UCF | Facilities and Safety

UNIVERSITY OF CENTRAL FLORIDA

Appendix A: Project Manager Manual

Introduction

Purpose and Structure of Manual

This manual details how projects are initiated and completed within UCF's Facilities & Safety domain with specific emphasis on the role and duties of the Project Manager (PM) to ensure that projects are managed safely, efficiently, cost-effectively, and consistently. The manual is a quick reference tool which acts as a how-to-guide with contents such as project phase workflows, corresponding narratives, related form/checklists, related policies/procedures and their timeframes.

Key concepts in this manual include:

- All projects are the direct product of a strategy for continuing development of infrastructure and capability at University of Central Florida, and funding sources are defined for each project before it is started.
- All projects have a Project Requester/Campus Client and a Project Manager who is responsible for the project from initiation through close-out (which is carried out by the Senior Project Assistant).
- All projects are approved for initiation and are monitored throughout their development by Facilities & Safety using a Computerized Maintenance Management System (CMMS) and Project Tracker Database, where its status can be reviewed by the requester.
- All projects must go through a standard set of steps called the **PROJECT PROCESS FLOW**. This process defines every phase from planning to selection, design to construction and closeout; and will not be deviated from without specific approval of the Associate Vice President, Administration & Finance (F&S AVP).
- All projects are actively monitored by the Facilities Planning & Construction Office which will team with the Project Manager to provide timely project performance information to the Facilities & Safety Stakeholders.

This manual must be consistently used as a resource and guide by all persons who are directly or indirectly involved in any of the various phases of Facilities & Safety projects. Although the primary focus of this manual is the Project Manager and the various functions that individual must routinely complete to safely facilitate a project from its beginning to completion, there are many groups within Facilities & Safety (Facilities Planning & Construction, Facilities Operations, Utilities & Energy Services, Environmental Health & Safety, Landscape & Natural Resources, Resource Management, Quality Management & Improvement, Sustainability Initiatives) that either support the Project Manager's activities, directly partner with the Project Manager or other project team members on project-related work, or rely on information generated by the project management effort. It is vital that these persons understand how projects are managed, what their role is required to be, and how

all key functions within the project management process are to be completed. The processes in this manual are not discretionary or negotiable.

Roles and Responsibilities

The following lists general roles and responsibilities for a department's team members. A complete list of job responsibilities, individual position descriptions may be requested from Human Resources through the Director.

Director

The Director is responsible and accountable for the overall operation and performance of the department. The director meets regularly with clients and other F&S directors to ensure that priority projects are being addressed, and ensure that project goals and objectives are achieved. The Director plays a major role in the design, bidding, and construction of all major projects.

Associate/Assistant Directors

Associate and Assistant Directors are responsible for the daily operation of the department. They oversee the status of all active design and construction projects, managing special projects as necessary. They work closely with the Project Managers to determine the appropriate design and construction companies to use for rotation/justification work, ensuring that department procurement requirements are being followed. They are involved in all major projects, ensuring quality delivery throughout the design, bidding, and construction phases.

Project Managers

Project Managers are the primary points of contact for all Projects. They meet with campus clients to understand project scope, create written Statement of Work (SOW) documents for review and comment, manage the Continuing Service architects and engineers needed to design projects, create funding documents with complete Statement of Work for approval, manage the construction of projects, review and process all financial transactions during projects (invoices, pay applications, etc.), and obtain the necessary paperwork for project closeout. Project Managers update projects in Project Tracker, and in addition, regularly communicate with campus clients regarding project status, informing them when input or action is needed.

Support Personnel

The Facilities Planning & Construction Project Database Administrator is responsible for processing all new Minor Project requests, entering them into Project Tracker, and providing critical status updates to Facilities and Safety (F&S) leadership and clients.

The technology coordinator provides computer aided design (CAD) and building information modeling (BIM) graphics support to the department, maintains the FP&C

website, and stays abreast of the latest software options to help with other departmental needs.

The department planner updates and makes entries related to project activities in the CMMS.

Project Manager (PM) Responsibilities

The PM will provide or facilitate programmatic guidance, design review assistance, construction permitting, and general oversight, coordination, and management of the project. F&S is specifically charged with managing construction and renovation projects from inception to completion.

This section of the manual does not present an all-inclusive list of every duty and responsibility that a Project Manager may have to cover on every of project, but it does address the primary considerations and areas of general responsibility. A practical Project Manager should use this guidance and common sense to determine what is appropriate. Whenever the Project Manager is unsure about a given duty, that individual should check with their Associate Director or Director.

The PM is the primary point of contact for design and commissioning (CxA) Professionals, and serves as the Owner's representative and customer liaison, providing leadership and guidance on all aspects of the project. All project-related communications and actions shall be routed through the PM, including deviation requests, impacts to the budget or schedule, and dealings with internal and external agencies.

The PM will:

1) Coordinate design and construction efforts to ensure the successful completion of projects in accordance with the schedule, program, budget of the work, and the institutional strategy of the University;
2) Schedule projects in logical steps, budgeting time to meet deadlines;
3) Plan, organize, and direct activities concerning the design, construction, and maintenance of structures, facilities, and systems;
4) Review contracts and negotiate revisions, changes, and additions to the contractual agreements with architects, consultants, clients, suppliers, and subordinates;
5) Review and submit budget estimates and progress-and-cost-tracking reports. Coordinate campus construction efforts, and accurately identify potential issues that may result in poor financial performance or quality;
6) Understand and support campus sustainability efforts related to new construction and renovation projects;

7) Manage and coordinate all aspects of Projects including oversight of the Contractor, Architect, engineer, and consultants; ensure that university standards and needs are being met by the project documents;
8) Communicate with team members and keep them active in decision-making;
9) Understand the details of the project Scope of Work and reviews construction documents for errors and omissions prior to bid and permit issuance;
10) Develop and/or review project estimates bids and Guaranteed Maximum Price (GMPs) as requested;
11) Develop a purchasing schedule and strategy to anticipate, address, and resolve purchasing challenges during early stages of pre-construction;
12) Create and maintain project cost reports and documents; negotiate changes that may affect project completion, quality, or contract costs;
13) Monitor compliance with building and safety codes among other regulations by inspecting and reviewing projects;
14) Confer and resolve matters pertaining to work procedures, complaints, and construction difficulties;
15) Ensure weather plans are in place, and if necessary take actions to address construction delays resulting from inclement weather or emergencies at construction sites;
16) Administer and oversee the Contractor payment process; develop project estimates as requested;
17) Manage Designer and Contractor performance through periodic inspection of progress of work compared with correct schedule, percent vs. percent complete; and
18) Ensure that all vendor responsibilities are properly provided:
    - ✓ All contract activities are in compliance with the contract and are correct all permits are successfully obtained
    - ✓ All laws and regulations are complied with
    - ✓ All necessary third party issues are addressed in a timely manner all the necessary reports are correct and on time.
    - ✓ All issues are resolved on the spot or elevated to the Department leadership.
    - ✓ All necessary communication is done.
    - ✓ All invoices are accurate, handled and paid in a timely manner.
    - ✓ All funds due to Facilities & Safety are received accurately and in a timely manner.
    - ✓ Project authorized budgets are not exceeded without prior approvals from the Project Requester and the Associate Director. If Capital projects, approval from F&S AVP is required.

If the Project Manager cannot handle something alone, the Project Manager must elevate it to the Associate Director or Director. Not only should the Project Manager be aware of these responsibilities, it is vital that all persons directly or indirectly involved in the project also understand the role of the Project Manager and make cooperation with and support of the Project Manager their highest priority.

These responsibilities span all phases of projects: planning, design, bidding, permitting, construction, and closeout. Project Management success is dependent upon ownership of projects by PMs. PMs will have the opportunity to work on both small and large projects, from straightforward to complex. The workload is distributed to provide PMs with a variety of challenges, and build a well-rounded team of Professionals.

Furthermore, Project Managers will use the Project Management Plan (PMP) Template for capturing key elements of the project and the proposed delivery method. Individuals who are not Facilities & Safety employees may be approved to function as a Project Manager for Facilities & Safety by the F&S Directors in those occasions where a unique skill set is required, workload issues, or to benefit UCF. Non-Facilities & Safety employees approved as Project Managers must meet all the requirements for the Project Manager role expected of a Facilities & Safety employee. The F&S Directors are responsible for setting the standards for the position, approving and denying individuals for the position, maintaining a list of approved Project Managers, establishing and managing the training program (either directly or through oversight), and evaluating the performance of each Project Manager.

How Project Managers are Assigned

Project Manager assignments are the responsibility of the department leadership. Particular assignments will be based on experience, capabilities, and availability. The Director of the Facilities & Safety department initiating the project may make assignment recommendations to the F&S Directors. Project Managers can be reassigned at any time by the Director of the Facilities & Safety department but this practice should be discouraged and only undertaken when there are strong reasons to do so.

Project Manager Work Loads

The number of projects a Project Manager can handle is a function of project size, project complexity, size of support staff, similarity of projects in the mix, and a particular Project Manager's capabilities.

The Director of the Facilities & Safety department managing the project, should very carefully determine workloads and then follow up to make certain that decisions have been correctly made to ensure that Project Managers are efficiently and effectively managing the projects assigned to them.

Project Ownership/Culture

Once a Project Manager is assigned to a given project that Project Manager owns that project until the project is completed and closed out or the Project Manager is reassigned. Ownership means that the Project Manager is responsible for the successful day-to-day management, final completion of the project, and the successful resolution of all issues that may arise.

Management of Project

On most moderate to large projects the Project Manager will have a Project Database Administrator and Senior Project Assistant support staff to provide assistance. However, the Project Manager, independent of the size of the project, is responsible for all aspects of the management of construction. This will include but not be limited to:

- Becoming intimately familiar with the design plans, manuals, and standards which support the design
- Maintaining liaison with Facilities & Safety, end users, contractors, and third parties to ensure proper involvement and approvals
- Making sure the final product has the quality and detail contained in the design
- Managing and handling approvals of contractor submittals
- Managing budget and schedule.
- Making sure contractor complies with all laws and regulations and has secured the necessary permits

In the final analysis, the Project Manager has to ensure that the contractor delivers on the contract, fulfills all obligations, and adequately addresses and characterizes any changed conditions or required changes to the design. The magnitude and impact of any issues that arise during construction should be managed by early detection and rapid response supported by intimate knowledge of the design and specifications.

Risk Management

The Project Manager will use the Risk Issue Log to log all issues with scope, quality, schedule, or budget risk. This will include the origin date, type of risk, high/medium/low category of risk, a description of the risk and its resolution. All yellow or red (medium/high) risks will be discussed with department leadership for resolution.

Contracts

The Project Manager will read and familiarize themselves with all contracts pertaining to the projects that they manage. The Project Manager will ensure that the vendor adheres to all contractual requirements (scope, schedule, budget, etc.), any exceptions to the contract must be approved in writing by the Director and AVP. The Project Manager will not request deliverables or other requirements outside of the contractual obligations without Director and AVP approval.

The Project Process Flow

The Project Process Flow is described in detail in this manual. This flow is the way Facilities & Safety conducts projects and it is the responsibility of the Project Manager to either perform the individual tasks in the lifecycle or make sure they are completed and the necessary people and groups are involved. Not all phases of the Project Process Flow will be required for every kind of project. It is the duty of the Project Manager to determine which phases are needed for their project and to obtain approval from the Director, Facilities Planning & Construction (FP&C Director).

Note: Each phase of the project process flow will contain the workflow for that phase, corresponding narratives, tables with related policies/procedures, forms and checklists.

Project Workflow Overview:

Figure 1 - Project Workflow

All Facilities & Safety projects follow the project process flow, illustrated in the above diagram. Facilities & Safety projects have a Planning Phase, Selection Phase, Design Phase, Construction/ Permitting Phase and Closeout Phase. Deviations from the Project Process Flow must be approved by the AVP and F&S.

