,400	282	394,800	Space	Net Area	Space	Net Area
Fotals Apply Unit Cost to to	43,857 tal GSF based	j on primary sp	65,686 ace type	- :	20,570,801	<u>Type</u>	(NASF)	Туре	(NASF)
Remodeling/Renovat	ion								
terriodening/i terroval		] [		] [					
otal Construction - N	lew & Rem./R	enov.		-	0	Total	<u>0</u>	Total	0
CHEDULE OF PRO	JECT COMPO	ONENTS	Funded to			ESTIMA	TED COSTS		
asic Construction C	ost		Date	2018-19	2019-20	2020-21	2021 22	2022.02	Europe de 101
. a.Construction Cos	t (from above)		Duto	2010-10	2019-20	2020-21	<u>2021-22</u>	<u>2022-23</u>	Funded & In (
		i.					20,570,801		20,570,
Add'I/Extraordinary									
b.Environmental Im	pacts/Mitigatio	วก							
c.Site Preparation							250,000		250.0
d.Landscape/Irrigai	ton						200,000		,
e.Plaza/Walks							200,000		200,0
f.Roadway Improve	mente								
g.Parking space									
h.Telecommunicati	on						250,000		250,0
i.Electrical Service									200,
j.Water Distribution									
k.Sanitary Sewer S	vstem								
I.Chilled Water Syst									
m.Storm Water Sys									
n.Energy Efficient E							744,083		744,0
otal Construction Co	sts		0	0	0	0	22,014,884	0	22,014
Other Project Costs									
a.Land/existing facili	ty acquisition								
a.Land/existing facili	ty acquisition					2,199 317			3 100 /
a.Land/existing facili b.Professional Fees	ty acquisition					2,199,317			
a.Land/existing facili b.Professional Fees c.Fire Marshall Fees	ty acquisition					58,790			58,7
a.Land/existing facili b.Professional Fees c.Fire Marshall Fees d.Inspection Service	ty acquisition s					58,790 328,429			58,7
a.Land/existing facili b.Professional Fees c.Fire Marshall Fees d.Inspection Service e.Insurance Consult	ty acquisition s					58,790 328,429 12,924			58,7 328,4
a.Land/existing facili b.Professional Fees c.Fire Marshall Fees d.Inspection Service e.Insurance Consult f.Surveys & Tests	ty acquisition s ant					58,790 328,429			58,7 328,4 12,9
a.Land/existing facili b.Professional Fees c.Fire Marshall Fees d.Inspection Service e.Insurance Consult f.Surveys & Tests g.Permit/Impact/Env	ty acquisition s ant	es				58,790 328,429 12,924			58,7 328,4 12,9 76,7
a.Land/existing facili b.Professional Fees c.Fire Marshall Fees d.Inspection Service e.Insurance Consult f.Surveys & Tests g.Permit/Impact/Env h.Artwork	ty acquisition s ant ironmental Fe					58,790 328,429 12,924 76,743	100.000		58,7 328,4 12,9 76,7 98,9
a.Land/existing facili b.Professional Fees c.Fire Marshall Fees d.Inspection Service e.Insurance Consult f.Surveys & Tests g.Permit/Impact/Env	ty acquisition s ant ironmental Fe					58,790 328,429 12,924 76,743	100,000	3 052 049	58,7 328,4 12,9 76,7 98,9 100,0
a.Land/existing facili b.Professional Fees c.Fire Marshall Fees d.Inspection Service e.Insurance Consult f.Surveys & Tests g.Permit/Impact/Env h.Artwork	ty acquisition s ant ironmental Fe igs & Equipme					58,790 328,429 12,924 76,743 98,987		3,052,049	58,7 328,4 12,5 76,7 98,5 100,0 3,052,0
a.Land/existing facili b.Professional Fees c.Fire Marshall Fees d.Inspection Service e.Insurance Consult f.Surveys & Tests g.Permit/Impact/Env h.Artwork	ty acquisition s ant ironmental Fe ugs & Equipme y					58,790 328,429 12,924 76,743	100,000 1,175,791 1,275,791	3,052,049	2,199,3 58,7 328,4 12,9 76,7 98,9 100,0 3,052,0 1,452,6 7,379,8
a.Land/existing facili b.Professional Fees c.Fire Marshall Fees d.Inspection Service e.Insurance Consult .Surveys & Tests g.Permit/Impact/Env n.Artwork .Moveable Furnishir .Project Contingence tal - Other Project C	ty acquisition s ant ironmental Fe ugs & Equipme y			0		58,790 328,429 12,924 76,743 98,987 276,859	1,175,791		58,7 328,4 12,5 76,7 98,5 100,0 3,052,0 1,452,6
a.Land/existing facili b.Professional Fees c.Fire Marshall Fees d.Inspection Service e.Insurance Consult f.Surveys & Tests g.Permit/Impact/Env h.Artwork .Moveable Furnishir .Project Contingenc	ty acquisition s ant ironmental Fer ngs & Equipme y osts	ent		0	0	58,790 328,429 12,924 76,743 98,987 276,859 3,052,049 3,052,049	1,175,791 1,275,791	3,052,049	58,7 328,4 12,6 76,7 98,5 100,0 3,052,0 1,452,6 7,379,6 29,394,
a.Land/existing facili b.Professional Fees c.Fire Marshall Fees d.Inspection Service e.Insurance Consult f.Surveys & Tests g.Permit/Impact/Env h.Artwork .Moveable Furnishir .Project Contingence tal - Other Project C	ty acquisition s ant ironmental Fe gs & Equipme y osts Appropriation:	s to Date	. 0	0	0 roject Costs Beyor	58,790 328,429 12,924 76,743 98,987 276,859 3,052,049 3,052,049 d CIP Period	1,175,791 1,275,791 23,290,675	3,052,049	58, 328,4 12,5 76,7 98,5 100,0 3,052,0 1,452,6 7,379,5 29,394, Total Project
a.Land/existing facili b.Professional Fees c.Fire Marshall Fees d.Inspection Service e.Insurance Consult .Surveys & Tests g.Permit/Impact/Env n.Artwork .Moveable Furnishir .Project Contingence tal - Other Project C	ty acquisition s ant ironmental Fe igs & Equipme y osts Appropriation: Source	ent	0 Amount	0	0 roject Costs Beyor	58,790 328,429 12,924 76,743 98,987 276,859 3,052,049 3,052,049	1,175,791 1,275,791	3,052,049	58, 328,4 12,5 76,7 98,5 100,0 3,052,0 1,452,6 7,379,5 29,394, Total Project
a.Land/existing facili b.Professional Fees c.Fire Marshall Fees d.Inspection Service e.Insurance Consult .Surveys & Tests g.Permit/Impact/Env n.Artwork .Moveable Furnishir .Project Contingence tal - Other Project C	ty acquisition s ant ironmental Fe gs & Equipme y osts Appropriation:	s to Date	. 0	0	0 roject Costs Beyor	58,790 328,429 12,924 76,743 98,987 276,859 3,052,049 3,052,049 d CIP Period	1,175,791 1,275,791 23,290,675	3,052,049	58, 328,4 12,5 76,7 98,5 100,0 3,052,0 1,452,6 7,379,5 29,394, Total Project
a Land/existing facili o. Professional Fees c. Fire Marshall Fees J. Inspection Service e. Insurance Consult Surveys & Tests o. Permit/Impact/Env Artwork Moveable Furnishir Project Contingence tal - Other Project Contingen	ty acquisition s ant ironmental Fe igs & Equipme y osts Appropriation: Source	s to Date	0 Amount	0	0 roject Costs Beyor	58,790 328,429 12,924 76,743 98,987 276,859 3,052,049 3,052,049 d CIP Period	1,175,791 1,275,791 23,290,675	3,052,049	58, 328, 12, 76,7 98,5 100,( 3,052,0 1,452,6 7,379,5 29,394,

CIP-3 SHORT-TERM PROJECT EXPLANATION
CIP-3, A – NARRATIVE DESCRIPTION

AGENCY Univers	ity of Central Florida		Page <u>1</u> of <u>1</u>
	SUS Facilities and Safety Building at Health Sciences Campus	AGENCY PRIORITY DATE BLDG PROGRAM APPROVED	34

### PURPOSE, NEED, SCOPE, RELATIONSHIP OF PROJECT TO AGENCY OBJECTIVES

The Facilities and Safety Building at Lake Nona will house Facilities and Safety departments (Facilities Planning, Facilities Operations, Landscape & Natural Resources, Environmental Health & Safety, and Utilities & Energy Services), the Office of Research and Commercialization, and the Police Department, to provide optimal support to faculty, staff and students.

Delays in construction will prohibit Facilities & Safety from efficiently and effectively maintaining the Lake Nona Medical Campus.

#### SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

#### EDUCATIONAL PLANT SURVEY

GEOGRAPHIC LOCAT	ION: Unive	rsity of Centra	l Florida. Orland	do					
PROJECT DESCRIPTI	ON/TITLE:	Facilities a	nd Safety Buildi	ng at Health Sci	ences Campus		COUNTY: Orang PROJECT BR N		
_		Net to					TROJECT BILL	o. (il assigned):	
Facility/Space	Net Area	Gross	Gross Area	Unit Cost	Construction	Assumed	Occupancy		
<u>Type</u>	<u>(NASF)</u>	Conversion	(GSF)	(Cost/GSF)*	Cost	Bid Date	Date		
Classrooms		1.5	0	305	0	Dig Date	Date		
Teaching Labs		1.5	0	376	õ				
Research Labs		1.5	õ	386					
Study		1.4	õ		0				
nstructional Media				298	0				
uditorium/Exhibition		1.5	0	222	0				
		1.2	0	329	0				
Symnasiums		1.2	0	226	0		Space Detail for R	emodeling Proj	ecte
Offices	10,000	1.5	15,000	331	4,965,000		ORE		
Campus Support Servic	as	1.4	0	282	0	Space	Net Area		AFTER
otals	10,000		15,000		4,965,000	<u>Type</u>	(NASF)	Space	Net Area
Apply Unit Cost to total	GSF based	on primary sp	ace type	=	1,000,000	TAbe	(INASE)	<u>Type</u>	(NASF)
emodeling/Renovation				-					
L		L		Ĺ					
otal Construction - New	& Rem./Re	nov.		-	4,965,000	Total	<u>0</u>	Total	<u>0</u>
CHEDULE OF PROJE	CT COMPO	NENTS	Funded to			ESTIMAT	ED COSTS		
asic Construction Cost			Date	2018.10	2010 2020	0000 57			
a.Construction Cost (fr	om above)		Date	<u>2018-19</u>	<u>2019-2020</u>	<u>2020-21</u>	<u>2021-22</u>	<u>2022-23</u>	Funded & In C
						4,965,000			4,965,0
Add'I/Extraordinary Cor									.,000,0
b.Environmental Impac	:ts/Mitigatior	n							-
c.Site Preparation						152,402			-
d.Landscape/Irrigation						150,000			152,4
e.Plaza/Walks						150,000			150,0
f.Roadway Improveme	nts								-
g.Parking spaces	into								-
									-
h.Telecommunication						629,364			629,36
i.Electrical Service									020,00
j Water Distribution									-
k.Sanitary Sewer Syste	m								-
									-
I.Chilled Water System									
m.Storm Water System	t								-
n.Energy Efficient Equi	oment								-
tal Construction Costs			0						-
			U	0	0	5,896,766	0	0	5,896,7
Other Project Costs									
a.Land/existing facility a	cquisition								
.Professional Fees						572,257			-
Fire Marshall Fees									572,25
Inspection Services						12,480			12,48
Insurance Consultant						68,883			68,88
Surveys & Tests						2,407			2,40
· ·						45,000			45,00
Permit/Impact/Environ	mental Fees	3				46,387			
.Artwork						32,021			46,38
Moveable Furnishings	& Equipmen	it				747,752			32,02
Project Contingency									747,75
al - Other Project Costs	3				<u> </u>	256,169			256,16
						1,783,356			1,783,35
L COSTS 1+2			0	0	0	7,680,122	0	0	7,680,1
	propriations t	to Date		Pr	oject Costs Beyond	CIP Period			Total Drainet I
	· · · · · · · · · · · ·	iscal Year	Amount		Source	Fiscal Year	Amount		Total Project In
	Source Fi		, anound						
		012-13				i iscai i cai	Amount		CIP & Beyond
5			0			risca real	Amount		CIP & Beyond
5	00 20			τc	DTAL	-	0	_	CIP & Beyond

#### CIP-3 SHORT-TERM PROJECT EXPLANATION CIP-3, A – NARRATIVE DESCRIPTION

1

AGENCYUniversity of Central Florida		Page 1 of
BUDGET ENTITY SUS PROJECT TITLE Recycling Center	AGENCY PRIORITY DATE BLDG PROGRAM APPROVED	35

# PURPOSE, NEED, SCOPE, RELATIONSHIP OF PROJECT TO AGENCY OBJECTIVES

The State of Florida mandates a 30% recycling rate for all state institutions, and will increase this requirement to 75% by 2020. UCF's current recycling rate is 33%. An on-campus recycling center will allow the university to continue meeting, and in some cases exceeding, future mandates. This facility will house the day-to-day operations of the recycling and solid waste programs, receiving and processing all materials to be recycled or composted. Recycled materials include plastic, paper, corrugated cardboard, glass, steel, aluminum, food waste, and Styrofoam; with material-specific sorting, packaging, bailing and composting.

A delivery system will be designed and implemented within this facility that will be efficient from the moment an item is discarded to the end product, whether recycled, reused, or sold. This facility will be designed for optimum use of space with storage areas for both wet and dry materials, and room for future equipment expansion. The Recycling Center will produce compost for use on university landscape and sales to the general public.

The alternative to this facility is to continue the current labor-intensive process where toters, trailers, dumpsters, and roll-offs are handled for daily trash removal and recycling materials processing. If this facility is delayed, by 2020, the university will not achieve the 75% recycling rate mandated by the State, and millions of pounds of materials may have to be thrown unnecessarily into the landfill.

#### SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

#### EDUCATIONAL PLANT SURVEY

GEOGRAPHIC LOC PROJECT DESCRIF	TION/TITLE:	Recycling		100			COUNTY: Orang		
		Net to			<u> </u>		PROJECT BR N	o. (ir assigned):	
Facility/Space	Net Area	Gross	Gross Area	Unit Cost	Construction	A	0		
Туре	(NASF)	Conversion		(Cost/GSF)*		Assumed	Occupancy		
Classrooms	1	1.5	0		Cost	Bid Date	Date		
eaching Labs		1.5	0	305	0				
Research Labs		1.5		376	0				
Study			0	386	0				
		1.4	0	298	0				
nstructional Media		1.5	0	222	0				
uditorium/Exhibition	36,175	1.2	43,410	329	14,281,890				
Symnasiums		1.2	0	226	0		Space Detail for R	emodeling Droid	oto
Offices	12,500	1.5	18,750	331	6,206,250	BE	FORE		
Campus Support Ser	vices	1.4	Ö	282	0	Space	Net Area		AFTER
otals	48,675		62,160		20,488,140			Space	Net Area
Apply Unit Cost to to	tal GSF based	on primary s		:	20,400,140	<u> </u>	(NASF)	Type	(NASF)
emodeling/Renovati	on								
•		] [							
otal Construction - N	ew & Rem./Re	enov.			20,488,140	Total	<u>0</u>	Total	<u>        0</u>
CHEDULE OF PRO	JECT COMPC	NENTS				ECTIMA			
asic Construction Co			Funded to <u>Date</u>	2019 10	2010 2020		TED COSTS		
a.Construction Cos			Dale	<u>2018-19</u>	<u>2019-2020</u>	<u>2020-21</u>	<u>2021-22</u>	<u>2022-23</u>	Funded & In Cl
Add'l/Extraordinary (							20,488,140		20,488,14
									-
b.Environmental Im	pacts/iviitigatio	n							-
c Site Preparation							250,000		250.00
d.Landscape/Irrigail	on						300,000		
e.Plaza/Walks							000,000		300,00
f.Roadway Improve	ments								-
g.Parking space									-
h.Telecommunicatio									-
i.Electrical Service							384,100		384,10
									-
j.Water Distribution									
k.Sanitary Sewer Sy	stem								-
I.Chilled Water Syste									-
m.Storm Water Sys									-
									-
n.Energy Efficient E							730,249		730,24
tal Construction Cos	sts		0	0	0	0		0	22,152,4
Other Project Costs							22,132,403	0	22,152,4
.Land/existing facilit									
Professional Fees	, acquisition								-
						2,081,651			2,081,65
Fire Marshall Fees						57,328			57,32
Inspection Service						364,870			364,87
Insurance Consulta	ant					12,591			
Surveys & Tests						88,378			12,59
.Permit/Impact/Envi	ronmental Fee	s				90,751			88,37
.Artwork						30,751	100 000		90,75
Moveable Furnishin	as & Equinme	nt					100,000		100,00
Project Contingency								2,924,880	2,924,88
tal - Other Project Co						229,311	1,146,553	· · · · · · · · · · · · · · · · · · ·	1,375,86
	2010				-	2,924,880	1,246,553	2,924,880	7,096,31
L COSTS 1+2			0	0	0	2,924,880	23,399,042	2,924,880	29,248,80
	Appropriations	to Date		F	Project Costs Beyo	nd CIP Period			Total Project In
	Source F	iscal Year	Amount		Source	Fiscal Year	Amount		
		2012-13	0			noou roai			CIP & Beyond
	TOTAL	_	·····	т	OTAL		0	_	29,248,80

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Page \_\_\_of \_\_\_

CIP-3 SHORT-TERM PROJECT EXPLANATI	ON
CIP-3, A – NARRATIVE DESCRIPTION	

AGENCY University of Central Florida BUDGET ENTITY SUS PROJECT TITLE Humanities & Fine Arts II Page 1 of 1

PURPOSE, NEED, SCOPE, RELATIONSHIP OF PROJECT TO AGENCY OBJECTIVES

A second Humanities & Fine Arts building will be necessary to accommodate the future growth of all the College of Arts and Humanities' diverse departments. We are currently meeting some of our immediate space needs with the upcoming Trevor Colbourn building; however, this building does not account for any expansion of future programs and hires, or provide for additional classroom spaces.

### SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

#### Classroom/Office

The space classification is predominately classroom or office type, with laboratory or research type minimized. The project will achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use. All heating and reheating will be hydronic.

#### EDUCATIONAL PLANT SURVEY

CIP-3 SHORT TEP									Pageof
GEOGRAPHIC LO PROJECT DESCR	)CATION: Unive RIPTION/TITLE:	ersity of Centra Humanities	l Florida, Orlan s and Fine Arts	do u			COUNTY: Orang		
		Net to	and The Arts				PROJECT BR N	<ol> <li>(if assigned):_</li> </ol>	
Facility/Space	Net Area	Gross	Gross Area	Unit Cost	Operator - "				
Туре	(NASF)	Conversion			Construction	Assumed	Occupancy		
Classrooms			( <u>GSF)</u>	(Cost/GSF)*	Cost	Bid Date	Date		
	7,000	1.5	10,500	305	3,202,500				
Teaching Labs	7,340	1.5	11,010	376	4,139,760				
Research Labs		1.5	0	386	0				
Study		1.4	0	298	0				
nstructional Media	1	1.5	0	222	õ				
Auditorium/Exhibitic	on	1.2	0	329					
Gymnasiums		1.2	õ		0				
Offices	26.004			226	0		Space Detail for R	emodeling Proje	ects
	26,284	1.5	39,426	331	13,050,006	BEF	ORE		AFTER
Campus Support S		1.4	0	282	0	Space	Net Area	Space	Net Area
l'otals	40,624		60,936		20,392,266	Type	(NASF)	Туре	(NASF)
Apply Unit Cost to	total GSF based	on primary sp	ace type	=			<u></u>		(147)01 ]
Pomodolina/Donou									
Remodeling/Renova		1 Г		Г					
Fotal Construction -	- New & Rem /Re	- –		Ľ					
				=	20,392,266	Total	<u>0</u>	Total	<u>0</u>
CHEDULE OF PR	OJECT COMPC	NENTS				ESTIMAT	ED COSTS		
Basic Construction (	Cost		Funded to <u>Date</u>	2019 10	2010 0000				
. a.Construction Co			Date	<u>2018-19</u>	2019-2020	<u>2020-21</u>	<u>2021-22</u>	<u>2022-23</u>	Funded & In C
Add'l/Extraordinar							20,392,266		20,392,2
b.Environmental !		n							-
c.Site Preparation	1					395,045			-
d.Landscape/Irrig	aiton					000,040	000.000		395,0
e.Plaza/Walks							200,000		200,00
f.Roadway Improv	vements								-
									-
g.Parking spa									-
h.Telecommunica	ation								
i.Electrical Service	э								-
j.Water Distributio	ND .								-
									-
k.Sanitary Sewer									
I.Chilled Water Sy	stem								-
m.Storm Water Sy									-
•	•								-
n.Energy Efficient									-
otal Construction C	osts		0	0	0	395,045	20,592,266	0	20,987,3
Other Project Cost									
a.Land/existing fac	ility acquisition								
b.Professional Fee						0 000 400			-
c.Fire Marshall Fee						2,228,188			2,228,18
d.Inspection Servic						56,344			56,34
•						425,983			425,98
e.Insurance Consu	inant					12,366			12,36
Surveys & Tests.						95,000			
.Permit/Impact/En	vironmental Fee	es				87,264			95,00
n.Artwork						57,204			87,26
Moveable Furnish	linas & Faulome	nt					100,000		100,00
Project Contingen								3,525,566	3,525,56
tal - Other Project	Casta					225,376	1,003,517		1,228,89
tal - Other Project		<u> </u>			-	3,130,521	1,103,517	3,525,566	7,759,60
			0	0	0	3,525,566	21,695,783	3,525,566	28,746,91
LCOSTS 1+2					· · · · · · · · · · · · · · · · · · ·				
L COSTS 1+2	Appropriations	to Date		n.	niect Costo Dour	CID Desire			_
L COSTS 1+2	Appropriations		Amount	Pi	oject Costs Beyond				Total Project Ir
L COSTS 1+2	Source F	to Date Fiscal Year 2012-13	Amount 0	Pi		CIP Period Fiscal Year	Amount		Total Project In CIP & Beyond 28,746.9
L COSTS 1+2	Source F	iscal Year					Amount	_	

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CIP-3 SHORT-TERM PROJECT EXPLANATION	
CIP-3, A – NARRATIVE DESCRIPTION	

AGENCY University of Central Florida BUDGET ENTITY SUS PROJECT TITLE Social Sciences Facility Page 1 of

2

## PURPOSE, NEED, SCOPE, RELATIONSHIP OF PROJECT TO AGENCY OBJECTIVES

A Social Sciences building will consolidate three College of Sciences units in a department-oriented facility, simplifying administrative functions for the College. The building will feature classrooms, teaching labs, research labs, and faculty and staff offices. Centralized and specialized Physical, Medical, and Forensic Anthropology teaching lab and research lab spaces will be needed, as current space is limited, shared, and located in multiple buildings on- and off-campus.

The Anthropology, Political Science, and Sociology departments currently occupy the two upper floors of Howard Phillips Hall, which is at maximum usage. The consolidation of these departments in the new facility will enable other departments from Academic Affairs and Student Affairs, which currently occupy the lower two floors of Howard Phillips Hall, to expand into the vacated spaces while remaining close to Millican Hall (Administration).

Delays in construction will inhibit the College in meeting university demands for teaching and research. Increased space and specific research laboratory spaces for these departments are essential to garner additional research funding and to accommodate the new and growing doctoral programs in Political Science and Sociology and a new anticipated Ph.D. degree in Anthropology.

#### SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

#### Classroom/Office

The space classification is predominately classroom or office type, with laboratory or research type minimized. The project will achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use.

### CIP-3 SHORT-TERM PROJECT EXPLANATION CIP-3, A – NARRATIVE DESCRIPTION

All heating and reheating will be hydronic.

# EDUCATIONAL PLANT SURVEY

CIP-3 SHORT TER									Pageof
GEOGRAPHIC LC PROJECT DESCR	CATION: Univ IPTION/TITLE:	ersity of Centra Social Scienc	l Florida, Orlando ces Facility	C			COUNTY: Oran	ge	
		Net to					PROJECT BR N	lo. (if assigned):	
Facility/Space	Net Area	Gross	Gross Area	Unit Cost	Construction	Assumed	0.000		
Type	(NASF)	<u>Conversion</u>	(GSF)	(Cost/GSF)*	Cost	Bid Date	Occupancy		
Classrooms	20,150	1.5	30,225	305	9,218,625	<u>Did Date</u>	Date		
Teaching Labs	4,000	1.5	6,000	376	2,256,000				
Research Labs		1.5	0	386	0				
Study		1.4	0	298	õ				
nstructional Media		1.5	0	222	0				
Auditorium/Exhibitio	on 7,000	1.2	8,400	329	2,763,600				
Gymnasiums		1.2	0	226	2,700,000		Caraca Datalit		
Offices	11,550	1.5	17,325	331	5,734,575		Space Detail for		
Campus Support S	erv 3,000	1.4	4,200	282	1,184,400		EFORE		AFTER
otals	45,700		66,150		21,157,200	Space	Net Area	Space	Net Area
Apply Unit Cost to	total GSF based	d on primary sp	ace type	: :	21,107,200	<u>Type</u>	(NASF)	<u> </u>	(NASF)
Remodeling/Renov	ation	л г							
		JL		l L					
otal Construction -	New & Rem./R	enov.		=	21,157,200	Total	0	Total	0
CHEDULE OF PR									
			Funded to			ESTIM	ATED COSTS		
asic Construction (			Date	<u>2018-19</u>	<u>2019-2020</u>	<u>2020-21</u>	<u>2021-22</u>	2022-23	Funded & In CIR
a.Construction Co	st (from above)	1					21,157,200	2022-23	Funded & In CIP
Add'I/Extraordinar	/ Const. Costs						21,157,200		21,157,200
b.Environmental I	mpacts/Mitigatic	on							-
c.Site Preparation							250.000		
d.Landscape/Irrig	aiton						250,000		250,000
e.Plaza/Walks							200,000		200,000
f.Roadway Impro∖	ements								-
g.Parking spa	ces								-
h.Telecommunica	tion								-
i.Electrical Service							200,000		200,000
j.Water Distributio	า								-
k.Sanitary Sewer S	System								-
I.Chilled Water Sys									-
m.Storm Water Sy									-
n.Energy Efficient									. –
tal Construction C			0	0	0		489,358		489,358
						0	22,296,558	0	22,296,558
Other Project Cost a.Land/existing faci	s litv acquisition								
Professional Fee									-
Fire Marshall Fee						2,173,944			2,173,944
Inspection Servic						59,820			59,820
Insurance Consu						431,858			431,858
Surveys & Tests						13,159			13,159
.Permit/Impact/En	vironmental Fee	25				45,000			45,000
.Artwork		~				88,987			88,987
Moveable Furnishi	nos & Fauinmer	nt					100,000		100,000
Project Contingen						_		3,052,049	3,052,049
al - Other Project					······	239,281	1,277,841		1,517,122
			-			3,052,049	1,377,841	3,052,049	7,481,939
L COSTS 1+2			0	0	0	3,052,049	23,674,399	3,052,049	29,778,497
	Appropriations	to Date							
		Fiscal Year	Amount	Pr	oject Costs Beyor				Total Project In
		issai i sai	Amount		Source	Fiscal Year	Amount		CIP & Beyond
		011 12	~						
		2011-12	0						on a beyond
		2011-12	0		TAL				on a beyond

		ATIVE DESCRIPTION	
BUDGET ENTITY _ PROJECT TITLE _	ty of Central Florida SUS UCF Health Expansion and Wellness Center	AGENCY PRIORITY DATE BLDG PROGRAM APPROVED	Page <u>1</u> of <u>1</u> 38

CID 2 CHODT TEDM DDO IEOT THE AND THE

PURPOSE, NEED, SCOPE, RELATIONSHIP OF PROJECT TO AGENCY OBJECTIVES

The UCF Health Expansion and Wellness Center is a multi-phase project, as there is a need to expand patient care offerings beyond the current clinical sites. Phase 1 will provide a basis for ambulatory and key ancillary services for patient care, and will locate doctors, allied health professionals, and learners within walking distance of the College of Medicine and other facilities at the Lake Nona Medical City. Public spaces include conference and multiple educational spaces for students, patients, and interdisciplinary opportunities in education and patient care. Future phases will address both education and patient care.

#### SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits which contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

#### Classroom/Office

The space classification is Clinical Practice, Clinical Lab, and supporting services. There will be a need for some offices, collaborative meeting spaces for all disciplines treating patients and academic support. The project will achieve LEED certification from the U.S. Green Building Council (USGBC).

#### EDUCATIONAL PLANT SURVEY

As the planning year approaches, the Educational Plant Survey for this project will be addressed.

#### STATE UNIVERSITY SYSTEM CIP-3 SHORT TERM PROJECT EXPLANATION Page \_\_\_\_of \_\_\_\_ GEOGRAPHIC LOCATION: University of Central Florida, Orlando COUNTY: Orange PROJECT DESCRIPTION/TITLE: UCF Health Expansion and Wellness Center PROJECT BR No. (if assigned): Net to Facility/Space Net Area Gross Gross Area Unit Cost Construction Assumed Occupancy Type (NASF) **Conversion** (GSF) (Cost/GSF)\* <u>Cost</u> Bid Date <u>Date</u> Classrooms 1.5 0 305 0 **Teaching Labs** 5,000 1.5 7,500 376 2,820,000 Research Labs 8,500 1.5 12,750 4,921,500 386 Study 1.4 0 298 0 Instructional Media 1.5 0 222 0 Auditorium/Exhibition 1.2 0 329 0 Space Detail for Remodeling Projects BEFORE Gymnasiums 1.2 0 226 0 Offices 1,000 1.5 1,500 496.500 331 AFTER Campus Support Services 1.4 0 282 0 Space Net Area Space Net Area Totals 14,500 21,750 8,238,000 Туре (NASF) <u>Type</u> (NASF) \*Apply Unit Cost to total GSF based on primary space type **Offices** 3000 <u>Offices</u> <u>3000</u> Auditorium/Exb <u>8000</u> Auditorium/Exb 8000 Teaching Labs <u>5000</u> Teaching Labs <u>5000</u> Remodeling/Renovation Total Construction - New & Rem./Renov. 0 Total Ō Total 16000

SCHEDULE OF PROJECT COMPONENTS ESTIMATED COSTS Funded to **Basic Construction Cost** Date <u>2018-19</u> <u>2019-20</u> 2020-21 <u>2021-22</u> 2022-23 Funded & In CIP 1. a.Construction Cost (from above) 8,238,000 8,238,000 Add'I/Extraordinary Const. Costs b.Environmental Impacts/Mitigation c.Site Preparation 250,000 250,000 d.Landscape/Irrigaiton 200,000 200,000 e.Plaza/Walks f.Roadway Improvements g.Parking \_\_\_\_ spaces h.Telecommunication 400,000 400,000 i.Electrical Service j.Water Distribution k.Sanitary Sewer System I.Chilled Water System m.Storm Water System n.Energy Efficient Equipment 524,682 524,682 **Total Construction Costs** 0 0 0 0 9,612,682 0 9,612,682 2. Other Project Costs a.Land/existing facility acquisition b.Professional Fees 1,040,788 1,040,788 c.Fire Marshall Fees 24,925 24,925 d.Inspection Services 92,901 92,901 e.Insurance Consultant 5,226 5,226 f.Surveys & Tests 45,000 45,000 g.Permit/Impact/Environmental Fees 62,847 62,847 h.Artwork 62,313 62,313 i.Moveable Furnishings & Equipment 1,271,687 1,271,687 j.Project Contingency 498,501 498,501 Total - Other Project Costs 1,271,687 560,814 1,271,687 3,104,188 ALL COSTS 1+2 0 0 0 1,271,687 10,173,496 1,271,687 12,716,870

Appropriations to Date Source Fiscal Year Amount 0	Project Costs Beyond CIP Peri Source Fiscal Year	od Total Project In Amount CIP & Beyond 12,716,870
TOTAL	TOTAL =	0 12,716,870

			Page _	<u>1</u> of	
-	sity of Central Florida				
BUDGET ENTITY	SUS	AGENCY PRIORITY	39		
PROJECT TITLE Coastal Biology Station	Coastal Biology Station	DATE BLDG PROGRAM		<u> </u>	
		APPROVED			

OID & OUODT TEDM DDO ITOT TVDL AND TO

PURPOSE, NEED, SCOPE, RELATIONSHIP OF PROJECT TO AGENCY OBJECTIVES

The UCF Marine Turtle Research Group (UCFMTRG) has conducted research at the Archie Carr National Wildlife Refuge (ACNWR), adjacent beaches, and in coastal and inland waters for over 30 years. Data collected by this program were instrumental in establishing the ACNWR in 1991. The refuge and coastal habitats support the most significant, densely nested loggerhead sea turtle rookery in the Western Hemisphere, and among the most important green turtle and loggerhead nesting habitats in North America. The UCFMTRG houses one of the longest and largest sea turtle datasets in the world. This dataset is essential to international, federal, and state managers tasked with the protection and recovery of endangered and threatened sea turtle populations, including populations utilizing central Florida's terrestrial and marine habitats.

The UCFMTRG field sites are located over 70 miles from the UCF campus in Orlando. Due to long field days, nighttime nesting beach surveys, and the storage and transport of heavy equipment (e.g., 4 boats, 4 trucks, 12+ ATVs), it is not practical or safe for students, Principle Investigators (PIs), and staff to commute between campus and the coast at all hours of the day or night. Historically, the ACNWR and Brevard County provided housing and equipment storage for the turtle program; however, given federal budgets and dwindling resources, this is no longer a viable option, nor are there other, feasible alternatives that would ensure the long-term presence and viability of a facility to support UCFMTRG activities. Additionally, the U.S. Fish & Wildlife Service has recently demolished the beach side building which has served for over 30 years as the housing and research staging facility for its UCFMTRG activities. Thus, it is critical to the continuance of this valued research program that new housing/research facilities be constructed at this location.

The continued success and survival of the UCFMTRG is dependent on the development of a dedicated coastal field station or field complex in proximity to the ACNWR. Without a strong presence on the coast, and without the resources needed to successfully fulfill federal and county contracts, the UCFMTRG may lose grants and contracts to other universities, consulting groups, and agencies. Such a loss would undermine the value of the 30+ year UCF sea turtle dataset and research program, to the detriment of sea turtle conservation as well as UCF's standing as an international leader in sea turtle research.

A coastal biology facility or complex will provide housing and equipment storage for the UCFMTRG; support coastal research (both in-water and terrestrial); and provide a hands-on, experiential education platform that can be used by K-12, undergraduate, graduate, and professional educational and training programs. Specifically, the facility will:

- 1) Provide housing and equipment storage for the UCFMTRG including:
  - A bunkhouse to support nighttime and seasonal nesting beach research, including up to 12 UCFMTRG personnel (graduate students and undergraduate interns). This bunkhouse can be used in the off-season by visiting school groups, field classes, Research Experience for Undergraduates (REU) programs, U.S. Fish & Wildlife Service, etc.
  - Additional PI and visiting scientist quarters, separate from a student bunkhouse. Visiting scientist quarters will promote national and international collaborations and broaden the research scope of the UCFMTRG.
  - Storage space for boats, trucks, ATVs, nets, and other field equipment out of the elements to better preserve equipment and promote safe use of equipment in the long-term.
  - A small, functional workshop to make and maintain/repair field equipment; space to properly wash and service field equipment.
  - A facility will allow for new funding/grant opportunities by providing adequate housing for educational activities (e.g., REU, research staging, and secure storage of research equipment and vehicles).
- 2) Enhance UCF's sea turtle and coastal research programs including:
  - A functional wet-lab available for use by student researchers, visiting scientists, and classes (K-12, undergraduate and graduate).
  - Lab space to also serve as temporary triage area for mass sea turtle (or other marine mammal) stranding or cold-stun events, assisting federal and state agencies during periods of unusual mortality, and conservation activities.
  - Office space with computer access to the UCF network for MTRG data entry and management, as well as for use by visiting scientists. This will facilitate scientific advisory service; and will promote the real-time reporting of nesting beach activities to federal, state, and county agencies.
  - A facility will allow for new research grant opportunities by providing adequate space and equipment for research activities.
  - Allowing for the creation of a center for "whole life history" sea turtle research in one of the world's most important nesting and foraging habitats. This will expand UCF's collaborative ties with regional, national, and international researchers and agencies.
  - Providing space (e.g., rooftop) for deployment of technologies to sample environmental data (temperature, rainfall, etc.), radio tracking listening stations, and other remote sensing equipment to enhance field data collection, and to establish a

#### CIP-3 SHORT-TERM PROJECT EXPLANATION CIP-3, A – NARRATIVE DESCRIPTION

base-line coastal monitoring program to better understand the effects of storm events, coastal nourishment activities, and climate change/sea level rise over time.

- 3) Enhance and expand UCF's education and research capacity, including:
  - Expanding student opportunities for educational, work, and research experience for students pursuing degrees in biology, conservation, chemistry, physics, engineering, and environmental studies, among others.
  - Providing space for short-term, on-location, and hands-on training programs (telemetry workshops, wildlife handling, veterinary practices, coastal ecosystem sampling, etc.) to the UCF community as well as outside groups.
  - Allowing for new research grant opportunities by providing adequate space and equipment for educational activities.
  - Encouraging public support and donations through educational outreach activities, elevating UCF's research and educational opportunities through public programs.
  - Creating a classroom/meeting room space to provide educational opportunities for K-12, undergraduate, and graduate students, as well as professional training programs.

A new facility/complex will solidify UCF's standing as a primary sea turtle research institution. It will provide the foundation for the UCFMTRG to evolve to incorporate new technological, educational and training programs; promote international relevancy and collaborations; and provide a platform for new coastal research and educational programs. This facility will promote UCF's commitment to achieving international prominence in key areas of graduate study and research, and fulfilling its state charters in education and training.

### SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

#### Research/Laboratory

The space classification is predominately laboratory type, with office type minimized. The project will achieve LEED Gold certification with the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and

#### CIP-3 SHORT-TERM PROJECT EXPLANATION CIP-3, A – NARRATIVE DESCRIPTION

water consumption will be at least 30% less than that of a comparable building. Laboratories will have continuous variable air flow valves with air flow reset capabilities. Domestic and laboratory hot water needs will be provided primarily by solar thermal energy. All heating and reheating will be hydronic.

## EDUCATIONAL PLANT SURVEY

			0						
	Appropriations t Source Fis	to Date scal Year	Amount	P	roject Costs Be Source F	yond CIP Pe	iod* Amount		Total Project In CIP & Beyond
LL COSTS 1+2			0	0	0	6,358,435	0	0	6,358,43
otal - Other Project Costs			-			342,711 1,653,829		<u> </u>	342,711 1,653,829
.Project Contingency	-quipment					623,127			623,127
.Moveable Furnishings & E	Fauinment					28,069			28,069
Artwork	FILM FEES					42,955			42,95
.Surveys & rests g.Permit/Impact/Environme	ental Foos					25,000			25,00
f.Surveys & Tests						2,718			2,71
d.Inspection Services e.Insurance Consultant						95,634			95,63
c.Fire Marshall Fees						12,463			12,46
b.Professional Fees						481,152			- 481,15
a Land/existing facility acq	uisition								_
Other Project Costs									
otal Construction Costs			0	00	0	4,704,606	0	0	4,704,60
n.Energy Efficient Equipm	nent								-
m.Storm Water System									-
I.Chilled Water System									-
k.Sanitary Sewer System									-
j.Water Distribution									-
i.Electrical Service						75,000			75,00
g.Parking spaces h.Telecommunication									-
f.Roadway Improvements	6								-
e.Plaza/Walks									-
d.Landscape/Irrigaiton						-			100,00
c.Site Preparation						100,000			-
b.Environmental impacts	/Mitigation								-
Add'I/Extraordinary Const	. Costs					7,528,000			4,529,60
. a.Construction Cost (fron	n above)			<u> 1 - 1 3</u>	2018-20	2020-21 4,529,606	<u>2021-22</u>	2022-23	Funded & In Cl
Basic Construction Cost			Funded to <u>Date</u>	<u>2018-19</u>	<u>2019-</u> 20				
CHEDULE OF PROJECT	COMPONENTS	8				ESTI	MATED COSTS		
					4,195,240	Total	<u>0</u>	Total	<u>0</u>
Total Construction - New &	Rem./Renov	L		I	4 105 040	Te/ 1			
		ſ		í					
Remodeling/Renovation									
*Apply Unit Cost to total GS	SF based on prir	mary space t	ype	. ;			<u></u>		<u></u>
Totals	17,544		26,316		4,195,240	<u>Type</u>	<u>(NASF)</u>	Space Type	Net Area (NASF)
Campus Support Services	4,750	1.4	6,650	282	1,875,300	Space	Net Area		AFTER
Offices	1,500	1.5	2,250	331	744,750	BE	Space Detail to FORE		
Gymnasiums	1,200	1.2	1,440	226	325,440		Snace Detail fo	r Remodeling P	oia ata
Auditorium/Exhibition		1.2	Õ	329	0				
Instructional Media		1.5	0	290	208,600				
Study	500	1.4	700	298	492,150 208,600				
Research Labs	850	1.5	1,275	376 386	0				
Teaching Labs	0	1.5	1,800 0	305	549,000				
Classrooms	1,200	Conversion 1.5		(Cost/GSF)*		<u>Bid Date</u>	<u>Date</u>		
		Gross	Gross Area	Unit Cost	Construction	Assumed	Occupancy		
Facility/Space	Net Area	Net to	0						
			ogy Station				PROJECT BF	No. (if assigned	d):
PROJECT DESCRIPTION		Coastal Biol					COUNTY: Ora		
GEOGRAPHIC LOCATION PROJECT DESCRIPTION									

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CIP-3 SHORT-TERM PROJECT EXPLANATION
CIP-3, A – NARRATIVE DESCRIPTION

Page 1 of 2

AGENCY Univers	sity of Central Florida
BUDGET ENTITY	SUS
PROJECT TITLE	Technology Commons II
	Renovation

AGENCY PRIORITY 41 DATE BLDG PROGRAM APPROVED

PURPOSE, NEED, SCOPE, RELATIONSHIP OF PROJECT TO AGENCY OBJECTIVES

The renovation of Technology Commons II is necessary to accommodate and meet the needs of Computer Services and Telecommunications, Computer Science, and Statistics.

A prior partial renovation of Tech Commons I and II replaced first floor air handling units, duct work, chilled water pumps, variable frequency drives, switch gear, and valves, and lighting. Second floor renovations replaced the air handling unit, outside air dampers and variable frequency drives.

The second floor requires HVAC upgrades that include new variable air volume and fan power boxes; new bathroom exhaust fans; cleaning of duct work, replacement of inside lined duct work with metal, exterior wrapped insulated ductwork exterior; lighting upgrades; complete bathroom renovation; carpeting; and standardization of exit lighting.

The wireless network needs to be upgraded with additional access points.

#### SUSTAINABILITY AND LEED

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#### Classroom/Office

The space classification is predominately classroom or office type, with laboratory or research type minimized. The project will achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use. All heating and reheating will be hydronic.

#### CIP-3 SHORT-TERM PROJECT EXPLANATION CIP-3, A – NARRATIVE DESCRIPTION

## EDUCATIONAL PLANT SURVEY

# STATE UNIVERSITY SYSTEM CIP-3 SHORT TERM PROJECT EXPLANATION GEOGRAPHIC LOCATION: University of Central Florida, Orlando PROJECT DESCRIPTION/TITLE: Technology Commons II Description COUNTY: Orange

Page \_\_\_\_of \_\_\_\_

· · · · · · · · · · · · · · · · · · ·		_ recimology	Commons II R	enovation			COUNTY: Oran		
		Net to					PROJECT BR N	to. (if assigned):	
Facility/Space	Net Area	Gross	Gross Area	Unit Cost	Construction	Assumed	0.000		
<u>Type</u>	<u>(NASF)</u>	<u>Conversion</u>	(GSF)	(Cost/GSF)*	Cost		Occupancy		
Classrooms		1.5	0	305	_	Bid Date	Date		
Teaching Labs		1.5	0		0				
Research Labs				376	0				
Study		1.5	0	386	0				
		1.4	0	298	0				
Instructional Media		1.5	0	222	0				
Auditorium/Exhibition		1.2	0	329	õ				
Gymnasiums		1.2	0	226					
Offices		1.5	ő		0		Space Detail for F	Remodeling Proj	ects
Campus Support Servi				331	0	BE	FORE		AFTER
Totals		1.4	0	282	0	Space	Net Area	Space	Net Area
	0		0		0	Type	(NASF)		
*Apply Unit Cost to tota	IGSF based	on primary sp	bace type	=		Offices	6,570	<u>Type</u> Offices	(NASF)
							0,070	Onices	6,5
Remodeling/Renovatio	n								
[	6,570	ſ	9,855	Г	2,623,061				
		-		L	2,020,001				
Fotal Construction ~ Nev	w & Rem./Re	nov.		=	2,623,061	Total	6,570	Total	6,5
SCHEDULE OF PROJE	ECT COMPO	NENTS	Free de dat			ESTIMA	TED COSTS		
Basic Construction Cost			Funded to <u>Date</u>	2018-19	2010 2020	0000		·	
. a.Construction Cost (	from above)		Duto	2010-19	<u>2019-2020</u>	<u>2020-21</u>	<u>2021-22</u>	<u>2022-23</u>	Funded & In Cl
Add'I/Extraordinary Co	not Costs						2,623,061		2,623,06
h Environmental June									2,020,00
b.Environmental Impa	acts/Mitigation	1							-
c.Site Preparation									-
d.Landscape/Irrigaitor	า								-
e.Plaza/Walks							144,984		144,98
f.Roadway Improvement	onto								
									-
g.Parking spaces									-
h.Telecommunication							100.000		-
i.Electrical Service							100,000		100,00
j.Water Distribution									-
k.Sanitary Sewer Syst	em								-
I.Chilled Water System	า								-
m.Storm Water Syster									-
m.storm water Syster									-
•									-
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n.Energy Efficient Equ			0	0			2 868 045		
n.Energy Efficient Equ tal Construction Costs			0	0	0	C	2,868,045	0	2,868,04
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		PROJECT EXPLANATION RATIVE DESCRIPTION	
AGENCY Univer BUDGET ENTITY PROJECT TITLE	sity of Central Florida SUS College of Sciences Building Renovation	AGENCY PRIORITY DATE BLDG PROGRAM APPROVED	Page <u>1</u> of <u>2</u> 42

The College of Sciences building was constructed in 1996 and is 54,644 GSF. The facility contains offices, computer rooms, support spaces, and an auditorium. The HVAC system is part of the original design and does not effectively maintain temperature and humidity in classrooms, offices, and computer server areas. A test and balance needs to be conducted. The renovation of this building will address indoor air quality issues.

The university contracted with the ISES Corporation to conduct a Facilities Condition Assessment (FCA) to benchmark the condition of its E&G facilities. The College of Sciences Building renovation will address both critical and non-critical issues identified in the FCA. These issues encompass deficiencies such as indoor air quality, fire alarm modernization, potable water and plumbing distribution systems, electrical service, asbestos, HVAC modernization, lighting upgrades, building automation, ADA compliance, building envelope repairs, interior finishes, flooring, egress, exterior lighting, and utility service entrance upgrades. Information technology upgrades are also required in order to meet current and future requirements.

### SUSTAINABILITY AND LEED

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# Classroom/Office

The space classification is predominately classroom or office type, with laboratory or research type minimized. The project will achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use. All heating and reheating will be hydronic.

# EDUCATIONAL PLANT SURVEY

### STATE UNIVERSITY SYSTEM CIP-3 SHORT TERM PROJECT EXPLANATION Page \_\_\_of \_ GEOGRAPHIC LOCATION: University of Central Florida, Orlando COUNTY: Orange PROJECT DESCRIPTION/TITLE: College of Sciences Building Renovation PROJECT BR No. (if assigned): Net to Facility/Space Net Area Gross Gross Area Unit Cost Construction Assumed Occupancy <u>Type</u> (NASF) Conversion <u>(GSF)</u> (Cost/GSF)\* <u>Cost</u> Bid Date <u>Date</u> Classrooms 1.5 0 305 0 Teaching Labs 1.5 0 376 0 Research Labs 1.5 ۵ 386 0 Study 1.4 0 298 0 Instructional Media 1.5 0 222 0 Auditorium/Exhibition 1.2 0 329 0 Gymnasiums 1.2 0 226 0 Space Detail for Remodeling Projects Offices 1.5 0 331 0 BEFORE AFTER Campus Support Services 1.4 0 282 0 Space Net Area Space Net Area Totals 0 0 (NASF) Туре <u>Туре</u> (NASF) \*Apply Unit Cost to total GSF based on primary space type Offices 16,998 Offices 16,998 Remodeling/Renovation 16,998 25,497 2,852,373 Total Construction - New & Rem./Renov. 2,852,373 Total 16,998 Total 16,998 SCHEDULE OF PROJECT COMPONENTS ESTIMATED COSTS Funded to **Basic Construction Cost** Date <u>2018-19</u> <u>2019-20</u> <u>2020-21</u> 2021-22 2022-23 Funded & In CIP 1. a.Construction Cost (from above) 2,852,373 2,852,373 Add'l/Extraordinary Const. Costs b.Environmental Impacts/Mitigation c.Site Preparation d.Landscape/irrigaiton e.Plaza/Walks f.Roadway Improvements g.Parking \_\_\_\_ spaces h.Telecommunication i.Electrical Service j.Water Distribution k.Sanitary Sewer System I.Chilled Water System m.Storm Water System n.Energy Efficient Equipment Total Construction Costs 0 0 0 0 2,852,373 0 2,852,373 2. Other Project Costs a.Land/existing facility acquisition b.Professional Fees 461,767 461.767 c.Fire Marshall Fees 8,020 8,020 d.Inspection Services 10,226 10,226 e.Insurance Consultant 1,711 1,711 f.Surveys & Tests g.Permit/Impact/Environmental Fees 29,567 29,567 h.Artwork i.Moveable Furnishings & Equipment 284,568 284,568 Project Contingency 443,366 443,366 Total - Other Project Costs 1,239,225 1,239,225 ALL COSTS 1+2 0 0 0 0 4,091,598 0 4,091,597 Appropriations to Date Project Costs Beyond CIP Period Total Project In Source Fiscal Year Amount Source Fiscal Year Amount CIP & Beyond PECO 2012-13 0 4,091,598 TOTAL -TOTAL 0 4,091,597

<b>CIP-3 SHORT-TERM PROJECT EXPLANATION</b>	
CIP-3, A – NARRATIVE DESCRIPTION	

AGENCY University of Central Florida BUDGET ENTITY SUS PROJECT TITLE Simulation & Training Building Page 1 of 2

# PURPOSE, NEED, SCOPE, RELATIONSHIP OF PROJECT TO AGENCY OBJECTIVES

This facility will serve as one of the research homes for the Institute for Simulation and Training (IST) simulation, modeling, and training activities, and particularly for rapidly growing programs in cyber research. For UCF and IST to be able to compete with other research institutions in the simulation field, it must be able to attract quality research faculty, provide modern research facilities, and develop training programs specific to simulation research.

UCF/IST must produce top students through cutting-edge educational and research opportunities to meet the needs of high tech industries.

The facility will:

- Expand educational and work-related opportunities for students pursuing degrees associated with modeling, simulation, team performance, advanced methods of training delivery, and future learning environments; in particular, the newly-established MS and PhD programs in Simulation and Modeling
- Provide laboratory and office space for the rapidly expanding research and development programs, as well as multiple disciplines in modeling, simulation, and training, immersive environments and mobile learning
- Allow UCF to fulfill its state charter as the Center of Excellence in Simulation and Training by focusing its broad range of academic and research efforts through more specialized programs and projects
- Allow for additional outside funding opportunities by providing adequate space and equipment for basic and applied research
- Highlight UCF's commitment to establish Central Florida as the National Center for Simulation.
- Expand traditional modeling and simulation into new areas such as medical team simulation and international cultural dynamics, significantly impacting health care scenarios and international relations and business
- Promote research in multimodal interaction to include multicultural speech, gestures, high level dialogue, health, counseling, and lifestyle decisions to understand probable outcomes and develop intervention scenarios
- Create a Cultural Modeling Center of Excellence to further expand research in recognizing and simulating body language (hostility, fear, suspicion, and personal space issues) and social customs, as well as cultural aspects of the social environment for various groups. The Center will research how individuals and groups react, and foster advances in dynamic agents, robots, and autonomous vehicles.

Without this facility, significant research projects and programs cannot be accommodated, and research funding will be lost to other institutions. The Simulation and Training Building will be integral to the academic experience, preparing students to compete for local simulation and training jobs within the high-technology pool.

# SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

### **Research/Laboratory**

The space classification is predominately laboratory type, with office type minimized. The project will achieve LEED Gold certification with the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption should be at least 30% less than that of a comparable building. Laboratories will have continuous variable air flow valves with air flow reset capabilities. Domestic and laboratory hot water needs shall be provided primarily by solar thermal energy. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of lab spaces and related energy use. All heating and reheating will be hydronic.

### Classroom/Office

Despite the fact that this building's space classification is predominately research and laboratory, there is also a significant number of classrooms and offices in the building.

# EDUCATIONAL PLANT SURVEY

### STATE UNIVERSITY SYSTEM CIP-3 SHORT TERM PROJECT EXPLANATION

Page \_\_\_\_of \_\_\_\_ GEOGRAPHIC LOCATION: University of Central Florida, Orlando COUNTY: Orange PROJECT DESCRIPTION/TITLE: Simulation and Training Building PROJECT BR No. (if assigned): Net to Facility/Space Net Area Gross Gross Area Unit Cost Construction Assumed Occupancy Type (NASF) <u>Conversion</u> (GSF) (Cost/GSF)\* Cost Bid Date Date Classrooms 5,000 1.5 7,500 305 2,287,500 Teaching Labs 4,000 1.5 6,000 376 2,256,000 Research Labs 20,100 1.5 30.150 386 11,637,900 Study 1.4 0 298 0 Instructional Media 1.5 0 222 0 Auditorium/Exhibition 1.2 0 329 0 Gymnasiums Space Detail for Remodeling Projects 1.2 0 226 0 Offices 10,000 1.5 15,000 331 4,965,000 BEFORE Campus Support Services 1.4 0 282 0 Space Net Area Space Totals Net Area 39,100 58,650 21,146,400 Type (NASF) \*Apply Unit Cost to total GSF based on primary space type Туре (NASF) Remodeling/Renovation Total Construction - New & Rem./Renov. 21,146,400 Total 0 Total SCHEDULE OF PROJECT COMPONENTS ESTIMATED COSTS Funded to **Basic Construction Cost** Date <u>2018-19</u> 2019-20 2020-21 2021-22 <u>2022-23</u> 1. a.Construction Cost (from above) Funded & In CIP Add'I/Extraordinary Const. Costs 21,146,400 21,146,400 b.Environmental Impacts/Mitigation c.Site Preparation 250,000 d.Landscape/irrigaiton 250,000 e Plaza/Walks 200,000 200,000 f.Roadway Improvements g.Parking \_\_\_\_ spaces h.Telecommunication 561,751 561,751 i.Electrical Service j.Water Distribution k.Sanitary Sewer System I.Chilled Water System m.Storm Water System n.Energy Efficient Equipment Total Construction Costs 0 0 0 0 0 22,158,151 22,158,151 2. Other Project Costs a.Land/existing facility acquisition b.Professional Fees 2,242,414 2,242,414 c.Fire Marshall Fees 57,704 d.Inspection Services 57,704 361,954 e.Insurance Consultant 361,954 11,373 11,373 f.Surveys & Tests 45,000 g.Permit/Impact/Environmental Fees 45,000 87,937 h.Artwork 87,937 100,000 i.Moveable Furnishings & Equipment 100,000 j.Project Contingency 207,943 1.154.083 Total - Other Project Costs 1,362,026 3,014,325 1,254,083 4,268,408 ALL COSTS 1+2 0 0 n 0 3,014,325 23,412,234 26,426,559 Appropriations to Date Project Costs Beyond CIP Period Total Project In Source Fiscal Year Amount Source Fiscal Year Amount CIP & Beyond 0 PECO 2022-23 3,014,325 26,426,559 TOTAL 3,014,325 TOTAL 3,014,325 29,440,884

	CIP-3 SHO CIP-3,	RT-TERM PROJECT EXPLANATION A – NARRATIVE DESCRIPTION	······································
AGENCY <u>Univer</u> BUDGET ENTITY PROJECT TITLE	sity of Central Florida SUS Business Administration III Building	AGENCY PRIORITY DATE BLDG PROGRAM APPROVED	Page <u>1</u> of <u>2</u> 44

The College of Business Administration (CBA) offers degrees at the bachelor's, master's, doctoral and executive levels. All programs, including the Kenneth G. Dixon School of Accounting, are accredited by The Association to Advance Collegiate Schools of Business (AACSB International). Only 5% of the world's 13,000 business programs have achieved such distinction through rigorous standards of achievement. AACSB-accredited schools are globally recognized for their outstanding mission, faculty contributions, operations and more. Degrees from such schools are constantly increasing in value, giving students a competitive edge.

Business Administration is a Science, Technology, Engineering, and Math (STEM) facility that houses five academic units: the School of Accounting, and the Departments of Economics, Finance, Management, and Marketing. The College of Business Administration serves 7,765 undergraduate and 721 graduate students. Technology plays an integral role in the curriculum through state-of-the-art computer labs, technology support, and multi-media classrooms, and students graduate with the technical knowledge and entrepreneurial skills necessary to compete in today's global marketplace.

Approximately 25% of all course sections are scheduled outside of Business Administration I and II, because the buildings are at capacity. The continued growth in student enrollment along with faculty size requirements mandated by AACSB will necessitate aggressive faculty hiring, and there are no available faculty offices. Since 1999 the College has experienced a serious office space-shortage for faculty and staff. Given expected continued growth in enrollment and student credit hours generated, this situation can only be alleviated in the long term by constructing a significant new facility. Delay or non-approval would be detrimental to the College's ability to best serve students studying Business Administration at the university.

# SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

# Classroom/Office

The space classification is predominately classroom or office type, with laboratory or research type minimized. The project will achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use. All heating and reheating will be hydronic.

# EDUCATIONAL PLANT SURVEY

### STATE UNIVERSITY SYSTEM CIP-3 SHORT TERM PROJECT EXPLANATION

GEOGRAPHIC LOC PROJECT DESCRI	PTION/TITLE:	Business A	dministration	iao III Buildina			COUNTY: Orange	(if projected)	
		Net to					PROJECT BR No	. (ir assigned):_	
Facility/Space <u>Type</u>	Net Area (NASF)	Gross <u>Conversion</u>	Gross Area (GSF)	Unit Cost (Cost/GSF)*	Construction <u>Cost</u>	Assumed	Occupancy		
Classrooms	14,050	1.5	21,075	305	6,427,875	Bid Date	<u>Date</u>		
Teaching Labs	0	1.5	0	376	0,427,875				
Research Labs		1.5	0	386	0				
Study	3,541	1.4	4,957	298	1,477,305				
Instructional Media		1.5	0	222	0				
Auditorium/Exhibitior	1	1.2	0	329	0				
Gymnasiums		1.2	0	226	õ		Space Detail for Re	modoling Droig	
Offices	10,500	1.5	15,750	331	5,213,250	B	EFORE		AFTER
Campus Support Se	rvices	1.4	0	282	0	Space	Net Area	Space	Net Area
Totals	28,091		41,782		13,118,430	Туре	(NASE)	<u>Type</u>	(NASF)
*Apply Unit Cost to to Remodeling/Renova		l on primary sp	bace type						
-		] [							
Total Construction - I	√ew & Rem./Re	enov.			13,118,430	Total	<u>0</u>	Total	<u>0</u>
SCHEDULE OF PRO	JECT COMPC	DNENTS				ESTIMA	ATED COSTS		
Basic Construction C	ost		Funded to Date	<u>2018-19</u>	2019-20	<u>2020-21</u>	2021-22	<u>2022-23</u>	Fundad & L. Ol
<ol> <li>a.Construction Cos Add'I/Extraordinary b.Environmental In</li> </ol>	Const. Costs							13,118,430	<u>Funded &amp; In Cll</u> 13,118,43
c.Site Preparation d.Landscape/Irriga	-							250,000	- 250,00
e.Plaza/Walks								200,000	200,00
f.Roadway Improve g.Parking space									-
h.Telecommunicati i.Electrical Service	on							550,000	550,00
j.Water Distribution	1								-
k.Sanitary Sewer S									-
I.Chilled Water Sys	-								-
									-
m.Storm Water Sys									-
n.Energy Efficient E								664,318	664,31
otal Construction Co	sts		0	0	0		0 0	14,782,748	14,782,74
. Other Project Costs									
a.Land/existing facil									-
b.Professional Fees							1,429,806	-	1,429,80
c.Fire Marshall Fees							38,574		38,57
d.Inspection Service							264,764		264,76
e.Insurance Consult	ant						8,317		8,31
f.Surveys & Tests	ironmostal C -						45,000		45,00
g.Permit/Impact/Env h.Artwork	monmental Fee	35					74,265		74,26
i.Moveable Furnishir	nae & Caulor-	nt						96,435	96,43
		an							-
j.Project Contingenc otal - Other Project C			-				154,297 2,015,023	771,484 867,919	925,78
LL COSTS 1+2			0	0	0	(		15,650,667	17,665,69
	Appropriations	s to Date	<u> </u>		Project Costs Pour				
		Fiscal Year	Amount	F	Project Costs Beyo		A		Total Project In
			mount		Source	Fiscal Year	Amount		CIP & Beyond
	PECO		n	r		2024 00	0.015.000		
	PECO		0	F	PECO	2021-22	2,015,023		17,665,69
	PECO TOTAL	_	0		PECO TOTAL	2021-22	2,015,023		17,665,69 2,015,02 19,680,71

### Page \_\_\_\_of \_\_\_\_

	ERM PROJECT EXPLANATION	
AGENCY University of Central Florida BUDGET ENTITY SUS PROJECT TITLE Education Building II	AGENCY PRIORITY DATE BLDG PROGRAM APPROVED	Page <u>1</u> of <u>2</u> 45

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The College of Education and Human Performance (CEDHP) is fully accredited and meets the rigorous standards of the Council for the Accreditation of Educator Preparation (CAEP) The College is recognized as one of the foremost institutions of its kind, nationally and internationally. Since inception, the CEDHP has impacted nearly 3.4 million Pre-K-12 students, and has strengthened the roles of countless Central Florida educators, who in turn influence the social, economic and societal well-being of our community, the State and beyond. UCF's CEDHP is the leading source of education degrees awarded in the State of Florida. Each year the Florida Department of Education identifies subject areas that are experiencing, or are projected to experience, a critical teacher shortage. The current and projected vacancies in Florida teacher certification areas for 2014-2015 stand at 1,498 of which 880, or 58 percent, are in critical teacher shortage areas. Critical teacher shortage areas for the 2015-16 school year are identified as follows: English, Exceptional Student Education, Reading, Foreign Language, English for Speakers of Other Languages, Science, and Mathematics. UCF is recognized for its scholarly leadership in the education profession, and through curricula and partnerships strives to address teacher shortages throughout the State. UCF must continue to produce professional educators who can competently teach literacy, mathematics and science, global studies, and technology, while addressing the issues of diversity, and personal and social responsibility.

In addition to preparing and renewing professional educators, the CEDHP serves as a hub for significant state centers, programs, and collaborative projects: The Toni Jennings Exceptional Education Institute; the Morgridge International Reading Center (MIRC); the Marriage and Family Research Institute; the Technical Assistance and Training Systems for Programs Serving Pre-K Children w/ Disabilities (TATS) project; TeachLivE, the School Organization and Science Achievement (SOSA) Project; and the MIRC-Istation Project (e-learning program) at UCF. These projects engage faculty, staff and students in teaching, learning, leadership, research and service, and promote partnerships with professional organizations, educational institutions, business, industry, and the community.

CEDPH requires the construction of an Education Building II in close proximity to its Education Complex to meet the demands of the State's educational system. Physical space is a critical factor in developing the potential of the CEDHP and upholding UCF's status as a major metropolitan research university. The facility will enhance the current collaborative ventures that link the CEDHP; the UCF Teaching Academy, the Morgridge International Reading Center; state colleges; and the public and private schools in the eleven-county Central Florida service area. Leased space is not available within walking distance of the main campus. In addition, the types of spaces required by the various education disciplines are generally not readily available in commercial buildings. Thus, leasing is not an option in this case.

The Education Building II will feature formal and informal learning spaces, and public interactive zones that invite collaboration and spark creativity. Dedicated space for centers and special projects will also be included. This state-of-the-art environment, with full multimedia support, will inspire and enable people to engage in education that is capable of creating the future.

Delay of this project will inhibit further growth of the CEDHP. Without new space it will be impossible to hire enough new faculty lines or meet increasing demands for additional course sections. School systems are expressing the need for more organized and effective approaches to professional development. UCF has been cited as a key reason for the location of business and industry in Central Florida in recent years. Future directions in education should utilize existing resources in Central Florida and the CEDHP at UCF stands ready to meet these new needs and demands.

# SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

# Classroom/Office

The space classification is predominately classroom or office type, with laboratory or research type minimized. The project will achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use. All heating and reheating will be hydronic.

# EDUCATIONAL PLANT SURVEY

# STATE UNIVERSITY SYSTEM CIP-3 SHORT TERM PROJECT EXPLANATION

GEOGRAPHIC LOCATION PROJECT DESCRIPTION		Education P	u norida, Orlan uilding U	do			COUNTY: Orang	e	
		Net to	anung n				PROJECT BR N	o. (if assigned):	
Facility/Space N	et Area	Gross	Gross Area						
		<u>Conversion</u>		Unit Cost	Construction	Assumed	Occupancy		
	17,320	1.5	<u>(GSF)</u> 25,980	(Cost/GSF)*	Cost	<u>Bid Date</u>	Date		
Teaching Labs	.,020	1.5	25,980	305	7,923,900				
Research Labs		1.5	0	376	0				
Study		1.4	0	386 298	0				
Instructional Media		1.5	0		0				
Auditorium/Exhibition		1.2	ŏ	222 329	0				
Gymnasiums		1.2	õ	226	0		_		
Offices 1	6,300	1.5	24,450	331	0		Space Detail for R	emodeling Proje	ects
Campus Support Services	,	1.4	24,430	282	8,092,950		ORE		AFTER
Totals 3:	3,620		50,430	202	0 16,016,850	Space	Net Area	Space	Net Area
*Apply Unit Cost to total GS	F based o	on primary sp	ace type	:	10,010,000	Туре	(NASF)	<u>Type</u>	(NASF)
Remodeling/Renovation									
				[					
Fotal Construction - New & I	Rem./Ren	10V.		=	16,016,850	Total	<u>0</u>	Total	<u>0</u>
CHEDULE OF PROJECT	COMPON	- <u></u>							
asic Construction Cost			Funded to	0040.15		ESTIMAT	ED COSTS		
. a.Construction Cost (from	above)		<u>Date</u>	<u>2018-19</u>	<u>2019-20</u>	<u>2020-21</u>	<u>2021-22</u>	<u>2022-23</u>	Funded & In Cli
Add'I/Extraordinary Const.	Coste							16,016,850	16,016,85
b.Environmental Impacts/	Mitigation								-
c.Site Preparation	mugation							250,000	250,00
d.Landscape/Irrigaiton									,
e.Plaza/Walks								200,000	200,00
f.Roadway Improvements									-
g.Parking spaces									-
h.Telecommunication									-
i.Electrical Service								250,000	250,00
j Water Distribution									-
									-
k.Sanitary Sewer System									_
I.Chilled Water System									
m.Storm Water System									-
n.Energy Efficient Equipme	ent							704 604	-
otal Construction Costs			0	0	0	0	0	724,694	724,694
								17,441,544	17,441,54
Other Project Costs									
a.Land/existing facility acqu	isition								
b.Professional Fees							1,717,608		-
c.Fire Marshall Fees							41,015		1,717,608
d.Inspection Services							331,417		41,015
e.Insurance Consultant									331,417
Surveys & Tests							8,871 75,000		8,871
g.Permit/Impact/Environme	ntal Fees						79,433		75,000
n.Artwork							10,400	100,000	79,433
Moveable Furnishings & E	quipment							100,000	100,000
Project Contingency							175,046	820,301	-
tal - Other Project Costs			-			-	2,428,390	920,301	995,347 3,348,691
LCOSTS 1+2			0	0	0	0	2,428,390	18,361,845	20,790,235
Δηρισο	oriations to	Data							
Sou			Amount	Pr	oject Costs Beyor	nd CIP Period			Total Project In
004			Amount 0		Source	Fiscal Year	Amount		CIP & Beyond
			U	PP	CO	2023-24			-
						2023-24	2,428,390		20.790.235
TOTAL					DTAL	2023-24	2,428,390		20,790,235 2,428,390

Page \_\_\_\_of \_\_\_\_

CIP-3 SHORT-TERM PROJECT EXPLANATION
CIP-3, A – NARRATIVE DESCRIPTION

AGENCY University of Central Florida BUDGET ENTITY SUS PROJECT TITLE Band Building II Infrastructure

AGENCY PRIORITY \_\_\_\_\_\_46 DATE BLDG PROGRAM APPROVED \_\_\_\_\_

Page 1 of 2

# PURPOSE, NEED, SCOPE, RELATIONSHIP OF PROJECT TO AGENCY OBJECTIVES

The University of Central Florida Bands program serves nearly 400 students, and consists of three concert ensembles and two athletic bands. The program is designed to provide professional training for music education and performance majors, while also serving as a musical outlet for wind and percussion players throughout the university community regardless of major.

The Band Building is needed to provide space for this program: ensemble and individual practice rooms, instrument and uniform storage, a recording studio, a band music library, office space, and a loading dock.

There is no other space on campus that can be used for this program, and leasing additional space of the type needed is not readily available or in proximity to the campus. A new building is the only viable alternative. Delays in construction will prohibit needed space for the marching band and hinder recruitment of new band members.

Phase 2 for the Band Building Facility Upgrade will occur concurrently with Phase 1. Phase 2 will provide road and utility improvements for the existing dirt part. The existing road currently has storm water deficiencies which floods the path and prevents access after rain events. Underground utilities (storm, sanitary, water, electric, and communications) will be installed for these improvements as well as to support the new Band Building. The upgraded road will also provide for a stabilized concrete path for fire access lane which currently does not exist. As part of Phase 2, permanent site lighting will also be installed for the Band Practice Field.

### SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

### **Classroom/Office**

The space classification is predominately assembly and media production, classroom or office type, with laboratory or research type minimized. The project will achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use. All heating and reheating should be hydronic.

# EDUCATIONAL PLANT SURVEY

CIP-3 SHORT TERM PROJEC								Pageof
GEOGRAPHIC LOCATION: U PROJECT DESCRIPTION/TIT	LE: Band Build	al Florida, Orlan ding II Infrastruc	do ture			COUNTY: Orange PROJECT BR No		
Facility/Space Net A <u>Type</u> (NAS Classrooms Teaching Labs Research Labs Study Instructional Media		Gross Area ( <u>GSF)</u> 0 0 0 0 0	Unit Cost (Cost/GSF)* 305 376 386 298 222	Construction Cost 0 0 0 0 0 0	Assumed <u>Bid Date</u>	Occupancy <u>Date</u>		
Auditorium/Exhibition Gymnasiums	1.2 1.2	0 0	329	0				
Offices	1.5	0	226 331	0	BE	<u>Space Detail for Re</u> FORE		
Campus Support Services Totals 0	1.4	0	282	0	Space	Net Area	Space	AFTER Net Area
Totals 0 *Apply Unit Cost to total GSF b	ased on primary s	0 pace type	=	0	Түре	(NASF)	Туре	(NASF)
Remodeling/Renovation			[	3018699				
Total Construction - New & Rer	n./Renov.		=	0	Total	<u>0</u>	Total	<u>0</u>
SCHEDULE OF PROJECT CO	MPONENTS	Funded to			ESTIMAT	ED COSTS		
Basic Construction Cost . a.Construction Cost (from ab Add'I/Extraordinary Const. Co b.Environmental Impacts/Miti	sts	<u>Date</u>	<u>2018-19</u>	<u>2019-20</u>	<u>2020-21</u>	<u>2021-22</u>	<u>2022-23</u> 3,018,699	Funded & In CIF 3,018,69
c.Site Preparation d.Landscape/Irrigaiton e.Plaza/Walks f.Roadway Improvements							250,000 109,816	250,00 109,81 -
g.Parking spaces h.Telecommunication i.Electrical Service							-	- - -
j.Water Distribution k.Sanitary Sewer System I.Chilled Water System								-
m.Storm Water System n.Energy Efficient Equipment								-
otal Construction Costs		0	0	0	0	0	3,378,515	3,378,51
. Other Project Costs a.Land/existing facility acquisit b.Professional Fees	ion							_
c.Fire Marshall Fees d.Inspection Services e.Insurance Consultant f.Surveys & Tests						377,780 9,128 83,688 1,811	-	377,78( 9,12) 83,68{ 1,81 <sup>-</sup>
g.Permit/Impact/Environmenta n.Artwork .Moveable Furnishings & Equi	-					45,000 31,939 -		45,000 31,939 -
Project Contingency tal - Other Project Costs						29,329 578,675	182,563 182,563	211,892
L COSTS 1+2		0	0	0	0	578,675	3,561,078	4,139,75
Appropria Source	tions to Date Fiscal Year	Amount 0		oject Costs Beyo Source ECO	nd CIP Period Fiscal Year 2023-24	Amount 578,675		Total Project In CIP & Beyond 4,139,75
TOTAL			т	DTAL	-		-	578,675
				- 17L	-	578,675	=	4,718,42

		HORT-TERM PROJECT EXPLANATION P-3, A – NARRATIVE DESCRIPTION	
BUDGET ENTITY	sity of Central Florida SUS Arts Complex Phase III	AGENCY PRIORITY DATE BLDG PROGRAM APPROVED	Page <u>1</u> of <u>2</u> 47

This project is the third phase of a three phase Arts Complex. Phase III will provide supporting offices, rehearsal spaces, storage, and classrooms. Currently, the Departments of Music and Theatre reside in a classroom and studio structure that was constructed in 2010. Due to consistent growth of academic offerings and an increase in student population, the facility is operating above capacity.

The Arts Complex Phase III will contain specialized production areas, teaching studios, storage, classrooms, faculty offices, and parking. These spaces will also attract more regional community activities to campus, which is a potential boon to local businesses. Phase III will enrich all UCF programs by emphasizing the critical importance of the arts and education, thus encouraging creativity and innovation across other academic disciplines. This convergence between the arts and other fields of study is among the new Center's most important contributions to UCF's vision of creating opportunity through access, partnerships, interdisciplinary endeavors, and community engagement. The need for the university to embrace and promote cultural activity and diversity is essential to its educational mission, which is reaffirmed by the recommendation that the School of Performing Arts "develop opportunities and partnerships to make UCF a destination campus for the arts."

This facility will contain teaching and lab space for performing arts students in the performing arts. With facilities built to professional standards that include the most advanced technology, these spaces can be accessed, shared, and experienced on many different platforms besides the traditional live setting. By using technology to create an innovative laboratory experience for undergraduate and graduate students, UCF can attract and retain exceptional students, faculty, and staff whose collective contributions strengthen the programs as well as promoting partnerships in the community.

Degrees offered in the School of Performing Arts are destination degrees, and Orlando is an international entertainment destination. Students who graduate with degrees in the Performing Arts, at both the undergraduate and graduate levels, possess the skills to contribute to the local economy by virtue of their marketability as employees.

The benefits of the Arts Complex will extend far beyond the UCF campus. Because of Orlando's prominence as an international tourist destination, the Arts Complex will help UCF students and faculty expand their reach and promote greater recognition of UCF internationally. The Arts Complex will enhance collaborations with community-based industry partners, such as Walt Disney World, Universal Studios, and Cirque du Soleil, and open the door to other potential partnerships. Furthermore, community-based partner organizations like the Orlando Philharmonic, Orlando Shakespeare Theater, and Orlando Repertory Theatre would also be able to use the new technologies as they support UCF's graduate programs. The Arts Complex Phase III would assist UCF in meeting state performance goals (skilled graduates earning competitive wages) and align with the Collective Impact Strategic Plan goal of transforming lives and livelihoods through UCF's impact on the students and communities it serves.

# SUSTAINABILITY AND LEED

The University of Central Florida is committed to the efficient use of natural resources. As energy costs and demands continue to grow, achieving energy efficiency has become increasingly important to the university's mission. Appropriate policies and procedures that govern the use of environmental resources and facilities have enabled UCF to achieve the improvements necessary to ensure a productive environment for all and establish itself as a national leader in energy research, education, and stewardship.

### Classroom/Office

Space classification shall be predominately classroom or office type, with laboratory or research type minimized. Project should achieve Gold LEED certification with the US Green Building Council. Energy consumption should be at least 30% less than a comparable building. Water consumption should be at least 50% less than a comparable building. Project should utilize the district cooling loop for space cooling needs. All heating and reheating should be hydronic type.

In line with the university policy for new construction, this project will be designed and constructed to achieve LEED Silver certification.

### EDUCATIONAL PLANT SURVEY

The Educational Plant Survey was conducted and approved in February, 2011. See recommendation No. 3.2, Performance Arts Center (Phase II).

