

# **Project Management Manual for Design and Construction Projects**

(Revised August 2010)



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# 1. Overview

The Minnesota State Colleges and Universities Capital Improvement Program (CIP) eManual is a web-based manual that contains many of the guidelines, policies, procedures, processes, checklists, and forms needed to manage the Minnesota State Colleges and Universities Facilities Design and Construction Program.

Storing and using procedures in this electronic format facilitates easy access and on-the-job learning. By providing information in this manner, procedures can be referenced as needed. The CIP eManual helps ensure that everyone has the latest edition of the procedures for their use.

Design and construction policies and procedures originate and are managed in the System Office through the Vice Chancellor-Chief Financial Officer, with delegation to the Associate Vice Chancellor for Facilities. The design and construction policies and procedures are administered by the Director, Design and Construction, hereinafter referred to as the Director, and the Program Managers within the System Office.

Program Managers support the Director in providing oversight and assistance to the individual Colleges and Universities (C/U) for all Capital Improvement projects. The Program Managers assist the C/U with the review of the designs, budgets and schedules at various phases during the project. Program Managers also review contracts and recommend these for approval by the Director.

Delegation of specific design and construction projects is approved by the Vice Chancellor-Chief Financial Officer to the individual campus president and their selected Project Managers. Project Management occurs at the College or University (C/U) campus level, following guidelines and procedures developed by the System Office (SO).

## **Brief summaries of the CIP eManual sections are as follows:**

**Section 1 – Overview** introduces the CIP eManual and introduction to the project management processes and procedures. Process overview flowcharts, from Predesign to Post-Occupancy Evaluations, are described here, as well as an Organization Chart and information on the roles and responsibilities of the parties involved.

**Section 2 – Project Initiation** describes different project delivery options and has flowcharts outlining the process of selecting the Architect/Engineer (A/E) design team, the Owner's Representative and the Construction Manager, if applicable. This section also outlines what information the Owner is responsible to provide.

**Section 3 – Design Management** describes the steps in each project phase, from Schematic Design to Design Development to Construction Documents, Bidding and Contract Award, Construction Administration, Occupancy and Closeout Phases.

**Section 4 – Construction Management** explains activities during the construction phase – meetings, submittals, inspections and testing, changes in the work affecting the project schedule or budget, pay requests, field observation reports, and project closeout.

**Section 5 – Quality Assurance/Quality Control** describes inspection, testing and requirements detailed in the Design Standards.

(Design Standards can be found at [www.finance.mnscu.edu/facilities](http://www.finance.mnscu.edu/facilities))

**Section 6 – Budgeting** describes the development and revisions of the project budget throughout the duration of the project.

**Section 7 – Scheduling** describes the development and revisions of the project schedule throughout the duration of the project.

**Section 8 – Project Reporting** details the requirements for reporting of information to the System Office.

**Section 9 – Financial Management** outlines the project finances; including fund transfers, contracts, accounting codes, encumbrance of funds, contingencies, procurement, and invoice processing.

**Section 10 – Contract Management** describes the process and provides guidelines used to administer frequently used Facility contracts including: outlining the project bidding requirements, Division 0 Documents, general construction contract forms, construction contract forms for \$50,000 or less and construction contract forms for over \$50,000.

**Section 11 – Appendix** contains a glossary of keywords and terms, forms, checklists and documents referenced throughout the eManual.

## **1.1 Introduction**

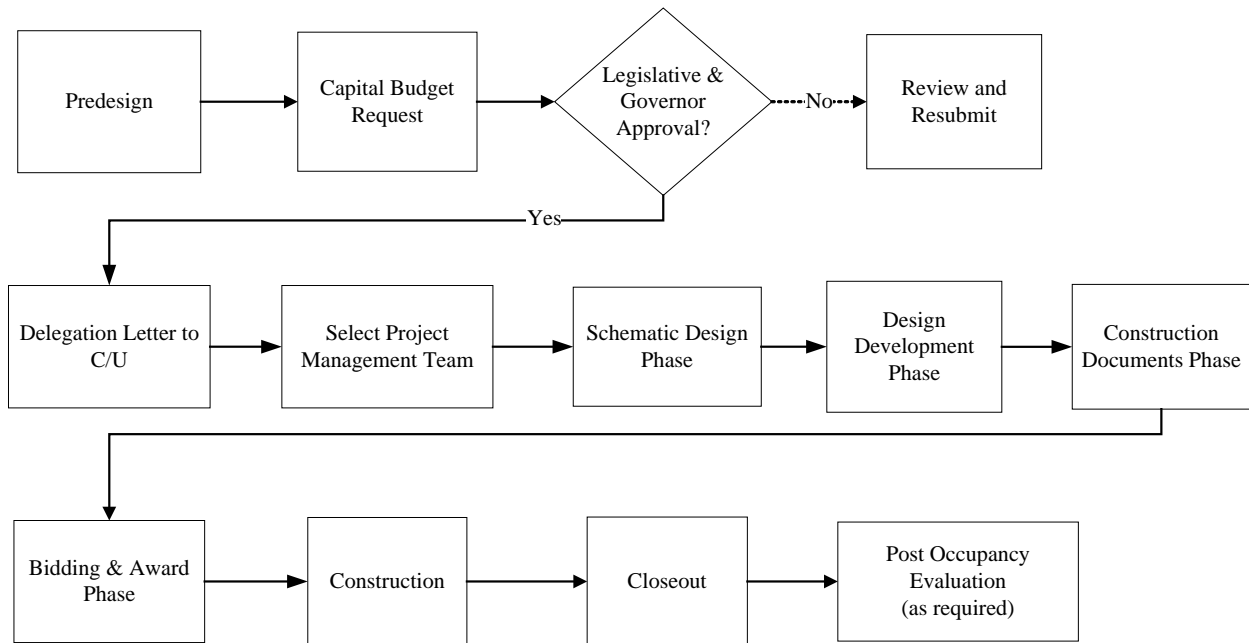
Design and construction policies and procedures originated in the System Office through the Vice Chancellor-Chief Financial Officer, with delegation to the Associate Vice-Chancellor for Facilities. The design and construction policies and procedures are administered by the Director, Design and Construction, hereinafter referred to as the Director, and the Program Managers within the System Office.

Program Managers report to the Director, provide oversight of the projects delegated to the individual Colleges and Universities, and coordinate the reviews of the project design, project budgets and schedules at various phases during the project. Program Managers also review contracts and recommend these for approval by the Director.

Delegation of specific design and construction projects is approved by the Vice Chancellor-Chief Financial Officer to the individual campus president and their selected Project Managers. Project

Management occurs at the College or University (C/U) campus level, following guidelines and procedures developed by the System Office (SO).

## 1.2 Design and Construction Process



### Predesign

- The requirements for the Predesign are on the MnSCU Facilities Web page under Planning and Programming. Please follow this link for information on submitting a Predesign - <http://www.finance.mnscu.edu/facilities/planning-programming/index.html>

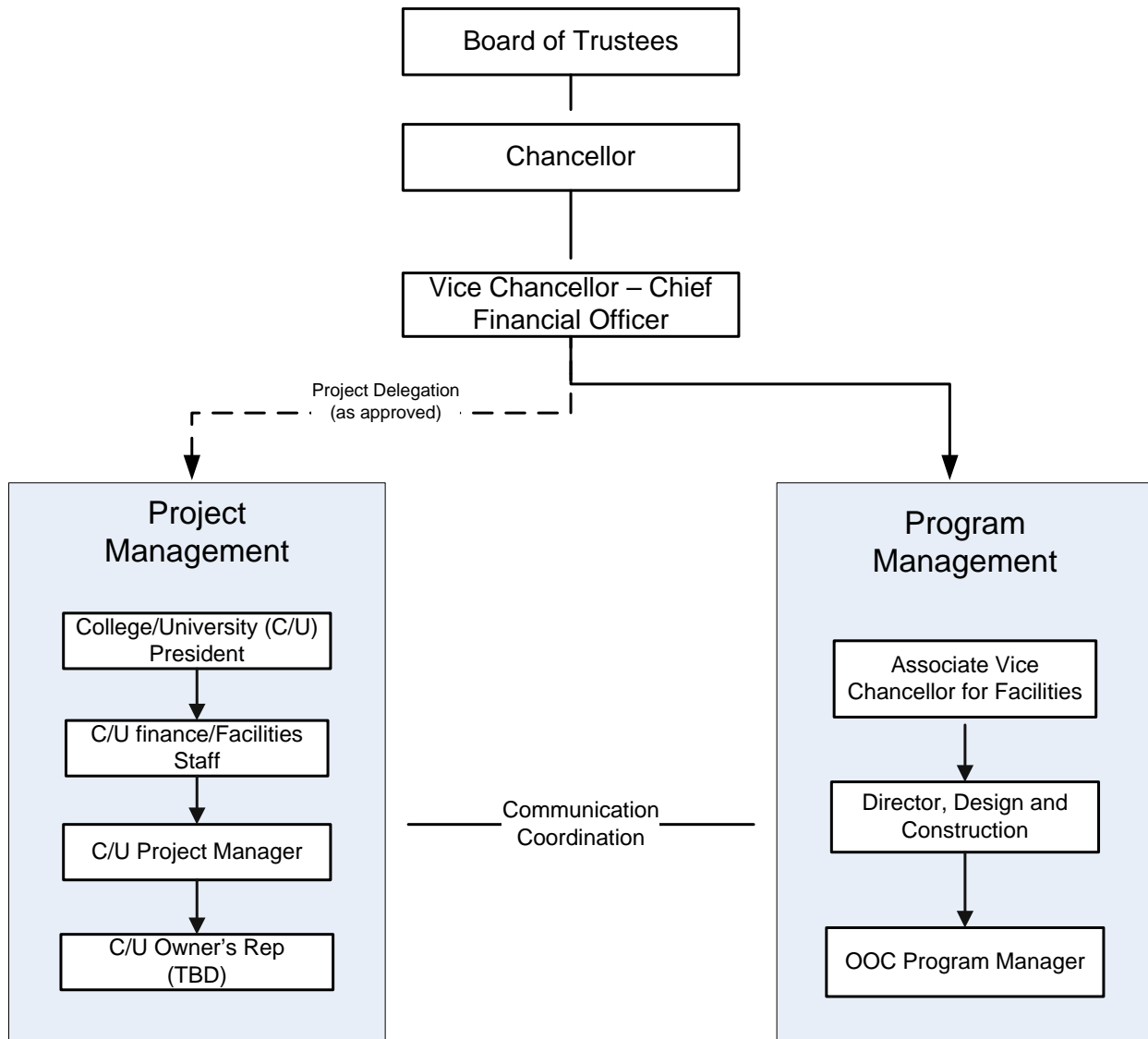
### Capital Budget Request

- The requirements for a Capital Budget Request are on the MnSCU Facilities Web page under Planning and Programming. Please follow this link for information on completing a Capital Budget Request – <http://www.finance.mnscu.edu/facilities/planning-programming/index.html>

### Delegation Letter to C/U

- The System Office will prepare a letter delegating the Project Management responsibilities of a project to the C/U President.

### 1.3 Project Delegation & Coordination Chart



This Section is to provide additional information on delegations of authority. A "delegation of authority" is the formal conveyance from one person to another of the authority to bind MnSCU or a C/U to a legally enforceable obligation.

Delegations of authority are limited in both scope and number. At a minimum, delegations of authority should meet the following criteria:

- the person receiving the delegation has the expertise to use the delegated authority appropriately and knowledgeably (See Section 2.2.1 C/U Project Manager Criteria);



- the risk of abuse of a delegated authority is minimal or where it can be reasonably controlled; and
- the responsibility of the employee receiving the delegation requires such authority to provide the employee the capacity to carry out his/her responsibility

Delegations of authority require ongoing compliance with applicable statutes, rules and board policies. See MnSCU System Board Policy 1A.2.2 for additional information.

## 1.4 Responsibility Matrix

The **Responsibility Matrix** is used to highlight responsibilities of the participants in the design and construction process. The basis for the matrix is to determine who is responsible for approval of each step of a project, and who needs to provide assistance or input.

## 1.5 Roles & Responsibilities

The following list of roles and responsibilities are meant to be a guideline. The basic roles and responsibilities of the individuals assigned to a MnSCU Project are as follows:

### CORE TEAM

#### **Associate Vice Chancellor (AVC) for Facilities (SO):**

**Reports to:** Vice Chancellor - Chief Financial Officer

#### **Responsibilities:**

- Reviews and makes recommendations to the delegation letter
- Approves the project schedule at the Project Initiation phase
- Approves the project budget at the Project Initiation phase
- Approves A/E design team selection
- Approves and signs the A/E contract
- Reviews Schematic Design Submittal and makes recommendations to the Vice Chancellor, Finance
- Approves the selection of an Owner's Representative (O/R)
- Approves and signs the O/R contract
- Approves Post Occupancy Evaluations

#### **Director, Design and Construction (SO):**

**Reports to:** Associate Vice Chancellor (AVC) for Facilities

#### **Responsibilities:**

- Creates and distributes delegation letter to College/University
- Reviews and makes recommendations to the project schedule and project budget at the Project Initiation phase
- Approves the A/E Request for Proposal (RFP)
- Approves the A/E team selection, in the absence of the AVC
- Approves and signs A/E contract, in the absence of the AVC

- Approves the O/R RFP
- Approves and signs the O/R contract in the absence of the AVC
- Leads the Design Phase Kickoff meeting
- Reviews Schematic Design Submittal and makes recommendations to the AVC
- Reviews Post Occupancy Evaluations and makes recommendations to the AVC

**Program Managers in the SO:**

**Reports to:** Director, Design and Construction

**Responsibilities:**

- Single point of contact for the SO, Design and Construction
- Provides weekly updates to the Director
- Provides input to the Director for the delegation letter
- Reviews the project schedule and budget at the Project Initiation phase
- Reviews the RFP's for the OR and A/E selection and recommends changes to C/U Project Manager
- Participates in the selection of the A/E design team, O/R, and specialty consultants
- Reviews the A/E and O/R contracts and recommends changes to the SO Director and AVC
- Provides input to the C/U Project Manager through all steps of the delegation, design, bidding and award phases of the project
- Reviews the agenda for the Design Kickoff Meeting and makes recommendations to the SO Director
- Reviews the Schematic Design, Design Development, and Construction project schedule and makes recommendations to the A/E
- Reviews the Schematic Design, Design Development, and Construction project budget and makes recommendations to the C/U Project Manager
- Reviews the Schematic Design Submittal and makes recommendations to the A/E
- Provides input to the C/U Project Manager on the Design Development phase and Construction Document phase reviews
- Reviews the Construction Contract Award and makes recommendations to the C/U Project Manager
- Provides input to the C/U Project Manager for the Pre-Construction Meeting
- Provides input to the C/U Project Manager on changes to the work during construction
- Provides input to the C/U Project Manager during the construction phase for commissioning, substantial completion, warranty/guarantee management, and final completion
- Provides input to the C/U Project Manager on FF&E design, procurement and installation
- Leads the Post Occupancy Evaluation process

**Project Manager(s) at the College/University (C/U):**

This C/U employee is responsible for the daily management of the project from the initiation of the design phase to project closeout. The C/U Project Manager should possess not only the knowledge, skills, and abilities required, but also the time necessary to appropriately oversee the project. The C/U Project Manager is delegated in writing from the C/U President.

**Reports to:** C/U President & Others (TBD)

**Responsibilities:**

- Develops the project schedule at the Project Initiation phase
- Develops the project budget at all phases of the project
- Selects and contracts with the A/E design team
- Selects and contracts with the O/R
- Provides input for the Design Kickoff Meeting
- Approves the project schedule through all phases of the project
- Reviews and reconfirms the predesign document to the Schematic Design and makes recommendations to the C/U President
- Reviews the Schematic Design options and makes recommendations to the C/U President
- Reviews the value engineering and constructability review and makes recommendations to the C/U President
- Provides input in the code approval process
- Contracts for and schedules the site, geotechnical, and abatement surveys during the Schematic Design phase
- Coordinates the SO required design reviews, and makes recommendations during design submittal reviews
- Coordinates FF&E design, procurement, installation, and coordination of owner-provided FF&E
- Provides reports on each phase of the project (Schematic Design, Design Development, Construction Documents, Bidding & Award, and Construction)
- Provides input for the Advertisement for Bid and respond to questions about bid
- Approves the Advertisement for Bid that is developed by the A/E
- Provides input to the A/E in response to questions during the bidding phase
- Reviews the construction bids and recommends contract award
- Manages contract award process and manages contracts with the A/E, Contractors, specialty consultants, and vendors
- Manages owner-required decisions during the construction phase
- Reviews and approves pay applications for the A/E, specialty consultants, Contractors, and vendors
- Reviews and approves all construction Change Orders
- Participates in and approves substantial and final completion inspections
- Coordinates commissioning and provides move-in coordination, warranty/guarantee management, claims management and construction phase accounting during the construction phase of the project
- Communicates with SO personnel and campus representatives to ensure collaboration, cooperation and minimization of facilities disruption and provides schedules and budget updates to the SO
- Manages and reports all project specific scheduling issues
- Files project correspondence/documentation and maintains the project's central file system
- Receives and distributes all incoming correspondence and processes all outgoing correspondence
- Assembles and distributes the monthly report
- Updates the announcements, calendar, files and photos for the project

- Provides input in the Post Occupancy Evaluations led by the Program Manager

### **Owner's Representatives:**

The size and complexity of the project and the experience and availability of the C/U Project Manager determines when an Owner's Representative becomes involved in a project – at the beginning, during design, at the start of construction, or not at all. Because this varies by project, the following responsibilities may not apply to all projects.

**Reports to:** C/U Project Manager

### **Responsibilities:**

- Performs project management duties as assigned by the C/U Project Manager
- Provides frequent monitoring of the design progress
- Provides frequent monitoring of the Contractor's construction progress and produces observation reports to C/U Project Manager and SO
- Provides input for design phase, bidding, and construction reporting
- Provides on-site project review and construction observation for conformance to the contract documents and MnSCU Design Standards
- Reviews and recommends approval of Contractor pay applications, project changes, and other project documentation
- Reviews, records, and logs shop drawings, submittals, RFI's, ASI's, PR's, CCD's, and CO's
- Provides input in the Post Occupancy Evaluation process led by the Program Manager

### **Specialty Consultants:**

**Reports to:** C/U Project Manager

### **Responsibilities:**

- Performs specialty consulting services for design reviews at each phase of the project
- Provides input on the project schedule and project budget to the C/U Project Manager
- Performs inspection and testing services during the construction phase
- Leads the commissioning process
- Provides input for the reporting of each phase
- Provides input in the Post Occupancy Evaluation process led by the Program Manager

### **A/E Design Team:**

**Reports to:** C/U Project Manager

### **Responsibilities:**

- Leads the project schedule during the Schematic Design, Design Development, and Construction phase for approval by the C/U Project Manager
- Participates in the Design Kickoff Meeting
- Leads the team during the design phases including: leading meetings, preparing minutes, design options, programs and adjacencies, project schedules, preparing design submittals and reviews, preparing construction estimates, and value engineering/constructability reviews
- Reconfirms the predesign document to the Schematic Design
- Submits the Schematic Design for approval by the C/U President and SO
- Obtains code approvals (state, local, health, etc.)

- Provides input on the site survey, hazardous materials survey, geotechnical surveys, etc.
- Provides input on the project budget at all phases
- Provides project reporting at all phases
- Advertises the project for construction bids, as well as responds to questions about the project
- Provides input in review of construction bids, and recommendation of award
- Leads the team during the construction phase including: leading the pre-construction meeting, approving submittals, updating the construction schedule, leading construction progress meetings, observing construction, approving pay requests, approving Change Orders, and providing substantial and final completion inspections
- Provides input on commissioning, and FF&E design, procurement, and installation
- Leads the warranty/guarantee management process for project close out
- Provides input to the Post Occupancy Evaluation process

**Finance/Facilities Officer:**

**Coordinates with:** C/U Project Manager

**Responsibilities:**

- Provides input in the project budget during the Project Initiation phase
- Provides input in A/E design team selection
- Provides input in the A/E contract
- Provides input in the Design Kickoff Meeting
- Provides input in review of bids, recommendation of award, and contract award
- Provides input in the construction budget reviews and construction phase accounting
- Receives, logs and distributes all contracts and invoices
- Provides monthly budget updates to the C/U Project Manager and SO
- Provides administrative support to the team members as required
- Provides input to the Post Occupancy Evaluation process

**C/U President:**

**Responsibilities:**

- May delegate approval authority in writing to C/U staff
- Approves project schedule and project budget at all phases of the project
- Approves the RFP for A/E selection with the SO Director
- Provides input in the A/E selection process to the AVC
- Approves the A/E contract with the AVC
- Approves the O/R RFP, selection and contract
- Provides input to the Design Kickoff Meeting
- Approves the reconfirmation of the Schematic Design to the predesign document
- Approves the Schematic Design options
- Approves the FF&E design
- Approves the value engineering/constructability review at the design phases
- Reviews the Schematic Design Submittal and makes recommendations to the SO
- Reviews and provides recommendations for Design Development and Construction Document phases submittals/reviews

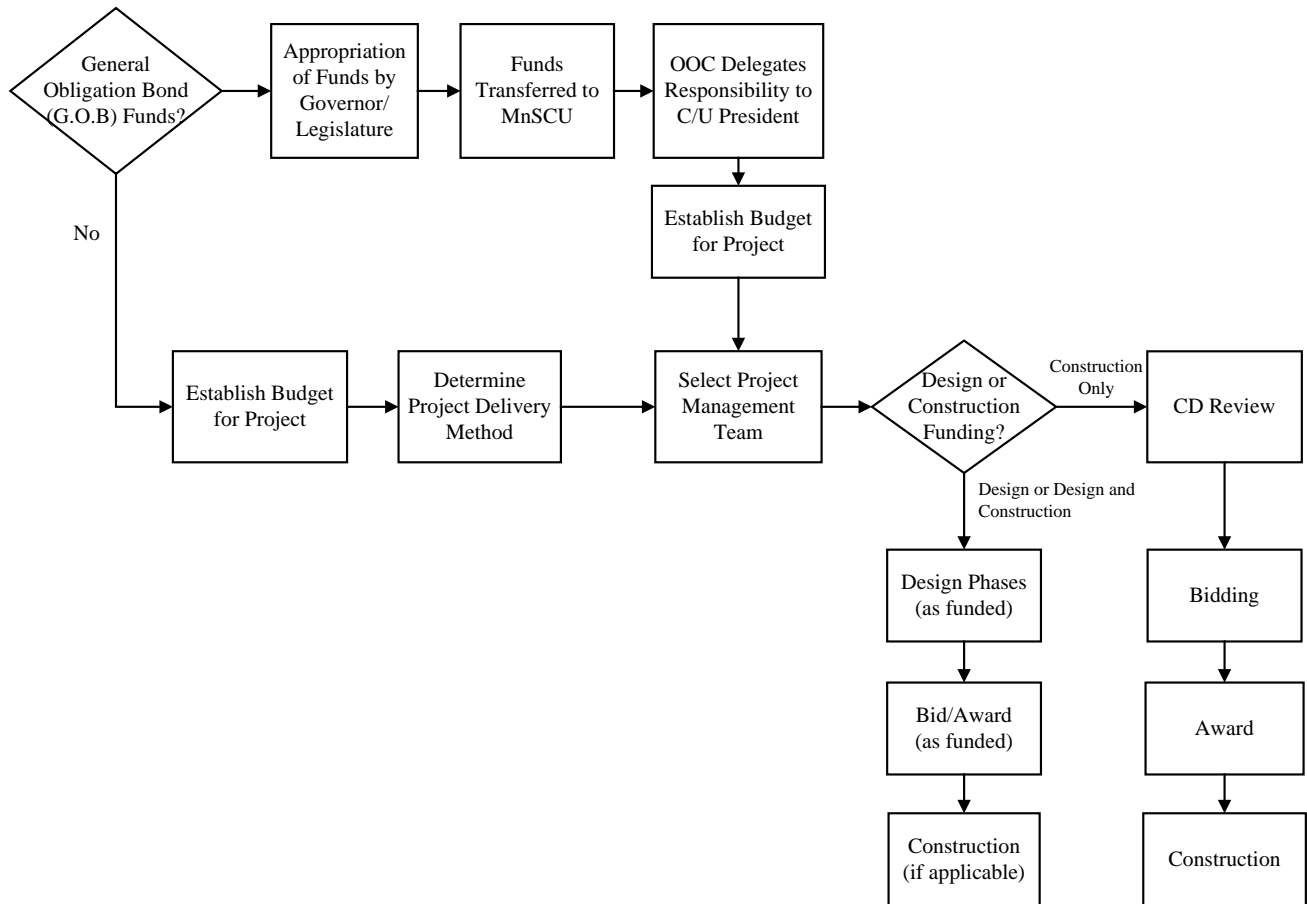
- Approves construction contract award
- Approves the construction phase project budget throughout construction
- Provides input to the Post Occupancy Evaluation process

**Contractor:**

**Responsibilities:**

- Signs the construction contract
- Participates in the pre-construction conference, construction progress meetings, etc.
- Provides submittals and mock-ups for A/E review
- Notifies IT Consultants
- Obtains and pays for all required permits
- Responsible for quality control and safety of the job site
- Constructs the project
- Responsible for the substantial completion, punch list items, final completion, and project closeout
- Provides input to the Post Occupancy Evaluation process

## 2. Project Initiation



### 2.1 Delegation of Contracting Authority

Colleges and universities are authorized to enter into contracts for construction projects up to \$250,000 that maximize the use of financial resources at each institution. Approval must be obtained from the vice chancellor - chief financial officer before incurring contractual obligations for projects in excess of \$250,000 except as noted below. (refer to Board Policy 6.5) Construction contracts in excess of \$250,000 must receive authorization to do so from the System Office, Utilize Capital, HEAPR and major Revenue Fund projects may be delegated to college and university presidents for execution of design and construction. In such cases, no further approval is required to enter into a contract or contracts that exceed \$250,000.