Table 1: All phase documents

Phase	Document Type	Policy/Procedure	Policy/Procedure #
All Phases	Procedure	Project Management Performance Standard	FS 2013 FPC0017
All Phases	Procedure	Financial Procedures for the following: Requisition Creation and Approval, Schedule of Values, Professional Service Invoices, Additional Service, Construction Payment Applications, Line-to-Line Transfers, Buyout Savings Transfers, Contractor Contingency Transfers, Owner Contingency Transfers, DOP Tax Savings	FS 2016 FPC0021

Planning:

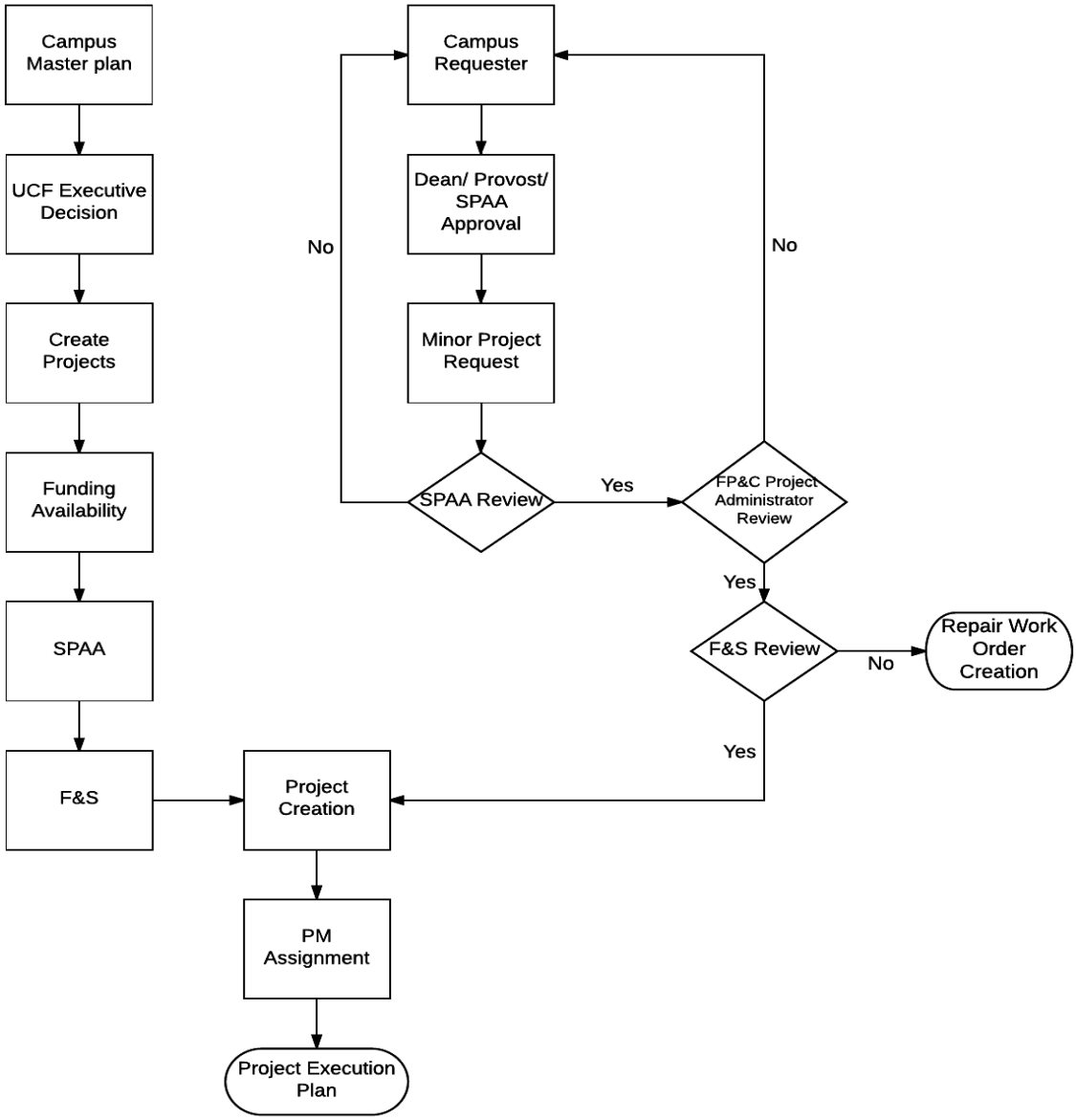


Figure 2 - Planning phase

Capital Project Track:

- UCF Executive Administration creates a project based on the Campus Master Plan and confirms funding availability.
- The project proposal is sent to Space Administration for building assignment.
- F&S AVP delivers project to FP&C Director.
- FP&C creates a project folder, inputs data into CMMS and Project Tracker, and assigns a Project Manager. The Project Manager moves the project to the Project Execution Phase.

Minor Project Request Track:

- Campus Requester submits a project request approved by the respective college Dean or Director to Space Administration.
- Space Administration approves project requests and send to FP&C. Disapproved project requests are returned to the requester.
- FP&C Project Administrator receives Space Administration approved project requests. A project number is assigned and the funding availability is confirmed with the requester. Funding availability, account number and receipt of project start-up fees ($150 for minor & $500 for projects greater than $2M) are required prior to F&S review.
- F&S Directors reviews the Minor Project Request (MPR) for implementation needs such as State Fire Marshall review, electrical load calculations, and infrastructure capacity.
- If the Minor Project Request is approved, a new work order is created for the project by FP&C and a Project Manager is assigned. Project Manager may be assigned from any F&S Department.
- If the Minor Project Request is not approved, the FP&C Project Administrator returns the request to the requester
- F&S may decide to implement the Minor Project Request as a repair. The FP&C Project Administrator requests a repair work order and closes the project referencing the work order number.

Table 2a: Planning phase documents

Phase	Document Type	Policy/Procedure	Policy/Procedure #
Phase 1	Policy	Management of Construction Funding - PECO, Courtelis, Bond and Donations	FSP 2012 RM0001

Table 2b: Planning phase forms

Phase	Document Type	Form/Checklist	Name
Phase 1	Request	Form	CWG100 F&S Matching Project Funds Application Form
Phase 1	Request	Form	Facilities Construction Request Form
Phase 1	Request	Form	Furniture Review Form
Phase 1	Request	Form	Minor Project Request Form
Phase 1	Request	Form	UIMP/Carry Forward Funding Request

Note: The Planning phase includes individual Project Execution Planning which has a sub-phase called the Operational Planning phase.

Project Execution Plan:

The Project Execution Plan phase has a key deliverable which is the Project Management Plan (PMP). The Project Manager cannot proceed from the Planning phase without an approved PMP.

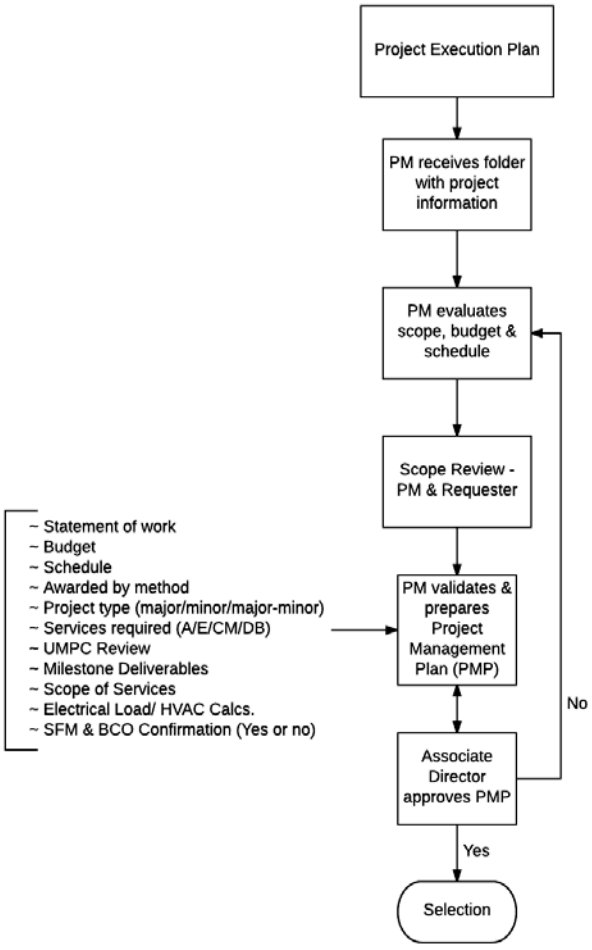


Figure 3 - Project Execution Planning phase

Planning phase recap:

- The FP&C Project Administrator creates a project folder containing:
  - ✓ Capital Request or Minor Project Request
  - ✓ Funding and account information
  - ✓ Supporting documentation such as sketches, equipment cut sheets, etc.
  - ✓ Related start-up information
- PM assignment is made by the FP&C Project Administrator as negotiated with the F&S Directors and FP&C Associate Director(s).

Project Execution Plan Narrative

- The assigned PM receives the project folder from the FP&C Project Administrator.
- The Project Manager meets with the project requester to evaluate project scope and assess budget and schedule. The PM meets with the project stakeholders to define the project scope and project components. Components and decisions are listed in the workflow. See Figure 3 bracket.
- The Project Manager completes scope review with the project requester for confirmation to proceed.
- The Project Manager creates the Scope of Services and Scope of Work (SOW) and prepares the Project Management Plan (PMP). The PMP is made up of several key components: scope, stakeholders, owner's project requirements, selection method, project roles, high-level project schedule, and high-level project budget.
- The Associate Director reviews approves the PMP or the Associate Director returns an unapproved PMP to the PM for update.
- The Project Manager moves to selection phase upon receipt of an approved PMP.

Table 2c: Project execution planning phase

Phase	Document Type	Policy/Procedure	Policy/Procedure #
Phase 2	Procedure	Procedure for Determining when actions are Facilities Improvements, Repairs, or Special Projects	FS 2013 FS0007
Phase 2	Procedure	GC Quotes	FS 2015 FS0014

Operational Planning:

Note: Operational Planning provides decision making process for services type and selection method.

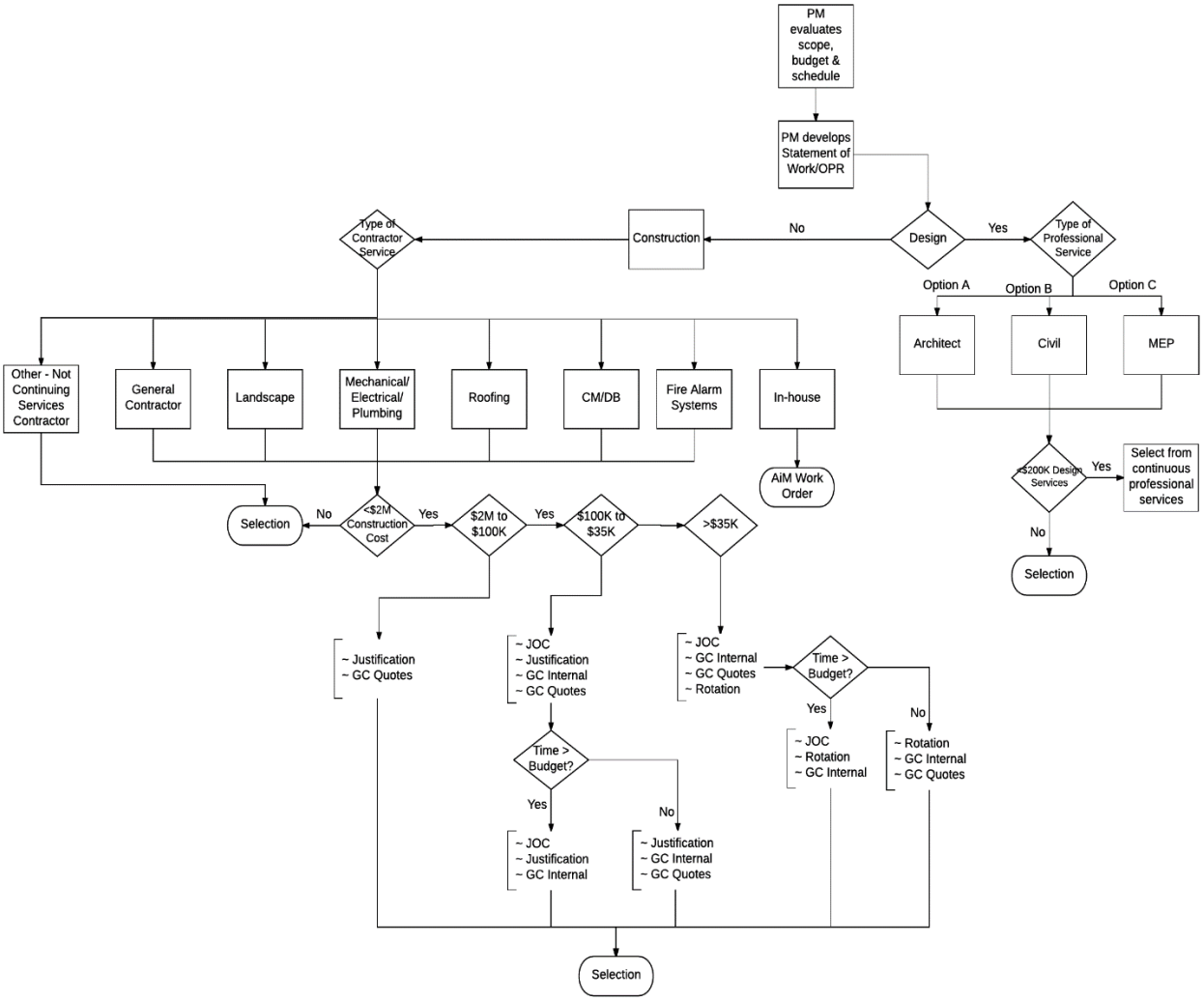


Figure 4 - Operational Planning phase

Professional Services Track (Design):

- To develop the SOW, Project Manager evaluates scope to determine if Design is needed. If needed, the Project Manager selects from the options under the professional service types offered. The professional service type selection is based upon the project scope. Option A, B or C can be opted.
- The PM determines the design services selection method based upon design services estimated cost. If the estimated cost of design services is less than $200K, then Continuing Services will be opted in Selection Phase. If the estimated cost of design services is greater than $200K, then opt Public Selection path in Selection Phase.