### STATE UNIVERSITY SYSTEM CIP-3 SHORT TERM PROJECT EXPLANATION Page \_\_\_\_of \_\_\_ GEOGRAPHIC LOCATION: University of Central Florida, Orlando COUNTY: Orange PROJECT DESCRIPTION/TITLE: Art Complex III PROJECT BR No. (if assigned): Net to Facility/Space Net Area Gross Gross Area Unit Cost Construction Assumed Occupancy Type (NASF) Conversion (GSF) (Cost/GSF)\* <u>Cost</u> Bid Date Classrooms Date 1.5 0 305 0 Teaching Labs 10,570 1.5 15,855 376 5,961,480 Research Labs 1.5 0 386 0 Study 1.4 0 298 0 Instructional Media 1.5 0 222 0 Auditorium/Exhibition 10,930 1.2 13,116 329 4,315,164 Gymnasiums 1.2 0 226 0 Space Detail for Remodeling Projects Offices 5,000 1.5 7,500 331 2,482,500 BEFORE AFTER Campus Support Services 1.4 0 282 0 Space Net Area Space Totals Net Area 26,500 36,471 12,759,144 Туре (NASF) <u>Type</u> \*Apply Unit Cost to total GSF based on primary space type (NASF) Remodeling/Renovation Total Construction - New & Rem./Renov. 12,759,144 Total С Total 0 SCHEDULE OF PROJECT COMPONENTS ESTIMATED COSTS Funded to **Basic Construction Cost** <u>Date</u> <u>2018-19</u> <u>2019-20</u> <u>2020-21</u> 2021-22 1. a.Construction Cost (from above) 2022-23 Funded & In CIP 12,759,144 Add'I/Extraordinary Const. Costs 12,759,144 b.Environmental Impacts/Mitigation c.Site Preparation 160,368 d.Landscape/Irrigaiton 160,368 110,727 e.Plaza/Walks 110,727 f.Roadway Improvements g.Parking \_\_\_\_ spaces h.Telecommunication 250,000 i.Electrical Service 250,000 j.Water Distribution k.Sanitary Sewer System I.Chilled Water System m.Storm Water System n.Energy Efficient Equipment **Total Construction Costs** 0 0 0 0 0 13,280,239 13,280,239 2. Other Project Costs a.Land/existing facility acquisition b.Professional Fees 1,354,034 c.Fire Marshall Fees 1,354,034 34,836 d.Inspection Services 34,836 237,153 237,153 e.insurance Consultant 7,470 f.Surveys & Tests 7,470 45,000 g.Permit/Impact/Environmental Fees 45,000 71,488 h.Artwork 71,488 87,091 i.Moveable Furnishings & Equipment 87,091 j.Project Contingency 139,346 Total - Other Project Costs 627,683 767,029 1,889,327 714,774 2,604,101 ALL COSTS 1+2 0 0 0 0 1,889,327 13,995,013 15,884,340 Appropriations to Date Project Costs Beyond CIP Period Total Project In Source Fiscal Year Amount Source Fiscal Year Amount CIP & Beyond 0 PECO 2023-24 1,889,327 15,884,340 1,889,327 TOTAL TOTAL 1,889,327 17,773,667

		M PROJECT EXPLANATION	
AGENCY Univer BUDGET ENTITY PROJECT TITLE	sity of Central Florida SUS Research Building IV	AGENCY PRIORITY DATE BLDG PROGRAM APPROVED	Page <u>1</u> of <u>2</u> 48

UCF has a critical need for research space that can help drive Florida's innovation economy and assist our state in producing high paying jobs. Crosscutting research is a critical component in addressing many of the issues facing today's innovation based economy. Interdisciplinary research, which crosses traditional academic disciplinary lines, has led the way in the discovery and creation of new and innovative technologies that fuel economic growth and prosperity in the US. Florida is building a strong base of faculty with a broad base of technological expertise in key areas of science and technology based on strong clusters in sectors vital to Florida. The ability to leverage the talents of faculty from various disciplines creates synergies, value, and opportunities well beyond the sum of the individual parts.

UCF aspires to be a preeminent state research university and has set strategic goals to be a Top 50 research university by 2035. UCF is committed to a robust portfolio of research, scholarship, and creative activities across all disciplines, contributing to the creation of new knowledge. Specific metrics have been designed to meet preeminence, including doubling research awards from \$133 million to \$250 million and achieving a level where at least 25% of graduate degrees awarded are research-focused. Strategies to meet these objectives include: reaching at least 200 post-doctoral research appointees; increasing undergraduate participation in some form of research by 50%; winning ten proposals per year exceeding \$1M, five of which exceed \$3M; creating 16 start-up companies annually and executing 36 licenses and options for UCF intellectual property; and achieving 200 patents awarded over three years.

UCF must accelerate the growth of its research enterprise in people, funded research expenditures, and facilities in order to expand the university's research scale and impact. According to the UCF Educational Plant Survey conducted in October 2015, a deficit of 618,214 NASF exists in laboratory space. Construction of Research Building IV is necessary to reduce the current deficit, and is advantageous to UCF and the State of Florida as we strive to achieve top-tier, preeminent state research university status.

This facility will provide the infrastructure, atmosphere, and culture necessary to build strong, creative, and innovative teams and programs in research, technology transfer, and commercialization. Focusing on relevant technology in emerging areas, the facility will enable fundamental and applied research across traditional disciplines to create clusters. It will act as a bridge between technology development and technology transfer and commercialization, and become an integral component of economic development activities in the region and state.

### SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission.

Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

### **Research/Laboratory**

The space classification is predominately laboratory type, with office type minimized. The project will achieve LEED Gold certification with the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. Laboratories will have continuous variable air flow valves with air flow reset capabilities. Domestic and laboratory hot water needs shall be provided primarily by solar thermal energy. The project will utilize the district cooling loop for space cooling needs and will look at alternative measures to provide dehumidification with the classifications of lab spaces and related energy use, and all heating and reheating will be hydronic.

# EDUCATIONAL PLANT SURVEY

CIP-3 SHORT TERM PR	OJECTEX	PLANATION							Pageof	
GEOGRAPHIC LOCATIC PROJECT DESCRIPTIO	)N: Univer N/TITLE:	sity of Central Research Bui	Florida, Orlando ilding IV (Know ε	as Interdisciplina	rv Research Buik	dina II)	COUNTY: Orang PROJECT BR N			
		Net to					TROJECT DATA	iu. (ii assigneu).		=
	Net Area	Gross	Gross Area	Unit Cost	Construction	Assumed	Occupancy			
	(NASF)	Conversion	<u>(GSF)</u>	(Cost/GSF)*	<u>Cost</u>	Bid Date	Date			
lassrooms		1.5	0	305	0		<u></u>			
eaching Labs		1.5	0	376	0					
esearch Labs	26,298	1.5	39,447	386	15,226,542					
Study		1.4	0	298	0					
structional Media		1.5	0	222	ŏ					
uditorium/Exhibition		1.2	0	329	õ					
iymnasiums		1.2	õ	226	0		Shace Datail for	Donne doline Des	• •	
ffices	12,021	1.5	18,032	331	5,968,427		<u>Space Detail for</u> BEFORE			٦
ampus Support Serv	3,157	1.4	4,420	282	1,246,384				AFTER	-
	41,476		61,898	202	22,441,352	Space	Net Area	Space	Net Area	
Apply Unit Cost to total G		on primary spa	ace type		22,441,302	<u>Type</u>	(NASF)	Type	(NASF)	
			100 () p0							
emodeling/Renovation										
emodeling/Renovation		Г		. 1		4				
L	J	L		i		-				
otal Construction - New &	& Rem./Rer	nov.			22,441,35	2 Totaí		Total	0	ł
<u> </u>										1
CHEDULE OF PROJEC		NENTS						· · · · · · · · · · · · · · · · · · ·		
			Funded to			ESTIM	ATED COSTS			
asic Construction Cost			Date	<u>2018-19</u>	<u>2019-20</u>	2020 21	2024 22	2000.00	-	
. a.Construction Cost (fro	m above)			2010 10	2010-20	<u>2020-21</u>	<u>2021-22</u>	<u>2022-23</u>	Funded & In CIP	
Add'I/Extraordinary Cons	ef Costs		-					22,441,352	22,441,352	
b.Environmental Impact	Mitigation								-	
c.Site Preparation	Shiniyation	1							-	
								294,072	294,072	
d.Landscape/Irrigaiton								200,000	200,000	
e.Plaza/Walks									,	
f.Roadway Improvemen	ts								-	
g.Parking spaces									_	
h.Telecommunication								253,030	253 030	
i.Electrical Service								200,000	253,030	
j.Water Distribution									. <b>-</b>	
k.Sanitary Sewer System	n								-	
I.Chilled Water System									-	
m.Storm Water System									-	
n.Energy Efficient Equip	ment								-	
otal Construction Costs	non		0	0	,			879,340	879,340	
			0	U	0	C	)0	24,067,794	24,067,794	
Other Project Costs										
a.Land/existing facility ac	auisition									
b.Professional Fees	1								-	
c.Fire Marshall Fees							2,319,727		2,319,727	
d.Inspection Services							55,308		55,308	
e.Insurance Consultant							235,300		235,300	
f.Surveys & Tests									-	
									-	
g.Permit/Impact/Environn	ientaí Fees	\$							-	
h.Artwork							81,687		81,687	
Moveable Furnishings &	Equipment	t							01,007	
Project Contingency							235,181	1,223,243	- 235,181	
otal - Other Project Costs			-		-		2,927,203	1,223,243	2,927,203	
L COSTS 1+2			0	0	0	0	2,927,203	25,291,037	26,994,997	
	ropriations t		A	P	Project Costs Bey				Total Project In	
		iscal Year	Amount		Source	Fiscal Year	Amount		CIP & Beyond	
PEC	0		0	P	PECO	2023-24	2927203		28,218,240	
TOT	A1			_						
101.	AL.		<u> </u>	Т	OTAL		2927203	-	31,145,443	
TOT	AL			т	OTAL		2927203	-	31,145,443	

AGENCY University of Central Florida BUDGET ENTITY SUS PROJECT TITLE Theatre Building Renovation

AGENCY PRIORITY 49 DATE BLDG PROGRAM APPROVED

Page 1 of

2

PURPOSE, NEED, SCOPE, RELATIONSHIP OF PROJECT TO AGENCY OBJECTIVES

The existing Theatre Building was constructed in 1968 and there is considerable capital renewal needed for health/safety issues as well as renovations for more appropriate user needs. In addition, the older performance space (auditorium) will need to be remodeled to accommodate teaching space. This facility is in fair condition.

Once Theatre occupies the new performance space in the proposed Arts Complex Phase II, the performance space in the existing Theatre Building will be unusable without renovation.

The university contracted with the ISES Corporation to conduct a Facilities Condition Assessment (FCA) to benchmark the condition of its E&G facilities. The Theatre renovation will address both critical and non-critical issues identified in the FCA. These issues encompass deficiencies such as indoor air quality, fire alarm modernization, potable water and plumbing distribution systems, electrical service, asbestos, HVAC modernization, lighting upgrades, building automation, ADA compliance, building envelope repairs, interior finishes, flooring, egress, exterior lighting, and utility service entrance upgrades. Information technology upgrades are also required in order to meet current and future requirements.

# SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

# **Classroom/Office**

The space classification is predominately assembly, classroom or office type, with laboratory or research type minimized. The project will achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and

offices and related energy use. All heating and reheating will be hydronic.

# EDUCATIONAL PLANT SURVEY

STATE UNIVERSITY SYSTEM CIP-3 SHORT TERM PROJECT EXPLANATION

GEOGRAPHIC LOCATI	ON: Univer	sity of Centra	al Florida, Orlar	do					Pageof
PROJECT DESCRIPTIC	N/TITLE:	Theater Bi	uilding Renova	tion			COUNTY: Orang PROJECT BR No	e (if occirpted):	
		Net to					PROJECT BRING	b. (ir assigned):	
	Net Area	Gross	Gross Area	Unit Cost	Construction	Assumed	Occupancy		
<u>Type</u>	(NASF)	<u>Conversion</u>	<u>(GSF)</u>	(Cost/GSF)*	Cost	Bid Date	Date		
Classrooms		1.5	0	305	0	Did Date	Date		
Teaching Labs		1.5	0	376	ő				
Research Labs		1.5	ō	386					
Study		1.4			0				
nstructional Media			0	298	0				
Auditorium/Exhibition		1.5	0	222	0				
		1.2	0	329	0				
Symnasiums		1.2	0	226	0		Space Detail for D		
Offices		1.5	0	331	õ		Space Detail for Re		
Campus Support Service	s	1.4	Ō	282			ORE		AFTER
otals	0				0	Space	Net Area	Space	Net Area
Apply Unit Cost to total		on primary sp	Dace type	-	0		(NASF)	<u>Type</u>	(NASF)
						Offices	6,045	Offices	6,
Remodeling/Renovation		_							
L	22,064	L	29,469	[	3,107,896	4			
otal Construction - New a	& Rem./Rer	10V.			3,107,896	Total	6,045	Total	
				=			0,040		6,
CHEDULE OF PROJEC	TCOMPON	NENTS				ESTIMAT	ED COSTS		
asic Construction Cost			Funded to						
			<u>Date</u>	<u>2018-19</u>	2019-20	<u>2020-21</u>	<u>2021-22</u>	2022.22	
a.Construction Cost (fro	m above)					2020 21	2021-22	2022-23	Funded & In (
Add'I/Extraordinary Cons	st. Costs							3,107,896	3,107,8
b.Environmental Impact	s/Mitigation								
c.Site Preparation	siningation								
d.Landscape/Irrigaiton									
e.Plaza/Walks									•
f.Roadway Improvemen	ts								
g.Parking spaces									
h.Telecommunication									
									-
i.Electrical Service									
j.Water Distribution									-
k.Sanitary Sewer System	n								-
Chilled Mater Overteen	•								_
I.Chilled Water System									
m.Storm Water System									-
n.Energy Efficient Equip	ment								-
tal Construction Costs									_
tal Construction Costs			0	0	0	0	0	3,107,896	3,107,8
Other Project Costs									0,107,0
Land/existing facility ac									
	quisition								
Professional Fees								300 370	-
Fire Marshall Fees								399,270	399,2
I.Inspection Services								9,141	9,1
Insurance Consultant								11,772	11,7
Surveys & Tests								1,865	1,80
.Permit/Impact/Environm									
.reimil/impact/Environm	iental Fees							17 004	-
								47,361	47,30
.Artwork								• • •	-
.Artwork Moveable Furnishings &	Equipment							212,578	212,5
.Artwork Moveable Furnishings &	Equipment							548,452	548,4
.Artwork Moveable Furnishings & Project Contingency	Equipment					-		1,230,439	1,230,43
.Artwork Moveable Furnishings & Project Contingency	Equipment		-				-	1,230,439	1.200.4
	Equipment		0	0					
Artwork Moveable Furnishings & Project Contingency al - Other Project Costs	Equipment			0	0	0	0	4,338,335	4,338,3
Artwork Moveable Furnishings & Project Contingency al - Other Project Costs - COSTS 1+2 Appr	opriations to	o Date				0			4,338,3
Artwork Moveable Furnishings & Project Contingency al - Other Project Costs - COSTS 1+2 Appr	opriations to				oject Costs Beyo	0 nd CIP Period	0		4,338,3 Total Project Ir
Artwork Moveable Furnishings & Project Contingency al - Other Project Costs - COSTS 1+2 Appr	opriations to	o Date	0 Amount			0			4,338,3 Total Project Ir CIP & Beyond
Artwork Moveable Furnishings & Project Contingency al - Other Project Costs - COSTS 1+2 Appr	opriations to	o Date	0		oject Costs Beyo	0 nd CIP Period	0		
Artwork Moveable Furnishings & Project Contingency al - Other Project Costs . COSTS 1+2 Appr	opriations to burce Fis	o Date	0 Amount	Pr	oject Costs Beyo	0 nd CIP Period	0		4,338,3 Total Project Ir CIP & Beyond

CIP-3 SHORT-TERM PR CIP-3, A – NARRAT		
AGENCY University of Central Florida BUDGET ENTITY SUS PROJECT TITLE Sustainability Center	AGENCY PRIORITY DATE BLDG PROGRAM APPROVED	Page <u>1</u> of <u>1</u> 50

The Sustainability Center will provide a collaborative environment where academic, research, and operational departments will partner to accelerate scientific discovery in sustainability and energy. The center will provide the offices and conference space needed to promote the university's continued sustainable efforts, while forging strong connections with research and academics units. This facility will promote faculty, staff, and student interaction with industry partners, and provide students with a home for continued learning about this emerging field. Designed and constructed with sustainability and energy in mind, the Center will also provide research space for building and construction industry demonstrations.

# SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

### Classroom/Office

The space classification is predominately classroom or office type, with laboratory or research type minimized. The project will achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use. All heating and reheating will be hydronic.

# EDUCATIONAL PLANT SURVEY

	ROJECT EXPLA								Pageof
GEOGRAPHIC LOCATI PROJECT DESCRIPTIC	ON: University	Sustainabilit					COUNTY: Oran PROJECT BR N	•	):
Facility/Space	Net Area	Net to Gross	Gross Area	Unit Cost	Construction	Assumed	0000000000		
Type	(NASF)	Conversion	(GSF)	(Cost/GSF)*		Bid Date	Occupancy Date		
Classrooms		1.5	0	305	0	Did Date	Date		
Teaching Labs		1.5	Ō	376	õ				
Research Labs		1.5	0	386	õ				
Study		1.4	0	298	õ				
nstructional Media		1.5	0	222	0				
Auditorium/Exhibition		1.2	0	329	õ				
Gymnasiums		1.2	0	226	0 0		Space Detail for	Periodeling Pr	oiooto
Offices	8,800	1.5	13,200	331	4,369,200		ORE		AFTER
Campus Support Service	es	1.4	0	282	0	Space	Net Area	Space	Net Area
Fotals	8,800		13,200		4,369,200	<u>Туре</u>	(NASF)	<u>Type</u>	(NASF)
Apply Unit Cost to total	GSF based on p	primary space	ype			-16 <i>2</i>		1920	
Remodeling/Renovation					·				
Fotal Construction - New	& Rem./Renov.				4,369,200	Total	0	Total	0
		<u> </u>					<u>×</u> _		<u> </u>
CHEDULE OF PROJEC	T COMPONEN	TS	E			ESTIN	IATED COSTS		
Basic Construction Cost			Funded to	2018 40	2010 0001				
. a.Construction Cost (fr	om above)		Date	<u>2018-19</u>	<u>2019-2021</u>	<u>2020-21</u>	<u>2021-22</u>	<u>2022-23</u>	Funded & in C
Add'I/Extraordinary Cor								4,369,200	4,369,2
b.Environmental Impa									-
c.Site Preparation	sishmiligation								-
d.Landscape/Irrigaiton								150,000	150,0
e.Plaza/Walks								100,000	100,0
f.Roadway Improveme	nts								-
g.Parking spaces	11.5								· -
h.Telecommunication									-
i.Electrical Service								150,581	150,58
j.Water Distribution									-
k.Sanitary Sewer Syste	m								-
I.Chilled Water System									-
m.Storm Water System	n								-
n.Energy Efficient Equi									-
otal Construction Costs	pinein		0	0	0	0		-	-
		······································				0	0	4,769,781	4,769,7
Other Project Costs									
a.Land/existing facility a	cquisition								-
b.Professional Fees								475,975	475,97
c.Fire Marshall Fees								12,717	12,71
d.Inspection Services								106,013	106,01
e.Insurance Consultant								2,655	2,65
f.Surveys & Tests								25,000	25,00
g.Permit/Impact/Enviror	mental Fees							44,321	44,32
h.Artwork								31,792	31,79
i.Moveable Furnishings	& Equipment							635,844	635,84
j.Project Contingency								254,337	254,33
otal - Other Project Cost	3		-	-	-	-		1,588,654	1,588,68
L COSTS 1+2			0	0	0	0	0	6,358,435	6,358,4
	Appropriation	is to Date			Project Costs D	overed CID D			
	Source	Fiscal Year	Amount	ľ	Project Costs B Source	eyond CIP Per Fiscal Year	iod Amount		Total Project Ir CIP & Beyond
			0						
	TOTAL			-		_		_	
	TOTAL		· ·		<b>FOTAL</b>		0		6,358,4

	CIP-3 SH CIP-	ORT-TERM PROJECT EXPLANATION 3, A – NARRATIVE DESCRIPTION	
AGENCY <u>Univer</u> BUDGET ENTITY PROJECT TITLE	sity of Central Florida SUS Wet Teaching Lab and Expanded STEM Facility	AGENCY PRIORITY DATE BLDG PROGRAM APPROVED	Page <u>1</u> of <u>2</u> 51

There has been over 280% increase in Burnett School of Biomedical Sciences (BSBS) majors from 2002 to 2015 (754 to 2,866) and over a 340% increase in non-majors (1,883 to 8,366) needing access to the six wet teaching labs as well as other BSBS courses. During this same time period, there has been virtually no increase in wet teaching lab space. In order to deliver a complete curriculum for the Biomedical Sciences, the Burnett School borrows classroom spaces from 10 other buildings scattered throughout the campus. Faculty offices are in four different locations, some of which are 25 miles away. As a feeder program for medicine and other critical disciplines, the BSBS is in need of one consolidated location to support its majors ranked by university enrollment: #2 Health Sciences: Pre-Clinical and #3 Biomedical Sciences. Wet teaching lab offerings must be consolidated and updated, and the current space does not allow for expansion of the program. Desperately needed spaces include wet lab and prep labs for Virology, Mycology, Zymology, and Parasitology, collaborative student study space, faculty offices, and a lecture hall for majors.

The State University System's Strategic Plan 2025 addresses teaching and learning goals for undergraduate, graduate, and professional education. The strategic priorities for a knowledge economy are to increase the number of degrees awarded in STEM and other areas of strategic emphasis. To accomplish this Florida must become more competitive in the national and global economy.

The University of Central Florida's Strategic Plan states, "Enhance initiatives in STEM and other critical-need disciplines..."

The College of Medicine Strategic Plan 2015-2020 intends to maximize learning opportunities and environments for COM students and residents in the medical and biomedical sciences programs. Initiatives include ensuring appropriate and sufficient facilities for undergraduate and graduate education in the Burnett School of Biomedical Sciences, enhancing infrastructure and the resources needed to promote an outstanding learning environment.

# SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits which contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Department of Utilities & Energy Services provides oversight for all new construction and major renovation projects, and expedites the commissioning process with the latest industry standards to ensure the university's

sustainability goals are met and design parameters achieved.

### Classroom/Office

The space classification is predominately classrooms and teaching labs classification. The project will achieve LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2007, and water consumption will be at least 30% less than that of a comparable building.

# EDUCATIONAL PLANT SURVEY

As the planning year approaches, the Educational Plant Survey for this project will be addressed.

CIP-3 SHORT TER									Pageof
GEOGRAPHIC LOC	ATION: Unive	rsity of Centra	l Florida, Orlando				COUNTY: Orang	1e	
PROJECT DESCRI	TION/TITLE:	Wet Leachin	g Lab and Expan	ded Stem Facility			PROJECT BR N		
Facility/Space	Net Area	Net to Gross	0					(	·
Туре	(NASF)	<u>Conversion</u>	Gross Area	Unit Cost	Construction	Assume	d Occupancy		
Classrooms	6,000	1.5	( <u>GSF)</u>	(Cost/GSF)*	<u>Cost</u>	<u>Bid Date</u>			
eaching Labs	27,500	1.5	9,000	305	2,745,000				
Research Labs	35,000	1.5	41,250	376	15,510,000				
ivarium	30,000	1.5	52,500	386	20,265,000				
tudy	9,000	1.5	45,000	298	13,410,000				
structional Media	6,000	1.4	12,600	222	2,797,200				
uditorium/Exhibition		1.2	9,000	329	2,961,000				
ymnasiums	0	1.2	9,600 0	226	2,169,600				
ffices	18,000	1.5	27,000	331	0		Space Detail for	Remodeling Pro	ojects
ampus Support Ser	v 25,000	1.4	35,000	282	7,614,000		BEFORE		AFTER
otals	164,500		240,950	276	9,660,000	Space	Net Area	Space	Net Area
pply Unit Cost to to		on primary sp	ace type	=	77,131,800	Туре	(NASF)	<u>Type</u>	(NASF)
		en princi y op	ace type						
emodeling/Renovati	on	-							
	L]	L		Ľ		1			
otal Construction - N	ew & Rem./Re	nov				1			
				=	0	Total	<u>0</u>	Total	<u>0</u>
CHEDULE OF PRO	JECT COMPO	NENTS				ESTI	MATED COSTS		
isic Construction Co	st		Funded to						
a.Construction Cost			Date	<u>2018-19</u>	<u>2019-20</u>	<u>2020-21</u>	<u>2021-22</u>	<u>2022-23</u>	Funded & in CI
Add'I/Extraordinary (	Const Costa								
b.Environmental Im	Dinst, Costs								-
c.Site Preparation	Jacis/Miligation	1							-
d.Landscape/Irrigait	00							731,321	- 731,32
e.Plaza/Walks	UII							550,000	731,32 550,00
Roadway Improver	mente							000,000	550,00
g.Parking space									-
n.Telecommunicatio									-
Electrical Service								953,800	953,80
Water Distribution									
Sanitary Sewer Sy	stem								_
Chilled Water Syste	m								_
n.Storm Water Syst	em								-
Energy Efficient Ec	uipment								-
al Construction Cos	s							318,151	318,15
				0	0		0 0	2,553,272	2,553,27
ther Project Costs									
Land/existing facility	acquisition								
Professional Fees								40 545	-
ire Marshall Fees								10,515,024	10,515,024
nspection Services								316,406	316,406
Insurance Consulta	nt							1,108,150	1,108,150
Surveys & Tests								71,661	71,661
Permit/Impact/Envir	onmental Fees							100,000	100,000
Artwork								213,049	213,049
loveable Furnishing	s & Equipment								-
roject Contingency I - Other Project Co	sts							1,265,626	1,265,626
			<u> </u>		-			13,589,916	13,589,916
COSTS 1+2			0	0	0	0	0	16,143,188	16,143,18
Δ	ppropriations to	n Date							
. ^		scal Year	Amount	Proj	ject Costs Beyor				Total Project In
P		cal redr	Amount			Fiscal Year	Amount		CIP & Beyond
r*			0		20	023-24	129,145,509		16,143,188
T	OTAL			тот		024-25	16,143,188		145,288,697

·	CIP-3 SHORT-TERM F CIP-3, A – NARR/	PROJECT EXPLANATION ATIVE DESCRIPTION	
	sity of Central Florida		Page 1 of 1
BUDGET ENTITY PROJECT TITLE	SUS Utilities Infrastructure and Site Work Clinical Facilities Health Sciences Campus	AGENCY PRIORITY DATE BLDG PROGRAM	52
		APPROVED	

The Lake Nona campus is served by the Orlando Utilities Commission (OUC), a municipally owned public utility that provides electric, water, re-claimed water, and chilled water. Coordination between OUC and the design team early in pre-design will be imperative to ensure adequate capacities and reserve demand are available for both distribution infrastructure and generation sites from the utility. Where possible, master metering should be employed for electric, water, re-claimed and chilled water to reduce cost with the serving utility providers. Utility-grade sub meters must be installed to account for consumption across the various tenants or mixed use spaces to ensure correct cost recovery from direct service organizations and auxiliaries.

