CIP-1 NARRATIVE OVERVIEW FOR AGENCY CAPITAL IMPROVEMENTS PLAN (NARRATIVE)

AGENCY: University of Central Florida

AGENCY OBJECTIVES AND POLICIES AS THEY RELATE TO THE CAPITAL IMPROVEMENTS PROGRAM

The University of Central Florida (UCF) is a metropolitan university, which combines a contemporary and local role with one that is both traditional and universal. UCF seeks to serve its local, national, and international constituents by accelerating industry diversification, enhancing quality of life for our residents, and improving the world beyond our borders.

UCF is a leader in many academic, partnership, and research fields including optics and lasers, modeling and simulation, engineering and computer science, business administration, education, hospitality management, health care, and video game design. UCF's programs in communication and the fine arts help fulfill the cultural and entertainment needs of a growing metropolitan area. Through learning, discovery, and partnerships, UCF transforms lives and livelihood.

According to U.S. News & World Report's 2021 Best Colleges guide, UCF ranks among the nation's 20 most innovative universities. UCF is also ranked as a best-value university by Kiplinger and The Princeton Review, as well as one of the nation's most affordable colleges by Forbes.

UCF has a general education program designed to produce well-rounded graduates with a balance of communicative and mathematical skills; historical, social, and scientific knowledge; and ethical, aesthetic, and artistic sensitivity. UCF uses the power of scale and the pursuit of excellence to solve tomorrow's greatest challenges and to make a better future for our students and society. Students explore and address their personal and social responsibility in an interconnected world and become engaged global citizens. The university confers almost 17,000 degrees each year and benefits from a diverse faculty and staff who create a welcoming environment and opportunities for all students to grow, learn, and succeed, in order to lead productive and meaningful lives.

UCF is the No. 1 supplier of graduates to U.S. aerospace and defense industries for the sixth consecutive year, according to Aviation Week Network, and ranks second in the nation for teaching the critical skills needed by employers.

During our first 50 years of existence, the university experienced a tremendous growth period, with great demand and high expectations. With new residents still moving to Central Florida every week, the pressures to keep up with the region's higher education needs are immense.

The university has 13 colleges comprising: Arts and Humanities, Burnett Honors College Business, Community Innovation and Education, Engineering and Computer Science, Graduate Studies, Health Professions and Sciences, Medicine, Nursing, Optics and Photonics, Rosen College of Hospitality Management, Sciences, and Undergraduate Studies. The university will continue to implement new programs at both the undergraduate and graduate levels to meet the needs of a rapidly-developing service area. The university is committed to maintaining the public's trust by offering high-quality programs of instruction, research, and service.

The construction and maintenance of facilities is fundamental to delivery of the university's programs, and requires land improvements and infrastructure improvements. Based on the results of the Educational Plant Survey, UCF is operating at a significant space deficit and is leasing space in locations such as the Central Florida Research Park.

HIGHLIGHTS OF CAPITAL IMPROVEMENTS PROGRAM

This year, the university places a high priority on the renovation of building systems: Biological Sciences Renovation, Chemistry Renovation, and Howard Phillips Hall Renovation and Remodel. New projects include the Learning Lab, and the Performing Arts Complex Phase II.

CURRENT STATUS OF FACILITY EFFORTS AND HIGHLIGHTS OF FACILITY PROGRAM OVER LAST FIVE YEARS

Over the last five years, the university has upgraded a variety of existing facilities, identified a need for new facilities, and constructed new facilities. This past year, UCF completed construction of the John C. Hitt Library Renovation Phase IA, Student Union Expansion, and the Roth Athletic Center.

Funding of facility maintenance is critical to enable campus buildings to continue to function effectively and safely. Life Safety items have been identified and extensive programs for fire alarm systems, fire code corrections, American Disabilities Act (ADA) requirements, and asbestos abatement projects are being performed as funding becomes available.

SUMMARY OF THE SIZE, USE AND CONDITION OF THE AGENCY'S FACILITIES OPERATIONS

The university's facilities consist of more than 6.5+ million assignable square feet in more than 200 buildings located on 1,415 acres. Since 2012, the University has contracted with the ISES Corporation to benchmark and detail the condition of its E&G facilities. On a triennial basis, Facilities Condition Assessments are performed on each E&G building. Categories inspected include exterior structure and roof system, interior structure, ADA accessibility, energy/water conservation, health, fire/life safety, HVAC, electrical, plumbing, and elevators. This ongoing assessment helps the university prioritize and perform the most critical repairs in a cost-effective manner, therefore helping to avoid the accumulation of deferred maintenance on campus. These reports have become an invaluable tool when renovating existing buildings.

IMPACT OF THE CURRENT AND PROPOSED FACILITIES OPERATIONS SIZE, USE AND CONDITION ON THE AGENCY'S OPERATING BUDGET

Plant operations and maintenance costs to maintain our facilities are critical to the success of the university. By renovating buildings and infrastructure, UCF will be able to extend the lifecycles of its existing buildings, and upgrading the utilities will result in greater energy efficiency, offsetting ever-increasing utility costs.

ALL PROPOSED DEBT OR P3 PROJECTS FOR FY 2022-23 THAT REQUIRE LEGISLATIVE APPROVAL

College of Nursing	$63,781,430	Construction of a new90,000 GSF facility to serve College of Nursing academic programs; includes Classrooms, Teaching Labs (Simulation, Essential Skills, Health Assessment, Virtual Reality, Objective Structured Clinical Examination), Study Space, and Office/Conference Space.
Spectrum Stadium expansion (Phase I)	$48,700,000	Increase of approximately 10,000 in seating capacity in three separate seating sections.
Spectrum Stadium expansion (Phase II)	$43,500,000	Addition of premium seating tower in southwest sector of stadium.
McNamara Cove	$2,900,000	Located on ~ 1.5 acres of land immediately adjacent to the southeast corner of Spectrum Stadium, the outdoor resort-style pool facility will feature a 495 ft. x 9 ft. long river and two small activity pools. In addition, the site will include an 1,800 square ft. restroom and dressing facility (unconditioned), sand volleyball courts, and a large concrete-paver deck. Added pavilion building and additional landscaping.
Wayne Densch Sports Center Renovation	$750,000	Renovation and finish upgrades to interior spaces of the building (opened in 2003) to include the reallocation of space to create more efficient staff work and dressing-room and student-athlete areas.
Wayne Densch Sports Center Entry Atrium	$1,000,000	Expansion of building to create new formal entry to the WDSC.
Champions Way Pedestrian Path @ Kenneth G. Dixon Athletics Village	$2,500,000	Pedestrian pathway extending ~2,200 ft. from the Wayne Densch Center for Student-Athlete Leadership (east) to Addition Arena (west). Project will be done in phases as funding allows.
UCF Basketball Excellence Center	$15,000,000	Comprehensive renovation of south sector of the three-story "The Venue" (the original UCF Arena opened in 1991) to create functional and efficient space for the intercollegiate sports of men's and women's basketball, and women's Volleyball.
Stadium Video/Audio Boards	$1,500,000	New video display boards at baseball and softball stadiums.
Tennis Training Facility (courts)	$1,500,000	Eight hard-surface tennis courts and teams' clubhouse.

