
Implementing Design-Build in the Public Sector

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COURSE CONTENT

1. THE CHALLENGE FACED BY PUBLIC AGENCIES IN IMPLEMENTING DESIGN-BUILD CONSTRUCTION DELIVERY

The challenge public agencies face in implementing the design-build construction delivery process is....

THE CHALLENGE

How can Design-Build be implemented by a public agency without compromising the integrity of its procurement process?

In order to address this challenge it is important to understand two fundamental principles....

TWO FUNDAMENTAL PRINCIPLES

- The difference between a *construction delivery process* and a *construction procurement process*
- The difference between awarding a construction contract based on *subjective* and *objective* criteria

2. THE DIFFERENCE BETWEEN A CONSTRUCTION *DELIVERY* PROCESS AND A CONSTRUCTION *PROCUREMENT* PROCESS

First, understand the essence of a construction *delivery* process. A construction *delivery* process defines....

Construction Delivery Process

Defines....

- Contractual relationships between participants in the project
- Authorities, processes and reporting relationships

There are two *legitimate* advantages to the Design-Build construction *delivery* process. They are

Advantages of the Design-Build construction *delivery* process....

- Involvement of Builder in design process
- Removes public agency from Builder-vs.-Designer disputes

Other purported benefits such as that Design-Build provides for “cheaper, faster, better, etc.” construction delivery have *never* been proven or reliably demonstrated.

The essence of a construction *procurement* process is....

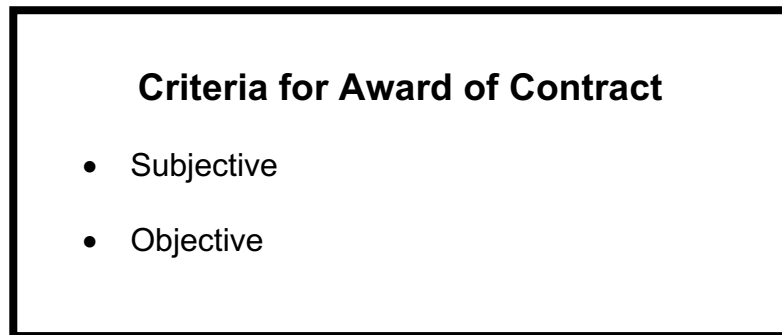
Construction Procurement Process

Defines....

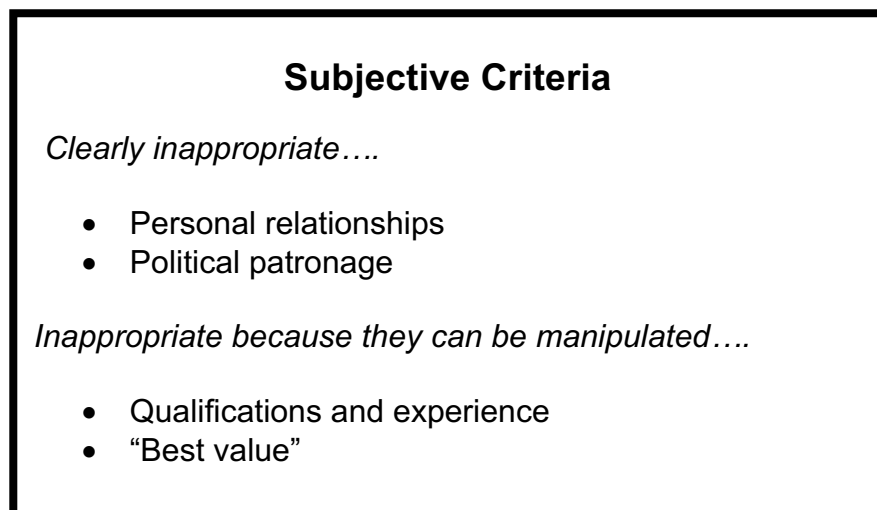
- Criteria for award of contract
- Process for award of contract

3. THE DIFFERENCE BETWEEN *SUBJECTIVE* AND *OBJECTIVE* CRITERIA FOR AWARD OF A DESIGN-BUILD CONTRACT

With regard to criteria for award of a contract, they are of two types....



