

# THE TEXAS STATE UNIVERSITY SYSTEM

## Policies and Procedures Manual for Planning and Construction

Pursuant to Chapter III, Section 1.6 of the Texas State University System Rules and Regulations, the following procedures and policies have been promulgated by the Chancellor:

### I. **Comprehensive Master Plan**

- A. Each Component must maintain an up-to-date Comprehensive Master Plan (Master Plan) that is approved by the Board of Regents. These Master Plans will be reviewed and revised at no greater than 10-year intervals. The nomenclature and process for an acceptable Master Plan is included in Attachment A to this manual.
- B. No new construction or alteration (change of function) construction project will be initiated unless it represents an implementation of the Component's approved Master Plan. Formal changes to the Master Plan should accompany the initiation of previously unplanned new projects valued in excess of \$1,000,000. A smaller such project may be initiated without formal change to the Master Plan if the Component determines that it will not be counter to the intent of the approved Master Plan. It will be acceptable for Components to aggregate several smaller Master Plan projects into one larger one for the purposes of listing on the CIP and this will not affect their delegated authority to perform each of the smaller projects without System Office participation. Components may amend their Master Plan at any time with Board approval. Simple and straightforward changes to the Master Plan may be made by the Components without the involvement of outside planning consultants. Proposed amendments to Master Plans will be reviewed and approved by the Chancellor via the Associate Vice Chancellor for Contract Administration (AVCCA) prior to submission to the Board.
- C. At a minimum, the Master Plan shall provide for all the buildings and other physical facilities needed to implement the Component's Strategic Plan to sustain and add to existing facilities assets during the 10-year planning horizon following its adoption. Ideally, the Master Plan should also contemplate future needs and provide for further development even beyond the 10-year horizon.
- D. The Master Plan should be compatible with the Component's Strategic Plan. If at any time the two plans become incompatible, one or both should be revised to achieve compatibility. The component should initiate the needed revisions as it is very likely that incompatibility will delay the approval of needed construction projects.

- E. The Master Plan should address buildings and other physical facilities and their usage; architectural styling and design concepts; land ownership and land use planning; storm drainage; roads, walkways, site furnishings, site landscaping and bridges; way-finding and signage; traffic; parking; utilities production and distribution; etc.

## II. Capital Improvements Program

- A. Each Component must maintain an up-to-date Capital Improvements Program (CIP) encompassing the next six years of construction projects needed to preserve, enhance and add to facilities assets in line with the approved Strategic Plan and the Master Plan for the Component. All Component CIPs will be reviewed, revised and approved annually by the Board to achieve the Strategic Plans of the Board and to accommodate known funding limitations on a year-by-year basis. The System Administrative Office will combine all the individual CIPs into one master CIP that will be considered by the Board for approval annually. The process for creating projects for the CIP and getting them reviewed and approved is contained in a separate attachment.
- B. No construction project will be initiated unless it is listed or otherwise included on the approved CIP. In the case of emergency projects not listed or included on the CIP, the AVCCA may approve project initiation steps short of a construction start, pending Board of Regents approval to add the project to the CIP. Inclusion on the CIP is also required for all smaller projects for which Components have delegated authority to manage and administer (later defined herein), even if these projects need to be combined into a single aggregated project in the CIP. It will be acceptable practice to aggregate together smaller routine projects into larger projects for the purpose of listing them on the CIP. It will also be acceptable to aggregate minor projects that cannot be identified in advance by category, e.g. “classroom relocations. Aggregating smaller projects on the CIP will not affect the Components’ delegated authority to execute the smaller projects as separate projects individually, provided this approach will produce the best value. The six-year CIP will be revised (by Component and Board) and reapproved (by the Board) annually prior to the beginning of each fiscal year. When facing emerging or emergency requirements, a Component may amend its existing approved CIP at another time with Board approval.
- C. Listing of a project on an approved System-wide CIP will constitute Board authority for the Chancellor to execute and the Component to expend up to 4% of the Total Project Budget to complete Project Planning and Programming and Design (Programming and/or Preliminary Engineering, Schematic Design, Design Development, and cost estimating).
- D. The President of each Component shall have authority delegated by the Chancellor to plan, design and construct projects listed on the approved CIP

without any further approvals from the Chancellor or the System Administrative Office within the following limits:

<u>Project Type</u>	<u>Est. Construction Cost</u>
New Construction and Alteration (change of function)	\$500,000
Maintenance, Repair and Renovation	\$500,000

(New construction is defined as the creation of a new structure. Alteration is defined as the change in function of an existing space. A renovation project, where space is renewed or upgraded for the same functional use, is considered maintenance and repair).

On a project by project basis, when requested by the component, the Chancellor may delegate complete contract administration authority above these limits.

When exercising delegated authority to plan, design and construct facilities projects covered by these guidelines Components will not use Construction Manager @ Risk, Construction Manager-Agency or Design-Build delivery methods.

When exercising delegated authority to plan, design and construct facilities projects covered by these guidelines Components will use only those contract forms and documents approved by the AVCCA for the intended use.

Components shall not fund separate smaller projects in stages or increments in order to avoid these delegated authority limits on what otherwise should be a single larger project.

- E. All projects where complete contract administration authority is not delegated to the Component will be managed and the contracts administered by the AVCCA. In this context, “managed” means that any contract and project authority that is exercised at the Component level is delegated by the AVCCA, either via this policies and procedure manual or specifically by other written correspondence. Additionally, upon request by a Component, the AVCCA will also manage and administer the contracts for one or more projects that are otherwise within the Component’s delegated authority.
- F. The System Administrative Office intends to retain a full service Program/Project Management consultant to assist the Chancellor and the AVCCA in this and other tasks that are assigned by these guidelines. The Chancellor and the AVCCA may delegate specific authorities to members of this consultant’s team to act on their behalf on matters needed to implement these guidelines.
- G. All TSUS projects will be managed and administered, whether by the System Administrative Office or by the Component, with strict adherence to the Policies

and Procedures issued by the Chancellor and periodically reviewed and approved by the Board of Regents.

### **III. Phases of Project Development**

All TSUS projects will be developed according to the following phases. These phases are generally recognized in the planning, design and construction industries and are well defined and discussed in the professional associations that form a part of this industry. Where the component has been delegated authority to plan, design and construct projects, such projects should be developed in accordance with the following phases; however, functions shown below to be performed by System Office personnel or outside consultants may instead be performed by the Component as to such projects. It is understood that for smaller projects one or more of these phases may be omitted or combined.

#### **A. Project Planning & Programming (PP&P)**

1. Guidelines for Master Plan preparation and submission; see Attachment A.
2. Guidelines for submission of projects for CIP; see Attachment B.
3. Guidelines for initiation of PP&P:
  - a. Component Construction Administrator (CCA) and TSUS Associate Vice Chancellor for Contract Administration (AVCCA) participate in PP&P. In general, the AVCCA will manage the process and administer any underlying contract and the Component will manage the collection and presentation of "Owner Requirements". All project programming will be performed by an outside consultant under an umbrella contract with the System Office. Under this umbrella contract, the Component shall negotiate and execute an agreement for the programming of the project. The Chancellor may waive this requirement and allow an alternative approach to programming individual projects that have unique characteristics or special needs. In general, consultants who program a project will not be permitted to design the project.
  - b. Project must be in CIP.
  - c. In all cases the Component will fund the PP&P of a project, though these expenditures may be reimbursed when the project is funded by an outside source (TRBs, bonds, grants, appropriations, etc.).
  - d. The Component must engage a TSUS approved programming and/or preliminary engineering firm for this purpose unless otherwise approved by Chancellor.