### 2.2 Project Delivery Method

Minnesota State Colleges and Universities typically use the traditional Design-Bid-Build (D-B-B) project delivery process. Under this process, all state bonded projects are required for bid publicly and awarded to the lowest responsive and responsible bidder. As such, the developments of procedures for this eManual are focused on the D-B-B process. Alternate

project delivery methods such as Design/Build and Construction Management are possible for unique circumstances.

### **DESIGN-BID-BUILD OVERVIEW:**

Design-Bid-Build (D-B-B) is the process used by Minnesota State Colleges and Universities for procurement of Capital Improvement projects. In the D-B-B method, there are separate prime contracts for the A/E design team and the general Contractor. Minnesota State Colleges and Universities works in conjunction with the State Designer Selection Board for selection of the A/E design team for projects whose total costs exceed \$2 million or A/E design fees exceed \$200,000 when funds are allocated by the state legislature. The selected A/E design team prepares a set of construction documents based on the owner's requirements. The scope of the entire project will typically be included in the bid documents so that one general Contractor will be responsible for all the requirements of a project. Therefore, the C/U Project Manager only needs to manage one contract for construction. Furniture, fixtures, and equipment and/or telecommunications may be bid as separate contracts if the C/U Project Manager desires.

Under the D-B-B process there is no contractual relationship between the A/E design team and the general Contractor. The A/E performs construction administration tasks, in addition to those observation requirements required by codes, ordinances and statutes.

In the D-B-B process, interested general Contractors submit a lump sum price to perform all of the work as specified in the bid documents. The construction contract is awarded to the lowest responsive and responsible bidder.

## **2.3 Select Project Management Team**

Once the project has been delegated to the Campus/University (C/U), the C/U President needs to lead the process to select the Project Management Team. The Project Management Team consists of the following individuals:

### **C/U Project Manager**

The C/U President delegates in writing a C/U Project Manager who is responsible for the daily management of the project from its initiation to project closeout. The selection of the C/U Project Manager is an important decision for the project's success. Depending on the size and complexity of the project, the daily project management responsibilities by the C/U Project Manager may require a large commitment of time to be assigned to the project. Prior experience in the management of design and construction projects is desirable, as many issues will arise during the process that will require timely decision making by the C/U Project Manager. The C/U Project Manager's responsibilities are outlined in more detail in Section 1.5 Roles & Responsibilities.

**Refer to Section 2.3.1 C/U Project Manager Criteria for more information.**

### **Architectural/Engineering (A/E) Design Team**



The Architectural/Engineering (A/E) Design Team is selected through one of the processes outlined in the eManual, depending on the size and source of the project funds. If the project is funded from revenue funds or non-state funds and the design fees are anticipated to exceed \$100,000, the A/E design team selection is initiated through a Request for Proposal (RFP).

Refer to Section 2.2.2 A/E Selection for more information.

### **Owner's Representative (OR)**

The project size, complexity, experience, and availability of the C/U Project Manager helps determine when, and if, an Owner's Representative (OR) is necessary for the Project Management Team. An OR provides project management expertise to support the C/U Project Manager, and typically joins the project management team at the beginning of the schematic design phase. The decision to add an OR to the project management team is determined when the project is delegated to the C/U.

Refer to Section 2.2.3 OR Selection for more information.

### **Specialty Consultants (SC)**

The project's size and complexity also determines specialty consultants required for the project. Specialty Consultants are recommended as part of the Quality Assurance Plan for inspection and testing in addition to those required by local building officials. These consultants are specialists in the design and construction of exterior building envelope systems, roofing, waterproofing, windows, curtainwall, and structural items such as concrete, steel, masonry, as well as mechanical heating, ventilation, and air conditioning systems.

The C/U Project Manager, in conjunction with the SO Program Manager, evaluates which specialty consultants are needed on the project during the project budget phase. Unique aspects of the project are evaluated to identify areas requiring additional inspection and testing. Depending upon the project, specialty consultants are selected to review particular building systems during the design, and to provide additional construction administration during construction. This additional consultant expertise provides quality assurance that the building system is designed and constructed properly.

Refer to Section 2.2.4 Specialty Consultants Selection for more information.

## **2.3.1 C/U Project Manager Criteria**

The C/U President designates in writing a C/U Project Manager who is responsible for the daily management of the project from its initiation to project closeout. The selection of the C/U Project Manager is an important decision for the project's success. The C/U Project Manager should possess the following knowledge, skills and abilities to serve the project:

### Time Management Skills

- Able to allocate time to the project management tasks which will vary by project size, complexity, and phase

### Design and Construction Experience

- Understand the overall design and construction process, preferably from past facilities project management experience
- Review design and construction documents
- Evaluate “value engineering” options and make recommendations
- Understand the furniture/fixture/equipment design and procurement processes and provide coordination with the construction process

### Project Budget Skills

- Understand how to develop a project budget
- Monitor expenses to the project budget
- Prepare “Budgeted to Actual” expense reports
- Review, approve and process pay applications to A/E, OR, specialty consultants, and the Contractor(s)

### Project Schedule Skills

- Understand the time needed for aspects of the design and construction processes
- Understand a project schedule in graphic format
- Review and provide input for the project schedule

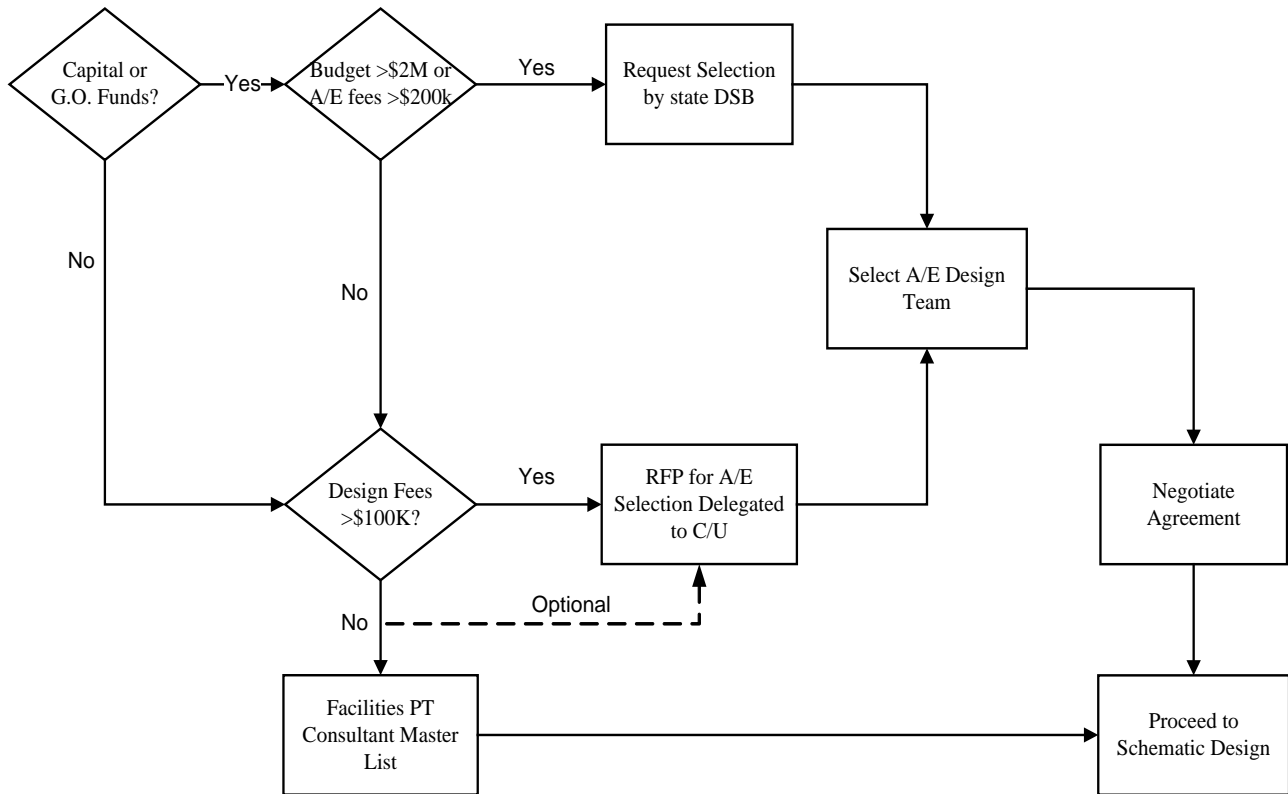
### Communication Skills

- Lead the internal design review process with department users and campus representatives
- Document review comments in writing
- Prepare monthly reports on the project’s status and quarterly reports to the Board of Trustees as needed
- Maintain the project document filing system, receive and distribute all incoming correspondence and process all outgoing correspondence

### Negotiation Skills

- Negotiate contracts with A/E team, OR, and specialty consultants
- Manage the owner-required decisions throughout the project

### 2.3.2 A/E Design Team Selection



#### Capital or G.O. Funds?

- Capital improvement projects follow the typical MnSCU design and construction process. Possible sources of funds include legislative appropriations (General Obligation (G.O.) funds), Revenue funds, Operating funds and Donations.

#### Budget > \$2M or A/E > \$200K

- If the total project budget is greater than \$2M, or if the A/E fees exceed \$200K when using G.O. funds, the selection of the A/E design team is done through the state Designer Selection Board (DSB)

For projects that don't meet the above criteria, the A/E design team may be selected through an RFP or in some instances by the Accelerated Contract List.

#### Request Selection by SDSB

- The C/U Project Manager, working with the SO Program Manager, completes an RFP which includes a description of the project and also an advertisement of the RFP in the State Register. The state DSB advertises the project in the State Register and requests proposals from A/E teams. The SO Program Manager will review the RFP and the

advertisement with the Director, Design and Construction before forwarding to the state DSB.

#### Design Fees >\$100K

- If the design fees are anticipated to be greater than \$100,000, the A/E design team must be selected through a Request for Proposal (RFP) process.

If the design fees are anticipated to be less than \$100,000, the A/E design team may be selected following the procedures of the Facilities PT Consultant Master List. (**See Section 10.3**) The C/U Project Manager may also choose to advertise through a Request for Proposal (RFP) for an A/E design team.

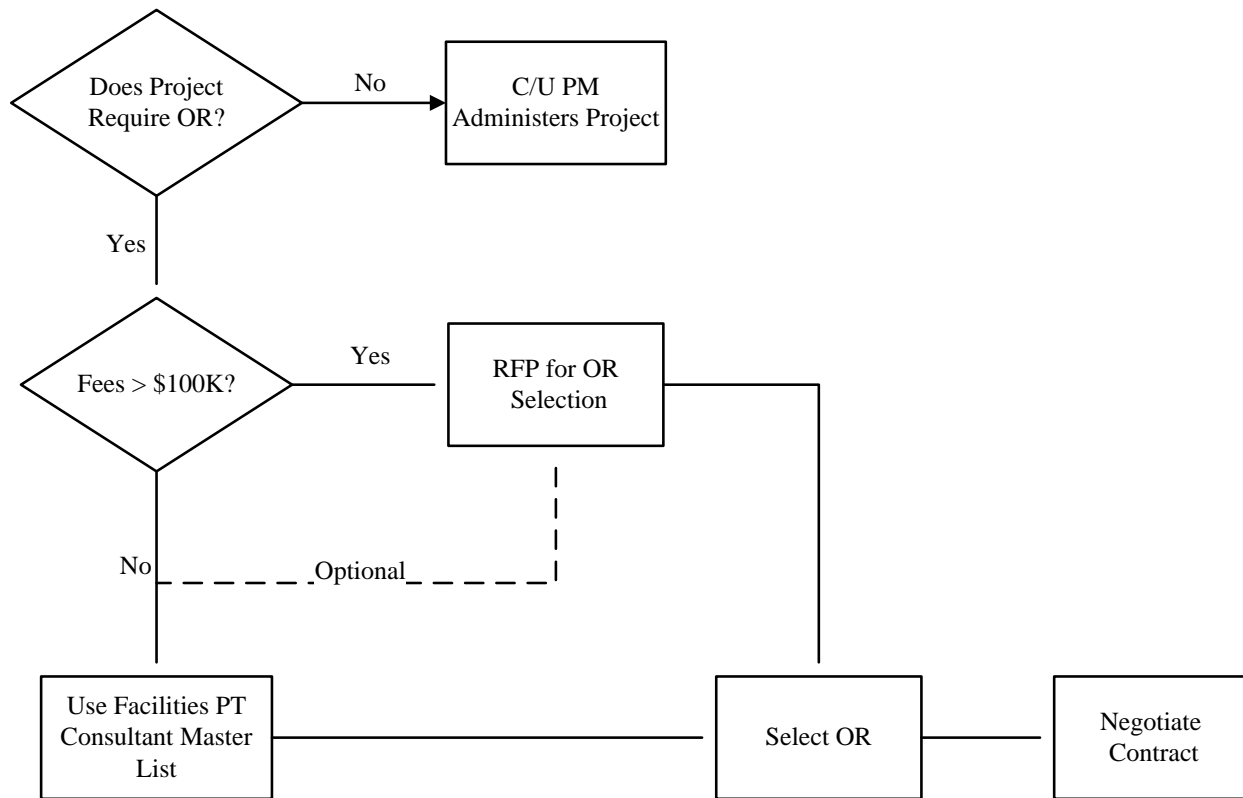
#### RFP for A/E Selection Delegated to C/U

- The RFP process will take two to three months overall, but will provide a number of A/E teams for consideration.

#### Negotiate Agreement

- After the final A/E design team is selected, the C/U Project Manager, with assistance from the SO Program Manager, will negotiate the contract fees and reimbursables. For contracts over \$100,000, use the MnSCU Standard Owner-Architect Agreement AIA B101 as amended by the SO. Contact the SO Program Manager to obtain the most current copy of the AIA B101 Document. In addition, the **AIA Documents B101-2007 Exhibit A, Initial Information** needs to be included with the contract. Additional information for A/E Contract is in Section 9.3.1. Once the negotiation of the total project's fees is completed and all parties sign the contract, the schematic design phase can commence.

### 2.3.3 OR Selection



#### Does Project Require OR?

- The requirement to hire an Owner's Representative (OR) is often delineated in the project delegation letter from the Vice Chancellor / Chief Financial Officer to the college or university president. Other factors that help determine if an OR is required are project complexity, C/U Project Manager's experience, knowledge and current workload.
- The OR is normally selected during the early stage of Schematic Design to assist throughout the design process.

#### C/U PM Administers Project

- If the decision is made for the C/U Project Manager to manage the project, then the project can proceed to the Schematic Design Phase.

#### Fees > \$100K

- As a general rule of thumb, the OR's fee is usually about 2% or less of the project construction cost. The OR's fee will vary depending on the scope of work desired.

- If the OR's fees are estimated to be greater than \$100,000, the C/U Project Manager must publish a Request for Proposal (RFP) for an Owner's Representative. (refer to the **Owners Representative (OR) Request For Proposal (RFP) for Services** form.)
- If the OR's fees are estimated to be less than \$100,000, the C/U Project Manager may follow the procedures for selecting an Owner's Representative from the Facilities PT Consultant Master List. The C/U Project Manager may also choose to advertise for Owner's Representative services through the RFP process.

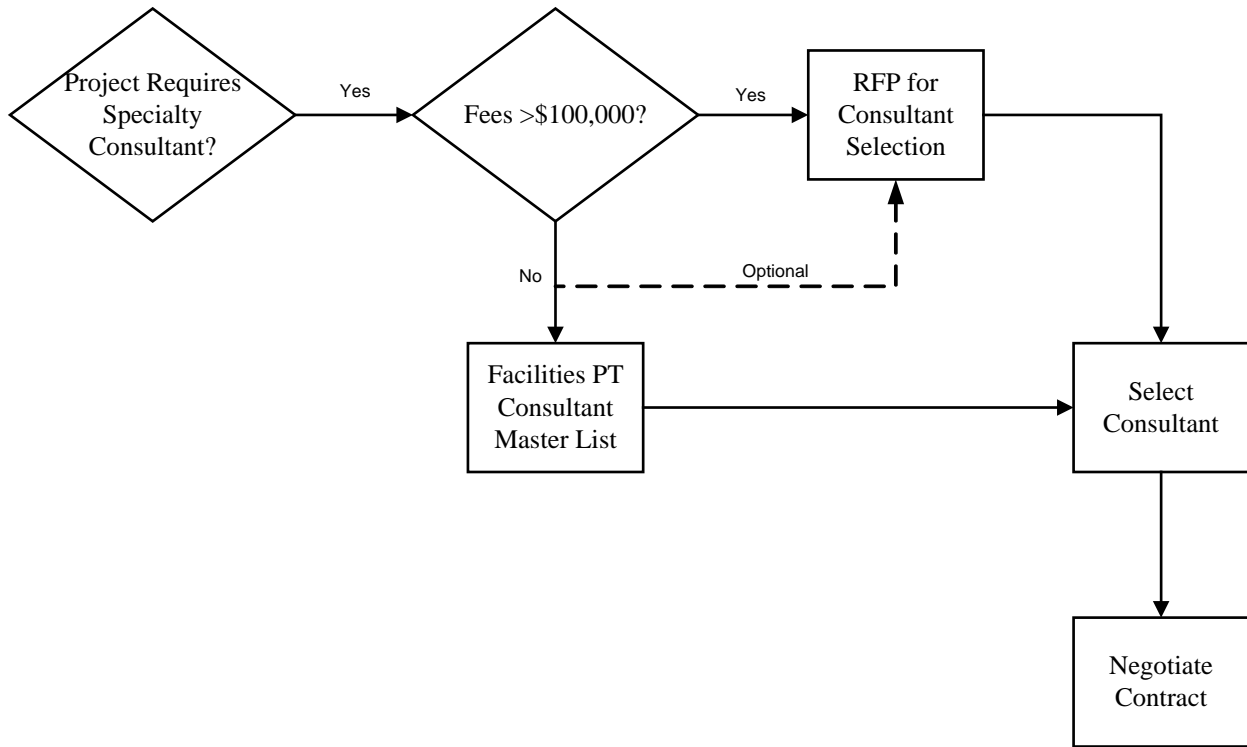
#### RFP for O/R Selection

- An RFP for Owner's Representative services is developed by the C/U Project Manager based on the Guidelines for Completing the O/R RFP and the sample Owner's Representative RFP (see 11.1 Forms and Checklists) that has been developed. The RFP may be published in the State Register and/or an appropriate legal newspaper in the vicinity of the work location.
- After RFP responses have been received, the C/U Project Manager, SO Program Manager and other campus representatives review the submittals and select three to four teams for interviews. The C/U Project Manager sets up interviews and invites the SO Program Manager to attend. The evaluation criteria developed in the RFP are followed in the shortlisting and interview process, and score sheets are recorded by those involved in the selection process. The C/U Project Manager leads the selection process to determine the Owner's Representative and reviews the selection with assistance from the SO Program Manager.

#### Negotiate Contract

- The C/U Project Manager and the SO Program Manager work together to negotiate the contract with the selected Owner's Representative, based on the standard Owner's Representative Contract. Additional information for OR Contracts is in Section 9.3.2. If contract terms cannot be agreed upon, the C/U Project Manager goes to the second choice Owner's Representative from the previous evaluation process and negotiates a contract with that party. Once the contract is negotiated and executed, the Owner's Representative may begin work.

### 2.3.4 Specialty Consultant Selection



#### Project Requires Specialty Consultant?

- The decision to hire a Specialty Consultant is based in part on the size and complexity of the project. The C/U Project Manager, in conjunction with the SO Program Manager, evaluates which specialty consultants are required for the project.

#### Fees > \$100K

- If the fees are estimated to be greater than \$100K, the C/U Project Manager must publish a Request for Proposal (RFP).

If the design fees are anticipated to be less than \$100,000, the A/E design team may be selected following the procedures of the Facilities PT Consultant Master List. (See Section 10.3) The C/U Project Manager may also choose to advertise through a Request for Proposal (RFP) for an A/E design team.

#### RFP for Consultant Selection

- An RFP for Specialty Consultant services is developed by the C/U Project Manager, with assistance from the SO Program Manager. The RFP is published in the State Register and / or a legal newspaper in the vicinity of the work location.



- After RFP responses have been received, the C/U Project Manager and SO Program Manager review the submittals and select the Specialty Consultant based on the selection criteria listed in the RFP.

#### Negotiate Contract

- After the consultant is selected, the C/U Project Manager and the SO Program Manager work together to negotiate the contract with the selected Specialty Consultant. Additional information for the SC contract is in Section 9.3.3. Once the contract is negotiated and executed, the Specialty Consultant may begin work.

## 2.4 Owner Provided Information

The System Office (SO) Program Manager and/or the C/U Project Manager will provide, or make available, the following project information to the A/E team as appropriate:

- a. The current issue of this eManual document, available on-line at: [www.finance.mnscu.edu/facilities](http://www.finance.mnscu.edu/facilities).
- b. MnSCU Board of Trustees Policies and System Procedures, available on-line at: <http://www.mnscu.edu/board/policy/index.html>.
- c. A copy of the General Conditions of the Contract for Construction, AIA Document A201 – 2007, 2007 Edition – Electronic Format, as amended by the Owner.
- d. Current issue Construction Contract Guidelines and Forms (Division 0) are available in Section 11.1 Forms and Checklists.
- e. A written list of the current College/University specific building systems or product requirements.
- f. A written preliminary program for the project and/or the approved predesign document.
- g. The MnSCU Predesign Guidelines, available on-line at: [www.finance.mnscu.edu/facilities](http://www.finance.mnscu.edu/facilities)
- h. A copy of the College/University campus Facilities Master Plan document.
- i. The MnSCU Master Planning Guidelines, available on-line at: [www.finance.mnscu.edu/facilities](http://www.finance.mnscu.edu/facilities).
- j. A copy of the Legislative Statute reference for the project funding appropriation request, and a restatement of the appropriation language that funds the project.
- k. Information technology and telecommuting standards to be incorporated into the project.

- l. A physical, topographic, and boundary survey and legal description of the project site (in consultation with the A/E design professional).
- m. Geotechnical borings and investigations, including a report, with recommendations (in consultation with the A/E design professional).
- n. The name of the College/University Project Manager representative.
- o. A copy of any asbestos and/or hazardous materials survey(s) and report(s), as applicable.
- p. Other appropriate documents requested in writing by the A/E design professional and approved by the SO Program Manager.
- q. A Quality Assurance Plan in chart format and spreadsheet with instructions for this QA Plan, available in the MnSCU Design Standards (see Facilities website: [www.finance.mnscu.edu/facilities](http://www.finance.mnscu.edu/facilities)).

### **3. Design Management**

The design process is an iterative one following the general industry sequence of Schematic Design, Design Development, and Construction Document phases. There are requirements for submittals at each phase, which must be approved by the SO and C/U before the next phase begins.

#### **Mission Statement:**

Design, construct, and maintain state owned higher education buildings for maximum performance with the least cost to the taxpayer over the life of the building.