Use of subjective criteria is inappropriate for public agencies. For example, these are general categories of *subjective* criteria....



Awarding contracts based on “personal relationships” or “political patronage” is clearly inappropriate for a public agency. Use of criteria such as “qualifications and experience” and “best value” is also inappropriate because these criteria can always be manipulated to deliver a contract to a competitor favored because of “personal relationships” and “political patronage.”

There is only one *objective* criterion

Objective Criteria

- Cost

....and its use by a public agency is always appropriate.

4. SUBJECTIVE CRITERIA ARE *ALWAYS* SUSCEPTIBLE TO MANIPULATION IN ORDER TO DELIVER A PUBLIC AGENCY CONTRACT TO AN INAPPROPRIATELY FAVORED CONTRACTOR

For example, this table shows the subjective criteria used by the State of California to award a design-build contract for a \$500 million office complex....

| EXAMPLE OF SUBJECTIVE CRITERIA: Used by the Department of General Services (DGS) to Evaluate Design-Build Contractors for a Major Design-Build Construction Contract | | |
|---|---|-----------------------|
| Category | Criteria | Maximum Points |
| Management Organization/ Communication/ Authority | Clarity and completeness in addressing roles, responsibilities, and authorities of design/build (D/B) team. Addresses D/B expectations of the state's project team. Effectiveness of proposed communications and job procedures; electronic communications; job site communications, meetings, conferences. Conflict/problem identification and resolution. | 45 |
| Design Schedule | Clarity and completeness of the proposed design schedule in defining the overall approach of the design builder. Does the schedule correspond to the major elements of the management plan as well as the milestone schedule provided? Effectiveness of the recovery strategy. | 30 |
| Interaction of Project Team | Demonstrates an understanding of the roles, responsibilities and authorities of the project team. Identification of processes for exchange of information, clarifications, and instructions. Proposed strategy for promoting interaction and cooperation. | 30 |
| Quality Assurance/ Quality Control Plan | Clarity and completeness. Proactive and comprehensive in defining policy, procedures, goals and responsibilities. Assurances for quality work. Effectiveness of QA/QC manager. Transition from criteria documents to contract documents to construction. | 30 |
| Safety Plan | Clarity and completeness of process and procedures for initiating, maintaining, and supervising precautions and programs. Qualifications and experience of designated safety officer. Coordination with the [state's] requirements. | 30 |

| | | |
|--------------------------------------|--|-----|
| Waste Management Plan | Clarity and completeness. Conformance to diversion rate requirements. Does the plan address plan distribution, site instructions, meetings, separation facilities, handling procedures, etc. | 45 |
| Building Performance Plan | Clarity and completeness of process of identification, documentation and tracking of performance objectives, diagnostics, maintenance and training. | 45 |
| Community Outreach | Clarity and effectiveness of process and procedures for on-going neighborhood outreach. Conflict resolution and complaint handling process. Proactive strategies. Procedures to minimize effects on neighbors. | 15 |
| Other factors deemed relevant | | 6 |
| Total Points | | 186 |

Clearly these criteria can only be applied by a public agency's contract award panel making subjective judgments. The weighting of criteria is completely subjective. Why is "Building Performance Plan" worth 45 points, instead of 46 or 44 or 50? And, importantly, most of these criteria are based on "plans." But a "plan" is just that....a "plan"....which can be observed or ignored in implementation and may or may not result in the completed project being in the best interest of the public agency.