- e. The programming and/or preliminary engineering exercise must produce a detailed cost estimate in CSI format that can reasonably be expected to be accurate within + /- 20%. This estimating accuracy applies to the Construction Cost Limitation (cost of work, plus the General Conditions costs, plus construction contingencies, plus profit/fee) and does not include other contingencies thought to be needed on the soft costs or on the Total Project Cost.
- f. Component approves and endorses programming/preliminary engineering results and provides funding plan showing sources and estimated amounts.
- g. Component suggests project delivery method in accordance with TSUS policy guidelines set forth in Attachment C (Project Delivery Policy).
- h. President may provide additional project justification if necessary to clarify the compelling need for the project.
- i. The AVCCA and the Chancellor approve the PP&P, scope, funding plan and project delivery method and authorize selection of an A/E to initiate design.
- j. As a general guidance, the Board of Regents, the Chancellor and the AVCCA recommend that PP&P be completed prior to establishing the Component's operating budget for the fiscal year in which a project is to be funded out of Component funds or prior to submission of any request or application for outside funding of the project (such as TRB funding).

**B. Design Phase (Schematic Design and Design Development)**

- 1. Guidelines for procurement process (to be customized for each delivery method).
  - a. A/E selection
    - 1. Component requests initiation of the design process.
    - 2. Approval of Chancellor to begin Design.
    - 3. RFQ preparation and public release of RFQ by AVCCA (based upon project details submitted by the Component).
    - 4. Component schedules and conducts pre-submittal conference if needed.
    - 5. A/E Selection Committee composed of Component participants with one System Office participant will evaluate and recommend successful A/E respondent.

Component will have majority of votes on committee and related selection prerogative.

6. A/E Selection Committee determines if interview is needed. Short-listed firms are notified of interview date, if needed.
  7. A/E Selection Committee recommends best firm to the Component President based upon the highest evaluation score using the published criteria.
  8. Component President submits proposed selectee to Chancellor for approval.
  9. Chancellor approval of selectee. Disapproval usually only in the case of a flawed process or a banned proposed selectee.
  10. AVCCA will draft and negotiate A/E contract scope of services and fee.
  11. AVCCA routes the negotiated contract to the Component President for approval prior to asking Chancellor to sign on behalf of the Board of Regents.
  12. Chancellor will issue the Notice to Proceed.
  13. AVCCA will administer A/E contract. Component will interface with A/E to conduct on site meetings, facilitate receipt and incorporation of user requirements and needs into the design and jointly review and comment on the A/E submittals during the course of the design.
- b. Construction Manager at Risk or Design Builder selection
1. A high priority objective shall be to select the CM@R shortly after the A/E is selected, or at the latest during the early stages of the design of the project.
  2. Component requests initiation of the CM@R or D-B selection process.
  3. Approval of Chancellor to select CM@R or D-B.
  4. RFQ preparation and public release of RFQ by AVCCA, (based upon project details submitted by Component).
  5. Component schedules and conducts pre-submittal and pre-proposal conferences, as needed.
  6. Selection Committee composed of Component participants with one System Office participant will evaluate and recommend successful respondent. Component will have majority of votes on committee and related selection prerogative.
  7. Selection Committee determines if interview is needed. Short-listed firms are notified of interview date, if needed.
  8. Selection Committee recommends best firm to the Component President based upon the highest evaluation score using the published criteria.

9. Component President submits proposed selectee to Chancellor for approval.
  10. Chancellor approval of selectee. Disapproval usually only in the case of a flawed process or a banned proposed selectee.
  11. AVCCA will draft and negotiate contract scope of services and fee.
  12. AVCCA routes the negotiated contract to the Component President for approval prior to having Chancellor sign it on behalf of the Board of Regents.
  13. Chancellor will issue the Notice to Proceed.
  14. AVCCA will administer CM@R or D-B contract focusing on matters of contract cost, contract time and contract interpretations. Component will interface with Contractor on all aspects of its field operations including Campus rules and regulations, safety, on site meetings, processing pay requests (except first and final) and on inspection and acceptance of the Work.
- c. Guidelines for detail design process (Schematic Design phase and Design Development phase)
1. System Administrative Office (through TSUS Consultant) exercises oversight w/Component participation.
  2. Component leads pre-design meetings on Campus to review project program, scope, cost limitations, and schedule milestones.
  3. Schematic design, Basis of Design Report and project budget prepared (with scope of A/E services tailored to project by System Administrative Office with input from Component). Review and comment on delivered submittals by both System Administrative Office and Component simultaneously. Component consolidates comments into one document and forwards to A/E or D-B for incorporation.
  4. Design Development, Basis of Design Report and project budget completed (with scope tailored to project by System Administrative Office with input from Component). Review and comment on delivered submittals by both System Administrative Office and Component simultaneously. Component consolidates comments into one document and forwards to A/E or D-B for incorporation.
  5. The Design Development phase shall result in a detailed cost estimate in CSI format that can reasonably be expected to be accurate within +/- 5% for new construction and +/-

8% for all other types of projects. The project budget may not at any time exceed 105% (for new construction) or 108% (for all other types of projects) of the project budget approved by the Board at the Design Development phase without Board approval. Scope reductions of ten percent (10%) or more after the Board approval of the project budget at the Design Development Phase also shall require re-approval by the Board.

6. System Office (with input from A/E or D-B and the Component) develops submittal package for the Board (see Attachment D).
7. President endorses project as designed and priced.
8. President provides final project justification that may be needed for Board of Regents consideration.
9. AVCCA presents the project to the Board with Chancellor's recommendation for project disposition and with Component representatives available to answer questions.
10. After Board approval the Component forwards electronic application to THECB with notification to AVCCA, and prepares certification for Chancellor's signature. Chancellor certifies to THECB that the TSUS Board has approved the project as submitted. THECB must approve the project prior to the beginning of construction.
11. President decides when project should proceed into preparation of Construction Documents phase.

### **C. Construction Document Phase**

1. Can be initiated only after Design Development phase and cost estimate is approved by the Board and a project application has been submitted to the Texas Higher Education Coordinating Board (THECB). System Administrative Office will make both presentations unless an alternative is approved by Chancellor. Component may be asked to participate in either.
2. AVCCA and TSUS Consultant manage completion of construction documents. Both System Administrative Office and Component review and comment on each A/E submission at each stage during the Construction Documents preparation phase.
3. Generally, there will be only a 50% and 100% stage submittal for projects under \$10,000,000. There will be a 50%, 75% and 100% stage submittal for projects over \$10,000,000.



4. The Construction Documents phase is expected to produce a CSI format estimate that is within +/- 5% for new construction and +/- 8% for all other types of projects.
5. Generally, no changes to the scope or to the design of the project will be permitted during the Construction Documents phase unless the progress of the project is halted and the desired changes are submitted to the Board of Regents for approval.

**D. Construction Phase**

1. Competitive Sealed Proposal Delivery method:
  - a. Component determines when project is to be advertised for receipt of proposals.
  - b. AVCCA prepares the Request for Proposals based on input provided by the A/E and the Component and issues the RFP. All pre-proposal conferences will be planned and conducted by the Component on the Component's campus.
  - c. Component will appoint the evaluation committee and the System Administrative Office will provide one member of the committee.
  - d. AVCCA approves committee's selection of Contractor. Disapproval usually only in the case of a flawed process or a banned proposed selectee.
  - e. Any negotiation or clarifying discussions needed prior to consummating the contractual arrangements will be conducted by the AVCCA.
  - f. Notice to Proceed issued by AVCCA.
  - g. Contract prepared and issued by AVCCA.
  - h. AVCCA acts as the Owner's Designated Representative (ODR) and the Component appoints the Owner's Designated Site Representative (ODSR), both as defined in the contract.
  - i. Component reviews and approves all pay requests, only providing copies of approved requests with supporting documentation to the System Office.
2. Construction Manager at Risk and Design-Build Contract Administration
  - a. Component determines when project is to be advertised for receipt of qualifications and proposals.
  - b. AVCCA manages and administers the Request for Qualifications/Proposals phase. AVCCA issues the RFQ/RFP. All pre-proposal conferences will be planned and conducted by the Component on the Component's campus.

