



Project Delivery for Governmental Entities **(Cities, Counties, & River Authorities)**

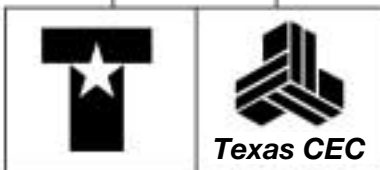


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INTRODUCTION

The 77th Legislature through Senate Bill No. 510 authorized certain Governmental Entities to utilize several different methods for the procurement of certain facility construction contracts. (Local Government Code 252.022, 252.043, 262.023; as described in Subchapter H, Chapter 271.)

5B510 defines a “Governmental Entity” only as a city county or river authority. (Local Government Code-271.111(10)).

5B510 defines a “Facility” as buildings, the design and construction of which are governed by accepted building codes. The term does not include:

- (A) highways, roads, streets, bridges, utilities, water supply projects, water plants, wastewater plants, water and wastewater distribution or conveyance facilities, wharves, docks, airport runways and taxiways, drainage projects, or related types of projects associated with civil engineering construction; or
- (B) buildings or structures that are incidental to projects that are primarily civil engineering construction projects

The statute provides specific definition of each delivery method, and the process and procedures for procurement. Construction, however, is a complex process wherein many variables affect the final outcome. The drive by industry and owners to deliver projects faster, spend less money, improve quality, reduce litigation and create less conflict has compounded this complexity. As Governmental Entities deliberate which project delivery method provides “best value,” a number of factors must be evaluated. There is no single “best” method. Each delivery method has certain advantages and disadvantages. It is not the intent of this document to endorse any specific method, but to provide a better understanding of the most common delivery methods including basic definitions, relative merits and limitations of each method, insight to the typical issues inherent in each method and recommend procurement guidelines.

This document is the product of a collaborative effort by owners, architects, engineers, contractors, design/builders, construction managers, attorneys and many other volunteers. It is their hope that users find it beneficial and that it contributes to the improvement of the building industry. It is also recognized that the construction process is an evolving process. As this evolution takes place, supplements and revisions to this document will be issued to keep users current with industry trends.

PROJECT DELIVERY METHODS

Industry currently recognizes seven project delivery methods. These methods principally differ in three ways:

- The number of contracts held by a Governmental Entity;
- Assistance by the builder in the design phase; and
- Governmental Entity participation in subcontract awards.

The seven delivery methods are:

- (1) Competitive Bidding
- (2) Competitive Sealed Proposals
- (3) Construction Management, Agency
- (4) Construction Management at Risk
- (5) Design/Build
- (6) Bridging
- (7) Job Order Contracting

Construction Management, either Agency or at Risk, are procured under the “request for proposals” provision. Bridging is a form of design/build.

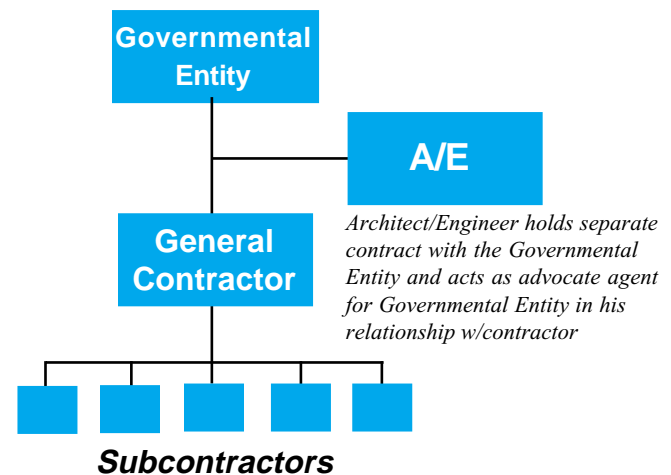
Some Governmental Entities engage the services of “Project Managers,” “Program Managers” or a “Construction Manager, Advisor” to assist or augment their staff in the management of their construction programs. These “*service*” roles are not recognized as delivery methods. Any of the seven common project delivery methods, however, may be used in conjunction with these management services.

The definition, characteristics, relative merits, phasing and limitations of these common delivery methods are presented to assist Governmental Entities in determining which method provides “*the best value to the Governmental Entity.*”

Competitive Bidding

Definition

Competitive Bidding is a delivery method wherein the Governmental Entity selects the Architect/Engineer to design the project. Once construction documents are fully complete, the Governmental Entity requests lump sum prices from general contractors to perform the work. Selection of the General Contractor is based on the lowest price submittal and award is made to a single contractor.



Characteristics

This delivery method is known as the “traditional” method and is the method with which most public agencies are the most familiar. Known as an open-price aggressive delivery method.

Delivery Schedule is three linear phases resulting in the longest time duration:



Pros

- “ Familiar delivery method
- “ Defined project scope
- “ Single point of responsibility for design and construction
- “ Open, aggressive bid competition

Cons

- “ No design phase assistance from builder
- “ Longer schedule duration than other methods
- “ Price not established until bidding is complete
- “ Lack of flexibility for change
- “ Adversarial relationship

Best Suited

New projects that are not schedule sensitive nor subject to potential change.

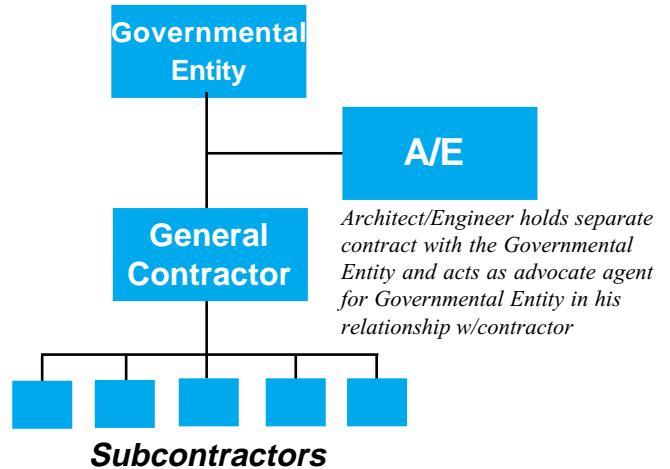
Least Suited

Complex projects that are sequence or schedule sensitive. Projects subject to potential change.

Competitive Sealed Proposals

Definition

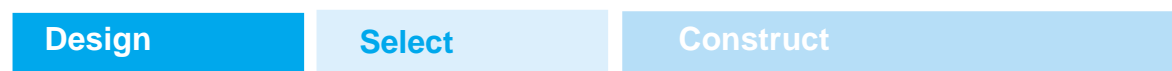
Competitive Sealed Proposal is a delivery method similar to competitive bidding in that the Governmental Entity selects an Architect/Engineer to design the project. Once construction documents are fully completed, the Governmental Entity solicits proposals from contractors to perform the work. Selection is generally based on a combination of price and other factors that the Governmental Entity deems in its best interest, such as project team personnel, schedule, contractor's past experience, etc.



Characteristics

Similar to competitive bidding, but this delivery method allows flexibility to select a contractor on a basis of specific selection criteria which includes factors other than price. Does not necessarily result in lowest price.

Delivery Schedule is three-linear phases resulting in longer time duration than other methods:



Pros

- Builder selection flexibility
- Single point of responsibility for design and construction
- Defined project scope

Cons

- No design phase assistance from builder
- Longer schedule duration than other methods
- Price not established until design is complete
- Adversarial relationship

Best Suited

New projects that are not schedule sensitive nor subject to potential change.

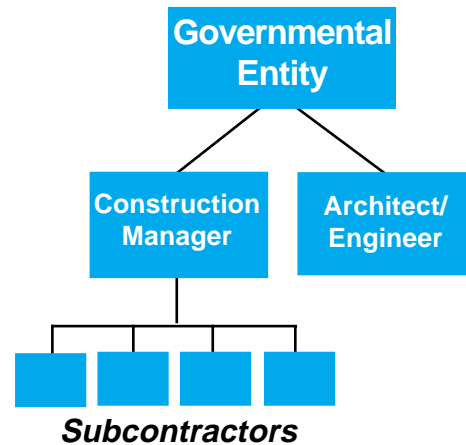
Least Suited

Complex projects that are sequence or schedule sensitive. Projects subject to potential change.

Construction Management at Risk

Definition

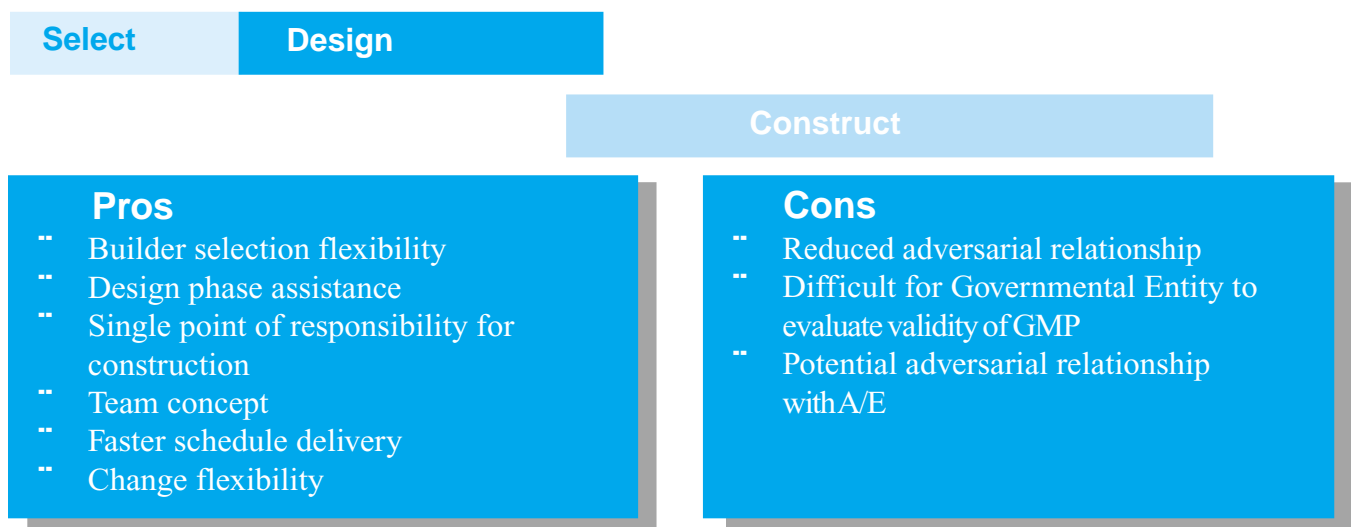
Construction Management at Risk is a delivery method wherein the governmental entity selects an Architect/Engineer to design the project and separately selects a Construction Manager at Risk to serve as the General Contractor. The Construction Manager assumes the risk for construction guaranteed price and provides design phase consultation in evaluating costs, schedule, implications of alternative designs and systems and materials during and after design of the facility. Selection is based on criteria that combine qualifications, experience, and may involve fee and general conditions.