Here is an illustration of how easy it is to manipulate subjective criteria. This table shows the actual criteria used by the State of California to award a design-build contract for what....at today's prices....would be about a \$250 million office building.

| EXAMPLE OF SUBJECTIVE CRITERIA: DGS Award of Points in Process of Selecting Design-Build Contractor for \$126 Million Office Building for Caltrans | | | | |
|---|--------------------------------|------------------|------------------|------------------|
| Criteria | Maximum Possible Points | Company A | Company B | Company C |
| Designation of Sub-Contractors | 400 | 262 | 297 | 189 |
| Design of New Building | 1600 | 1229 | 868 | 938 |
| Sustainable Design and Waste Management Plan | 500 | 313 | 252 | 176 |
| Art in Public Places | 400 | 331 | 240 | 301 |
| Life Cycle Cost Analysis | 250 | 113 | 125 | 75 |

| | | | | |
|---|-------------|-------------|-------------|-------------|
| Plan | | | | |
| Project Management Plan | 1000 | 634 | 774 | 457 |
| Small and Disabled Veterans Utilization Plan | 400 | 237 | 274 | 153 |
| Design Impact Plan | 200 | 107 | 100 | 73 |
| Totals | 4750 | 3226 | 2930 | 2362 |

Clearly the criteria and weighting are subjective. Why is a “Small and Disabled Veterans Utilization Plan” worth 400 points and a “Life Cycle Cost Analysis Plan” only worth 250? Why was Company A’s “Design Impact Plan” (whatever that is....sorry, I’m editorializing) worth 107 points....rather than 106 or 108 or 91? Why was Company B’s “Design Impact Plan” worth 100 points, instead of 101 or 99 or 108 or 125?

Now here is how a modest shifting of points would result in Company B, not Company A, getting the contract. By merely shifting 4% of the possible points from Company A to Company B, there is this entirely different result....

| EXAMPLE OF SUBJECTIVE CRITERIA: \$126 Million Office Building for Caltrans Effect of Shifting 4 percent of Maximum Possible Points From Company A to Company B | | | | |
|---|--------------------------------|------------------|------------------|------------------|
| Criteria | Maximum Possible Points | Company A | Company B | Company C |
| Designation of Sub-Contractors | 400 | 246 | 313 | 189 |
| Design of New Building | 1600 | 1165 | 932 | 938 |
| Sustainable Design and Waste Management Plan | 500 | 293 | 272 | 176 |
| Art in Public Places | 400 | 315 | 256 | 301 |

| | | | | |
|--|-------------|-------------|-------------|-------------|
| Life Cycle Cost Analysis Plan | 250 | 103 | 135 | 75 |
| Project Management Plan | 1000 | 594 | 814 | 457 |
| Small and Disabled Veterans Utilization Plan | 400 | 221 | 290 | 153 |
| Design Impact Plan | 200 | 99 | 108 | 73 |
| Totals | 4750 | 3036 | 3120 | 2362 |

Or if 10 percent of the maximum possible points were shifted from Company A and 1 percent from Company B to Company C, Company C would have been awarded the contract. The order of the competitors would have been completely reversed; from A-B-C, to C-B-A.

| EXAMPLE OF SUBJECTIVE CRITERIA: \$126 Million Office Building for Caltrans in Effect of Shifting 10 percent of Maximum Possible Points From Company A to Company C and 1 Percent From Company B to Company C | | | | |
|---|--------------------------------|------------------|------------------|------------------|
| Criteria | Maximum Possible Points | Company A | Company B | Company C |
| Designation of Sub-Contractors | 400 | 222 | 293 | 233 |
| Design of New Building | 1600 | 1069 | 852 | 1114 |
| Sustainable Design and Waste Management Plan | 500 | 263 | 247 | 231 |
| Art in Public Places | 400 | 291 | 236 | 345 |
| Life Cycle Cost Analysis Plan | 250 | 88 | 123 | 103 |
| Project Management Plan | 1000 | 534 | 764 | 567 |
| Small and Disabled Veterans | 400 | 197 | 270 | 197 |

| | | | | |
|--------------------|-------------|-------------|-------------|-------------|
| Utilization Plan | | | | |
| Design Impact Plan | 200 | 87 | 98 | 95 |
| Totals | 4750 | 2751 | 2883 | 2885 |

5. THE OBJECTIVE CRITERIA OF LOWEST COST AS DETERMINED BY COMPETITIVE BIDDING CANNOT BE MANIPULATED TO AWARD A CONTRACT BASED ON INAPPROPRIATE INFLUENCE

A bid of \$100 million is always less than a bid of \$101 million, and in a properly conducted competitive bidding process an agency’s award panel can do nothing to award a contract to a competitor favored because of personal or political influence.