- c. Component will appoint the evaluation committee and the System Administrative Office will provide one member of the committee.
- d. AVCCA approves committee's selection of best value firm. Disapproval usually only in the case of a flawed process or a banned proposed selectee.
- e. AVCCA conducts all discussions and negotiations with the Selectee regarding its proposal, costs, fees, etc.
- e. Notice to Proceed issued by AVCCA.
- f. Contract prepared and issued by AVCCA
- g. AVCCA acts as the Owner's Designated Representative (ODR) and the Component appoints the Owner's Designated Site Representative (ODSR), both as defined in the contract.
- h. AVCCA will review and approve first and last payment request on every CM@R project. Component reviews and approves all other pay requests, only providing copies of finished products to the System Office.

3. Change Order Policy (for both CSP and CM@R methods)

- a. Change orders may not be used to expand the approved scope of the project. Exceptions must be approved in writing by Chancellor.
- b. All changes to the Work of a project will be issued in writing. All such changes will be originated by the ODSR for approval by the System Administrative Office with AVCCA directing the A/E to formally issue a proposed change directive.
- c. All change directives will be priced by the A/E and/or a qualified independent estimator under the A/E's contract, prior to receipt and review of the contractor's pricing for the proposed change.
- d. AVCCA will determine if the change occurred as a result of A/E errors or omissions and, if so, will issue timely notification.
- e. Change order cost and time negotiations will be conducted by the AVCCA.
- f. Cumulative amount of change orders may not exceed 5% of project construction budget unless approved in writing by the Chancellor.
- g. Components shall have the authority to perform all steps necessary to implement this policy without involvement of the System Office on changes to a project that do not exceed \$25,000 per change. After completing such a change the Component will submit all documentation related to the change along with the formal contract change order to the AVCCA for signature and for record purposes. Components will not exercise this authority in increments to bring about a larger cumulative change that it is not authorized to perform.

4. Both the Component and System Administrative Office approve final inspection and close out of design and construction contracts.
5. AVCCA drafts final report, based on data supplied by the Component, and provides it to the Component for review and comment. AVCCA and Component will have dual responsibility to get the Final Report completed and into the hands of the Board on a timely basis. Final Report should include the following:
  - Brief summary of final project including A/E and Contractor information
  - Final Project cost
  - Liquidated Damages
  - Change Orders, including detailed information
  - HUB Participation (total and percentage)
  - Evaluation of A/E
  - Evaluation of Contractor
  - Approval by Federal or State Agencies, if any

# **ATTACHMENT “A”**

## **The Texas State University System**

### **Campus Master Plan**

All TSUS construction projects will be created, controlled and executed through a Capital Improvements Program (CIP) that spans a six-year period looking into the future. All construction projects on this CIP will be products of an integrated planning process. That process will start with the Vision and Mission Statements of the individual Components and progress through their Strategic Plans to the resulting Campus Master Plan and ultimately to a set of projects of defined scope, cost and priority of need. The timing of design and construction of these projects will depend on the strength of their justification of need, tempered by the ability to fund the work.

Successful facilities master planning in higher education depends on having settled Academic and Strategic Plans in place as a foundation. The Component must know what it plans to teach and to how many students, according to an agreed business model before the need for specific facilities can be resolved. So, Components must, as a first step, adopt a Mission Statement and a Vision Statement and complete a Strategic Plan laying out how they will achieve these idealized outcomes over a period of time. Then they will undertake a Campus Master Plan effort to determine the facilities impacts of these plans. If a Component’s Vision, Mission and Strategic Plans change significantly, then the Master Plan should be changed accordingly.

Once the long-range pathway of the Component is set in place, the facilities implications can be determined. First, there are State-imposed facilities planning parameters that can be used to directly translate planned student/professor populations into the specific facilities needed to support them. Second, there are benchmarking data that show how other comparable Components are matching their teaching efforts to specific facilities infrastructures. Analyzed together, these sources will yield a list of basic facilities requirements needed to support any specific Strategic Plan.

All Components already maintain an inventory of existing facilities that can be subtracted out from the total requirements to yield a list of facilities deficiencies that must be supplied in order to implement the Strategic Plan. This listing of total requirements, that highlights existing deficiencies, is a good point of departure for the Master Planning effort.

The first phase of this effort should be an Investigations phase wherein the existing facilities are understood in their current context. This should include (but not necessarily limited to) analysis of the following:

- Natural and Built Systems
- History of the Campus and Place
- Building Use and Character

Landscape and Vegetation  
Centers and Edges  
Surface Hydrology  
Geology and Landform  
Water and Sewer  
HVAC, Electric and Telecommunications  
Codes and Regulations  
Contextual Influences  
Transportation Systems and Parking  
Access  
Circulation

With the body of information gleaned from these investigations the conceptual planning of how the campus should be built out can begin.

The Preliminary Plan phase should establish guiding principles for campus development and conceptual ideas on how to proceed. For example, notions about what history may be there to preserve and how it should be handled, whether to adapt to existing topography or decide to alter it, how various areas of the campus relate to one another and/or how they should evolve independently, how to integrate into traffic patterns in the surrounding areas or how to isolate the campus from them, etc. This phase should culminate in an initial fixed “broad brush” idea of how to proceed in laying out structures, open spaces, circulation patterns, focal points, etc.

The Area Plans constitute the next phase of work. This effort should proceed to distinct internal areas (or precincts, or zones) within the campus to advance the basic ideas to a more detailed level. Discrete areas of the campus are explored at a greater scale of detail in order to test the technical feasibility and refine information generated in the Preliminary Plan phase. Building setbacks and massing, envelope criteria, engineering systems, pedestrian and vehicular circulation systems, service points, treatment of open space and entrances, general code compliance, and landscape composition are all addressed in this phase of work.

After the initial ideas are confirmed, a Design Guidelines phase is undertaken to establish a codified system to guide how the various areas of campus (and the campus as a whole) will stay architecturally unified. The Design Guidelines describe height and massing of buildings, disposition, primary entries and service areas, street and open space proportions and detailing characteristics of each. Building gross square footage and appropriate use, if determinable, are included. Interrelationships of buildings, streets, and open spaces to each other and to the overall plan are also articulated. Campus-wide architectural guidelines define architectural features, styles, and vocabulary of new facilities throughout the campus. Building fenestration, treatment of openings, organizational elements, and appropriate architectural materials are evaluated. Similar guidelines are developed for the grounds, landscaping, architectural treatment of specific types of streets, public spaces, parks, and woodland environments. Likewise, outdoor lighting, walls and enclosure systems, plantings and site furnishings, signage and other elements that identify special spaces should be created.

The Final Plan phase consists of documents and presentations that aggregate the plan information prepared in the first four phases. This takes the form of a plan view showing existing and proposed buildings and open space and illustrates “before” and “after” perspective views. Also, included should be an implementation plan showing how the comprehensive development can be put in place over a period of time. Interrelationships between future projects should be made clear so that sequencing can be done correctly. Where the need for projects is directly linked to forecasted population growth on the campus, this connection should be made clear. To the extent scope, priorities, and pricing can be known, this information should be explicitly displayed. The direct interconnection between the projects on the Master Plan and the elements of progress on the Strategic Plan should be clearly identified (i.e. “this classroom building of 135,000 gross square feet will be needed to support a student population of 15,000 which is currently forecast for Fall, 2008). The projects accepted by the Board of Regents on the CIP will be the projects that directly implement the Component’s approved Strategic Plan. The Master Plan will not only guide where each project will be built, it will also help to define what the project will cost (because of related work, design guidelines, etc.) and how it should be sequenced with other projects.

It is interesting, but not mandatory, to advance the master planning effort beyond the normal 10-year planning horizon so that ideas about “ultimate build out” can be examined. It may be useful to understand the absolute maximum population that a particular campus could support as this might influence how Strategic Plans are developed.