Characteristics

The CM at Risk contracts directly with the trades or subcontractors and has single point of responsibility for the delivery of the project. The CM at Risk is normally selected at the same time, or shortly after, the Architect/Engineer and provides assistance in evaluating costs, scheduling and constructibility. The CM at Risk provides a Guaranteed Maximum Price (GMP) to fix the cost and competitively bids or receives proposals from the trades and subcontractors. The owner can speed construction by starting elements of the construction prior to design being complete.

Delivery Schedule is three phase non-linear:



Best Suited

Larger new or renovation projects that are schedule sensitive, difficult to define, or subject to change.

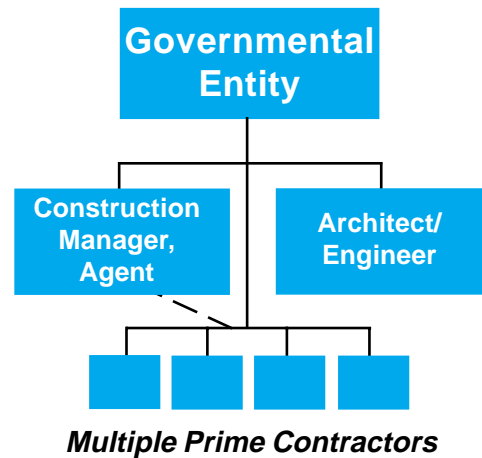
Least Suited

Smaller projects.

Construction Management, Agency

Definition

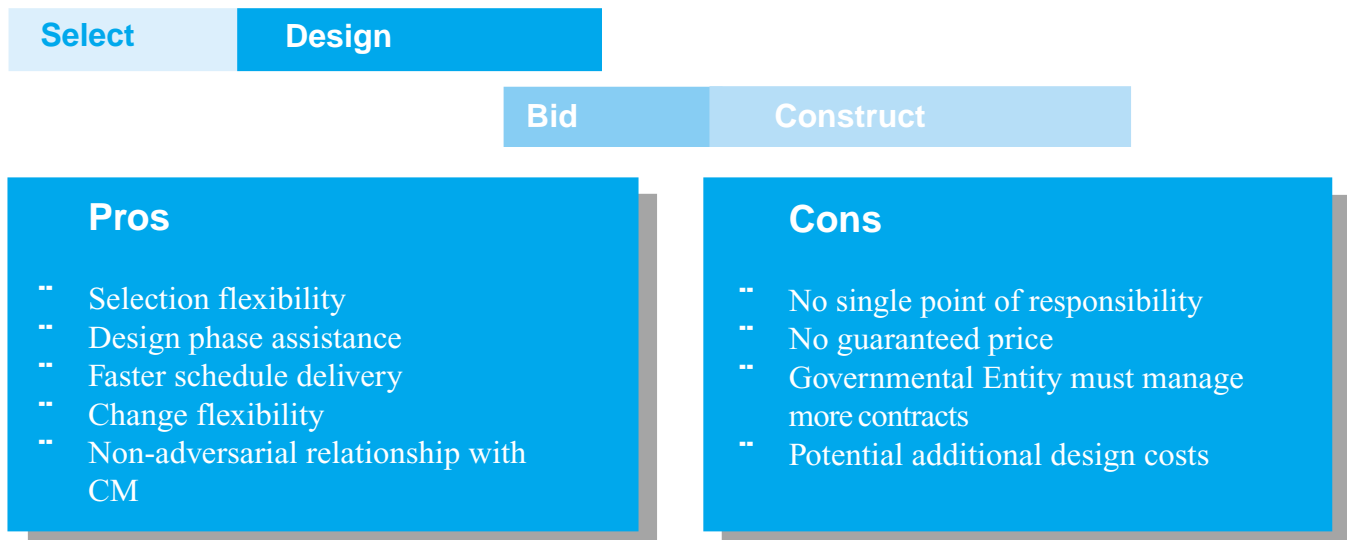
Construction Management, Agent is a delivery method wherein the governmental entity selects an Architect/Engineer to design the project and separately selects a Construction Manager to serve as an Agent for the Governmental Entity providing administration and management services in lieu of a General Contractor. The CM, Agent provides design phase assistance, but holds no subcontracts nor provides project bonding for the construction. Selection of the CM, Agent is based on qualifications and experience.



Characteristics

The Construction Manager, Agent is characterized by the work divided into multiple packages and bid directly to the trades. The Governmental Entity holds all trade contracts and the CM acts as the Governmental Entity's agent in the management and direction of the work. The CM is normally selected at the same time as the Architect/Engineer or shortly thereafter and provides assistance in the design phase for costs, schedule, and constructibility. The Governmental Entity can speed construction by awarding elements of the work prior to the completion of design.

Delivery Schedule is four phase - non linear:



Best Suited

Larger new or renovation projects that are schedule sensitive, difficult to define, or subject to change.

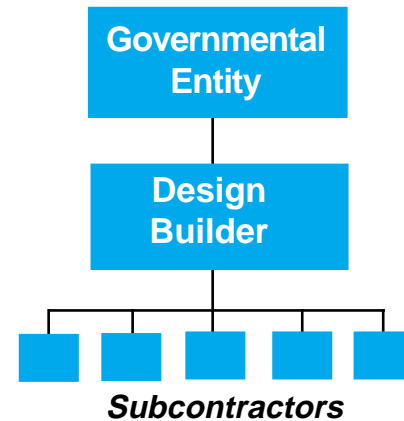
Least Suited

Smaller projects.

Design/Build

Definition

A method where a single entity is contracted to provide both design and construction. The Design/Build team consists of builder, architect and engineer. The Design/Builder contracts directly with the subcontractors and is responsible for delivery of the project. Selection is based on the proposal offering the best value to the Governmental Entity.



Characteristics

This method requires the Governmental Entity to be more knowledgeable and involved in the process. Key element to success is trust between Governmental Entity, Contractors, and Architect/Engineers.

Delivery Schedule is two non-linear phases:



Pros

- Selection flexibility
- Single point of responsibility for design and construction
- Faster schedule delivery
- Team concept

Cons

- Loss of check and balance
- More difficult process to manage
- Potential adversarial relationship between Governmental Entity and Design/Builder

Best Suited

New or renovation projects that are schedule sensitive.

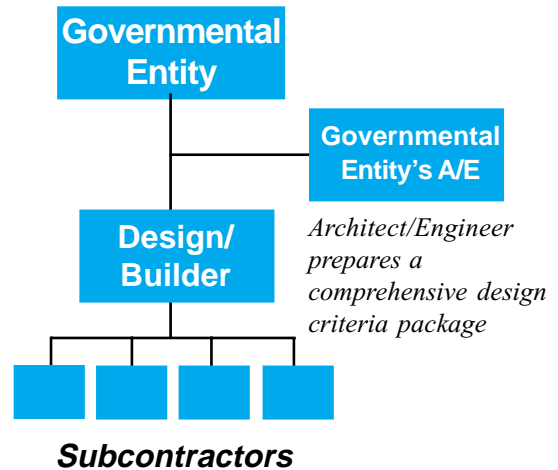
Least Suited

Projects that are difficult to define and are less schedule sensitive.

Bridging

Definition

Bridging is another form of Design/Build where the Governmental Entity hires its A/E to prepare a “design criteria package” which is more comprehensive and enables the Governmental Entity to receive competitive sealed proposals from Design/Build teams. The Design/Builder is selected on either a competitive bid process or on a combination of qualifications, experience and price. The Design/Builder completes the construction documents and performs the work.



Characteristics

Involves two Architect/Engineer teams. One to prepare the Governmental Entity’s detailed design criteria package and one to prepare final design for the Bridging Design/Build team. Trust is a major element to success.

Delivery Schedule is three partially-linear phases:



Pros

- “ Single point of responsibility for design and construction
- “ Faster schedule delivery
- “ Enhanced scope definition
- “ Builder/Architect/Engineer team relationship

Cons

- “ Loss of check and balance
- “ More difficult process to manage
- “ Adversarial relationship between Governmental Entity’s Architect/Engineer and Design/Build Architect/Engineer

Best Suited

Larger new or renovation projects that are schedule sensitive and difficult to define.

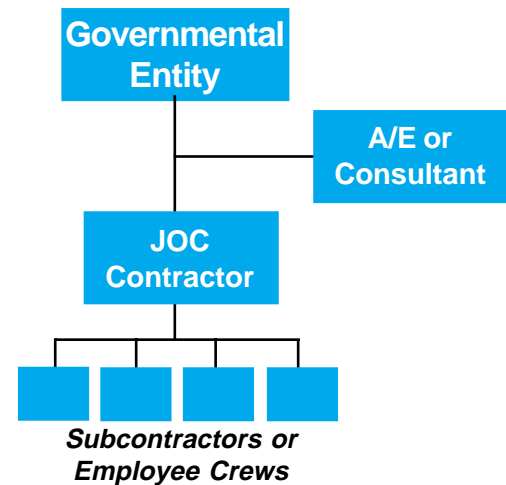
Least Suited

Smaller projects and those projects to change.