Contrary to the allegations by proponents of Design-Build contracts awarded based on subjective criteria, there is no evidence to support a contention that such an approach delivers projects “cheaper, faster, better”. To the contrary, for a *fully defined building or infrastructure project* (one defined by 100% working drawings and specification as the basis for competitive bids), competitive bidding *always* delivers the fully defined project to a public agency at lowest cost. This table shows a small sample of hundreds of competitive bidding results that were examined at public agencies at all levels in California.

**EXAMPLE OF OBJECTIVE CRITERIA:
 Bid Results for 74 Construction Contracts
 Competitively Bid in California**

| Construction Cost of All Projects (in millions) | | | High Bid as a Percentage of Low Bids | |
|---|---------------------------|--|--------------------------------------|---------|
| If Awarded to High Bidders | If Awarded to Low Bidders | Savings Resulting from Awards to Low Bidders | Median | Average |
| \$378 | \$276 | \$102 (37%) | 172% | 147% |

The median of all bids was 172% higher than the total of all low bids. The average of all bids was 147% higher. Clearly competitive bidding results in lowest cost to the public agency, *if the project has been competently designed and detailed working drawings and specifications prepared as the basis of the competitive bids.*

6. SO, HOW CAN A PUBLIC AGENCY GET THE BENEFITS OF THE DESIGN BUILD CONSTRUCTION *DELIVERY* PROCESS (AND THERE *ARE*, AS PREVIOUSLY INDICATED, BENEFITS), WITHOUT COMPROMISING THE INTEGRITY OF ITS CONSTRUCTION *PROCUREMENT* PROCESS?

These are the important *public policy* considerations a public agency should consider in implementing a “construction *procurement and delivery* process”....

What Does a Public Agency Need?

- ❑ **COST:** Civil servants have an obligation to spend public funds prudently. There is no rationale for spending more for a project than is necessary.
- ❑ **OBJECTIVITY OF PROCESS:** The public expects public contracts to be awarded objectively and without favoritism.
- ❑ **APPROPRIATE SPEED:** The public expects infrastructure to be provided in a timely manner. The integrity of the procurement process, however, should not be compromised in the quest for speed.
- ❑ **ACCESS AND OPPORTUNITY:** The public expects all qualified businesses, large and small, to have equal opportunity to compete for and obtain government contracts.
- ❑ **QUALITY CONTROL:** A construction delivery process needs to provide for effective quality control. The less definitive the drawings and specifications that constitute the essence of the contract between the Agency and builder, the less effective can be the Agency's quality control efforts.
- ❑ **EFFECT ON CONSTRUCTION BONDS:** A construction delivery process should not negate the utility of construction performance bonds. The less definitive the drawings and specifications that constitute the essence of the contract between the Agency and bonding company, the less effective can the Agency be in holding the bonding company to remedy non-performance by the builder.

These six public policy considerations are the basis for the *evaluation* of the various combinations of construction *procurement* processes and construction *delivery* processes. This is the framework for evaluation of the various combinations....

Combinations of Construction Procurement Processes with Construction Delivery Process

Construction Procurement Processes

- Objective Criteria: Competitive Bidding
- Subjective Criteria: Qualifications, experience, best value

Construction Delivery Processes

- Design-Bid-Build
- Design-Build
- Construction Management

Basis for Comparison

- Cost
- Objectivity of Process
- Appropriate Speed
- Access and Opportunity
- Quality Control
- Effect on Construction Bonds

Here is how the various combinations of construction procurement processes and construction delivery processes are evaluated based on these public policy considerations....