# **ATTACHMENT “B”**

## **The Texas State University System**

### **Capital Improvements Program**

The Capital Improvements Program (CIP) is the TSUS’s plan to preserve and enhance its facilities assets infrastructure. It is a six-year forward-looking plan for all repair, rehabilitation, alteration, and new construction projects. The CIP will also be accompanied by a Capital Budget that lays out all capital expenditures planned for the first two fiscal years of the plan.

In order for a project to be listed on the CIP, the sponsoring component must demonstrate how the project directly promotes achieving its approved Strategic Plan and justify its need based upon accepted planning parameters (i.e. the component is growing at a confirmed rate and this additional increment of classroom space is required to continue offering adequate instruction to the resulting student population). Further, the project can only be listed on the CIP if it has been specifically accommodated on the Component’s Campus Master Plan (see Attachment A).

Board of Regents’ approval of a CIP will constitute its authorization for the Chancellor to expend Component funds up to 4% of the project cost to develop a Formal Program document, hire a project A/E, complete the Design Development phase of the project and produce a detailed cost estimate. Funds needed for these endeavors will be provided by the Component initially, but may be reimbursed when the project is approved for further development at this stage to the extent that outside funding is released for the project. If 4% proves insufficient to complete the PP&P through Design Development the Chancellor may approve an exception to exceed that amount based on a specific request from the Component. To the extent consistent with the TSUS Rules and Regulations, the Chancellor may delegate the authority granted him for these purposes. A Component may expend funds for Project Planning and Programming prior to the inclusion of a project on the CIP, provided the project is submitted for inclusion in the CIP at the next regularly scheduled Board Meeting.

The process to update the CIP normally begins at the Component level with each Component evaluating its facility needs internally. Each Component’s process for this evaluation is tailored to fit its specific needs and to leverage specific resources it already possesses, but the process should begin with the Strategic Plan and a search for all of the things that are needed to implement it. The annual update of the CIP will normally occur at the August meeting of the Board of Regents.

#### **Component Process**

While each Component’s process is unique, the process typically includes consideration of similar matters, such as:

- Review and evaluation of compatibility of a proposed project with the Component’s Vision and Mission Statements, its Strategic Plan, its Campus Master Plan, and the campus goals and targets;

- Review and evaluation of the condition of existing facilities;
- Identification of current and projected needs, based on a variety of data which may include projected enrollment or future growth projections, strategic initiatives, and technological innovation;
- Identification and evaluation of the underlying justification for the project using accepted facilities planning parameters;
- Identification and evaluation of funding sources and available resources; and
- Establishment of priorities, both for the necessary funds and among all the potential uses of the available funds;

As a general rule, each Component's process includes input from appropriate individuals, councils or committees, such as faculty representatives, departmental representatives, administrative officers, and committees or councils charged with duties pertaining to space planning and facilities operations and maintenance. Project proposals and requests are typically reviewed and evaluated by executive officers or by councils and committees of executive officers with respect to various matters such as need, funding sources and priorities. Final Component review rests with the President of the Component with advice and assistance from the executive officers.

The results of the Component's process conducted to identify and evaluate projects will be used to submit proposed updates and changes to the CIP to the Associate Vice Chancellor for Contract Administration (AVCCA). Further refinement of the projects occurs as the CIP update process continues at the System Administrative Office level, as discussed in the following paragraphs:

#### Process for Updating the CIP

The formal process to annually update the CIP begins when the AVCCA sends submission instructions to each Component representative describing schedule, process and forms required to gather all the information needed to update the CIP. The submission instructions that the AVCCA sends to each Component will include a Project Planning Form (attached as Addendum 1). The component is required to submit a completed Project Planning Form for each project (or aggregated group of projects) that it proposes to add to the CIP. The form requires the Component to provide detailed information on the proposed project to include the following:

- Determination of the CIP year in which the project should be built;
- Description of the project, including the gross square feet in the project and the proposed uses of the space;
- Best current estimate of project cost with the basis of the estimate;



- Detailed justification of the project, including an explanation of how the project serves the mission of the Component, an explanation of the need for the project and how it helps the Component implement its Strategic Plan, a discussion of options other than new construction or alteration, a discussion of the Texas Higher Education Coordinating Board's evaluation criteria, and a description of the condition of existing facilities; (the System Administrative Office will often work with the Component to obtain complete information needed for the project's justification)
- Description of the project site and location and confirmation of whether the site complies with the Campus Master Plan;
- Suggested project delivery method for the project, such as competitive sealed proposals, construction manager at risk or design/build;
- Identification of sources of funding for the project; if revenue bond financing is proposed, identification of the source of revenue to pay the debt service and a five-year forecast of revenues and expenses for the project with a list of assumptions;
- Determination of whether enabling legislation for the project is required and, if so, whether the legislation has been adopted.

For each such project submitted, the AVCCA will require the Component to complete a Work Sheet to establish the preliminary project cost if the project is in the first two years of the CIP. This Work Sheet requires the Component to provide detailed financial information on the proposed expenditures for the project, including:

- Description of any known site problems such as easements, utilities, environmental conditions or concerns that may affect project costs. In renovation projects the Component will identify any facility issues that may affect the cost of renovations such as asbestos and lead paint removal;
- Description of any known geotechnical problems, such as poor soils, that may affect the cost;
- Description and estimate of new construction, renovation, or addition costs, including the cost of fixed equipment to be installed as a part of the project; and
- Description and estimate of construction costs for site work and infrastructure, including site grading, utilities, thermal line relocations, expansion of utilities plants, street, walkways landscaping, parking and site lighting.

The information submitted on the Project Planning Form and the Work Sheet serves as the basis for the evaluation of the project proposals. Because accuracy and completeness of the information are critical to the update process, the System Staff will work with the Component staff on several levels during the initial submission stage to gather and refine information.

Ultimately, the AVCCA will maintain a web-based database on which all CIP submissions or updates will be placed. Until that time, the AVCCA will gather electronic CIP submissions. System Staff will meet with each Component on site or by phone conference in order to ensure that the information and the projects submitted are technically and financially correct. When requested, the AVCCA will provide expert consultant support to the Component at Component expense. Once the submissions are reasonably complete, the draft CIP will be forwarded to the Vice Chancellor for Academic Affairs (VCAA) and the Vice Chancellor for Finance (VCF) for review and comment.

### Evaluation

The VCAA evaluates and reviews the proposed projects and consults with each Component concerning the need for the proposed projects. Further refinements of the plan are made as a result of this review and evaluation that focus on:

- Whether there is sufficient justification for the project;
- Whether the project is consistent with the mission and strategic plan of the Component;
- Whether the proposed projects, about which the office had been previously advised, are included in the CIP. If projects have been omitted or removed, there is a dialogue about these actions;
- Whether a project has been assigned a higher priority than that of projects previously listed on the CIP and whether there is good reason to reorder the priorities; and
- Whether the project funding is adequate and achievable. In particular, there is a review of the level of commitment of any proposed gift pledges on which the success of the project may depend.

The VCF reviews all proposed projects that are to be funded in part or in whole with Revenue Financing System Bond proceeds. Such projects must receive a recommendation for allocation of debt proceeds from the VCF prior to being approved by the Board for inclusion in the CIP. Each request for formal approval from the Board to use the bond proceeds must be accompanied by a “finding of fact” from the VCF concerning the Component’s and the System’s ability to service the debt in question. The VCF’s evaluation includes three levels of debt capacity and repayment analysis: the System level, the Component level, and the project level.

Upon completion of review and revision by the VCAA, VCF, and AVCCA, a revised draft of the proposed CIP is sent to the Components for approval of any changes made during the review process. After Components have approved the revisions, the proposed CIP is reviewed by the Chancellor. Upon approval by the Chancellor, the proposed CIP is scheduled for presentation to the Planning and Construction Committee of the Board and ultimately to the full Board for adoption. These actual presentations will be performed by a combination of the Chancellor, members of the System Staff and individual Component representatives.