Job Order Contracts

Definition

As normally defined within the industry, Job Order Contracting is a process for contracting for the minor construction, repair, rehabilitation, or alteration of facilities when the work is of a recurring nature but the delivery times, type, and quantities of work required are indefinite. Orders are priced based substantially upon pre-described and pre-priced tasks contained in a Governmental Entity specified Unit Price Book. The prime contractor bids a “coefficient” or multiplier which is applied to these unit prices to determine the actual rates. Selection is based upon the combination of experience, qualifications, past performance, technical ability, financial stability, reputation, and price which provides the overall “best value.”



Characteristics

- A long term “win - win” partnering relationship between the Governmental Entity and the JOC contractor.
- The contract has a low guaranteed minimum volume of work and a high, but realistic maximum.
- The contract normally has a base term of not less than six months, nor more than two years with the Governmental Entity having the option to renew it for one to four additional terms.
- The low guarantee, combined with the potential for substantial volume and optional renewals, provides a strong incentive for the contractor to deliver high quality, responsive service.
- Unit prices (rates) are fixed for the base term and adjusted, if options are exercised, by using a construction cost index or, if a commercial Unit Price Book is specified, using the latest edition.
- The prime contractor uses local small businesses as subcontractors, with limited self-performance.
- Projects are accomplished by the issuance of individual delivery orders.
- Fast response is possible because of the reduced up-front administrative and design requirements.

Delivery Schedule for each project consists of two non-linear phases:

1. **Joint Planning:** determination of the scope of work, design and permit requirements, construction details, and applicable unit prices and quantities to produce a fixed price lump sum delivery; and
2. **Execution:** design, construction, demolition, repair, replacement, alteration, renovation.

Pros

- Fast response
- Reduced changes
- Reduced “up-front” time and cost
- Incentive for higher quality
- Puts more money in local businesses
- Up-front involvement of the contractor facilitates concurrent design and execution

Cons

- Perception of threat to “in-house” work force or local businesses.
- Requires teamwork to reach potential.
- Need trained personnel on Governmental Entity staff, or provided by a consultant, to best administer contract

Best Suited

Schedule sensitive, multi-trade, minor construction, repair, alteration, or renovation projects

Least Suited

Single trade simple projects or very small or very large projects.

MANAGEMENT ASSISTANCE

There are distinct differences between Project Delivery Methods and Management Assistance. Project Delivery is the actual design and construction of facilities whereas Management Assistance does not entail the actual design or construction but is an advisory role. There are three basic approaches a Governmental Entity can choose in obtaining management assistance:

- (1) Construction Management, Advisor
- (2) Project Management
- (3) Program Management

CONSTRUCTION MANAGEMENT, ADVISOR

A Construction Manager, Advisor is an additional consultant a Governmental Entity may wish to engage to provide advice on matters of project scope, cost, schedule, quality, constructibility, and project delivery. The Construction Manager, Advisor serves as an independent resource providing continuous management services through design, bidding and construction phases. The authority and responsibilities of the Construction Manager, Advisor varies as may be defined by the Governmental Entity. The Construction Manager, Advisor does not assume the responsibilities nor replace the traditional roles of the architect/engineer or contractor.

The Construction Manager, Advisor may be brought on board at any point in the process but is normally hired at the beginning of the design phase. A Construction Manager, Advisor may be appropriate when a Governmental Entity has neither sufficient nor knowledgeable staff to manage larger, complex projects.

PROJECT MANAGEMENT

A Project Manager is similar to the Construction Manager, Advisor in that the Project Manager is also an additional consultant providing advice on project scope, cost, schedule, quality, constructibility, and project delivery.

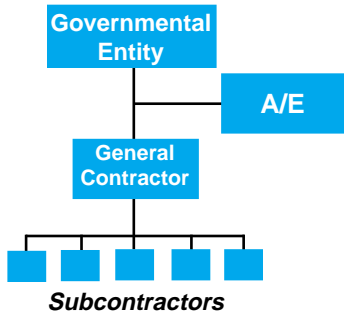
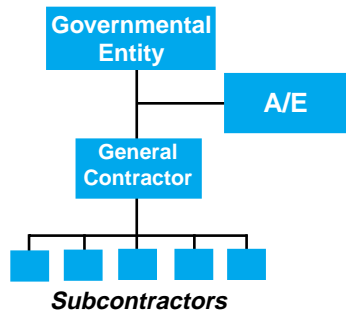
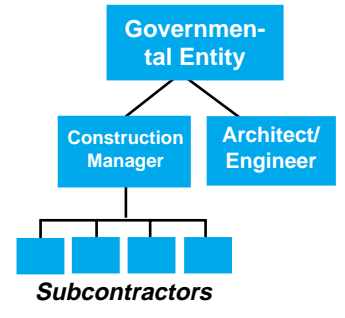
The Project Manager also does not assume the responsibilities nor replace the traditional roles of the architect/engineer or contractor. The essential difference between the Project Manager and Construction Manager, Advisor is services. The Project Manager is typically hired early in the process and provides pre-design and post-construction services. These services may include demographic and financial studies, site selection, architect/ engineer selection and other such services as the Governmental Entity may determine.

A Project Manager is also appropriate when a Governmental Entity has neither sufficient nor knowledgeable staff to manage larger, complex projects and may need specialized services.

PROGRAM MANAGEMENT

A Program Manager is also an additional consultant providing similar services provided by a Project Manager. A Program Manager addresses a program of multiple projects where the Project Manager is focused on a single project.

A Program Manager is very appropriate for a Governmental Entity with a large bond program where they have neither sufficient nor knowledgeable staff to manage the program.

MATRIX OF PROJECT DELIVERY METHODS			
Legislative Term	Competitive Bidding	Competitive Sealed Proposals	Request for Proposals
Industry Term	Traditional Process, Hard Bid Lump Sum or Stipulated Sum	Traditional Process, Hard Bid Lump Sum or Stipulated Sum	Construction Management at Risk
Definition	<p>A delivery method wherein the Governmental Entity selects an architect, engineer to design and develop construction documents from which the Governmental Entity solicits lump sum bids. Selection is based on the lowest responsible bid and the contractor serves as a single point of responsibility for construction.</p>	<p>A delivery method similar to competitive bidding. The Governmental Entity selects an architect, engineer to design and develop construction documents. Once documents are fully complete the Governmental Entity solicits sealed proposals. Selection is based on a combination of price and other factors that the Governmental Entity deems provide best value.</p>	<p>A method where an Architect/Engineer develops construction documents and the construction manager serves as the general contractor providing pre-construction and construction services. The Construction Manager at Risk provides design phase consultation in evaluating costs, schedule, implications of alternative designs, systems and materials during design and serves as a single point of responsibility contracting directly with the subcontractors during construction.</p>
Pros	<ul style="list-style-type: none"> • Familiar delivery method • Defined project scope • Single point of responsibility for construction • Open, aggressive bidding 	<ul style="list-style-type: none"> • Selection flexibility • Defined project scope • Single point of responsibility for construction • No design phase assistance • Longer schedule duration 	<ul style="list-style-type: none"> • Selection flexibility • Design phase assistance • Single point of responsibility for construction • Team concept • Faster schedule delivery • Change flexibility
Cons	<ul style="list-style-type: none"> • No design phase assistance • Longer schedule duration • Price not established until bidding is complete • Adversarial relationship • Lack of flexibility for change 	<ul style="list-style-type: none"> • Price not established until design is complete • Adversarial relationship 	<ul style="list-style-type: none"> • Adversarial relationship reduced • Difficult for Governmental Entity to evaluate GMP
Best Suited	<p>New projects that are not schedule sensitive nor subject to potential change.</p>	<p>New projects that are not schedule sensitive nor subject to potential change.</p>	<p>Larger new or renovation projects that are schedule sensitive, difficult to define, or subject to change.</p>
Least Suited	<p>Complex projects that are sequence or schedule sensitive. Projects subject to potential change.</p>	<p>Complex projects that are sequence or schedule sensitive. Projects subject to potential change.</p>	<p>Smaller projects</p>

Request for Proposals	Design/Build	Design/Build	Job Order Contracting
Construction Management, Agency	Design/Build	Bridging	Delivery Order Contracting, Job Order Contracting, SABER, Fast Track Construction, Work Order Requirements Contract
<p>A method where an Architect/Engineer develops construction documents and the construction manager serves as an agent for the Governmental Entity providing pre-construction and construction services in lieu of a general contractor. The Construction Manager, Agent provides design phase assistance but holds no subcontracts nor provides project bonding for the construction. The multiple trade contracts are held by the Governmental Entity. Selection is based on the proposal offering the best value to the Governmental Entity.</p>	<p>A method where a single entity is contracted to provide both design and construction. The Design/Build team consists of contractor, architect and engineer. The Design/Builder contracts directly with the subcontractors and is responsible for delivery of the project. Selection is based on the proposal offering the best value to the Governmental Entity.</p>	<p>A form of design/build where the Governmental Entity selects an architect, engineer to prepare the “design criteria package” which is more comprehensive and enables a Governmental Entity to receive competitive proposals from the Design/Build teams.</p>	<p>Job Order Contracting is a process for contracting for the minor repair, rehabilitation, or lateration of facilities when the work is of a recurring nature but the delivery times, type, and quantities of work required are indefinite.</p>
<ul style="list-style-type: none"> • Selection flexibility • Design phase assistance • Faster schedule delivery • Change flexibility • Non-adversarial relationship 	<ul style="list-style-type: none"> • Selection flexibility • Single point of responsibility for design and construction • Faster schedule delivery • Team concept 	<ul style="list-style-type: none"> • Single point of responsibility for design and construction • Faster schedule delivery • Enhanced scope definition • Builder/architect/engineer team relationship 	<ul style="list-style-type: none"> • Fast response • Reduced changes • Reduced “up-front” time and cost • Incentive for higher quality • Puts more money in local business • Up-front involvement of the contractor facilitates concurrent performance of design and execution.
<ul style="list-style-type: none"> • No single point of responsibility • No guaranteed price • Governmental Entity must manage more contracts 	<ul style="list-style-type: none"> • Loss of check and balance • More difficult for Governmental Entity to manage • Potential adversarial relationship between Governmental Entity and Design/Builder 	<ul style="list-style-type: none"> • Loss of check and balance • More difficult method to manage • Adversarial relationship between Governmental Entity’s architect/engineer and Design/Build architect/engineer 	<ul style="list-style-type: none"> • Perception of threat to “in-house” work force or local business • Requires teamwork to reach potential • Need trained personnel on Governmental Entity staff, or provided by a consultant, to best administer contract.
Larger new or renovation projects that are schedule sensitive, difficult to define, or subject to change.	New or renovation projects that are schedule sensitive.	Larger new or renovation projects that are schedule sensitive and difficult to define	Schedule sensitive, multi-trade, minor repair, alteration, or renovation projects
Smaller projects	Projects that are difficult to define, and are less schedule sensitive.	Smaller projects and those projects subject to change.	Single trade simple projects or very small projects.