OTHER FACTORS AFFECTING THE AGENCY'S CAPITAL IMPROVEMENTS PROGRAM

N/A

State University System
5-Year Capital Improvement Plan (CIP)
FY 2022-23 through 2026-27

Summary of Projects - PECO-Eligible Projects

University: University of Central Florida

Contact: Gina Seabrook (name) | 407-823-5894 (phone) | gina.seabrook@ucf.edu (email)

PECO-ELIGIBLE PROJECT REQUESTS (ONLY)

Priority No.	Project Title	Projected Annual Funding 2022-23	2023-24	2024-25	2025-26	2026-27	Academic or Other Programs to Benefit from Project	Net Assignable Square Feet (NASF)	Gross Square Feet (GSF)	Project Cost	Project Cost Per GSF	Educational Plant Survey Recommended? (Date & Rec. #)
1	BIOLOGICAL SCIENCES BUILDING RENOVATION (P,C,E)	$ 15,357,300					Clge of Sciences	68,769	116,607	$ 21,630,000	$185	6/22/2021 No. 3.1 and 4.1
2	CHEMISTRY BUILDING RENOVATION (P,C)	$ 1,000,000	$ 9,000,000				Clge of Sciences	29,336	49,073	$ 10,000,000	$204	6/22/2021 No. 3.2 & 4.3
3	HOWARD PHILLIPS HALL RENOVATION AND REMODEL (P,C)		$ 500,000	$ 11,900,000			Total Campus	33,577	64,619	$ 12,400,000	$192	6/22/2021 No. 3.4 & 4.6
4	LEARNING LABORATORY - ACTIVE LEARNING, TEACHING LAB AND MAKER SPACE FACILITY (P,C,E)		$ 5,319,956	$ 58,519,519	$ 5,319,956		Total Campus	100,000	150,000	$ 69,159,431	$461	6/22/2021 No. 5.2
5	PERFORMING ARTS COMPLEX PHASE II (P,C,E)			$ 3,164,520	$ 67,170,960	$ 5,164,520	CAS-CHPS	88,310	122,800	$ 77,500,000	$631	6/22/2021 No. 5.1
	Total:	**$ 16,357,300**	**$ 14,819,956**	**$ 73,584,039**	**$ 72,490,916**	**$5,164,520**						

State University System
5-Year Capital Improvement Plan (CIP)
FY 2022-23 through 2026-27

Summary of Projects - CITF Projects

University: University of Central Florida | Contact: Gina Seabrook (name) | 407-823-5894 (phone) | gina.seabrook@ucf.edu (email)

CITF PROJECT REQUESTS (ONLY)

Priority No.	Project Title	Projected Annual Funding 2022-23	2023-24	2024-25	2025-26	2026-27	Academic or Other Programs to Benefit from Project	Net Assignable Square Feet (NASF)	Gross Square Feet (GSF)	Project Cost	Project Cost Per GSF	University Approval Date
1	John C. Hitt Library Renovation Phase II	$ 7,301,087					Total Campus	144,097	226,506	$ 42,978,312	$190	5/2012, rev. 5/13/2019
2	John C. Hitt Library Renovation Phase IIB	$ 20,345,000					Total Campus	30,000	45,000	$ 20,345,000	$452	4/29/2021
	Total:	**$ 27,646,087**	**$ -**	**$ -**	**$ -**	**$ -**						

State University System
5-Year Capital Improvement Plan (CIP)
FY 2022-23 through 2026-27

Summary of Projects - Supplemental Funding

University: University of Central Florida

Contact: Gina Seabrook (name) | 407-823-5894 (phone) | gina.seabrook@ucf.edu (email)

SUPPLEMENTAL FUNDING OF PECO AND/OR CITF PROJECTS (ONLY)

Priority No.	Project Title	Projected Annual Funding					Academic or Other Programs to Benefit from Project	Net Assignable Square Feet (NASF)	Gross Square Feet (GSF)	Project Cost	Project Cost Per GSF
		Year 1	Year 2	Year 3	Year 4	Year 5					
Total:		$ -	$ -	$ -	$ -	$ -					

State University System
5-Year Capital Improvement Plan (CIP)
FY 2022-23 through 2026-27

Project Detail

University: University of Central Florida Project Title: Biological Sciences Renovation

Project Address: 4110 Libra Dr, Orlando, FL 32816

PROJECT NARRATIVE

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

The Biological Sciences Building is a reinforced concrete and masonry five-story structure (including the sub-level basement) and was built in 1975. With the addition of the annex in 2002, its size doubled to 116,607 gross square feet. This building houses two general-purpose classrooms with a combined seating capacity of 110 seats, and nine specialized teaching laboratories (BIO-COS) with a combined seating capacity of 300 seats. Research laboratories and research support spaces facilitate the sponsored research of 40 principal investigators and numerous graduate and undergraduate students from Biological Sciences (COS), Burnett School of Biomedical Sciences (COM) Genomics and Bioinformatics Cluster (OR-FCI), and Kinesiology and Physical Therapy (CHPS). Researchers in this building were awarded $12.5M in sponsored-research grants in the past three years. The rest of the building contains faculty and staff offices and conference rooms.

The Department of Biology is the greatest user of the building's instructional spaces, and has the 8th largest undergraduate program on campus, with 1,871 students in Fall 2018. In addition, the department serves thousands of non-majors through its teaching of introductory biology. The department has a well-recognized graduate program which currently supports 64 graduate students. Overall, the department comprises a balanced blend of research scientists and classroom lecturers who are committed to maintaining a diverse undergraduate curriculum and a dynamic graduate program, and engaging in contemporary research. Biology faculty have successfully trained thousands of undergraduate students for a range of biology careers, including botanists, zoologists, ecologists, and health care professionals. Furthermore, the department's broad-based curriculum provides excellent preparation for post-graduate education (e.g., medical, dental, veterinary, and graduate school). Its competitive MS and PhD programs provide contemporary training in a diverse academic environment. Many state and federal agencies, colleges, universities, environmental consulting firms, and NGOs have consistently employed its students. The Biology Department would make an even greater impact on the Central Florida region with up-to-date, optimized facilities designed to support its ability to provide broad-based science education in an engaging manner.

The university contracted with the ISES Corporation to conduct a Facilities Condition Assessment (FCA) to benchmark the condition of its E&G facilities. The ISES Corporation inspected Biological Sciences May 15, 2018 and reported the building's Facility Condition Needs Index (FCNI) at 0.47 (below average condition with major renovation required). This project request includes renovation costs for the entire building. These costs include the following scope items:

- Planning, design, permitting, and inspections
- Painting of public areas and labs
- Fire pump and controller replacement
- Fire alarm replacement, including peripherals and radio communications
- Restroom upgrades for ADA compliance
- Interior lighting replacement including ceiling grid and tile replacement
- Flooring replacement
- Building envelope repairs
- Stair egress and entrance repairs
- Exterior door replacement
- Compressed air system replacement
- Walk-in cooler condenser and evaporator replacement
- Information Technology air conditioner replacement
- Electrical panel replacement and upgrades
- Elevator modernization
- Boiler and hot water replacement and upgrades
- Replacement of building automation control systems
- Replacement or repair of HVAC distribution systems, sealing, ductwork, dampers, diffusers, etc.
- Replacement of furniture, fixtures, and equipment where necessary
- Lab upgrades where needed, such as countertop, cabinetry, and sink replacement
- Temporary staff relocation when necessary

SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of natural resource consumption in new construction projects, and renovations where applicable. 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 operational efficiency is achieved.