Click twice on CIP form to activate excel.  
Zoom if needed.

**CAPITAL IMPROVEMENTS PROGRAM**  
Project Planning Form

**Date:** \_\_\_\_\_  
**University:** \_\_\_\_\_  
**Project Name:** \_\_\_\_\_

**Is the project on the Campus Master Plan?**    Select One    If "No", is an amendment to the Master Plan being offered?  
\_\_\_\_\_  
\_\_\_\_\_

**Program Year:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Project Title:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Project Type:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Project Site and Location:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Construction Type :**    Select from Drop down List  
\_\_\_\_\_  
\_\_\_\_\_

**Gross Square Feet:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Construction Cost Estimate:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Source & Basis of the Construction Cost Estimate:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Soft Cost:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Contingencies:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Anticipated Sources of Funding:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Suggested Project Delivery Method:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Project Need and Justification :** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Current Status:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**COMMENTS:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

# **CAPITAL IMPROVEMENTS PROGRAM PROJECT SHEET INSTRUCTIONS**

## **Inclusion of Project in Campus Master Plan**

This item asks whether the project is on the approved Campus Master Plan. If it is not, an amendment to the Plan should be offered by the Component to revise the Plan to provide for the project's inclusion.

## **Program Year (fiscal year of expected construction funding)**

This item asks for the fiscal year in which the component expects to fund the project.

## **Project Title (the project's title need not convey its function...it might be named for a contributor, etc.)**

This item asks for the project's title. The title may be a working title, subject to change.

## **Project Site and Location (orientation on campus, and description of site)**

This item asks about the proposed site. Describe the present status of the site, what improvements, if any, presently exist on the site, where on the campus it is located, and any other relevant considerations.

## **Project Type (function = classroom, gym, music hall, etc. it can be hyphenated...try to adhere to Coordinating Board nomenclature)**

The Coordinating Board has various functions it uses to classify projects. If there is more than one function, list one or two primary functions.

## **Construction Type (maintenance, repair, repair by replacement, renovation, conversion, new construction, select from a set list that will be further defined...also may be hyphenated)**

We intend to provide a list of types from which one or more may be chosen.

## **Gross Square Feet (or other quantifying terminology...if only Net Square Feet is known then divide NSF by 0.65 or state a different conversion factor you intend to adhere to)**

If the number of gross square feet is known, provide that number. If only net square feet is known, gross square feet may be calculated by using a conversion factor of 0.65 net square feet per gross square foot. If the component uses a different conversion factor, please specify.

## **Construction Cost Estimate (the best information you have appropriate to the current stage of development of the project)**

This item asks for the best estimate of construction cost available. Since little or no programming will have been performed in the typical case, this estimate is not expected to provide more than a general indication of cost. However, in the initial submissions, projects that have advanced beyond the conceptual stage will be included and more reliable estimates will be possible.

**Source and Basis of the Construction Cost Estimate [Source=who generated the estimate...are there more than one compatible sources (for example an A/E's independent estimator plus a CM@Risk estimate), Basis=\$\$/sf, or CSI division by division educated guess, or material and labor takeoff using Means or other estimating guide, or materials and labor takeoff using CM@R private estimating data base, etc.]**

Depending on the project, there may be any of a variety of bases for the cost estimate. This item asks for those bases to be specified.

**Soft Costs (some stated percentage of the estimated construction cost or a detailed list of soft costs with estimates for each)**

This item asks for either a list of estimated non-construction project costs or for an estimate of such costs based on a percentage of the estimated construction cost.

**Contingencies (a list of all contingencies planned into the project including, but not limited to: design contingency, construction contingency, inflation escalators used, CM@Risk contingency, Owner's project contingency, etc.)**

This item asks for a listing of any contingencies built into the estimated construction costs or soft costs, and the amount of each.

**Anticipated Sources of Funding (one or more sources should be stated)**

List the anticipated sources of funding, such as HEAF funds, tuition revenue bonds, gifts, etc. If the sources of funding change, an appropriate amendment to the CIP may be made to reflect the change.

**Suggested Project Delivery Method (construction manager at risk, design-build, competitive sealed proposals, job order contract, or other legally permitted method)**

This item asks the component to suggest the method of project delivery. The actual project delivery method will be determined in accordance with the TSUS Policies and Procedures for Planning and Construction once the project is initiated.

**Current Status (on master plan, surveying and geotechnical engineering complete, programming complete, schematic (20%) design complete, design development (35%) complete, final (100%) design complete, \_\_% of construction complete)**

This item asks for the current status of each project. If construction has begun, provide a percentage of completion. If design has begun, provide a percentage of completion of design.

**Project Justification and Comments (narrative explanation of need for and justification of the project, and any other comments the component would like to make regarding the project)**

This item asks for an explanation of how the project serves the institution's mission and helps it implement its Strategic Plan, and why the project is needed. Also, any additional comments or information that would be helpful to the Board of Regents may be included in response to this item.

## ATTACHMENT “C”

### **Project Delivery Method Guidelines**

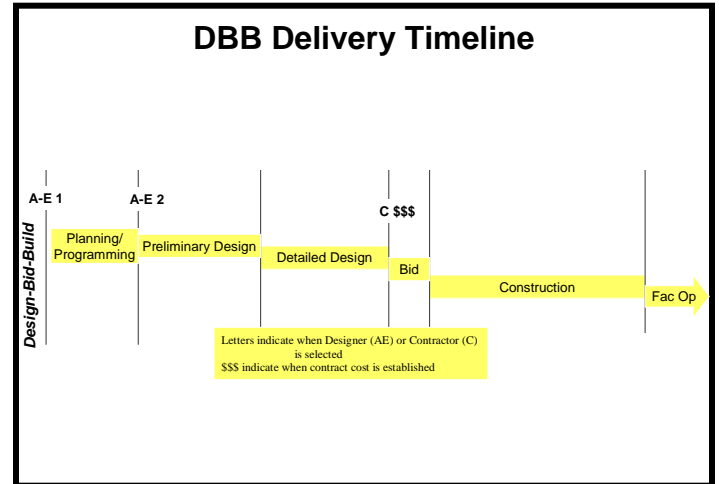
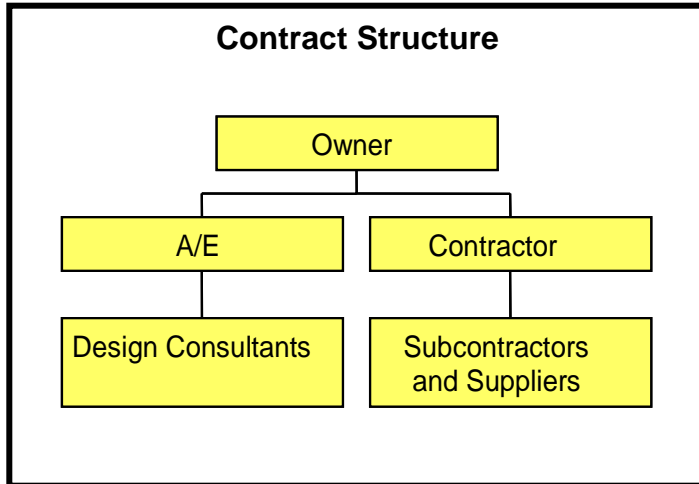
The Board of Regents and the System Office favor project delivery methods that allow the Construction Contractors and Construction Managers to participate in the project planning and design at the earliest possible date (i.e. Construction Manager at Risk and Design/ Build). These allow for optimum pricing strategies, the most accurate and up-to-date estimating of project costs, timely and efficient Value Engineering and materials and methods selections, as well as optimum Scheduling and Phasing strategies. At the same time they emphasize wide-ranging competition in the marketplace on everything in the project except the General Conditions and Construction Management overhead and profit costs. When managed properly, these delivery methods can result in the lowest possible project cost and the shortest completion schedule, while including construction quality considerations not as readily available in other delivery methods.