RECOMMENDED GUIDELINES FOR PROCUREMENT

Even with the procurement requirements of Senate Bill No. 510, the building industry has seen a variety of procurement processes. Many are well thought out and done very professionally. Others have caused confusion, cost time and created difficulty for both Governmental Entities and industry in finalizing a selection and contract. These recommended guidelines have been prepared to help eliminate some of the confusion, streamline the process, enhance the Governmental Entity's opportunity to achieve "best value" and improve industry practices.

GOVERNMENTAL ACTION

Before starting the selection process, the Governmental Entity's board should determine which of the methods specified will provide "the best value to the Governmental Entity." The Governmental Entity should consider:

- **The size and complexity of the project**
- **The time allocated for the construction of the project**
- **The competitiveness of the current/local construction market**
- **The flexibility desired**
- **The availability of contractors and subcontractors in the local market**

Whatever the factors, it is recommended that the Governmental Entity evaluate the various methods and formally adopt the method that they deem "best value."

Regardless which method the Governmental Entity selects, there are two key provisions to which the Governmental Entity must adhere:

- Advertisement
- Bonding

ADVERTISEMENT

Local Government Code-271.112 Applicability; Other Law

(d) For a contract entered into by a municipality or river authority under any of the methods provided by this subchapter, the municipality or river authority shall publish notice of the time and place the bids or proposals, or the responses to a request for qualifications, will be received and opened. The notice must be published in a newspaper or general circulation in the county in which the municipality's central administrative office is located or the county in

which the greatest amount of the river authority's territory is located once each week for at least two weeks before the deadline for receiving bids, proposals, or responses. If there is not a newspaper of general circulation in that county, the notice shall be published in a newspaper of general circulation in the county nearest the county seat of the county in which the municipality's central administrative office is located or the county in which the greatest amount of the river authority's territory is located. In a two-step procurement process, the time and place the second step bids, proposals, or responses will be received are not required to be published separately.

- (e) *For a contract entered into by a county under any of the methods provided by this subchapter, the county shall publish notice of the time and place the bids or proposals, or the responses to a request for qualifications, will be received and opened. The notice must be published in a newspaper of general circulation in the county once each week for at least two weeks before the deadline for receiving bids, proposals, or responses. If there is not a newspaper of general circulation in the county, the notice shall be:*
- (1) posted at the courthouse door of the county; and*
 - (2) published in a newspaper of general circulation in the nearest county.*
- (f) *A contract entered into or an arrangement made in violation of this subchapter is contrary to public policy and is void. A court may enjoin performance of a contract made in violation of this subchapter. A county attorney, a district attorney, a criminal district attorney, a resident of a county that enters into a contract under this subchapter or of a county in contract under this subchapter or of a county in which a municipality or a river authority that enters into a contract under this subchapter is located, or any interested party may bring an action for an injunction. A party who prevails in an action brought under this subsection is entitled to reasonable attorney's fees as approved by the court.*

BONDING

Texas Government Code, Chapter 2253 requires bonding for contracts for construction, alteration, or repair of a public building or completion of any public work:

- (1) performance bonds for all construction in excess of \$100,000;
- (2) and payment bonds for all construction in excess of \$25,000

COMPETITIVE BIDDING

The first delivery method authorized is Competitive Bidding. (Local Government Code 271.113(a) (1)). If a Governmental Entity determines that this method provides the best value then the Governmental Entity “must comply with the competitive bidding procedures stated in chapter 271, subchapter B of the Local Government Code. The following Procurement recommendations are traditional and are consistent with industry standards and good business practices.

DEFINITION

Competitive Bidding is a delivery method wherein the Governmental Entity selects an Architect/Engineer to design the project and develop construction documents from the Governmental Entity solicits lump sum competitive bids. Selection of the contractor is based on the lowest responsible bid and the contractor serves as a single point of responsibility for construction.

CHARACTERISTICS

This delivery method is known as the “traditional” method and is the method with which most public agencies are the most familiar. Its three phases, design-bid-construct, are linear and thus result in the longest time duration of all the methods. This method is the easiest to understand and manage and does provide an open aggressive competition. The architect/engineer and contractor each have separate contracts with the Governmental Entity. The architect/engineer assist the Governmental Entity in managing the contractor’s contract. This method has been used on a variety of project types, however, it is best suited for projects that can be fully defined and are not sequence nor schedule sensitive.

PROS

The advantages of this delivery method stem from its long and widespread use and the clear roles of the contractor, architect/engineer and Governmental Entity:

- Its an easy method to understand and manage and is familiar to all Governmental Entity.
- The project scope is fully defined prior to construction.
- The Governmental Entity has a single contractor responsible for the construction.
- Contractors are familiar with this method which enables open, aggressive Governmental Entity has a check and balance between the architect/engineer and contractor.

CONS

The disadvantages of this method include:

- The Governmental Entity and architect/engineer do not receive the contractor's advice on constructibility and cost during design.
- The linear phasing results in the longest delivery schedule of all the methods.
- The final price is not established until the bids are received.
- Adversarial relationships and the potential for litigation can develop between the contractor and architect/engineer due to separate contracts and the difficulty of achieving a perfect set of documents and the contractor's need to protect their costs.
- With contractor selected on the lowest bid, any changes that may occur must be priced, reviewed and approved. This process does not always result in the lowest cost for a change and reduces the flexibility for the Governmental Entity to make changes.

PROCUREMENT

The procurement process for contractors is based on the lowest responsible bid. A bid is deemed responsible when submitted on time and in the format required by the bidding documents. Additionally, qualified bid bond, payment and performance bonds must be provided.

The Governmental Entity may consider the factors listed in section 271.113(b) in determining which bid to accept.

Industry recommends that when Governmental Entities utilize this method the principal selection criteria be lowest price. If a Governmental Entity determines that other factors have equal or greater importance, then it is recommended that the Competitive Sealed Proposals method be utilized.

Any architect/engineer contracted to provide design shall be selected on the basis of demonstrated competence and qualifications in accordance with Subchapter A, Chapter 2254, Government Code.

RECOMMENDATIONS

It is industry's general recommendation that competitive bidding should be an open process. Many Governmental Entities, however, do pre-qualify potential bidders. If the Governmental Entity elects to pre-qualify, it is recommended that the pre-qualification process:

Pre-qualifications

- (1) Be conducted as soon as possible to allow notification and adequate time for potential bidders to prepare their bid. A minimum of 14 days should be provided.
- (2) Not be restrictive in the number of bidders allowed. All potential bidders deemed qualified should be allowed to bid.
- (3) Not be exhaustive in its content. All potential bidders who demonstrate:
 - Financial capability
 - Comparable project experience
 - Satisfactory references should be allowed to bid.

When bids are received after a pre-qualification process, award should be made to the lowest bidder.

Projects Over Budget

When all the bids received are over budget, there are several approaches to reducing costs. Each approach involves evaluation of alternative materials, methods or scope modifications. The process works best when the Governmental Entity selects its apparent low bidder and works with that single contractor to evaluate cost saving alternatives. This maximizes cost leverage with subcontractors and maintains clarity of scope. If the apparent low bidder is unable to achieve satisfactory reductions, then the Governmental Entity should move to the next lowest bidder.

RECOMMENDED CONTRACT FORM

A standard contract agreement prepared by the American Institute of Architects, AIA A101 is recommended.

Modifications and cost reductions to bring the project in budget should be documented and incorporated in the contract through a formal change order.

COMPETITIVE SEALED PROPOSALS

Another method authorized by Senate Bill No. 510 is “Competitive Sealed Proposals” (Local Government Code 271.113 (a) (2)). The specific procurement requirements are outlined in the Local Government Code 271.116. The following are additional recommended guidelines believed to be both consistent with the statute and industry standards as well as good business practice when a Governmental Entity determines that this delivery method provides the best value to the Governmental Entity.

DEFINITION

Competitive Sealed Proposal is a delivery method similar to Competitive Bidding. The Governmental Entity selects an Architect/Engineer to design the project and once construction documents are fully complete solicits sealed proposals from contractors to perform the work. Selection is based on a combination of price and other factors that the Governmental Entity deems provide best value. Factors typically include schedule, proposed personnel, creativity in approach, safety record and past experience.

CHARACTERISTICS

Competitive Sealed Proposals have the same characteristics as Competitive Bidding but provide flexibility in selecting the contractor. The Governmental Entity still has a single contractor with responsibility for construction, a three-phase linear process and separate contracts with the architect/engineer and contractor. Like Competitive Bidding, this method has been used on a variety of project types; however, is best suited to projects that can be fully defined and may be more sequence and schedule sensitive. This method does not necessarily result in the lowest price.