Research/Laboratory

The space classification is predominately research or laboratory type, with standard classroom and 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

EDUCATIONAL PLANT SURVEY

The 2021-2026 Educational Plant Survey was conducted March 5, 2021 and approved by the UCF Board of Trustees on April 22, 2021. Approval by the SUS Board of Governors is anticipated at their June 22, 2021 meeting.

The most recent UCF Educational Plant Survey recommendation as Project 3.1 & 4.1.

1% RESERVE ESCROW [per F.S. 1001.706 (12) c.] This pertains to PECO projects only, not CITF

Building / project value:	$ 63,721,000
Basis / source of valuation:	Facility Condition Assessment (ISES Report)
1st Year escrow deposit:	$ 637,210
Escrow funding source:	E&G
Comments:	

BUILDING SPACE DESCRIPTION

Space Type (per FICM)	Net Assignable Sq. Ft. (NASF)	Net-to-Gross Conversion Factor	Gross Sq. Ft. (GSF)	Unit Cost * (per GSF)	Building Cost	Remodeling Projects **Only** NASF **BEFORE**	Remodeling Projects **Only** NASF **AFTER**
NEW CONSTRUCTION							
	-		-		-		
	-		-		-		
	-		-		-		
	-		-		-		
	-		-		-		
	-		-		-		
	-		-		-		
	-		-		-		
	-		-		-		
	-		-		-		
Total:	-		-		-		
REMODELING / RENOVATION							
Classroom	1,515	1.4	2,121	124	263,004	1,515	1,515
Teaching Lab	13,266	1.5	19,899	150	2,984,850	13,266	13,266
Research Lab	41,057	1.5	61,586	181	11,146,976	41,057	41,057
Office	12,790	1.4	17,906	114	2,043,170	12,790	12,790
	-		-		-	-	-
	-		-		-	-	-
	-		-		-	-	-
	-		-		-	-	-
	-		-		-	-	-
	-		-		-	-	-
Total:	68,628		101,512		16,438,000	68,628	68,628
Total New Const. and/or Remodel / Renovation:	68,628		101,512		16,438,000		

* Apply Unit Cost to total GSF based on Space Type

PROJECT COMPONENT COSTS & PROJECTIONS

	Costs Funded to Date	Projected Costs Year 1	Year 2	Year 3	Year 4	Year 5	Total
Basic Construction Costs							
Building Cost (from above)	3,521,064	12,916,936					16,438,000
Environmental Impacts/Mitigation							
Site Preparation							
Landscape / Irrigaiton							
Plaza / Walks							
Roadway Improvements							
Parking : _____ spaces							
Telecommunication							
Electrical Service							
Water Distribution							
Sanitary Sewer System							
Chilled Water System		233,278					233,278
Storm Water System		87,300					87,300
Energy Efficient Equipment							
Subtotal: Basic Const. Costs	3,521,064	13,237,514					16,758,578
Other Project Costs							
Land / existing facility acquisition							
Professional Fees	1,790,345						1,790,345

Fire Marshall Fees	65,085			65,085
Inspection Services	86,087			86,087
Insurance Consultant	43,214			43,214
Surveys & Tests	45,000			45,000
Permit / Impact / Environmental Fees	80,617			80,617
Artwork				
Moveable Furnishings & Equipment		1,895,874		1,895,874
Project Contingency	641,288	223,912		865,200
Subtotal: Other Project Costs	2,751,636	2,119,786		4,871,422
Total Project Cost:	6,272,700	15,357,300		21,630,000

PROJECT FUNDING

Funding to Date

Source *	Fiscal Year	Amount
donations	2021-22	6,272,700
		-
		-
		-
		-
	Total:	6,272,700

Total Project Cost (from above)	**Remaining Funding Need**
21,630,000	15,357,300

***** List any prior PECO funding. Also, for non-PECO funding sources (i.e. donations, auxiliary, C&G, etc), list each source and the entire anticipated ($) amount. See Instructions for further detail.

State University System
5-Year Capital Improvement Plan (CIP)
FY 2022-23 through 2026-27

Project Detail

University: University of Central Florida Project Title: Chemistry Building Renovation

Project Address: 4104 Libra Dr, Orlando, FL 32816

PROJECT NARRATIVE

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

The Chemistry Building, a lab-sciences building constructed in 1969, is still serviced by its original building systems and is in grave need of a major renovation. The building currently serves as home to the Chemistry Department within the College of Sciences. In order for Chemistry to continue functioning as a lab-science building, it must be brought up to code and the labs modernized to ensure their compliance. The building is structurally sound; however, extensive remediation of critical and non-critical building infrastructure issues is required. Replacement of building systems will prolong the intended use of the building and avoid unnecessary and costly building system failures.

The building requires the following renovations:
•Replacement of 24 laboratory exhaust fans on the south side of the building with one dual fan system; the existing fans are obsolete, have reached end-of-life, and are not current to code.
•Replacement of 16 laboratory exhaust fans on the north side of the building with one dual fan system; the existing fans are obsolete, have reached end-of-life, and are not current to code.
•Update and modernization of lab controls to provide a more energy-efficient approach to controlling the amount of exhaust, makeup air, chilled water, and reheat required in the building.
•Replacement of all air handler units (AHU) and variable air volume systems (VAV); none meet current UCF standards.
•Replacement of boilers, pumps, and domestic hot water heat exchangers with premium efficient condensing boilers; current boilers do not meet UCF standards.
•Update electrical, generator, elevator, ADA restroom, egress stair, and limited finishes

Using deferred maintenance funds, the university has already renovated the following:
•Added fire sprinklers.
•Replaced the main electrical distribution panel.
•Repaired the domestic and acid waste piping.
•Replaced the exterior doors.
•Renovated AHU coils, recoated drain pans and floors in AHU mechanical rooms.

The following three assessments have been completed related to the Chemistry Building:
•ISES Corporation conducted a Facilities Condition Assessment (FCA) to benchmark the condition of its E&G facilities. The issues identified encompass deficiencies such as indoor air quality, fire alarms, potable water and plumbing systems, electrical service, asbestos, HVAC, lighting, building automation, utility service entrance, information technology upgrades, ADA compliance, building envelope, interior finishes, and flooring. Per ISES, the most critical issue in this building is the support systems for the teaching labs, which are outdated and need to be repaired or replaced.
•TLC Engineering conducted a life safety and building systems analysis on the building in 2015. The study evaluated the construction parameters and usage of the building's laboratories in order to assess and categorize the existing laboratories, based on their current conditions. This evaluation corroborates the FCA findings that the labs do not fully meet current codes. Specifically, they lack proper exhaust fans, gas shut off valves, generator capacity, fire suppression systems, smoke control systems, room exits, fire dampers, and have significant HVAC issues. These issues need to be addressed to ensure that the teaching and research labs meet code 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 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 ANSI/ASRHAE/IES Standard 90.1-2016 Energy Standard for Buildings, 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 2021-2026 Educational Plant Survey was conducted March 5, 2021 and approved by the UCF Board of Trustees on April 22, 2021. Approval by the SUS Board of Governors is anticipated at their June 22, 2021 meeting.

The most recent UCF Educational Plant Survey (EPS) recommends the Chemistry Project as 3.2 & 4.3.