CEOODADUIO LOO		XPLANATION							Pageof
GEOGRAPHIC LOC PROJECT DESCRIF	ATION: Unive TION/TITLE:	rsity of Centra Utilities Infra Net to	al Florida, Orlan structure and S	do ite Work Lake N	ona Clinicial Failitie	s	COUNTY: Orang PROJECT BR N	ge Io. (if assigned):	
Facility/Space	Net Area	Gross	Gross Area	Unit Cost	Construction	Assumed	Occupancy		
<u>Type</u>	(NASF)	<u>Conversion</u>	( <u>GSF)</u>	(Cost/GSF)*	Cost	Bid Date	Date		
Classrooms		1.5	0	305	0		<u></u>		
Feaching Labs Research Labs		1.5	0	376	0				
Study		1.5	0	386	0				
nstructional Media		1.4	0	298	0				
uditorium/Exhibition		1.5	0	222	0				
Symnasiums		1.2 1.2	0	329	0				
Offices		1.2	, O O	226	0		Space Detail for R	emodeling Proje	ects
Campus Support Ser	vices	1.4	0	331 282	0		FORE		AFTER
otals	0			202	0	Space	Net Area	Space	Net Area
Apply Unit Cost to to	al GSF based	on primary s		=		<u>Type</u>	(NASF)	<u>Type</u> Offices	(NASF)
								011000	
emodeling/Renovati	on	і г	0	г					
otol Construction N	L	I L	0	L					
otal Construction - N	ew & Rem./Re	enov.		=	0	Total		Total	·
CHEDULE OF PRO	JECT COMPO	NENTS				ESTIMA	TED COSTS		
asic Construction Co	et		Funded to						
a.Construction Cost			Date	<u>2018-19</u>	<u>2019-20</u>	<u>2020-21</u>	<u>2021-22</u>	<u>2022-23</u>	Funded & In CIP
Add'l/Extraordinary (								10,509,124	10,509,124
b.Environmental Im	nacts/Mitigatio	n							-
c.Site Preparation	paolormitigatio								-
d.Landscape/Irrigait	on							250,000	250,000
e.Plaza/Walks								200,000	200,000
f.Roadway Improver	nents								-
g.Parking space	es								-
h.Telecommunicatio	n								-
i.Electrical Service								250,000	250,000
j.Water Distribution									-
k.Sanitary Sewer Sy	stem								-
I.Chilled Water Syste									-
m.Storm Water Syst									-
n.Energy Efficient Ed									-
tal Construction Cos			0	0	0	0	0	44 000 404	-
_					<del>`</del>		0	11,209,124	11,209,124
Other Project Costs									
a.Land/existing facilit	y acquisition								-
p.Professional Fees							-	1,072,648	1,072,648
Fire Marshall Fees							_	29,498	29,498
Inspection Services							-	82,290	29,498 82,290
Insurance Consulta	nt						-	6,305	
Surveys & Tests							-	45,000	6,305
.Permit/Impact/Envi	onmental Fee	s					-	45,000 82,304	45,000
Artwork							-	02,304	82,304
Moveable Furnishing	js & Equipmer	nt					-		-
Project Contingency							-	703,463	-
al - Other Project Co	osts			-				2,021,508	703,463 2,021,508
COSTS 1+2			0	0	0	· 0	0	13,230,632	13,230,632
	Appropriations	to Date			cient Cente De				
,		iscal Year	Amount	PI	oject Costs Beyon Source	Fiscal Year	A +		Total Project In
,	Source P				Julice	inscal rear	Amount		CID & Dovond
	PECO	iodai i dai					7 inount		CIP & Beyond
			0				, mount		13,230,632

# Attachment B

### STATE UNIVERSITY SYSTEM Fixed Capital Outlay Projects Requiring Board of Governors Approval to be Constructed, Acquired and Financed by a University or a University Direct Support Organization with Approved Debt BOB-1

.

				Project	 Project	Funding	Estimated Month Of Board		nnual Amount For A Maintenance Costs
Univ.	Project Title	GSF	Brief Description of Project	Location	Amount	Source	Approval Request	Amount	Source
UCF	Spectrum Stadium Expansion and Improvements Phase I	21,337	Additional club seating, suites, and operational booths	UCF, Orlando	\$ 14,790,000 Donations		July	\$320,055	DSO
UCF	Baseball Clubhouse Expansion and Renovation		New playing field, chair backs, audio, and lighting upgrade	UCF, Orlando	\$ 1,020,000 Donations		July	\$0	DSO
UCF	Spectrum Stadium Expansion and Improvements Phase II	80,000	Additional seating up to 20,000	UCF, Orlando	\$ 39,662,000 Donations		July	\$1,200,000	DSO
UCF	Football Building	45,000	Offices, storage, and support space	UCF, Orlando	\$ 14,737,500 Donations		July	\$675,000	Auxiliary
UCF	Golf Training Facility (move from Twin Rivers Golf Course)			UCF, Orlando	\$ 2,000,000 Donations		July	\$0	DSO
UCF	Garvy Center for Student-Athlete Nutrition	9,783		UCF, Orlando	\$ 1,850,000 Donations		July	\$146,745	DSO
UCF	Venue Expansion and Renovation		Offices, storage, and support space	UCF, Orlando	\$ 8,000,000 Donations		July	\$0	Auxiliary

### Attachment C

.

### STATE UNIVERSITY SYSTEM Fixed Capital Outlay Projects that may Require Legislative Authorization and General Revenue Funds to Operate and Maintain BOB-2

						Estimated Annual Amount For
Univ.	Project Title		Project	Project	Funding	
UCF	Florida Advanced Manufacturing Research Facility	GSF Brief Description of Project	Location	Amount	Source	Operational & Maintenance Costs
UCF	Optical Materials Lab Addition	81,750 Research Labs, Wet Labs, Collaboration Rooms, Offices	UCF-Osceola	\$75,000,000	PECO	Amount Source
UCF		5,530 Research Labs	UCF-Orlando	\$1,640,000	E&G	\$1,339,850 General Revenue
UCF	John C. Hitt Library Expansion Phase I (ARC)	8,800 Automatic Retrieval Center	UCF-Orlando	\$10,771,963	CITE	\$90,634 General Revenue
1005				010,771,000	CHF	\$144,228 General Revenue
UCF	John C. Hitt Library Expansion Phase I (Connector)	12,609 Automatic Retrieval Center	UCF-Orlando	\$21,366,592	CITE	· · · · ·
UCF	CREOL	2,756 Research Labs	UCF-Orlando	\$1,406,000		\$122,007 General Revenue
UCF	Arts Complex II Performance	2,728 Teaching Lab, Offices	UCF-Orlando		E&G	\$45,170 General Revenue
UCF	BPW Building	4,038 Teaching Labs, Offices	UCF - Orlando	\$964,411	PECO	\$31,353 General Revenue
UCF	District Energy IV Plant	13,000 Offices		\$275,000	E&G	\$66,181 General Revenue
			UCF - Orlando	\$13,000,000	Auxiliary	\$94,231 General Revenue
UCF	Trevor Colbourn Hall and Colbourn Demolition	100 F00 - 075				
UCF	Coastal Biology	136,500 Offices, Classrooms	UCF-Orlando	\$38,000,000	E&G	\$2,237,180 General Revenue
UCF	Partnership IV Phase A and B	3,000 Research	UCF-Melbourne Beach	\$2,500,000	E&G	\$49,169 General Revenue
UCF	Florida Solar Energy Center Renovation	221,537 Office, Research Labs	UCF-Orlando	\$42,000,000	PECO	\$3,630,903 General Revenue
UCE	Research Building I (know as Interdisciplinary Research and Incubator Facility)	42,986 Offices, Research Labs	UCF-Orlando	\$10,000,000	PECO	\$704,523 General Revenue
UCF	Arboretum Green House	97,482 Offices, Labs	UCF-Orlando	\$46,614,853	E&G	\$1 597 691 Ceneral David
UCF	Band Building	800 Teaching Lab	UCF-Orlando	\$400.000	E&G	\$1,597,691 General Revenue
UCF	CREOL Expansion Phase II	6,000 Teaching Labs, Offices	UCF-Orlando	\$5,000,000	E&G	\$13,112 General Revenue
UCF	CREOL Expansion Phase in	13,900 Research Labs, Offices	UCF-Orlando	\$6,784,228	E&G	\$98,338 General Revenue
				\$0,104,220	EaG	\$227,815 General Revenue
	Visual Arts Building Addition	699 Teaching Lab	UCF-Orlando	\$2,000,000	-	·····
UCF	Arecibo National Astronomy Ionosphere Center	62,918 Research Labs, Offices	UCF-Puerto Rico	\$2,000,000	E&G	\$11,456 General Revenue
UCF	Medically Directed Wellness and Sports Center	2,000 Teaching Labs, Classroom	UCF Lake Nona		E&G .	\$1,031,201 General Revenue
UCF	UCF Downtown Tri-generation Facility	15,000 Teaching Labs, Offices	UCF-Orlando		E&G	\$32,779 General Revenue
UCF	College of Nursing and Allied Health - Health Sciences Campus	145,000 Teaching Labs, Offices	UCF-HSC	\$15,118,000	E&G	\$245,844 General Revenue
UCF	UCF Downtown Garage (E and G Spaces)	32,000 Offices, Support	UCF-Orlando	\$83,216,700	E&G	\$2,376,492 General Revenue
UCF	Energy Lab	20,000 Research Labs. Offices	UCF-Orlando	\$15,000,000	E&G	\$524,467 General Revenue
UCF	Laboratory and Environmental Support Expansion	1,535 Offices			E&G	\$327,792 General Revenue
		• • • • • • • • • • • • • • • • • • • •	UCF-Orlando	\$909,534	E&G	\$25,158 General Revenue

.

**ITEM:** <u>**FF-2**</u>

### University of Central Florida Board of Trustees

**SUBJECT:** Five-year Capital Improvement Plan

**DATE:** July 19, 2018

### PROPOSED BOARD ACTION

Approve the capital improvement plan for 2019-20 through 2023-24.

### **BACKGROUND INFORMATION**

Each year, the university must submit an updated capital improvement plan to the Board of Governors. This plan identifies projects that will be included in the three-year Public Education Capital Outlay list, and it provides information to the State Board of Education for its request for capital project funding for 2019-20.

The capital improvement plan must be submitted to the Board of Governors' staff by August 1, 2018. The attached schedules include the following:

- projects that are proposed for inclusion in the five-year capital improvement plan
- items to be included in the 2019-20 Appropriations Authorization Bill, including projects funded by bonds, direct support organization projects, and projects requiring general revenue to operate.

We request approval to submit the 2019-20 Capital Improvement Plan with the projects listed in the attached schedules.

Supporting documentation:	Attachment A: 2019-20 Five-year Plan List Attachment B: 2019-20 Fixed Capital Outlay Projects
	Requiring Board of Governors Approval to
	be Constructed, Acquired, and Financed by
	a University or a University Direct Support
	Organization with Approved Debt
	Attachment C: 2019-20 Fixed Capital Outlay Projects
	That May Require Legislative
	Authorization and General Revenue Funds
	to Operate and Maintain

**Prepared by:** Lee Kernek, Associate Vice President for Administration and Finance

Submitted by: William F. Merck II, Vice President for Administration and Finance and Chief Financial Officer

#### Board of Trustees Meeting - Reports

#### Attachm ent A

UNIVERSITY OF CENTRAL FLORIDA FUTURE PROJECT PROJE 2019 FIVE-YEAR FIXED CAPITAL IMPROVEMENTS		19-24					
PECO PROJECTS REVISED 05/04/2018	2019-20	2020-21	2021-22	2022-23	2023-24	TOTALS	RANK
MAINTENANCE AND UTILITY INFRASTRUCTURE (P,C)	YR #1 \$14,000,000	YR #2 \$14,000,000	YR #3 \$14,000,000	YR #4 \$14,000,000	YR #5 \$14,000,000	\$70,000,000	1
RESEARCH II - SCIENCE, ENGINEERING, AND COMMERCIALIZATION FACILITY (P,C,E) LEARNING LABORATORY - ACTIVE LEARNING, TEACHING LAB, AND MAKER SPACE FACILITY (P,C,E)	\$11,215,931 \$8,512,000	\$89,727,447 \$68,096,000	\$11,215,931 \$8,512,000			\$112,159,309 \$85,120,000	2
ENGINEERING BUILDING I RENOVATION (P,C,E)	\$1,500,000	\$17,745,473	\$1,176,311			\$20,421,784	4
BIOLOGICAL SCIENCES RENOVATION (P,C,E) FLORIDA SOLAR ENERGY CENTER RENOVATION (P,C,E)		\$4,181,000	\$4,500,000 \$11,322,000			\$8,681,000 \$11,322,000	5
CHEMISTRY RENOVATION (P,C,E) HEALTH SCIENCES AND COLLEGE OF NURSING BUILDING (P,C,E) (formerly known as College of Nursing)			\$5,000,000 \$19,000,000			\$5,000,000 \$19,000,000	7 8
PERFORMING ARTS COMPLEX PHASE I (P,C,E)			\$3,139,552	\$27,809,218	\$3,139,552	\$34,088,322	9
UCF DOWNTOWN CAMPUS BUILDING II (P,C) HOWARD PHILLIPS HALL RENOVATION (P,C,E)				\$8,799,156 \$12,400,000	\$70,393,244	\$79,192,400 \$12,400,000	10
CHILLED WATER REPLACEMENT (P,C)				\$5,100,000 \$7,140,000	\$10,200,000 \$10,200,000	\$15,300,000	12
WASTEWATER, WATER, NATURAL GAS REPLACEMENT (P,C) TOTAL	\$35,227,931	\$193,749,920	\$77,865,794	\$75,248,374	\$10,200,000	\$17,340,000 \$490,024,815	13
	2019-20	2020-21	2021-22	2022-23	2023-24		
CITF PROJECT REQUESTS [OHN C. HITT LIBRARY RENOVATION PHASE II (P.C.F)	YR #1 \$33,566,573	YR #2	YR #3	YR #4	YR #5	TOTALS \$33,566,573	RANK
CREATIVE SCHOOL FOR CHILDREN (P,C,E)		\$6,000,000				\$6,000,000	2
TOTAL	\$33,566,573	\$6,000,000	\$0	\$0	\$0	\$39,566,573	
REQUESTS FROM OTHER STATE SOURCES	2019-20 XR #1	2020-21 YR #2	2021-22 YR #3	2022-23 YR #4	2023-24 YR #5	TOTALS	RANK
CAMPUS ENTRYWAYS PHASE I (P,C,E)	\$2,153,996		18.15			\$2,153,996	1
CAMPUS ENTRYWAYS PHASE II (P,C,E) WELCOME CENTER EXPANSION (P,C,E)		\$5,015,978 \$8,768,771				\$5,015,978 \$8,768,771	2
FERRELL COMMONS (E AND G SPACE) RENOVATION (P,C,E)		\$8,138,731				\$8,138,731	
CAMERA ACCESS CONTROL (P,C) VISUAL ARTS BUILDING HVAC (P,C,E)		\$58,000,000 \$400,000	\$3,600,000			\$58,000,000 \$4,000,000	5
COASTAL BIOLOGY STATION (P,C,E)			\$5,358,435 \$25,000,000			\$5,358,435 \$25,000,000	7
ARA CHILLED WATER PLANT (P,C,E) PERFORMING ARTS COMPLEX PHASE II (P,C)			\$25,000,000	\$4,000,000	\$32,000,000	\$36,000,000	8 9
MATHEMATICAL SCIENCES BUILDING REMODELING AND RENOVATION (P,C) RESEARCH BUILDING III (P,C,E)				\$998,783 \$6,859,773	\$13,431,308 \$54,878,187	\$14,430,091 \$61,737,960	10
VISUAL ARTS RENOVATION AND EXPANSION (P,C)				\$3,730,000	\$29,840,000	\$33,570,000	12
MILLICAN HALL RENOVATION (P,C) BUSINESS ADMINISTRATION RENOVATION (P,C)				\$1,502,226 \$718,954	\$13,221,575 \$13,790,853	\$14,723,801 \$14,509,807	13
FACILITIES & SAFETY COMPLEX RENOVATION (P,C,E)				\$7,054,917		\$7,054,917	15
RESEARCH BUILDING IV (P,C) MULTI-PURPOSE RESEARCH AND EDUCATION BUILDING (P,C,E)				\$8,396,362 \$4.044,473	\$67,170,901 \$32,357,976	\$75,567,263 \$36,402,449	16 17
CLASSROOM BUILDING III (P,C)				\$5,262,180	\$42,097,440	\$47,359,620	18
FACILITIES AND SAFETY BUILDING AT HEALTH SCIENCES CAMPUS (P,C,E) RECYCLING CENTER (P,C)				\$8,560,997 \$3,281,715	\$26,253,725	\$8,560,997 \$29,535,440	19 20
HUMANITIES AND FINE ARTS II (P,C) SOCIAL SCIENCES FACILITY (P,C,F)				\$3,955,685	\$24,342,669	\$28,298,354	21
UCF DOWNTOWN CAMPUS BUILDING II (P,C)				\$3,052,049 \$87,991,555	\$24,416,391	\$27,468,440 \$87,991,555	22 23
TECHNOLOGY COMMONS II RENOVATION (P,C,E) COLLEGE OF SCIENCES BUILDING RENOVATION (P,C,E)				\$4,243,038 \$4,590,773		\$4,243,038 \$4,590,773	24 25
SIMULATION AND TRAINING BUILDING (P,C)				\$3,382,073	\$26,507,311	\$4,590,773	26
BAND BUILDING II INFRASTRUCTURE (P,C) RESEARCH BUILDING V (P,C)				\$300,000 \$3,284,322	\$2,400,000 \$28,376,544	\$2,700,000 \$31,660,866	27
MEDICAL EDUCATION AUDITORIUM RENOVATION				33,204,322	\$3,840,000	\$3,840,000	29
THEATRE BUILDING RENOVATION (P) SUSTAINABILITY CENTER (P,C,E)					\$4,867,612 \$7,134,164	\$4,867,612 \$7,134,164	
WET TEACHING LAB AND EXPANDED STEM FACILITY (P)					\$18,112,657	\$18,112,657	32
UTILITY INFRASTRUCTURE AND SITE WORK CLINICAL FACILITIES HEALTH SCIENCES CAMPUS (P) TOTAL	\$2,153,996	\$80,323,480	\$33,958,435	\$165,209,875	\$14,844,769 \$479,884,082	\$14,844,769 \$761,529,868	33
	2019-20	2020-21	2021-22	2022-23	2023-24		
REQUESTS FROM NON-STATE SOURCES, INCLUDING DEBT	YR #1	2020-21 YR #2	2021-22 YR #3	2022-25 YR #4	2023-24 YR#5	TOTALS	RANK
DOWNTOWN WELCOME CENTER (P,C,E) DOWNTOWN CAMPUS SERVICES (P,C,E)	\$3,060,000 \$3,500,000					\$3,060,000	
UCF SOLAR FARM (P,C,E)	\$17,000,000					\$17,000,000	
INSTITUTE FOR HOSPITALITY IN HEALTHCARE (P,C,E) HEALTH SCIENCES CAMPUS UCF DOWNTOWN CAMPUS GARAGE II (P,C,E)	\$15,300,000 \$16,983,000					\$15,300,000 \$16,983,000	
SPECIAL PURPOSE HOUSING AND PARKING GARAGE (P,C,E)	\$30,569,400					\$30,569,400	
SPECIAL PURPOSE HOUSING II (P,C,E) PARKING DECKS (P,C,E)	\$9,782,208 \$20,787,192					\$9,782,208 \$20,787,192	
GRADUATE HOUSING (P,C,E)	\$61,138,800					\$61,138,800	
STUDENT HOUSING (P,C,E) PARTNERSHIP GARAGE (P,C,E)	\$61,138,800 \$8,559,432					\$61,138,800 \$8,559,432	
ROTH ATHLETICS CENTER	\$8,750,000					\$8,750,000	
SPECTRUM STADIUM RUST REMEDIATION (P,C,E) VENUE EXPANSION AND RENOVATION (P,C)	\$14,000,000 \$10,000,000					\$14,000,000 \$10,000,000	
PARKING DECK (P,C,E)	\$5,661,000					\$5,661,000	
OUTPATIENT CENTER (P,C,E) LAKE NONA CAMPUS ENTRYWAYS PHASE I (P,C,E)	\$91,708,200 \$2,153,996					\$91,708,200 \$2,153,996	
ROSEN EDUCATIONAL FACILITY (P,C,E)	\$16,000,000	01 - COR #				\$16,000,000	
EOOTBALL BUILDING (P,C,E) GOLF TRAINING FACILITY (P,C,E)		\$16,685,798 \$2,000,000				\$16,685,798 \$2,000,000	
ROSEN GARAGE (P,C,E)		\$13,000,000				\$13,000,000	
CAMPUS ENTRYWAYS PHASE II (P,C,E) HEALTH SCIENCES CAMPUS PARKING GARAGE I (P,C,E)		\$5,015,978 \$20,000,000				\$5,015,978 \$20,000,000	
DINING, HOUSING & RESIDENCE LIFE, AND CREATIVE SCHOOL FOR CHILDREN PARTNERSHIP BUILDING (P, C, E) BIG MEDICAL ANNEY PENDUATION AND EVENNSION (P, C, E)			\$101,000,000 \$14,492,160	•		\$101,000,000 \$14,492,160	
BIO-MEDICAL ANNEX RENOVATION AND EXPANSION (P,C,E) PARKING GARAGE VII (P,C,E)			\$25,433,741			\$25,433,741	
COASTAL BIOLOGY STATION (P,C,E) ARA CHILLED WATER PLANT (P,C,E)			\$5,358,435 \$25,000,000			\$5,358,435	
UCF DOWNTOWN CAMPUS BUILDING II (P,C,E)			\$25,000,000	\$87,991,555		\$25,000,000 \$87,991,555	
FACILITIES AND SAFETY BUILDING AT HEALTH SCIENCES CAMPUS (P,C,E)				\$8,560,997 \$73,000,000		\$8,560,997 \$73,000,000	
DENTAL SCHOOL (P,C,E) HEALTH SCIENCES CAMPUS MULTI-PURPOSE MEDICAL RESEARCH AND INCUBATOR FACILITY (P,C,E)				\$139,635,343		\$139,635,343	
SUSTAINABILITY CENTER (P,C,E) WET TEACHING LAB AND EXPANDED STEM FACILITY (P,C,E)					\$6,358,435 \$18,112,657	\$6,358,435 \$18,112,657	
UTILITY INFRASTRUCTURE AND SITE WORK CLINICAL FACILITIES (P,C) HEALTH SCIENCES CAMPUS					\$14,844,769	\$14,844,769	
SPECTRUM STADIUM EXPANSION AND IMPROVEMENTS PHASE I (P,C,E)					\$16,416,900 \$44,905,316	\$16,416,900	
SPECTRUM STADIUM EXPANSION AND IMPROVEMENTS PHASE II (P,C,E) TOTAL	\$396,092,028	\$56,701,776	\$171,284,336	\$309,187,895	\$44,905,316	\$44,905,316 \$1,033,904,112	
GRAND TOTAL	\$467,040,528	\$336,775,176	\$283,108,565	\$549,646,144		\$2,325,025,368	

Projects to be programmed Projects with approved building programs Remodeling denotes change in space usage. Renovation denotes no change in space usage.

#### Board of Trustees Meeting - Reports

# Attachment B STATE UNIVERSITY SYSTEM Fixed Capital Outlay Projects Requiring Board of Governors Approval to be Constructed, Acquired, and Financed by a University or a University Direct Support Organization with Approved Debt BOB-1

							Estimated Month	Estimated Annual A	mount For
				Project	Project	Funding	Of Board	Operational and Ma	intenance Costs
Univ.	Project Title	GSF	Brief Description of Project	Location	Amount	Source	Approval Request	Amount	Source
UCF	Roth Athletics Center (formerly known as Wayne Densch Expansion)	TBD	Offices, storage, and support space	UCF, Orlando	\$8,750,000	Donations	July	\$0	DSO
UCF	Spectrum Rust Remediation	21,337	Additional club seating, suites, and operational booths	UCF, Orlando	\$14,000,000	Donations	July	\$320,055	DSO
UCF	Spectrum Stadium Expansion and Improvements Phase I	21,337	Additional club seating, suites, and operational booths	UCF, Orlando	\$16,416,900	Donations	July	\$320,055	DSO
UCF	Spectrum Stadium Expansion and Improvements Phase II	80,000	Additional seating up to 20,000	UCF, Orlando	\$44,905,316	Donations	July	\$1,200,000	DSO
UCF	Football Building	45,000	Offices, storage, and support space	UCF, Orlando	\$16,685,798	Donations	July	\$675,000	Auxiliary
UCF	Golf Training Facility (move from Twin Rivers Golf Course)			UCF, Orlando	\$2,000,000	Donations	July	\$0	DSO
UCF	Venue Expansion and Renovation	TBD	Offices, storage, and support space	UCF, Orlando	\$10,000,000	Donations	July	\$0	Auxiliary

#### Attachment C

#### STATE UNIVERSITY SYSTEM Fixed Capital Outlay Projects That May Require Legislative Authorization and General Revenue Funds to Operate and Maintain BOB-2

						<b>-</b>		ed Annual Amount For
Jniv.	Project Title	GSF	Brief Description of Project	Project Location	Project Amount	Funding Source	Operati Amount	onal and Maintenance Costs Source
CF Florida Advanced Manufa			Research Labs, Wet Labs, Collaboration Rooms, Offices	UCF-Osceola	\$75,000,000	PECO		General Revenue
CF Optical Materials Lab Ad	Idition	5,530 I	Research Labs	UCF-Orlando	\$1,640,000	C&G	\$90,634	General Revenue
CF John C. Hitt Library Expa	ansion Phase I (ARC)	8,800	Automatic Retrieval Center	UCF-Orlando	\$10,771,963	CITF	\$144,228	General Revenue
CF John C. Hitt Library Expa	ansion Phase I (Connector)	12,609	Automatic Retrieval Center	UCF-Orlando	\$21,366,592	CITF	\$122,007	General Revenue
CF CREOL		2,756	Research Labs	UCF-Orlando	\$1,406,000	E&G	\$45,170	General Revenue
CF Arts Complex II Performa	ance	2,728	Teaching Lab, Offices	UCF-Orlando	\$964,411	PECO	\$31,353	General Revenue
CF BPW Building		4,038	Teaching Labs, Offices	UCF - Orlando	\$275,000	Donations	\$66,181	General Revenue
CF District Energy IV Plant		13,000 (	Offices	UCF - Orlando	\$13,000,000	Auxiliary	\$94,231	General Revenue
F Trevor Colbourn Hall and	d Colbourn Demolition	135,600	Offices, Classrooms	UCF-Orlando	\$38,000,000	CF-Aux	\$1,312,093	General Revenue
F Coastal Biology		3,000 F	Research	UCF-Melbourne Beach	\$2,500,000	E&G	\$29,029	General Revenue
F Partnership IV Phase		42,529	Office, Research Labs	UCF-Orlando	\$42,000,000	PECO	\$697,033	General Revenue
F Partnership V		123,658	Office, Research Labs	UCF-Orlando	\$42,000,000	PECO	\$2,026,705	General Revenue
F Florida Solar Energy Cer	nter Renovation-	<del>42,986</del> (	Offices, Research Labs	UCF-Orlando	<del>\$10,000,000</del>	PECO	<del>\$704,523</del>	General Revenue
F Research I (formerly Inte	erdisciplinary Research and Incubator Faculty)	97,482	Offices, Research Labs	UCF-Orlando	\$46,614,853	Aux-CF	\$1,597,691	General Revenue
F Arboretum Green House	3	800	Teaching Lab	UCF-Orlando	\$400,000	E&G	\$3,728	General Revenue
F Band Building		3,695	Teaching Labs, Offices	UCF-Orlando	\$5,000,000	Auxiliary	\$35,754	General Revenue
CF CREOL Expansion Phas	se II	13,086 I	Research Labs, Offices	UCF-Orlando	\$6,784,228	E&G-Aux-C&G	\$214,474	General Revenue
F UCF Downtown Dr. Philli	ips Academic	148,000 I	Research Labs, Offices	UCF-Orlando	\$6,784,228	PECO-Private-Aux	\$1,528,618	General Revenue
F Visual Arts Building Addi	ition	699	Teaching Lab	UCF-Orlando		PECO		General Revenue
F Arecibo National Astrono	omy lonosphere Center	62,918 I	Research Labs, Offices	UCF-Puerto Rico		C&G		General Revenue
F Medically Directed Welln	ess and Sports Center	2,000	Teaching Labs, Classroom	UCF Lake Nona				General Revenue
CF UCF Downtown Central I	Energy Plant	15,000	Teaching Labs, Offices	UCF-Orlando	\$12,100,000	E&G (Reserve)-Private		General Revenue
F Health Sciences and Col	llege of Nursing Building	145,000	Teaching Labs, Offices	UCF-HSC	\$19,000,000	PECO		General Revenue
CF UCF Downtown Garage	(E and G Spaces)		Offices, Support	UCF-Orlando	\$13,500,000	Auxiliary		General Revenue
CF Energy Lab		20,000 F	Research Labs, Offices	UCF-Orlando		C&G		General Revenue
CF Laboratory and Environm	nental Support Expansion	1,535 (	Offices	UCF-Orlando	\$909,534	CF	\$25,158	General Revenue
CF DataSite Orlando		460 0	Office, Storage	UCF-Orlando		CF		General Revenue
CF UCF Downtown Police D	Department	3,000		UCF-Orlando	\$5,000,000	Auxiliary-Donations	\$49,169	General Revenue
CF UCF Research Hub - Do	owntown	7,000	Offices, Teaching Lab, Interview Rooms	UCF-Orlando	\$1,500,000	Auxiliary-Donations		General Revenue
CF Union West - Student Se	ervices	50,000	Classrooms, Offices	UCF-Orlando	\$105,000,000	Private		General Revenue
CF Sanford Burnham Institut	te for Medical Research	174,843 I	Research Labs, Vivarium, Offices	UCF-Orlando		Private	\$2,865,607	General Revenue

## Minutes Board of Trustees Meeting University of Central Florida July 19, 2018

Vice Chair Robert Garvy called the meeting of the Board of Trustees to order at 1:02 p.m. in the *FAIRWINDS* Alumni Center on the UCF Orlando campus.