Contractor Services Track (Construction):

- If Project Manager determines that design is not needed, then the Project Manager chooses the type of contractor service based upon the project scope and cost.
    - ✓ After the contractor service type is chosen, the project manager makes a decision based on the construction cost. If the estimated cost of construction is greater than $2M, the PM chooses public advertisement in the Selection phase.
    - ✓ If the estimated cost is less than $2M, the PM determines the selection as follows:
        1. For projects with construction cost between $2M and $100K - PM opts for Justification or GC Quotes only.
        2. For projects with construction cost between $100K and $35K - PM opts from JOC, Justification, GC Internal or GC Quotes only.
        3. For projects with construction cost less than $35K, PM opts from JOC, Rotation, GC Internal or GC Quotes only.
- The PM further refines the selection method choice based on project requester's time and budget constraints. For projects less than $100K that have time constraints, the PM may decide to forego the GC Quotes selection. This decision is based upon the PM's judgement, experience and request input.
- Once the contract service type is chosen as per workflow above, the Project Manager validates the selection and completes the PMP per Figure 3, prior to moving to Selection Phase.

Concurrent Process – Accounting:

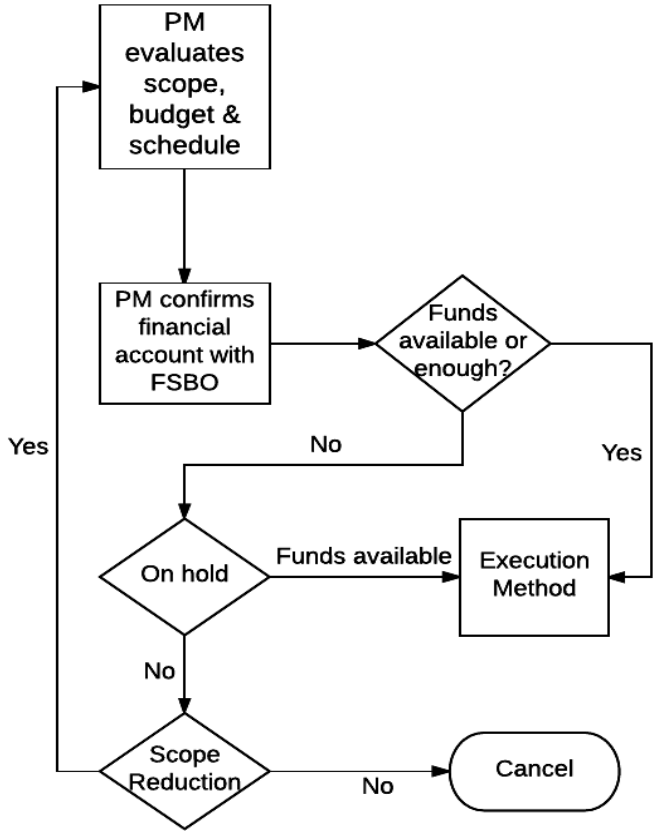


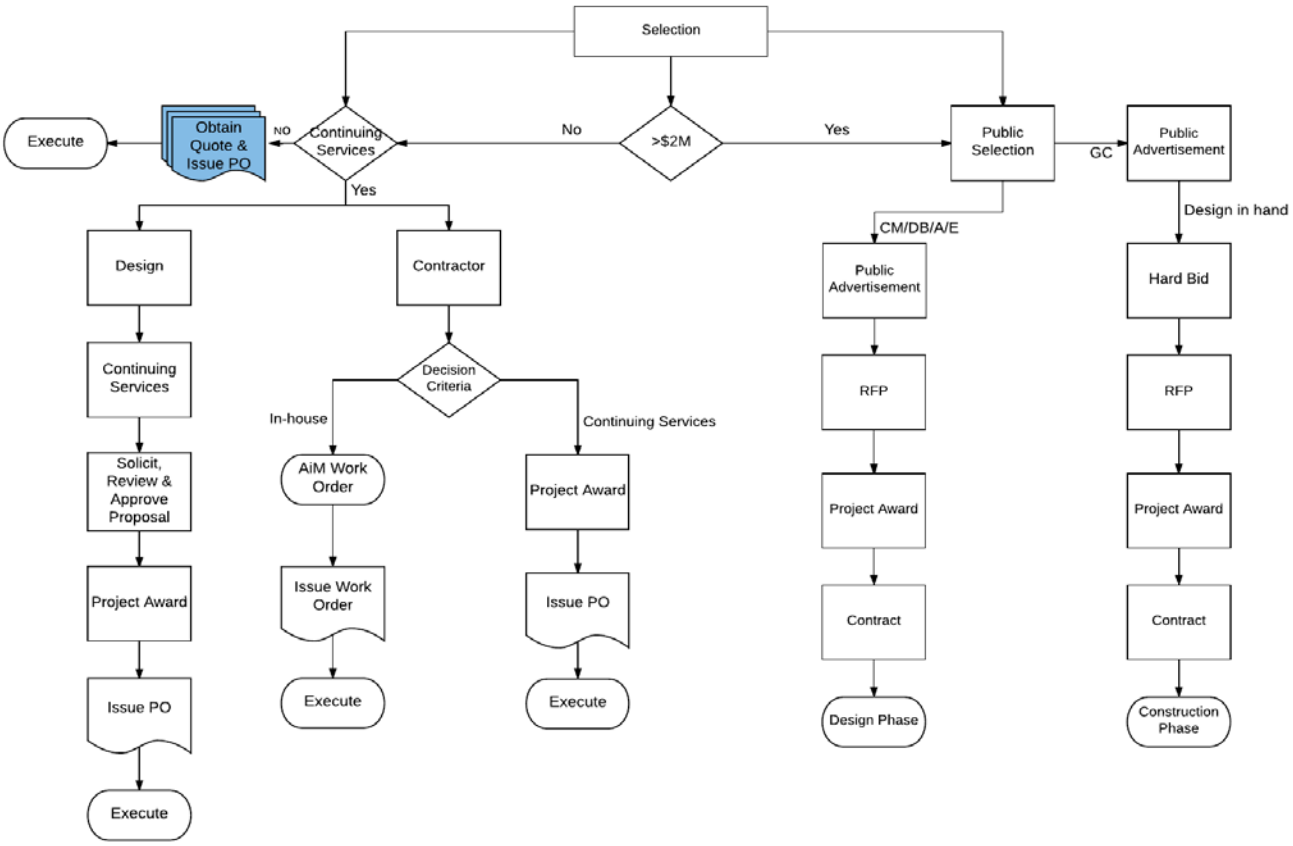
Figure 5 - Accounting

The Project Manager defines a high-level project budget to be included in the Project SOW. This high-level project budget is aligned with the project scope. The PM allocates estimated costs to cost categories as seen in Project Tracker.

- After evaluating the scope, the Project Manager works with Facilities & Safety Business Office (FSBO) to confirm project financial account.
- The Project Manager makes a decision on scope, schedule, and budget based upon funding available in the financial account.
  - ✓ If the PM determines that funding will cover the estimated project cost, the PM then determines the execution method and proceeds with the Operational Planning process.
  - ✓ If the PM determines that funding is insufficient, the Project Manager will put the project in "Awaiting Customer" status in Project Tracker until funds are made available.
  - ✓ The PM asks the Project Requester if more funds can be obtained or if the scope can be reduced.
- If scope reduction is acceptable, the PM re-evaluates the scope and moves to the execution method and prepares the PMP. If scope reduction is not acceptable, then the project is cancelled. If the project is cancelled, the PM returns the folder to the FP&C Project Administrator for project closure.

Selection:

The execution of the selection process is based upon the selection method approved in the Project Management Plan (PMP).



Public Selection Track:

- The Project Manager uses the method approved in the PMP.
- If the cost of the project is greater than $2M, the Project Manager uses Public Selection for CM/DB/A/E or hiring a GC with design in hand.
    - ✓ Project Manager uses the Professional Services/ General Contracting chosen from the selection process per F&S procedure Facilities Planning & Construction Selection Procedures (FS 2016 FPC0020) and moves to Design Phase.
    - ✓ Project Manager uses the Contractor chosen from the selection process per F&S procedure "Facilities Planning & Construction Selection Procedures" (FS 2016 FPC0020) and moves to Construction Phase.

Continuing Services Track:

Continuing Services contractors are used if the skillset is not available, then purchasing procedures are used. To obtain and issue a Purchasing Order, the guidelines and steps involved are detailed on the UCF Purchasing website.

- The Project Manager uses the method approved in the PMP.

- If the cost of the project is less than $2M, Project Manager uses the Continuing Services path.
- If Continuing Services contractors are used, the PM uses the Contractor or Design path, or both, depending upon project scope.
    - ✓ Design path: The FP&C director approves the selection of the professional made by the Project Manager per policy FSP 2014 FPC0007 (Award of Projects among Professionals selected through a Qualification Basis to provide Continuing Services). After confirming the selection of the vendor, Project Manager moves to Design Phase.
    - ✓ Construction path: The FP&C director approves the selection of the professional made by the Project Manager per policy FSP 2015 FPC0008 (Award of Projects to Continuing Service Contractors Selected through a Qualifications Basis). After confirming the selection of the vendor, Project Manager moves to Construction Phase.
- If Design in hand, the Project Manager moves to Construction phase.
- Contractor path: The PM chooses the In-house or Continuing Services contractor path as approved in the PMP.
    - ✓ In-house: The PM requests a CMMS work order for project completion.
    - ✓ Continuing Services path: PM chooses a Continuing Services contractor based upon the approved PMP. When GC Quotes is used, the PM follows the GC Quotes workflow and procedure FS 2015 FS0014 (after selection phase).
- If the project scope requires services that are not available via a continuing services contractor, an outside contractor will be selected. The PM will obtain a minimum of three quotes and choose the service provider. The FP&C Director approves the selection.
- The PM initiates action for a Purchase Order to procure the selected vendor's services.

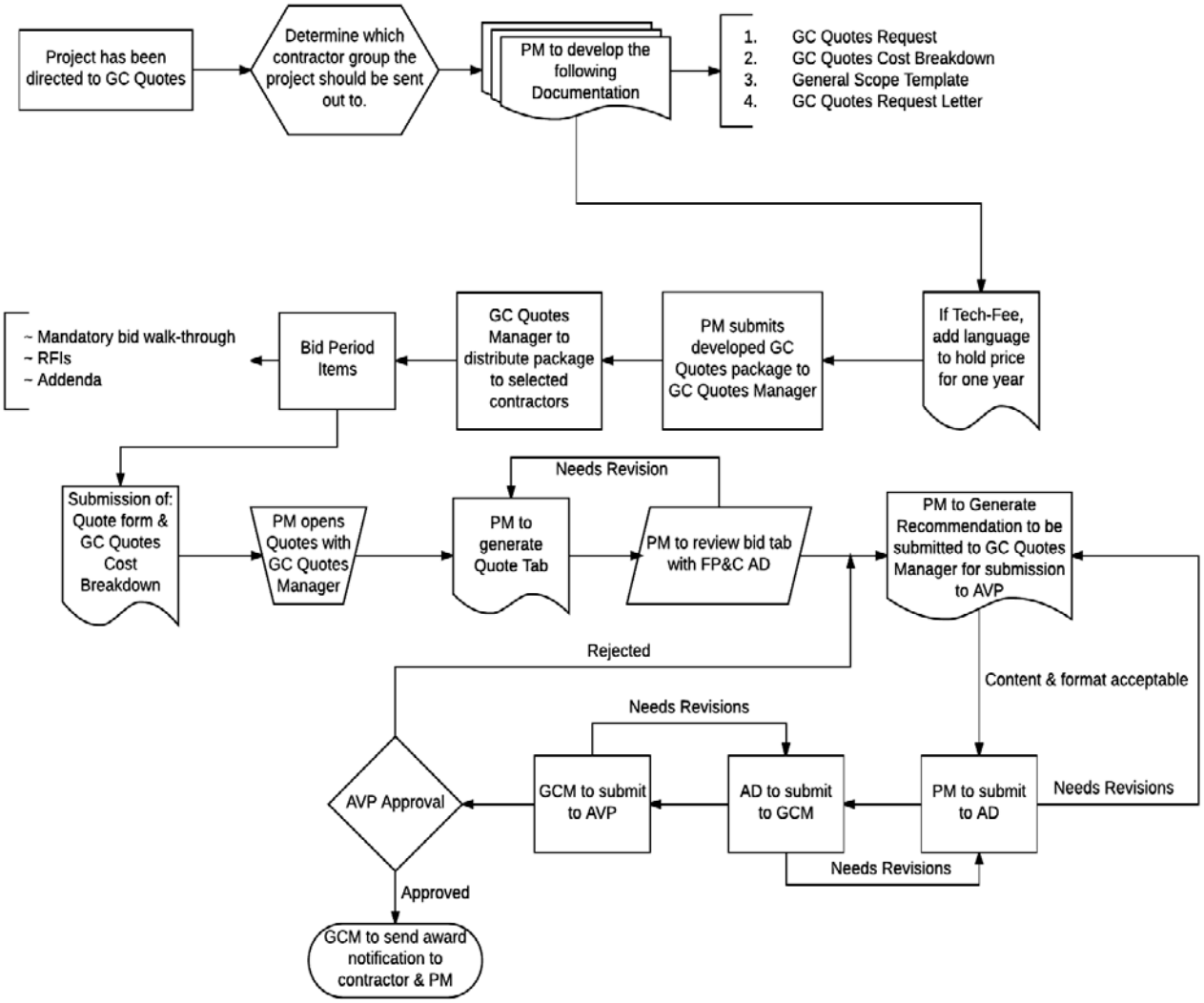
Table 3a: Selection phase documents

Phase	Document Type	Policy/Procedure	Policy/Procedure #
Phase 3	Policy	Award of Projects among Professionals Selected through a Qualifications Basis to Provide Continuing Services	FSP 2014 FPC0007
Phase 3	Policy	Award of Projects to Continuing Service Contractors Selected through a Qualifications Basis	FSP 2015 FPC0008
Phase 3	Procedure	Best Value Contracting Method	FS 2013 FPC0010
Phase 3	Procedure	Facilities Planning & Construction Selection Procedures	FS 2016 FPC0020
Phase 3	Procedure	Process for Advertisement and Selection of Design Professionals and Construction Firms	FS 2017 FPC0022