#### **3.1 Design Principles**

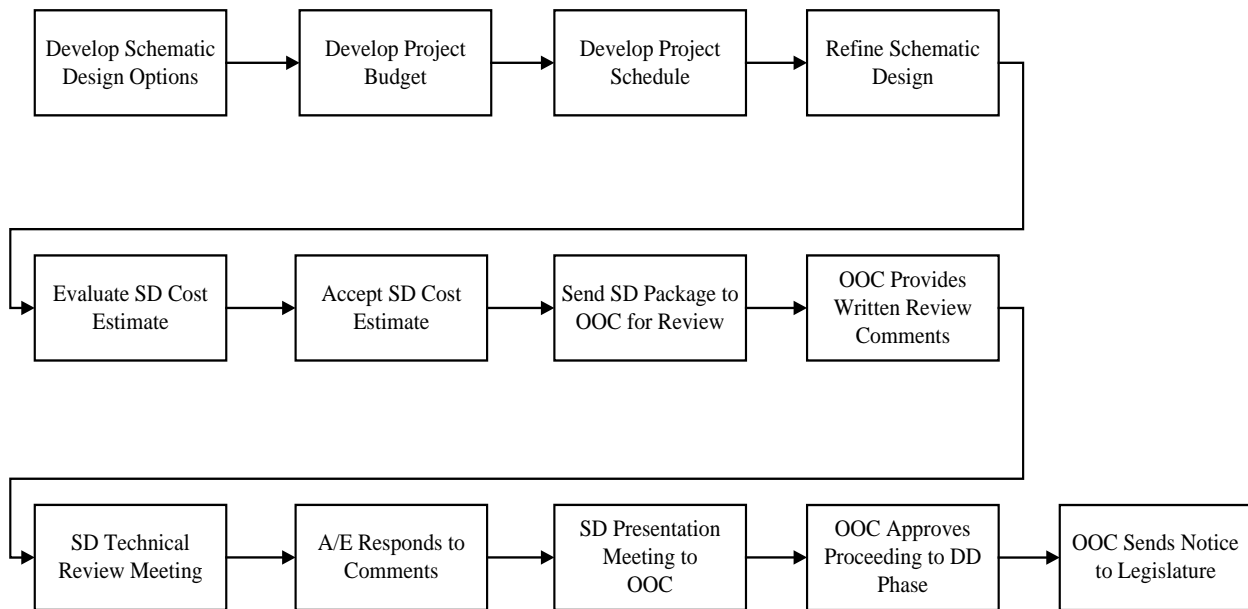
Minnesota State Colleges and Universities (MnSCU) defines its design and construction principles for facilities that:

1. Meet the college/university program requirements; result in projects that are complete, usable and flexible; conducive to learning and incorporate appropriate technological advances
2. Provide low maintenance, long-lived facilities that are structurally sound, adaptable to changes in academic programs and technologies, which utilize materials and systems that are both durable and attractive
3. Provide a high degree of energy efficiency and demonstrate sustainable design principles
4. Are visually and architecturally attractive within the context of existing buildings on the campus
5. Are constructed within budget and use funds judiciously
6. Meet the goals of the campus academic, the Facilities Master Plans and the legislative intent
7. Provide design and scope that is not substantially different (<10%) from the Predesign report and Capital Budget Request

#### **3.2 Predesign Phase**

MnSCU is required to do predesign planning and to submit predesign documents to the State Department of Administration for review before proceeding with design work for any state-funded projects. The State of Minnesota's Predesign Manual delineates the general requirements for the predesign phase. These requirements are available on the State Department of Administration's website at <http://www.admin.state.mn.us/recs/cs/mg-pred-toc.html> . Additional information about MnSCU's predesign process can be found at the MnSCU Facilities website [www.finance.mnscu.edu/facilities](http://www.finance.mnscu.edu/facilities)

### 3.3 Schematic Design Phase



#### Develop Schematic Design Options

- Schematic Design (SD) is the phase that defines the design intent, site location, general floor layout, description of infrastructure, and how the C/U's program is to be satisfied within the budgeted construction cost.

During SD, space requirements are determined, several schemes are reviewed, and one scheme is selected. The selected scheme must meet the requirements that were presented to the legislature in the Capital Budget Request. Structural, mechanical, electrical, and special system requirements are determined. This may include air changes, light levels, design temperatures, and data requirements. The code plan is started with notations for rated walls, smoke partitions, areas of refuge and basic code information.

During this phase, the project delivery method should be decided. Sustainable design factors are addressed, the material selection will begin and the initial documentation established for items to be commissioned.

The project scope, cost and schedule are evaluated during SD, and must be in balance before the next phase, Design Development (DD), is started.

#### Develop Project Budget

- Based on the Capital Budget Request, the C/U Project Manager creates the Project Budget utilizing the MnSCU **Project Budget Worksheet** with assistance from the SO Program Manager. The C/U Project Manager estimates the non-construction costs such as design fees, FF&E, construction contingency, etc. Costs should be updated through each stage of the design when the A/E completes their construction estimate and when contracts are executed.

#### Develop Project Schedule

- The C/U Project Manager develops an overall Project Schedule, with input from the A/E and SO Program Manager, listing key milestone dates.

The schedule should be updated at each stage of the design process.

#### Refine Schematic Design

- The A/E reviews multiple design options with the C/U Project Manager and other campus representatives as determined by the C/U. Collaboratively, a single schematic design option is developed, which incorporates site orientation, building massing, blocking and stacking, access and circulation, and architectural decisions.

The C/U Project Manager, in consultation with the SO Program Manager, decides which specialty consultants are needed for plan review services, based on the schematic design direction being taken. Contracts are executed by the C/U Project Manager for these plan review consultant services prior to the completion of the SD phase.

#### Evaluate SD Cost Estimate

- The A/E prepares a construction cost estimate based on the final Schematic Design documents. The A/E needs to include all construction costs, and should include an estimating contingency, typically 10% to 20% of the construction cost for items not yet identified. If the SD construction cost estimate exceeds the construction budget amount identified in the A/E contract, the A/E is responsible for identifying how to reduce the estimate. This is an iterative process that requires participation by the C/U Project Manager, the A/E, and campus user representatives, with advice from the SO Program Manager. The SD construction cost estimate must be reconciled to the MnSCU Project Budget Worksheet prior to proceeding further.

#### Accept SD Cost Estimate

- The C/U Project Manager verifies the SD construction cost estimate is reconciled to the MnSCU Project Budget Worksheet and notifies the SO Program Manager.

#### Send SD Package to SO for Review

- The C/U Project Manager collects the following information and sends to the SO Program Manager:
  - Executed **Schematic Design Signature Sheet**
  - Signed **Schematic Design Submittal Checklist** - the A/E and C/U Project Manager review and sign the SD checklist form and submit the signed form with the SD Package
  - Schematic Design drawings
  - Schematic Design Submittals per MnSCU Design Standards (one complete full size set, one half size set and five sets in 3-ring binders with 11x17 drawings)
  - **Project Budget Worksheet**
  - **Project Schedule Milestones**

The SO Program Manager distributes the documents within the SO and schedules the SD Technical Review Meeting.

#### SO Provides Written Review Comments

- The SO representatives review the SD package and prepare written review comments, which are sent to the SO Program Manager. The SO Program Manager consolidates all SO review comments and sends them to the C/U Project Manager for distribution to the A/E design team. The C/U Project Manager coordinates reviews from review consultants and forwards review comments to the A/E and SO Program Manager.

#### SD Technical Review Meeting

- The SO Program Manager schedules the SD Technical Review Meeting, with the following representatives present:
  - C/U representatives
  - A/E team
  - SO Planning and Programming
  - SO Design and Construction
  - Owner's Representative (OR) if OR is selected
  - CM if CM delivery selected

The group discusses the review comments and the project. If the SD is incomplete or needs revision, the A/E will incorporate any comments into the SD and resubmit to the SO for further review. Once the SO representatives feel that the SD is complete, the project is scheduled for a SD Presentation to the SO.

#### A/E Responds to Comments

- The A/E reviews all of the comments from the C/U Project Manager, SO Program Manager, and Consultants and provides a written response to the C/U Project Manager.

#### SD Presentation Meeting to SO

- Once the comments from the SD review meeting have been incorporated into the SD submittal, the SO Program Manager schedules the SD Presentation Meeting, with the following representatives present:
  - C/U representatives
  - A/E team
  - SO Vice Chancellor-Chief Financial Officer
  - SO Associate Vice Chancellor for Facilities
  - SO Planning and Programming
  - SO Design and Construction
  - OR
  - CM

The purpose of the meeting is to present the SD submittal to SO Vice Chancellor-Chief Financial Officer for approval to proceed to DD.

The C/U and A/E representative present the SD and answer any final questions from the group. Upon approval of the SD submittal, the SO verbally approves the project to proceed to DD and follows up with a formal approval.

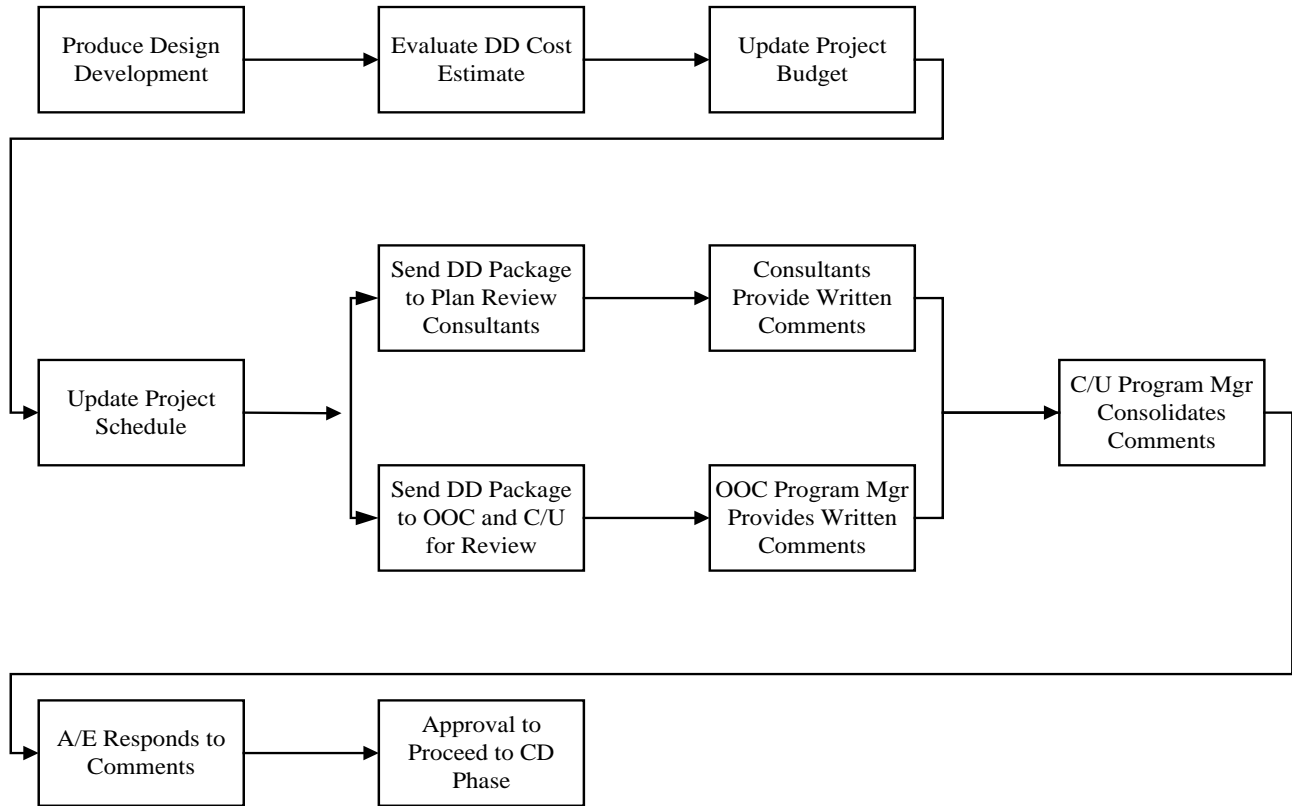
#### SO Approves Proceeding to DD Phase

- The SO Program Manager drafts the approval letter, following the MnSCU **Schematic Design Approved Letter Template**, for signature by the SO Vice Chancellor – Chief Financial Officer. Topics discussed in the SD Presentation Meeting should be listed in the letter for incorporation into the documents as the project proceeds into the Design Development phase. The letter is sent to the C/U President and the project team.

#### SO Sends Notice to Legislature

- The SO Program Manager drafts the Notification Letter, following the sample letter, for signature by the SO Vice Chancellor – Chief Financial Officer. The SO Program Manager forwards the Notification Letter and Schematic Design Report to the Legislature and copies of the letter to the C/U President and C/U Project Manager. The letter, required by Minnesota Statute 16B.335, notifies the legislature that the project is proceeding to DD and notes any significant changes.

### 3.4 Design Development Phase



#### Produce Design Development

- Design Development (DD) is the phase where the scheme selected at the end of Schematic Design (SD) is further developed and refined.

During DD, the plans, sections, and elevations are drawn to scale, principle dimensions are noted, the structural system is laid out, and major mechanical and electrical components and distribution routes are located. Critical interior spaces are drawn and elevated for review. Preliminary specifications are assembled, materials selection is finalized and the Room Finish Schedule is developed. Any exceptions to MnSCU Design Standards that the A/E wishes to propose for consideration by the Owner, must be requested in writing using the standard form (see **Design Standards Variance Form**) by the end of Design Development phase.

It is important that when DD is finished, the C/U Project Manager and user group understand and approve all aspects of the design.

As in SD, the project scope, cost and schedule are evaluated during DD and must be in balance before the Construction Documents (CD) are started. The C/U Project Manager must provide written approval to the A/E to proceed to the CD phase.



#### Evaluate DD Cost Estimate

- The A/E prepares a construction cost estimate based on the final DD documents. The A/E must include all construction costs and a contingency estimate, which is typically 10% to 15% of the construction cost for items not yet identified. If the DD construction cost estimate exceeds the construction budget amount identified in the A/E contract, the A/E is responsible for identifying how to reduce the estimate. This iterative process requires participation and advice from the C/U Project Manager, A/E, campus user representatives, and SO Program Manager. The DD construction cost estimate must be reconciled to the MnSCU Project Budget Worksheet prior to proceeding further.

#### Update Project Budget

- The C/U Project Manager updates the MnSCU Project Budget Worksheet that was prepared for the Schematic Design Report.

The C/U Project Manager inserts the DD construction cost estimate into the worksheet, updates the non-construction cost estimates such as: design fees, FF&E, construction contingency, etc., and reviews the updated MnSCU Project Budget Worksheet with the SO Program Manager.

#### Update Project Schedule

- The C/U Project Manager updates the overall Project Schedule with input from the A/E and SO Program Manager and lists key milestone dates.

#### Send DD Package to Plan Review Consultants

- Once the Project Budget and Schedule is approved, the C/U Project Manager sends a complete set of DD documents to the plan review consultants under contract on the project. The plan review consultants review the documents for their adherence to the Design Standards and provide technical review/constructability comments.

#### Consultants Provide Written Comments

- Typically, within ten (10) working days, the plan review consultants provide their comments to the C/U Project Manager and the SO Program Manager.

#### Send DD Package to SO Program Mgr for Review

- Once the Project Budget and Schedule have been approved, the C/U Project Manager collects the following information and sends to the SO Program Manager:
  - Design Development drawings (one complete full size set, and two complete half size sets)
  - DD Submittals per MnSCU Design Standards
  - Project Budget Worksheet
  - Project Schedule
  - DD Submittal Requirements Checklist

#### SO Program Mgr Provides Written Comments

- The SO Program Manager reviews the DD package and prepares written review comments for C/U Project Manager distribution to the A/E design team.

#### C/U Project Mgr Consolidates Comments

- The C/U Project Manager reviews and consolidates all review comments to one set of coordinated comments. The C/U Project Manager should request receipt of comments electronically for ease of consolidation. The C/U Project Manager distributes the comments to the A/E and SO Program Manager.

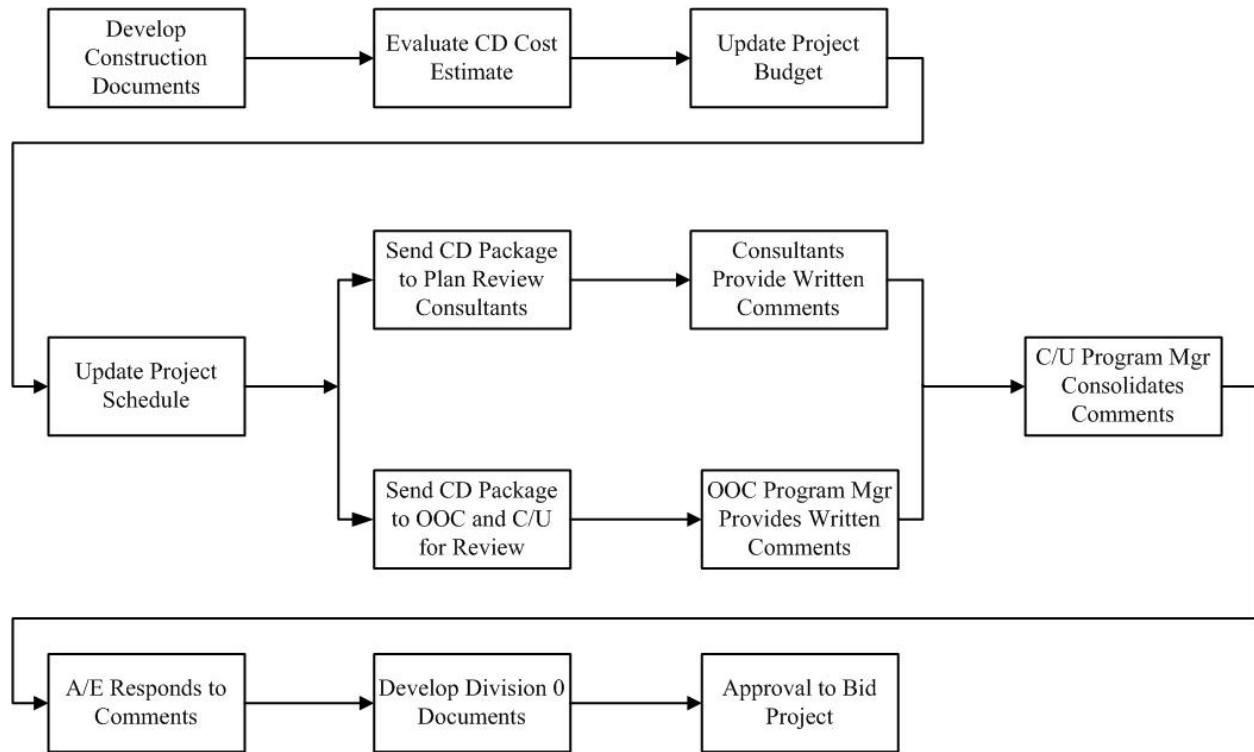
#### A/E Responds to Comments

- The A/E reviews all of the comments from the C/U Project Manager, SO Program Manager, and Consultants and provides a written response to the C/U Project Manager.

#### Approval to Proceed to CD Phase

- The C/U Project Manager reviews the A/E's written response to the review comments. When all comments are addressed to the satisfaction of the C/U Project Manager and SO Program Manager, the C/U Manager sends an approval letter to the A/E to proceed with the CD phase. Conditions noted in the DD Review should be listed in the letter, for incorporation into the documents as they proceed into the Construction Documents phase

### 3.5 Construction Documents Phase



#### Develop Construction Documents

- Construction Documents (CD) is the phase where all elements necessary for the construction of the project, including both graphic and written information, are assembled.

During this phase, the project drawings shall be coordinated and finalized, the specifications written, the bidding requirements established, and the project scope, cost and schedule brought into final alignment. The drawings, schedules and specifications shall be in sufficient detail for construction of the project.

As in SD and DD, the project scope, cost and schedule are evaluated, and must be in balance before the project is bid. Written approval to proceed into the Bidding phase must be received by the A/E from the C/U Project Manager before the project can go out for bids.

#### Evaluate CD Cost Estimate

- The A/E prepares a construction cost estimate based on the final Construction Documents. If the CD construction cost estimate exceeds the construction budget amount identified in the A/E contract, the A/E is responsible for identifying how to reduce the estimate. This is

an iterative process that requires participation by the C/U Project Manager, the A/E, and campus user representatives, with advice from the SO Program Manager. The CD

construction cost estimate must be reconciled to the MnSCU Project Budget Worksheet prior to proceeding further.

#### Update Project Budget

- The C/U Project Manager updates the MnSCU Project Budget Worksheet.

The C/U Project Manager inserts the CD construction cost estimate into the worksheet and non-construction cost estimates such as design fees, FF&E, construction contingency, etc. are updated. The C/U Project Manager reviews the updated MnSCU Project Budget Worksheet with the SO Program Manager. If the estimate is within budget, the C/U Project Manager accepts that the CD construction cost estimate and approves the project for bidding. As a "bidding contingency", alternates (typically 3-5) should be developed and prioritized. These can be accepted, if needed, to keep the project on budget if the bids come in higher than expected.

#### Update Project Schedule

- The C/U Project Manager updates the overall Project Schedule and lists key milestone dates with input from the A/E and SO Program Manager.

#### Send CD Package to Plan Review Consultants

- The C/U Project Manager sends a complete set of CD documents to the plan review consultants under contract on the project. The plan review consultants review the documents for their adherence to the Design Standards and provide technical review/constructability comments.

#### Consultants Provide Written Comments

- The plan review consultants provide written comments to the C/U Project Manager within ten (10) working days of receiving the documents.

#### Send CD Package to C/U and SO for Review

- The C/U Project Manager collects and sends to the SO Program Manager for review the following information:
  - Construction Document drawings (one complete full size set, and one complete half size set)
  - CD Submittals per MnSCU Design Standards
  - Project Budget Worksheet
  - Project Schedule

#### SO Program Mgr Provides Written Comments

- The SO Program Manager reviews the CD package and prepares written review comments for C/U Project Manager distribution to the A/E design team.

#### C/U Project Mgr Consolidates Comments

- The C/U Project Manager reviews and consolidates all review comments to one set of coordinated comments. The C/U Project Manager should request receipt of comments electronically for ease of consolidation. The C/U Project Manager distributes the comments to the A/E and the SO Program Manager.

#### A/E Responds to Comments

- The A/E responds to the review comments in writing to the C/U Project Manager, noting which comments will be incorporated into the documents and which need further explanation or discussion.

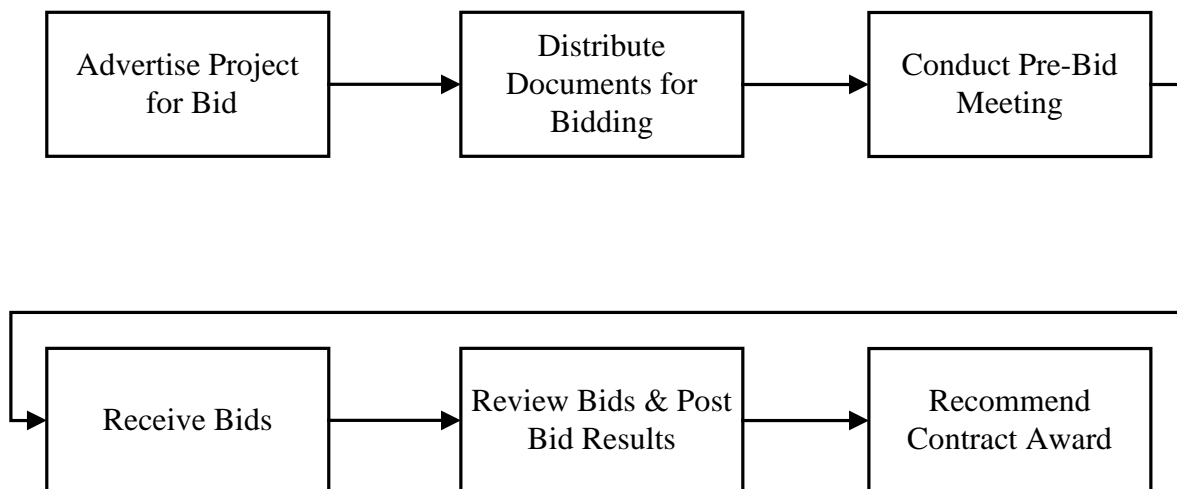
#### Develop Division 0 Documents

- Division 0 is the first section of the construction specifications. For each advertised bid project, the campus must provide documents to the A/E to be included in Division 0 of the construction specifications. Refer to **Div 0 - Instructions to College/University - Preparation of Division 0 Forms** for information regarding the documents to include.

#### Approval to Bid Project

- The C/U Project Manager reviews the A/E's written response to the review comments. When all comments are addressed to the satisfaction of the C/U Project Manager and SO Program Manager, the C/U Project Manager sends a **Design Phase Approval Letter** to the A/E to proceed with the Bidding phase. Conditions noted in the CD Review must be incorporated into the bid documents by the A/E.