PROS

The advantages of this delivery method are:

- It provides flexibility in selection of a contractor based on specific criteria factors other than price.
- The project scope is fully defined prior to construction.
- The Governmental Entity has a single contractor responsible for the construction.
- The roles of contractor, architect or engineer and Governmental Entity are clearly defined.
- The Governmental Entity has a check and balance between the architect/engineer and contractor.

CONS

The disadvantages of this method include:

- The Governmental Entity and architect/engineer do not receive the contractor's advice on constructibility and cost during design.
- The linear phasing results in a longer delivery schedule.
- The final price is not established until the bids are received.
- Adversarial relationships and the potential for litigation can develop between the contractor and architect/engineer due to separate contracts and the difficulty of achieving a perfect set of documents and the contractor's need to protect their costs.
- Contractor selection is more difficult and requires the Governmental Entity to prepare and select from definitive selection criteria.
- Any changes that may occur must be priced, reviewed and approved. This process does not always result in the lowest cost for a change and reduces the flexibility for the Governmental Entity to make changes.

PROCUREMENT

The procurement process for contractors can be a single step or a two-step process. If a two-step process is selected, the first step is a general Request for Qualifications from which the Governmental Entity would qualify potential proposers. The second step is the request for competitive sealed proposals. The Governmental Entity's advertisement must clearly state the selection criteria and the Governmental Entity must evaluate and rank all proposals against the published criteria.

Any architect/engineer contracted to provide design shall be selected on the basis of demonstrated competence and qualifications in accordance with Subchapter A, Chapter 2254, Government Code.

Qualification Phase

In a two-step process, the first step is a request of potential proposers general qualifications to determine their overall capabilities. Cost-related or price-related questions should not be asked in this step. Suggested questions, which the Governmental Entity may consider, include:

- How substantial is the contractor's recent experience in the construction of projects of comparable size and complexity?
- How substantial is the contractor's experience in construction of educational facilities of comparable size and complexity?

- Is the contractor knowledgeable about or have recent or current experience in the Governmental Entity's geographical area?
- Has the contractor worked for the Governmental Entity in the past? If so, was that work satisfactory to the Governmental Entity?
- How long has the contractor been in business?
- Does the contractor's organizational structure, licensing and financial information indicate that the firm is capable of undertaking the project?
- Did the references provided (both owners and architects) have a favorable experience with the organization? Would they work with them again? How comparable was their project to the one proposed?

Prequalification may not be a conclusive determination that a proposer offers the Governmental Entity the best value and a prequalified proposer may be rejected on the basis of subsequently discovered information. If a proposer fails to qualify for a specific project or opportunity, that failure can not bar that proposer from future projects.

Proposal Request

The request for competitive sealed proposals should require the potential contractor's specific proposal to perform the work and must clearly identify the selection criteria from which selection will be made. A minimum of three weeks should be allowed for offers to prepare their proposals.

Selection Criteria

The Governmental Entity's selection criteria should reflect those factors that the Governmental Entity deems of significant importance. Such factors may include:

- **Schedule:** The contractor's ability or commitment to deliver or sequence delivery by a specific date(s).
- **Personnel:** The specific capabilities and number of personnel proposed.
- **Approach:** The project plan or approach proposed.
- **Price:** The quoted price or cost methodology, alternatives proposed and markup for changes.
- **Safety:** The contractor's safety record and safety plan for this project.
- **Quality Program:** The contractor's approach to quality.

RECOMMENDATIONS

Public Opening of Proposals

Proposals are to be received, publicly opened and read aloud by the Governmental Entity. A public opening is a fair process and clearly establishes the price, if required, of each proposal. The other criteria for selection, however, generally requires some degree of evaluation and therefore the proposal that provides best value may not be readily apparent. The Governmental Entity needs time to evaluate the proposals against the selection criteria and determine which proposal offers the best value. The Governmental Entity must within 45 days of opening the proposals evaluate and rank each proposal using the published selection criteria. It is recommended that rankings be publicly released after evaluations are completed.

Proposal Reviews

After proposals are received, evaluated and ranked, the Governmental Entity may elect to work with the highest ranked offer to reduce costs through the evaluation of alternative materials, methods or scope modifications. If cost objectives cannot be reached with the top ranked offer, the Governmental Entity must move to the second ranked offer and then other offers in turn until the cost objectives are met or all proposals are rejected and the project is re-competed.

Recommended Contract Form

A standard contract agreement prepared by the American Institute of Architects, AIA A101 is recommended. Modifications and cost reductions to bring the project in budget should be documented and incorporated in the contract through a formal change order.

CONSTRUCTION MANAGEMENT AT RISK

Another method authorized by Senate Bill No. 510 is “Construction Management” (Local Government Code 271.113 (a) (4)). The specific procurement requirements for Construction Management at Risk are outlined in the Local Government Code 271.118. The following are additional recommended guidelines believed to be both consistent with the statute and industry standards as well as good business practice when a Governmental Entity determines that this delivery method provides the best value to the Governmental Entity.

DEFINITION

Construction Management at Risk is when the Construction Manager serves as the General Contractor providing administration and management services in the performance of the project. The CM at Risk contracts directly with the subcontractors and is responsible for delivery of the project in the most expeditious and economical manner consistent with the interest of the Governmental Entity.

CHARACTERISTICS

The CM at Risk provides a single point of responsibility for construction while providing consultation during the design phase. The CM at Risk is normally selected at the same time as the architect/engineer or shortly thereafter and provides assistance in evaluating cost, recommends sequencing and scheduling of the work, evaluates the implications of alternative designs, systems and materials. The CM at Risk provides the district either a Guaranteed Maximum Price (GMP) to fix the cost or a Cost Plus Fee and competitively bids or takes competitive sealed proposals from the trades and subcontractors. The CM at Risk can speed construction by starting elements of the work while design is being completed.

PROS

Advantages with this delivery method include:

- Flexibility in selecting the construction manager that provides the Governmental Entity best value.
- Assistance during the design phase in evaluating costs, recommending sequencing and phasing of the construction schedule and evaluating alternative designs, systems and materials.
- The Governmental Entity has a single contractor responsible for construction.
- The roles of the construction manager and architect/engineer are clearly defined and there is a working team relationship in the design phase.

- Starting certain elements of the work before design is complete can reduce the project schedule.
- Scope changes can be made easier offering the district greater flexibility.
- The Governmental Entity has check and balance between the architect/engineer and construction manager.
- The GMP can be established earlier.

CONS

Disadvantages of this delivery method are:

- Once the guaranteed maximum price is established there is a potential for an adversarial relationship.
- It is difficult for the Governmental Entity and the Governmental Entity's architect/engineer to evaluate the guaranteed maximum price and assure it is not inflated.

PROCUREMENT

The procurement process for CM at Risk can be a single step or a two-step process. If a two-step process is selected the first step is the Request for Qualifications from which the Governmental Entity would qualify potential proposers. The second step is the request for proposals. The Governmental Entity's advertisement must clearly state the selection criteria and the Governmental Entity must evaluate and rank all proposals against the published criteria. Some Governmental Entities, after evaluating the proposals elect to interview a select number of the firms proposing to gain a more comprehensive awareness of their capabilities. From these interviews the final selection is made. Many Governmental Entities elect to omit the interview if they feel they have sufficient information from the proposals to make an informed selection.

Any architect/engineer contracted to provide design shall be selected on the basis of demonstrated competence and qualifications in accordance with Subchapter A, Chapter 2254, Government Code.

Request for Proposal

The Request for Proposals should contain the following:

- A description of the project, the submission requirements and the selection process schedule.
- A questionnaire to be completed by prospective Construction Managers. The questionnaire should be based on the AIA Contractor's Qualification Statement (A305) with additional questions related to construction management at risk and the special requirements of the project. A request of fees and general conditions is optional.

- Information describing the project scope including as available (program requirements, drawings, outline specifications, and opening date).

Selection Criteria

The Governmental Entity should use the following criteria when considering information submitted in response to the Request for Proposals by prospective construction managers.

Experience

- (2) *The Reputation of the vendor and of the vendor's good or services;*
- (3) *The quality of the vendor's goods or services;*
- (5) *The vendor's past relationship with the Governmental Entity;*

- How substantial is the construction manager's recent at risk experience in the construction of projects of comparable size and complexity?
- How substantial is the construction manager's at risk experience for educational facilities of comparable size and complexity?
- Is the construction manager knowledgeable about or have recent or current experience in the Governmental Entity's geographical area?
- How substantial is the construction manager's recent experience in providing pre-construction services for projects of comparable size and complexity.
- Has the construction manager worked for the Governmental Entity in the past? If so, was that work satisfactory to the Governmental Entity?

Governmental Entity's Needs

- (4) *the extent to which the goods or services meet the Governmental Entity's needs;*

- Does the description of pre-construction services provided by the construction manager evidence both his understanding and capabilities?
- Does the construction manager appear to have the capability to meet the Governmental Entity's schedule objectives?

Cost Issues, Fees

- (1) *the purchase price;*
- (7) *the total long-term cost to the Governmental Entity to acquire the vendor's goods or services;*

- Is the format and nature of cost estimates prepared by the firm during the design phases informative and useful for the Governmental Entity and architect/engineer? Are the initial and final estimates consistent in nature and format?
- Are the fees for all the pre-construction services clearly defined?
- Is there a separate fee for the pre-construction and construction services? How are the fees calculated? How much? When are fee payments due?
- If savings are realized during construction, what percentage of those savings is returned to the Governmental Entity?
- What is the construction manager's concept for the disposition of any unused contingency included in the project cost?
- Is the construction manager agreeable to sharing all construction cost data with the Governmental Entity and architect/engineer throughout the pre-construction and construction phases?

**Organization, Licensing,
Financing Information,
Personnel, References**

(8) any other relevant factor that specifically listed in the request for bids or proposals.