| Combinations of Construction Procurement and Delivery Processes | | | | | | | |
|---|---|---|---|----------------|---|---|---|
| Delivery Process | Procurement Process | Cost | Objectivity of Process | Speed | Access and Opportunity | Quality Control | Effect on Construction Bonds |
| Design-Bid-Build | OBJECTIVE CRITERIA: Competitive Bidding | Good. Contract for fully defined building is awarded to the lowest bidder. | Good. Contract awarded on basis of objective criteria—lowest responsible bid. | May be slower. | Good. Small and large contractors compete on equal footing. | Good, because building is defined in detail in contract. | Good, because building is defined in detail in contract. |
| | SUBJECTIVE CRITERIA: Qualifications, Experience, Best Value | Not good. Seldom used. No evidence “qualification and experience” means cost benefit for state. No evidence “best value” can be determined other than by competitive bidding. | Not good. Contract awarded based on subjective judgments. | | Not good. Small contractors effectively barred from competing. | | |
| Design-Build | OBJECTIVE CRITERIA Competitive Bidding | Not practicable. | | | | | |
| | SUBJECTIVE CRITERIA: Qualifications, Experience, Best Value | Not good. No evidence “qualification and experience” means cost benefit for agency. No evidence “best value” can be determined other than by competitive bidding. | Not good. Contract awarded based on subjective judgments. | May be faster. | Not good. Small contractors effectively barred from competing. | Not good. Building only partially designed at time contract is awarded. | Poor, because building is only minimally defined in contract. |
| Construction Management (with Guaranteed Maximum Price) | Combination of OBJECTIVE AND SUBJECTIVE CRITERIA: Qualifications and experience to select construction manager, competitive bidding of trade contracts. | Good. Trade contracts are competitively bid. | Good. Trade contracts are competitively bid. | Can be fast. | Good. Large and small trade contractors bid competitively on construction work. | Good. Trade contracts are fully defined at time they are awarded. | Good, because building is defined in detail in trade contracts. |
| Construction Management (without Guaranteed Maximum Price) | | Not as good as when used with a guaranteed maximum price. | | | | | |

Based on this evaluation there are two processes....which are specific combinations of a construction *procurement* process with a construction *delivery* process that will allow a public agency to receive the benefits of the design-build construction *delivery* process while maintaining the integrity of its construction *procurement* process. These are....

**Two Procurement/Delivery Processes
that Combine the Integrity of a
Construction Procurement Process
Based On Objective Criteria
With the Benefits of the
Design-Build Construction Delivery Process**

- **TWO ENVELOPES**
- **CONSTRUCTION MANAGEMENT**
with competitive bidding of trade sub-contracts

7. THE TWO ENVELOPES PROCESS

The “Two Envelopes” procurement process is a proven system of procurement for public agencies. For example, it is often used by the Department of Defense to procure new military equipment and systems. It has seldom been used for buildings and infrastructure construction because of the generally satisfactory results that have been obtained by public agencies over many years using the traditional “Design-Bid-Build” system. As more public agencies have come to believe there can be benefits to using a “Design-Build” construction delivery process, “Two Envelopes” provides a procurement process that will protect the integrity of public agencies’ procurement processes by assuring that contracts are awarded based on objective criteria. These are its fundamental elements and important considerations in using it....

1. Agency defines the building or infrastructure it needs; Statement of Needs (SON)

These are important considerations in preparing an SON....

- ❑ A building (or other infrastructure project) is “defined” by preliminary drawings and outline specifications. The more definitive and detailed they are, the more likely the Agency is to get what it needs. This is the Statement of Needs.
- ❑ How definitive do they need to be? Somewhere between 5 and 30% of working drawings should be about right. The bigger and more unique a project, the greater the need for more definition.
- ❑ There is a distinction between “needs” and “wants”. What an agency needs is what is necessary to fulfill its mission. What it wants is not necessary, but would be nice to have (i.e. a brick façade, a VAV HVAC system, etc.). Where this becomes an important distinction is when evaluating Technical Proposals. If five proposals all satisfy the agency’s needs, there is a temptation to want to select one over the others because there is a *subjective* judgment that it offers features it would be nice to have. Opening the door to subjective judgments opens the door for inappropriate influence in the procurement process. The way to avoid this temptation is to prepare a fully definitive job of preparing your Statement of Needs. If you want a brick façade or VAV system, say so in your Statement of Needs.

2. Request for Qualifications (RFQ) issued by agency

These are important considerations in preparing an RFQ....