Garvy reminded the board that the meeting was covered by the Florida Sunshine Law and that the public and press were invited to attend.

#### WELCOME

He welcomed the board members and called on Grant Heston, Assistant Corporate Secretary, to call the roll. Heston determined that a quorum was present.

The following board members attended the meeting: Chairman Marcos Marchena, Vice Chair Robert Garvy, Josh Boloña, Ken Bradley, Joseph Conte, John Lord, Beverly Seay, William Self, John Sprouls, and William Yeargin. Chairman Marcos Marchena and Trustee John Sprouls attended via teleconference.

#### PUBLIC COMMENT

There were no requests for public comment.

#### MINUTES

Garvy called for approval of the May 24, 2018 and June 20, 2018 meeting minutes, which were approved.

Garvy recognized President Whittaker as taking office this month as the University's fifth president.

Garvy announced President Whittaker will further articulate his vision for UCF at his inauguration scheduled for November 9<sup>th</sup>.

Garvy stated the Transition Task Force established by Chairman Marchena had a primary goal of setting President Whittaker up for success.

Garvy called on President Dale Whittaker for remarks and introductions.

#### REMARKS

Whittaker addressed the board collectively for the first time as president.

Whittaker thanked Chairman Marchena for leading a transparent, inclusive search and thanked the trustees who served on the Presidential Search Committee and Transition Task Force. He also thanked John and Martha Hitt for their friendship and for a smooth transition.

Whittaker shared how he plans to shape UCF's Vision, which included hosting presidential forums in the fall, meeting with internal and external groups of strategic importance and turning to the UCF community for their expertise, passion, thought-leadership and connections to advance UCF.

Whittaker stated that as president, he wants to foster a culture where we think boldly and strategically and he expects to be more external, a storyteller and economic development partner.

Whittaker stated our goal is to be a preeminent university for the 21st century.

Whittaker indicated that he would be bringing back our "Myth Busters" series about higher education in this setting and perhaps externally.

Whittaker provided the following leadership updates:

- Janet Owen new VP for Government Relations | Thad Seymour new VP for Innovation and Partnerships.
- Deb German is now VP for Health Affairs and Dean of the College of Medicine.
- Dan Holsenbeck in his new role as Senior Counsel to the President.
- Carl Metzger was promoted to Chief of Police for UCF.
- Developing plans for an elevated leadership role in inclusion and diversity.
- Recognized Elizabeth Dooley's work in launching two new colleges and school and stepping in as Interim Provost, He updated that the search for a provost isongoing.

Finally, Whittaker recognized the following milestones: \$183M in research awards this past year and more than \$80M raised this past year in philanthropy, which puts us past \$400M raised toward our \$500M Ignite goal.

## COMMITTEE REPORTS

Garvy stated due to colleagues with pressing time commitments, the agenda would be changed to allow a quorum to be maintained.

Garvy stated the Educational, Finance and Facilities, and Nominating and Governance committees would provide their reports first and Garvy asked that those reports be kept to 5 minutes.

Garvy stated after the Consent Agenda was approved, additional comments are welcome. Following those reports, the committee resumed the agenda as scheduled.

#### EDUCATIONAL PROGRAMS COMMITTEE REPORT

Robert Garvy, Chair of the Educational Programs Committee, reported highlights from the committee meeting held earlier in the day.

- Janet Jasinski, Vice Provost for Faculty Excellence, presented and reported on EPC-1 2018 Tenure with Hire which was unanimously approved by the committee and placed on the consent agenda as EP-1.
- Paige Borden, Associate Provost for Academic Program Quality and Associate Vice President for Institutional Knowledge Management, presented and reported on EPC-2 Academic Degree Program Termination Master of Science in Conservation Biology which was unanimously approved by the committee and placed on the consent agenda as EP-2.
- Dooley reported on EPC-3 Conferral of Degrees for the Summer 2018 commencement ceremony on August 4<sup>th</sup> which was unanimously approved by the committee and placed on the consent agenda as EP-3. The number of degrees expected to be conferred are as follows:
  - 3,169 Baccalaureate degrees
    - 541 Master's degrees
  - 110 Doctoral and Specialist degrees

3.820 Total

- Borden presented information and background on Doctoral Analysis part 1 (INFO-1) and Elizabeth Klonoff, Vice President for Research & Commercialization, discussed the analysis (INFO-1) regarding the variety of Doctoral Programs at UCF compared toother universities and the future program requests at UCF.
- Dooley provided an update on various university items. (INFO-2) Faculty Spotlight Megan Nickels presented on broadening access to STEM. She shared information on the organization and students.
- She reported on Valencia College Notice of Intent to develop Bachelors of Applied Science in Software Development (INFO-3). Florida Statutes requires that state universities and regionally accredited independent colleges and universities be notified. Dooley reported that UCF does not object to Valencia's intent to develop a Bachelors of Applied Science in Software Development.

- She reported that there was record breaking 183 million in Research Funding for 2017-18 which is up 23% from last year. The funding boosters UCF's efferent to be a preeminent metropolitan university of global impact.
- Dooley reported the new colleges/schools officially launched on July 2, 2018. Thenew names are as follows:
  - College of Health Professions and Sciences
  - College of Community Innovation and Education
  - Nicholson School of Communication and Media
- She reported there is a new civic leadership requirement. The 2017 Florida legislation amended state statutes to require students initially entering any institution within the state university college system in Florida to demonstrate competency in civil literacy. Starting next month all students who have not previously attended a post-secondary institution in Florida must meet this civic leadership requirement to graduate. They must show an understanding of these four things:
  - The basic principles of American Democracy
  - o The US constitution
  - The founding documents
  - The landmark Supreme Court cases
- These requirements can be met by the following:
  - o Advance placement
  - o College coursework in American History or Government
  - o College level examination program
  - o Passing the US citizenship exam which will be offered by UCF

## FINANCE AND FACILITIES COMMITTEE REPORT

In Alex Martins, Chair of the Finance and Facilities Committee, absence, Bill Yeargin reported highlights from the committee meeting held on June 20, 2018.

The following actions occurred at the June 20, 2018, meeting and were already approved by the board via teleconference.

- FFC-8 The use of Spectrum Stadium for Professional Football Games
- FFC-9 Amendment to Sublease Agreement between UCF and Pegasus Hotel
- FFC-10 Assignment of Option to Purchase 11.4 Acres at Lake Nona

The following info items were presented at the June 20, 2018, committee meeting.

- William Merck, Vice President for Administration and Finance and Chief Financial Officer, and John Pittman, Associate Vice President for Debt ad Revenue Management, presented a summary of the Direct Support Organizations' 2017-18 Third-Quarter Financial Reports (INFO-1)
- Merck presented the UCF Investments Quarterly Report Ended March 31, 2018, Including Annual Review (INFO-2)
- Merck presented the Campus Master Plan Public Comment Meeting Minutes(INFO-3)

 Merck and Lee Kernek, Associate Vice President for Administration and Finance, presented and reported on FFC-4 Razing of building 38 which was unanimously approved by the committee and placed on the consent agenda as FF-6. Kernek requested approval from demolition, building 39 already received demolition approval from BOG in 2015. The cost to demolish both buildings is \$300,000.

Yeargin presented the following item(s) for board approval.

- FF-1 2018-19 Direct Support Organizations' Budgets A motion was unanimously approved
- FF-2 Five-year Capital Improvement Plan A motion was unanimously approved
- FF-3 Academic Health Sciences Center Parking Garage- A motion was unanimously approved
- FF-4 2018-19 College of Medicine Faculty Practice Plan Budget A motion was unanimously approved
- FF-5 2018-19 College of Medicine Self-insurance Program Budget A motion was unanimously approved

#### **NOMINATING AND GOVERNANCE COMMITTEE REPORT**

William Yeargin, Chair of the Nominating and Governance Committee, reported highlights from the committee meeting held earlier in the day

- Yeargin reported that the following items were unanimously approved and placed on the consent agenda.
  - NGC-1 Appointment of Board Members to UCF Foundation
  - o NGC-2 Appointment of Board Members to UCF Research Foundation
  - NGC-3 Appointment of Board Members to Limbitless Solutions
  - o NGC-4 Appointment of Board Members to UCF Academic Health
  - NGC-5 Amendments to University Regulation UCF-3.0031 Tuition Waiver Benefit Program
  - NGC-6 Amendments to Chapter 4 University Regulations there was one public comment related to use of drones on campus. University is working on a new drone policy and the public comment will be considered with the new policy
  - NGC-7 Amendments to Chapter 5 University Regulations
  - NGC-8 Amendments to University Regulations UCF-5.016 Student Academic Appeals and UCF-5.017 Appeals of Graduate Program Actions or Decisions – one public comment was received regarding a typo
  - NGC-9 Florida Equity Report
  - NGC-10 UCF Foundation Bylaws Amendments

### **CONSENT AGENDA**

A motion was made to accept the consent agenda and was unanimously approved.

- EP-1 2018 Tenure with Hire
- EP-2 Academic Degree Program Termination Master of Science in Conservation Biology
- EP-3 Conferral of Degrees
- FF-6 Razing of Building 38
- NG-1 Appointment of Board Members to UCF Foundation
- NG-2 Appointment of Board Members to UCF Research Foundation
- NG-3 Appointment of Board Members to Limbitless Solutions
- NG-4 Appointment of Board Members to UCF Academic Health
- NG-5 Amendments to UCF-3.0031 Tuition Waiver Benefit Program
- NG-6 Amendments to Chapter 4 University Regulations
- NG-7 Amendments to Chapter 5 University Regulations
- NG-8 Amendments to UCF-5.016 and UCF-5.017 University Regulations
- NG-9 Florida Equity Report
- NG-10 UCF Foundation Bylaws Amendments

## **REPORTS** (continued)

Garvy called on Mike Morsberger, Vice President for Alumni Relations and Development and CEO UCF foundation, who gave an informational report on the following item.

• INFO-1 IGNITE Campaign Update

Garvy called on Dr. Gordon Chavis, Associate Vice President for Enrollment Services, who gave an informational report on the following item.

• INFO-2 Enrollment Planning

## **COMMITTEE REPORTS (continued)**

Garvy asked if there are any additional questions/comments from the reports provided earlier or if the Advancement or Compensation and Labor Committee had reports. None were forthcoming.

#### ANNOUNCEMENTS AND ADJOURNMENT

Garvy announced the following upcoming meetings:

Commencement	August 4, 2018 (CFE Arena)
Board of Governors meeting	September 12-13, 2018 (New College)
Board of Trustees meeting	September 27, 2018 (FAIRWINDS Alumni Center)
2018 Trustee Summit	November 7, 2018 (Florida Atlantic University Boca Raton)
Association of Governing Boards	April 14-16, 2019 (National Conference on Trusteeship Orlando)

Garvy adjourned the board meeting at 2:04 p.m.

Respectfully submitted:

Grant Heston

Date: 10-2.18

Grant Heston Assistant Corporate Secretary

## Operational & Financial Entry Conference Notes 10:20 am, 4/2/18 MH 327

## In attendance from UCF:

Bev Seay, Chair, UCF BOT Audit & Compliance Committee Bill Merck, CFO and VP Admin & Finance Christy Tant, Assistant VP and University Controller Phillip Henson, Director, F&A Brad Hodum, Associate Controller Brian Boyd, University Registrar Robert Taft, CAE Kathy Mitchell, Associate Director

In attendance from the Auditor General: Brenda Racis, Supervisor Jeff Brizendine

Jonathan Agnelli

## Financial Audit

- AG will start in late June or early July; planned to end fieldwork by December 2018, with the report due by March 31, 2019.
- AG will need the DSO financial statement reports when they're available.
- Brenda isn't sure who will lead the audit; Jeff Brizendine lead today's discussion.

## **Operational Audit**

- AG has already started and expects to finish by the end of the summer; however, they'll hold the report until the financial audit fieldwork is completed just in case there are any concerns that arise during that audit that they would want to include as findings/recommendations in the operational audit.
- Scope is calendar year 2017, plus additional transactions before and after that period as necessary (e.g., for construction, they'll pull all payments to date for each project).
- Mr. Merck will be the primary contact for the audit (Jeff initially said Bill would be the primary "target" which led to guffaws and a protest from Bill).
- They will follow up on the four recommendations from the last audit issued 12/1/16:
  - Background screenings were not always performed and documented for individuals in positions of special trust or responsibility.
  - $\circ$  University textbook affordability procedures continue to need improvement.
  - University procedures for canceling purchasing card privileges could be enhanced.

- Certain University information technology access controls need improvement. [Note: Tallahassee will not be sending down the IT section to do the audit this year; the local section will do the IT audit fieldwork.]
- Based on their risk assessment, AG will likely look at:
  - Payments from UCF to or on behalf of the DSOs to determine whether the payments are authorized by s. 1004.28(1)(a)(2) and (2), F.S.
  - Student status and residency to determine whether they are in compliance with s. 1009.21, F.S. and BOG Regulation 7.007.
  - Policies and procedures regarding textbook affordability for compliance with s. 1004.085, F.S. and BOG Regulation 8.003.
  - Student fees to determine compliance with various statutes (e.g., tuition differential fee, distance learning fee).
  - Auxiliary Operations to determine whether the university properly monitored compliance with the contract terms for fees, insurance, and other provisions. They'll also look at whether the auxiliary is self-supporting.
  - Construction projects to determine whether payments are made in accordance with contract terms and conditions, University policies and procedures, and provisions of applicable State laws and rules; the University properly selected design professionals and construction managers and adequately monitored the construction manager selection of subcontractors; and that design professionals provided evidence of required insurance.
- Other items not mentioned today, but have appeared in recent operational audit reports:
  - Determine whether the Trustees had prescribed by rule the conditions with which the DSOs must comply in order to use University property, facilities, and personal services; the University maintained records to document the value of University property and facilities used by the DSOs and University employee actual time and effort provided to the DSOs; and the Trustees documented consideration and approval of anticipated property, facilities, and personal services and related costs provided to the DSOs.
  - Determine whether there is supervisory review and approval of exempt employee time worked and leave used during the audit period.
  - Determine whether administrative employees who received compensation in excess of \$200,000 did not exceed the limits from E&G funds established in s. 1012.975(3) and 1012.976(2), F.S.
  - Travel expenses for Trustees and the President to determine whether the travel expenses were reasonable, adequately supported, for valid University purposes, and limited to amounts allowed by s. 112.061, F.S.

Shelly King has set up an FTP website for the AG for us to send them large or sensitive files.

Questions from Jeff B:

- OK to go through F&A Department heads to get what AG needs? Christy: Yes, please cc Christy, Phillip, and Brad
- Any changes to the reporting entity? No (Limbitless was new last year)
- Any new debt? F&A said yes and provided details; also some old debt was refunded. See John Pittman for details.

- Any major changes to PeopleSoft? Not yet, but the chart of accounts is being redesigned.
- Any changes in policies? Yes, they're posted with effective dates on the university website.
- Any changes in personnel? President Hitt is retiring June 30, 2018; current Provost and EVP will become President on July 1, 2018.
- Any fraud during the prior year? Nothing that would affect the financial statements or schedule of expenditures of federal awards (SEFA). See Tina and Robert for details on any specific fraud cases.

## AG Operational Exit Conference for CY 2017

8/7/18 MH 360

### Findings that will appear in the report:

- 1. Textbook Affordability (Three-peat finding triggers required letter from BOT chair to JLAC)
  - Fall 2016 & Spring 2017 reports should have 95% posted at least 45 days before class; only had 76% and 89% actual
  - Lack of support for #s reported B&N provides the file, but didn't retain the file to go back and show now how the %s were calculated; file provided didn't match reported %s
  - File needs to show how the %s were calculated AG couldn't follow what B&N did
  - UCF's most current term is at least 95% include that in the response (AG won't delete the finding)
- 2. Background Screenings (Repeat finding)
  - Still need a policy and the screening needs to be ongoing
  - Level 2 not obtained for all EEs with access to minors or in what AG considers to be positions of trust (only 5 of 30 tested had required Level 2 screening; 25 did not)
  - Per AG, positions of trust should include: IT, Financial Aid, F&A, RO, Audit, Police, Compliance
- 3. Support to Direct Support Organizations
  - UCF Foundation 133 employees with \$14M personnel services cost for UCF in 2016-17
  - UCF must identify conditions DSO must meet to use UCF personnel, facilities, equipment; need an MOU that requires DSOs to get BOT approval of budgets <u>prior to</u> incurring expenditures.
  - Scott thought UCF had an MOU with UCFF; Kathy reminded him we do not.
  - Budget presented to BOT shows total personnel exp; law requires details (name, title, salary)
  - UCF Regulation 4.034 requires Financial Audits of DSOs be presented to BOT they're not being presented currently, but that's an easy fix. Lots of discussion about what level of detail. After the meeting, Tracy and Scott agreed they could present a summary that grouped employees by job titles without individual names (e.g., 10 development officers . . . \$600,000)
- 4. Construction Funding (E&G Carryforward funds for Trevor Colburn Hall)
  - Trevor Colburn Hall built using E&G Carryforward funds
  - E&G funds not allowed for construction, only for operating activity
  - Originally UCF planned to do major renovation on old Colburn Hall with the E&G funds, calling it "deferred maintenance" which UCF believes is ok from E&G funds; but the building was in such bad shape that wasn't feasible; Tracy said carryforward form from state includes a line for "deferred maintenance" but AG disagrees; AG will recommend UCF seek guidance from BOG
  - Capital Outlay budget approved by BOT in May 2018 shows Colburn Hall with the PECO funding source AG says that's not going to happen, so UCF should present it in "Other Sources"
- 5. Payments for Contractual Services (this was an Exit comment last year, not in the report)
  - Invoices for payments to outside attorneys don't match the rates per the contract or don't include rates on the invoice.
  - Need support for rates in an amendment to the contracts with the outside attorneys.
  - Scott said he'd revise the contracts to say that the rates could be increased via an annual amendment to the contracts.

- 6. Services and Exemptions to Competitive Selection
  - BOG Regulation 18.001 provides list of exemptions from competitive procurement requirements, including piggy-backing on other competitively bid contracts
  - However, UCF selects vendors by piggy-backing on contracts negotiated with universities outside Florida; AG believes the piggy-backing should only pertain to in-state agencies and universities; but BOG agrees with UCF.
  - AG will add to the next BOG audit also for BOG attorneys to work it out with AG attorneys, then clarify for the SUS institutions
  - Also, Procurement is only using the piggy-back to select the contractor/vendor; then Procurement re-negotiates for sometimes worse terms than the piggy-backed contract terms.
  - AG believes BOG exemption applies to pre-awarded contracts, not just the selection of the vendor, so UCF would be required to obtain the same contractual terms as the piggy-backed contract.
  - UCF piggy-backed on FIU's contract with the Parker Search firm to select the new President (Whittaker), but Parker Search was paid \$100,000 for FIU Prez search; \$150,000 for UCF Prez search
  - AG believes Procurement is just avoiding searches by finding a contractor/vendor they want to use, then asking them if they've been selected anywhere via competitive bidding, then getting to avoid competitive selection at UCF; but still negotiate new terms for UCF contract
- 7. President Emeritus Salary
  - AG is questioning the reasonableness of the salary amount to Dr. Hitt as emeritus
  - He was paid \$1.2M 2016-17 and working only .25 FTE 2018-19, so \$300,000 seemed reasonable to UCF; Bill Merck pointed out this is the last year of the Capital Campaign, so UCF is willing to pay that amount to have Dr. Hitt make phone calls on behalf of the campaign.
  - However, AG said the \$1.2M included housing and other perks, so he should have gotten closer to 25% of his base salary (\$515,000 x .25 = \$128,750)
  - Tally <u>really</u> wants this finding (like the FIU finding, but this is a different situation); AG thinks the hourly rate as President should not = hourly rate as Emeritus

## Exit Comments (likely won't appear in the report)

- 8. IT Access Controls
  - Last audit cycle, Financial module super users (Bob Y) had inappropriate access; current testing shows this has been corrected & there are compensating controls
  - But still no policy as previously recommended
- 9. Access to Student SSNs
  - Lots of issues with the file provided to AG should only include names of those with access to the unmasked full SSN, not those with partial access (to last four digits of SSN) or those who can get there via private query or those who can enter a SSN on a search page
  - List from UCFIT needs to be cleaner still shows 605 with super user access may cause heartburn in Tally

### 10. PCards

- No review of cardholder limits as required by policy
- Per Christy Tant, F&A will redesign and re-implement the policy
- AG looked at top 28 EEs with limits > \$35,000 over 4 months; found 10 didn't need those high limits during that period
- Use of PCards is increasing at UCF intentionally need a policy to review usage focus on high dollar/high volume limits

#### 11. Construction Documents

• Missing required insurance documents - no documentation of pollution liability coverage from the CM for Trevor Colburn Hall

#### 12. Construction - Subcontractors

- Need clear and convincing evidence of oversight of subcontractor selection by CMs; UCF does this, but there is no policy AG wants to see a policy
- CM needs to obtain Licenses from subs; UCF does this, but no policy
- Pay apps from CM include payments to subcontractors may need to beef up policy that requires review of the pay apps and subcontractor invoices in support of payments to subs

#### In Attendance from the AG's Office:

Jeff Brizendine, Brenda Racis

#### In attendance from UCF:

Grant Heston Scott Cole Elizabeth Dooley Ronnie Korosec Joel Hartman Michael Sink Aaron Stremish Bill Merck Tracy Clark **Christy Tant Phillip Henson** Maureen Binder **Elizabeth Hamilton Greg Robinson** Robert Taft Kathy Mitchell

From: Sent: To: Subject: Robert Taft Wednesday, October 03, 2018 10:08 AM Tina Maier FW: please include this in the invitation to the late October status meeting to discuss the AG's Operational Audit report

## Robert J. Taft CIA, CCSA, CRMA

Chief Audit Executive University Audit

University of Central Florida 4365 Andromeda Loop N—Millican Hall 341 P.O. Box 160080 Orlando, FL 32816-0080 Twitter Account: @UCFAudit

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Please note: Due to Florida's broad public records law (F.S. 119), most written communication to or from University employees is considered a public record. Therefore, the contents of this email, including personal email addresses, may be subject to disclosure in the event a request is made.

From: Robert Taft
Sent: Thursday, August 9, 2018 11:07 AM
To: Jenny Carter <Jennifer.Carter@ucf.edu>
Cc: Kathy Mitchell <Kathryn.Mitchell@ucf.edu>
Subject: please include this in the invitation to the late October status meeting to discuss the AG's Operational Audit report

In all, twelve topics were covered during the exit conference. The Auditor General's staff that performed the audit stated they believe items 1-7 are likely to be included in the final report with the remaining items not expected to be included. This decision is subject to final review by the Auditor General's Office in Tallahassee.

The final report is expected to be issued in December.

## 1. Textbook Affordability

NOTE: This is a "Three-Peat" finding from three consecutive Auditor General Reports. This condition requires the UCF Board of Trustees Chairperson to submit a letter to the Florida Joint Legislative Auditing Committee detailing the university's plan to remediate this issue.

• There is a requirement that faculty teaching courses in the upcoming semester post their course material requirements 45 days before classes start. The requirement is to achieve a 95% compliance rate. For the Fall 2016 & Spring 2017 reports, UCF only achieved a 76% and 89% compliance rate respectively. UCF has shown

improvement in the most current term and achieved a 95% rate but that is not enough to get the finding removed.

## 2. Background Screenings

## NOTE: This is a repeat finding for 2 consecutive audits

• UCF still needs a Background Screening policy and the screening needs to be ongoing as well as at the time of hiring. Also, the category of "positions of trust" within the university needs to be expanded where these identified individuals need a more extensive background check.