1% RESERVE ESCROW [per F.S. 1001.706 (12) c.] This pertains to PECO projects only, not CITF

Building / project value: $ 28,352,000

Basis / source of valuation: Facility Condition Assessment (ISES Report)

1st Year escrow deposit: $ 283,520

Escrow funding source: E&G

Comments:

BUILDING SPACE DESCRIPTION

Space Type (per FICM)	Net Assignable Sq. Ft. (NASF)	Net-to-Gross Conversion Factor	Gross Sq. Ft. (GSF)	Unit Cost * (per GSF)	Building Cost	Remodeling Projects **Only** NASF **BEFORE**	NASF **AFTER**
NEW CONSTRUCTION							
	-		-		-		
	-		-		-		
	-		-		-		
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	-		-		-		
	-		-		-		
	-		-		-		
Total:	-		-		-		
REMODELING / RENOVATION							
Research Lab	7,848	1.5	11,772	222	2,616,973	7,848	7,848
Teaching Lab	15,429	1.5	23,144	210	4,860,135	15,429	15,429
Office	4,172	1.4	5,841	114	665,851	4,172	4,172
Classroom	340	1.5	510	124	63,240	340	340
	-		-		-	-	-
	-		-		-	-	-
	-		-		-	-	-
	-		-		-	-	-
	-		-		-	-	-
	-		-		-	-	-
Total:	27,789		41,266		8,206,200	27,789	27,789
Total New Const. and/or Remodel / Renovation:	27,789		41,266		8,206,200		

* Apply Unit Cost to total GSF based on Space Type

PROJECT COMPONENT COSTS & PROJECTIONS

	Costs Funded to Date	Projected Costs Year 1	Year 2	Year 3	Year 4	Year 5	Total
Basic Construction Costs							
Building Cost (from above)			8,206,200				8,206,200
Environmental Impacts/Mitigation							
Site Preparation							
Landscape / Irrigaiton							
Plaza / Walks							
Roadway Improvements							
Parking : spaces							
Telecommunication							
Electrical Service							
Water Distribution							
Sanitary Sewer System							
Chilled Water System			233,278				233,278
Storm Water System			87,300				87,300
Energy Efficient Equipment							
Subtotal: Basic Const. Costs			8,526,778				8,526,778
Other Project Costs							
Land / existing facility acquisition							
Professional Fees		1,000,000					1,000,000
Fire Marshall Fees			21,825				21,825
Inspection Services			72,183				72,183
Insurance Consultant			43,214				43,214
Surveys & Tests			45,000				45,000

Permit / Impact / Environmental Fees			48,500		48,500
Artwork					
Moveable Furnishings & Equipment					
Project Contingency			242,500		242,500
Subtotal: Other Project Costs		1,000,000	473,222		1,473,222
Total Project Cost:			9,000,000		10,000,000

PROJECT FUNDING

Funding to Date

Source *	Fiscal Year	Amount
		-
		-
		-
		-
		-
	Total:	-

Total Project Cost (from above)	**Remaining Funding Need**
10,000,000	10,000,000

***** List any prior PECO funding. Also, for non-PECO funding sources (i.e. donations, auxiliary, C&G, etc), list each source and the entire anticipated ($) amount. See Instructions for further detail.

State University System
5-Year Capital Improvement Plan (CIP)
FY 2022-23 through 2026-27

Project Detail

University: University of Central Florida Project Title: Howard Phillips Hall Renovation and Remodel

Project Address: 4297 Andromeda Loop N. Orlando, FL 32816

PROJECT NARRATIVE

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

Howard Phillips Hall (HPH), a four-story concrete and masonry structure, was built in 1969 as one of the university's original buildings. It was partially remodeled in 1990 and 2000, but requires upgrades to its building systems as well as comprehensive reconfiguration of its interior spaces. Occupants of the building, in 2020, include:
•College of Sciences - Political Science, Sociology, Anthropology, and Global Perspectives
•SDES - University Testing Center, First Year Experience, Trio Programs
•Numerous offices have been provided for Academic Affairs, the Office of Research, and the departments of History, English, Modern Languages, Philosophy, Performing Arts, and Health Management Informatics

The university contracted with the ISES Corporation to conduct a Facilities Condition Assessment (FCA) to benchmark the condition of its E&G facilities. Howard Phillips Hall was inspected April 19, 2018. ISES reported the building's Facility Condition Needs Index (FCNI) at 0.34 (fair condition normal renovations required). This renovation project includes the replacement of above-ceiling HVAC air distribution systems, ceiling and lighting replacements, reconfiguration of select areas of the building to improve the space efficiency of the floor plan, the replacement of finishes such as carpet/tile/paint, and the replacement of vertical transportation. Code upgrades include the creation of accessible and all-gender restrooms, installation of ADA-compliant stairwell and exterior handrails, dual-level drinking fountains, lever handle door hardware, and signage. In addition to the ISIS report, UCF IT recommends significant infrastructure improvements including right-sized IT closets and equipment upgrades.

SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of natural resource consumption in new construction projects, and renovations where applicable. 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 operational efficiency is achieved.

Classroom/Office

The space classification is predominately classroom or office type, with research or laboratory 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 2021-2026 Educational Plant Survey was conducted March 5, 2021 and approved by the UCF Board of Trustees on April 22, 2021. Approval by the SUS Board of Governors is anticipated at their June 22, 2021 meeting.

The most recent UCF Educational Plant Survey (EPS) recommends the Chemistry Project as 3.4 & 4.6.

1% RESERVE ESCROW [per F.S. 1001.706 (12) c.] This pertains to PECO projects only, not CITF

Building / project value:	$ -
Basis / source of valuation:	
1st Year escrow deposit:	$ -
Escrow funding source:	E&G
Comments:	

BUILDING SPACE DESCRIPTION

Space Type (per FICM)	Net Assignable Sq. Ft. (NASF)	Net-to-Gross Conversion Factor	Gross Sq. Ft. (GSF)	Unit Cost * (per GSF)	Building Cost
NEW CONSTRUCTION					
	-		-		-
	-		-		-
	-		-		-
	-		-		-
	-		-		-

	-		-		-	
	-		-		-	
	-		-		-	
	-		-		-	
	-		-		-	
Total:	-		-		-	

* Apply Unit Cost to total GSF based on Space Type

REMODELING / RENOVATION

						Remodeling Projects **Only** NASF **BEFORE**	NASF **AFTER**
	-		-		-	-	-
	-		-		-	-	-
	-		-		-	-	-
	-		-		-	-	-
	-		-		-	-	-
	-		-		-	-	-
	-		-		-	-	-
	-		-		-	-	-
	-		-		-	-	-
	-		-		-	-	-
Total:	-		-		-	-	-
Total New Const. and/or Remodel / Renovation:	-	33577	-	64619	-		

PROJECT COMPONENT COSTS & PROJECTIONS

	Costs Funded to Date	Projected Costs Year 1	Year 2	Year 3	Year 4	Year 5	Total
Basic Construction Costs							
Building Cost (from above)				8,883,112			8,883,112
Environmental Impacts/Mitigation							
Site Preparation							
Landscape / Irrigaiton							
Plaza / Walks							
Roadway Improvements							
Parking : _____ spaces							
Telecommunication							
Electrical Service							
Water Distribution							
Sanitary Sewer System							
Chilled Water System							
Storm Water System							
Energy Efficient Equipment							
Subtotal: Basic Const. Costs				8,883,112			8,883,112
Other Project Costs							
Land / existing facility acquisition							
Professional Fees			500,000	443069			943,069
Fire Marshall Fees				26127			26,127
Inspection Services				144527			144,527
Insurance Consultant							
Surveys & Tests				5330			5,330
Permit / Impact / Environmental Fees				52499			52,499
Artwork							
Moveable Furnishings & Equipment				729120			729,120
Project Contingency				1616216			1,616,216
Subtotal: Other Project Costs			500,000	3,016,888			3,516,888
Total Project Cost:				11,900,000			12,400,000

PROJECT FUNDING

Source *	Fiscal Year	Funding to Date Amount
		-
		-
		-
		-
		-
	Total:	-

Total Project Cost (from above)	**Remaining Funding Need**
12,400,000	12,400,000

***** List any prior PECO funding. Also, for non-PECO funding sources (i.e. donations, auxiliary, C&G, etc), list each source and the entire anticipated ($) amount. See Instructions for further detail.