- ❑ An RFQ limits competition and provides an opportunity for *subjectivity* to creep into the procurement process.
- ❑ If used, the best RFQ is the one that is the least restrictive.
- ❑ One of the best RFQ criteria, from the standpoints of objectivity and efficacy, is bonding capacity.

Here are things to ask for in an RFQ....

- Commitment of bonding company to provide required performance, payment and bid bonds
- Verifiable history of successful completion of recent (say, the last ten years) projects of similar size and scope
- Verifiable history of contested claims and litigation in, say, the last ten years
- Experience and qualifications of key personnel and sub-contractors (including same project and legal history as required of prime) and commitments to their roles in project
- Any statutory and public policy commitments (small business, minority involvement, etc.)
- SOQ should provide contractually enforceable *commitments*, and *verifiable* information....not "plans."

3. Statement of Qualifications (SOQ) submitted by competitors

These are important considerations in evaluating an SOQ....

- Criteria should be objectively evaluable.
- To minimize risk of subjectivity and foster competition, SOQ evaluation is better if it is pass/fail, rather than "short list" or "ranking."
- Should be "in writing." "In-person" presentations should be avoided.

4. Request for Proposals (RFP) issued by agency to qualified competitors

The fundamental concepts of the Two Envelopes Process are....

- The Technical Proposal is submitted in the "first envelope" and the Cost Proposal in "second envelope."
- In the case of buildings and infrastructure projects the Technical Proposal contains the competitors' conceptual designs and outline specifications which they propose in response to the Agency's Statement of Needs.
- The Cost Proposal contains the price for which the competitors' bid to provide the facility in accordance with their respective Technical Proposals.

These are important considerations in issuing an RFP....

- Specify the Two Envelopes process: Technical Proposals in first envelope, Cost Proposal in the second. All proposals that satisfy the agency's needs and other RFP requirements have their Cost Proposal envelopes opened. Contract awarded based on lowest price.
- On anything other than small projects (say, less than \$5 million), it is a good idea to pay competitors an honorarium for the intellectual property rights in their proposals. This is a good idea because (a) it is a lot of work to put together a good proposal and (b) it avoids law suits by losing competitors. How much? A starting point for this discussion is about 0.5% of the construction cost.
- In order to contain the budget for honoraria, it may be necessary to compromise a bit on my skepticism about the use of SOQs, and my "no-ranking" recommendation in evaluating SOQs. If honoraria are to be paid, an SOQ should be used and a short-list (say, "top five") developed. This puts a limit on the amount your agency has to pay out for honoraria.
- If honoraria are paid, a variation is to pay the honoraria to those competitors who make the short-list, while permitting all others who make the pass/fail grade are permitted to submit proposals contingent on their waiving all intellectual property rights in their proposals.
- The most important item in an RFP is the "statement of needs", i.e. the conceptual plans and specifications. The more definitive they are, the better the chances your agency will get what it needs. How detailed do they need to be? Somewhere between 5 and 30% of working drawings.
- Incorporate by reference, mandatory design and construction standards.
- Specify the agency's expectations for the Technical Proposals. (i.e. floor plans, elevations, concept drawings for structural, HVAC, plumbing and electrical systems, outline specifications for materials and equipment, etc.)
- Technical proposals should provide contractually enforceable *commitments*, and *verifiable* information....not "plans."

5. Technical and Cost Proposals are submitted by competitors

In separate, sealed envelopes.

6. Agency evaluates Technical Proposals submitted by competitors

These are important considerations in evaluating Technical Proposals....

