7.01 OVERVIEW OF CONSTRUCTION MANAGEMENT ADMINISTRATION

The selection of a Construction Manager (CM) is a very important step in managing the design and construction processes for a planned facility. The CM is responsible for overseeing the design and construction activities that will move an approved facility program through the design process and into construction. Construction management services are typically of two types, agency services or at-risk services. Agency services are provided when a CM serves as an owner's representative on a project where the college holds all design and construction contracts and for which the CM is paid only a fee for services. At-risk services are provided when a CM has direct financial responsibility for a project by holding all design and/or construction contracts and for which the CM is paid for completing all design and/or construction activities performed by the various subcontractors, as well as receives payment for management of the overall project. At-risk CM services may include arrangements that are analogous to a design/build contract or a construction contract where the CM provides the project construction with a separate A/E retained by the college. In both cases, the procurement process is similar to the standard construction process outlined in Section 9.

This section discusses CM that is providing agency services to a college where the college holds all design and construction contracts. The CM receives only a negotiated fee for the desired construction management services appropriate to the project. Other construction delivery methods are presented as case studies in Subsection 7.12.

7.02 SELECTION PROCEDURES

The recommended selection procedures for construction managers are intended to obtain from all interested firms the general qualifications and the special qualifications needed for a specific project. For example, it is suggested that the GSA forms for retaining A/E services (Standard Form 330) may be modified to apply to construction management services.

The advertisement for bids shall be placed in the legal notices section of appropriate newspapers and applicable trade newsletters. In addition, the advertisement may be mailed to industry reporting agencies, such as Blue Reports, Construction Data Corporation, Construction Market Data, Dodge Reports, the Maryland-Washington Minority Contractors Association, and Maryland Contract Weekly.

The CM firms interested in performing services for the college should submit appropriate information for the college's review and evaluation. Recommended selection procedures involve seven basic steps, as follows:

1. Projects are announced publicly, in a newspaper advertisement or in Maryland

Contract Weekly, inviting all interested CM firms in a given geographical area to indicate their interest in providing professional services to the college. Announcements should include the generalized selection criteria to be used in the evaluation process.

- 2. Interested CM firms submit a modified SF330, which gives the college specific information about the firm's qualifications for the project.
- 3. A selection committee, appointed by the college board of trustees, reviews the modified SF330 form and, based on selection criteria, recommends a short list of firms considered to be the best qualified for the project.
- 4. All recommended firms are given additional information regarding the project, including detailed selection criteria. These firms are invited to make presentations and to attend interviews held by the selection committee.
- 5. The top three firms, in order of ranking, are recommended to the college board of trustees on the basis of their capabilities.
- 6. The top ranked firm selected is invited to submit a proposal which is the basis for contract negotiations.
- 7. If negotiations are unsuccessful, the second firm is invited to submit a proposal. If negotiations fail again, the remaining firm is invited to submit a proposal. If negotiations fail a third time, a new group of three is recommended by the selection committee and the process continues until a satisfactory contract can be recommended to the Department of General Services for Board of Public Works approval.
- 8. Throughout the selection process there must be safeguards to ensure impartiality and objectivity. Evaluations should be made by professionals who represent both the board of trustees and the college staff. To protect the integrity of the process, deliberations should be kept confidential. However, the selection process and its results are a matter of public record.

7.03 SELECTION CRITERIA

To obtain the best available CM services, every effort should be made to maximize professional competition through the careful structuring of the selection criteria. The weight factors assigned to the various criteria, as well as the criteria, will change from project to project according to the nature and special needs of the project. Selection criteria and weights are both generalized and detailed. The public announcement, which is general, contains a summary of the elements for consideration and their weights. The detailed rating criteria and their weights for the specific project are made known to the CM firms recommended for interview by the CM selection committee.

7.04 PROJECT ADVERTISEMENT

Upon approval by the board of trustees to proceed with the procurement of CM services, the college releases the project announcement to the media for publication. This notice is written for and tailored to each specific project. It includes a description of the generalized selection criteria and their weights. The professional societies in the area of project consideration should be sent copies of the project announcement.

The project advertisement should invite firms that meet the requirements of the announcement to submit a modified SF330 and any supplemental data requested. Firms that have a current SF330 on file with the college are not required to resubmit that form; however, they must submit an SF330 to be considered.