Project Detail

University: University of Central Florida Project Title: Learning Laboratory

Project Address: Main Campus - TBD

PROJECT NARRATIVE

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

In late 2017, UCF's Office of the Provost and Academic Affairs convened a university-wide committee to assess academic space and facility needs across campus, and to refine planning for research laboratories, teaching laboratories, and classroom space. Deans and Vice Presidents presented their 5-year visions for academic needs to the committee. Among the highest collective priorities was a need for more and better teaching laboratories and classrooms to support Science, Technology, Engineering, and Math (STEM).

UCF determined that a new innovative, interdisciplinary STEM facility could meet campus-wide needs for teaching laboratories and active learning classrooms for multiple colleges. The UCF 2021-2026 Educational Plant Survey "Needs Assessment" confirms that there remains a deficit of teaching laboratories and classrooms at UCF.

The proposed Learning Laboratory (LL) will be a 150,000 gross square foot (GSF) facility. The facility will provide 100,000 net assignable square feet (NASF) of classrooms, teaching laboratories, and office space to meet the needs of several colleges.

TEACHING LABORATORIES. New state-of-the-art Teaching Labs will replace aging, crowded teaching labs in other buildings, and provide additional space for growth and new programs. The Teaching Labs will provide an appropriate quantity of space per student station, in keeping with current code and recommendations in the Florida State Requirements for Educational Facilities (SREF).

COLLEGE OF SCIENCES (COS)
•Chemistry Teaching Laboratories (10) will be provided to replace those currently located in the 1967 Chemistry building (CHEM); and additional Chemistry Teaching Labs (2) will address current needs.
•Introductory Physics Teaching Labs (4) will replace those currently located in the 1969 Mathematical Sciences Building (MSB); and additional Physics Teaching Labs (2) will address current needs. Physics will retain several Teaching Labs in MSB to support upper level courses.
•A Mixed-Use Teaching Lab will serve both Chemistry and Biology.
•Chemistry Teaching Lab Service will be provided to replace all Teaching Lab Service in CHEM.
•Physics Teaching Lab Service will be provided to support new Physics Teaching Labs in LL. Physics will retain some Teaching Lab Service to support retained Teaching Labs in MSB.

COLLEGE OF MEDICINE, Burnett School of Biomedical Sciences (BSBS)
•Molecular Microbiology Teaching Laboratories (4) will support current needs; and additional Teaching Laboratories (2) will offset any loss of capacity that would result from even the most minor future renovations to existing BSBS Teaching Laboratories (6) located in the 20-year-old Health Sciences II building (HS II).
•Teaching Lab Service will be provided to support BSBS Teaching Labs in LL.

COLLEGE OF ENGINEERING and COMPUTER SCIENCES (CECS)
•Teaching Labs (3) will support the new Bachelor of Science in Materials Science and Engineering (MSE), introduced in Summer of 2019.
•Teaching Lab Service for MSE will be provided.

COLLEGE of COMMUNITY INNOVATION and EDUCATION (CCIE)
•A new MakerSpace will serve K-12 education programs in Science, Technology, Engineering, Arts, and Mathematics (STEAM.)
•The LL will provide a collaborative Science Teaching Laboratory for teacher education.
•See CLASSROOMS regarding the provision of Flexible Learning Studios, where active learning pedagogies can be practiced by future teachers.

GENERAL PURPOSE
•An Open Laboratory will serve as a Tutoring Center for the participating colleges; and replace a small tutoring room in CHEM.
•Additional Teaching Labs (4) will be available to serve STEM colleges that require space.

CLASSROOMS. All classrooms in the facility will be designed to support active learning pedagogies, with furniture and technology to facilitate collaboration and generous space per student station. All classrooms in the facility will be classified as General Purpose, open to the university to partially remediate UCF's classroom space deficit. Flexible Learning Studios (7) were requested by the College of Community Innovation and Education (CCIE) for teacher education. To improve utilization, the University will use these rooms as General Purpose Classrooms when they are not in use by CCIE.
Large Lecture Halls (2) will support collaborative learning for 200 and 240 students.
•One lecture hall will be tiered to facilitate chemistry and physics demonstrations, with teaming tables oriented toward the instructor area. The students will be arranged in teams of six, with easy circulation around the tables.
•One lecture hall should be will be furnished to support teaming at round tables. This room may be divisible into two rooms by use of a mobile partition.
•Technology will support distance learning, interactive teaching, and Assistive Listening Devices (ALD) to comply with the Americans with Disabilities Act (ADA).

The large lecture hall(s) will address university and community needs for colloquia, collaboration, and public talks; as well as serving the professional learning components of CCIE.

Classrooms will be served by a shared Storeroom for use by the participating colleges, as well as Breakout and Queueing space to support the comings and goings of large numbers of students.

OFFICE. The facility will not serve as the primary home for any of the participating colleges. Office space will be provided only for personnel who are critical to the success and safety of the facility.
•Critical Personnel (lab managers, lab techs) from all four colleges will be provided dedicated office space. Workspace will also be provided for support staff, such as a facility

manager, Information Technology, and the Office of Instructional Resources.
•Touchdown workspace will be provided for teaching assistants (TAs) and faculty working in the facility but officed elsewhere.
•Several Conference Rooms will be available, including some for use as Office-Hours Rooms by TAs from the participating colleges.

This project will result in the release of outdated Teaching Laboratory and Teaching Laboratory Service space in CHEM, for renovation into classroom and office space to partially remediate UCF's deficits in these space classifications. Further, it will facilitate the release of Teaching Laboratory and Teaching Laboratory Service in MSB, to support other academic units.

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.

SPACE CLASSIFICATIONS

The space classification is both teaching laboratory and classroom type. 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 ANSI/ASRHAE/IES Standard 90.1-2016 Energy Standard for Buildings, 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 2021-2026 Educational Plant Survey was conducted March 5, 2021 and approved by the UCF Board of Trustees on April 22, 2021. Approval by the SUS Board of Governors is anticipated at their June 22, 2021 meeting.

The most recent UCF Educational Plant Survey (EPS) recommended the Learning Laboratory as Project 5.2.