Table 3b: Selection phase forms

Phase	Document Type	Form/Checklist	Name
Phase 3	Contractor	Form	FPC2220 Construction Manager Qualifications Supplement (CMQS)
Phase 3	Finance	Form	FPC4310 Design Build Design Services Invoice

GC Quotes Process for Project Managers:

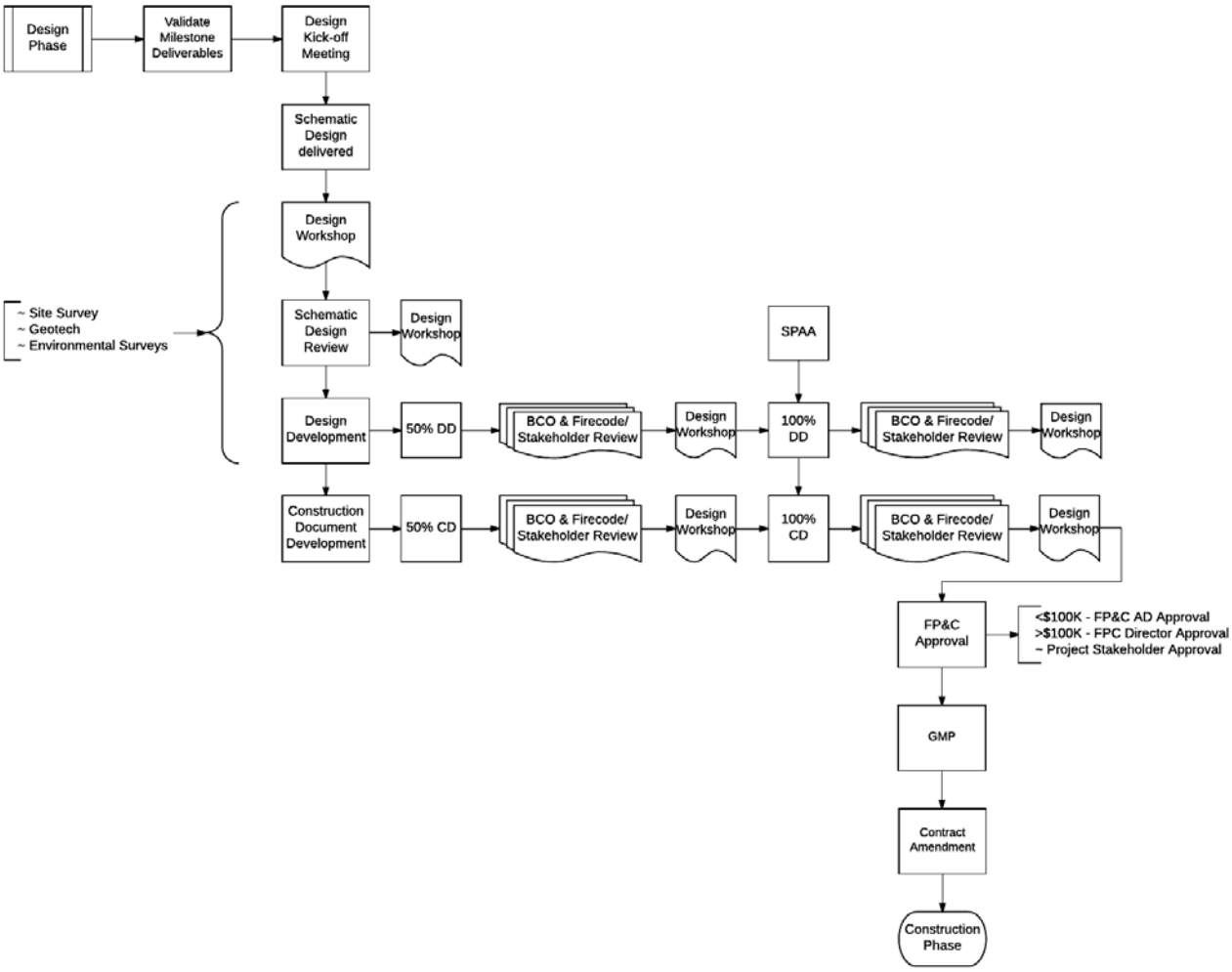


GC Quotes PM Workflow

GC Quotes Process:

- Use GC Quotes procedure FS 2015 FS0014

Design:



- The PM validates milestone and design and design deliverables in preparation for the kick-off meeting.
- After validating the design deliverables, the Project Manager coordinates the Kick-off meeting. The A/E provides design deliverables & critical needs list at each design workshop while the Stakeholders provide comments at each design workshop.
- The A/E responds to comments provided after each design work shop and implements agreed upon changes.
- During the Schematic Design stage, EHS Safety Officer (SO) determines State Fire Marshall (SFM) involvement and the Project Manager adjusts the schedule accordingly.
- Space Planning Analysis and Administration reviews design and provides building and room numbers for the project as required. Room numbers are due at 100% DD.

- A/E provides construction deliverables & critical needs checklist at 50% and 100% workshops. The A/E responds to comments provided and implements agreed upon changes.
- The Project Manager submits 100% documents to Building code Office (BCO)/ State Fire Marshall (SFM) for permit review. BCO/SFM performs design review for permit issuance.
- The approved contractor provides a Guaranteed Maximum Price for the FP&C Director to approve.
- Office of Contracts and Real Estate Management (OCREM) processes a contract amendment incorporating the F&S AVP approved GMP into the contract.
- The Project Manager proceeds to the Construction phase.

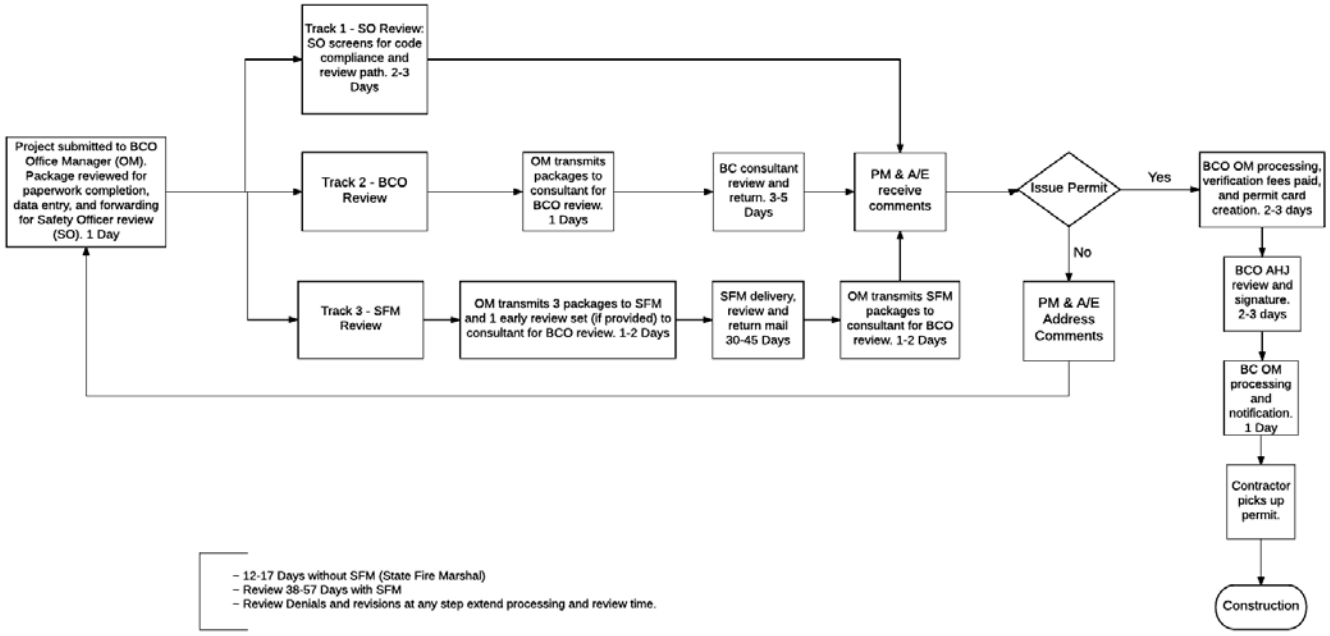
Table 4a: Design phase documents

Phase	Document Type	Policy/Procedure	Policy/Procedure #
Phase 4	Policy	Crime Prevention Through Environmental Design (CPTED)	FSP 2012 FPC0002
Phase 4	Policy	Access to UCF Facilities Drawings, Documents, and Sensitive Data	FSP 2013 FPC0005
Phase 4	Policy	Basic and Additional Services for Major and Minor Projects	FSP 2017 FS0013
Phase 4	Procedure	Major and Minor Design Workshop Procedure	FS 2013 FPC0013
Phase 4	Procedure	Utility Outage Procedure	FS 2015 FS0017

Table 4a: Design phase forms

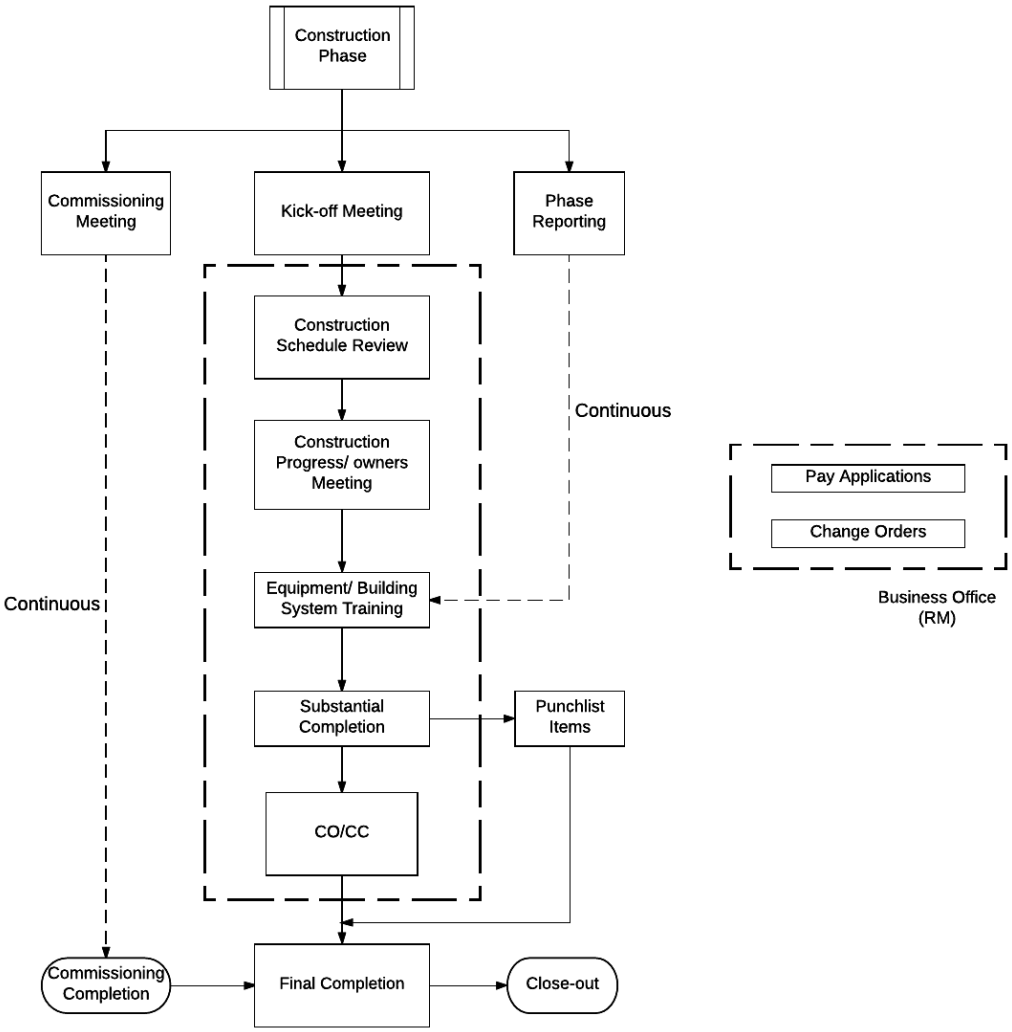
Phase	Document Type	Form/Checklist	Name
Phase 4	Contractor	Form	Non-Disclosure Agreement (NDA) Form
Phase 4	Contractor	Form	Professional Qualifications Supplement (PQS)
Phase 4	Finance	Form	FPC4320 Professional Services Invoice
Phase 4	Finance	Form	FPC4330 Additional Services Request Justification Form
Phase 4	Finance	Form	FPC4340 Design Phase Submission Report
Phase 4	Request	Form	Access Control Installation Request Form
Phase 4	Request	Form	Camera Installation Request Form
Phase 4	Request	Form	Document Request Form - Form FP100
Phase 4	Request	Form	Standards Deviation Form
Phase 4	Request	Form	Utility Interruption Notification

Permitting:



- The PM submits;
  - ✓ BCO Fee Proposal
  - ✓ Document Review Request Form
  - ✓ Bldg. Code Document Transmittal
  - ✓ Building Permit Application
- The three separate tracks can occur concurrently.
- Safety Office (SO), SFM & BCO review plans and if changes are required, the Project Manager and A/E receive the comments from the personnel in each track.
- Permits can be issued ahead of addressing the review comments.
- If the comments are addressed after issuance of the permit, the BCO prepares the billing for the project. If comments are not addressed, the PM routes the plans through the whole workflow from the start.