3. University Support to Direct Support Organizations (DSO)

• Essentially, the Auditor General would like to see a more detailed presentation of total support costs, more robust Memorandum of Understanding and/or Service Level Agreements between the DSOs and the university and presentation of the DSO Financial Audit reports to the full UCF Board of Trustees.

4. Construction Funding (specifically E&G Carryforward funds for Trevor Colbourn Hall)

• Trevor Colbourn Hall was built using E&G Carryforward funds. However, E&G funds not are allowed for new construction, only for operating activity. The root cause of this issue is that initially this was intended to be a renovation project for the existing building but, based on the cost/benefit, deteriorating condition of the building, and potential health hazards, it was determined that a new facility made more sense. Thus, to protect the health and safety of the students and staff in the building, the E&G funds were transferred to the new construction project. The Auditor General will likely recommend that UCF seek guidance from the Board of Governors on this issue.

5. Payments for Contractual Services

• The Auditor General noted that invoices for payments to outside attorneys don't always match the rates per the contract or don't include rates on the invoice. The General Counsel agreed to update the contracts on an annual basis using amendments to reflect the actual rates.

6. Services and Exemptions to Competitive Selection

• BOG Regulation 18.001 provides a list of exemptions from competitive procurement requirements, including "piggy-backing" on other competitively bid contracts between a vendor and another agency. UCF, with BOG approval, has interpreted this regulation to extend to contracts negotiated with universities outside Florida. There is a disagreement between the Auditor General and BOG and it is expected that BOG attorneys will make a determination and then clarify this for future SUS institution activity.

• Also, UCF is sometimes only using the "piggy-back" to select the contractor/vendor as opposed to fully accepting the terms of the agreement. The Auditor General had concerns that UCF had twice agreed to terms less favorable than the piggy-backed contract terms. The AG provided the example of when UCF piggy-backed on FIU's contract with the Parker Search firm to select its new President. FIU paid Parker Search \$100,000 for its search while UCF paid Parker \$150,000 for its search.

7. President Emeritus Salary

• AG is questioning the reasonableness of the salary amount to Dr. Hitt as an Emeritus President. Dr. Hitt was paid \$1.2 M in total compensation for 2016-17. Given he will be working .25 FTE in 2018-19 (in large part to assist in the Capital Campaign), \$300,000 (25 percent of the total compensation) seemed reasonable compensation to the parties negotiating the contract. However, the AG believes that only Dr. Hitt's base salary should have been used and a reasonable amount of compensation from their perspective would have been 25% of \$515,000, or approximately \$130,000.

Exit Comments (likely won't appear in the report)

## 8. IT Access Controls

• While no exceptions were found, UCF still has not developed a formal policy as was previously recommended.

## 9. Access to Student SSNs

• There was some confusion about who has full access to SSN and who only has partial access to the last four digits. Also some concerns on the number of individuals with "super-user" access.

10. PCards

• The AG recommended UCF continue its annual cardholder review, focusing on cards with high dollar/high volume of activity. AG also wanted Finance & Accounting to revise the current policy to reflect this recommended approach.

## 11. Construction Documents

• There was no documentation of pollution liability coverage from the Construction Manager for Trevor Colbourn Hall.

## 12. Construction – Subcontractors

• Although Facilities & Safety has demonstrated effective oversight of subcontractor selection by Construction Managers and reviewing payments to subcontractors, written procedures need to be created to ensure the processes are consistent and continued in the event of employee turnover.

## Robert J. Taft CIA, CCSA, CRMA

Chief Audit Executive University Audit

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UNIVERSITY OF CENTRAL FLORIDA

University of Central Florida Board of Trustees Emergency Meeting September 6, 2018 11 a.m. President's Boardroom, Millican Hall, 3<sup>rd</sup> floor Conference call in phone number 800-442-5794, passcode 463796

## AGENDA

1.	Welcome and call to order	Marcos Marchena, Chairman
2.	Roll call	Grant J. Heston, Assistant Corporate Secretary
3.	Public comment	Grant J. Heston
4.	New Business	Chairman Marchena
	<b>BOT</b> – 1 Approval	Replenish E & G accounts for Trevor Colbourn Hall construction
5.	Other new business	Chairman Marchena
6.	Adjournment	Chairman Marchena

**ITEM: BOT-1** 

## University of Central Florida Board of Trustees

## SUBJECT: Replenish E&G accounts for Trevor Colbourn Hall construction

DATE: September 6, 2018

## PROPOSED BOARD ACTION

Replenish the Education and General (E&G) account(s) used to fund the construction of Trevor Colbourn Hall with non-appropriated funds. For future board and committee approvals of capital projects, require a written certification by the President and Vice President presenting the item identifying the source of funds and certifying that they are appropriate for that purpose.

## **BACKGROUND INFORMATION**

In 2014, the Board of Trustees considered a plan to renovate the 40-year-old Colbourn Hall, which had experienced water intrusion and other issues typically found in older facilities. The repairs and renovations were planned as a single project.

Several comprehensive evaluations of the building determined that Colbourn Hall was in such poor condition that undertaking extensive repairs to the building would not make economic sense and not be in the best interest of the university and employees occupying the building.

In April 2014, the BOT Finance and Facilities Committee approved construction of the new Trevor Colbourn Hall, initially designed as a 75,000-square-foot building that would be built with carry-forward funds.

In May 2014, the full Board approved construction of Trevor Colbourn Hall. Neither the committee nor the full Board were told the source of the carry-forward funds would be E&G, which cannot be used for new construction.

In spring 2016, it was determined that cost considerations dictated that Colbourn Hall be demolished and the square footage of Trevor Colbourn Hall be increased to serve the university needs.

In June 2016, the BOT Finance and Facilities Committee approved the razing of Colbourn Hall, which was approved by the full board the following month.

As of August 2018 - the Florida Auditor General found that the \$38 million Trevor Colbourn Hall project was funded by E&G funds. The preliminary findings were shared with UCF.

After speaking with the Board of Governors, President Whittaker directed that the Board of Trustees be informed of these facts and, with its approval, identify non-E&G funds to replenish the E&G account from which the construction funds were drawn. Additionally, the university is developing a process for future board and committee approvals of capital projects, which will require a written certification by the President and Vice President presenting the item identifying the source of funds and certifying that they are appropriate for that purpose.

#### Supporting documentation: Exhibit A: Timeline

Exhibit B: Project spreadsheet Exhibit C: 4/3/14 Finance & Facilities meeting documents Exhibit D: 5/22/14 Board of Trustees meeting documents Exhibit E: 7/28/16 Finance & Facilities meeting documents Exhibit F: 7/28/16 Board of Trustees meeting documents

Prepared by: Scott Cole, Vice President and General Counsel

Submitted by: Scott Cole, Vice President and General Counsel

## Exhibit A

## **Detailed Timeline**

2010- Colbourn Hall renovation was first placed on UCF's PECO list and assigned priority #18 with a projected cost total of \$5 million (see Exhibit B).

2011- PECO priority was moved to #16; projected cost remained \$5 million.

2012 - PECO priority was changed to #17; list projected cost rose to \$5.8 million.

2013 - Projected cost had risen to \$8.3 million and Other State Sources were being considered for funding. Facilities Planning discussed availability of PECO funds with BOG staff but was told none was available.

February 2014 - Building Analyses conducted by Clancy & Theys, Schenkel Shultz, Walter P Moore and TCL determined that the extent and cost of necessary repairs made renovation economically unfeasible.

April 3, 2014 – BOT Finance and Facilities committee was informed of the cost of renovations of the existing Colbourn Hall. Staff recommended to the Committee that they approve construction of a new 75,000 square-foot building (Trevor Colbourn Hall). The estimated construction cost of the new building was \$21.3 million. In the absence of PECO funding, construction costs would be paid from UCF "non-recurring funds" (see Exhibit C). However, the committee was not informed that the "non-recurring funds" were E&G funds, which could not be used for construction.

May 22, 2014 - The full board approved construction of Trevor Colbourn Hall but again was not told that the funding source would be E&G funds (see Exhibit D).

2015 - Educational Plant Survey supported UCF's request for PECO for the renovation of Colbourn Hall and the construction of Trevor Colbourn Hall.

Spring 2016 - It was determined to be more prudent to demolish Colbourn Hall and increase the square footage of Trevor Colbourn Hall to serve the needs of both buildings. This was primarily due to rising costs, both from increasing construction costs and the need to expand the space to accommodate more people.

June 27, 2016 - The Finance and Facilities committee approved the razing of Colbourn Hall. Estimated cost to correct defects in the building was more than \$15 million, which was greater than 60 percent of the building cost (see Exhibit E).

July 28, 2016- The full board approved the demolition of Colbourn Hall. (See Exhibit F).

May 1, 2017 – Construction begins on Trevor Colbourn Hall.

August 2018 - Construction of Trevor Colbourn Hall was completed and occupants from Colbourn Hall moved to Trevor Colbourn Hall. The razing of Colbourn Hall is scheduled for September 2018.

As of August 2018 - the Florida Auditor General found that the \$38 million Trevor Colbourn Hall project was funded by E&G funds. The preliminary findings were shared with UCF.

Present- The plan for restoring E&G funds that were spent on the construction and furnishing of Trevor Colbourn Hall in cash totaling \$38 million has been returned to E&G and replaced with cash and accumulated investment gains from auxiliary and concession funds. In August 2018, the E&G carryforward was returned and the current sources of funding are \$36.7 million auxiliary funds, \$950k concession funds, \$600k of PO&M for demolition of old building, and \$320k E&G funds for project management services provided by Facilities Planning.

## Exhibit B

		Trevor Colbourn Hall - Colbourn Hall Ren		1		
DATE OF BOT APPROVAL	FISCAL YEAR	DESCRIPTION		FUNDING SOURCE	PROJECT TOTAL	Notes
July 29, 2008	2009-2010	Not on list				
July 23, 2009	2010-2011	Colbourn Hall Renovation	#18	PECO	\$4,968,246	
July 22, 2010	2011-2012	Colbourn Hall Renovation	#16	PECO	\$4,968,246	
July 21, 2011	2012-2013	Colbourn Hall Renovation	#17	PECO	\$5,807,816	
August 24, 2011		C.T. Hsu + Partners and Allan and Conrad Inc.				Site Observation Report - Structural
July 26, 2012	2013-2014	Colbourn Hall Renovation	#3	Other State Sources	\$8,276,053	
December 3, 2012		The RAAD-Tannous Engineering Group, Inc				Visual Structural Assessment & Analysis of Colbourn Hall
June 29, 2012		The RAAD-Tannous Engineering Group, Inc				Visual Structural Assessment & Analysis of the Exterior Faça of Colbourn Hall
April 9, 2013		AMEC E&I				Report of Limited NESHAP Asbestos Survey
July 25, 2013	2014-2015	Colbourn Hall Renovation	#2	Other State Sources	\$7,865,928	
February 1, 2014		Clancy & Theys, Schenkel Shultz, Walter P. More, TLC	-			Colbourn Hall Building Analysis
•						The BOG Notified of the Clancy & Theys, Schenkel Shultz, Walter P Moore Report dated February 2014 - UCF request out of cycle funding from the State, however it was denied
July 31, 2014	2015-2016	Colbourn Hall Renovation	#3	PECO	\$19,524,553	#1 Utilities, Infrastructure, Capital Renewal, and Roofs #2 Interdisciplinary Research and Incubator Facility
		Trevor Colbourn Hall	#6	PECO	\$26,175,387	
June 29, 2015	2016-2017	Colbourn Hall Renovation	#3	PECO	\$19,524,553	
		Trevor Colbourn Hall	#6	PECO	\$26,175,387	
June 29, 2015	2016-2017	Colbourn Hall Renovation	#4	Other State Sources	\$15,000,000	Added to Other State Sources UCF needed to fund
		Trevor Colbourn Hall	#5	Other State Sources	\$23,000,000	Added to Other State Sources UCF needed to fund
July 28, 2016	2017-2018	Colbourn Hall Renovation	deleted	Other State Sources	\$15,000,000	The Clancy & Theys, Schenkel Shultz, Walter P Moore and To Report dated February 2014 triggered the change. BOT and BOG Notified of Razing of Building 18 and increase in the siz of Trevor Colbourn Hall, and funding source Funded by UCF
		Trevor Colbourn Hall	deleted	Other State Sources	\$23,000,000	The Clancy & Theys, Schenkel Shultz, Walter P Moore and To Report dated February 2014 triggered the change. BOT and BOG Notified of Razing of Building 18 and increase in the siz of Trevor Colbourn Hall, and funding source Funded by UCF
July 28, 2016	2017-2018	Colbourn Hall Renovation	deleted	PECO		BOT Approval for the Razing of Building 18 Colbourn Hall
February 27, 2017 (Revised 3/3/2017)		Trevor Colbourn Hall Building Program			\$38,000,000	Signed Building Program
July 20, 2017	2018-2019	Trevor Colbourn Hall/Colbourn Hall Demo	#5	PECO	\$38,000,000	Requesting funding to reimburse UCF
		Trevor Colbourn Hall/Colbourn Hall Demo	#6	PECO	\$38,000,000	Requesting funding to reimburse UCF
July 19, 2018	2020-2020	Trevor Colbourn Hall/Colbourn Hall Demo	deleted	PECO	\$38,000.000	Notified No funding will be provided

Exhibit C

ITEM: INFO-7

## University of Central Florida Board of Trustees Finance and Facilities Committee

SUBJECT: Colbourn Hall Renovations

DATE: April 3, 2014

For information only.



Board of Trustees Finance and Facilities Committee Meeting President's Boardroom, Millican Hall, 3<sup>rd</sup> floor April 3, 2014

#### MINUTES

#### CALL TO ORDER

Trustee Marcos Marchena, chair of the Finance and Facilities Committee, called the meeting to order at 8:34 a.m. Committee members Alex Martins, Reid Oetjen, and Melissa Westbrook were present. Committee members John Sprouls and Robert Garvy attended via teleconference.

#### MINUTES APPROVAL

The minutes of the January 23, 2014, and February 12, 2014, Finance and Facilities Committee meeting were approved as submitted.

#### NEW BUSINESS

Universal Health Insurance for New Students (FFC-1)

Maribeth Ehasz, Vice President for Student Development and Enrollment Services, and Michael Deichen, Director of Health Services, led a discussion regarding the concept of universal health insurance as a condition of enrollment for new students beginning Fall 2015. Ehasz and Deichen received questions from the committee members and will return to a future meeting with additional information.

#### Finance and Facilities Committee Charter Review (FFC-2)

Chair Marchena explained that regulations implemented by the Board of Trustees in January 2011 direct the Finance and Facilities Committee to review its charter every three years. No changes to the charter were proposed, and the committee unanimously approved to keep the charter with its current format and content.

#### Amend UCFAA Bylaws (FFC-3)

Jordan Clark, Associate General Counsel, discussed a proposal to amend the UCF Athletics Association bylaws to combine the standing Audit Committee and Finance Committee to create a new single Audit and Finance Committee. The purpose of the amendment is a house-keeping measure and allows for more flexibility and administrative case when scheduling committee meetings and obtaining a quorum. The committee unanimously approved the proposed amendment.

Page 1 of 3

Direct Support Organizations' 2013-14 Second-Quarter Financial Reports (INFO-1) William F. Merck II, Vice President for Administration and Finance and Chief Financial Officer, and John C. Pittman, Associate Vice President for Administration and Finance, Debt Management, reported that the DSOs' 2013-14 second-quarter financial reports ended December 31, 2013, were provided as information items.

#### Golden Knights Corporation and UCF Athletic Association 2013-14 Second-Quarter Financial Report Presentation (INFO-2)

Todd Stansbury, Director of Athletics, Brad Stricklin, Senior Associate Athletics Director and Chief Financial Officer, and David Hansen, Senior Associate Athletics Director of Internal Operations, gave a presentation on the Golden Knights Corporation and UCF Athletic Association's operating results and budget.

#### University and DSO Debt Report (INFO-3)

Merck reported that the University and DSO Debt Report was provided as an information item.

#### 2013 Audited University Financial Statements (INFO-4)

Tracy Clark, Associate Vice President for Administration and Finance and Controller, reported that the 2013 Audited University Financial Statements were provided as an information item.

#### Bloomberg Terminal Fee Discussion (INFO-5)

Paul Jarley, Dean of the College of Business Administration, explained the purpose of the Bloomberg terminals for finance and real estate majors and the need for the associated revised equipment fee for those students beginning 2014-15.

<u>UCF Convocation Corporation Series 2004A Certificates of Participation Refinancing (INFO-6)</u> Pittman explained that the UCFCC has the opportunity to refinance debt issued in 2004, resulting in possible savings in excess of 5 percent. Various financing alternatives are currently being explored to determine which option will yield the best overall savings. The committee unanimously recommended the UCFCC refinance this debt.

#### Colbourn Hall Renovations (INFO-7)

Merck and Lee Kernek, Associate Vice President for Administration and Finance, explained the preferred renovation option for Colbourn Hall is to build a new 75,000 square-foot building adjacent to the current building. Upon completion, the employees and departments housed in Colbourn Hall would move into the new building. Possibilities for the existing Colbourn Hall are contingent upon funding and will be considered at a future date. The committee unanimously recommended moving forward with the preferred renovation option.

#### Invitation to Negotiate for a Hotel and Conference Center (INFO-8)

Merck discussed the Invitation to Negotiate being developed for a hotel and conference center that potentially would be constructed on campus. The results and recommendation will be brought back to the committee before a decision is made.

Page 2 of 3

Global Academy Facilities Update (INFO-9)

Merck, Clark, and Paul Lartonoix, Interim Assistant Vice Provost, provided an update on the financing and construction of the Global UCF classroom building and parking garage. The committee unanimously recommended an internal loan to finance the classroom building. The parking garage is proposed to be funded through the revenue bond process. Lartonoix also provided an update on the Global UCF program itself.

Chair Marchena adjourned the Finance and Facilities Committee meeting at 10:30 a.m.

Respectfully submitted:

William F. Merck II Vice President for Administration and Finance and Chief Financial Officer Date

Page 3 of 3

#### Exhibit D

ITEM: FF-4

### University of Central Florida Board of Trustees

SUBJECT: Colbourn Hall Renovations

DATE: May 22, 2014

#### PROPOSED BOARD ACTION

Approval to proceed in the renovation process for Colbourn Hall.

#### BACKGROUND INFORMATION

Constructed 40 years ago, Colbourn Hall suffers from issues common to older buildings. In addition, the original HVAC system is still in operation. Renovating the building in phases is not practical, as it would necessitate the university provide temporary housing for almost 200 faculty members, department offices, the Graduate Student Center, and the University Writing Center.

The preferred renovation option is to build a new, approximately 75,000 square-foot building adjacent to the current building for the employees and departments housed in Colbourn Hall. Possibilities for the existing Colbourn Hall are contingent upon funding and will be considered at a future date.

The cost of the new building is estimated at \$21.3 million. In the absence of PECO funding and considering the need to move forward expeditiously, construction costs will be paid from UCF non-recurring funds.

Supporting docum	mentation: None
Prepared by:	William F. Merck II, Vice President for Administration and Finance and Chief Financial Officer
Submitted by:	William F. Merck II, Vice President for Administration and Finance and Chief Financial Officer

#### Minutes Board of Trustees Meeting University of Central Florida May 22, 2014

Chair Olga Calvet called the meeting of the Board of Trustees to order at 1:05 p.m. in the Live Oak Center on the UCF Orlando campus.

The following board members attended the meeting: Trustees Jim Atchison, Weston Bayes, Clarence Brown, Richard Crotty, Robert Garvy, Marcos Marchena, Alex Martins, Reid Oetjen, and Beverly Seay.

#### WELCOME

Calvet reminded the board that the meeting was covered by the Florida Sunshine Law and that the public and press were invited to attend.

She welcomed the board members and called on **Rick Schell**, Associate Corporate Secretary, to call the roll. Schell noted that a quorum was present.

Calvet welcomed public comment from Jonathan Sebastian Blount. Blount is founder of *Essence Magazine*.

Calvet called for approval of the March 27, 2014, meeting minutes, which were approved.

Calvet called on John C. Hitt for remarks and introductions.

#### REMARKS

Hitt welcomed and congratulated new board member, Weston Bayes, the newly-elected president of the UCF Student Government Association.

Hitt announced that **Reid Oetjen** was elected to a second, one-year term as chair of the Faculty Senate and retains his seat on the board of trustees.

#### INTRODUCTIONS

Hitt recognized the following members of the UCF community, congratulating them for their accomplishments.

#### A. Students

Dan Holsenbeck, Vice President for University Relations, introduced this year's legislative scholars and thanked them for their service: Jon Bielby, Alysha Burgess, Jarrett Davis, Kevin Deo, Mikaela Duffy, Kurt McDavid, Elisabeth Mendes, Allysia Mompoint, Christina Nguyen, and Jessica Sirianni.

Hitt announced that the UCF Collegiate Cyber Defense Competition Team placed first in the 2014 Raytheon National Collegiate Cyber Defense Competition. Members of the team present for recognition were Carlos Beltran, team captain, Jason Cooper, team co-captain, Alex Davis, Dale Driggs, Mark Ignacio, Heather Lawrence, Cody McMahon, Troy Micka, and Dr. Thomas Nedorost, faculty sponsor.

Hitt congratulated women's golfer Ashley Holder and head coach, Emily Marron. Holder was named this year's American Athletic Conference Player of the Year and Freshman Golfer of the Year.

Hitt noted that UCF's softball team won the American Athletic Conference regular-season championship. Junior Farrah Sullivan was named the AAC Player of the Year and head coach Renee Luers-Gillispie's coaching staff was named Coaching Staff of the Year.

#### B. Faculty

Zenghu Chang, a distinguished professor of physics and optics, was recognized for holding the world's record for the shortest laser pulse. He was awarded more than \$9 million dollars, and his research can lead to faster, more efficient computers and electronic devices.

**Timothy Coombs**, professor in the Nicholson School of Communication, was recognized for his winning the 2013 Pathfinder Award from the Institute for Public Relations. This lifetime achievement award recognizes a body of scholarly research that has made a significant contribution to the theory and practice of public relations.

#### C. 2014 Pegasus Professors Awards

Hitt referred the board members to their FYI materials for a summary of the meritorious achievements of each of the 2014 Pegasus Professors and Reach for the Stars recipients.

The Pegasus Professor Award is UCF's most prestigious faculty honor, distinguishing extraordinary contributions to the UCF community through teaching, research, and service. This year, four faculty members were presented with this award. Hitt recognized and congratulated the following recipients who were in attendance.

Aristide Dogariu, Florida Photonics Center of Excellence Jeffrey Rupert, School of Performing Arts

#### D. Reach for the Stars Awards

The UCF Reach for the Stars award honors highly successful research and creative activity accomplished by early-career university professionals. There were eight recipients for this year's inaugural UCF Reach for the Stars awards. Hitt recognized and congratulated the following recipients who were in attendance.

Ayman Abouraddy, Center for Research and Education in Optics and Lasers Thomas Bryer, School of Public Administration Stephen Fiore, Department of Philosophy Joseph LaViola II and Dr. Kenneth Stanley, Department of Electrical Engineering and Computer Science, and

Eleazar Vasquez III, Department of Child, Family, and Community Sciences

#### E. Employee of the Month

The Employee of the Month for May was Jim Sullivan, a maintenance specialist at the Recreation and Wellness Center.

Hitt asked the audience to join him in congratulating these members of the UCF family.

#### F. Diligent Boardbooks

Schell provided an update on Diligent Boardbooks, an electronic format for handling board and committee documentation. Schell announced that the first paperless meeting will be on September 25, 2014. One-on-one training will be provided for trustees in September.

#### REPORTS

**Deborah German**, Vice President for Medical Affairs and Dean of the College of Medicine, gave an update on the UCF College of Medicine.

#### INFORMATION

Calvet noted the following informational item.

INFO-1 – New Committee Assignments

#### CONSENT AGENDA

A motion was made to accept the consent agenda, and members of the board unanimously approved the following actions.

- EP-1 2014 Tenure Recommendations-Approval of tenure for faculty members whose names are recommended.
- EP-2 UCF 2014-15 Work Plan-Approval of the UCF 2014-15 Work Plan.
- FF-1 Amend UCFAA Bylaws–Approval to amend the UCF Athletics Association Bylaws to combine the standing Audit Committee and Finance Committee to create a new single Audit and Finance Committee.
- FF-2 Refinancing of the UCF Convocation Corporation Series 2004A Certificates of Participation-Approval to refinance the UCF Convocation Corporation Series 2004A Certificates of Participation.

• FF-3 Revisions to Amendments to Regulation UCF-6.008 Vehicle Registration Fees and Parking Violation Fines-Approval of the attached amendments to existing university regulation UCF-6.008 Vehicle Registration Fees and Parking Violation Fines, effective at the start of the Fall 2014 semester, pending approval by the Florida Board of Governors.

#### EDUCATIONAL PROGRAMS COMMITTEE REPORT

**Robert Garvy**, Chair of the Educational Programs Committee, noted the items approved in the consent agenda and reported the highlights from the committee meeting earlier in the day.

- Diane Z. Chase, Interim Provost and Vice President for Academic Affairs, reported on the 2014 Tenure Recommendations.
- Chase and Paige Borden, Assistant Vice President for Institutional Knowledge Management, provided an overview of the UCF 2014-15 Work Plan.
- Dean Bahaa Saleh, College of Optics and Photonics, Interim Vice Provost and Dean Elliot Vittes, Office of Undergraduate Studies, and Dean Ross Hinkle, College of Graduate Studies, reported on the 2012-13 Academic Program Review Recommendation Implementation Status.
- Maribeth Ehasz, Vice President for Student Development and Enrollment Services, reported on enrollment and housing trends.
- Chase provided the provost's update and noted that the Global Achievement Academy is underway with 70 students expected to enroll in the fall. She reported that the affordability textbook bill did not pass in the current legislative session. However, UCF is working with the bookstore to provide avenues to control textbook costs for the students. Chase stated there is an increase in funding to allow for an increase in hiring of new faculty.

#### ADVANCEMENT COMMITTEE REPORT

Rich Crotty, Chair of the Advancement Committee, reported the highlights from the committee meeting earlier in the day.

- Dan Holsenbeck gave a report on the 2014-15 State University System budget summary.
- Hitt reported on a \$2 million legislative appropriation for UCF's downtown presence. The project is being discussed.
- Joyce Henckler, Chief Development Officer of the UCF Foundation, reported on the capital campaign stating that \$130 million had been secured towards the campaign with \$80 million in active requests. She further stated that the Alumni Association had a busy graduation season, hosting senior send-off events within the colleges.
- Crotty reported that the NFL draft sparked enthusiasm from UCF alumni and fans as they
  gathered across the country to watch Blake Bortles drafted by the Jacksonville Jaguars.
  UCF benefited from the good publicity surrounding this event.