### 3.6 Bidding



#### Advertise Project for Bid

- Once the Division 0 documents have been compiled in the completed Construction Documents set, the A/E creates the Advertisement for Bid and coordinates the posting of the ad with the C/U Project Manager in the appropriate public notices and publications.
- The name of the person in charge of receiving the bids, the bid opening time and exact location where the bids are to be delivered needs to be identified in the Advertisement for Bids.

### Distribute Documents for Bidding

- The A/E shall upload the Contract Documents (plans and specifications) on the QuestCDN website in pdf format. This website will deliver construction bidding documents to interested parties electronically using the internet. Refer to **On-Line Distribution of Bidding Documents** forms.

Allow 2-4 weeks, depending on size and complexity of the Project, from the time of advertising until the bid date for pre-bid meetings and Contractors to review the documents and obtain pricing.

### Conduct Pre-Bid Meeting

- The C/U Project Manager may choose to conduct a pre-bid meeting. These can be helpful for remodeling projects so that Contractors may familiarize themselves with the existing conditions. The meeting attendance should be recommended, but not mandatory. The A/E team should be present to describe the scope of the project in general terms and answer questions. The C/U Project Manager needs to be present to answer questions on behalf of the Owner. The C/U Project Manager should invite the SO Program Manager to attend.

Refer to form **MnSCU110 - Construction Contract Guidelines-Advertised Bid Over \$50K**.

### Receive Bids

- Bids are received and opened in accordance with the Instructions to Bidders section in the Contract Documents.

### Review Bids & Post Bid Results

- The C/U Purchasing department and the C/U Project Manager review the bids for compliance. The C/U Project Manager receives a copy of the apparent low bid and forwards it to the A/E for review. The C/U Project Manager and the A/E review the bid and compare the bid amount to the pre-bid construction cost estimate. If noted on the Bid Form, the TG and ED preferences are computed and applied to the bid amounts. (See the **Vendor Preference Information** in Appendix 11.1 Forms and Checklists.) The C/U Project Manager and the A/E will determine whether or not it is necessary to accept deduct alternates to bring the bid within the construction funds available.

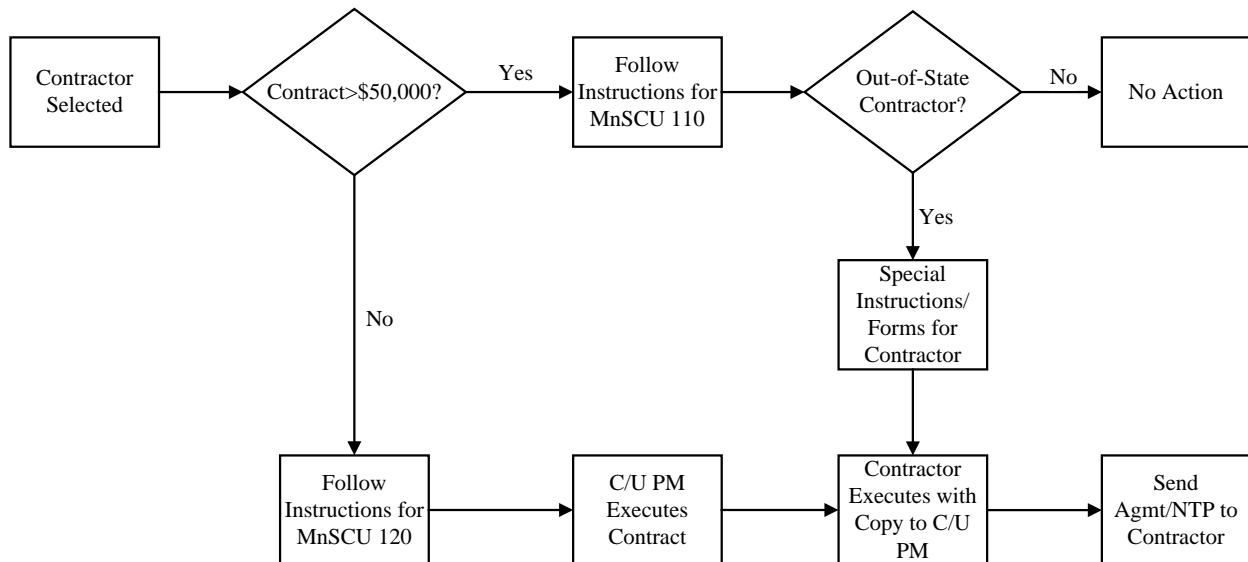
The A/E should also request references from the apparent low bidder and check with these references on the apparent low bidder's ability to perform the work on time, their management abilities, and other factors. The A/E should also confirm the apparent low bidder is eligible to bid on state funded projects. In the competitive low-bid environment, there would need to be a history of poor performance that is documented by the reference checks to substantiate not awarding a contract to the low bidder. (See MnSCU's AIA Document A201 Article 5.2 and the **Non-Responsible Bidder Information** form in Appendix 11.1 Forms and Checklists for additional information.) After the review of the bid and the references verification is complete, the A/E recommends in writing contract award to the C/U Project Manager.

- After bids have been opened, post the bid tab (typed) containing the name of the vendors and what city they are from and their base bid only on the QuestCDN site. Organize in order from lowest bid to highest bid. Include C/U name, Project Name and bid date and time on the form. Additional information and instructions are provided in the **On-Line Distribution of Bidding Documents** forms.

#### Recommend Contract Award

- The C/U Project Manager receives from the A/E their written recommendation to award a contract to the Contractor who is the qualified low bidder. The C/U Project Manager prepares the **Letter of Award** (see **MnSCU110-Instructions to C/U Letter of Award Sample**), the Construction contract and all required forms and sends them to the apparent low bidder.

### 3.7 Contracts and Awards



#### Contractor Selected

- Once the apparent low bidder has been qualified, the Letter of Award is sent to the Contractor with the contract enclosures and forms.

#### Contract > \$50,000

- The C/U PM must send a number of documents to the selected Contractor. The Letter of Award is sent with the following enclosures:
  - **MnSCU 110-Agreement for Construction Services for Advertised Bid Projects**
  - **Instructions to Contractor for Preparation of Agreement for Construction Services for Advertised Bid Projects**
  - **ACORD 25 Certificate of Insurance**, sample
  - **MnSCU130- Payment and Performance Bond for Construction Projects**
  - **MnSCU 133- Corporate Acknowledgement for Contractor**

- **MnSCU 135**Acknowledgement of Corporate Surety

Follow Instructions for MnSCU 110

- If the contract is greater than \$50,000, MnSCU110 is the form used as the Agreement for Construction Services. (See form **MnSCU110 - Instructions to C/U – Preparation of Agreement for Construction Services for Advertised Bid Projects over \$50K** in Appendix 11.1 Forms and Checklists.)

Out-of-State Contractor

- If an Out-of-State Contractor is selected, these additional forms must be included:
  - **Div0 – Instructions for Form SD-E**
  - **Div0 – Exemption from Surety Deposits For Out-of-State Contractors, Form SD-E**

Contract < \$50,000

- The C/U PM must send a number of documents to the selected Contractor. The Letter of Award is sent with the following enclosures.
  - **MnSCU120 - Agreement for Construction Services for Non-Advertised Bid Projects**
  - **MnSCU120 - Instructions to Contractor - Preparation of Agreement for Construction Services for Non-Advertised Bid Projects**
  - **ACORD 25 Certificate of Insurance**, sample

Follow Instructions for MnSCU 120

- If the contract is less than \$50,000, MnSCU 120 is the form used as the Agreement for Construction Services. See form **MnSCU120 - Instructions to C/U Preparation of Agreement for Construction Services for Non-Advertised Bid Projects** in Appendix 11.1 Forms and Checklists.

C/U PM Executes Contract

- The C/U Project Manager completes the Agreement for Construction Services and sends the Agreement and required forms listed in the **MnSCU120 - Instructions to C/U - Letter of Award Sample** to the Contractor for signature.

Contractor Executes with Copy to C/U Project Manager

- Contractor executes and returns necessary documents to C/U Project Manager.

Send Agreement/Notice to Proceed (NTP) to Contractor

- C/U Project Manager reviews the project specific completed certificate of insurance provided from the Contractor to confirm the Contractor has obtained the required insurance before the C/U signs the agreement.

If the insurance is in compliance, C/U Project Manager obtains required signatures on the contract and sends the executed contract to the Contractor with a Notice to Proceed Letter



### 3.8 Public Art Procedures

MnSCU supports the Percent for Art program. Projects funded by the legislature after July 1, 2007 for new buildings or major renovation/remodeling may contain an amount not to exceed one percent of the total appropriation. Projects funded by the legislature prior to July 1, 2007 will normally include funds up to one percent of the budgeted construction contract amount, not to exceed \$100,000.

Under the Joint Powers Agreement between MnSCU and the Minnesota State Arts Board, a C/U may request to manage the art acquisition process rather than the Arts Board. The C/U is then responsible for soliciting, selecting, and contracting for Art under the Minnesota Percent of Art program and in conjunction with MnSCU's board policies, procedures and contract requirements. See the **Art Guidelines** in Appendix 11.1 Forms and Checklists.

Percent for Art funds must be used only for art to be exhibited in areas of a C/U building or its grounds, accessible on a regular basis, to members of the public. MnSCU or the C/U may expend NONE of the art funds on administrative expenses.

A C/U, which desires to proceed with selecting and acquiring Art under the agreement, must arrange a consultation meeting with representatives from the C/U, the SO Program Manager and the Minnesota Arts Board to review the following procedures:

1. Selecting an artist:
  - Purchase of Existing Artwork
  - Commissioning Artwork
  - Design and Commissioning Artwork
  
2. Contracting with an artist:
  - If purchasing pre-existing art, use **Art Purchase Contract - MnSCU160**
  - If accepting a pre-developed design, use **Art Commissioning Contract - MnSCU170**, the **Art Timeline & Budget** form, and the **Data Disclosure Form – MnSCU001**
  - If entering into a contract for design and commissioning, use **Art Design and Commissioning Contract – MnSCU180**, the **Art Artwork Statement** form, the **Art Timeline & Budget** form, and the **Data Disclosure Form – MnSCU001**
  
3. Contract Completion:
  - Public Notice or plaque installed per the contract
  - Completed Percent for Art Timeline and Budget Final Report
  - Documentation Worksheet including technical and narrative description of the Work, blueprints, maintenance and other special instructions or related information
  - Archival records - slides, photographs, etc.
  - Updated resume of Artist
  - Final Acceptance Letter and Final Payment to Artist
  - Final Accession Report to Arts Board and SO

### 3.9 Architect/Engineer Evaluation

The Architect and/or Engineer (A/E) performance evaluation is initiated to meet the statutory requirement for evaluation of A/E's, as well as to address requests from various campuses for information as to how A/E's performed during projects at other colleges/universities. Information gathered will be available to institutions to better evaluate firms during the selection process for future projects, to include selections through the state's Designer Selection Board.

There are two types of evaluations:

1. An Interim Evaluation is required during the execution of a project when a firm's performance in any area is considered poor, or otherwise unsatisfactory and when reasonable steps are taken to improve the firm's performance.
2. A Final Evaluation is required and prepared as soon as possible but no later than 60 calendar days following the completion of a contract for non-construction services or within 60 calendar days following substantial completion of a construction project.

A/E Performance Evaluations shall be initiated by the C/U Project Manager for projects delegated to them or by the SO employee delegated responsibility for the contract management. Reference **Performance Evaluation A/E Form - Preparation Instructions** for additional information.

## 4. Construction Management

This Section describes the processes used to administer the construction Agreement and the Agreements with the design professionals. Examples of the standard forms used for these Agreements can be found in the Construction Bidding and Contract Forms (see 10.1 Construction Bidding & Contract Forms) and the Appendix (see Appendix 11).

### 4.1 Pre-Construction

#### Construction Contract Submittals

Once the Notice to Proceed letter is received, the Contractor is required to submit the following:

- Names of all Subcontractors and material suppliers within 14 days
- Contractor's Construction Schedule within 10 days
- Selection of Retention Options and Escrow Agreement
- Certificates of bonds and insurance requirements prior to commencement of work
- Other documents as stipulated

#### Pre-Construction Conference

The Pre-Construction Conference is an opportunity for the Contractor, Subcontractors, A/E, C/U Project Manager, OR and SO Program Manager to meet and discuss the administration of the project. The A/E is responsible for scheduling the Pre-Construction meeting, preparing an agenda (**Pre-Construction Meeting Agenda**) and inviting the participants. This meeting is held as soon as possible after the Notice to Proceed letter is issued.

#### Pre-Installation Meetings

Pre-Installation meetings are normally required for specific materials and activities of the project as listed below and are an important part of the construction process. These meetings provide the team the opportunity to discuss issues related to the project and hopefully prevent potential problems through thought-out approaches to the installation. They also allow the Contractor and Subcontractors time to coordinate with other trades. The A/E shall specify all pre-installation meetings, location, responsibilities and agenda items. The A/E, Contractor and Subcontractors, product representative(s), OR and C/U Project Manager should attend all meetings. The A/E shall conduct and prepare minutes of all meetings. Pre-installation meetings are typically scheduled the same day as construction meetings.

Pre-installation meetings are required for the following:

- Quality control meeting
- Excavation, backfill
- Concrete formwork, placing, and backshoring
- Waterproofing\*
- Mortar/masonry/flashing\*

- Roof and roof flashing\*
- Window and curtain wall installation\*
- Sealant\*
- Vapor barrier\*
- Fire sprinkler and ductwork
- Painting and flooring
- Cabinetry and casework
- Temperature Controls
- Commissioning

\*Items related to the exterior envelope are a high priority.

## **4.2 Construction Progress Meetings**

Construction progress meetings are held to discuss the project schedule, submittals, RFI's, change orders, etc. and any other required items. These meetings are typically held every two weeks, but may be held weekly on short-term projects or during critical stages of the project. The A/E is responsible for organizing and conducting the construction progress meetings and writing and distributing meeting minutes.

## **4.3 Submittals and Shop Drawings**

The Contractor is expected to submit certain documents and reports as evidence that products intended for use in the construction comply with the requirements of the Contract Documents. Submittal documents are described in the paragraphs below.

### **Shop Drawings**

Shop drawings are drawings, diagrams, schedules and other data specially prepared for the work by the Contractor or a Subcontractor to illustrate some portion of the work. The Contractor submits shop drawings for review by the A/E to ensure conformance with the Contract Documents. The Contractor is ultimately responsible for ensuring that all parts of the work are fabricated and installed correctly as described in the Contract Documents.

### **Product Data and Samples**

Product data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor to illustrate or describe materials or equipment for some portion of the work.

Samples are physical examples that illustrate materials, equipment or workmanship and establish standards by which the work will be evaluated.

Product data and samples are prepared by the Contractor (or Subcontractor) as a package and include technical data from manufacturers and other information proving that specified items

meet the requirements of the contract documents. The submittal process for product data and samples is the same as that for shop drawings (see 4.3.1 Submittal Process). During construction, the A/E maintains a file containing a list of all approved product data and samples. At the completion of the work, the C/U Project Manager receives this file, along with actual product data and samples from the A/E.

### **Test Reports**

Test reports are written documents prepared by testing laboratories reporting on examinations performed on materials used in the construction (see 4.4 Inspections and Testing). The testing laboratory submits test reports directly to the A/E and other parties as needed.

### **Other Required Submittals**

The Contractor is expected to submit other items like Insurance Certificates, Performance & Payment Bonds. Refer to 4.3.2 Other Required Submittals for more information.

### **4.3.1 Submittal Process**

In general, the process is as follows:

1. The Contractor or Subcontractor prepares submittals (Subcontractor submits them to the Contractor)
2. Contractor reviews and approves submittal information for conformance with the Contract Documents and forwards them to the A/E
3. The A/E reviews submittals and also consults with the C/U Project Manager and/or other Owner consultants as needed
4. The A/E reviews all submittals and either approves or returns them to the Contractor for resubmission

During construction, the A/E maintains a file containing all approved submittals. At the completion of the work, the C/U Project Manager receives this file from the A/E and it becomes part of the project file documents.

### **Requests for Substitution of Materials and Equipment**

The required standards of quality, utility and appearance of materials and equipment are established by the use of specific manufacturers' names, catalog numbers, specific brands or trade names. Substitutions of alternative materials and equipment that are equal in quality, utility and appearance to those specified may be accepted, subject to the provisions and procedures described in the Contract Documents and specifications. The Contractor is required to submit a Material Substitution Proposal with each substitution request. The A/E reviews the requests and in consultation with the C/U Project Manager determines whether the substitution is allowed.

### **4.3.2 Other Required Submittals**

Upon receipt of the Letter of Award, the Contractor is required to submit within ten days, Certificates of Insurance and bonds required by the General Conditions and Instructions to Bidders to the C/U Project Manager. The certificates must be prepared on the forms required by the System Office (see below).

The Contractor must furnish the following insurance policies, coverages, and bonds:

- Payment Bond (see below)
- Performance Bond (see below)
- Comprehensive or commercial form general liability insurance
- Business automobile liability insurance
- Workers' compensation and employer's liability insurance
- Builder's Risk insurance

#### **Payment Bond**

The Payment Bond secures the payment of claims initiated by Subcontractors, laborers, mechanics, material suppliers and other persons as provided by civil law. A minimum of two original bonds are executed; one is for the Contractor; and one is for the C/U Project Manager.

#### **Performance Bond**

The Performance Bond guarantees the project will be completed even if the Contractor is unable to fulfill the requirements of the Contract Documents. A minimum of two original bonds are executed; one is for the Contractor; and one is for the C/U Project Manager.

The C/U Project Manager must contact the System Office if the Contractor is unable to complete the Contract.

#### **Insurance**

Comprehensive or commercial form general liability insurance, business automobile liability insurance, workers' compensation, and employer's liability insurance protect the Contractor, the C/U, and its employees or agents from claims resulting from accidents and injuries related to the construction of the project.

#### **Prevailing Wage - Payroll Information**

Contractor and all of its Subcontractor(s) shall comply with the Labor Standards and Wages requirements of Minnesota Statutes Chapter 177 as applicable. Minnesota Statutes Section 177.43, Subd. 3, requires the collection of payroll information, as further described below, for all Contracts or work under a work authorization, unless:

- the estimated total cost of completing the project is less than \$2,500 and only one trade or occupation is required to complete it, or
- the estimated total cost of completing the project is less than \$25,000 and more than one trade or occupation is required to complete it.

All projects that must comply with Minnesota Labor Standards and Wages requirements of Minnesota Statutes Chapter 177 shall ensure the following are listed in the solicitation and contract documents:

Pursuant to Minnesota Statutes 177.41 to 177.44 and corresponding Rules 5200.1000 to 5200.1120, projects are subject to the prevailing wages as established by the Minnesota Department of Labor and Industry, unless specifically exempted as noted above. Specifically, all contractors and subcontractors must pay all laborers and mechanics the established prevailing wages for work performed under the contract. Failure to comply with the aforementioned may result in civil or criminal penalties

For more information regarding prevailing wage and its application, contact:  
Minnesota Department of Labor and Industry  
Prevailing Wage unit  
443 Lafayette Road N.  
St. Paul, MN 55155  
Phone: (651) 284-5091  
E-mail: [dli.prevwage@state.mn.us](mailto:dli.prevwage@state.mn.us)  
Web: [www.dli.mn.gov](http://www.dli.mn.gov)

The College/University shall incorporate into its proposals and all contracts the applicable wage determinations for the contract along with contract language provided by the commissioner of labor and industry to notify the contractor and all subcontractors of the applicability of sections 177.41 to 177.44. **Failure to incorporate the determination or provided contract language into the contracts shall make the College/University liable for making whole the contractor or subcontractor for any increases in the wages paid, including employment taxes and reasonable administrative costs based on the appropriate prevailing wage due to the laborers or mechanics working on the project.** The contract must also provide that the contracting agency shall demand, and the contractor and subcontractor shall furnish to the contracting agency, copies of any or all payrolls not more than 14 days after the end of each pay period. The payrolls must contain all the data required by section 177.30.

See also Prevailing Wage Payroll Procedures & Guidelines section in 11.1 Forms and Checklists for additional information.

## **Accidents**

In the case of an accident on the project, the SO Program Manager should be notified as soon as possible. The Contractor records in detail the events leading up to an accident, the conditions at the time of the accident, and a complete description of the accident, damage and injuries. This report must be submitted to the C/U Project Manager for delivery to the appropriate risk

management representative. The C/U Project Manager and A/E should also record the accident in detail.

### **Builder's Risk Property Insurance and Loss Reporting**

For each project, a Contractor's risk property insurance policy includes: earthquake, flood and pollution clean-up. The Contractor is responsible for the deductible amount, which may vary from C/U or project.

Once the Contractor is selected for the project, the Contractor is responsible for obtaining builder's risk insurance and filing the insurance policy with the C/U Project Manager before any work is started on the project.

### **Insurance Valuation of Property**

The System Office requires accurate records to insure property at its appropriate value. If a loss occurs, the undervaluation of the building could result in a shortage of funds needed to repair or replace that building.

The tracking of building valuation starts with the administration of each facility. The facilities management staff responsible for the building must provide pertinent data for the following costs: constructing, acquiring, altering or adding to a building.

## **4.4 Inspections and Testing**

The administration of and responsibility for construction inspection and testing is discussed below.

Inspections differ from field observations, as they are a more detailed examination of the quality of the work. There are two types of inspection and testing for construction - those performed by the Contractor and those performed by an agent that operates under a direct contract with the C/U Project Manager. Each party to the contract (C/U, A/E, Contractor, etc.) shall have clearly defined responsibilities. The requirements and responsibilities for inspections and testing are detailed in the Design Standards and Contract Documents.

### **Geotechnical Engineering and Inspection**

The C/U Project Manager may employ a geotechnical engineer for soil borings (A/E to determine quantity and location), special inspections, field analysis and test report analysis during construction. The geotechnical engineer may inspect subsurface conditions, document the Contractor's performance and monitor the quality of excavation, grading and soil compaction. Reports provided by the geotechnical engineer are submitted to the A/E, C/U Project Manager and Contractor.



## **Survey**

The A/E shall define the scope and required features of the site property and topographic survey. The C/U Project Manager will contract with a registered surveyor and provide the survey to the A/E.

## **Inspections and Observations**

The C/U Project Manager will contract with consulting firms to obtain inspection and observation services as necessary for the project scope of work. Observation and inspection services shall assist in verification of certain aspects of the work for probable compliance with the requirements specified in the Contract Documents and the Design Standards. These services shall not relieve the Contractor of responsibility for compliance with the Contract Documents.

Reports generated by the inspection and observations firms shall be distributed to the C/U Project Manager, the A/E, the Contractor (as appropriate), the O/R and the SO Program Manager.

## **Testing**

Materials furnished under construction contracts are subject to inspection and testing by a materials testing laboratory for compliance with Contract requirements. All such inspections and tests of materials must be made in accordance with applicable American Society of Testing and Materials standards or other procedures set forth in the Specifications. The C/U Project Manager contracts with a testing agency and pays for all tests and inspections made by the testing laboratory.

Laboratories submit all testing and inspection reports directly to the A/E. The A/E judges the acceptability of all reports including methods used, results and content. By reviewing the reports, the A/E will determine if the quality of work complies with the contract documents and will issue written corrective action, if needed.