The Board of Regents and the System Office discourage project delivery methods that involve direct negotiation with a single Contractor or Construction Manager of lump sum costs as in Job Order Contracting, or in increasing the scope of an existing lump sum contract via Change Order. These methods are useful for urgent minor work that involve repetitive tasks that are easy to price. In general, however, they are the most expensive delivery methods and they should be avoided when possible.

There are no hard and fast rules for selecting project delivery methods for specific project types and opinions of individuals in the industry vary considerably. It is anticipated that the final decision on the delivery method for a specific project will have had input from the component institution, the System Office and the Board of Regents. However, the final decision should be made prior to starting design or, at the latest, during the early stages of design.

The following descriptions of alternative delivery methods are provided for consideration by the Component institutions as they are deciding their preferences for delivery methods on a given project:

## Competitive Bidding or Design-Bid-Build (DBB) Alternative Project Delivery Methods



**Description:** An architect/engineer (AE) prepares complete plans and specifications, from which contractors can bid a lump sum bid price. The Owner advertises and receives non-negotiable bids. Low bid is awarded the contract, unless it does not comply with requirements of the invitation for bid. Alternates, both additive and deductive, can be used to modify the scope, if included as part of the original bid documents.

**Pros:**

- AE selected independently based on qualifications
- Established traditional approach to project delivery
- Suitable for competitive bidding
- A/E directly works for owner
- Contractor selections simple to defend because they are based only on price.

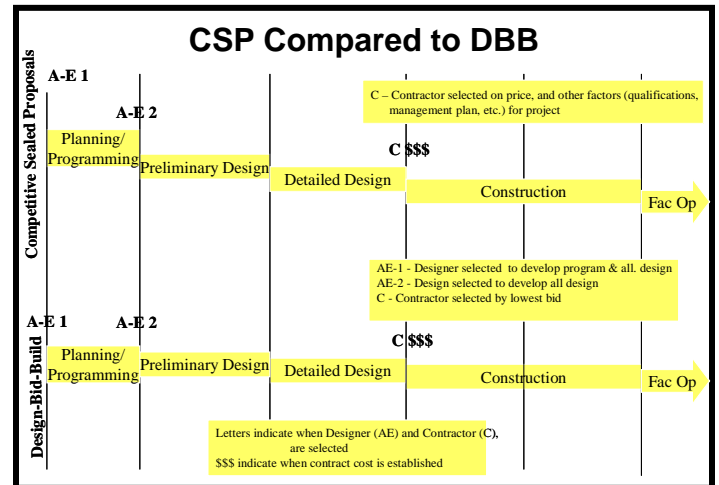
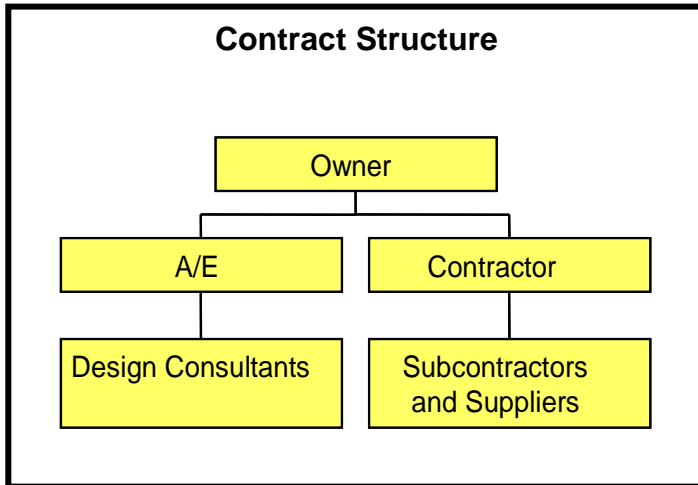
**Cons:**

- Two contracts for owner to manage
  - Disagreements go through owner
  - Owner pays for gaps in plans and disagreements between AE and contractor
- All parties have different agendas/objectives
- Low bid doesn't result in final best value
- Bids over budget difficult to reduce costs
  - Creates significant delay
- No contractor involvement in design to help provide cost effective solutions
- "Closed book" accounting, no savings pool available to owner as in CMR or DB.
- Most expensive delivery approach – long term
- Slowest project delivery
- Most litigious delivery process

**Applications:** If the owner wants the selection process to be simplified to a price only selection, and has ample time in the schedule to allow the design to be completed to 100% for competitive bids, then Design-Bid-Build is an appropriate delivery method.



## Competitive Sealed Proposals (CSP) Alternative Project Delivery Methods



**Description:** An architect/engineer (AE) prepares complete plans and specifications from which contractors can propose a lump sum price. An RFP is publicly solicited, requesting bids for the construction work and other criteria such as qualifications, capabilities, capacity, reliability, and schedule. Proposals are evaluated on a best value approach which considers price as well as the other selection criteria. The contract can be awarded to other than the low bidder if the other criteria make it a better value to the owner. Also negotiation with the best value proposer is possible to reduce scope, price and time to bring the project within budget or to meet a required delivery date.

**Pros:**

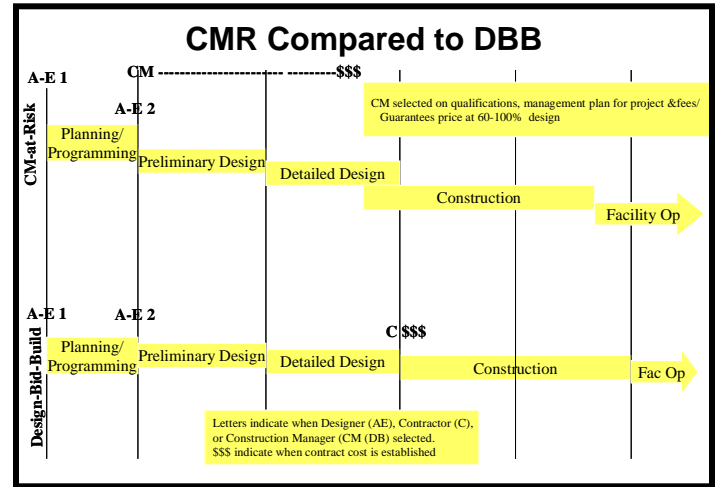
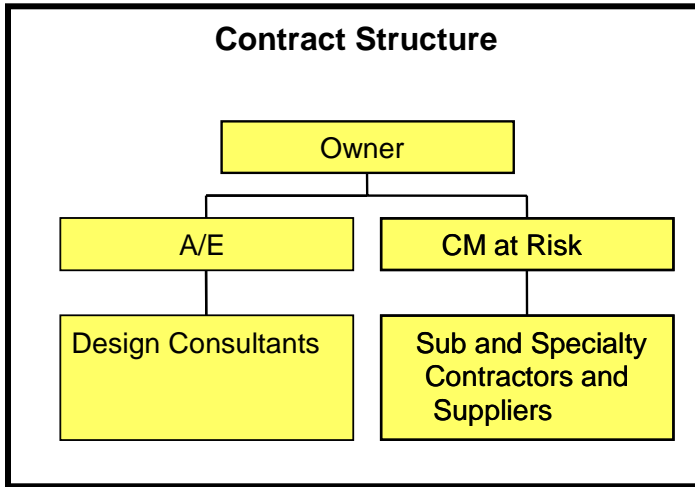
- AE selected independently based on qualifications
- Contractor selection allows consideration of qualifications and capabilities
- Best value is selected rather than low bid
- Negotiation with best value proposer possible
- Allows contracting with highly qualified firm

**Cons:**

- Good objective procurement process required or selections will be hard to defend
- No contractor input during design
- CSP slower than CM(at Risk) & Design-Build, must be designed to 100% complete documents before contractor is engaged.
- Subcontractor selection not an open process as in CM(at Risk) and Design-Build
- Relationship less adversarial than DBB but more adversarial than CM(R) or Design-Build

**Applications:** Good for single projects where pre-construction services are not needed from the contractor, the owner wants a lump sum price for construction, and the schedule will accommodate 100% design documents prior to engaging a contractor.