Construction:



- The Project Manager will hold a kickoff meeting with the A/E, General Contractor and representatives from each Facilities & Safety department (refer table 7: UCF departments and contacts) to start the Construction Phase. This kickoff meeting will let the project team members interact with each other, understand their roles and set project goals & expectations.
- During the meeting, the Project Manager will review the Project Management Plan, project schedule and communicate key success milestones with stakeholders.
- During the construction phase, construction, commissioning and phase reporting occur concurrently.
- The Project Manager establishes and coordinates Owner Architect Contractor (OAC) meetings routinely for project status updates. Meeting frequency depends upon project complexity, contract, and is determined based upon PM judgement.
- The Project Manager reviews financials, updates, and records all data periodically in Project Tracker per section Project Tracker Requirements.

- If Commissioning is required, the Project Manager coordinates commissioning process with the construction management team. Commissioning activities take place concurrently throughout the various stages of the workflow.
- The Project Manager coordinates with the contractor to receive asset data using the warranty template. (reference procedure FS 2017 FS0024)
- Prior to Substantial Completion, per procedure FS 2016 FS0021 (Substantial and Final Completion) the PM will initiate a punch walk through with the Architect, General Contractor, and representatives from each Facilities and Safety department. The Contractor maintains the punch lists and status, and the PM validates that punch list items have been completed.
- The PM will collect all punch comments and distribute to the General Contractor for correction/ response.
- Upon completion of the Substantial Completion Approval Form from the contractor, the PM informs the Contractor that they may apply for Certificate of Occupancy (CO) from the BCO.
- Upon completion of Construction, the PM informs the Contractor that they may apply for Certificate of Completion (CC) from the BCO.
- The PM proceeds to Close-out phase.

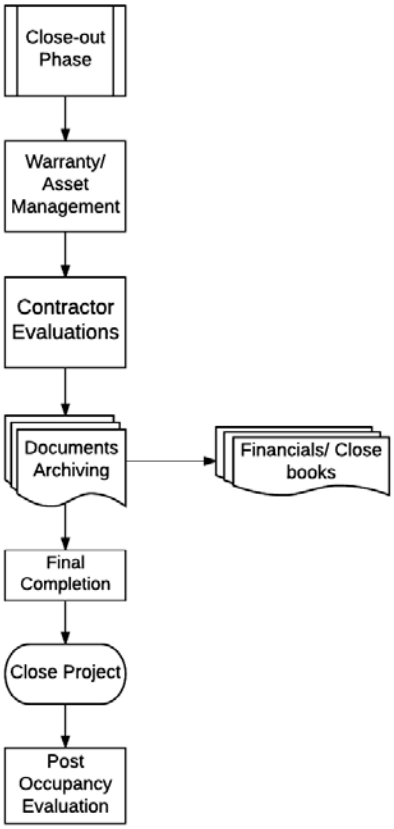
Table 5a: Construction phase documents

Phase	Document Type	Policy/Procedure	Policy/Procedure #
Phase 5	Guideline	Environmental Health and Safety Construction Information General	www.ehs.ucf.edu/buildingcode/bcconstructioninfo.html
Phase 5	Policy	Access to UCF Facilities Drawings, Documents, and Sensitive Data	FSP 2013 FPC0005
Phase 5	Policy	University Issuance and Control of Keys	FSP 2016 FS0006
Phase 5	Policy	Direct Owner Purchase Program (DOP) for Major and Minor Construction	FSP 2013 RM0011
Phase 5	Policy	Basic and Additional Services for Major and Minor Projects	FSP 2017 FS0013
Phase 5	Procedure	Builder's Risk Procedure for Major Construction Projects	FS 2013 FPC0012
Phase 5	Procedure	Utility Outage Procedure	FS 2015 FS0017
Phase 5	Procedure	Direct Owner Purchase (DOP) Procedure for Major and Minor Construction Procedure	FS 2013 RM0018
Phase 5	Procedure	UCF Building Energy Systems Commissioning Procedure	FS 2015 UES0003
Phase 5	Procedure	Liquidated Damages	FS 2016 FS0020
Phase 5	Procedure	Substantial and Final Completion	FS 2016 FS0021
Phase 5	Procedure	Subsurface Excavation in Accordance with Sunshine State One-Call (Sunshine 811)	FS 2016 FS0022
Phase 5	Procedure	Asset Collection and Warranty Claim	FS 2017 FS0024

Table 5b: Construction phase forms

Phase	Document Type	Form/Checklist	Name
Phase 5	Completion	Form	Final Completion Approval Form
Phase 5	Completion	Checklist	Final Completion Checklist
Phase 5	Completion	Form	Substantial Completion Approval Form
Phase 5	Completion	Checklist	Substantial Completion Checklist
Phase 5	Contractor	Form	FPC2310 Performance Bond Template
Phase 5	Contractor	Form	FPC2320 Payment Bond Template
Phase 5	Contractor	Form	Asset List and Warranty Template
Phase 5	Contractor	Form	Building Completion Approval Form
Phase 5	Contractor	Form	Equipment Information List for Computerized Maintenance Management System Population
Phase 5	Contractor	Form	Non-Disclosure Agreement (NDA) Form
Phase 5	Finance	Form	FPC4100 Certificate of Partial Payment Cover
Phase 5	Finance	Form	FPC4110 Schedule of Values
Phase 5	Finance	Form	FPC4120 Line to Line Transfer Form
Phase 5	Finance	Form	FPC4130 Buyout Savings Transfer Form
Phase 5	Finance	Form	FPC4210 Contingency Request Justification Form
Phase 5	Finance	Form	FPC4211 Contingency Transfer Form
Phase 5	Finance	Form	FPC4220 Construction Contract Change Order Cover
Phase 5	Finance	Form	FPC4221 Change Order Request Justification Form
Phase 5	Finance	Form	FPC4222 Change Order Allocation Form
Phase 5	Finance	Form	FPC4310 Design Build Design Services Invoice
Phase 5	Finance	Form	FPC4400 Direct Owner Purchase Order
Phase 5	Finance	Form	Direct Owner Purchase Order Information Sheet
Phase 5	Finance	Form	Direct Owner Purchase Order Instructions
Phase 5	Finance	Form	Direct Owner Purchase Order Instructions — Detailed
Phase 5	Finance	Form	Direct Owner Purchase Order Log
Phase 5	Finance	Form	Direct Owner Purchase Order Request Form
Phase 5	Finance	Form	Invoice Summary Letter Authorizing Payment
Phase 5	Finance	Form	UCF Certified Small, Minority & Women Owned Business Participation
Phase 5	Request	Form	Document Request Form - Form FP101
Phase 5	Request	Form	Contractor/Vendor GGM Key Request Letter Template
Phase 5	Request	Form	Contractor/Vendor Key Request Letter Template
Phase 5	Request	Form	Utility Interruption Notification

Close-out:



- To settle the contract and close the project the Project Manager follows the procedures specified in the contract's terms and conditions.
- The Project Manager receives the completed warranty and asset data using the warranty template. The PM turns over the warranty and asset data to Facilities Operations for CMMS entry.
- The Project Manager fills out the contractor evaluation form and submits to the Associate Director per procedure FS 2016 FS FS0018 (Evaluations of Firms under Contract with the University of Central Florida).
- The Project Manager coordinates document turnover and archiving.
- The Project Manager confirms final payment with FSBO.
- The Project Manager coordinates Post Occupancy Evaluation 11 months after project closure, per PMP.

Table 6a: Close-out phase forms

Phase	Document Type	Form/Checklist	Name
Phase 6	Completion	Form	Projects Document Turnover Form
Phase 6	Contractor	Form	Asset List and Warranty Template
Phase 6	Evaluation	Form	FPC3100 Contractor Evaluation Form
Phase 6	Evaluation	Form	FPC3200 Architect/Engineer Evaluation Form

Table 6b: Close-out phase documents

Phase	Document Type	Policy/Procedure	Policy/Procedure #
Phase 6	Procedure	Evaluations of Firms under Contract with the University of Central Florida	FS 2016 FS0018
Phase 6	Procedure	Liquidated Damages	FS 2016 FS0020
Phase 6	Procedure	Asset Collection and Warranty Claim	FS 2017 FS0024

Project Communication

Facilities & Safety projects involve many stakeholders who have an interest in project activities and outcomes.

These entities include:

- Project Requester
- Agencies issuing permits required by the project.
- Other departments within Facilities & Safety that may be supporting the project.

Some of these entities have formal and very specific reporting requirements while others just need to be kept informed. It is the responsibility of the Project Manager to determine what the scope and specific form of communication is for each entity and to make sure that those communication responsibilities are adequately discharged at all times. The Project Manager is also responsible for the content of all communication and any required follow up. The Project Manager should have a communication plan in place as part of the Project Management Plan that can be implemented for all reasonably foreseeable emergency situations.

Communication Methods

Projects are complicated endeavors: proper execution of even seemingly simple projects requires extensive communication and numerous approvals. Project Managers must use their best judgment and conduct themselves professionally when communicating with project stakeholders. This includes campus clients, partner departments, and vendors. Project Managers are reminded that they represent their department, F&S, Administration and Finance (A&F), and UCF as a whole, and that all communications are subject to records requests in accordance with the Florida

Statutes Chapter 286 “Sunshine Law”.
Project Managers may use all communication methods at their disposal, including:

- In-person meetings: Meetings are often the most productive way to discuss projects, review documents, and make decisions. They are an absolute requirement for reviewing field conditions and developing a project Scope. In-person meetings must be followed up with written communications to document project decisions and approvals.
- Phone calls: Phone conversations are encouraged, especially when setting up initial meeting times with campus clients, or when unexpected news (i.e., a project is over budget) needs to be communicated. Phone conversations cannot be relied upon for project approvals, and must be followed up with written communications to document project decisions and approvals.
- Emails: Emails are necessary to document important decisions made in person or on the phone, and to obtain approvals. They are also useful for communicating important project information to a large number of project stakeholders. Project Managers should always keep a professional tone in written communications, and are strongly encouraged to reread emails prior to sending, to ensure that the intended tone and content is expressed. Hastily-written emails may not come across as intended, which can lead to miscommunication.
- Letters: Official correspondence usually requires official communication by letter. This includes items and occasions such as Notice to Proceed, Additional Service Authorizations, contract approvals, Liquidated Damages, and Termination. When in doubt, consult with department leadership to determine if an email or a letter is the appropriate mode of communication.
- Text messages: Text messages should not be used for official communications. While often used for quick communication between team members, they are not always reliable and are difficult to document. Any information conveyed via text message must be followed up by official written communication.

Meeting Minutes and Project Correspondence

Meeting minutes are a critical part of proper documentation of project decisions. If a Project Manager is meeting with a client without a vendor (A/E or Contractor), it is the Project Manager’s responsibility to document the conversation using the FP&C meeting minutes template, and share the minutes with the client to get their approval and any corrections. If a Project Manager is meeting with a client with a vendor, it is the Project Manager’s responsibility to obtain meeting minutes from the vendor, screen them for accuracy, distribute them to project stakeholders for additional screening and feedback, and communicate approval (or changes) back to the vendor in a timely manner (generally one week). Failure to properly document project decisions can have major consequences when decisions are questioned.

Proactive Communication

Project Managers must proactively communicate with campus clients, using the following goals, as defined in the F&S department's annual assessment

The following are guidelines for the amount of time between project assignment and contacting the client. Project Managers should always aim to meet the "target" guideline:

- 0 to 5 days (target) – 50% of projects
- 6 to 15 days (acceptable) – 30% of projects
- 16 to 30 days (needs improvement) – 50% of projects
- 30+ days (unacceptable) – 10% of projects

The following are guidelines for the amount of time between when a project update occurs, and when the Project Manager enters it into Project Tracker. Project Managers should always aim to meet the "target" guideline:

- 0 to 10 days (target) – 30% of projects
- 11 to 20 days (acceptable) – 30% of projects
- 21 to 30 days (needs improvement) – 30% of projects
- 30+ days (unacceptable) – 10% of projects

These measures are reviewed annually as part of the FP&C assessment, both at the departmental level and at the individual PM level.