#### FINANCE AND FACILITIES COMMITTEE REPORT

Marcos Marchena, Chair of the Finance and Facilities Committee, noted the items approved in the consent agenda. He invited William F. Merck II, Vice President for Administration and Finance and Chief Financial Officer, and John C. Pittman, Associate Vice President for Administration and Finance, Debt Management, to provide a brief summary on the net savings involved with consent agenda item FF-2, Refinancing of the UCF Convocation Corporation Series 2004A Certificates of Participation, approved earlier in the day.

Marchena presented the following items for board approval.

- FF-4 Colbourn Hall Renovations-A motion was made and unanimously passed to proceed with the new construction to replace Colbourn Hall.
- FF-5 Global UCF Facilities Update-A motion was made and unanimously passed to
  proceed in the construction of an academic building to support the Global UCF
  program.
- FF-6 2014-15 Tuition and Fees, Amendments to University Tuition and Fee Regulation UCF 9.001–A motion was made and unanimously passed approving the tuition, tuition differential, out-of-state fees, financial aid fees, and technology fees for undergraduate, graduate, and professional students, effective Fall 2014. Also approved were amendments to University Tuition and Fee Regulation UCF-9.001.
- FF-7 2014-15 University Operating Budget-A motion was made and unanimously passed approving the university's 2014-15 operating budget.
- FF-8 2014-15 Capital Outlay Budget-A motion was made and unanimously passed approving the university's 2014-15 capital outlay budget and authorizing the president to make necessary adjustments to the 2014-15 capital outlay budget.
- FF-9 Florida Statewide Mutual Aid Agreement-A motion was made and unanimously passed approving the Florida Statewide Mutual Aid Agreement for the State of Florida Division of Emergency Management.

Marchena reported highlights from the committee meeting held on April 3, 2014. He advised that the committee had reviewed its charter for potential modifications and is recommending no changes.

Hitt announced that **M.J. Soileau** reported that grant and contract funding reached \$131 million, which is an increase of 31 percent from last year.

Calvet announced that all future board meetings will be held at the Fairwinds Alumni Center. She requested trustees to submit to Rick Schell any topics they would like to discuss at the July board retreat.

## ANNOUNCEMENTS AND ADJOURNMENT

Chair Calvet announced the following upcoming meetings:

Board of Governors meeting

June 17–19, 2014 (Fairwinds Alumni Center)

Board of Trustees retreat

July 24, 2014 (Fairwinds Alumni Center)

Calvet adjourned the board meeting at 2:24 p.m.

Respectfully submitted:

Date:

John C. Hitt Corporate Secretary Board of Trustees Meeting - New Business

#### Exhibit E

Finance and Facilities Committee - New Business

**ITEM:** FFC-4

#### University of Central Florida Board of Trustees Finance and Facilities Committee

SUBJECT: Razing of Building 18

**DATE:** June 27, 2016

#### PROPOSED COMMITTEE ACTION

Approve the demolition of building 18, contingent upon the Educational Plant Survey recommendation, and authorize the president to make necessary adjustments.

#### **BACKGROUND INFORMATION**

Building 18 is in poor condition and should be demolished. Deficiencies are found in structure, the building envelope, indoor air quality, fire alarm systems, potable water and plumbing distribution systems, electrical service, asbestos, HVAC, lighting, building automation, ADA compliance, interior finishes, flooring, egress, exterior lighting, and utility service entrances. Information technology upgrades also are necessary in order to meet current and future technology requirements. The building is showing signs of structural deterioration on the second and third floor exposed-exterior walkways, around the perimeter of the building, and throughout on steel handrails and structural steel-shelf angles.

The estimated cost to correct the problems within the building is in excess of \$15,000,000, which is greater than 60 percent of the building cost.

According to Administrative Rule 6C-9.004 Razing of Buildings, as prescribed by Section 240.22 Florida Statutes, Universities, each university's Board of Trustees shall have the authority to raze buildings. Prior to demolition of any educational support facility with a replacement cost exceeding \$1,000,000, the university shall obtain an Educational Plant Survey recommendation for demolition. The university Board of Trustees shall review and approve the Educational Plant Survey recommendation and transmit it to the Board of Governors for validation.

A spot survey by the BOG's staff has been requested.

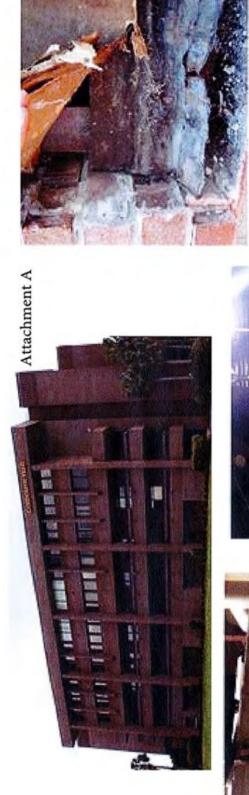
Finance and Facilities Committee - New Business

Supporting documentation: Attachment A: Photographs of the building

Prepared by: Lee Kernek, Associate Vice President for Administration and Finance

Submitted by: William F. Merck II, Vice President for Administration and Finance and Chief Financial Officer











Board of Trustees Finance and Facilities Committee Meeting President's Boardroom, Millican Hall, 3<sup>rd</sup> floor June 27, 2016

#### MINUTES

#### CALL TO ORDER

Trustee Alex Martins, chair of the Finance and Facilities Committee, called the meeting to order at 8:32 a.m. Committee members Bill Yeargin, Christopher Clemente, and David Walsh were present. Committee member Keith Koons and chairman Marcos Marchena attended by teleconference.

#### MINUTES APPROVAL

The minutes of the April 29, 2016, and May 31, 2016, Finance and Facilities Committee meetings were approved as submitted.

#### NEW BUSINESS

Direct Support Organizations' 2014-15 Third-Quarter Financial Reports (INFO-1) William F. Merck II, Vice President for Administration and Finance and Chief Financial Officer, and John C. Pittman, Associate Vice President for Administration and Finance, Debt Management, reported that the 2015-16 third-quarter financial reports ended March 31, 2015, for the UCF DSOs were provided as information items.

#### Release of Unrestricted UCF Stadium Corporation Revenues (FFC-1)

Merck and Pittman requested the release of unrestricted UCF Stadium Corporation revenues. The 2015-16 budget was approved by the UCF Stadium Corporation's board, which reflects projected unrestricted excess revenues of \$3,876,922 to be available for transfer to the UCFAA. The committee unanimously approved the release of unrestricted UCF Stadium Corporation revenues as presented.

#### 2015-16 Direct Support Organizations' Budgets (FFC-2)

Merck presented for approval the 2016-17 operating budgets for the following DSOs: UCF Athletics Association, UCF Convocation Corporation, UCF Finance Corporation, UCF Foundation, UCF Research Foundation, and UCF Stadium Corporation. The committee unanimously approved the budgets as presented.

#### Five-year Capital Improvement Plan (FFC-3)

Merck and Lee Kernek, Associate Vice President for Administration and Finance, requested approval of the capital improvement plan options for 2017-18 through 2021-22. Each year, the university must submit an updated capital improvement plan to the Board of Governors. This plan identifies projects that will be included in the three-year Public Education Capital Outlay

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list and provides information to the State Board of Education for its request for capital project funding for 2017-18. The capital improvement plan must be submitted to the Board of Governors' staff by August 1, 2016.

The committee unanimously approved the 2017-18 Capital Improvement Plan with the projects listed in the attached schedules.

### Razing of Building 18 (FFC-4)

Merck and Kernek presented a request for the razing of Building 18, also known as Colbourn Hall. Building 18 is in poor condition and should be demolished. The estimated cost to correct the problems within the building is in excess of \$15,000,000, which is greater than 60 percent of the building cost.

According to Administrative Rule 6C-9.004 Razing of Buildings, as prescribed by Section 240.22 Florida Statutes, Universities, each university's Board of Trustees shall have the authority to raze buildings. Prior to demolition of any educational support facility with a replacement cost exceeding \$1,000,000, the university shall obtain an Educational Plant Survey recommendation for demolition. The university Board of Trustees shall review and approve the Educational Plant Survey recommendation and transmit it to the Board of Governors for validation.

A spot survey by the BOG's staff has been requested. The committee unanimously approved the demolition of Building 18.

## Status of UCF Projects Presentation (INFO-4)

Kernek gave a presentation on the status of the active as well as planned construction and renovation projects on campus.

Chair Martins adjourned the Finance and Facilities Committee meeting at 10:27 a.m.

1- 50 8.1-16 Respectfully submitted: N William F. Merck II Date Vice President for Administration and Finance and Chief Financial Officer

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#### Exhibit F

### Minutes Board of Trustees Meeting University of Central Florida July 28, 2016

Chairman Marcos Marchena called the meeting of the Board of Trustees to order at 1:00 p.m. in the Live Oak Event Center on the UCF Orlando campus.

The following board members attended the meeting: Chairman Marcos Marchena, Vice Chair Robert Garvy, Ken Bradley, Clarence Brown, Christopher Clemente, Joseph Conte, Keith Koons, Beverly Seay, David Walsh, and William Yeargin. Trustees Ray Gilley and John Sprouls attended via teleconference.

#### WELCOME

Chairman Marchena reminded the board that the meeting was covered by the Florida Sunshine Law and that the public and press were invited to attend.

He welcomed the board members and called on Rick Schell, Associate Corporate Secretary, to call the roll. Schell determined that a quorum was present.

Marchena announced that special guest, Senate President Andy Gardiner, was in the audience and recognized him for all that he has done for UCF and the Orlando community. Marchena called on John C. Hitt who invited Senator Gardiner to join him and Chairman Marchena. Hitt remarked that UCF's successes of late are the direct results of several factors:

- location, location! Orlando and Central Florida destinations speak for themselves;
- a truly dedicated, motivated, and brilliant faculty who, in turn, attract a student body of talent, loyalty, and promise for the future;
- and, perhaps the most envied partnership in Florida with our local officials and elected members of the Legislature, led by Senator Gardiner and UCF alumnus Speaker of the House, Steve Crisafulli. Hitt stated that their representation of UCF's best interests through the legislative process is unprecedented!

Marchena thanked Senator Gardiner for his service to the state and Central Florida and for his support of UCF, adding that he is the type of public official who represents the very best of what we want in government.

Hitt invited Senator Gardiner to speak. Senator Gardiner said that in politics timing is everything and that we as a community had been fortunate with the type of partnerships we had formed. He was grateful to be Senate President when there were so many incredible opportunities for UCF and our community. He expressed his gratitude to be able to serve the Florida Senate and the community, and he thanked UCF for the recognition.

Hitt presented Senator Gardiner with a framed certificate and thanked him for his representation in the Florida Senate and for all that he has done for UCF.

#### PUBLIC COMMENTS

Messrs. Jimmy Briggs, Jeffrey Koeppel, Justin Hemlepp, and Nicholas Bagma commented on Educational Programs item EP-4c, Amendment to University Regulation UCF 5.0021 Student Government and Registered Student Organizations.

Sean Lavin reported that he is a graduate of UCF who participated in student government and the student press and had covered UCF over the last ten years for local media. He said that he plans to attend law school at University of Florida and thanked members of UCF and the board for their service.

Marchena responded and thanked the commentators. Marchena stated that, with Trustee Clemente's modifications to item EP-4c at the Educational Programs Committee meeting held earlier in the morning, the concerns that had presented had been addressed. Trustee Garvy advised the commentators that the regulation had been amended clarifying that the Student Government Association would control the expenditures of the funds.

#### MINUTES

Marchena called for approval of the May 13, 2016; May 31, 2016; June 14, 2016; and July 7, 2016; meeting minutes, which were approved.

Marchena called on President John C. Hitt for remarks and introductions.

### REMARKS

Hittreported that according to the National Academy of Inventors, the University of Central Florida ranked number 19 in the nation among public universities and number 40 in the world for the number of U.S. patents it secured in 2015.

Hitt reported that UCF had secured 50 patents for invention from the U.S. Patent and Trademark Office in 2015. He stated that UCF, the University of Florida, and the University of South Florida, which together represent the Florida High Tech Corridor, had 245 U.S. patents, exceeding the Research Triangle universities–Duke University, North Carolina State University, and the University of North Carolina–which had 131 patents.

Hitt called on A. Dale Whittaker, Provost and Executive Vice President, who introduced Elizabeth Klonoff, the new Vice President for Research and Dean of the College of Graduate Studies.

Whittaker introduced and welcomed Jeff Moore, the new Dean of the College of Arts and Humanities.

Hitt called on William F. Merck II, Vice President for Administration and Finance and Chief Financial Officer, who introduced Maureen Binder, the new Chief Human Resources Officer.

Hitt called on Danny White, Vice President and Director of Athletics, who introduced Florida native Greg Lovelady, UCF's new baseball coach.

## INTRODUCTIONS

Hitt acknowledged and congratulated the following UCF faculty and staff members.

#### A. Faculty

Michael Chini, a post-doctoral associate in the Physics Department, was recognized by the Oak Ridge Associated Universities with a 2016 Ralph E. Powe Junior Enhancement Award in physical sciences. Recipients are given an unrestricted \$5,000 research award, which is matched by the home institution. Hitt presented him with an ORAU plaque.

Alexander Katsevich, a professor of mathematics, has received the highest international honor by the forestry industry: the 2016 Marcus Wallenberg Prize. Katsevich is well known for "The Katsevich Algorithm" and other groundbreaking techniques. His co-recipient applied Katsevich's approach to forestry. The prize comes with an award of approximately \$246,000.

College of Medicine researcher Shadab Siddiqi identified for the first time a tiny liver protein that when disrupted can lead to the nation's top killer, cardiovascular disease, as well as fatty liver disease, a precursor to liver cancer. His finding was the cover story of the June 10 edition of *The Journal of Biological Chemistry*. An associate professor in the Burnett School of Biomedical Sciences, Siddiqi's latest discovery was funded by the National Institutes of Health.

#### B. Employee of the Month

The Employee of the Month for May was Lindell Jones, a teacher's assistant at the Creative School for Children for almost 18 years.

The Employee of the Month for June was Susan Terrill, an office assistant in the John C. Hitt Library.

Hitt gave a special thanks to Greg Gromak for initiating and creating the lighting display on Millican Hall to honor the Pulse Nightclub victims and presented him with a framed photo of the Millican Hall lights.

## REPORTS

Marchena stated that earlier this summer, Orlando was the site of the worst mass shooting in modern U.S. history. UCF was a leader in its response to the tragedy, and we continue to help the community. Marchena called on Maribeth Ehasz, Vice President for Student Development and Enrollment Services, and Grant Heston, Vice President for Communications and Marketing, who gave a report on the following, including videos.

• INFO-1 UCF's Response to the Pulse Nightclub Tragedy

Marchena welcomed Chair *Emeritus* Rick Walsh and Michael Morsberger, Vice President for Alumni Relations and Development and CEO, UCF Foundation, Inc., who reported on the following.

INFO-2 IGNITE The Campaign for UCF

Marchena thanked Chair Emeritus Rick Walsh for his continued involvement with the university.

Marchena recognized Nelson Marchioli, Chair of the UCF Foundation Board, and thanked him for his dedication and contribution of time.

## ADVANCEMENT COMMITTEE REPORT

Clarence Brown, Chair of the Advancement Committee, reported the highlights from the committee meeting held earlier in the day.

- Heston provided an overview of social media strategy and its impact in engaging students, alumni, and the community. Heston announced that a new UCF license plate will be available through the Department of Motor Vehicles, and it is the first new UCF design in 29 years. All license plate revenue comes to the university for the benefit of students.
- Dan Holsenbeck, Senior Vice President for University Relations, reported that his team is working with the university's general counsel to develop appropriation agreements for the distribution of funds that are approved for this year's budget. Holsenbeck stated that many legislative campaigns were underway and reminded the board of the policies and regulations surrounding lobbying at a state university, and that the university must remain neutral in all campaign activity.
- Holsenbeck introduced Greg Schuckman, Assistant Vice President for University Relations and Director of Federal Relations, who lobbies on behalf of UCF in Washington, D.C. Schuckman also works on coalitions with other universities on higher education issues.
- Michael Morsberger, Vice President for Alumni Relations and Development and CEO, UCF Foundation, Inc., presented a review of fiscal year 2015-16 and provided an update on the progress of the IGNITE campaign. The campaign has reached the halfway mark in of its fundraising towards the \$500 million goal. September 16 is the public launch of the campaign.

Marchena stated that before proceeding with the next committee report, he wished to note that at the last board meeting he had commented on the Governor Rick Scott's Degrees to Jobs Summit, and had acknowledged Hitt's and Walsh's participation on panels. Marchena then recognized Trustee Sproul's participation at the Summit as the keynote speaker at one of the luncheons.

## COMPENSATION AND LABOR AD HOC COMMITTEE REPORT

John Sprouls, Chair of the Compensation and Labor Ad Hoc Committee, reported the highlights from the committee meeting held earlier in the day.

• Sprouls stated the committee reviewed the annual presidential performance and compensation review cycle and guidelines. The results will be delivered to the full board this fall.

Sprouls presented the following items for board approval.

- CL-1 Amendment to University Regulations UCF-3.0031 Employee Tuition Free Course Enrollment and UCF-9.004 UCFAA Employee Tuition Free Course Enrollment-A motion was made and unanimously passed by the board approving Amendments to University of Central Florida Regulations UCF-3.0031 and UCF-9.004.
- CL-2 Amendment to University Regulation UCF-3.0262 Meritorious Service Awards– A motion was made and unanimously passed by the board approving amendment to University of Central Florida Regulation UCF-3.0262.

### EDUCATIONAL PROGRAMS COMMITTEE REPORT

Robert Garvy, Chair of the Educational Programs Committee, reported the highlights from the committee meeting held earlier in the day.

- Whittaker reported on the conferral of degrees for summer 2016.
- Whittaker reported on the Path to Preeminence, a Five-year Benchmarking Plan.
- Whittaker announced a new degree program, Master of Science in Genetic Counseling, and stated that the program will meet the standards of the Accreditation Council of Genetic Counseling. John Weishampel, Associate Dean, College of Graduate Studies, presented the program.
- Garvy summarized the amendments stated in the consent agenda items EP-4a Chapter 2 Regulations and EP-4b Chapter 5 Regulations. Marchena requested that EP-4c University Regulation UCF-5.0021 be set aside in order that the board could consider it separately.
- Whittaker reported on tenure with hire.
- Garvy noted that the bulk of the Provost's report was deferred to the next meeting due to time constraints.

## FINANCE AND FACILITIES COMMITTEE REPORT

Robert Garvy, Vice Chair of the Finance and Facilities Committee, reported highlights from the committee meeting held earlier in the day.

• William F. Merck II, Vice President for Administration and Finance and Chief Financial Officer, advised the board of an upcoming item to be heard at the next Finance and Facilities Committee meeting regarding the Nicholson Fieldhouse, and he provided an overview and description of the non-air-conditioned facility. Hitt noted that he would like to have more information collected on what reasonable uses of the space there may be and the full cost of preparing the space so a rational decision could be made.

Garvy presented the following items for board approval.

- FF-1 Release of Unrestricted UCF Stadium Corporation Revenues—A motion was made and unanimously passed by the board approving the release of revenues above budgeted obligations from the UCF Stadium Corporation to the UCF Athletics Association for 2016-17.
- FF-2 2016-17 Direct Support Organizations' Budgets-A motion was made and unanimously passed by the board approving the 2016-17 operating budgets for the UCF Athletics Association, UCF Convocation Corporation, UCF Finance Corporation, UCF Foundation, UCF Research Foundation, and UCF Stadium Corporation.
- FF-4 Razing of Building 18–A motion was made and unanimously passed by the board approving the demolition of building 18, contingent upon the Educational Plant Survey recommendation, and authorizing the president to make necessary adjustments.

#### CONSENT AGENDA

A motion was made to accept the amended consent agenda removing EP-4c, and members of the board unanimously approved the following actions.

- EP-1 Conferral of Degrees-Approval of the conferral of degrees at the Summer commencement ceremonies
  - 2,973 baccalaureate degrees 496 master's degrees <u>159</u> doctoral and specialist degrees 3,628 Total
- EP-2 Path to Preeminence–Five-year Benchmark Plan–Approval of path to preeminence: five-year benchmarking plan

- EP-3 New Degree Program-Master of Science in Genetic Counseling-Approval of a master of science degree in genetic counseling
- EP-4a Amendment to Chapter 2 University Regulation-Approval of amendment to the following Chapter 2 university regulations:
  - UCF-2.001 Undergraduate Admissions
  - UCF-2.003 Admission of Graduate Students
  - UCF-2.0121 Limited Non-Degree-Seeking Applicants
  - UCF-2.0031 Post-baccalaureate Non-Degree-Seeking Applicants
- EP-4b Amendment to Chapter 5 University Regulation–Approval of amendment to university regulations relating to student conduct rules, student organization conduct rules, and review proceedings for violations of the conduct rules by students or student organizations. The Chapter 5 regulations to be amended are:
  - UCF-5.006 Student Rights and Responsibilities
  - UCF-5.007 Office of Student Conduct; Scope; Definitions; Student Conduct Records; Special Student Panels
  - UCF-5.008 Rules of Conduct
  - UCF-5.009 Student Conduct Review Process; Sanctions
  - UCF-5.010 Student Conduct Appeals
  - UCF-5.011 Scope; Authority; Principles of Group Responsibility; Violations of Law and Rule of Conduct Violations; Definitions; Student Organizational Conduct Records
  - UCF-5.012 Organizational Rules of Conduct
  - UCF-5.013 Organizational Conduct Review Process; Sanctions; Appeals
  - UCF-5.015 Student Academic Behavior Standards
- EP-5 2016-17 Tenure with Hire-Approval of tenure with hire

Marchena then presented EP-4c for the board to consider separately. He stated that the vote is to approve item EP-4c with the amendment approved by the committee, which was presented by Trustee Clemente. The amended text is as follows:

Through its own constitutional procedures and in accordance with Section 1009.24(10)(b), Florida Statutes, Student Government may determine the allocation and expenditure of that portion of University fees fixed by law and designated as Activity and Service Fees. The University must review the Activity and Service Fee budget, and the President may veto any particular line item in the budget.

• EP-4c Amendment to University Regulation UCF-5.0021 Student Government and Registered Student Organizations-A motion was made and unanimously passed by the board approving the amendment to university regulations relating to student government allocation and expenditure of fees with the amendment introduced by Trustee Clemente.

### NEW BUSINESS

Marchena stated that he received a request from Chairman Thomas Kuntz of the Florida Board of Governors for a report on delegated authority to the president and vice presidents and advised the board that the report was ready to send. In conjunction with that response, Marchena will notify Chair Kuntz that the Nominating and Governance Committee is undertaking a review of that delegation authority.

Marchena reported that Holsenbeck and he traveled to Tallahassee to meet with the Governor's staff to discuss ongoing issues related to UCF Downtown.

## ANNOUNCEMENTS AND ADJOURNMENT

Marchena announced the following upcoming meetings:

Commencement

Football Kickoff Luncheon

August 6, 2016 (CFE Arena)

September 15, 2016

August 19, 2016 (Contact Rick Schell if you would like to attend)

Board of Trustees meeting

Board of Governors meeting

September 21-22, 2016 (New College of Florida)

(FAIRWINDS' Alumni Center)

Marchena adjourned the board meeting at 3:10 p.m.

Respectfully submitted:

Date:

John C. Hitt Corporate Secretary

## Minutes Board of Trustees Teleconference Meeting University of Central Florida September 6, 2018

Chairman Marcos Marchena called the teleconference meeting of the Board of Trustees to order at 11:01 a.m.

Marchena reminded the board that the meeting was covered by the Florida Sunshine Law and that the public and press were invited to attend.

# **WELCOME**

He welcomed the board members and called on Grant Heston, Assistant Corporate Secretary, to call the roll. Heston determined that a quorum was present.

The following board members attended the meeting: Chairman Marcos Marchena, Josh Boloña, Ken Bradley and William Self. Vice Chair Robert Garvy and Trustees Joseph Conte, Alex Martins, David Walsh and William Yeargin attended via teleconference.

## **Public Comment**

There were no requests for public comment.

## NEW BUSINESS

Chairman Marchena invited Vice President and General Counsel Scott Cole to brief the board on the agenda item. Cole gave a concise history of Colbourn Hall and construction of the new Trevor Colbourn Hall. The update provided an overview of the construction funding process, including using \$38 million from Education and General (E&G) funds, which by statute and Board of Governors regulations cannot be used for construction or rehabilitation of a building.

Cole noted that clear information about funding sources for Trevor Colbourn Hall was not shared with university leadership and our Board of Trustees, starting with the Board's original approval of the building in 2014.

Marchena then called on President Whittaker for his remarks. Whittaker recognized the seriousness of the situation and outlined changes, including:

- Accepted the resignation of the Vice President for Administration and Finance & Chief Financial Officer who made the decision to use the inappropriate funds for Trevor Colbourn Hall.
- Appointed an interim CFO outside of the Administration and Finance division who will report directly to the President.

- Recommended to the Board that future capital projects over \$2 million receive written certification by the President, the Vice President presenting the item, the General Counsel and Chief Financial Officer. The certification will identify the source of all funds and certify that they are appropriate for the purpose sought.
- Proposed a plan to the Board to immediately use eligible funds to replenish the E&G dollars that were used for the construction of Trevor Colbourn Hall.
- Directed that a thorough and transparent review begin to investigate this matter, how it happened and who was involved.

Following discussion to the item put forth for approval, Cole read the consent agenda item into the record.

BOT - 1 Replenish the Education and General (E&G) account(s) used to fund the construction of Trevor Colbourn Hall with non-appropriated funds.

For future board and committee approvals of capital projects, require a written certification signed by the President, Vice President submitting the item, Chief Financial Officer (CFO) and General Counsel identifying the source of funds and certifying that they are appropriate for that purpose.

A motion was made to approve item one of BOT - 1, and unanimously approved.

The board suggested that the implementation of a certification form be approved today and an amended form, after review at the Finance and Facilities Committee on September 27, 2018, be presented to the board, if necessary.

A motion was made to approve item two of BOT - 1, and unanimously approved.

# ADJOURNMENT

Marchena adjourned the board meeting at 11:30 a.m.

Respectfully submitted: \_\_\_\_

Date: \_\_\_\_\_

Grant Heston Assistant Corporate Secretary