7.05 NEGOTIATION SUMMARY

The college issues a Request for Proposal (RFP) to the CM firm selected for the project. The RFP describes the requirements, available site information, draft of contract, and request for cost information. Meanwhile, the college develops an independent cost estimate using the best information available on current costs for similar type projects.

The negotiations and discussions should cover the project requirements, time constraints, completion time, construction cost limitations, contract documents, and the CM costs, with adjustments as necessary to reach mutual agreement by all parties. Every effort should be made to prepare a contract reflecting all agreements arrived at during negotiations.

If the college and the CM firm fail to reach an agreement on the price, the contract documents, or the requirements, the college terminates the negotiations, advises the CM firm, and confirms the termination in writing. The college then issues an RFP to the CM firm selected second in order of preference and proceeds to negotiate with that firm.

If negotiations with the second CM firm fail, the above termination procedures are followed and an RFP is issued to the third firm recommended. If these negotiations also fail, the CM evaluation committee proceeds to identify in preferential order the names of three additional highly qualified firms for submission to the selecting official so that negotiations may continue until a satisfactory contract is agreed upon.

A record of the negotiations for a contract for CM services is prepared and incorporated into the contract file and is made available for use by reviewing authorities. The record shall contain sufficient detail to reflect the significant considerations controlling the negotiations and the establishment of the price and other contract items.

7.06 BOARD OF PUBLIC WORKS APPROVAL

The Board of Public Works consists of the Governor, Comptroller and Treasurer of the State of Maryland. All contracts and allocations involving State funds must be approved by the BPW.

Immediately following a successful CM fee negotiation, the college shall request, in writing, that the Maryland Higher Education Commission recommend that the Department of General Services prepare a Board of Public Works agenda item for an allocation of the State share of project funds and approval to expend funds for the CM contract award.

The request letter, the DGS Board of Public Works Agenda Item Request A/E Contract Award form (See Section 14 Attachments) and all applicable information included in the checklist should be sent to:

Original Request Letter

(w/digital copy of

Finance Policy Analyst for Community College Capital

Maryland Higher Education Commission

backup documentation):

6 N. Liberty Street, 10th Floor

Baltimore, MD 21201

Two Copies (w/back up):

Program Administrator for Community Colleges

Department of General Services 301 West Preston Street, Suite 1405

Baltimore, MD 21201-2365

One Digital Copy:

Capital Budget Analyst for Community Colleges

Department of Budget and Management 301 West Preston Street, Suite 1209

Baltimore, MD 21201-2365

The request letter shall include the following:

- 1. Name of project and project number
- 2. Name of CM firm recommended
- 3. Procurement method (Competitive Sealed Proposals, Maryland Architectural/Engineering Services Act, Competitive Bids)
- 4. Construction management fee
- 5. Construction management fee breakdown of basic and special services if applicable
- 6. Explanation and justification for CM fee

The Board of Public Works announces meeting dates in December and May for the following six months. The Department of General Services issues a table of these dates to the community colleges as they become available. Included are DGS cut-off dates for the colleges to submit their BPW requests for inclusion in the next available agenda.

While the formal BPW request should go through the MHEC, the Department of General Services reviews and approves the CM selection process and fees, and prepares and carries the item on its agenda to the Board of Public Works. The colleges should contact DGS to discuss upcoming BPW items, dates, scheduling and issues regarding BPW approval.

If necessary, a representative of the college should be in attendance at the Board of Public Works meeting to support their projects and answer Board members' questions.

Construction management for projects that are funded entirely with local money does not require Board of Public Works approval. However, if the State will be participating in funding any portion of the project, the construction management services shall be submitted to the Department of General Services for a technical review.

7.07 BOARD OF PUBLIC WORKS AWARD RELEASE

The college should not proceed with the A/E award and no public comment regarding any negotiation or its outcome is made before the BPW approval of the recommended A/E firm is obtained. Check the BPW web site www.bpw.state.md.us/ for the BPW schedule, agendas, and actions.

7.08 CM FEES

The fees for the CM are a portion of the cost of the project. In requesting State participation in the CM fee, the College shall provide a complete justification to DGS for evaluation. The college shall be responsible for the total portion of all fees determined to be ineligible for State participation.