- ❑ The most important consideration in evaluating Technical Proposals is whether or not it satisfies the agency's Statement of Needs.
- ❑ There is a great temptation to want to make subjective judgments that one Technical Proposal is better than another (i.e. This building is more attractive than that one; brick is better than stucco; VAV is better than terminal reheat, etc.). This must be avoided if subjectivity is to be kept out of the procurement process.
- ❑ The way to avoid the temptation to make subjective judgments *is to do a thorough job of preparing your agency's Statement of Needs (conceptual plans and specifications)*. If your agency needs certain architectural attributes, it should define them in the conceptual plans and specifications. If it needs a brick building, it should define it in the conceptual plans and specifications. The same with a VAV HVAC system, etc.
- ❑ All Technical Proposals that satisfy the agency's statement of needs (and other proposal requirements) advance to the Cost Proposal stage.
- ❑ Even though, subjectively, the award panel likes one Technical Proposal better than the others, *all which satisfy the agency's statement of needs should advance to the Cost Proposal stage*.
- ❑ The key to avoiding the temptation to make subjective judgments *is to do a thorough, definitive job of preparing your Statement of Needs (conceptual drawings and specifications.)*
- ❑ As with evaluation of the SOQs, Technical Proposals should be evaluated by a panel of *technically qualified* professionals, without participation of political appointees or managers who are not technically qualified.

7. Agency opens Cost Proposals of all competitors whose Technical Proposals satisfy the Agency's Statement of Needs, and the Design-Build contract is awarded to the lowest bidder

This is how the Two Envelopes Process protects the integrity of an Agency's Construction *Procurement* Process while allowing it to receive the benefits of the Design-Build Construction *Delivery* Process....

Even though the Two Envelopes Process allows some subjective judgments into the procurement process in the evaluation of Statements of Qualifications and Technical Proposals, the ultimate decision to award the design-build contract to a specific competitor is based strictly on the objective criterion of lowest cost. Thus there is little opportunity for the contract to be awarded based on inappropriate criteria such as personal relationships and political patronage.

8. THE CONSTRUCTION MANAGEMENT PROCESS, WITH COMPETITIVE BIDDING OF TRADE SUB-CONTRACTS

The "Construction Management" construction delivery process is well known and widely used. If a public agency uses it, however, and wishes to protect the integrity of its construction procurement process it is important that *trade sub-contracts be competitively bid and the benefit of the competitive bidding (lowest cost) flows to the agency and not the construction manager.* These are fundamental elements in this process and important considerations in implementing it....

1. Request for Proposals for construction management services issued, including architect engineer services, and requiring competitive bidding of trade sub-contracts

Note that....

- Architect engineer (AE) services are not a "trade" sub-contract and are not included in the competitive bidding requirement. AE costs are negotiated with Agency as part of the cost negotiations for construction management services.

2. **Construction manager is selected based on subjective criteria such as “experience and qualifications.”**
3. **Agency and selected competitor negotiate fee for construction management services, including architectural engineering services.**
4. **Cost to Agency is sum of construction manager’s fee plus total of the cost of competitively bid trade sub-contracts.**

This is how the Construction Management Process, *with competitively bid trade sub-contracts*, protects the integrity of an Agency’s Construction Procurement Process while allowing it to receive the benefits of the Design-Build Construction *Delivery* Process....

With Construction Management, *with competitively bid trade sub-contracts*, in order to obtain the benefits of Design-Build, about 25% of the project cost is awarded based on subjective criteria (compared to about 10% with Design-Bid-Build) and 75% on the objective criterion of cost (competitive bidding). This is a reasonable trade-off.

9. NOW, A FEW POINTS TO KEEP IN MIND....

- WHICH PROCESS SHOULD I USE?** If your agency has a qualified and experienced staff of engineers and architects in-house, or can acquire this capability by contracting with a private architectural engineering firm, I would normally suggest Two Envelopes. If your agency does not have this capability, I would suggest Construction Management, with Competitive Bidding of Trade Contracts.
- WHEN USING TWO ENVELOPES, HOW DETAILED DOES THE AGENCY’S STATEMENT-OF-NEEDS NEED TO BE?** I would normally suggest that the drawings and outline specifications, which constitute the statement-of-needs, should be the equivalent of about 30% working drawings and specifications.

- ❑ **WHEN USING CONSTRUCTION MANAGEMENT, HOW DETAILED DOES THE AGENCY’S STATE-OF-NEEDS NEED TO BE?** No statement-of-needs is required, but rather a request-for-qualifications (RFQ) for the construction management services (which includes the architectural engineering services).