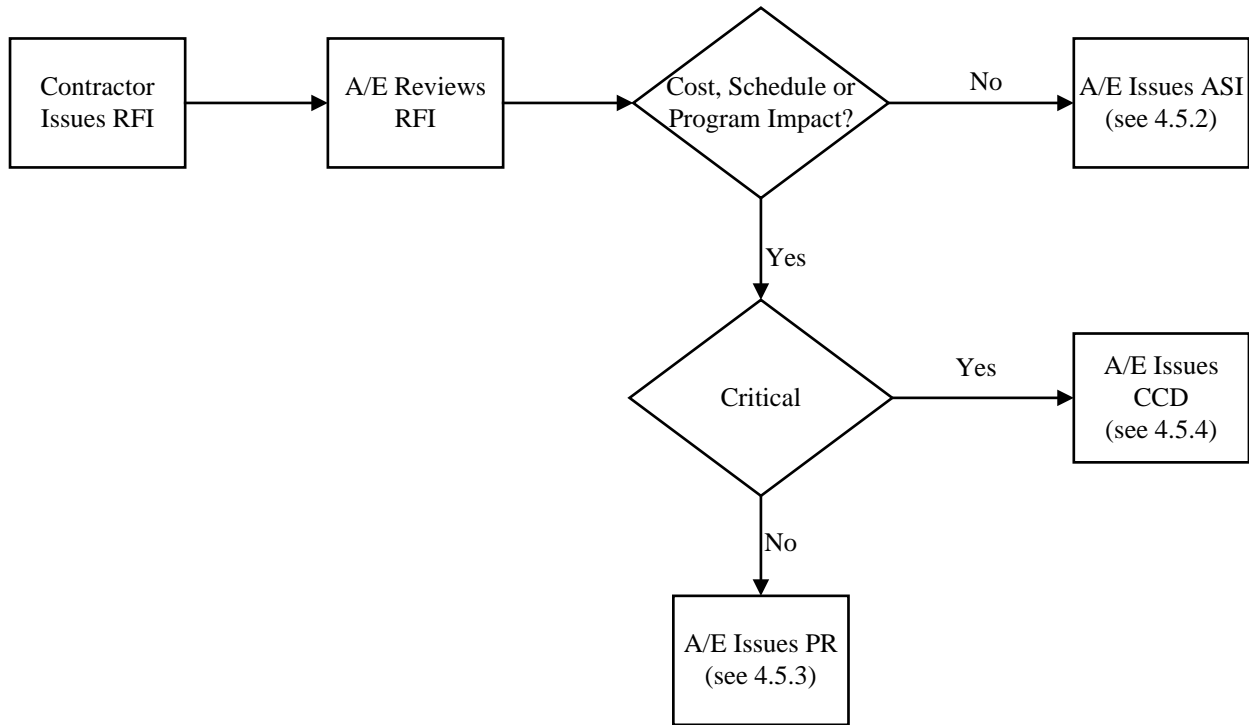
## **4.5 Changes to the Work**

The Construction Contract may only be changed through one of the following methods:

- **Request for Information (RFI)**
- Architect's Supplemental Instructions (ASI) (see Section 4.5.2 )
- Proposal Request (PR) (see Section 4.5.3)
- **Construction Change Directives (CCD) – MnSCU014** (see Section 4.5.4)
- **Change Orders Construction (CO)** (see Section 4.5.5)

Construction contracts must follow the procedures outlined in the Contract Documents. The A/E will review and respond to any requested changes from the Contractor or C/U Project Manager.

## 4.5.1 Request for Information



### Contractor Issues Request for Information (RFI)

- The Contractor should use the agreed upon **Request for Information (RFI) form**. The information contained in the RFI is critical to ensuring a complete and timely response. At a minimum, the information submitted must include the full name and title of the author, the firm name, the date the request was submitted for consideration, the signature of the author and the required date of response. The description of the request should clearly state what information is required making adequate reference to the appropriate Contract Documents. Issues requiring immediate action should be addressed via telephone to the A/E and C/U Project Manager with a follow-up, written RFI.

### A/E Reviews RFI

- It is the responsibility of the A/E Project Manager to review and respond to all RFI's in a timely manner (typically one week). The initial review should determine if the request is a complete and legitimate question concerning the interpretation of the Contract Documents. If any issues are unclear, the RFI should be returned to the Contractor for clarification. The A/E Project Manager should immediately notify the C/U Project Manager and/or the O/R if the RFI response represents a substantial change to the Contract Documents.

If the request requires input from a sub-consultant, the A/E Project Manager is responsible to forward the request and solicit a response. The A/E Project Manager must author the response to the Contractor, but may attach documentation from the sub-

consultant. The sub-consultant response should clearly state the interpretation of the required documents.

The A/E will maintain a record of all RFI's submitted against a contract. If an RFI is returned to the Contractor for clarification, the A/E will issue a revision number.

#### Cost, Schedule or Program Impact

- The A/E Project Manager determines the effect on the project cost or schedule. If the request has no impact on cost or schedule and requires clarification to the drawings or the specifications, the A/E should prepare an Architect's Supplemental Instructions (ASI) (see 4.5.2) to clearly document the Response.

#### Critical

- If the effect on cost or schedule is critical, the A/E should prepare a Construction Change Directive (CCD) (see 4.5.4) to direct the Contractor to start work upon receipt of the CCD document. If not critical, the A/E Project Manager may elect to issue a Proposal Request (PR) (see 4.5.3) to solicit cost input from the Contractor before taking further action.

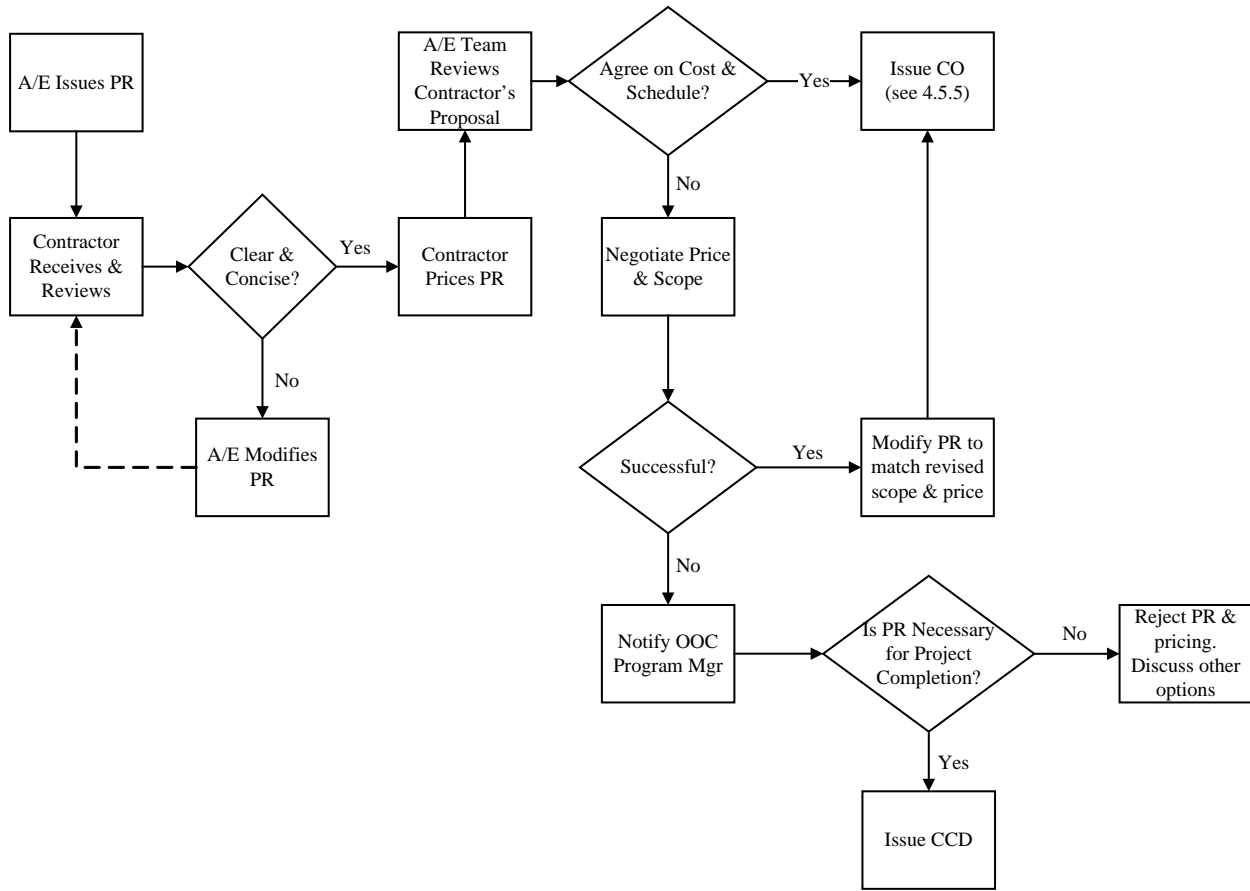
The definition of critical is:

- Significant increase in cost or schedule will occur if decision not made now
- No alternatives exist, and
- Immediate Cost exposure is less than \$10,000

### **4.5.2 Architect's Supplemental Instructions**

The A/E may authorize minor changes in the work not involving an adjustment in cost or requiring an extension of time by issuing a document called the Architect's Supplemental Instructions (ASI). Such changes shall be effected by a written order signed by the A/E Project Manager directing the Contractor to execute the work promptly. If necessary, the A/E shall prepare, reproduce and distribute drawings and specifications to adequately describe and document work to be added, deleted or modified.

### 4.5.3 Proposal Request (PR)



#### A/E Issues PR

- The A/E will issue a Proposal Request and include all design information necessary for the Contractor to determine the cost of the proposed change to the work. If necessary, the A/E will prepare, reproduce and distribute drawings and specifications to adequately describe and document change work to be added, deleted or modified.

#### Contractor Prices PR

- The Contractor should prepare a detailed estimate of the cost and/or time adjustment involved in the proposed change.

Four methods are authorized in the General Conditions of the Contract for Construction to represent the cost of the change:

- Unit prices listed in the Construction Agreement
- Agreed-upon unit prices
- Agreed-upon lump sum supported by a Contractor Proposal
- Actual cost plus a Contractor fee

#### A/E Team Reviews

- The A/E shall evaluate the Contractor's proposal to determine whether it is appropriate to the request. If required, the A/E Project Manager may request further breakdown or an independent estimate of the work.

#### Agree on Cost & Schedule

- The A/E approval signifies that the money and/or time involved in the change is reasonable. The A/E documents their approval of the Proposal Request to the C/U Project Manager and the O/R. The A/E approval does not authorize the Contractor to proceed with the work. If accepted by the C/U Project Manager, the Proposal Request is approved for a Change Order (CO).
- If agreement on cost(s) or schedule cannot immediately resolve the disposition of the proposed change, the A/E Project Manager may elect to negotiate with the Contractor. This step in the process may require additional information to be supplied by the Contractor for a fair disposition of the request.

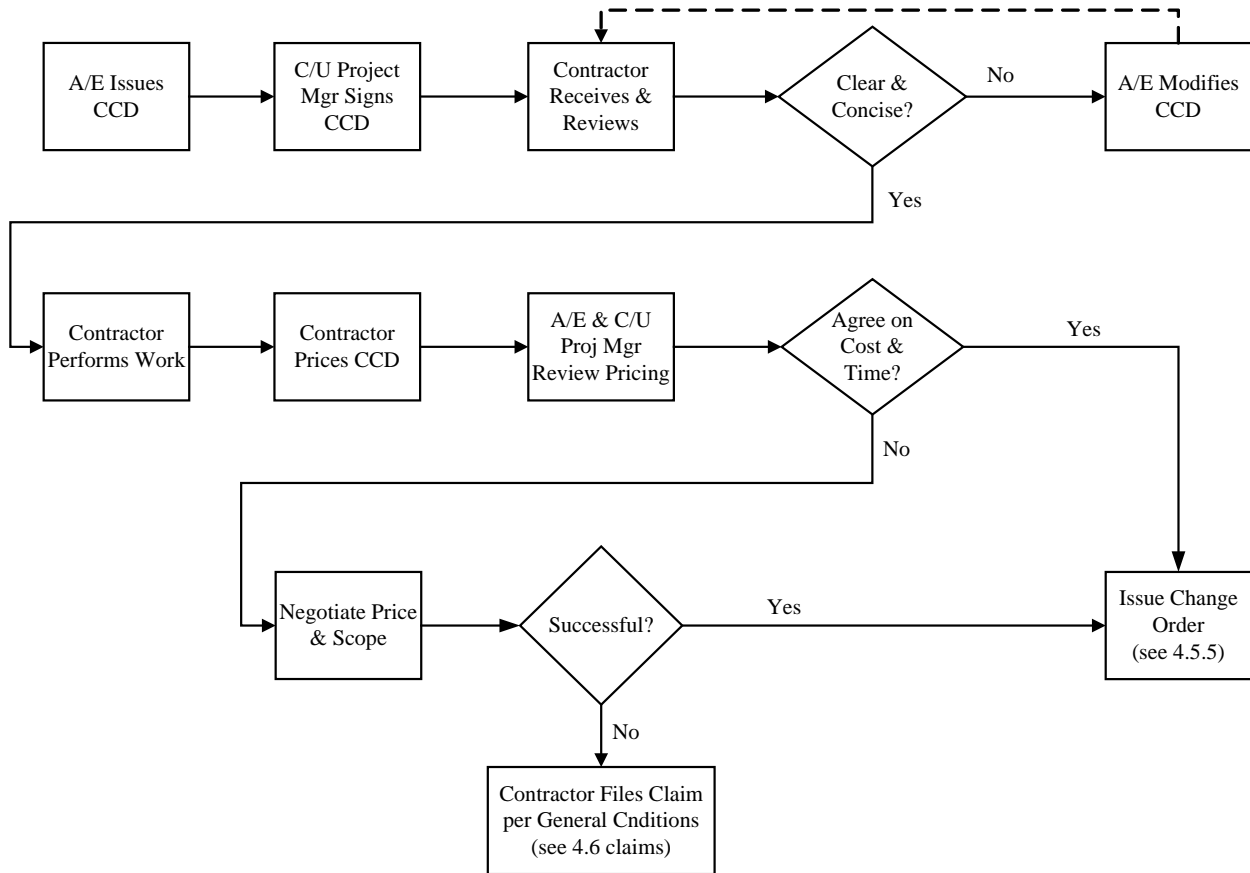
#### Notify SO Program Mgr

- If the negotiation fails and the Contractor issues a claim for litigation, notify the SO Program Manager for assistance.

#### Is PR Necessary for Project Completion?

- If the proposed cost and/or duration of the change is not acceptable, then the C/U PM, A/E, and OR discuss if the PR is critical to the project completion. If not critical, obtain pricing from other vendors/contractors or do not proceed with PR work.

#### 4.5.4 Construction Change Directives (CCD)



##### A/E Issues CCD

- A CCD is a written directive to the Contractor to proceed with the work outlined in the CCD. The A/E creates the CCD using the AIA Standard Form G714 - Construction Change Directive or the **Construction Change Directive (CCD) - MnSCU014**. When the CCD is signed by the A/E and C/U Project Manager, the Contractor must proceed with the work and submit cost and schedule information once the work is complete. The A/E prepares the CCD for signature by the C/U Project Manager.

##### C/U Project Manager Signs CCD

- The A/E reviews the scope of work in the CCD with the C/U Project Manger and OR. If approved, the C/U Project Manager signs the CCD and the A/E sends it to the Contractor to proceed with the work.

##### Contractor Receives & Reviews

- The Contractor reviews the CCD and determines if the description of the scope of work is sufficient to proceed with the work.

#### A/E Modifies CCD

- If the Contractor cannot perform the work as defined in the CCD, the A/E will discuss the scope of work with the Contractor and revise the CCD. The CCD will be reissued to the C/U Project Manager for signature and the Contractor for execution.

#### Contractor Performs Work

- If the Contractor cannot perform the work within the information provided in the CCD, the A/E will discuss the scope of work with the Contractor, revise the CCD as necessary and reissue it to the C/U Project Manager for signature and the Contractor for execution.

#### Contractor Prices CCD

- After the work is complete, the Contractor submits a detailed breakdown of the price and schedule impact of the CCD to the A/E for review.

#### A/E & C/U Project Manager Review Pricing

- The A/E reviews the pricing and schedule impact with the C/U Project Manager and OR.

#### Agree on Cost & Time

- If the A/E and C/U Project Manager agree that the pricing and schedule impacts are acceptable for the scope of work, the A/E prepares a Change Order for signature.

#### Negotiate Price & Scope

- If the A/E, C/U Project Manager and OR do not agree that the pricing and schedule impacts are acceptable for the scope of work, the A/E, with assistance from the OR, will negotiate the pricing and schedule impacts with the Contractor.

### 4.5.5 Change Orders (CO)

A Change Order is a post-award modification to the Contract. A Change Order may revise, add to or delete from previous requirements of the work. It may also be used to adjust the Contract Sum and/or Contract Time Schedule. All changes or potential changes to a project must be recorded to determine the impact on the project.

The A/E will issue a Change Order to formally indicate and record the acceptance of a proposal offered by the Contractor. See **Change Order Construction Contract - MnSCU022**. The A/E shall maintain a list of changes to the Contract and distribute this list to the C/U Project Manager or OR as needed.

By signing a Change Order, the Contractor agrees to the cost and/or time of the Contract modification. Change Orders shall not be used prior to construction contract award to negotiate a change in the bid, scope, budget or schedule.

Once a change in the Contract has been agreed to, the A/E will issue a Change Order for signature.

## **Contractor Disapproval of Change Orders**

The Contractor may not agree with the content of a Change Order. Therefore, they may refuse to sign the Change Order. The A/E or the C/U Project Manager should promptly reject any attempted qualification the Contractor adds to the terms of agreement prepared by the Change Order, on the face of the Change Order or in an enclosed letter. Send any modified Change Order back to the A/E for negotiation, clarifications as necessary and reissue. In unusual circumstances, contact the SO for language to accept a qualified Change Order.

## **4.6 Claims**

A claim is a written demand or assertion by the Contractor seeking adjustment or interpretation of the terms of the Contract Documents, payment of money, extension of time or other relief with respect to the Contract Documents. A claim may include a determination of disputes or matters in question between the C/U Project Manager, A/E and the Contractor regarding the Contract Documents or the performance of the work.

The Contract Documents provide procedures for resolving claims. The A/E is required to review claims and render a decision. Once the Contractor receives the decision of the A/E, they can continue to negotiate with the A/E until an agreement is reached or negotiations breakdown. Mediation or litigation may follow. Continuous negotiation is required throughout the dispute process.

### **Making a Claim, Requesting a Change Order, Writing a Notice of Intent for Filing a Claim**

The Contractor must either submit a claim in writing or give a written notice of intent to file the claim. Claims shall initially be referred to the A/E for decision. The A/E will render a decision in writing within a reasonable time. The A/E will review any decision with the C/U Project Manger, the SO Program Manager and the OR before sending their decision to the Contractor. The C/U Project Manager makes the final decision on claims. The SO Program Manager is available as a resource to review and assist the C/U Project Manager as needed.

### **Decision on Claims**

If negotiation is unsuccessful, the A/E issues a final decision on the Contractor's claim. The Contractor may dispute the decision of the A/E and may initiate mediation. After initiating mediation, the parties then attempt to resolve the claim.

At any time during this process, the claim may be resolved by using negotiation.



## 4.7 Contractor Pay Request

### Schedule of Values

Before the first application for payment, the Contractor shall submit for approval to the A/E a detailed Schedule of Values of the work. This schedule, once approved by the A/E, shall be used as a basis for reviewing the Contractor's Applications for Payment.

### Application for Payment

The Contractor starts the monthly payment process by preparing an Application for Payment on the approved form or a similar document (see **Div0 – Application for Payment, MnSCU060**). The Contractor must itemize the application using the Schedule of Values, as modified by fully executed Change Orders.

The A/E will authorize payments to the Contractor on a monthly basis. Retainage in the amount of 5% will be held on the work completed to date.

When the work is found to be complete, the Contractor makes a final application for payment.

All Applications for Payment should include:

- Statement of Construction progress basis for the Contractor and all Subcontractors and supporting documentation as requested
- The A/E must certify that the application is correct and must check the accuracy of the following:
  - Percentage of work complete for each line item and arithmetic for the entire form including the cost breakdown of the Contract Sum
  - The A/E Project Manager must also verify the provision of items listed in the General Conditions

### Process Payment Request

The A/E Project Manager must be aware that time restrictions are specified in the General Conditions to ensure that the payment is processed in a timely manner.

The C/U shall confirm that the Contractor has submitted payroll information in compliance with Minnesota Statute 177. See **Prevailing Wage Payroll Information Form – MNSCU073** for additional information.

The A/E Project Manager and the C/U Project Manager will both sign and/or initial all copies of each Application for Payment in the appropriate area. The C/U will issue payment to the Contractor in accordance with the approved application amount.

If an application requires major adjustments, the application must be returned to the Contractor with a letter explaining the reason(s) for the discrepancy.

## 4.8 Field Observation Reports

Field observation of construction progress is critical to the success of any project. It is the responsibility of the A/E to visit the site at a frequency as required and commensurate with the A/E Contract. The primary purpose of the visit is to conduct a first-hand review of the progress of construction in preparation for the project progress meetings. In addition, provide field observation by personnel qualified to determine that civil, structural, mechanical and electrical work is compliant with the Contract Documents.

### Observations

The A/E Project Team should visit the site and observe all the activities conducted. Any significant findings should be reported to the Contractor's Site Superintendent. If immediate action is required, or if the issue is of a critical nature, the A/E should document the findings in writing and have the document signed by the Contractor's Site Superintendent acknowledging receipt of the action.

### Field Observation Reports

The A/E should document any significant findings they observe when walking the site. The A/E should also review the Contractor's daily report and comment on any irregularities or exceptions they feel appropriate.

The A/E shall submit a written field report signed by the A/E documenting their observations.

### Daily Inspection Reports

The Specialty Consultant(s), if needed on the project, is responsible to provide daily inspection reports to the A/E, C/U Project Manager, OR and Contractor as necessary for each project and to ensure that construction proceeds as detailed in the Contract Documents. The A/E shall review the reports and document corrective action needed by the Contractor. On each trip to the site, the A/E should obtain a copy of the Specialty Consultant's daily report. If the reports are not available, the A/E should so note and inform the C/U Project Manager.

## 4.9 Project Closeout

When the project is nearing completion, the A/E will walk through the project, determine if Substantial Completion was achieved and create a list of outstanding items. Substantial completion initiates the Project Closeout phase.

A project's Contract Documents typically note the required services and forms for obtaining substantial and final completion. However, the construction project **Substantial Completion & Closeout Checklist** is an additional reference.

Following the completion of the project, the project files and records shall be retained and safeguarded per the Project File Retention Schedule.

## **4.9.1 Substantial Completion**

Substantial Completion of the project or a designated portion of the project is determined by the A/E in discussions with the C/U Project Manager when the work is complete and in accordance with the Contract Documents, except for completion of minor items which do not impair the C/U's ability to occupy and fully utilize the project for its intended purpose.

Substantial Completion also represents the point at which the daily operation and maintenance of the facility is transferred to the C/U and the warranty period begins. Therefore, it is critical to ensure the maintenance staff has received all the necessary operations and maintenance manuals and training required to take ownership of the facility.

The A/E shall review the project to ensure the facility is ready for the Substantial Completion walk through. If the A/E makes an inspection for purposes of Substantial Completion and determines that the work is not substantially complete, the Contractor may request a follow-up inspection after items identified at the initial inspection have been completed. However, additional inspection may be at the Contractor's expense and costs for the additional inspection shall be deducted from any monies due and payable to the Contractor.

The A/E is responsible for developing a list of outstanding items, normally referred to as a punchlist that must be completed by the Contractor prior to granting final completion. This punchlist represents the Contractor's remaining responsibilities. If an item is not on the list, the Contractor must still complete all work in accordance with the Contract Documents.

The Certificate of Substantial Completion establishes the date of Substantial Completion, the responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the work and insurance, and shall establish the amount of time within which the Contractor shall finish all items on the punchlist. Examples of acceptable punchlist items include touch-up painting, minor repair, replacement and other similar items. If major equipment or systems are not complete, the issuance of the Certificate of Substantial Completion should be discussed between the A/E, C/U Project Manager and OR.

The C/U is not required to take Substantial Completion and may wait for final completion to occupy and use the site. If the C/U and the Contractor agree that punchlist items can be accomplished while the C/U fully occupies and utilizes the facility for its intended purpose, then the C/U may proceed with occupying the space. However, for the C/U to occupy the space, the authorized building code official must issue a Certificate of Occupancy. The date of the Certificate of Occupancy often becomes the date of Substantial Completion.

## **4.9.2 Operations & Maintenance Issues**

Before Substantial Completion, the Contractor must provide training, warranties, guarantees, manuals and spare parts needed to operate and maintain the building. The A/E must review all items before the Certificate of Substantial Completion can be issued. The Contractor should begin the process early and submit all written materials at the same time. The C/U personnel should review, correct and study the manuals prior to training.

### **Review Construction Documents**

The Contract Documents should specify exactly what is required. The general terms of the Contract requires the Contractor to correct defective work during a specified period (often one year) after Substantial Completion. Additionally, the Contract may require longer warranties for certain items such as the roof system, windows or major pieces of equipment such as the boiler. The Contractor is required to provide written warranties for these items from the manufacturer(s).

Operating and maintenance manuals are required to assist the C/U with increasingly complex systems such as digital controls for mechanical systems, UPS, security, communications, fire alarm interfaces, etc. Although the mechanical and electrical systems have the most complex manuals, nearly every building system or product, from floor finishes to skylights, is likely to require some form of maintenance instructions.