- How long has the firm been in business providing construction management services?
- Does the construction manager's organizational structure, licensing and financial information indicate that the firm is capable of undertaking this project?
- Do the personnel proposed for the project appear to have the appropriate experience and capabilities?
- Did the references provided (both owners and architect/engineers) have a favorable experience with the organization? Would they work with them again? How comparable was their project to this project?

RECOMMENDATIONS

***When to Select
a CM at Risk***

The Construction Manager can provide the best value when selected at the start of design. Selection should be concurrent with the selection of the architect/engineer or shortly thereafter. Early involvement enables confirmation of budgets and schedule realities that can avoid revisions and lost time.

Fee and General Conditions

Construction management fees are individually stated for pre-construction and construction services and will vary based on size, complexity and duration of the project. Fees for pre-construction services are normally a stipulated sum or a multiple of direct labor expense and actual reimbursable costs. Fees for construction services are normally stated as a percentage of the cost of the work and include overhead, profit and home office labor and expenses.

General conditions normally include items such as equipment, job trailer, bonds, insurance bonds, utilities, etc. and on-site field management and administrative personnel.

Both fee and general conditions can widely vary between construction managers depending on what each typically includes or excludes. Care should be taken to request the detail that each potential construction manager includes or excludes in their fee and general conditions.

Self-Performance of Work

Many construction managers are capable of performing some of the work with their own forces. In many cases this can provide a Governmental Entity with lower costs than can be obtained from the subcontract bidding process. Self-performance can also raise questions regarding the competitive cost development for such work. Under certain conditions, it may be in the best interest of the Governmental Entity to allow the construction manager to self-perform. Careful consideration should be given in determining whether to allow self-performance of work. If a Governmental Entity chooses to allow self-performance, the construction manager must submit his cost in a competitive process with all other subcontractors.

Recommended Contract Form

Standard agreement AIA A121/CMc and AGC 565 or AIA A131/CMc and AGC 566 have been prepared by the American Institute of Architects and the Associated General Contractors of America for CM at Risk. These contracts clearly delineate services, define costs and address the Construction Management at Risk process.

Contingency

There should be two contingency funds. A contingency in the construction manager's guaranteed maximum cost to cover unanticipated costs, which might arise during construction and a contingency in the total project budget for use by the Governmental Entity to address issues regarding scope. The construction manager's contingency should decrease as the design progresses and the guaranteed maximum price (GMP) is established.

What is a GMP?

A Guaranteed Maximum Price (GMP) is the amount that the CM at Risk guarantees (the sum of the Cost of the Work and the construction manager's fee,) he will not exceed. This maximum is subject to additions and deductions due to changes in the scope of work. All cost which exceed the GMP and are not approved by change order are paid by the CM at Risk.

When Should the GMP Be Established

The GMP should be established when the design is sufficiently complete. The GMP may be established as early as the completion of design development or as late as completed construction documents. Establishing an early GMP speeds construction while waiting increases certainty of costs and reduces contingency.

Subcontractor Pre-Qualification and Bidding

The Construction Manager at Risk is responsible for developing subcontractor interest in the project and determining prior to receipt of bids the qualifications of subcontractors to perform the work. The construction manager should evaluate the subcontractor's experience and technical competence, capability to perform, financial strength, personnel, past performance and other factors as appropriate to determine qualifications. The Governmental Entity and architect/engineer should have the opportunity to object to any subcontractor or supplier.

When the drawings and specifications are sufficiently complete, the construction manager will publicly advertise and solicit competitive bids or competitive sealed proposals from subcontractors and suppliers from the pre-qualified list. Bids must be received and opened by the Construction Manager and the Governmental Entity. The Construction Manager at Risk and the Governmental Entity then determine with advice of the architect/engineer which bids will be accepted.

In the event the Construction Manager at Risk recommends a bid or proposal from a trade or subcontractor yet the Governmental Entity determines another bid or proposal should be accepted, the Governmental Entity must compensate the Construction Manager at Risk for any additional cost, risk or schedule that may occur because of the Governmental Entity's requirement.

Opening of Proposals

All subcontractors bids or proposals must be received and opened in a manner that does not disclose the content of the bid or proposal during the selection process. Bids and proposals of subcontractors generally require some degree of evaluation and therefore the lowest responsible bidder may not be readily apparent. A private opening allows time for the construction manager and Governmental Entity to evaluate the bids. Proposals privately opened must be publicly released within seven days of final selection.

Shared Savings or Incentives

If at the completion of the project, the actual cost of the work plus the construction manager's fee is less than the GMP as adjusted by change order, savings result. In the private sector, the Construction Manager may share in these savings as an incentive to work diligently to reduce costs. A Governmental Entity should weigh the benefit of an incentive or determine if all savings should return to the Governmental Entity.

CONSTRUCTION MANAGEMENT, AGENCY

A second construction management delivery method is Construction Management, Agency. The specific procurement requirements are outlined in the Local Government Code 271.117. The following are additional recommended guidelines believed to be consistent with statute and industry standards as well as good business practice when a Governmental Entity determines that this delivery method provides the best value to the Governmental Entity.

DEFINITION

Construction Management, Agency is when the construction manager serves as an agent for the Governmental Entity and provides administration and management services during construction and consultation during the design phase. The Construction Management, Agent holds no subcontracts nor provides project bonding. The work is performed by multiple contractors who contract directly with the Governmental Entity for their specific portion of the work.

CHARACTERISTICS

Construction Management, Agency serves in lieu of a general contractor, which provides the Governmental Entity an advocate who is not at risk. The Governmental Entity assumes the risk by holding all contracts. The CM, Agent is normally selected at the same time as the architect/engineer or shortly thereafter and provides assistance in the design phase in evaluating costs, schedules, alternative designs, systems and materials. The Governmental Entity can speed construction by starting certain elements of work prior to the completion of design.

PROS

Advantages with this delivery method include:

- Flexibility in selecting the construction manager that provides the Governmental Entity best value.
- Assistance during the design phase in evaluating costs, recommending sequencing and phasing of the construction schedule and evaluating alternative designs, systems and materials.
- A non-adversarial relationship because the Construction Manager, Agent is not at risk.
- The roles of the construction manager and architect/engineer are clearly defined and there is a working team relationship in the design phase.
- Starting certain elements of the work before design is complete can reduce the project schedule.

- Scope changes can be made easier offering the district greater flexibility.
- The Governmental Entity has check and balance between the architect/engineer and construction manager.

CONS

The disadvantages of this delivery method are:

- The Governmental Entity does not have a single entity with the responsibility for construction.
- The Governmental Entity does not have a guaranteed maximum price and the project cost is not established until all bids are complete.
- The Governmental Entity assumes the risk and responsibilities of the multiple prime contracts.

PROCUREMENT

The procurement process for Construction Manager, Agent (CM, Agent) is also normally a two-phase process. The first phase is the Request for Proposals issued by the architect/engineer or Governmental Entity. In the second phase the Governmental Entity, after evaluating the proposals, interviews a select number of the firms proposing to gain a more comprehensive awareness of their capabilities. From these interviews a selection is made. Many Governmental Entities elect to omit the second phase if they feel they have sufficient information from the proposals to make an informed selection.

A Construction manager-agent shall be selected on the basis of demonstrated competence and qualifications in the same manner as provided for the selection of engineers or architects under Section 2254.004, Government Code.

Request for Proposals

The Request for Proposals should contain the following:

- A description of the project, the submission requirements and the selection process schedule.
- A questionnaire to be completed by prospective construction managers. The questionnaire should be based on AIA Contractor Qualifications (A305) with additional questions related to construction management and the special requirements of the project.
- Information describing the project scope including as available (program requirements, drawings, outline specifications, and opening date).

Selection Criteria

The Governmental Entity should use the following criteria when considering information submitted in response to the Request for Proposal by prospective construction managers.

Experience

- (2) The Reputation of the vendor and of the vendor's good or services;*
- (3) The quality of the vendor's goods or services;*
- (5) The vendor's past relationship with the Governmental Entity;*

- How substantial is the construction manager's recent experience in the construction of projects of comparable size and complexity with multiple prime contracts?
- How substantial is the construction manager's experience in providing construction services for educational facilities of comparable size and complexity?
- Is the construction manager knowledgeable about or have recent or current experience in the Governmental Entity's geographical area?
- How substantial is the construction manager's recent experience in providing pre-construction services for projects of comparable size and complexity?
- Has the construction manager worked for the Governmental Entity in the past? If so, was that work satisfactory to the Governmental Entity?

Governmental Entity's Need

- (4) the extent to which the goods or services meet the Governmental Entity's needs;*

- Does the description of pre-construction services provided evidence both the understanding and capabilities of the construction managers?
- Does the construction manager appear to have the capability to meet the Governmental Entity's schedule objectives?

Cost Issues, Fees

- (1) the purchase price;*
- (7) the total long-term cost to the Governmental Entity to acquire the vendor's goods or services;*

- Is the format and nature of cost estimates prepared by the firm during the design phases informative and useful for the Governmental Entity and architect/engineer? Are the initial and final estimates consistent in nature and format?

- Are the fees for the pre-construction services clearly defined?
- Is there a separate fee for the pre-construction and construction services? How is the fee calculated?

**Organization, Licensing,
Financial Information,
Personnel, References**

(8) any other relevant factor specifically listed in the request for bids or proposals.

- How long has the firm been in business providing the Construction Management, Agency services sought by the Governmental Entity?
- Does the construction manager's organizational structure, licensing and financial information indicate that the firm is capable of undertaking this project?
- Do the personnel proposed for the project appear to have the appropriate experience and capabilities?
- Did the references provided (both Governmental Entity and architects/engineers) have a favorable experience with the organization? Would they work with them again? How comparable was their project to this project?

RECOMMENDATIONS

***When to Select a CM,
Agency***

The Construction Manager, Agent can provide the best value when selected at the start of design. Selection should be concurrent with the selection of the architect/engineer or shortly thereafter. Early involvement confirms cost and schedule realities that can avoid revisions and lost time.