Project Tracker

Projects, all project related activities and data are tracked using Project Tracker. Consistent, daily use of Project Tracker is a mandatory requirement for all Project Managers and is evaluated on their annual performance appraisal. This includes keeping all vendor information, PO dates, financial information, and notes up to date in a timely manner.

F&S departments and campus clients also use Project Tracker. While it should not substitute for phone calls or emails, Project Tracker should be used to capture all important project correspondence and decisions. Project Tracker notes and history, as entered by Project Managers and other project team members, are regularly used to explain project progress or delays. Incomplete data entry can present misleading information to stakeholders, potentially giving the false impression that work isn't being done on their project. Incomplete data can also result in criticisms from UCF Audit.

Project Tracker data is reviewed annually as part of the F&S department assessment, both at the departmental level and at the individual PM level.

The following critical information must be recorded for all projects:

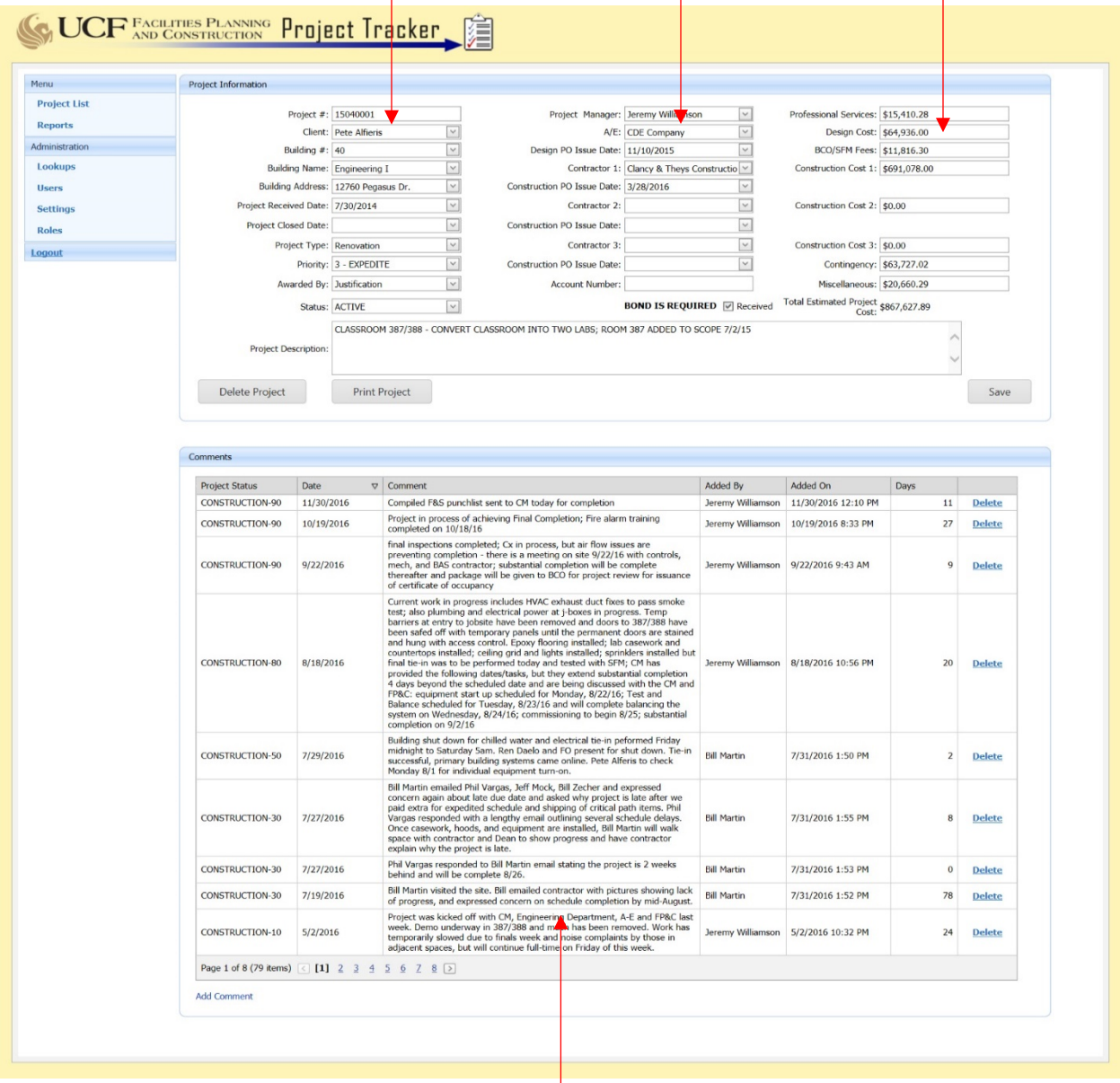
- **Project**
  - Client, PM, Building Name, Building Address, Project #
  - Project Description, Type
  - Project Received Date, Priority
- **Team**
  - A/E Name, A/E PO Date
  - Contractor name, Contractor PO Date
- **Budget**
  - PROJECT COST – Professional Services, Design Cost, BCO/SFM Fees, Construction Cost, Contingency, Miscellaneous Cost, Account #
  - Bond Required/Received
  - Awarded By
- **Status**
  - Status – ACTIVE, AWAITING CUSTOMER, ETC.
  - Notes – see Project Tracker Comment Status guidelines

Project Tracker Snapshot

Financial Info

Team Info

Project Info



Status Info

Project Tracker Requirements

Project Tracker – COMMENT STATUS PHASES

NEW – the project will start in this status when assigned to the Project Manager. NEW reports as “ACTIVE NEW” on the PDR.

DESIGN-10 to DESIGN-40 – Once the Project Manager has done anything on the project with a client (phone call, meeting, etc.), a comment must be entered with a DESIGN-XX status. DESIGN-10 to DESIGN-40 reports as “ACTIVE EARLY DESIGN” on the PDR.

DESIGN-50 to DESIGN-100 – this reports as “ACTIVE LATE DESIGN” on the PDR.

PERMIT SUBMITTED – when documents are submitted to EH&S for permit, the Project Manager must enter a comment with this status. This reports as “DESIGN COMPLETE/PERMIT” on the PDR.

PERMIT APPROVED – when a permit is approved by EH&S, the Project Manager must enter a comment with this status. This reports as “DESIGN COMPLETE/PERMIT” on the PDR.

CONSTRUCTION-10 to CONSTRUCTION-40 – as construction progresses, the Project Manager should enter updates reflecting the construction status. This reports as “ACTIVE EARLY CONSTRUCTION” on the PDR.

CONSTRUCTION-50 to CONSTRUCTION-100 – as construction progresses, the Project Manager should enter updates reflecting the construction status. This reports as “ACTIVE LATE CONSTRUCTION” on the PDR.

CLOSE-OUT – for use when construction is complete (CC/CO obtained) but there is remaining paperwork (invoices, warranties, etc.). The project should be transferred to the Senior Project Assistant for closeout. This reports as “ACTIVE CLOSEOUT” on the PDR.

AWAITING CUSTOMER – for use when you have sent anything to a client and are waiting on their direction. Design, funding, etc. Make sure to also change the status in the top right to “AWAITING CUSTOMER”.

TEMP HOLD – for use when project are on indefinite hold, but will start eventually. Especially for projects like tech fees. Make sure to also change the status in the top right to “TEMP HOLD”. If projects are on hold over 30 days due to client inaction, the PM needs to call them and inform them of the projects status to see if it can be cancelled. If so, we can always bring them back at a later date.

Project Tracker – AWARD DOCUMENTATION REQUIREMENTS

Documentation of award:

- **Professional - Design**
  When a continuing service professional is selected, it is MANDATORY for the PM to put a note in project tracker with the date they are selected, and the reason why they are selected. Example reasons include:
  - ✓ Most qualified due to experience or expertise
  - ✓ Bundled project to provide design fee value to UCF
  - ✓ Rotation – they have not received recent work
  - ✓ Speed – they are able to expedite a project that is needed quickly
  - ✓ Client request – client preference due to positive past performance
  - ✓ Other – any other reasons must be CLEARLY DOCUMENTED

- **Contractor – Rotation**
  When award through ROTATION has been made (projects under $35K), it is MANDATORY for the PM to put a note in project tracker with the date they are selected, and the specific reason why they are selected. Allowable reasons are the same listed in policy FSP 2015 FPC0008 section C.a.

- **Contractor – Justification**
  - ✓ When award through JUSTIFICATION has been made (projects over $35K), it is MANDATORY for the PM to put a note in project tracker with the date they are selected, and the specific reason why they are selected. Allowable reasons are listed in policy FSP 2015 FPC0008 section C.a. (type, location, client, expertise, due date, fair share, past performance).
  - ✓ Include the date on the project tracker comment when the AVP F&S approved the justification request.

- **Contractor – GC Quotes**
  - ✓ When award through GC QUOTES has been made, it is MANDATORY for the PM to put a note in project tracker with the date they are approved.
  - ✓ Include the date on the project tracker comment when the AVP F&S approved the justification request.

- **Other**
  - ✓ If a professional service or contractor vendor is used that is NOT ON THE CONTINUING SERVICE LIST, it is MANDATORY for the PM to put a note in project tracker with an explanation of why this alternate vendor was used, what contract vehicle they are operating under.
  - ✓ Any non-continuing service vendor used by an F&S department must be approved in writing by the Director, Facilities Planning and Construction.

Project Tracker – COMPLETE DOCUMENTATION FOR REPORTING AND AUDIT

It is CRITICAL that complete documentation be provided related to the award of vendors, in order for our tracking reports to accurately reflect current information. Due to past audit findings on the lack of complete information, this information is MANDATORY.

- **PROJECT $** - if a project is new and you don't have a detailed estimate, enter the rough cost or budget as one dollar value under "MISCELLANEOUS", then split it up later as you get updated numbers. Having estimated costs for each project (even if they are off), helps estimate our dollar value of projects under management.

- **PROFESSIONAL SERVICE INFO** - When a professional service project is awarded, ALL FIELDS related to the award MUST be completed:
  - ✓ A/E:
  - ✓ Design Cost:
  - ✓ Design PO Issue Date:
  - ✓ Note documenting award

- **CONSTRUCTION INFO** - when a construction project is awarded, ALL FIELDS related to the award MUST be completed:
  - ✓ Contractor 1:
  - ✓ Construction Cost 1:
  - ✓ Construction PO Issue Date:
  - ✓ Awarded By:
  - ✓ Note documenting award

- **INITIAL CONTACT**
  Making quick initial contact on a new project is a sign of proactive communication and project management. Contact with requesters on new projects are targeted as follows, per the FP&C 2016/17 Assessment Plan:
  - ✓ Initial contact between 0 to 5 days (target)
  - ✓ Initial contact between 6 to 15 days (acceptable)
  - ✓ Initial contact between 16 to 30 days (needs improvement)
  - ✓ Initial contact 30+ days (unacceptable)

- **FREQUENCY OF PROJECT TRACKER COMMENTS**
  Regular comment entries are necessary for proper project documentation and proactive client communication. Comment target frequency in Project Tracker is outlined under "Proactive Communication".

Project Tracker – COMMENT REQUIREMENTS

All Project Tracker comments must address the following four items:

- **STATUS/NEXT STEPS** – describe the current status on the project and any recent actions completed. Describe next steps of the project and who is responsible for action items to keep the project moving forward
- **BUDGET** – describe if the project is under, on, or over budget
- **SCHEDULE** – describe if the project is ahead, on, or behind schedule

Additional comment requirements:

- Write comments in a way that other people reading the comment with limited knowledge on the project will be able to understand. This is important not only when external clients or internal leadership review comments for project status, but also for auditing. Two years from now someone unfamiliar with the project needs to be able to look back at the file and understand the history of the project.
- Do not write comments like "see last update" or "no change in status". Our reports only print out the most recent comments, and these sorts of updates are not useful on reporting tools.

Sample of acceptable comments:

- STATUS/NEXT STEPS: Met with architect on site on 1/11/17 to review project scope. Architect to prepare proposal and deliver to UCF PM by 1/21/17
- BUDGET: Total project budget approximately $62K. Anticipated design fee $10K. Project on budget.
- SCHEDULE: anticipated design schedule – design proposal 1/21/17; proposal review and MPP to client 1/30/17; client approval and funding 2/14/17; accounting and design PO issued 2/28/17; preliminary design 3/20/17; final design 4/14/17; issue to GCQuotes 4/21/17; scope bids 4/31/17; accounting and construction PO issued 5/14/17; construction start 5/21/17; CC/CO 8/14/17. Project on schedule.

- STATUS/NEXT STEPS: OAC meeting held 6/16/16. Contractor provided Change Order #4 paperwork for storefront color change to UCF PM, who has provided to FSBO for review.
- BUDGET: Change Order #4 adds $2,345 to the project. Project contingency funds will be requested.
- SCHEDULE: anticipated design schedule –construction start 5/21/16; CC/CO 8/14/16. Anticipating a 1 week delay due to lead time of mechanical unit.