1% RESERVE ESCROW [per F.S. 1001.706 (12) c.] This pertains to PECO projects only, not CITF

Building / project value:	$	69,159,431
Basis / source of valuation:		
1st Year escrow deposit:	$	691,594
Escrow funding source:	E&G	
Comments:		

BUILDING SPACE DESCRIPTION

Space Type (per FICM)	Net Assignable Sq. Ft. (NASF)	Net-to-Gross Conversion Factor	Gross Sq. Ft. (GSF)	Unit Cost * (per GSF)	Building Cost
NEW CONSTRUCTION					
Classroom	23,900	1.5	35,850	355	12,717,429
Teaching Lab	68,600	1.5	102,900	387	39,872,721
Office	7,500	1.5	11,250	360	4,046,400
	-		-		-
	-		-		-
	-		-		-
	-		-		-
	-		-		-
	-		-		-
	-		-		-
Total:	100,000		150,000		56,636,550

* Apply Unit Cost to total GSF based on Space Type

REMODELING / RENOVATION				Remodeling Projects **Only** NASF **BEFORE**	NASF **AFTER**
	-	-	-	-	-
	-	-	-	-	-
	-	-	-	-	-
	-	-	-	-	-
	-	-	-	-	-
	-	-	-	-	-
	-	-	-	-	-
	-	-	-	-	-
	-	-	-	-	-

	-	-	-	-	-
Total:	-	-	-	-	-

Total New Const. and/or Remodel / Renovation:	100,000	150,000	56,636,550

PROJECT COMPONENT COSTS & PROJECTIONS

	Costs Funded to Date	Projected Costs					
		Year 1	Year 2	Year 3	Year 4	Year 5	Total
Basic Construction Costs							
Building Cost (from above)				56,636,550			56,636,550
Environmental Impacts/Mitigation							
Site Preparation			1,000,000				1,000,000
Landscape / Irrigaiton					500,000		500,000
Plaza / Walks							
Roadway Improvements							
Parking : spaces							
Telecommunication					1,200,000		1,200,000
Electrical Service							
Water Distribution							
Sanitary Sewer System							
Chilled Water System							
Storm Water System							
Energy Efficient Equipment							
Subtotal: Basic Const. Costs			1,000,000	56,636,550	1,700,000		59,336,550
Other Project Costs							
Land / existing facility acquisition							
Professional Fees			3,239,407				3,239,407
Fire Marshall Fees			122,385				122,385
Inspection Services			273,410				273,410
Insurance Consultant			23,387				23,387
Surveys & Tests			100,000				100,000
Permit / Impact / Environmental Fees			109,447				109,447
Artwork					100,000		100,000
Moveable Furnishings & Equipment					2,938,870		2,938,870
Project Contingency			451,920	1,882,969	581,086		2,915,975
Subtotal: Other Project Costs			4,319,956	1,882,969	3,619,956		9,822,881
Total Project Cost:			5,319,956	58,519,519	5,319,956		69,159,431

PROJECT FUNDING

Funding to Date

Source *	Fiscal Year	Amount
		-
		-
		-
		-
		-
		-
Total:		-

Total Project Cost (from above)	**Remaining Funding Need**
69,159,431	69,159,431

***** List any prior PECO funding. Also, for non-PECO funding sources (i.e. donations, auxiliary, C&G, etc), list each source and the entire anticipated ($) amount. See Instructions for further detail.

Project Detail

University: University of Central Florida Project Title: Performing Arts Complex Phase II

Project Address: 12488 Centaurus Blvd, Orlando, FL 32816

PROJECT NARRATIVE

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

The Performing Arts Complex Phase II (PAC II) project is the second, and final, phase of the UCF Performing Arts Complex. UCF, the state university with the highest student enrollment in Florida, cannot meet the needs of the School of Performing Arts with its existing facilities. Currently, the Music and Theatre Departments reside in the Performing Arts Complex Phase I (PAC I), a classroom and studio structure that was constructed in 2010. Since PAC I was constructed without performance venues, PAC II will meet this critical need. Due to consistent growth of academic offerings and a substantial increase in student enrollment over the past 10 years, PAC I is operating above capacity. Performing Arts has contended with the lack of performance space in PAC I by utilizing inadequate on-campus spaces, such as lecture halls and Rehearsal Hall, a 167-seat dedicated music performance facility, and by borrowing larger and more up-to-date performance spaces from neighboring churches and schools.

In lieu of constructing multiple performance venue spaces in PAC II, the facility will be designed to provide a highly-flexible “Sound Stage,” divisible and convertible into as many as four performance spaces to provide learning opportunities for traditional performances (proscenium theatre, concert hall, etc.), as well as for developing unique events for UCF’s new Themed Experience program (experiential, immersive, interactive, and shareable activities). The Sound Stage will have mobile “seating wagons” and no fixed seating.

PAC II will provide teaching labs (sound stage, rehearsal studios, production shops, etc.), study space/gallery, storage, and supporting offices, and will establish a new cultural home for the School of Performing Arts. The learning spaces will be built to professional standards with the most advanced of technologies, enabling the teaching labs to be accessed, shared, and experienced on many different platforms, in addition to traditional live settings. 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 will strengthen academic programs as well as promote partnerships within the community.

PAC II will enrich all UCF programs by emphasizing the critical importance of the arts in education and encouraging creativity and innovation across other academic disciplines. This convergence between the arts and other fields of academia is among the facility’s most important contributions in support of UCF’s vision to create opportunity through access, partnerships, interdisciplinary endeavors, and community engagement.
Students who graduate with degrees in the Performing Arts, at both the undergraduate and graduate levels, will possess the skill sets required to contribute to the local economy, by virtue of their marketability as employees in the field of entertainment. The College of Arts and Humanities has recently introduced a new Themed Experience track in the Theatre Masters of Fine Arts program as well as the Masters of Science program.. Located in the “Theme Park Capital of the World,” UCF is uniquely positioned to meet a growing demand for a skilled workforce, forward-thinking research, and creative ideation in the Themed Experience industry.

The benefits of completing the Performing Arts Complex, with the construction of PAC II, will extend well beyond the UCF campus. The spaces will attract regional community activities to campus, a potential boon to the local economy.
•Because of Orlando’s prominence as an international tourist destination, PAC II will help UCF students and faculty expand their reach, and promote greater international recognition for the university.
•PAC II will enhance collaborations with community-based industry partners, such as Disney World, Universal Studios, and Cirque du Soleil; and open the door to other creative partnerships.
•Community-based partner organizations, such as the Orlando Philharmonic, Orlando Shakespeare Theater, and Orlando Repertory Theatre will be able to use PAC II technologies and venues, as they support UCF’s graduate programs.
•PAC II would assist UCF in meeting state performance goals (skilled graduates earning competitive wages) and align with the UCF Collective Impact Strategic Plan goal of transforming lives and livelihoods through UCF’s impact on students and the communities it serves.
Space needs and project costs for PAC II were determined as follows: First, a preliminary needs-evaluation and design concept was prepared by a prominent local architecture firm and a theatrical consulting firm. UCF then developed a “summary of required spaces” that aligned with space categories used by the SUS. Finally, a local contracting firm prepared a detailed cost estimate, including “extraordinary costs that are not directly related to the facility” (utility extension from the UCF District Energy Plant and IT upgrades).

The building program for the facility has been approved by the university President. In 2019, student government expressed their support for the project, as evidenced by the student led CITF committee allocating $2M of CITF funds to the design efforts of the project. The UCF Board of Trustees has also approved the use of these funds, as well as $750K of donations, to be spent on design and preconstruction efforts.