## Construction Manager at Risk (CMR) Alternative Project Delivery Methods



**Description:** The AE has a direct contract with the owner as in the traditional process. CMR replaces the role of GC but with the advantage of being brought on board at the same time as the AE. The owner solicits for CMR's through a two-step process. First is the RFQ which assesses the qualifications, capabilities, capacity and reliability of the construction firms who submit. The owner shortlists 3-5 firms to submit proposals and will normally interview all firms on this short list. The second step involves CMR's responding to an RFP with their staffing and management plan for the project as well as a cost proposal that includes their fees and general conditions. The selected CMR works on a fee basis throughout the design phase working with the AE to provide cost effective solutions to keep the project within budget. At some point during the detailed design phase the CMR will establish a Guaranteed Maximum Price (GMP) which gives the owner a ceiling amount which will not be exceeded unless the project scope is increased. Once the GMP is established, construction can begin. (If GMP is unacceptable, the owner can terminate the CMR and bid out the construction.) While the GMP protects the owner's upside risk, the contract is cost reimbursable and all costs are open book. As such subcontractors are publicly solicited and bid through the CMR. The CMR is at financial risk and totally responsible for performance of all the construction work under his contract.

**Pros:**

- AE selected independently based on qualifications
- More professional relationship with contractor
- Works well with a knowledgeable owner/PM
- Earlier knowledge of costs through Guaranteed Maximum Price (GMP)
- Earlier involvement of contractor possible which allows options for owner to select
- Allows owner to identify cost problems early in project
- More cost effective than low bid
- Open book contract – all savings below GMP returned to owner
- Bidding subcontract work open to owner – CM selects best value subs
- Delivers higher quality than low bid / same as DB
- Two contract system is less change for owner
- Project delivery faster than DBB
- Far less claims and litigation than DBB

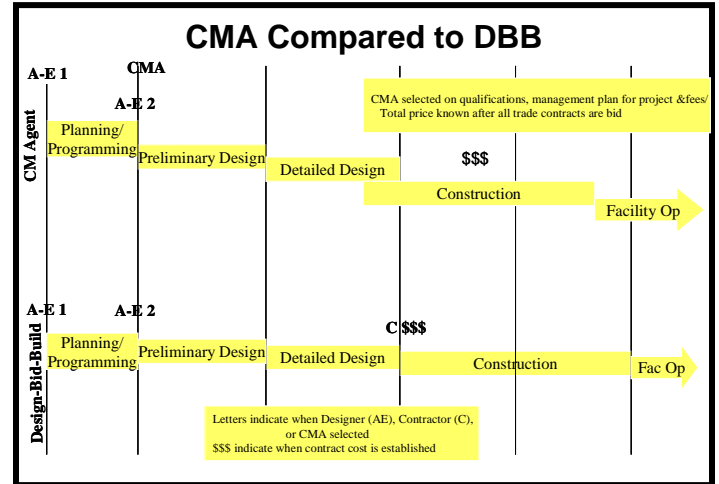
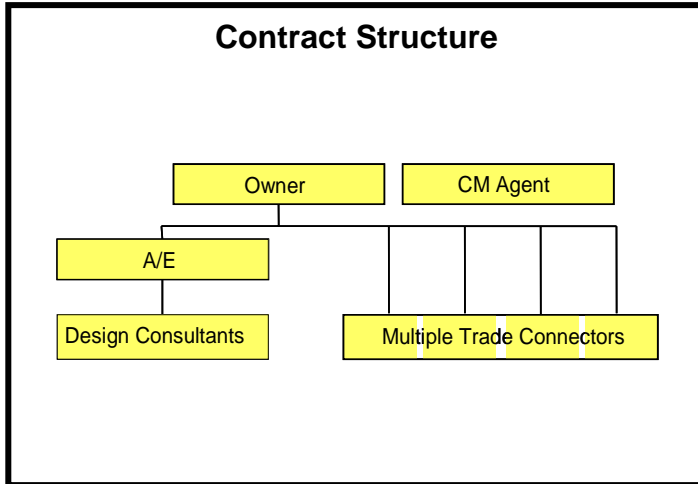
**Cons:**

- Two contracts for owner to manage
  - Disagreements go through owner
  - Owner covers gaps in design but there are less than DBB
- Parties may still have different agendas/objectives
- CM input may not be included by designer

- Resistance among those not familiar with approach
- Not for those who rely first on contract clauses to get job done / It requires a partnering attitude

**Applications:** Provides good approach when (1) AE has been predetermined, (2)when early contractor input is valuable, (3)when the quality of contractor is important, or (4)for a program of multiple projects at one site. It has proven effective in achieving HUB goals and ensuring the use of high quality subcontractors.

## Construction Manager – Agent (CMA) Alternative Project Delivery Methods



**Description:** The AE has a direct contract with the owner as in the traditional process. CMA is generally an experienced constructor who works on a consulting fee basis throughout project generally being brought on board at the same time as the AE. The owner solicits for CMA's through a two-step process similar to selecting an AE. The CMA works with the AE during the design phase to provide cost effective solutions and then like a general contractor provides coordination and oversight in the field during construction. The CMA however does not hold any subcontracts. All trade contracts (subcontracts under other project delivery methods) are publicly solicited, bid, and contracted directly with the owner. The CMA is not at financial risk or responsible for performance of all the construction work. The owner holds multiple contracts for construction and is responsible for overall construction performance.

**Pros:**

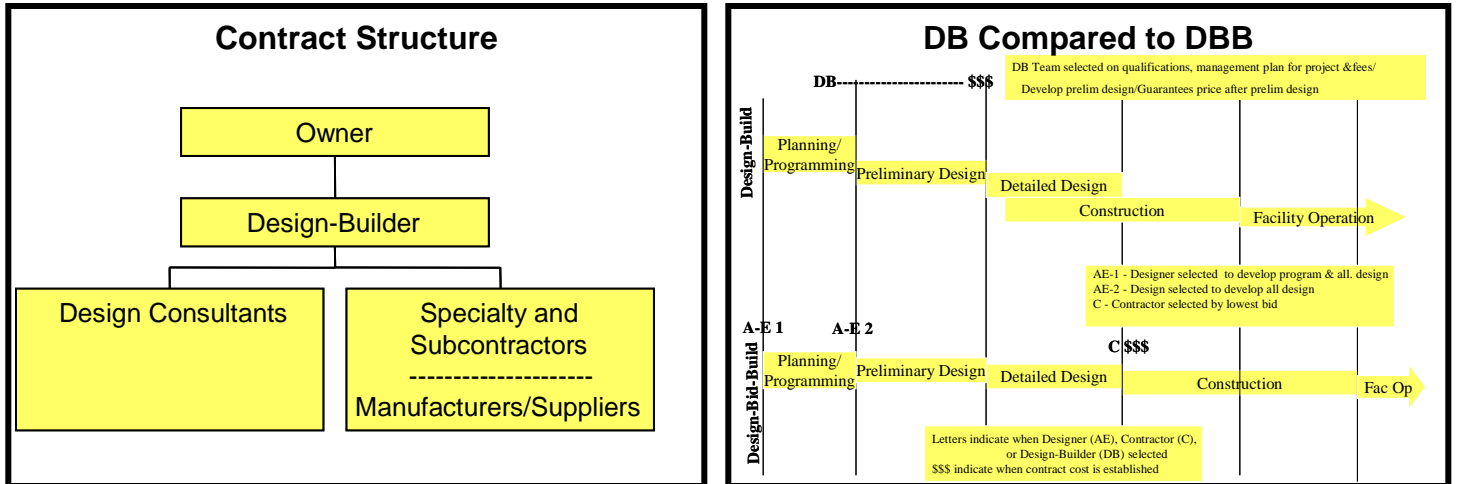
- AE selected independently based on qualifications
- More professional relationship with contractor
- Earlier involvement of contractor possible which allows options for owner to select
- Allows start prior to completion of design

**Cons:**

- No protection for the owner of a Guaranteed Maximum Price (GMP)
- Multiple trade contracts is a liability burden for the owner.
- Two contracts for owner to manage
  - Disagreements go through owner
  - Owner covers gaps in design but there are less than DBB
- Parties may still have different agendas/objectives
- CM input may not be included by designer
- Different process in front end of project

**Applications:** Was used somewhat in Texas prior to the change of the project delivery law in 1997 to get a contractor involved during the design phase of a project and to fast-track projects. It has generally been replaced by CMR and Design-Build, but it is still available for use.