### **Maintenance Contact Information**

Prior to the issuance of the Certificate of Substantial Completion, the Contractor shall provide a list of contacts to be used during the warranty period. This list of contacts should include the manufacturers, the name of a company representative and their phone number(s). The A/E will be copied on warranty related correspondence.

## **4.9.3 Final Completion and Payment**

Final completion implies the release of all retention and the approval of the final Application for Payment from the Contractor. All project issues need to be resolved, and the facility needs to be accepted by the A/E, the C/U Project Manager and the C/U.

It is the A/E responsibility to recommend final completion. Final Completion is determined to be when the A/E Project Manager finds that the work is fully completed and in accordance with the Contract Documents. The work includes final cleaning, punch list items, operating manuals, training, as-built documents, warranties, guarantees, and work added by change orders.

### **Punch List Update**

The Contractor will update the punch list initialing all items that are the responsibility of the Contractor signifying that they are complete. If an issue is not the responsibility of the Contractor, the issue needs to be addressed in the cover letter that requests the walkthrough.

## **Resolve Change Order Log**

The project records are reviewed by the A/E to ensure that all Change Orders are complete and resolved. The Contract Documents need to be reviewed to ensure the project was delivered according to the Contract Documents.

## **Final Walkthrough**

The Contractor is responsible to complete all the punch list items and ensure all outstanding issues with the facility are addressed. Any change orders or claims need to be addressed before the final walkthrough is scheduled. If the Contractor calls for a walkthrough and is not complete with the items, costs associated with the next walkthrough will be deducted from their final Application for Payment.

When the work is found to be complete, the Contractor prepares a final Application for Payment. The A/E then issues a final certificate for payment constituting final acceptance of the work by the C/U.

Final payment and any remaining retention is due after the Contractor submits the following documentation to the A/E:

- Final Application for Payment and all required submittals
- Conditional releases from the Contractor and Subcontractors entitled to receive any portion of the final payment
- As-built Record Documents
- All operating and maintenance data for equipment installed in the project
- All guarantees and warranties from the Contractor, from Subcontractors and from suppliers
- All other submittals required by the Contract Documents

The final payment and retention is not payable until the Notice of Completion is filed.

Acceptance of final payment by the Contractor constitutes a waiver of all claims except those previously made in writing and identified by the Contractor as unsettled at the time of final Application for payment.

The C/U Project manager will notify the SO Program Manager when the project is complete and final payment has been made.

## **Ten-Month Warranty Walk-through**

The A/E, C/U Project Manager, OR and key maintenance personnel shall conduct an inspection walk-through ten months after the date of Substantial Completion to document any issues that do not comply with the requirements of the Contract Documents or are warranty issues. If a warranty issue cannot wait until the warranty inspection, the C/U Project Manager should notify the Contractor of the issue immediately in writing. The C/U Project Manager should document

minor issues with assistance from their maintenance staff to discuss at the warranty inspection. The A/E will send the results of the walk through to the Contractor for corrective action.

#### **4.9.4 Post Occupancy Evaluation (POE)**

The Post Occupancy Evaluation (POE) is a method to evaluate the successes or failures of completed projects with the objective of improving future projects. The POE goal is to determine how the building is doing in terms of meeting the various expectations that preceded its construction and to determine lessons learned which could be applied to future programming, design and construction.

The C/U Project Manager (for projects delegated to them) or the System Office staff will initiate the Post Occupancy Evaluation. (See **Post Occupancy Evaluation - Instructions.**) The POE is required for all projects over \$2,000,000, but may be used on any project. At the time of Substantial Completion, the C/U project manager, the A/E, the Contractor and the Owner's Representative each complete a Post Occupancy Evaluation Form. The completed forms should be maintained with the campus project files and a complete copy of the information forwarded to the Director of Design and Construction

## **5. Quality Assurance and Quality Control**

Setting quality assurance standards and measuring them through quality control can alleviate quality issues.

Quality Assurance - A system of procedures for selecting the levels of quality required for a project to perform the functions intended and assuring that these levels are obtained.

Quality Control - A system of tests and/or inspections that ensures a quality finished product.

Summarizing the difference, quality assurance is setting the standards, and quality control is testing and inspecting to make sure the standards are met.

### **5.1 Quality Assurance**

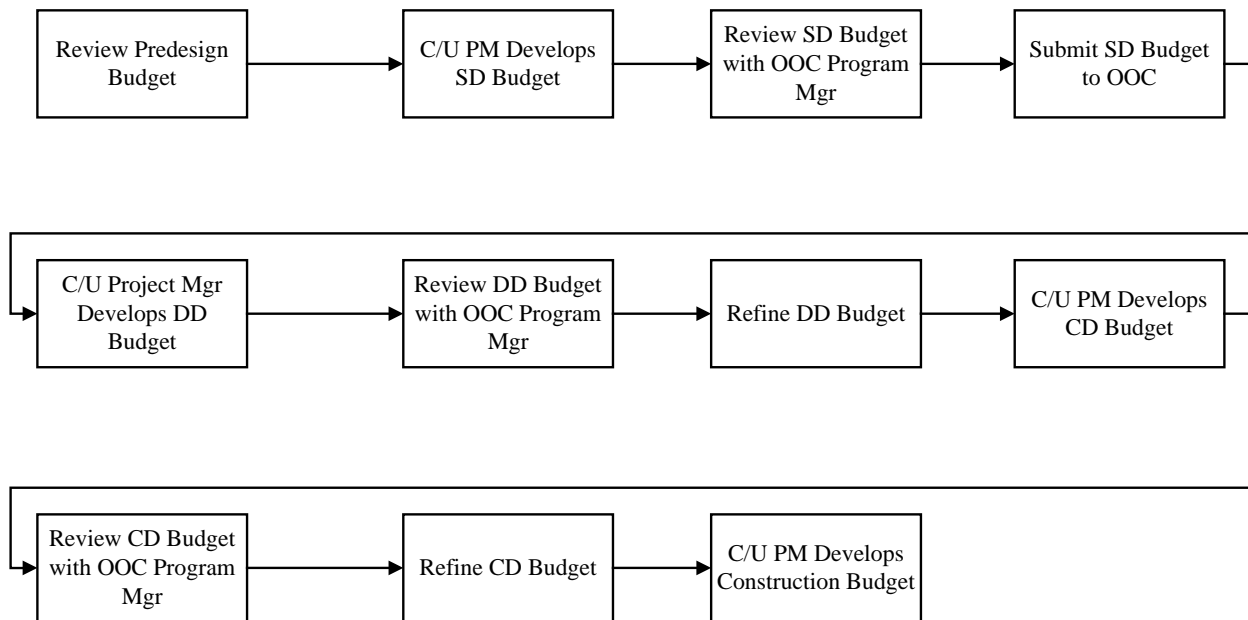
The A/E, OR, and C/U Project Manager shall develop a quality assurance plan specific to the project's needs that address building code requirements, design reviews, construction testing and construction observations. Refer to [www.finance.mnscu.edu/facilities](http://www.finance.mnscu.edu/facilities) for the MnSCU Design Standards.

The general intent of the design process is that the quality standards for the building not be compromised. Quality assurance work will be contracted directly by the College/University. The OR will assist the C/U Project Manager in retaining the services of a test/inspection firm(s) and/or applicable specialty consultants.

### **5.2 Quality Control**

The Contractor is ultimately responsible for quality control and is solely responsible for the construction means, methods, techniques and procedures in constructing a project. The testing and inspection firm(s) will verify that the quality, composition and strength of the materials conform to the quality assurance standards in the Contract Documents. The verification will be in the form of on site observations, obtaining samples of materials and testing the samples in an accredited laboratory.

## 6. Budgeting



### Review Predesign Budget

- The C/U Project Manager and the SO Program Manager review the Predesign project budget, comparing it to the funds appropriated. Modifications are made to the project budget as needed, reconciling the total project budget against the funds available. Refer to the **Project Budget Worksheet**.

### C/U PM Develops Schematic Design Budget

- Prior to the A/E team selection, the C/U Project Manager develops a preliminary SD budget, based on the MnSCU Project Budget Worksheet. The A/E SD construction cost estimate will be reconciled with the construction cost stated in the A/E contract. The A/E must comply with financial parameters of the A/E contract during all phases of design.

### Review SD Budget with SO Program Mgr

- The C/U Project Manager reviews the preliminary SD budget and the A/E SD construction cost estimate with the SO Program Manager.

### Submit SD Budget to SO

- After review with the SO Program Manager, the C/U Project Manager refines the SD budget, based on input received. The C/U Project Manager or President approves the SD budget as a portion of the SD phase submittal Report. The C/U Project Manager includes the approved SD budget in the SD review materials to the SO.



#### C/U Project Mgr Develops DD Budget

- At the end of the DD phase, the C/U Project Manager updates the Project Budget Worksheet, incorporating the A/E DD construction cost estimate. The C/U Project Manager also needs to update budget amounts for the FF&E, technology needs, and other categories, based on estimates that are more current and accurate.

#### Review DD Budget with SO Program Mgr

- The C/U Project Manager reviews the updated DD budget with the SO Program Manager.

#### Refine DD Budget

- After review with the SO Program Manager, the C/U Project Manager refines the DD budget, based on input received. The C/U Project Manager or President approves the DD budget and authorizes the A/E team to proceed into the CD phase.

#### C/U PM Develops CD Budget

- After the A/E submits the CD construction cost estimate to the C/U Project Manager and after the construction cost estimate is reconciled to the construction budget, the C/U Project Manager updates the CD budget. All budget categories have their estimates refined based on more current and accurate information from the construction documents.

#### Review CD Budget with SO Program Mgr

- Review CD budget with SO Program Manager. The C/U Project Manager reviews the CD budget with the SO Program Manager.

#### Refine CD Budget

- After review with the SO Program Manager, the C/U Project Manager refines the CD budget, based on input received. The C/U Project Manager or President approves the CD budget and authorizes the documents for bidding.

#### C/U PM Develops Construction Budget

- After advertisement, construction bids are received. After the apparent low bidder is determined, the C/U Project Manager incorporates the apparent low bid amount into the construction budget. The budget is updated based on the actual construction contract award amount, and categories are adjusted as needed to reconcile the construction budget within the funds available. The C/U Project Manager or President approves the construction budget.

## 7. Scheduling

The project schedule contains all the activities, the duration and the proper sequence that the activities need to occur to complete the project. In addition to the construction schedule, the project schedule needs to include significant milestone dates; for example, the academic calendar, FF&E procurement, user group occupancy, etc.

The design schedule is agreed to by the A/E and the C/U PM and detailed by the A/E contract. The C/U PM, in consultation with the A/E and OR, will determine the amount of review time needed for each project. Review time needs to be sufficient and include all user groups and the SO. The scheduled review time contemplates that each phase requires no more than one review and revision to bring the documents into conformance. Additional time for follow-up reviews will extend the schedule. The process for SO Schematic Design review and formal approval is a thirty-day duration.

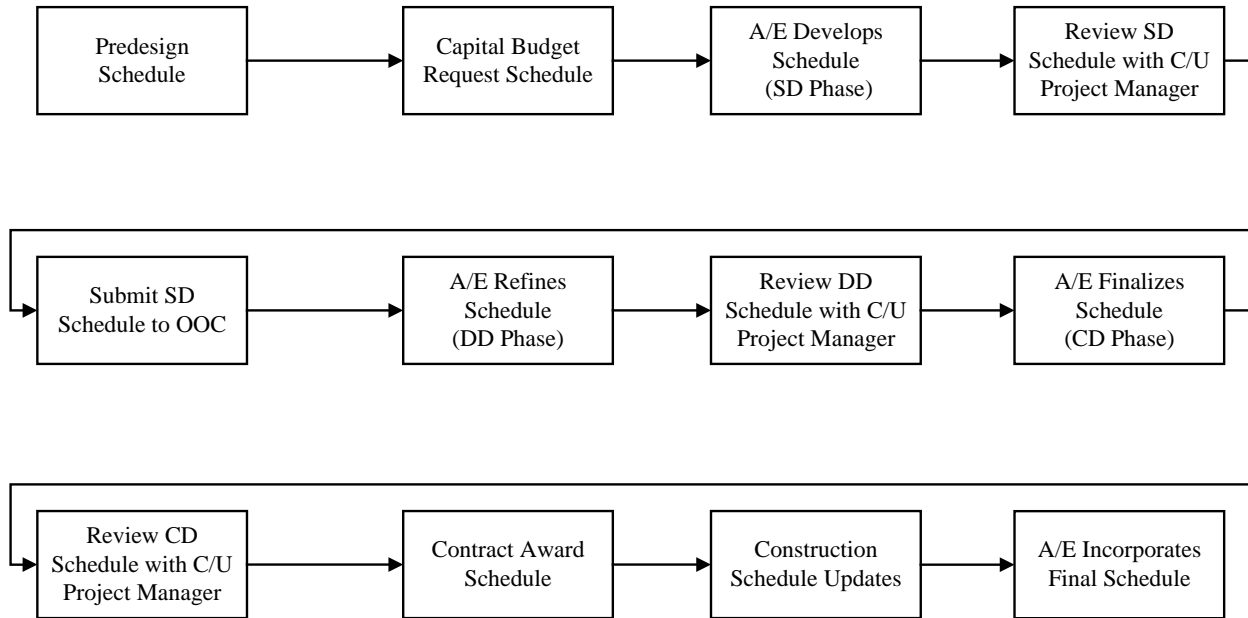
A construction schedule is prepared by the A/E, included in the bid documents and agreed to by the A/E and the C/U Project Manager. The C/U Project Manager, in consultation with the A/E and OR, will determine key milestone dates for the project schedule. The construction schedule will be summarized by major milestones such as site clearing, foundations, building enclosure, Substantial Completion, etc., and will be included in the Contract Documents. The construction schedule is critical to inform the Contractor of dates to be met, provides a basis for determining when liquidated damages apply and allows time for move in and furnishing after construction. The construction schedule should cover the period from bidding through occupancy.

MnSCU does not prescribe scheduling software tools however, the format must follow the Critical Path Method (CPM) of scheduling.

After award of contract, the Contractor shall submit a construction schedule to the A/E for review. The schedule shall not exceed the Contract Documents specified duration of the work and the construction schedule shall be updated/kept current in accordance with the Contract Documents.

The construction schedule shall list construction activities, with actual and planned start and end dates, provided in a Critical Path Method (CPM) format. Ten (10) days after the Notice to Proceed is issued, the Contractor shall submit the first such construction schedule. At minimum, the Contractor shall update the construction schedule monthly. With each Application for Payment, an updated schedule shall be submitted for review. If the construction schedule indicates a change to the project duration as defined by the Contract Documents, the construction schedule shall be accompanied by a request for change order.

## 7.1 Scheduling



### Predesign Schedule

- The C/U Project Manager, with input from the Predesign A/E, develops the Predesign project schedule. The Predesign project schedule is reviewed by the SO Facilities Department Planning and Programming and comments are sent to the C/U Project Manager.

### Capital Budget Request Schedule

- The comments from the SO Facilities Department Planning and Programming are incorporated into the Predesign schedule. The updated schedule is used to submit the Capital Budget Request (CBR) for approval.

### A/E Develops Schedule (SD Phase)

- Once the project has been approved and the A/E selected, the A/E, with input from the C/U Project Manager and the SO, develop a project schedule early in the SD phase. This schedule shall be developed in conjunction with the CBR schedule and the A/E contract schedule requirements.

### Review SD Schedule with C/U Project Manager

- The A/E reviews the Schematic Design (SD) Project Schedule with the C/U Project Manager and the SO. The C/U Project Manager and C/U President approve the SD project schedule.

#### Submit SD Schedule to SO

- The C/U Project Manager includes the approved Schematic Design (SD) project schedule in the SD Submittal review materials to the SO.

#### A/E Refines Schedule (DD Phase)

- At the end of the Design Development (DD) phase, the A/E refines the project schedule, incorporating input from the C/U Project Manager and the SO Program Manager.

#### Review DD Schedule with C/U Project Manager

- The A/E reviews the updated Design Development (DD) project schedule with the C/U Project Manager and C/U President for their review and approval.

#### A/E Finalizes Schedule (CD Phase)

- Toward the end of the Construction Document (CD) phase, the A/E finalizes the project schedule, incorporating input from the C/U Project Manager and the SO Program Manager. This schedule shall be included in the Contract Documents for bidding.

#### Review CD Schedule with C/U Project Manager

- The A/E reviews the Construction Document (CD) project schedule with the C/U Project Manager and C/U President for their approval.

#### Contract Award Schedule

- After construction bids are received and the apparent low bidder determined, the A/E reviews the apparent low bidder's schedule information for compliance with the overall project schedule with input from consultants and the SO Program Manager. The C/U Project Manager also reviews the construction schedule.

#### Construction Schedule Updates

- Ten (10) days after the Notice to Proceed is issued, the Contractor shall submit their initial construction schedule. At minimum, the Contractor shall update the construction schedule monthly. With each Application for Payment, an updated schedule shall be submitted for review. If the schedule indicates a change to the project duration as defined by the Contract Documents, the schedule shall be accompanied by a request for change order.

#### A/E Develops Final Schedule

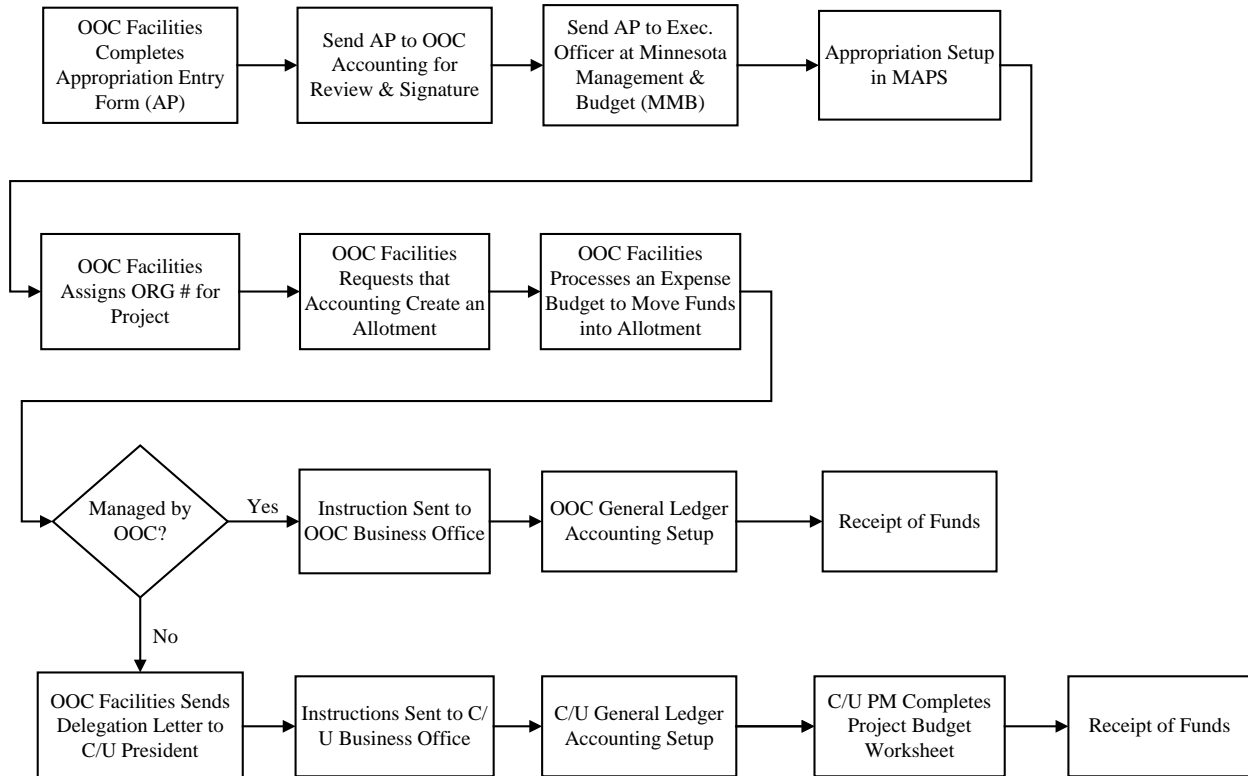
- At the conclusion of the project and after final completion of the Contractor, the A/E creates a final project schedule for the project files which will serve as a reference for future project planning.

## **8. Project Reporting**

## 9. Financial Management

This section outlines the accounting processes that support managing a project and the interaction between the C/U Project Manager, C/U Business Office and the System Office.

### 9.1 Project Accounting Setup



#### SO Facilities Completes Appropriation Entry Form (AP)

- Budget Officer completes the AP form for each appropriation unit
- HEAPR is assigned a single appropriation unit in MAPS.
- Each capital project is assigned its own appropriation unit in MAPS
- The total contingency amount for all capital projects is assigned a separate appropriation unit in MAPS. (This line only applies if the legislature mandates a separate contingency account. Contact the SO to see if this applies to each capital project).

#### Send AP to SO Accounting for Review & Signature

- The AP is sent to the SO MAPS Coordinator for review and signature

Send AP to Executive Budget Officer at Department of Management and Budget (DOMB)

- The SO MAPS Coordinator forwards the AP to the Executive Budget Officer at the Department of Management and Budget (DOMB)

Appropriation Setup in MAPS

- The Executive Budget Officer at the DOMB has the Appropriation set up in MAPS

SO Facilities Assigns ORG # for Project

- For each Project, the SO Facilities Budget Officer creates a new Organization Number (ORG #) in MAPS from the Organization Index
- Each project's contingency is assigned a separate ORG # in MAPS

SO Facilities Requests that Accounting Create an Allotment

- The SO Facilities Budget Officer requests that the SO MAPS Coordinator create an Allotment, with zero balance, for that ORG #

SO Facilities Processes an Expense Budget to Move Funds into Allotment

- The SO Facilities Budget Officer processes a transfer budget to move funds from the appropriation unit into the allotment

Managed by SO

- In over 90% of projects, these funds will be transferred and the project will be managed by the C/U

Instructions Sent to SO Business Office

- SO Facilities sends accounting instructions to the SO Business Office

SO General Ledger Accounting Setup

- The SO prepares the general ledger accounting setup

Receipt of Funds

- The SO Business Office processes a revenue receipt and sets up the project accounting system by entering the budget with object codes as completed by the SO PM

SO Facilities Sends Delegation Letter to C/U President

- The SO will prepare a delegation letter for Vice Chancellor approval and signature

Instructions Sent to C/U Business Office

- SO Facilities sends accounting instructions to the C/U Business Office

C/U General Ledger Accounting Setup

- The C/U PM completes the Project Budget Worksheet with assistance from the SO before funds will be released.

#### C/U PM Completes Project Budget Worksheet

- The C/U PM completes the Project Budget Worksheet with assistance from the SO before funds will be released.

#### Receipt of Funds

- The C/U Business Office processes a revenue receipt and sets up the project accounting system by entering the budget with object codes as completed by the C/U PM.

## 9.2 Accounting Codes

Accounting object codes are used to track each portion of the project and build a historical database to help estimate projects in the future.

Each part of the entire project budget should be assigned an object code based on the type of activity. The Project Budget Worksheet should be completed with assistance from your SO Program Manager. A definition of each object code and how it should be assigned is included in **Project Budget Worksheet**.

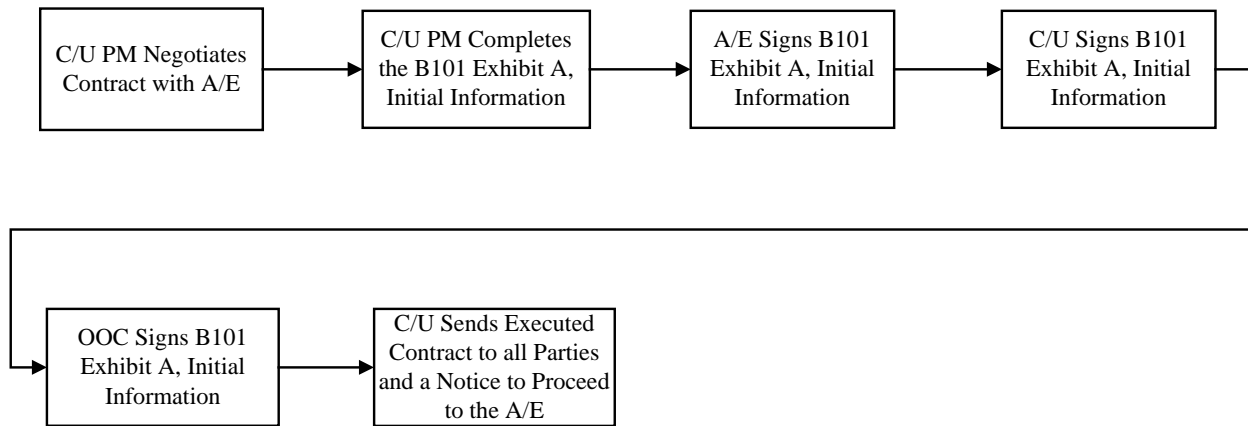
Once the object codes have been filled out in the Project Budget Worksheet, the C/U Project Manager uses the object codes when completing contracts or requisitions for purchases.