Stakeholder and University Agent Coordination

In any project, there are many stakeholders at UCF that must be given the opportunity to have input on our projects. Smaller projects will have fewer stakeholders, while larger projects will have many stakeholders. The Project Manager must use his or her best judgment to determine who needs to be involved in smaller projects. For example, a small interior renovation would not require input from Landscape and Natural Resources. If unsure, the Project Manager should err on the side of caution and involve more stakeholders instead of less.

Below is a list of the typical project stakeholders that provide input on our projects. This list is not comprehensive, and the PM should endeavor to include all relevant stakeholders in the process, whether on this list or not.

Stakeholders

Campus Clients
Campus clients are the end users of our projects; thus, projects must meet their needs, or they will not be successful. Campus clients must be involved in the following aspects of project development:

- Scope and schedule development
- Scope and schedule approval
- Funding approval
- Regular construction meetings
- Building or partial-building shutdowns
- Punch list
- Final completion approval
- Input on Designer and Contractor performance

University Master Plan Committee (UMPC)
The UMPC is a broadly represented group of faculty, administrators, staff, and students whose charge is to make recommendations to the President of the University regarding matters of aesthetics and suitability for minor projects and modifications of the campus landscape, utilities, and building exteriors. The UMPC meets monthly to review short-range and long-range issues related to land use, facilities planning, and future development of the campus, including protection and preservation of natural resources on the campus. The UMPC also reviews signage, site furniture, public art, and some temporary installations, at the charge of the Vice President for Administration and Finance and the Associate Vice President for Administration and Finance (Facilities and Safety).

The UMPC serves solely as an advisory body, with meetings open for public attendance, serving as a clearinghouse for communication to and from the campus

community. All plans are submitted through FP&C, and, before being considered by the committee at large, they must be approved by the AVP, F&S and the Vice President for Administration and Finance. Terms of service shall be three years, staggered for faculty and appointed members; one year for student members; and ongoing for position-specific members.

PMs with projects that have an exterior impact on campus must submit project plans to the UMPC, and attend the monthly UMPC meeting to review the project requests. The forms for this submission are located in Section X – Forms. Adequate time (generally 2 weeks prior to the requested meeting date) must be allowed for the proper staffing of these forms for approval, and for announcement of the agenda to the UMPC committee members.

Partner Departments

The design and construction of all projects involves several partner departments/key stakeholders who must all have proper input on project planning, design, and construction. It is imperative that Project Managers understand the roles of each of these departments, including what input they provide and when it is needed (typically as early as possible). Lack of communication and coordination is the highest cause of project problems. PMs are expected to be proactive in involving all stakeholders, as necessary.

Space Administration

www.provost.ucf.edu/academic-affairs/space-planning-analysis-and-administration – The Space Administration office is a department within the Information Technologies & Resources division. As the department's name implies, Space Administration is responsible for university-wide planning, analysis, and administration of both university-owned and rented space of all types—classrooms, offices, laboratories, etc. Space Administration serves as the liaison for space needs between university colleges and divisions. Space Administration maintains detailed awareness of all university spaces and their assignments, both those for instruction and research and otherwise; keeps current and accurate records regarding UCF's overall space inventory, as required by the Board of Governors (BOG) of the State University System (SUS); and represents UCF during SUS Educational Plant Surveys visits for inventory validations and space needs assessments. In addition to these university-wide responsibilities, Space Administration works closely with FP&C to oversee space project requests, including planning, construction, maintenance, and, where necessary, facility upgrades.

Space Administration must be involved in the following aspects of project development:

- Review of all Minor Projects to determine if they are acceptable to the university, on a space category and use basis.
- Building number assignment for new construction
- Room number assignment for all projects. Space Administration should be involved in this process as early as possible, and at the Design Development phase at the

latest.
- Turn-over of electronic plan modification information at the close-out phase.

Utilities & Energy Services (UES)
www.energy.ucf.edu – UES maintains energy-efficient building system operation through education, optimization, implementation, and verification, while providing professional leadership and fostering sustainable growth. UES is responsible for providing and supporting a wide variety of mission-critical services, including green building accreditation, commissioning, building automation system specification, integration, enterprise management, and utilities and energy management services for all campus buildings, comprising 7.8 million gross square feet of space.

UES must be involved in all projects that have any impact to campus utilities, and in the following aspects of project development:
- Utilities
  - Chilled Water
  - Natural Gas
  - Domestic and Reclaimed Water
  - Sanitary
  - Power
- Commissioning (CxA)
- Utility locates
- Evaluations of HVAC adequacy for Minor Project renovations
- Building or partial-building shutdowns
- Punch list
- Turn-over of utility plan modification information at the close-out phase.

Landscape & Natural Resources (LNR)
www.green.ucf.edu – LNR enriches the community by creating and maintaining an inviting and sustainable outdoor environment, providing high-quality service for operational activities, and generating research and educational initiatives that guide conservation and stewardship of natural resources.

LNR must be involved in the following aspects of project development:
- St Johns River Water Management District (SJRWMD) permitting
- Gopher Tortoise surveys
- Landscape and Irrigation on all Minor and Major Projects
- Punch list

Environmental Health & Safety (EHS)
www.ehs.ucf.edu – EHS promotes a culture of safety, health, and environmental protection in collaboration with the university community, to support education, research, and service. It is dedicated to reducing injuries, accidents, and

environmental impact, while ensuring compliance through high-quality training, comprehensive workplace evaluation, hazardous materials management from acquisition to disposal, managing regulatory information, and minimizing future potential liabilities.

EHS must be involved in the following aspects of project development:

- State Fire Marshall (SFM) coordination – All communication with the SFM Tallahassee office during design must go through EHS – neither FP&C nor the A/E team is allowed to contact the SFM directly without approval from the FP&C Director.
- Preliminary code review of drawings
- Permit code review of drawings
  - Building Code Office (BCO) code and electrical panel review, in conjunction with the plan review consultant PDCS.
  - Fire Safety code review, in conjunction with the SFM
- Punch list

Office of Emergency Management (OEM)

www.emergency.ucf.edu – OEM prepares the university to respond to, recover from, and mitigate against any natural or manmade disaster and/or crisis. It strives to protect the wellbeing of UCF students, faculty, staff, and guests. OEM is responsible to:

- Develop and maintain the UCF Comprehensive Emergency Management Plan (CEMP);
- Develop, plan, and evaluate emergency exercises;
- Maintain and manage an Emergency Operations Center;
- Provide training for individuals that have emergency management roles and responsibilities;
- Provide the university with preparedness information;
- Fulfill Homeland Security responsibilities including Threat Assessments, Vulnerability Assessments, Force Protection, and Antiterrorism;
- Fulfill Security Management responsibilities including assessments and recommendations for closed circuit television cameras, access control, and emergency notification systems; and
- Act as the UCF liaison for local, state, and federal emergency responders and agencies.

OEM must be involved in the following aspects of project development:

- Mass Notification
- Access Control
- Cameras
- Blue light phones
- All supporting infrastructure for the above items
- Punch list

Office of Instructional Resources (OIR)

www.oir.ucf.edu – OIR designs, selects, and installs multimedia systems and equipment across all UCF campuses to maintain a consistent experience in all of our learning spaces, and to ensure that UCF's multimedia standards are being met. OIR is also closely involved in the Technology Fee project process, since many of these projects have a multimedia component.

OIR must be involved in the following aspects of project development related to classroom and conference room instructional resources:

- Projectors
- Fixed and retractable projection screens
- Lighting control systems
- Document cameras
- Instructional podiums
- Instructional media equipment
- All supporting infrastructure for the above items
- Punch list

Note that auxiliary and direct support organizations are not required to use OIR for their audio/visual needs.

Technology Services (UCF IT)

www.it.ucf.edu – UCF IT, a unit within the Information Technologies and Resources Division, provides central information technology resources – including software, databases, computer networks, telephones, and IT staff – to support UCF's academic, research, and business activities. FP&C coordinates closely with UCF IT on all projects that require telecommunications infrastructure and/or services. UCF IT is the sole provider of UCF's telecommunications systems, and is responsible for their design, standards and guidelines, installation, operation, and maintenance. This includes, but is not limited to: outside plant duct bank, outside copper/fiber systems, structured cabling, main and intermediate distribution frames (MDF/ IDF), cable television network infrastructure (wired and wireless), the distributed antenna system (DAS), two-way radio systems, and many other technology-related services. UCF IT must be involved in the following aspects of project development:

- Temporary removal or relocation of existing telecommunications infrastructure for Minor Projects
- Outside telecommunications infrastructure (vaults, etc.)
- Inside telecommunications infrastructure
  - MDF rooms
  - IDF rooms
  - cable trays
  - cable installation
  - telecom outlet installation

- All supporting infrastructure for the above items
- Building or partial-building shutdowns
- Punch list

It is important to coordinate and schedule all UCF IT scope as early as possible to ensure proper design and scheduling of their Scope of Work. It is critical that our Scopes of Work state that there must be no painting of new or existing UCF IT cabling, as this voids the cable warranty, requiring replacement in full at the Contractor's cost.

Facilities Operations (FO)

www.fo.ucf.edu – FO comprises Housekeeping, Maintenance, Recycling, and Reliability Engineering, and is focused on operating and maintaining buildings and assets, both on our main campus and remote campuses. It implements preventative maintenance programs and perform corrective maintenance work to ensure that every building is safe, functional, clean, and attractive. It also supports all recycling efforts by students and faculty. FO must be involved in the following aspects of project development:

- Maintenance and equipment needs
- Spare parts and attic stock
- Asset reviews
- Building or partial-building shutdowns
- Punch list

Resource Management (RM)

www.rm.fs.ucf.edu – RM performs multiple support functions within Facilities and Safety (F&S), including warehouse, central receiving, central stores, contract and real estate management, F&S Business Office (FSBO), F&S Information Technology (IT), policy and procedure management, Postal services, records storage and destruction, and surplus property management.

RM must be involved in the following aspects of project development:

- Surplus of UCF property
- Deliveries of building equipment
- Warehousing

Quality Management & Improvement (QMI)

www.qmi.fs.ucf.edu – QMI provides internal oversight to F&S via standard reporting, and provides crucial information on employee compliance with policies and procedures. It also verifies that completed work is in accordance with best practices, industry standards, and safety standards. Its specialists conduct annual facilities condition assessments to provide updated building and site condition information. A Customer Inquiry service and a Feedback Form are available on the QMI website for students, faculty, and staff to discuss or report issues.

QMI must be involved in the following aspects of project development:

- Project workshops
- Commissioning meetings
- Punch list

UCF Police

www.police.ucf.edu – UCF PD's mission is to reduce crime and the fear of crime by providing a safe environment for students, faculty, staff, and visitors, and the safeguarding of constitutional guarantees. UCF PD provides law enforcement services to the university community as well as several university-affiliated housing communities near campus. UCF PD is involved in the planning and design of all new building projects, with a focus on safety, security, and Crime Prevention through Environmental Design (CPTED).

UCF Police must be involved in the following aspects of project development:

- Project security reviews
- Crime Prevention through Environmental Design (CPTED)
- Coordination of roadway or intersection rerouting or shutdowns

University Agents

Projects often involve local agencies or third parties, who may require approvals or may impact the project. The Project Manager has shared responsibility with the contractors, and Architect/ Engineers to function as the conduit between Facilities & Safety and third parties or local agencies for all matters that could be related to the project. The Project Manager has the ultimate responsibility in Facilities & Safety to maintain project coordination as needed.

Commissioning Agent (CxA)

The commissioning process is not a singular event at the end of construction, but an ongoing activity that takes place starting at the conception of a facility. The goals of the CxA process are to design and install building systems that improve building performance, reduce energy costs, and reduce life-cycle operation and maintenance costs. UCF has the option of performing commissioning services internally through UES, or by hiring a third party company. Continuing service CxAs can be used for this service. This choice must be discussed with UES on a project-by-project basis, and will depend greatly on the complexity of the project and the availability of UES resources.

UCF also performs total building commissioning, which involves third-party review of all building systems including MEP/FP and building envelope systems. For building envelope system commissioning, UCF employs building envelope consultants, which are discussed in the following section.

The CxA must be involved in the following aspects of project development:

- Developing the Owner's Project Requirements (OPR) in conjunction with the Owner and with the Owner's approval, as described in Section III.3;
- Reviewing and commenting on the Architect and MEP/FP Engineer's Basis of Design (BOD) document, which describes how the OPR will be achieved;
- Attending all project meetings and workshops;
- Reviewing and commenting on all design deliverables, to ensure compliance with the OPR and UCF Standards;
- Reviewing construction submittals related to MEP/FP scope for compliance with the contract requirements;
- Reviewing and testing installed MEP/FP systems for compliance with the contract document and approved submittal requirements; and
- Reviewing building envelope installation, if within the scope of the CxA.

The PM, with cooperation from UES and FP&C leadership, is responsible for facilitating CxA selection, developing the CxA Scope of Services and fee, coordinating the requisitions and purchase orders related to the CxA services, coordinating initial meetings between the CxA and UCF to establish the OPR, and inviting the CxA to the appropriate project meetings.