Fee

Construction management fees are individually stated for pre-construction and construction services and will vary based on size, complexity and duration of the project. Fees for pre-construction and construction services are normally a stipulated sum or a multiple of direct labor expense and actual reimbursable costs. Fees for construction services can be stated as a percentage of the cost of the work and include overhead, profit and home office labor and expenses.

Reimbursable expenses normally include items such as job trailer, computers insurance, etc., and on-site field labor.

Recommended Contract Form

Standard agreements AIA B801 or AGC 510 have been prepared by the American Institute of Architects and the Associated General Contractors of America for Construction Management, Agency.

Contingency

There should be a contingency for use by the Governmental Entity to address issues regarding changes in scope. The contingency should decrease as the design progresses and the prime contracts are ready for bidding.

Contractor Pre-Qualification and Bidding

The construction manager is responsible for developing sub-contractor interest in the project and determining prior to receipt of bids the qualifications of subcontractors to perform the work. The Governmental Entity, construction manager and architect/engineer should evaluate the subcontractor's experience and technical competence, capability to perform, financial strength, personnel, past performance and other factors as appropriate to determine qualifications. When the drawings and specifications are complete, the Governmental Entity will obtain bids from multiple prime contractors and suppliers from the pre-qualified list. Bids will be delivered to the Governmental Entity and the architect/engineer.

Public or Private Opening of Proposals

Either public or private opening of the contractors bids is deemed acceptable. A public opening clearly announces the apparent low price but the bids of contractors generally require some degree of evaluation and therefore the lowest responsible bidder may not be readily apparent. A private opening allows time for the construction manager and Governmental Entity to evaluate the bids. Proposals privately opened must be publicly released within seven days of final selection.

DESIGN/BUILD

A final method authorized by Senate Bill No. 510 is “design/build”(Local Government Code-271.111 (a) (3)). The specific procurement requirements are outlined in Local Government Code-271.119. The following are additional recommended guidelines believed to be both consistent with the statute and industry standards as well as good business practice when a Governmental Entity determines that this delivery method provides the best value to the Governmental Entity.

DEFINITION

Design/Build is a delivery method where a single entity is contracted to provide both design and construction. The Design/Build team consists of contractor, architect and engineer. The Design/Build Team contracts directly with the trades/subcontractors and the architect and engineer and is responsible for delivery of the project. The architect and engineer members of the Design/Build Team are the architect/engineer of record for the project.

CHARACTERISTICS

This delivery method has the most complex selection process and generally requires the Governmental Entity to be more knowledgeable regarding delivery methods and an ability to be more involved in the process. The Design/Build Team must conform to a “design criteria package” developed by the Governmental Entity or their architect/engineer that establishes the requirements of the project. The most attractive element of this delivery method is the speed with which projects can be delivered. The schedule is a non-linear, two-phase process that enables early construction start of many elements of the work. A key ingredient of this method is trust. The Governmental Entity and Design/Build Team must work very closely together and must have a great deal of trust in each other.

PRO'S

The advantages of this delivery method are:

- Flexibility in selecting the Design/Build Team that provides the Governmental Entity best value.
- A non-adversarial relationship between the contractor and architect/engineer which work in a team relationship.
- Starting certain elements of the work before design is complete can reduce the project schedule.
- A single point of responsibility for design and construction.

CONS

The disadvantages of this delivery method are:

- A loss of the check and balance that independent contracts with the contractor and the architect/engineer normally provides.
- A more difficult selection and management delivery method for the Governmental Entity.
- A potential adversarial relationship between the Governmental Entity and Design/Build Team regarding scope and costs.
- Roles of the contractor and architect/engineer are no longer clearly defined.

PROCUREMENT

The Governmental Entity shall evaluate proposals and select Design/Build firm in two phases. Phase one is a “request for qualifications” and phase two is a “request for proposals.” Selection is based on the proposal offering the best value for the Governmental Entity.

REQUEST FOR QUALIFICATIONS

A request for qualifications is prepared by the Governmental Entity that may include general information on the project site, project scope, budget, special systems, selection criteria and any other information that may assist potential design/build teams to submit proposals.

The Governmental Entity evaluates each offer’s experience, technical competence, and capability to perform, the past performance of the offer’s team and members of the team, and other appropriate factors submitted by the team or firm. Cost-related or price related evaluation factors are not permitted.

Any Architect/Engineer contracted to provide design shall be selected on the basis of demonstrated competence and qualifications in accordance with Subchapter A, Chapter 2254, Government Code.

The Governmental Entity qualifies no more than five potential offers to submit additional information such as technical approach, implementation, and cost methodologies in response to a formal request for proposals based on the “design criteria package.”

SELECTION CRITERIA

Suggested criteria when considering information submitted in response to the request for qualifications include:

Experience

- (2) The Reputation of the vendor and of the vendor’s goods or services;***
- (3) The quality of the vendor’s goods or services;***
- (5) The vendor’s past relationship with the Governmental Entity;***

- How substantial is the design/build team's recent experience in the design and construction of projects of comparable size and complexity?
- How substantial is the team's experience in providing design/build services for educational facilities of comparable size and complexity?
- Is the team knowledgeable about or have recent or current experience in the Governmental Entity's geographical area?
- How substantial is the team's recent experience in providing design for projects of comparable size and complexity.
- Has the team or its members worked for the Governmental Entity in the past? If so, was that work satisfactory to the Governmental Entity?

Governmental Entity's Needs (4) *the extent to which the goods or services meet the Governmental Entity's needs;*

- Does the description provided by the firm of design/build services evidence both understanding as well as capabilities as it applies to this specific project?
- Does the design/builder appear to have the capability to meet the Governmental Entity's schedule objectives?

Cost Issues

(7) *the total long-term cost to the Governmental Entity to acquire the vendor's goods or services;*

- Is the format and nature of cost estimates prepared by the team during the design phases informative and useful for the Governmental Entity? Are the initial and final estimates consistent in nature and format?

**Organization Licensing,
Financial, Personnel,
References**

(8) *any other relevant factor specifically listed in the request for bids or proposals.*

- How long has the firm been in the business of providing design/build services?
- Does the firm's organizational structure, licensing and financial information indicate that the firm is capable of undertaking this project?
- Do the personnel proposed for the project appear to have the appropriate experience and capabilities?
- Did the references provided have a favorable experience with the firm? Would they work with them again? How comparable was their project to this project?

Request for Proposal

A Governmental Entity prepares a request for proposals which includes a “design criteria package” that provides sufficient information so as to permit design/build teams to prepare a response.

The design criteria package may include criteria for the project such as: the legal description of the site, when appropriate, survey information concerning the site, interior space requirements, special material requirements, material quality standards, conceptual criteria, special equipment requirements, cost or budget estimates, time schedules, quality assurance and quality control requirements, site development requirements, applicable code and ordinances, provisions for utilities, parking requirements, or other requirements as applicable.

The Governmental Entity evaluates proposals on the basis of demonstrated competence and qualifications; considerations of safety and long term durability of the project; the feasibility of implementing the project as proposed; ability to meet schedules; costing methodology; and other factors as appropriate.

RECOMMENDATIONS

Contract Form

The design/build delivery method can take many forms in contract approach. A lump sum amount, a guaranteed maximum price similar to the CM at Risk or a cost plus a fee.

The Governmental Entity should carefully consider which approach provides the best value prior to issuing the request for proposal. The lump sum amount approach can be determined prior to or after completion of design. If prior, the design/builder must use a higher contingency in his price to accommodate design changes or limit the design to match the price.

Fees and Conditions

When a GMP or Cost Plus Fee approach are used, Design/Build fees are individually stated for design and construction services and will vary based on size, complexity and duration of the project. Fees for design services are normally a stipulated sum or a multiple of direct labor expense and actual reimbursable costs. Fees for construction services are normally stated as a percentage of the cost of the work and include overhead, profit and home office labor and expenses.

General conditions normally include items such as equipment, job trailer, bonds, insurance, utilities, etc. and on-site field labor.

Both fee and general conditions can widely vary between design/builders depending on what each typically includes or excludes. Care should be taken to request the detail that each potential design/build team includes or excludes in their fees and general conditions.

Self Performance of Work

In the lump sum Design/Build approach, the Design/Builder is able to self perform all portions of the work they so choose. In the GMP or Cost Plus Fee approaches self performance of work is at the discretion of the Governmental Entity. Many firms are capable of performing some of the work with their own forces. In many cases this can provide a Governmental Entity with lower costs than can be obtained from the subcontract bidding process. Self-performance can also raise questions regarding the competitive cost development for such work. Careful consideration should be given in determining whether to allow self-performance of work. If a Governmental Entity chooses to allow self-performance, the Design/Builder should submit his cost in a competitive process with all other subcontractors.

Recommended Contract Form

Standard agreements AIA A191 or AGC 410 for lump sum or AIA A491 or AGC 415 for Guaranteed Maximum Price (GMP) have been prepared by the American Institute of Architects and the Associated General Contractors of America for Design/Build.

Contingency

If the Governmental Entity elects a GMP contract there should be two contingency funds. A contingency in the design/builders' guaranteed maximum costs to cover unanticipated costs that might arise during construction and a contingency in the total project budget for use by the Governmental Entity to address issues regarding scope. The design/builders' contingency should decrease as the design progresses and the GMP is established. In a lump sum contract only the Governmental Entity's contingency for scope issues is needed.

**Subcontractor
Pre-Qualification and Bidding**

In the GMP or Cost Plus Fee contract approaches the Design/Builder is responsible for developing subcontractor interest in the project and determining prior to receipt of bids the qualifications of subcontractors to perform the work. The Design/Builder should evaluate the subcontractor's experience and technical competence, capability to perform, financial strength, personnel, past performance and other factors as appropriate to determine qualifications. The Governmental Entity and architect/engineer is provided the opportunity to object to any subcontractor or supplier.