The State will not participate in CM fees for conducting feasibility studies, for preparing educational specifications, or for selecting furniture and equipment. If a college elects to engage a consultant for such activities, payment must be made from normal college operating funds. Similarly, salaries of any inspector hired by a college for specific construction projects cannot be paid from State bond funds.

7.09 CONSTRUCTION MANAGEMENT SERVICES

BASIC SERVICES

- 1. Pre-Construction Phase
 - a. Baseline evaluation of facility program, project schedule, and project construction budget
 - b. Review and comment on design documents at each phase (Schematic Design Documents, Design Development Documents, and Construction Documents), particularly material selections, constructability issues, and value engineering evaluation

- c. Prepare construction cost estimate at each design submission
- d. Prepare preliminary construction schedule at end of the design phase
- e. Assist with obtaining building permit(s) and other special permits required for construction

2. Bidding Phase

- a. Develop bidder interest in project and assist college in issuing bid documents
- b. Attend pre-bid meeting and assist in evaluation of bids
- c. Assist college in preparing contract documents

3. Construction and Post-Construction Phases

- a. Provide administration and management of construction contracts, including schedule coordination and performance
- b. Coordinate and chair pre-construction meeting and weekly construction progress meeting
- c. Review submittals and shop drawings, and coordinate approval process with the A/E.
- d. Maintain a construction site presence to monitor contractor activities and schedule, ensure quality control, observe safety practices, coordinate construction sequencing, and monitor overall project progress
- e. Process requests for information regarding means and intent to the A/E
- f. Reject non-conforming work and monitor corrective action by the contractor
- g. Review and recommend contractor applications for payment
- h. Review, negotiate, and recommend change requests to the college
- i. Coordinate building commissioning and start-up operations
- j. Coordinate final inspection/punch list development
- k. Provide post-construction inspections during two-year warranty period.

SPECIAL SERVICES

- 1. Construction Inspection and Testing Services (CITS)
- 2. Site survey and geotechnical services
- 3. Building commissioning services
- 4. Building move-in coordination

REIMBURSABLES

- 1. Soil borings and laboratory soil testing
- 2. Travel expenses
- 3. Reproduction of drawings/specifications expenses

7.10 CM CONSTRUCTION INELIGIBILITY

CMs providing agency services as an owner's representative on a project where the college holds all design and construction contracts and for which the CM is paid only a

fee for services, whether primary or consultants, and engaged in construction management services, are not eligible to bid or participate in the construction of that project, whether as a general contractor or a sub-contractor.

7.11 CONSTRUCTION DELIVERY STUDIES

CASE – CM AGENCY

Montgomery College has experience with an agency CM. In terms of budgeting, the CM is included with design in the pre-construction numbers (1st contract), and included with construction, too (2nd contract). The agency CM is with the project until completion. The agency CM method is very labor intensive for DGS and requires numerous BPW meetings to approve individual contracts with subcontractors. For example, the A/E was responsible for preparing one bid set (drawings and specifications). The agency CM working with the college broke this set into 35 bid packages (for 35 sub contractors) of greater than or equal to one CSI Division adding a Section 900 to each for contractor coordination. The A/E holds all consultants' contracts and traditional liability insurance. The CM holds liability for construction only. The insurance cost increase was minimal. Warranty monitoring and the punch list completion are under the agency CM. This method is "cleaner" than CM at Risk – get it at the front end rather than the back end. However, management of multiple sub contractors instead of one GC is labor intensive.

CASE – CM AT RISK

Howard Community College has experience with a CM at risk. Howard based their RFP on the University of Maryland at Baltimore process to hire the CM at risk. CMs are often former general contractors (GC). Unforeseen conditions may be included in the contract (IC) or not included in the contract (NIC); as contingency with CM at risk or college. The A/E participates in the Review Screening Committee (RSC) interviews because the CM will be part of the design team. The contract with the CM is executed prior to establishment of Guaranteed Maximum Price (GMP). Therefore, if the cost increases, the CM cannot increase his or her fee. CM fee is less than or equal to the fee for a GC (overhead & profit may be 3-5% of total construction).