The use of the performance space as Auditoria will be far less frequent than its use as learning space; therefore, performance, rehearsal, and production spaces will be classified as Instructional space (Teaching Labs) where students will learn all facets of the design, production, and staging of performances such as plays, musicals, concerts,

and themed events. A large portion of lobby and gallery space will be used as Study space.

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.

The project will achieve LEED Gold certification with the U.S. Green Building Council. Energy consumption will be at least 30% less than a comparable building. Water consumption will be at least 50% less than a comparable building. The project will utilize the district cooling loop for space cooling needs.

EDUCATIONAL PLANT SURVEY

The 2021-2026 Educational Plant Survey was conducted March 5, 2021 and approved by the UCF Board of Trustees on April 22, 2021. Approval by the SUS Board of Governors is anticipated at their June 22, 2021 meeting.

The most recent UCF Educational Plant Survey recommends the Performing Arts Complex Phase II as Project 5.1.

1% RESERVE ESCROW [per F.S. 1001.706 (12) c.] This pertains to PECO projects only, not CITF

Building / project value:	$ 77,500,000
Basis / source of valuation:	
1st Year escrow deposit:	$ 775,000
Escrow funding source:	E&G
Comments:	

BUILDING SPACE DESCRIPTION

Space Type (per FICM)	Net Assignable Sq. Ft. (NASF)	Net-to-Gross Conversion Factor	Gross Sq. Ft. (GSF)	Unit Cost * (per GSF)	Building Cost
NEW CONSTRUCTION					
Teaching Lab	49,335	1.5	74,003	435	32,191,088
Study	6,400	1.4	8,960	333	2,985,472
Office	2,485	1.5	3,728	346	1,289,529
Audio/Exhib.	28,060	1.2	33,672	410	13,805,520
Other	2,030	1.2	2,436	315	767,340
	-		-		-
	-		-		-
	-		-		-
	-		-		-
	-		-		-
Total:	88,310		122,798		51,038,948

* Apply Unit Cost to total GSF based on Space Type

	Remodeling Projects **Only** NASF **BEFORE**	NASF **AFTER**
REMODELING / RENOVATION		
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
Total: -	-	-

Total New Const. and/or Remodel / Renovation:	88,310	122,798	51,038,948		

PROJECT COMPONENT COSTS & PROJECTIONS

	Costs Funded to Date	Projected Costs Year 1	Year 2	Year 3	Year 4	Year 5	Total
Basic Construction Costs							

Building Cost (from above)			51,038,948		51,038,948
Environmental Impacts/Mitigation					
Site Preparation			1,500,000		1,500,000
Landscape / Irrigaiton			800,000		800,000
Plaza / Walks			587,550		587,550
Roadway Improvements					
Parking : _____ spaces					
Telecommunication			1,500,000		1,500,000
Electrical Service			600,000		600,000
Water Distribution			350,000		350,000
Sanitary Sewer System			350,000		350,000
Chilled Water System			2,500,000		2,500,000
Storm Water System			800,000		800,000
Energy Efficient Equipment			700,000		700,000
Subtotal: Basic Const. Costs			60,726,498		60,726,498
Other Project Costs					
Land / existing facility acquisition					
Professional Fees	2,750,000	2,414,520			5,164,520
Fire Marshall Fees			165,133		165,133
Inspection Services			974,435		974,435
Insurance Consultant			35,602		35,602
Surveys & Tests			100,000		100,000
Permit / Impact / Environmental Fees			119,292		119,292
Artwork			100,000		100,000
Moveable Furnishings & Equipment			1,200,000	5,164,520	6,364,520
Project Contingency			3,750,000		3,750,000
Subtotal: Other Project Costs	2,750,000	2,414,520	6,444,462	5,164,520	16,773,502
Total Project Cost:			67,170,960		77,500,000

PROJECT FUNDING

Funding to Date

Source *	Fiscal Year	Amount
CITF	2021-22	2,000,000
Donations	2021-22	750,000
		-
		-
		-
		-
	Total:	2,750,000

Total Project Cost (from above)	**Remaining Funding Need**
77,500,000	74,750,000

***** List any prior PECO funding. Also, for non-PECO funding sources (i.e. donations, auxiliary, C&G, etc), list each source and the entire anticipated ($) amount. See Instructions for further detail.

State University System
5-Year Capital Improvement Plan (CIP)
FY 2022-23 through 2026-27

Project Detail

University: University of Central Florida Project Title: John C. Hitt Library Renovation Phase II

Project Address: 12701 Pegasus Drive Orlando, FL 32816

PROJECT NARRATIVE

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

The John C. Hitt Library, built in 1967 when enrollment was 1,948 students, and expanded in 1984, is woefully inadequate to meet the needs of current and future student populations. The existing library, with a collection of over 1.3 million print volumes, is open 105 hours per week, and has a patron count of almost 1.25 million visits per year. During a typical midterm week, 41,000 people visit the library. The existing library had 1,903 public seats pre-Phase IA construction, which represents about 4.9% of the main campus FTE, 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.

When completed, the renovated and expanded facility will include flexible interior spaces featuring greatly increased seating, more collaboration spaces, expanded library instruction rooms; triple the number of group study rooms; a 24/5 study area; a digital initiatives center; additional Special Collections and University Archives space; graduate study space; dedicated space for campus academic partners such as SARC and the Writing Center; quiet study areas; and more than twice the number of technology workstations. The building will integrate advances in technology seamlessly with library services and collections. The renovation will also upgrade existing HVAC, electrical, and water systems – most of which are original to the building.

The next phases of the Library project consist of the build-out of the remaining ARC aisles and the full renovation of the third floor of the library - which requires the addition of a mechanical room to the first floor, and system replacements such as boilers and chilled water pumps. Future phases will renovate additional floors of the library. When fully completed, this project will provide approximately 3,500 public seats, about 9.1% of main campus FTE.

SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of natural resource consumption in new construction projects, and renovations where applicable. 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 operational efficiency is achieved.

Classroom/Office
The space classification is predominately open seating, group 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 ANSI/ASRHAE/IES Standard 90.1-2016 Energy Standard for Buildings, 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 June 2016.

1% RESERVE ESCROW [per F.S. 1001.706 (12) c.] This pertains to PECO projects only, not CITF

Building / project value:	$ -
Basis / source of valuation:	
1st Year escrow deposit:	$ -
Escrow funding source:	E&G
Comments:	

BUILDING SPACE DESCRIPTION

Space Type (per FICM)	Net Assignable Sq. Ft. (NASF)	Net-to-Gross Conversion Factor	Gross Sq. Ft. (GSF)	Unit Cost * (per GSF)	Building Cost
NEW CONSTRUCTION					
	-		-		-
	-		-		-
	-		-		-
	-		-		-
	-		-		-

	-		-		-		
	-		-		-		
	-		-		-		
	-		-		-		
	-		-		-		
Total:	-		-		-		

* Apply Unit Cost to total GSF based on Space Type

REMODELING / RENOVATION						Remodeling Projects **Only** NASF **BEFORE**	NASF **AFTER**
Classroom	5,525	1.5	8,288		-	-	-
Study	113,536	1.4	158,950		-	-	-
Instruct. Media	10,000	1.5	15,000		-	-	-
Office	29,512	1.5	44,268		-	-	-
	-		-		-	-	-
	-		-		-	-	-
	-		-		-	-	-
	-		-		-	-	-
	-		-		-	-	-
	-		-		-	-	-
Total:	158,573		226,506		-	-	-
Total New Const. and/or Remodel / Renovation:	158,573		226,506		-		