When the drawings and specifications are sufficiently complete, the Design/Builder will publicly advertise and solicit competitive bids or competitive sealed proposals from subcontractors and suppliers from the pre-qualified list. Bids must be received and opened by the Design/Builder and the Governmental Entity. The Design/Builder and the Governmental Entity then determine with advice of the architect/engineer which bids will be accepted.

In the event the Design/Builder recommends a bid or proposal from a trade or subcontractor yet the Governmental Entity determines another bid or proposal should be accepted, the Governmental Entity must compensate the Design/Builder for any additional cost, risk or schedule that may occur because of the Governmental Entity's requirement.

Opening of Proposals

All subcontractors bids or proposals must be received and opened in a manner that does not disclose the content of the bid or proposal during the selection process. Bids and proposals of subcontractors generally require some degree of evaluation and therefore the lowest responsible bidder may not be readily apparent. A private opening allows time for the Design/Builder and Governmental Entity to evaluate the bids. Proposals privately opened must be publicly released within seven days of final selection.

**Shared Savings or
Incentives**

If at the completion of the project, the actual cost of the work plus the design/builder's fee is less than the GMP as adjusted by change order, savings result. In the private sector, the Design/Builder may share in these savings as an incentive to work diligently to reduce costs. A Governmental Entity should weigh the benefit of an incentive or determine if all savings should return to the Governmental Entity.

BRIDGING

Bridging is another form of Design/Build subject to the same procurement requirements of Local Government Code 271.119. The principal difference is the depth and scale of the “design criteria package” prepared by the Governmental Entity’s architect/engineer.

DEFINITION

Bridging is a form of design/build where the Governmental Entities architect/engineer develops the “design criteria package” which is more detailed and comprehensive and enables a Governmental Entity to reduce the opportunity for miscommunication and enables a Governmental Entity to receive definitive price proposals.

CHARACTERISTICS

With bridging, the Governmental Entity has two contractual relationships. First the Governmental Entity contracts with an architect/engineer, if the Governmental Entity doesn’t have architects and engineers on staff, to develop a “design criteria package.” This design criteria package which is more comprehensive enables the Governmental Entity to obtain proposals that are more definitive to the scope of the project. The Design/Build Team still has an architect/engineer as a member of its team who is responsible for the final design for the project. The schedule is a three-phase linear process that reduces the opportunity for faster project delivery while enhancing the opportunity to achieve the scope requirements.

PROS

The advantages of this delivery method are:

- Flexibility in selecting the Design/Build Team that provides the Governmental Entity best value.
- A non-adversarial relationship between the contractor and architect/engineer which work in a team relationship.
- Starting certain elements of the work before design is complete can reduce the project schedule.
- A single point of responsibility for design and construction.
- Enhanced definition of the requirements and scope of the project through a comprehensive design criteria package.

CONS

The disadvantages of this delivery method are:

- A loss of the check and balance that independent contracts with the contractor and the architect/engineer normally provides.

- A more difficult selection and management delivery method for the Governmental Entity.
- A potential adversarial relationship between the Governmental Entity's architect/engineer and Design/Builder's architect/engineer.
- Roles of the contractor and architect/engineer are no longer clearly defined.

PROCUREMENT

The procurement process is the same as that outlined under the design/build section except that the design criteria package development effort may require an architect/ engineer selection for the district.

RECOMMENDATIONS

Conflict of Liability

With the Governmental Entity's architect/engineer performing a significant portion of the design, there is a potential for conflict and confusion regarding design liability. It is recommended that the Bridging Design/Builder's architect/engineer be the architect/engineer of record for the project and have the design liability.

Contract Form

The bridging design/build delivery method can still take different contract forms. A lump sum amount, a guaranteed maximum price or cost plus fee although best suited for lump sum. The Governmental Entity should carefully consider which approach provides the best value prior to issuing the request for proposal.

Self Performance of Work

If the bridging design/build firm is selected from lump sum competitive bidding, the bridging design/build firm should have the right to self perform all portions of the work they deem appropriate. If the selection process is based on providing a GMP then same provisions as outlined under design/build apply. Careful consideration should be given in determining whether to allow self-performance of work.

Standard Contract

Standard contracts for bridging have not as yet been developed by AIA or AGC.

JOB ORDER CONTRACTS (JOC'S)

Job Order Contracting is a delivery system for providing responsive construction services under a long-term prime contract for an indefinite quantity of multiple projects. It is used extensively in the Department of Defense and other Federal agencies. It is beginning to be used more in school districts and local government agencies. The specific procurement requirements are outlined in the Local Government Code 271.120. The following are additional recommended guidelines believed to be consistent with statute and industry standards as well as good business practices.

DEFINITION

As normally defined within the industry, Job Order Contracting is a process for contracting for the minor construction, repair, rehabilitation, or alteration of facilities when the work is of a recurring nature but the delivery times, type, and quantities of work required are indefinite. "Minor" as applied in most JOCs is the applicable statutory limit for Operations and Maintenance funding versus single project appropriations. "Recurring" refers to the fact that the JOC is intended for a series of multiple projects rather than a single project.

CHARACTERISTICS

- The contract normally has a base term of not less than six months, nor longer than two years, with the Governmental Entity having the option to renew it for one to four additional terms.
- Unit prices (rates) are fixed for the base term and adjusted, if options are exercised, by using a construction cost index or, if an annually updated commercial Unit Price Book is specified, using the latest edition. (e.g. MEANS)
- A "coefficient" or multiplier is bid to be applied to the unit prices to provide the actual rates.
- The contract has a low guaranteed minimum volume and a higher, but realistic maximum.
- The potential volume and optional renewals provide a strong incentive for the contractor to deliver high quality, responsive service. Projects are accomplished by the issuance of individual delivery orders.
- Fast response is possible because of the reduced up-front administrative and design requirements.
- Normally most work is subcontracted to local small businesses.

PROS

- Done successfully, provides a long term “win - win” partnering relationship between the Governmental Entity and the JOC contractor.
- Fast response
- Reduced changes
- Reduced “up-front” time and cost
- Incentive for higher quality
- Puts more money in local businesses
- Up-front involvement of the contractor facilitates concurrent performance of design and execution.

CONS

- Perception of threat to “in-house” work force or local businesses.
- Requires teamwork to reach potential.
- Need trained personnel on Governmental Entity staff, or provided by a consultant, to best administer contract.

PROCUREMENT

Job Order Contracts are procured using competitive sealed proposals. Selection is based upon the combination of experience, qualifications, past performance, technical ability, financial stability, reputation, and price (coefficient) which provides the overall “best value” to the Governmental Entity. The intent is to provide a positive, long-term, “win-win” partnership between the Governmental Entity and the successful contractor. The selection criteria should be clearly stated in the Request for Competitive Sealed Proposals(RFCSP). Goals, such as the minimum percentage of work to be subcontracted to small businesses, as well as, minimum response times; use of standard materials and equipment; and other Governmental Entity requirements should be addressed in the RFCSP’s selection criteria and considered in the evaluation of the proposals.

The Statement of Work should indicate the contractual minimum (normally a nominal amount used only to establish a “consideration” and applicable only for the base term); an anticipated annual volume (a realistic appraisal of the amount of work available if the contractor provides outstanding performance, (but neither a “cap” nor a “guarantee”)); the number, location, type, and square footage of facilities covered in the contract; and whether the contractor has any design responsibility.

Any Architect/Engineer contracted to provide design shall be selected on the basis of demonstrated competence and qualifications in accordance with Subchapter A, Chapter 2254, Government Code.

Proposal preparation instructions and the Governmental Entity's evaluation criteria should be covered in a separate section.

AIA Documents A101 and A202 provide a base for the Contract and the General Conditions.

They are usually supplemented by Supplementary and Special Conditions to tailor them to the specific policies and needs of the Governmental Entity and the JOC process.

If a large number of proposals are received, an initial "short list" is established of those best qualified to perform the work. After the short list has been established, oral presentations by the finalists' project teams may also be helpful in the evaluation process. After establishment of a technical "order of merit," the price proposals of the finalists are reviewed to determine the offeror which provides the Governmental Entity the best combination of technical capability. Award is made to the contractor offering the overall best value in accordance with the Governmental Entity's evaluation criteria and plan.

RECOMMENDATIONS

- The value used as the "anticipated value" should be carefully determined as most contractors will price their coefficients upon this value. If too low, the Governmental Entity's cost will be too high. If too high, the contractor will have bid too low and will have a difficult time delivering the service needed. The intent should be to provide the contractor a realistic incentive to become your preferred provider of construction services.
- The costs of mobilization, clean-up, supervision, overhead, general conditions, and profit should be in the coefficient. This should be clearly stated in the RFCSP.
- Some provision should be made for pricing items not found in the Unit Price Book. One of the best methods is to ask for a separate coefficient which can then be applied to the actual cost of the labor and material.
- To comply with State law regarding public facilities, a registered engineer and/or architect should be available to oversee the program and its work. He can be on the staff of the Governmental Entity, the staff of the contractor, provided by subcontract through the contractor, or provided by contract through the Governmental Entity. (Any engineer or architect contracted by the district to provide design shall be selected on the basis of demonstrated competence and qualifications in accordance with Subchapter A, Chapter 2254, Government Code.)
- If change orders are required, they are normally priced using the Unit Price Book.

For more information contact:

Texas Building Branch - AGC

816 Congress Avenue, Suite 950
Austin, TX 78701-2443
512/478-5629
512/478-1618 FAX
www.agctbb.org

Texas Society of Architects

816 Congress Avenue, Suite 970
Austin, TX 78701
512/478-7386
512/478-0528 FAX
www.tsaonline.org

Texas Council of Engineering Companies, Inc.

400 West 15th Street, Suite 820
Austin, Texas 78701
512-474-1474
512-474-1490 FAX
www.cectexas.org