## 9.3 Contracts

The following flow charts and descriptions can be used as a guide for completing the following contracts. This section outlines the process on how to fill out the contract once the terms have been agreed on. See Sections 2 & 3 for the negotiation or bidding phase.



### 9.3.1 A/E Contracts



*NOTE: for Projects that utilize the MnSCU Unifier system, the contracts may be executed electronically.*

#### C/U PM Negotiates Contract with A/E

- After the final A/E design team is selected, the C/U Project Manager, with assistance from the SO Program Manager, will negotiate the contract fees and reimbursables. For contracts over \$100,000, use the MnSCU Standard Owner-Architect Agreement AIA B101 as amended by the SO. Contact the SO Program Manager to obtain the most current copy of the AIA B101 or B103 Document.

#### C/U PM Completes the B101 or B103 Exhibit A, Initial Information

- The AIA Documents B101-2007 Exhibit A, Initial Information is part of the AIA B101 or B103 document. The Attachment lists the entire schedule, fee, reimbursable and payment information related to the contract. The C/U Project Manager, with assistance from the SO Program Manager, completes the B101 Exhibit A, Initial Information and sends the completed B101 contract to the A/E for signature.

#### A/E Signs B101 or B103 Exhibit A, Initial Information

- The A/E signs the B101 Exhibit A, Initial Information and sends the AIA B101 or B103 document, the B101 or B103 Exhibit A, Initial Information and required insurance document(s), to the C/U Project Manager for review and signature.

#### C/U Signs B101 or B103 Exhibit A, Initial Information

- The C/U Project Manager signs the B101 or B103 Exhibit A, Initial Information and forwards the B101 or B103 Exhibit A, Initial Information to the C/U Business Office to sign for encumbrance. Once encumbered, all documents are forwarded to the SO Program Manager.

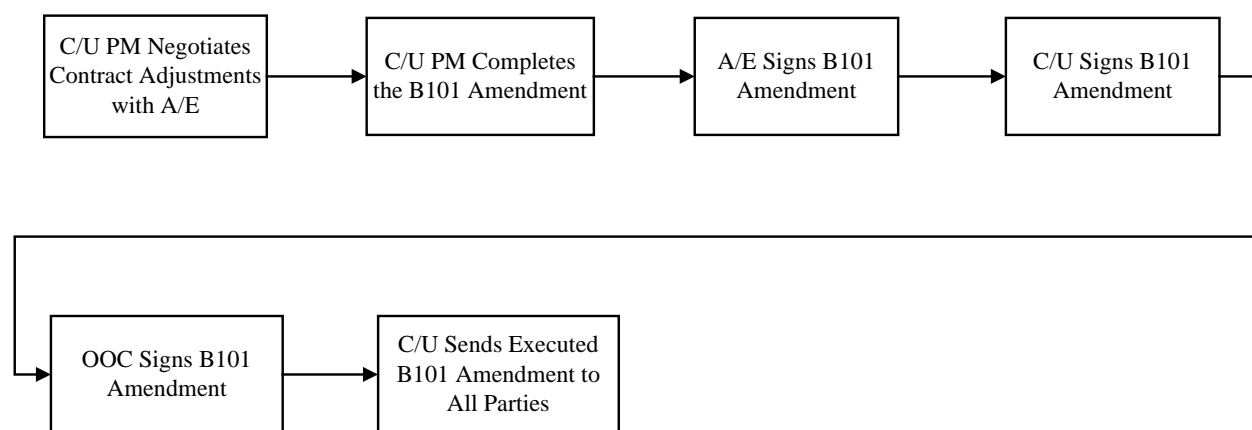
### SO Signs B101 or B103 Exhibit A, Initial Information

- The SO Facilities signs the B101 or B103 Exhibit A, Initial Information and returns it to the C/U for signature as to Form and Execution. The fully executed contract is sent to the C/U Project Manager for distribution.

### C/U Sends Executed Contract to All Parties and a Notice to Proceed to the A/E

- Once all parties sign the contract, the C/U Project Manager issues the Notice to Proceed to the A/E, and the Schematic Design phase can commence.

#### 9.3.1.1 A/E Contract Changes



*NOTE: for Projects that utilize the MnSCU Unifier system, the contracts may be executed electronically.*

### C/U PM Negotiates Contract Adjustment with A/E

- The C/U Project Manager, with assistance from the SO Program Manager, will negotiate any contract changes with the A/E. Use AIA Documents B101 or B103-2007 Amendment form for changes to the AIA B101 or B103 Document.

### The C/U PM Completes the B101 or B103 Amendment

- The C/U Project Manager, with assistance from the SO Program Manager, completes the B101 or B103 Amendment and updates the project budget worksheet to reflect current changes. The C/U Project Manager sends the B101 or B103 Amendment to the A/E for signature.

### A/E Signs Amendment

- The A/E signs the B101 or B103 Amendment and sends it to the C/U Project Manager for signature.

### C/U Signs the B101 or B103 Amendment

- The C/U Project Manager signs the B101 or B103 Amendment and sends it to the C/U Business Office to sign for encumbrance and forwards it to the SO Program Manager.
- SO Signs the B101 or B013 Amendment

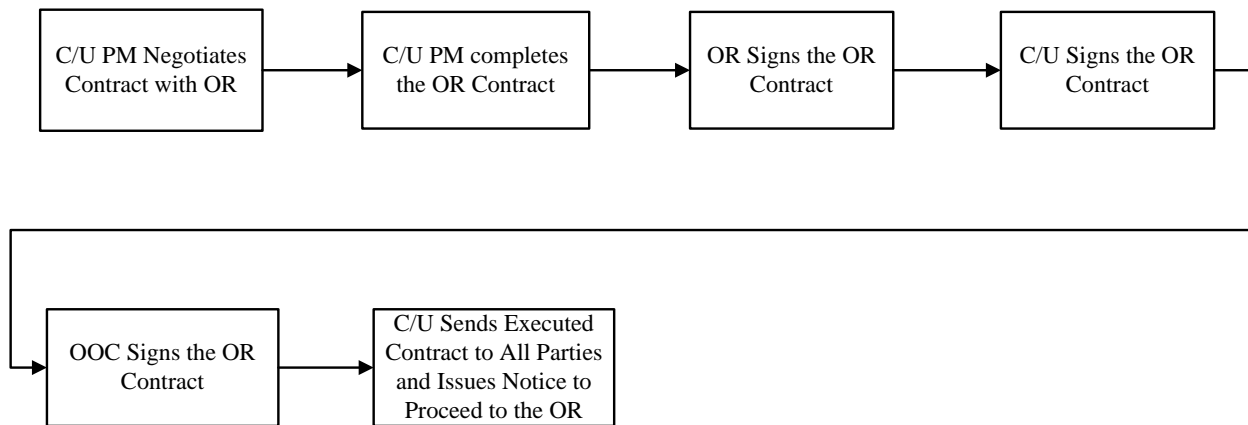
- The SO Facilities signs the B101 or B103 Amendment and sends it to the C/U Project Manager for the C/U Business Office to verify for Form and Execution.

C/U Sends Executed B101 or B103 Agreement to All Parties

- Once the B101 or B103 Amendment is signed by all parties, the C/U Project Manager distributes copies to all parties and the contract changes can commence.

### 9.3.2 OR (Owner’s Representative) Contracts

*NOTE: for Projects that utilize the MnSCU Unifier system, the contracts may be executed electronically.*



C/U PM Negotiates Contract with OR

- After the selection committee selects the OR, the C/U Project Manager, with assistance from the SO Program Manager, will negotiate the contract fees and reimbursables with the OR.

C/U PM Completes the OR Contract

- The C/U Project Manager, with assistance from the SO Program Manager, completes the Owner’s Representative (OR) Contract and sends the contract to the OR for signature. See section 2.2.3, OR Selection for related information.

OR Signs the OR Contract

- The OR signs the OR Contract and sends contract with required insurance documentation to the C/U Project Manager for signature.

C/U Signs the OR Contract

- The C/U Project Manager signs the OR Contract and forwards to the C/U Business Office to sign for encumbrance and forwards the contract and insurance documentation to the SO.

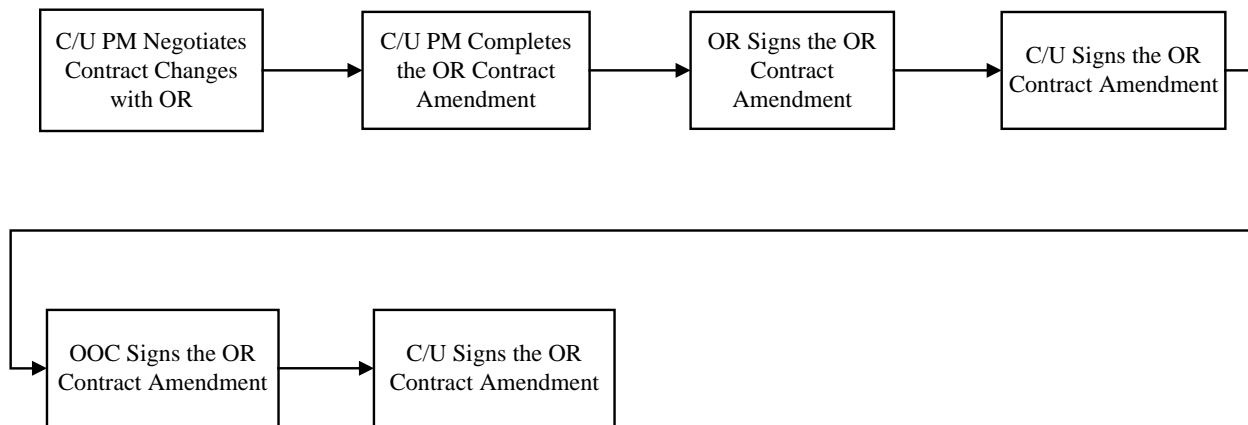
#### SO Signs the OR Contract

- The SO Facilities signs the OR Contract and sends the contract to the C/U Project Manager for the C/U Business Office to verify for Form and Execution.

#### C/U Sends Executed Contract to All Parties and Issues Notice to Proceed to the OR

- Once the contract is signed by all parties, the C/U Project Manager issues the Notice to Proceed to the OR and their work can commence.

### 9.3.2.1 OR Contract Changes



*NOTE: for Projects that utilize the MnSCU Unifier system, the contracts may be executed electronically.*

#### C/U PM Negotiates Contract Changes with OR

- The C/U Project Manager, with assistance from the SO Program Manager, will negotiate the contract changes with the OR.

#### C/U PM Completes the OR Contract Amendment

- The C/U Project Manager, with assistance from the SO Program Manager, completes the **Owner's Representative (OR) Contract Amendment** and sends the Amendment to the OR for signature.

#### OR Signs the OR Contract Amendment

- The OR signs the OR Contract Amendment and sends it to the C/U Project Manager for signature.

#### C/U Signs the OR Contract Amendment

- The C/U Project Manager signs the OR Contract Amendment and forwards it to the C/U Business Office to sign for encumbrance and forwards the contract to the SO.

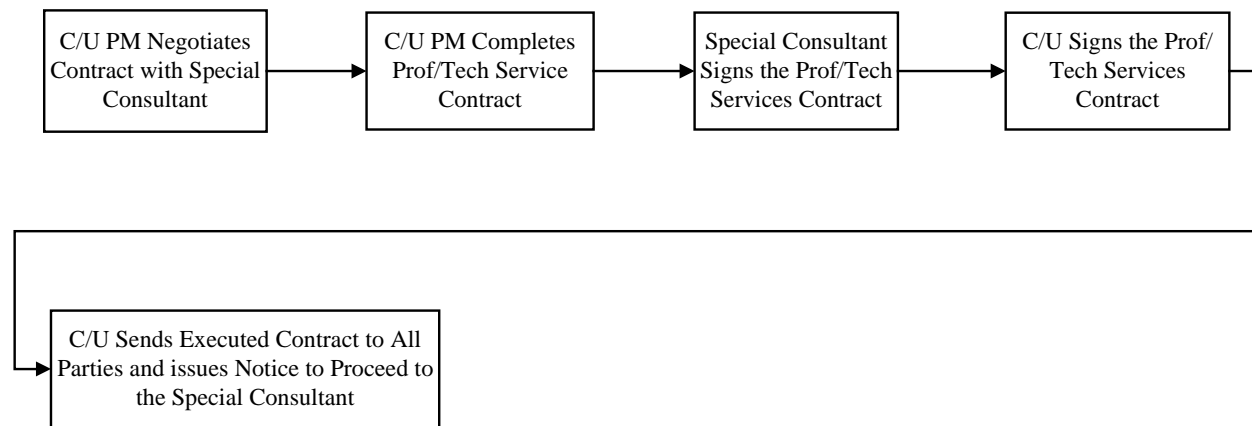
#### SO Signs the OR Contract Amendment

- The SO Facilities signs the OR Contract Amendment and sends it to the C/U Project Manager for the C/U Business Office to verify for form and execution.

#### C/U Signs the OR Contract Amendment

- Once all parties sign the OR Contract Amendment, the C/U Project Manager distributes copies to all parties and the contact changes can commence.

### 9.3.3 Special Consultant (SC) Contracts



#### C/U PM Negotiates Contract with SC

- After the SC has been selected, the C/U Project Manager, with assistance from the SO Program Manager, will negotiate the contract fees and reimbursables.

#### C/U PM Completes P/T Services Contract

- Use the P/T Services Contract from the MnSCU Finance Contract and Purchasing webpage for SC Contracts. In addition, the contract form is within Unifier for projects managed on this system.
- The C/U Project Manager, with assistance from the SO Program Manager, completes the P/T Services Contract and sends it to the SC for signature. **Note:** Always check the MnSCU Finance General Contract Forms website or Unifier to assure you are using the most current form.

#### SC Signs the P/T Services Contract

- The SC signs the P/T Services Contract and sends contract to the C/U Project Manager for signature.

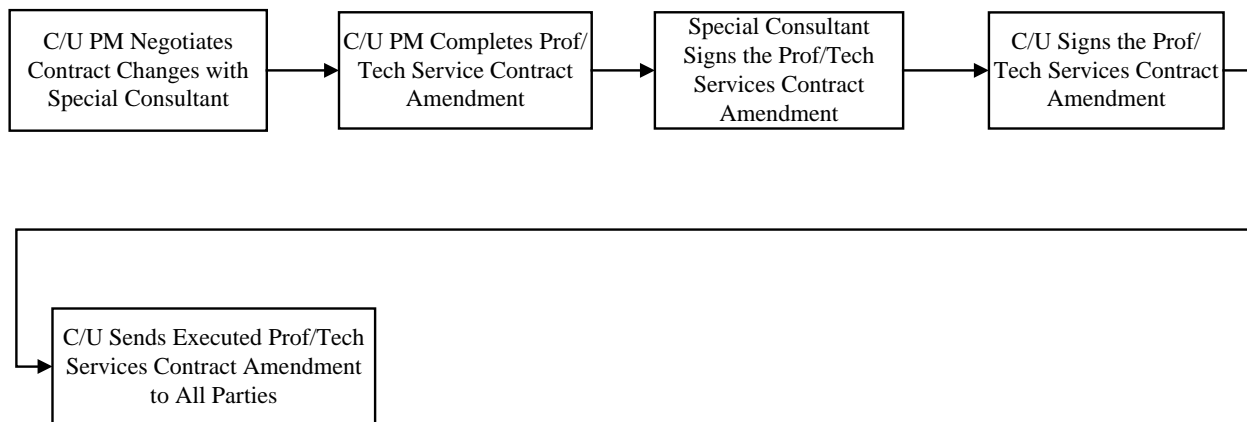
### C/U Signs the P/T Services Contract

- The C/U Business Office signs for encumbrance and forwards the contract to the C/U Project Manager for signature. The C/U secures signature as to form and execution.

### C/U Sends Executed Contract to All Parties and issues Notice to Proceed to the SC

- Once all parties sign the contract, the C/U Project Manager issues the Notice to Proceed to the S/C and distributes the contract to all parties.

#### 9.3.3.1 SC Contract Changes



### C/U PM Negotiates Contract Changes with SC

- The C/U Project Manager, with assistance from the O/C Program Manager, will negotiate the contract changes with the SC.

### C/U PM Completes P/T Services Contract Amendment

- Use the P/T Services Contract from the MnSCU Finance Contract and Purchasing webpage for SC Contracts. In addition, the contract form is within Unifier for projects managed on this system.
- The C/U Project Manager, with assistance from the SO Program Manager, completes the P/T Services Contract Amendment and sends the Amendment to the SC for signature.  
**Note:** Always check the MnSCU Finance General Contract Forms website or Unifier to assure you are using the most current form.

### SC Signs the P/T Services Contract Amendment

- The SC signs the P/T Services Contract Amendment and sends it to the C/U Project Manager for signature.

### C/U Signs the P/T Services Contract Amendment

- The C/U Project Manager forwards the contract amendment to the C/U Business Office to sign for encumbrance and then the C/U Project Manager signs the P/T Services

Contract Amendment on behalf of the C/U. Following the signature of the C/U Project Manager, the amendment is signed by the C/U as to Form and Execution.

C/U Sends Executed Prof/Tech Services Contract Amendment to All Parties

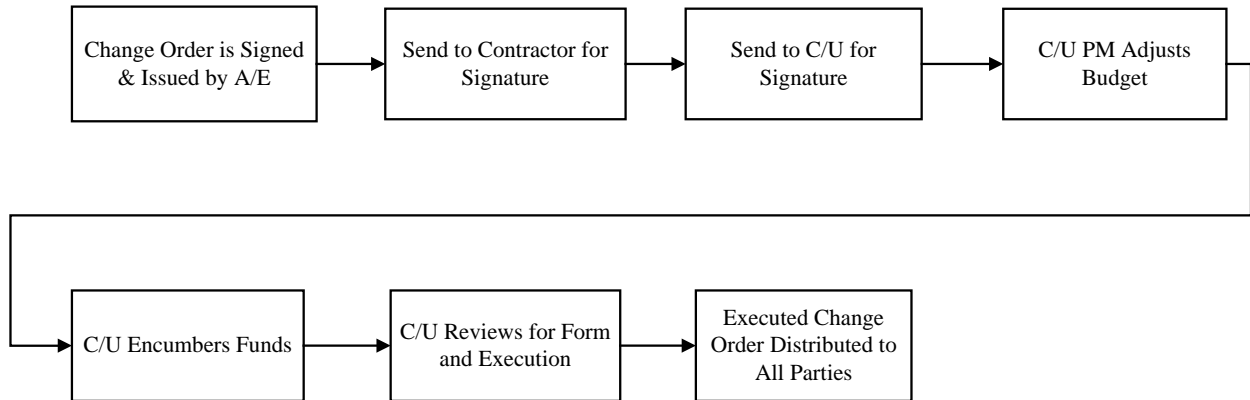
- Once the Professional/Technical Services Contract Amendment is signed by all parties, the C/U Project Manager distributes copies to all parties and the contact changes can commence.

### 9.3.4 Construction Contract

See 3.7 Contracts and Awards

*Note: for projects that utilize the MnSCU Unifier system, the contracts may be executed electronically.*

#### 9.3.4.1 Construction Contract Changes



*Note: for projects that utilize the MnSCU Unifier system, the contracts may be executed electronically.*

Change Order is Signed & Issued by A/E

- The A/E creates the change order on the **Change Order for Construction Contract - MnSCU022** form, which may encompass approved Proposal Requests (PRs), Construction Change Directives (CCDs), and/or Architectural Supplemental Instructions (ASIs).
- The A/E signs the change order in the signature block and sends it to the Contractor for signature.

Send to Contractor for Signature

- The Contractor signs the Change Order in the signature block and sends it to the C/U Project Manager for signature.

Send to C/U for Signature

- The C/U Project Manager forwards the Change Order to the C/U Business Office to sign for encumbrance.

#### C/U PM Adjusts Budget

- The C/U Project Manager updates the Project Budget Worksheet.

#### C/U Encumbers Funds

- The C/U Business Office encumbers the funds, signs the Change Order and returns MnSCU022 form to the C/U Project Manager.

#### C/U Reviews for Form and Execution

- The C/U Project Manager reviews the Change Order for form and execution and signs the Change Order in the signature block on behalf of the C/U.

#### Executed Change Order Distributed to All Parties

- Once the MnSCU022 – Change Order for Construction Contract form is signed by all parties, the C/U Project Manager distributes copies to all parties and the contract changes can commence.

## 9.4 Public Art Accounting

Under the Joint Powers Agreement between MnSCU and the Minnesota State Arts Board, a C/U may request to manage the art acquisition process rather than the Arts Board. The C/U is then responsible for soliciting, selecting, and contracting for Art under the Minnesota Percent for Art program and in conjunction with MnSCU's board policies, procedures and contract requirements. See the **Art Guidelines** in 11.1 Forms and Checklists.

The C/U may elect for the Minnesota Arts Board to manage the art acquisition process. The following is the procedure for transferring the Percent for Art funds on construction projects to the Arts Board:

#### **Joint Powers Agreement**

Confirm with the SO Program Manager that the Joint Powers Agreement has been executed with the Minnesota State Arts Board for the project.

#### **MAPS**

The SO Facilities Project Budget Officer will process the transfer to the Arts Board in MAPS Accounting.

#### **Minnesota State Colleges and Universities**

The SO Facilities Project Budget Officer will contact the Campus Assistance Unit Supervisor and provide the following information:

- College
- Cost center



- Dollar amount
- Type of project (new construction or addition)

The Campus Assistance Unit Supervisor will enter an expense voucher (AC0212UG screen) in the appropriate database debiting object code 5200 if this is a new construction project, or object code 5212 if it is an addition or extension of an existing building project.

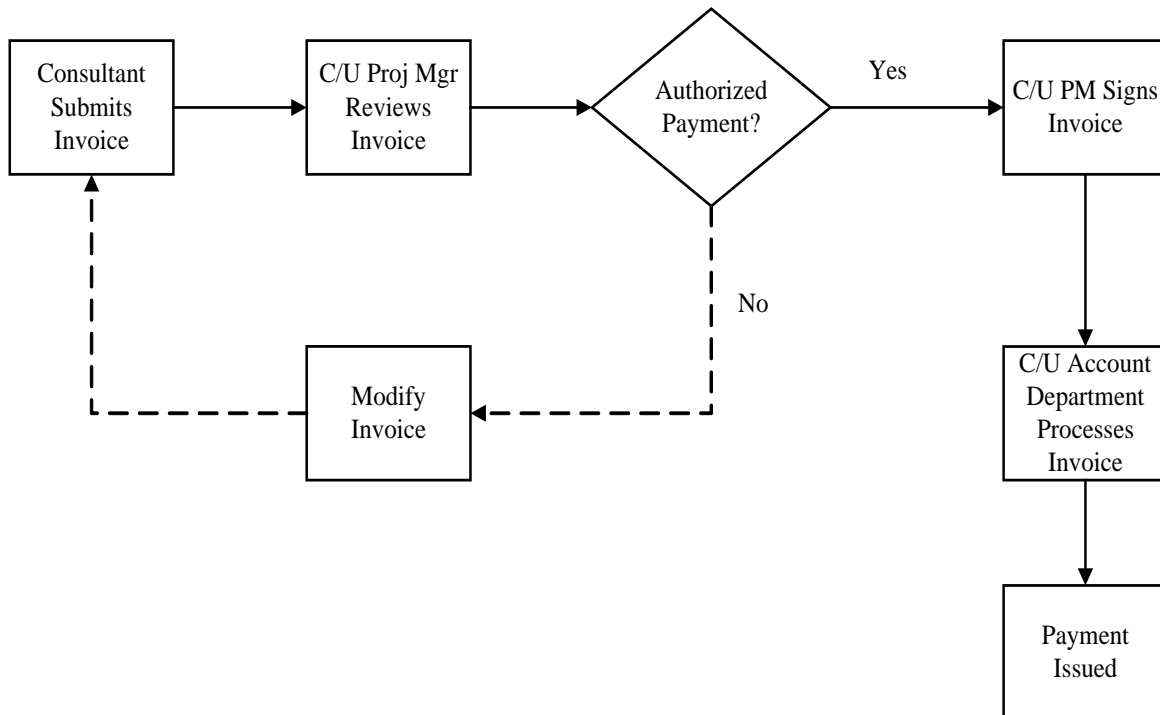
The Campus Assistance Unit Supervisor will notify the SO Project Budget Officer of the transaction entry and provide the transaction number.