Building Envelope Consultant

UCF has the option of hiring a building envelope consultant for its projects. All Major Projects and large Minor Projects with an exterior skin scope must have a building envelope consultant, who must be involved in the following aspects of project development:

- Input into the OPR document for scope related to the building envelope;
- Reviewing and commenting on all design deliverables for compliance with the OPR and UCF Standards;
- Reviewing construction submittals related to the building envelope scope;
- Reviewing mockups and field installation conditions to ensure that the installation is in compliance with the design details and intent;
- Water testing (and re-testing when required) installed conditions to verify that the installed conditions are water-tight; and
- Certifying that the building is water-tight, in compliance with the Substantial and Final Completion procedure.

Some Minor Projects, such as re-roofs and building envelope repairs, have only a building envelope Scope of Work. In these cases, a Continuing Service building envelope consultant can be hired to produce the entire Scope of Work package, answer bid RFIs, review Contractor submittals, review the installation of the work, and certify proper completion of the work.

Table 7: UCF DEPARTMENTS & CONTACTS

DEPT	TITLE	POINT OF CONTACT	WEBSITE/EMAIL	PHONE
FP&C	**FAC. PLANNING & CONST. (FP&C)**		http://www.fp.ucf.edu	
	Archives	Maritza Tibbetts	Maritza.Tibbetts@ucf.edu	407.823.4215
UES	**UTILITY & ENERGY SERV. (UES)**		http://www.energy.ucf.edu	
	Cx	Tran Huynh	Tran.Huynh@ucf.edu	407.823.1121
	BAS Mngr.	Alex Parlato	Alex.Parlato@ucf.edu	407.823.0285
	Duke Eng. Crd.	Keith Coelho	Keith.Coelho@ucf.edu	407.823.4613
	Chilled Water	Saul Santiago	Saul.Santiago@ucf.edu	407.823.0873
	Water Utilities	Larry Eflin	Larry.Eflin@ucf.edu	407.823.4659
	Sr.Controls	Dale Lance	Dale.Lance@ucf.edu	407.823.0614
EH&S	**ENV HEALTH & SAFETY (EH&S)**		http://www.ehs.ucf.edu	
	BCO	Allen Bottorff	Allen.Bottorff@ucf.edu	407.823.3392
	FS Plans Rev/SO	Michelle Humphries	Michelle.Humphries@ucf.edu	407.823.2338
	FS Site Rev	Marcel Fernandez	Marcel.Fernandez@ucf.edu	407.823.0073
	ENV Manager	David Bock	David.Bock@ucf.edu	407.823.0707
	Chemical Safety	Sandra Hick	Sandra.Hick@ucf.edu	407.823.3307
	Lab Safety	Brian Butkus	Brian.Butkus@ucf.edu	407.823.5498
	Radiation Safety	Kasey Creel	Kasey.Creel@ucf.edu	407.823.4173
LNR	**LAND & NAT. RESOURCES (LNR)**		http://www.green.ucf.edu	
	AD, Landscape	Chris Kennedy	Chris.Kennedy@ucf.edu	407.823.2210
	AD, Operations	Brian Hagan	Brian.Hagan@ucf.edu	407.823.3146
	Irrigation Crd.	Lauren Morris	Lauren.Morris@ucf.edu	407.823.4893
	Arborist	Ray Jarrett	Raymond.Jarrett@ucf.edu	407.823.4295
	Biologist	Amanda Lindsay	Amanda.Lindsay@ucf.edu	407.823.4702
UCF IT	**TECHNOLOGY SERVICES (UCF IT)**		http://www.it.ucf.edu	
	UCF IT, Constr.	Jason Musick	Jason.Musick@ucf.edu	407.823.4309
	UCF IT, Design	Tony Awtonomow	Anthony.Awtonomow@ucf.edu	407.823.0020
OIR	**OFF. OF INSTRUCTIONAL RS.(OIR)**		http://www.oir.ucf.edu	
RM	**F&S RESOURCE MNGMT(RM)**		http://www.rm.ucf.edu	
	AD, Finance	Lashanda Brown-Neal	Lashanda.Brown-Neal@ucf.edu	407.823.5166
	AD, Warehouse	Lance Watkins	Lance.Watkins@ucf.edu	407.823.4082
	RM Surplus	Joshua Haupt	Joshua.Haupt@ucf.edu	407.823.1445
	RM Contracts	Gina Seabrook	Gina.Seabrook@ucf.edu	407.823.5894
FO	**FACILITIES OPERATION (FO)**		http://www.fo.ucf.edu	

PM Support & Reference Documents

List of all F&S policies & procedures related to projects.

Standards and Requirements

- UCF Design, Construction, and Renovation Standards (current version)
- UCF Professional Services Guide
- UCF IT Design Standards
- Campus Landscape Master Plan and Design Standards
- Campus Landscape Master Plan and Design Standards Submittal Specifications
- UCF Green Building Construction and Renovation Requirements
- UCF Standards Critical Needs Checklist
- Florida Board of Governors Regulations
- Campus Client Guide to UCF Facilities Planning & Construction
- FP&C Professional Services Orientation
- 2015 Educational Plant Survey
- SREF Table
- Protected Lands
- UCF Hurricane Guide

Specifications

- Building Automation System Specification
- UCF Fire Alarm Detection Systems Specifications

Building Coordination

- Building Liaison Information Sheet
- Building Liaison List
- Official UCF Building Name, Abbreviation, and Street Address Changes
- UCF Building Names and Numbers

Contract Documents

- Agreement Between Owner and Professional (for Use on Construction Management Projects)
- Agreement For Construction Management Services
- Agreement For General Contractor Continuing Services
- CM Fee Sliding Scale
- GC Fee Chart

- Major Services Submittals
- Minor Services Submittals
- Professional Continuing Services Contract

Electrical Panel Forms

- Electrical Panel Load Calculator (EPLC)
- Electrical Panel Load Calculator (EPLC) Procedure
- Non-dwelling Load Calculations

UCF Memoranda

- Administration of Architect/Engineer Agreements
- Advertisements for Architect/Engineer and Construction Manager Services and Calls for Bid
- Administration of Construction Manager Agreements
- Architect/Engineer Selection Process
- Construction Change Orders and Construction Change Directives
- Construction Manager Selection Process
- Construction Project Administration and Award of Construction Contracts
- Establishment of Construction Contract Time and Liquidated Damages
- Receipt and Opening of Construction Bid Proposals
- Roof Systems for University Facilities

F&S/FP&C Policies

- [FSP 2012 FPC0001] University Master Planning Committee (UMPC) Policy for Electronic Vote
- [FSP 2012 FPC0002] Crime Prevention Through Environmental Design (CPTED)
- [FSP 2012 FPC0004] Limitations on Authority in regard to Project Management Direction
- [FSP 2013 FPC0005] Access to UCF Facilities Drawings, Documents, and Sensitive Data
- [FSP 2014 FPC0007] Award of Projects among Professionals Selected through a Qualifications Basis to Provide Continuing Services
- [FSP 2015 FPC0008] Award of Projects to Continuing Service Contractors Selected through a Qualifications Basis
- [FSP 2016 FS0006] University Issuance and Control of Keys
- [FSP 2016 FS0007] Great Grand Master Keys

- [FSP 2012 FO0001] Computerized Maintenance Management System Requirements
- [FSP 2012 RM0001] Management of Construction Funding - PECO, Courtelis, Bond and Donations
- [FSP 2013 RM0011] Direct Owner Purchase Program (DOP) for Major and Minor Construction
- [FSP 2017 FS0013] Basic and Additional Services for Major and Minor Projects

F&S/FP&C Procedures

- [FS 2012 FPC0004] Facilities Improvements Requests for Privately Owned Greek House Corporations Only
- [FS 2012 FPC0005] Use of the UCF Standards regarding Exemptions and Change Orders
- [FS 2012 FPC0007] UCF Soils Stock Site Procedure
- [FS 2013 FPC0010] Best Value Contracting Method
- [FS 2013 FPC0012] Builder's Risk Procedure for Major Construction Projects
- [FS 2013 FPC0013] Major and Minor Design Workshop Procedure
- [FS 2013 FPC0014] Revising the UCF Design, Construction, and Renovation Standards
- [FS 2013 FPC0016] Procedure for the Design, Procurement, and Installation of Furnishings and Equipment for Major Projects
- [FS 2013 FPC0017] Project Management Performance Standard
- [FS 2016 FPC0019] Building Program Development - Capital Projects Procedure
- [FS 2016 FPC0020] Facilities Planning & Construction Selection Procedures
- [FS 2016 FPC0021] Financial Procedures for the following: Requisition Creation and Approval, Schedule of Values, Professional Service Invoices, Additional Service, Construction Payment Applications, Line-to-Line Transfers, Buyout Savings Transfers, Contractor Contingency Transfers, Owner Contingency Transfers, DOP Tax Savings
- [FS 2013 FS0007] Procedure for Determining when actions are Facilities Improvements, Repairs, or Special Projects
- [FS 2015 FS0012] Mass E-mail Request Procedure
- [FS 2015 FS0014] GCQuotes
- [FS 2015 FS0017] Utility Outage Procedure
- [FS 2016 FS0018] Evaluations of Firms under Contract with the University of Central Florida

- [FS 2012 LNR0001] Compliance and Regulatory Requirements Procedure
- [FS 2012 RM0002] Management of Project Funds Subject to Reversion
- [FS 2013 RM0017] Furnishings & Equipment Approval Procedure
- [FS 2013 RM0018] Direct Owner Purchase (DOP) Procedure for Major and Minor Construction Procedure
- [FS 2017 FPC0022] Process for Advertisement and Selection of Design Professionals and Construction Firms
- [FS 2013 RM0019] Taggable Assets Procurement Procedures for Facilities and Safety Projects
- [FS 2014 RM0022] Certified Surplus Property Removal, Evaluation, and Disposition Procedure
- [FS 2015 UES0003] UCF Building Energy Systems Commissioning Procedure
- [FS 2016 FS0020] Liquidated Damages
- [FS 2016 FS0021] Substantial and Final Completion
- [FS 2016 FS0022] Subsurface Excavation in Accordance with Sunshine State One-Call (Sunshine 811)
- [FS 2017 FS0024] Asset Collection and Warranty Claim

List of forms & checklists related to projects:

Completion Forms

- Final Completion Approval Form
- Final Completion Checklist
- Projects Document Turnover Form
- Substantial Completion Approval Form
- Substantial Completion Checklist

Contractor Forms

- FPC2220 Construction Manager Qualifications Supplement (CMQS)
- FPC2310 Performance Bond Template
- FPC2320 Payment Bond Template
- Asset List and Warranty Template
- Building Completion Approval Form
- Equipment Information List for Computerized Maintenance Management System Population
- Non-Disclosure Agreement (NDA) Form
- Professional Qualifications Supplement (PQS)

Disclosure Forms

- Disclosure of Conflict of Interest – UCF F&S Selection Committee Form

Evaluation Forms

- FPC3100 Contractor Evaluation Form
- FPC3200 Architect/Engineer Evaluation Form

Finance Forms

- FPC4100 Certificate of Partial Payment Cover
- FPC4110 Schedule of Values
- FPC4120 Line to Line Transfer Form
- FPC4130 Buyout Savings Transfer Form
- FPC4210 Contingency Request Justification Form
- FPC4211 Contingency Transfer Form
- FPC4220 Construction Contract Change Order Cover
- FPC4221 Change Order Request Justification Form
- FPC4222 Change Order Allocation Form
- FPC4310 Design Build Design Services Invoice

- FPC4320 Professional Services Invoice
- FPC4330 Additional Services Request Justification Form
- FPC4340 Design Phase Submission Report
- FPC4400 Direct Owner Purchase Order
- Direct Owner Purchase Order Information Sheet
- Direct Owner Purchase Order Instructions
- Direct Owner Purchase Order Instructions — Detailed
- Direct Owner Purchase Order Log
- Direct Owner Purchase Order Request Form
- Invoice Summary Letter Authorizing Payment
- UCF Certified Small, Minority & Women Owned Business Participation

Request Forms

- CWG100 F&S Matching Project Funds Application Form
- FPC5100 UCF Design, Construction, and Renovation Standards Change Request
- Access Control Installation Request Form
- Camera Installation Request Form
- Document Request Form - Form FP100
- Contractor/Vendor GGM Key Request Letter Template
- Contractor/Vendor Key Request Letter Template
- Facilities Acquisition Request Form
- Facilities Construction Request Form
- Furniture Review Form
- Minor Project Request Form
- Print Request Form (for UCF personnel only)
- Standards Deviation Form
- UIMP/Carry Forward Funding Request
- Utility Interruption Notification

Staffing Forms

Facilities and Safety Staffing Form (External)
Facilities and Safety Staffing Form (Internal)

RISK ISSUE LOG TEMPLATE:

UCF FACILITIES PLANNING AND CONSTRUCTION

High Risk
Medium Risk
Low Risk

Risk Issue Log

Last updated: 6/20/17

Project Manager:	
Project Name:	
Project Number:	

#	PRI	Added	Completed	Type	Description	Resolution
1						
2						
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