PROJECT COMPONENT COSTS & PROJECTIONS

	Costs Funded to Date	Projected Costs Year 1	Year 2	Year 3	Year 4	Year 5	Total
Basic Construction Costs							
Building Cost (from above)	27,656,798	4,226,383					31,883,181
Environmental Impacts/Mitigation							
Site Preparation	673,900						673,900
Landscape / Irrigaiton		1,600,000					1,600,000
Plaza / Walks							
Roadway Improvements							
Parking : _____ spaces							
Telecommunication	936,370						936,370
Electrical Service							
Water Distribution							
Sanitary Sewer System							
Chilled Water System	168,475						168,475
Storm Water System							
Energy Efficient Equipment							
Subtotal: Basic Const. Costs	29,435,543	5,826,383					35,261,926
Other Project Costs							
Land / existing facility acquisition							
Professional Fees	3,206,120						3,206,120
Fire Marshall Fees	84,237						84,237
Inspection Services	295,790						295,790
Insurance Consultant		18,018					18,018
Surveys & Tests	292,304						292,304
Permit / Impact / Environmental Fees	101,101						101,101
Artwork							
Moveable Furnishings & Equipment	2,121,208						2,121,208
Project Contingency	140,922	1,456,686					1,597,608
Subtotal: Other Project Costs	6,241,682	1,474,704					7,716,386
Total Project Cost:	35,677,225	7,301,087					42,978,312

PROJECT FUNDING

Source *	Fiscal Year	Funding to Date Amount
CITF	2017-18	1,710,066
CITF	2018-19	7,701,673
CITF	2019-20	9,337,817
CITF	2020-21	9,625,360
CITF	2021-22	7,302,309
	Total:	35,677,225

Total Project Cost (from above)	**Remaining Funding Need**
42,978,312	7,301,087

***** List any prior PECO funding. Also, for non-PECO funding sources (i.e. donations, auxiliary, C&G, etc), list each source and the entire anticipated ($) amount. See Instructions for further detail.

State University System
5-Year Capital Improvement Plan (CIP)
FY 2022-23 through 2026-27

Project Detail

University: University of Central Florida Project Title: John C. Hitt Library Renovation Phase IIB

Project Address: 12701 Pegasus Drive Orlando, FL 32816

PROJECT NARRATIVE

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

The John C. Hitt Library, built in 1967 when enrollment was 1,948 students, and expanded in 1984, is woefully inadequate to meet the needs of current and future student populations. The existing library, with a collection of over 1.3 million print volumes, is open 105 hours per week (pre-COVID), and had a pre-COVID patron count of almost 1.25 million visits per year. During a typical midterm week, 41,000 people visit the library. The existing library had 1,903 public seats pre-Phase IA construction, which represents about 4.9% of the main campus FTE, a low ratio for university 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.

When completed, the renovated and expanded facility will include flexible interior spaces featuring greatly increased seating, more collaboration spaces, expanded library instruction rooms; triple the number of group study rooms; a 24/5 study area; a digital initiatives center; additional Special Collections and University Archives space; graduate study space; dedicated space for campus academic partners such as SARC and the Writing Center; quiet study areas; and more than twice the number of technology workstations. The building will integrate advances in technology seamlessly with library services and collections. The renovation will also upgrade existing HVAC, electrical, and water systems – most of which are original to the building.

Phase IIB of the Library project consists of the full renovation of the second floor of the library. When reconstructed, this floor will include a new library technology lending desk, an upgraded café, a student academic resource center, and considerable student seating and group study rooms. The renovation will require the following scope:
•Demolition of the entire floor back to structure
•New HVAC, electrical, plumbing, air distribution, fire alarm, and sprinkler systems
•New ceilings, lighting, painted walls, and floor finishes
•Upgraded ADA restrooms
•New furniture for student and staff use
When fully completed, this project will provide approximately 3,500 public seats, about 9.1% of main campus FTE.

SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of natural resource consumption in new construction projects, and renovations where applicable. 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 operational efficiency is achieved.
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 ANSI/ASRHAE/IES Standard 90.1-2016 Energy Standard for Buildings, 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.

CLASSROOM/OFFICE/STUDY
The space classification is predominately open seating, group study rooms, stacks, or office type.

EDUCATIONAL PLANT SURVEY

The Educational Plant Survey was conducted October 6-7, 2015 and approved June 2016.

1% RESERVE ESCROW [per F.S. 1001.706 (12) c.] This pertains to PECO projects only, not CITF

Building / project value:	$ -
Basis / source of valuation:	
1st Year escrow deposit:	$ -
Escrow funding source:	E&G
Comments:	

BUILDING SPACE DESCRIPTION

Space Type (per FICM)	Net Assignable Sq. Ft. (NASF)	Net-to-Gross Conversion Factor	Gross Sq. Ft. (GSF)	Unit Cost * (per GSF)	Building Cost

NEW CONSTRUCTION

Study	30,000	1.5	45,000	353	15,873,750
	-		-		-
	-		-		-
	-		-		-
	-		-		-
	-		-		-
	-		-		-
	-		-		-
	-		-		-
	-		-		-
Total:	30,000		45,000		15,873,750

* Apply Unit Cost to total GSF based on Space Type

REMODELING / RENOVATION

				Remodeling Projects **Only**	
				NASF **BEFORE**	NASF **AFTER**
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
Total:	-	-	-	-	-

Total New Const. and/or Remodel / Renovation:	30,000	45,000	15,873,750	

PROJECT COMPONENT COSTS & PROJECTIONS

	Costs Funded to Date	Projected Costs					
		Year 1	Year 2	Year 3	Year 4	Year 5	**Total**
Basic Construction Costs							
Building Cost (from above)		15,873,750					15,873,750
Environmental Impacts/Mitigation							
Site Preparation							
Landscape / Irrigaiton							
Plaza / Walks							
Roadway Improvements							
Parking : _____ spaces							
Telecommunication							
Electrical Service							
Water Distribution							
Sanitary Sewer System							
Chilled Water System							
Storm Water System							
Energy Efficient Equipment							
Subtotal: Basic Const. Costs		15,873,750					15,873,750
Other Project Costs							
Land / existing facility acquisition							
Professional Fees		900,000					900,000
Fire Marshall Fees		36,188					36,188
Inspection Services							
Insurance Consultant							
Surveys & Tests							
Permit / Impact / Environmental Fees		110,000					110,000
Artwork							
Moveable Furnishings & Equipment		2,701,312					2,701,312
Project Contingency		723,750					723,750
Subtotal: Other Project Costs		4,471,250					4,471,250
Total Project Cost:		20,345,000					20,345,000

PROJECT FUNDING

	Funding to Date	
Source *	Fiscal Year	Amount

		Total Project Cost (from above)	Remaining Funding Need
Total:	-	20,345,000	20,345,000

***** List any prior PECO funding. Also, for non-PECO funding sources (i.e. donations, auxiliary, C&G, etc), list each source and the entire anticipated ($) amount. See Instructions for further detail.