Though there is only one agenda item for the BPW to consider, DGS wants to review all sub contracts that follow. The process is based on the community college grant program. Therefore, the CM does not receive a bonus for bringing the project in under budget. Shared cost savings is impossible. However, there are indirect savings to all parties, if the schedule is under time. For example, the college can open the building sooner or the CM costs decrease.

There are no Change Orders (CO) because they are built into the CM process. However, CM submits partial contracts (partial buy out) of job. DGS is debating partial contracts – are they really COs? College has right to insist that CM re-bid a sub contract due to for example prior negative experience with them. CM may re-bid a sub if finish has been

discontinued and must be changed. There is tighter control over subs. The ability to upgrade due to project savings is possible even though upgrades after the fact are not permitted with traditional methods. Add alternates must be accepted when bidding traditionally.

<u>Advantages</u> – Achieve a better building/product (not less expensive). The CM is flexible and visible. The CM and the college are partners.

<u>Disadvantages</u> – The community college is exposed to potential A/E modifications when changes such as upgrades are made. One facilities planner had poor results in the commercial sector with four projects. The University of Maryland at College Park (UMCP) has asked for more money while using CM at risk. State does not use CM at risk for State-owned projects.

CASE – HYBRID

Anne Arundel Community College has experience with a hybrid. They "bridged" into a design-build by using an A/E to write a well-defined tight performance spec (the key component of the bid package for the design-build firm) through 50% design development (DD) following the University System of Maryland (USM) procedures. The A/E owns the intellectual property of the design. The A/E sat on the RSC.

There was a smooth transition. However, it was time consuming for the design-builder to familiarize with the project. The A/E performed constructability analysis, daily construction administration duties (clerk of the works), and reviewed shop drawings. The A/E was not permitted to participate in the second phase and had no supervisory responsibilities for the design-builder. All A/E observations were reported to the college. The inspector and site superintendent reported daily to the college. Requests for Information (RFI) were a matter of record only. The design-build firm had professional liability. They were responsible for coordination with the State Fire Marshal. Their architect was the A/E of record, his/her name appears on the block on drawings, and he/she certifies the "as-builts."

The total design fee of 7-71/2% was split between the A/E and the design-builder.

<u>CASE – DESIGN-BUILD</u>

Harford Community College has extensive experience with design-build. The cost per GSF ranged from a low of \$77 to a high of \$114. They used the same contractor for the first four buildings. The fifth building was awarded to another. A well-developed set of campus architectural standards and project requirements is tantamount to a positive experience with this method. Harford's Part 2 programs include these as well as detailed specifications, the DGS Roof requirements, and DGS concrete requirements.

In the design-build method, the builder holds the contract and the A/E is a sub contractor.

The builder attends the schematic design (SD) meetings. The owner has limited access to the A/E so changes to the design are often very costly. However, the design is collaborative and costs are known. Also, errors and omissions are less.

Once DGS has approved the design, construction proceeds quickly. The owner has poor insight into the sub costs. Change Orders (CO) can be contentious when expectations are not met. DGS has observed that the design-build method results in higher CO costs than other methods.

<u>Limitations</u> – Harford does not recommend design-build for large complex projects. Careless specifications can be costly and contentious. Design changes may be costly. The process can outpace DGS review.

Benefits – Cost effective and time efficient.

7.12 STATE CONCERNS WITH NON-TRADITIONAL CONSTRUCTION DELIVERY METHODS

- The Maryland Department of Budget and Management is concerned about budget flow. DBM requests that community colleges introduce their proposed non traditional construction delivery method in the capital project program to eliminate learning of the method after the first allocation. DBM does not have the opportunity to make hard decisions about alternates when non-traditional methods are introduced.
- 2. The Maryland Department of General Services is concerned about equity for all grant recipients. DGS is concerned about the lack of checks and balances for CM at risk. There are no competitive bids to compare with the Guaranteed Maximum Price (GMP), so an honest competitive benchmark is difficult if not impossible to identify. Consequently, DGS requires more back up for the GMP. Just because a college stays with in the GMP budget, does not mean that the best price was secured. Therefore, DGS is working toward developing a policy.
- 3. MHEC contingency funds may be denied for non-traditional methods.