## Design Build (DB) Alternative Project Delivery Methods



**Description:** Design-Build means design and construction under a single contract. A Design-Builder (DB) is typically a team of an AE and Contractor with either or both firms (as a joint venture) holding the contract with the District. It offers single source accountability and has the advantage of the designer and builder working together through all phases. The District solicits for DB's through a two-step process. First is the RFQ which assesses the qualifications, capabilities, capacity and reliability of the Design-Build teams who submit. The District shortlists 3-5 teams to submit proposals and normally interview. The second step involves DB's responding to an RFP with their staffing, design approach, and management plan for the project as well as a cost proposal that includes all fees (both design and construction) and general conditions. The selected DB works on a fee basis throughout the design phase using their in-house builders to provide cost effective solutions to keep the project within budget. At the end of design development the DB will establish a Guaranteed Maximum Price (GMP) which gives the owner a ceiling amount which will not be exceeded unless the project scope is increased. Once the GMP is established, construction can begin. (If GMP is unacceptable, the District can terminate the DB, have an AE complete the design and bid out the construction.) While the GMP protects the District's upside risk, the contract is cost reimbursable and all costs are open book. As such subcontractors are publicly solicited and bid through the DB. The DB is at financial risk and totally responsible for performance of all the design and construction work under his contract.

**Pros:**

- Single point of responsibility and accountability to the owner – clear definition of risks
- One RFQ/RFP required vs. two for other systems
- More professional relationship with contractor
- A/E and constructor on the same team providing unified recommendations to owner
- Works well with a knowledgeable owner/PM
- Earliest knowledge of firm costs through a GMP
- Allows innovations / options for owner to select
- Allows owner to identify cost problems early in project
- Open book contract – all savings below GMP returned to owner
- Bidding subcontract work open to owner – DB selects best value subs
- Least claims and litigation
- Fastest project delivery system
- More cost effective delivery system than DBB
- Quality is highest with DB (and CMR)

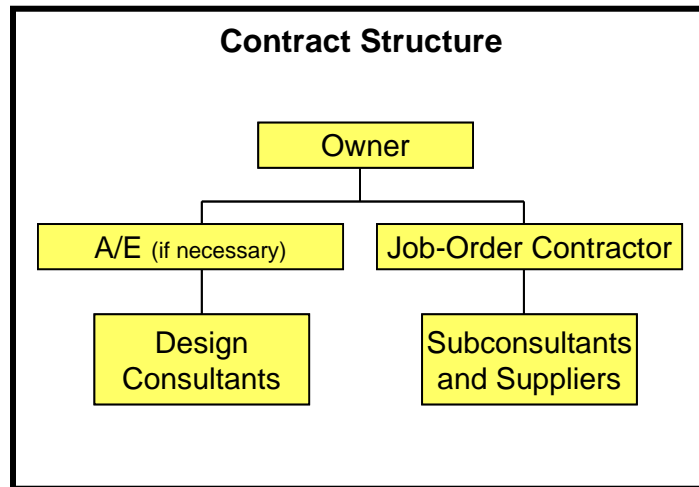
**Cons:**

- Must be decided on early in project
- Owners pushed for earlier and timely decisions

- New learning curve for owners
- Resistance among those not familiar with approach
- Not for those who rely first on contract clauses to get the job done / It requires a partnering attitude

**Applications:** Best where speed is the driving factor and the owner wants single source accountability for both design and construction.

## Job-Order Contract (JOC) Alternative Project Delivery Methods



**Description:** A job order contract is a standing arrangement with a general contractor to provide construction services on an as-needed basis. The architect/engineer (A/E) is engaged to develop a design for the contemplated contract work. If the project is small enough, then no design work may be necessary. A job order contractor is selected by issuing a RFP to qualified firms, which submit their experience and capabilities along with a multiplier coefficient. This coefficient is used to adjust the price of the work which is determined through application to an estimating guide such as Means. The contractor with the best value of coefficient and other qualifications is selected as the job order contractor. The job order contract usually has an annual upper limit which cannot be exceeded. The job order contract typically has option to be intended for multiple years if the JOC contractor's work is satisfactory. Each task order the JOC contractor performs is defined by assembling all of the elements of work and pricing them through the estimating guide. The price the contractor receives for the work is determined by multiplying the coefficient times the total price for the estimating guide.

**Pros:**

- Flexible system for small tasks under one contract
- Easy to price work based on estimating guide
- Eliminates expensive procurement process for small jobs
- Contracting system that allows quick response
- Reduces owners cost for solicitation and procurement

**Cons:**

- On certain task orders, pricing may be higher than if bid out separately
- In some cases, may be difficult to define all elements of work in estimating guide
- Limits distribution work to multiple small general contractors

**Applications:** This option is only appropriate for small projects with indefinite quantity and indefinite work schedule.

## ATTACHMENT “D”

### **Board of Regents Submittal Package at DD/35% Design Stage**

1. Architectural Rendering, or a complete set of Architectural Exterior Elevations reflecting a complete architectural design concept if exterior is altered by the Project (by prior Component/System Administrative Office agreement).
2. Complete set of Architectural Floorplans (90% complete)\*.
3. Enlarged Architectural Floorplans showing major core areas such as entryways, elevator lobbies, typical functional rooms (like classrooms), utility room layout, etc. (90% complete)\*.
4. Complete listing of all major building systems with no selection choices left unmade (i.e. drilled caisson foundations, reinforced concrete frame, two-way slab construction, brick façade with precast elements, built up flat roof, chilled water/hot water HVAC fed from central plant, etc.).
5. Detailed Cost Estimate, prepared by independent estimator and/or CM@R, in CSI, 16 Division format taken off the DD set of drawings with very few Lump Sum/\$\$ per gross square foot estimates. Additionally, a summary cost estimate with one cost item per CSI Division and with all contingencies, all profits/fees and all soft costs listed to show a comprehensive Total Project Cost Estimate.
6. A summary showing the cost of this project compared to similar size and type projects recently built in the region under similar conditions.
7. Information regarding projected operating and maintenance costs of the facility, or (in the case of renovation) the projected impact of the project on operating and maintenance costs.
8. Information regarding the projected environmental impact of the project.
9. Certification by Component and System Administrative Office that the submittal has been reviewed and found to be a complete and satisfactory Design Development/35% Design submittal. (This will be based partially on informal certification by Architect/Engineer of Record for every discipline that the design is complete, all calculations are completed, all major equipment has been sized, etc....there is nothing left to do but provide details and prepare construction documents).

\* 90% Complete means the actual floor plans are frozen and will not change. There can be minor dimensioning missing and incomplete referencing to supporting detail drawings needed to complete the architectural design.

**Obviously, much more than this is needed from the A/E for a complete Design Development/35% Design submittal. The above list is only that information that must be extracted from the submittal or supplied and presented to the Board of Regents for their decision making. Non-building projects will be different and will be decided by Component/System Administrative Office based on the vagaries of each project.**