If this is a delegated project, the SO Project Budget Officer will inform the college of the transaction entry and provide the transaction number.

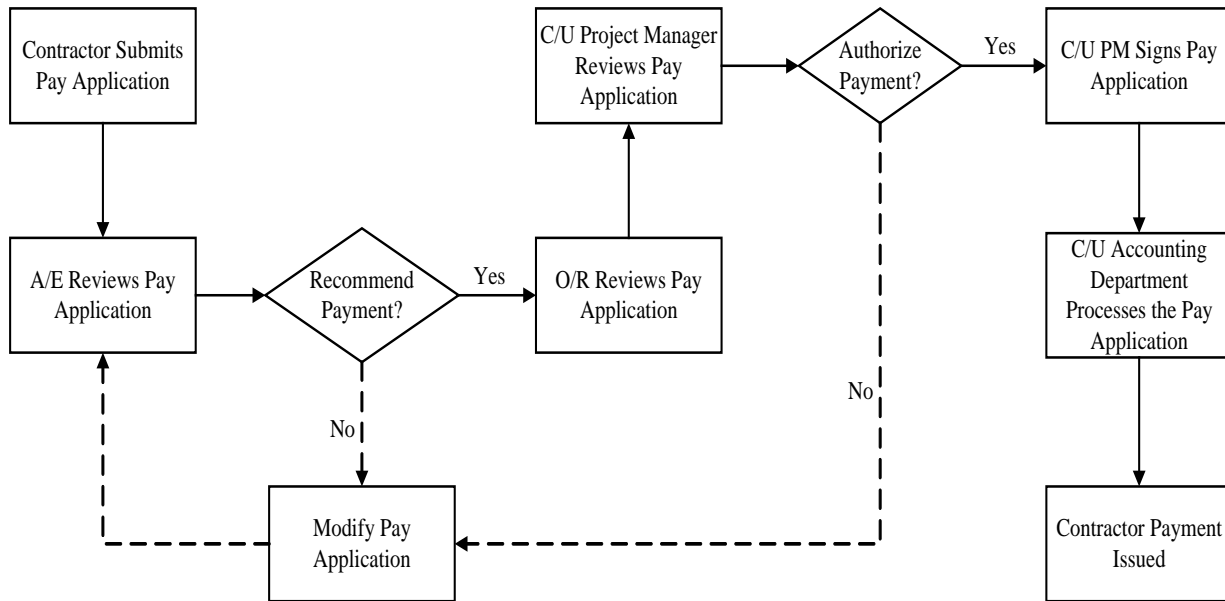
## 9.5 Invoice Processing

The following diagrams detail the process for reviewing and processing invoices for various contracts. The diagrams follow the process laid out in the consultant contract or the construction contract (AIA Document A201 General Conditions of the Contract for Construction).

### 9.5.1 Consultant Invoices



## 9.5.2 Contractor Payment Applications



## 9.6 Contingencies

Calculating the construction contingency amount is an important part of completing the Project Budget Worksheet. The construction contingency should be approximately 5-10% of the construction cost of the project. A lower construction contingency of 5% could be used for larger new buildings, but smaller renovations should use at least 10%. The construction contingency should only be used to cover unpredictable or unforeseen conditions of construction and should not be used for changes to enhance or expand the project. The construction contingency is to be used only for construction items. Contingencies for design, desired enhancements or FF&E should be calculated separately. Change orders to the construction contract are to be charged against the appropriate contingency account until that account is exhausted or until the last construction change order is executed. When the construction contract has been paid in full, the contingency accounts can be evaluated and prioritized for use on the project.

The C/U Project Manager will need to update the project budget and the C/U Accounting Department will need to show the encumbrances against the contingency accounts when changes are made.

In 2002 and 2003, the Legislature mandated that MnSCU separately track and account for contingency funds on Capital projects. Please contact the SO when setting up a Capital project to verify whether the contingency account needs to be tracked as a separate cost code.

## 9.7 FF&E

Furniture, fixtures, and equipment (FF&E) can be part of the construction contract, contracted for separately or a combination of both. The C/U Project Manager will discuss the purchasing procedure and installation of FF&E with the A/E, OR, and C/U user groups. Any FF&E that is not included in the construction contract will need to be closely coordinated for power, installation, and space requirements, as well as timing of deliveries. If FF&E items delay the construction contractor, they may submit a claim.

For purchasing FF&E items, review the procedures and use the forms located at the MnSCU Finance Division Website under Contracts and Purchasing at the link below:  
[www.finance.mnscu.edu/contracts-purchasing/index.html](http://www.finance.mnscu.edu/contracts-purchasing/index.html)

## 9.8 Financial Reporting

### Background

Government Accounting Standards (GASB No. 34, par. 18-22) require capital assets to be reported on the statement of net assets at historical cost and depreciated over the estimated useful life of the asset. The MnSCU System Procedure [Capital Asset 7.3.6](#) provides guidance to ensure conformity with Generally Accepted Accounting Principles (GAAP) and Government Accounting Standards Board (GASB).

MnSCU's System Procedure [Capital Asset 7.3.6](#) defines the capital asset categories and how the various costs associated with capital assets should be treated. The procedure establishes the following cost threshold for capitalization by category:

- Land improvements – projects equal to or greater than \$100,000
- Buildings – projects equal to or greater than \$100,000
- Building improvements – projects equal to or greater than \$100,000

**Financial Reporting Responsibility:**

|  | <b>Audited Institutions</b>  | <b>Non-audited Institutions</b>  |
|--|--|--|
| <b>Projects paid with capital bonding proceeds</b> | Institution Business Office  | System Office, Financial Reporting<br>With institution sign off  |
| <b>Projects paid with institutional funds</b>      | Institution Business Office<br><br>(Contract retainage at fiscal year-end should be reported as an account payable.) | Institution Business Office annually reports to SO, Fin Reporting:<br>a) Project name/number and total estimated cost of the project<br>b) Estimated completion date<br>c) Applicable Apron, GL and cost centers and<br>d) Current fiscal year expenditures, <b>including contract retainage</b> payable as of 6/30* |

## 10. Contract Management

This section describes the process and provides guidelines to administer frequently used Facility contracts. This section should serve as a resource to those who manage construction projects and/or operate and maintain physical facilities in support of MnSCU's mission.

### 10.1 Construction Bidding & Contract Forms

#### Construction Bidding Requirements:

Prevailing Wage Payroll Procedures & Guidelines (see 11.1 Forms and Checklists)

MnSCU120 - Construction Contract Guidelines for Non-Advertised Bid less \$50K

MnSCU110 - Construction Contract Guidelines - Advertised Bid over \$50K

Div0 – Instructions to C/U for Preparation of Division 0 forms

#### Division 0 Documents

|                  |  |
|------------------|--|
| Section 00 01 10 | Table of Contents  |
| Section 00 11 13 | Advertisement for Bids   |
| Section 00 21 13 | Instructions to Bidders  |
| Section 00 22 13 | Supplemental Instructions to Bidders (New 5/9/08, Unifier projects only)                       |
| Section 00 41 13 | Bid Form   |
| Section 00 43 13 | Bid Bond for Construction Project  |
| Section 00 45 36 | Notice to Bidders - Affirmative Action Certificate of Compliance                               |
| Section 00 45 46 | Special Instructions for Non-Minnesota Contractors   |
| Section 0045 47  | Exemption from Surety Deposits for Out-of-State Contractors, Form SD-E                         |
| Section 00 45 48 | Instructions for Form SD-E   |
| Section 00 52 00 | Agreement Form Documents Incorporated by Reference   |
| Section 00 62 76 | Application for Payment - Construction Work, MnSCU060  |
| Section 00 65 73 | Instructions for Form IC134  |
| Section 00 72 00 | General Conditions of the Contract for Construction  |
| Section 00 73 46 | Prevailing Wage Requirements and Project Specific Wage Rates                                   |
| Section 00 73 80 | Special Conditions of the Contract for Construction, Time of Completion and Liquidated Damages |

## **Construction Contract Forms: General**

Data Disclosure Form, MnSCU001 - Preparation Instructions

Data Disclosure Form, MnSCU001

ACORD25 Certificate of Insurance sample form - Worker's Compensation & Liability

## **Construction Contract Forms: \$50,000 or Less**

MnSCU120 - Instructions to College/University - Preparation of MnSCU120

MnSCU120 - Agreement for Construction Services for Non-Advertised Bid Projects

Instructions to College/University - MnSCU120 - Instructions to CU - Letter of Award Sample

MnSCU120 - Instructions to Contractor - Preparation of Agreement for Construction Services for Non-Advertised

Instructions to College/University - MnSCU120 - Instructions to CU - Notice to Proceed Letter Sample

## **Construction Contract Forms: Over \$50,000**

MnSCU110 - Instructions to CU - Preparation -Agreement for Construction Services for Advertised Bid Projects over \$50K

MnSCU110 - Agreement for Construction Services for Advertised Bids

Instructions to College/University - Preparation of Forms MnSCU130, MnSCU133 and MnSCU135 Agreement for Construction Services for Advertised Bid Projects

MnSCU130 - Payment and Performance Bond for Construction Projects

MnSCU133 - Corporate Acknowledgment for Contractor

MnSCU135 - Acknowledgment of Corporate Surety

Instructions to College/University - MnSCU110 - Instructions to CU - Letter of Award Sample

MnSCU110 - Instructions to Contractor Preparation of Agreement for Construction Services for Advertised Bid Projects

Instruction to College/University - MnSCU110 - Instructions to CU - Notice to Proceed Letter Sample

**Construction Project Forms:**

Construction Change Directive(CCD) - MnSCU014

Change Order for Construction Contract - MnSCU022

Div0 - Application for Payment - Construction Work - MnSCU060

Prevailing Wage Payroll Information Form - MnSCU073

**10.2 Maintenance/Service Contract Guidelines**

The Maintenance/Service Contracts are to be utilized for maintenance and service items that are not related to building or facilities construction or remodeling.

The contracts allow two options of funding:

Option #1 - The College/University must confirm that funds are available in an active Cost Center for use in encumbering the contract.

Option #2 – The College/University may encumber zero (0) dollars at the time of executing the contract. However, subsequent Purchase Orders at the time of award of work must be executed to confirm that funds are available in an active Cost Center.

**Bidding Requirements:**

MnSCU034 - Maintenance/Service Master Contract Guidelines & Procedures

Instruction to College/University – MnSCU034 – Instruction to C/U - Request for Proposal (RFP) Sample

**Contract Forms:**

MnSCU034 - Maintenance/Service Master Contract – Not Building Construction or Remodeling

MnSCU034 - Instructions to College/University – Preparing Maintenance/Service Master Contract

Instruction to College/University – MnSCU034 – Instruction to C/U - Notice to Proceed Sample Letter

MnSCU034 - Maintenance/Service Master Contract Amendment form

Data Disclosure Form – MnSCU001

Data Disclosure Form, MnSCU001 – Preparation Instructions

### **10.3 Facilities Professional/Technical Consultants Master Contract**

Overview:

A Request for Information (RFI) is published in the State Register approximately every six months inviting architects, engineers, owner representative firms, real estate consultants and other related professional and technical firms to apply for membership on the List. To be included on the List, firms need only to respond to the RFI by the date and in the manner prescribed which includes signing a Master Contract. There is no proficiency screening involved and the List is not to be construed as an “approved” list of consultants, i.e., there is no implied “warranty” of quality of individuals or firms.

To accelerate contracting for Facilities Professional/Technical Consultant Services, the following information is related to the Master Contract List and its procedures.

Facilities Professional/Technical Consultants Contract Overview

Facilities Professional/Technical Consultants Contract Instructions

Facilities Professional/Technical Consultants Master List

Facilities Professional/Technical Consultants Master Contract-Sample



## **11. Appendix**

The appendices contain standard forms and other documents useful in communicating and managing projects. The list provided below organizes these documents by project phase. Use the link to obtain the most current copy of a document.

### **Design Phase**

1. Design Kickoff Meeting Agenda
2. Project Schedule Milestones
3. Project Budget Worksheet
4. Schematic Design Submittal Checklist
5. Schematic Design Signature Sheet
6. Schematic Design Submittal Requirements
7. Schematic Design Approved Letter Template
8. Design Development Submittal Requirements
9. Construction Document Submittal Requirements
10. Design Phase Approval Letter

### **Bidding Phase**

1. Non-Responsible Bidder Information
2. Vendor Preference Information
3. On-Line Distribution of Bidding Documents Information

### **Construction Phase**

1. Pre-Construction Meeting Agenda
2. Field Report Form
3. Request for Information (RFI)
4. Construction Change Directive (CCD) – MnSCU014
5. Change Order Construction Contract - MnSCU022
6. Div0 - Application for Payment – Construction Work - MnSCU060
7. Prevailing Wage Payroll Information Form – MnSCU073

### **Post Construction Phase**

1. A/E 10 Month Checklist
2. Substantial Completion & Closeout Checklist
3. Consent of Surety
4. Div0 – Instructions for Form IC134 - Withholding Affidavit for Contractors

**Additional Forms**

1. Project File Checklist and Retention Schedule
2. AIA Documents B101-2007 Exhibit A, Initial Information form
3. AIA Documents B101-2007 Amendment form
4. Requisition for Purchase Form
5. Responsibility Matrix for Design and Construction Projects
6. Other Purchasing Forms – MnSCU Finance Website
7. Facilities P/T Services Invoice Form

## 11.1 Forms and Checklists

| Line | Name of Form  | MnSCU Form No. | Section No.   | Revision Date |
|------|---|----------------|---------------|---------------|
| 1.   | ACORD25 Certificate of Insurance  |                |               | 4/1/2009      |
| 2.   | AIA Documents B101-2007 Amendment   |                |               | 9/1/2010      |
| 3.   | AIA Documents B101-2007 Exhibit A, Initial Information                        |                |               | 2/12/2010     |
| 4.   | Art Artwork Statement Form  |                |               | 4/1/2009      |
| 5.   | Art Commissioning Contract – MnSCU170   | MnSCU170       |               | 12/3/2010     |
| 6.   | Art Design and Commissioning Contract – MnSCU180                              | MnSCU180       |               | 12/3/2010     |
| 7.   | Art Guidelines  |                |               | 7/1/2009      |
| 8.   | Art Purchase Contract – MnSCU160  | MnSCU160       |               | 4/1/2009      |
| 9.   | Art Timeline & Budget   |                |               | 4/1/2009      |
| 10.  | Builders Exchanges & Plan Room List   |                |               | 4/1/2009      |
| 11.  | Change Order Construction Contract – MnSCU022                                 | MnSCU022       |               | 4/1/2009      |
| 12.  | Construction Change Directive (CCD) – MnSCU014                                | MnSCU014       |               | 4/1/2009      |
| 13.  | Construction Document Submittal Requirements                                  |                |               | 4/1/2009      |
| 14.  | Data Disclosure Form - MnSCU001   | MnSCU001       |               | 9/2/2010      |
| 15.  | Data Disclosure Form, MnSCU001 - Preparation Instructions                     |                |               | 9/10/2010     |
| 16.  | Design Development Submittal Requirements                                     |                |               | 12/15/2010    |
| 17.  | Design Kickoff Meeting Agenda   |                |               | 4/1/2009      |
| 18.  | Design Phase Approval Letter  |                |               | 4/1/2009      |
| 19.  | Design Standards Variance Form  |                |               | 4/1/2009      |
| 20.  | Div0 - Instructions to C/U for preparation of Division 0 forms                |                |               | 7/15/2010     |
| 21.  | Div0 - Table of Contents  |                | Section000110 | 4/1/2009      |
| 22.  | Div0 - Advertisement for Bid  |                | Section001113 | 7/15/2010     |
| 23.  | Div0 – Instruction to Bidders   |                | Section002113 | 10/1/2009     |
| 24.  | Div0 - Supplemental Instructions to Bidders                                   |                | Section002213 | 4/1/2009      |
| 25.  | Div0 – Bid Form   |                | Section004113 | 10/1/2009     |
| 26.  | Div0 – Bid Bond for Construction Project                                      |                | Section004313 | 4/1/2009      |
| 27.  | Div0 - Notice To Bidders - Affirmative Action Certificate Of Compliance       |                | Section004536 | 4/1/2009      |
| 28.  | Div0 - Special Instructions for Non-Minnesota Contractors                     |                | Section004546 | 4/1/2009      |
| 29.  | Div0 - Exemption from Surety Deposits for Out-of-State Contractors, Form SD-E |                | Section004547 | 4/1/2009      |

| Line | Name of Form  | MnSCU Form No. | Section No.   | Revision Date |
|------|---|----------------|---------------|---------------|
| 30.  | Div0 - Instructions for Form SD-E   |                | Section004548 | 4/1/2009      |
| 31.  | Div0 - Agreement Form Documents Incorporated by Reference   |                | Section005200 | 7/1/2009      |
| 32.  | Div0 - Application for Payment – Construction Work  | MnSCU060       | Section006276 | 4/1/2009      |
| 33.  | Div0 - Instructions for Form IC134  |                | Section006573 | 4/1/2009      |
| 34.  | Div0 - General Conditions of the Contract for Construction  |                | Section007200 | 4/1/2009      |
| 35.  | Div0 - Prevailing Wage Requirements and Project Specific Wage Rates                                   |                | Section007346 | 7/1/2009      |
| 36.  | Div0 - Special Conditions of the Contract for Construction, Time of Completion and Liquidated Damages |                | Section007380 | 4/1/2009      |
| 37.  | Facilities P/T Consultants Master List  |                |               | 7/1/2010      |
| 38.  | Facilities P/T Consultants Master Contract Instructions   |                |               | 7/1/2010      |
| 39.  | Facilities P/T Consultants Master Contract Overview   |                |               | 5/6/2009      |
| 40.  | Facilities P/T Consultants Master Contract Sample   |                |               | 4/1/2009      |
| 41.  | Facilities P/T Service Invoice  |                |               | 5/29/2009     |
| 42.  | Facilities Matrix of Interested Consultants   |                |               | 7/1/2010      |
| 43.  | Facilities P/T Services Contracts ( <i>for Finance/Facilities Division used only</i> )                |                |               | 12/23/2010    |
| 44.  | Field Report Form   |                |               | 4/1/2009      |
| 45.  | MnSCU034 – Instruction to CU –Notice to Proceed Letter Sample   |                |               | 4/1/2009      |
| 46.  | MnSCU034 – Instruction to CU –Preparing Maintenance/Service Master Contract                           |                |               | 4/1/2009      |
| 47.  | MnSCU034 – Instruction to CU –Request for Proposal (RFP) Sample                                       |                |               | 8/6/2010      |
| 48.  | MnSCU034 - Maintenance Service Master Contract Amendment  |                |               | 4/1/2009      |
| 49.  | MnSCU034 – Maintenance/Service Master Contract - Not Building Construction or Remodeling              | MnSCU034       |               | 9/13/2010     |
| 50.  | MnSCU034 –Maintenance/Service Master Contract Guidelines & Procedures                                 |                |               | 7/1/2009      |
| 51.  | MnSCU073-Prevailing Wage Procedures   | MnSCU073       |               | 7/1/2009      |
| 52.  | MnSCU073-Instruction to Prevailing Wage Information/Statement of Compliance                           | MnSCU073       |               | 7/1/2009      |
| 53.  | MnSCU073-Prevailing Wage Information/Statement of Compliance  | MnSCU073       |               | 7/1/2009      |
| 54.  | MnSCU110 - Agreement for Construction Services for Advertised Bid Projects                            | MnSCU110       |               | 7/1/2009      |
| 55.  | MnSCU110 - Construction Contract Guidelines-Advertised Bid over \$50K                                 |                |               | 7/1/2009      |

| <b>Line</b> | <b>Name of Form</b>  | <b>MnSCU Form No.</b> | <b>Section No.</b> | <b>Revision Date</b> |
|-------------|--|-----------------------|--------------------|----------------------|
| 56.         | MnSCU110 - Instructions to Contractor Preparation of Agreement for Construction Services for Advertised Bid Projects                                 |                       |                    | 4/1/2009             |
| 57.         | MnSCU110 - Instructions to CU - Letter of Award Sample   |                       |                    | 4/1/2009             |
| 58.         | MnSCU110 - Instructions to CU - Notice to Proceed Letter Sample  |                       |                    | 4/1/2009             |
| 59.         | MnSCU110 - Instructions to CU - Preparation -Agreement for Construction Services for Advertised Bid Projects over \$50K                              |                       |                    | 4/1/2009             |
| 60.         | MnSCU120 – Agreement for Construction Services for Non-Advertised Bid Projects   | MnSCU120              |                    | 7/1/2009             |
| 61.         | MnSCU120 - Construction Contract Guidelines-Non Advertised Bid less \$50K  |                       |                    | 10/1/2009            |
| 62.         | MnSCU120 - Instructions to Contractor - Preparation of Agreement for Construction Services for Non-Advertised Bid Projects                           |                       |                    | 4/1/2009             |
| 63.         | MnSCU120 - Instructions to CU - Letter of Award Sample   |                       |                    | 4/1/2009             |
| 64.         | MnSCU120 - Instructions to CU - Notice to Proceed Letter Sample  |                       |                    | 4/1/2009             |
| 65.         | MnSCU120 - Instructions to CU - Preparation of Agreement for Construction Services for Non-Advertised Bid Projects                                   |                       |                    | 4/1/2009             |
| 66.         | MnSCU130 - Instructions to CU - Preparation of Forms MnSCU130, MnSCU133 and MnSCU135 Agreement for Construction Services for Advertised Bid Projects |                       |                    | 4/1/2009             |
| 67.         | MnSCU130 - Payment and Performance Bond for Construction Projects  | MnSCU130              |                    | 4/1/2009             |
| 68.         | MnSCU133 - Corporate Acknowledgment for Contractor   | MnSCU133              |                    | 4/1/2009             |
| 69.         | MnSCU135 - Acknowledgment of Corporate Surety  | MnSCU135              |                    | 4/1/2009             |
| 70.         | Non-Responsible Bidder Information   |                       |                    | 4/1/2009             |
| 71.         | On-line Distribution of Bidding Documents - Instructions to Architect-Engineer   |                       |                    | 7/23/2010            |
| 72.         | Owner’s Representative (OR) Contract   |                       |                    | 12/3/2010            |
| 73.         | Owner’s Representative (OR) Contract Amendment   |                       |                    | 4/1/2009             |
| 74.         | Owner’s Representative (OR) Request For Proposal (RFP) for Services  |                       |                    | 12/3/2010            |
| 75.         | Owner’s Representative (OR) Request for Proposal Instruction Guide   |                       |                    | 4/1/2009             |
| 76.         | Post Occupancy Evaluation Form   |                       |                    | 4/1/2009             |
| 77.         | Performance Evaluation A/E Form  |                       |                    | 4/1/2009             |
| 78.         | Performance Evaluation A/E Form – Preparation Instructions   |                       |                    | 4/1/2009             |
| 79.         | Post Occupancy Evaluation - Instructions   |                       |                    | 4/1/2009             |
| 80.         | Pre-Construction Meeting Agenda  |                       |                    | 4/1/2009             |
| 81.         | Prevailing Wage – Frequently Ask Questions   |                       |                    | 1/8/2010             |

| <b>Line</b> | <b>Name of Form</b>   | <b>MnSCU Form No.</b> | <b>Section No.</b> | <b>Revision Date</b> |
|-------------|---|-----------------------|--------------------|----------------------|
| 82.         | Prevailing Wage - Instructions to CU - Responding to Requests for Copies of Payroll Records Sample Letter |                       |                    | 4/1/2009             |
| 83.         | Project Budget Worksheet  |                       |                    | 4/1/2009             |
| 84.         | Project File Checklist and Retention Schedule   |                       |                    | 4/1/2009             |
| 85.         | Project Schedule Milestones   |                       |                    | 4/1/2009             |
| 86.         | Request for Information (RFI)   |                       |                    | 4/1/2009             |
| 87.         | Responsibility Matrix for Design and Construction Projects  |                       |                    | 4/1/2009             |
| 88.         | Schematic Design Approved Letter Template   |                       |                    | 4/1/2009             |
| 89.         | Schematic Design Signature Sheet  |                       |                    | 4/1/2009             |
| 90.         | Schematic Design Submittal Checklist  |                       |                    | 12/15/2010           |
| 91.         | Schematic Design Submittal Requirements   |                       |                    | 12/15/2010           |
| 92.         | Substantial Completion & Closeout Checklist   |                       |                    | 4/1/2009             |
| 93.         | Vendor Preference Information   |                       |                    | 7/12/2010            |