Facilities Management Operating Policies and Procedures Manual

Effective Date: 4-26-06
Policy Number: 04-20-001
Section: Facilities and Services

Subject: Project Estimating, Execution and Closure

Purpose:

All renovations, modifications or work done to university buildings and grounds must be performed by or in cooperation with Facilities Management in advance. (Reference ASU Policies and Procedures 04-18 thru 04-20.)

Background:

The process for an estimate begins with a service request submitted to the Work Order Control Center. Verbal estimates are not a part of this process and will not be used. Departments and non-academic units should communicate in advance with Facilities Management so that university resources and manpower may be directed appropriately.

Requesting an Estimate:

1. The requesting department submits a service for an estimate to the Work Order Control Center. The service request for an estimate can be obtained by phone (2067), via email contacts located on our Web site or online using FAMIS. The request should include contact name and information with a brief summary of the request (including location, description of needs and desired occupancy date). Although estimates are generally not billable, a chargeable account number is required to process and estimate within FAMIS. For large or complex requests requiring external architect or engineering assistance the A/E fees may be charged to the account provided.

FM Department personnel may submit an internal service request for a maintenance project in the same manner previously mentioned. This request utilizes a non-billable (dummy) account number. Charges cannot be incurred on a service e request. Therefore, when a project will incur A/E or other preliminary cost, as a component of the preliminary design, a standing work order will be used to capture such cost. These costs will be billed to the design and construction account number during estimating and

these charges will be transferred to the appropriate work order or project upon conversation of this SR to a project.

- 1. Estimates and projects are developed and administered through the FM Construction Office. To ensure that a project is completed by a desired occupancy date, it must be submitted to Facilities Management with an adequate time to design, competitively bid, and construct the project. When submitting a SR for an estimate, clients should anticipate a minimum of 3-6 months before the start of construction. Each specific project schedule will be developed on the basis of the particulate scope and characteristics of that project.
- 2. Estimates may be requested at any time and will be added to the Construction Offices estimate and design schedule will be met; especially those projects submitted to utilize end of the year funds. Projects submitted with less than prescribed project timelines may not exact and become more refined only as the project moves through the project delivery process. It is therefore of extreme importance that good communication occurs between Facilities Management and a single representative from the client's organization from the beginning to the end of the project delivery process. It is equally important that the client's representative keep all client stakeholders informed regarding their project.

Estimate Process:

- **1.** The Work Order Control Center enters and estimate service request into FAMIS and assigns it to the Construction Coordinator.
- 2. The Construction Coordinator assigns the Service Request (SR) to an FM estimator or a project designer.
- **3.** The estimator or project designer will schedule and on-site meeting with the contact person to review the request and to clarify the scope and budget. The primary goals of this meeting are as follows:
 - **a.** FM and client develop a mutual understanding of scope.
 - b. Client determines financial feasibility.
 - c. FM determines feasibility of request. If the request does not meet building codes and /or university requirements or if the request is impractical, the client will be informed by Facilities Management personnel. The Construction Coordinator will be notified to determine alternate solutions. However, if a request is found to be impractical, a written report is filed with the Assistant Vice Chancellor of Facilities for project denial.
- **4.** The Estimator or Project Designer will establish a project file. This file documents all relevant information pertaining to the project such as estimating forms, scope and supporting drawings/documents. The Estimator or Project Designer will continue to coordinate with the client until there is a

- mutual understanding of scope description, at which time a final cost estimate is submitted to the construction coordinator.
- **5.** The Estimator or Project Designer submits the project file to the Construction Coordinator for review and approval of scope, drawing and pertinent details.
- **6.** The Construction Coordinator then forwards the project file to the Accounts Supervisor to update construction report.
- 7. The Accounts Supervisor forwards the project file to the Work Order Control Center for processing (scans documents and enter information onto FAMIS). The SR status is set to "Hold for IDT".
 - **a.** FAMIS on-line notification of estimate completion to customer and the Construction Coordinator.
 - **b.** The project file is then returned to the Construction Coordinator. The Construction Coordinator directs any communications to the customer via written letter, email, phone call or scheduled personal visit. The Construction Coordinator initiates a permanent project file.
- **8.** The estimate is valid for 60 days after submission to the customer. After 60 days the Construction Coordinator will review estimate status, determine if submission period is to be extended or void the estimate, Voided estimates will need to be re-submitted.

A customer may submit an IDT to the Construction Coordinator's office at any time within the 60 day period the estimate is valid. The earlier an IDT is submitted, the more likely a desired schedule will be met. The client accepts the proposal for estimate cost and scope by submitting an IDT. All project estimates are guaranteed maximum price. If an IDT is received that does not match the estimate, the construction coordinator will determine a resolution. This resolution may involve submittal of a new Service Request or written clarification of scope with adjustments signed by the customer and the construction coordinator.

Client Submit IDT to Facilities Management:

1. Projects under \$25,000

The Construction Coordinator will review all estimate IDT's for the correct estimate amount and valid accounting information. The Construction Coordinator then forwards the IDT to the Work Order Control personnel who will convert the estimate service request (SR) to a work order (WO). The work order is assigned to Construction Coordinator.

2. Capital Projects over\$25,000

Under the direction of ASU administration the Construction Coordinator initiates capital projects for the university. Generally Capital project are either:

- **a.** New or major construction projects
- b. Capital Renewal Projects or
- **c.** Projects over \$25,000

The Construction Coordinator initiates capital and reviews all estimate IDT's greater than \$25,000. The Construction Coordinator routes budget information to the Accounts

Supervisor to obtain or use an appropriate 7-account. The Construction Coordinator creates a project budget, (7-4 or other), and forwards to Account Supervisor for entry into FAMIS Capital Project Module. The Account Supervisor creates appropriate work orders, and scans or attaches documents to work orders. Work orders are assigned to Construction Coordinator and documents are returned to Construction Coordinator's office for permanent building file.

Project Management Assignment and Execution:

The work order is assigned to the Construction Coordinator. The Construction Coordinator will notify the Director of Maintenance to review the project file for requested work. The Director of Maintenance will determine if the project is to be completed by FM staff. Jointly, the Construction Coordinator and the Director of Maintenance will determine if outsourcing services are necessary and assign a project manager. They review the project file, (design scope and drawings, and project check list), for completeness and assemble a working project file for transfer to the Project Manager.

Construction Process:

The Construction Coordinator directs the assignment of the WO to the Project Manager on FAMIS and transfers the project files to the Project Manager.

- 1. The Project Manager then becomes the single point of contact within FM for this project. All communication to/from the customers, venders, contactors, and other FM staff will be directed to or through the Project Manager.
- **2.** The Project Manager contacts the customer to discuss project deliverables and to coordinate and schedule the construction process.
- **3.** The Project Manager directs the development of detailed drawings, and specifications as required.
- **4.** The Project Manager orders materials, directs material contract services, schedules tools and equipment, and assigns workmen in accordance with existing FM operating Procedures.
- **5.** The Project Manager designates start and end dates, communicates project objectives, and informs work teams of the sequence of events and schedule.

During the Assembly Phase:

1. The Project Manager will oversee the execution of construction by monitoring and coordinating equipment, tools, staff, and contractors.

- 2. The Project Manager should also track costs as the project moves through the project delivery process, therefore keeping abreast of ongoing budget issues. In the course of the project execution, minor changes in scope are at the sole discretion of the Project Manager. Attempts will be made to accommodate minor scope changes only if the project is within budget.
- **3.** The Project Manager should also update the customer throughout the Construction process as to progress.

Change Orders:

Change Orders are documentation of scope changes with associated cost and schedule changes. Scope changes may be requested or necessitated by the customer, the FM staff, or the result of hidden or unforeseen circumstances.

- **1.** Capital Project Change Orders will be processed by the project architect, engineer, other design professional, or by the Construction Coordinator.
- 2. In-house and contracted project Change Order are initiated by the Project Manager who completes a request for Change Order form.
 - **a.** The Project Manager contacts the Work Order Control Center and opens an SR for an estimate Change Order.
 - **b.** The service request for a Change of Scope is submitted to the Construction Coordinator for review, approve, and/or design requirements.
 - **c.** The Construction Coordinator assigns the request to the Estimator, designer, or Project Manager, depending on the complexity of the request. After consulting with the customer, the scope is determined and a project file is created for additional work.
 - d. The Estimator or Project Manager Designer submits the project file to the Construction Coordinator for review and approval. The Construction Coordinator will ask the Assistant Director of Maintenance and the Project Manager to discuss the impact of the Change Order on the current work load. They will jointly determine if the Change Order should be implemented concurrently with the completion of the original scope of work or if the Change Order becomes a project in which the schedule will be independent of the current project when accepted by the client.
 - **e.** The Construction Coordinator then forwards the project file to the Accounts Supervisor to update construction report.
 - **f.** The Accounts Supervisor forwards the project file to the Work Order Control Center for processing (scan documents and enter into FAMIS). Thus, occurs the following:
 - FAMIS online notification of estimate completion to the customer and the Construction Coordinator. The status is "Hold for an IDT".
 - The project file is then returned to the Construction Coordinator. The Project Manager directs additional communication to the customer via written letter, email, phone call, or scheduled personal visit by

the Project Manager. The Construction Coordinator initiates a permanent project file.

a. The customer should immediately send an IDT to the Construction Coordinator for the project to proceed if the change order is to be implemented as a component of the original scope of work. Upon receipt of the IDT the Work Order Control Center creates a Child Work Order; this process follows the estimate progression above.

Project Close Out Process:

The Project Manager:

- 1. Completes the scheduled project deliverables, including punch list items.
- **2.** Fills out and processes a Project File Check List (attached).
- **3.** Marks the work order as complete in FAMIS and assigns the work order to the Construction Coordinator.
- **4.** Forwards the Project Manager Check List to the Construction Coordinator's office and it is attached to the project file.

The Construction Coordinator may conduct a quality assurance inspection before closing work order. The Construction Coordinator then directs work order to Accounts Supervisor for a financial reconciliation. The Accounts Supervisor codes Work Order as finished and then forwards to Work Order Control for final billing. FAMIS will send a generated email to customer that work order has been completed.

Project File:

The project file and applicable information will be kept on file and available for inspection in the Construction Coordinator's office

Related Forms:

Project File Check List
Project Estimate Form
Change Order Request / Change Order Form