- ❑ **WHEN USING TWO-ENVELOPES, ALL COMPETITORS WHOSE TECHNICAL PROPOSAL SATISFIES THE AGENCY’S STATEMENT-OF-NEEDS SHOULD ADVANCE TO THE NEXT STEP (PRICE COMPETITION BASED ON THE SECOND ENVELOPE), NOT JUST THE “TOP THREE.”** This is because if a “top three” approach is used, you are allowing subjectivity to creep into the award process, which opens the door to inappropriate influence.

- ❑ **IF AFTER REVIEWING THE TECHNICAL AND COST PROPOSALS RECEIVED UNDER THE TWO-ENVELOPES PROCESS, I CONCLUDE THAT ONE PROPOSALS OFFERS FEATURES AT A COST THAT I BELIEVE WILL GIVE MY AGENCY “BETTER VALUE”, WHAT IS WRONG WITH AWARDING THE CONTRACT TO THAT COMPETITOR EVEN THOUGH IT IS NOT THE LOWEST COST PROPOSAL?** Allowing subjective judgments of “better value” to override the objective criterion of lowest cost opens the door for inappropriate influence in the procurement process. Features that may provide “better value” should have been incorporated into the agency’s statement-of-needs. If they were not, your agency probably did not put sufficient time and effort by professional staff (engineers and architects) into preparation of its statement-of-needs .

- ❑ **WHEN USING TWO-ENVELOPES IT IS VERY IMPORTANT THAT SUFFICIENT PROFESSIONAL (ENGINEERS AND ARCHITECTS) TIME AND RESOURCES BE DEVOTED TO PREPARATION OF THE AGENCY’S STATEMENT-OF-NEEDS.** The statement-of-needs is the essence of the contract between the agency and the design-build firm to which it awards the contract. If the drawings and specifications that constitute the statement of needs are not sufficiently detailed, the agency will be hard pressed to later claim the design-build firm did not comply with the contract.

- ❑ THE EFFICACY AND VALUE OF CONSTRUCTION PERFORMANCE BONDS TO AN AGENCY WHEN THE DESIGN-BUILD CONSTRUCTION DELIVERY PROCESS IS USED IS QUESTIONABLE.** This is because the building (or other infrastructure) the agency needs is not fully defined by 100% working drawings and specifications at the time the contract between the agency and the design-build entity is entered into. In the absence of definitive working drawings and specifications for the project, it is not clear that bonding companies will readily step in and remedy conditions the agency feels constitute non-performance.

- ❑ “SPEED” IN COMPLETING PROJECTS IS IMPORTANT FOR PUBLIC AGENCIES, BUT THE PURSUIT OF SPEED SHOULD NOT BE AT THE EXPENSE OF THE INTEGRITY OF THE PROCUREMENT PROCESS.** Oversight is essential to the integrity of public procurement processes and should not be sacrificed. Also, public sector projects are not revenue-producers as they are in the private sector.

- ❑ WHEN USING CONSTRUCTION MANAGEMENT, INCLUDE IN YOUR CONTRACT WITH THE CONSTRUCTION MANAGER A REQUIREMENT THAT “100%” WORKING DRAWINGS AND SPECIFICATIONS BE PREPARED AND CONSTITUTE THE BASIS OF THE TRADE SUB-CONTRACTS.** This is important because (a) if your project is not 100% defined, you may not get what you need and (b) with 100% working drawings and specifications trade sub-contractors can submit “tighter” bids....and therefore your agency pays a lower price.... because they do not have to include allowances for undefined features.

- ❑ WHEN USING CONSTRUCTION MANAGEMENT, SHOULD THE TRADE SUB-CONTRACTS BE WITH THE PUBLIC AGENCY OR THE CONSTRUCTION MANAGER?** A good question. On the one hand, if the Trade Sub-contractors are contracted directly to the Agency, the Agency has better control over them (i.e. the Agency controls their payments). This can help assure the quality of the work and reduce workmen’s liens. On the other hand, because of this contractual relationship, there is a risk of claims and litigation involving the Agency and Trade Sub-contractors. If Trade Sub-contractors are under contract to the Construction Manager, there is less likelihood the Agency will be dragged into

claims disputes and litigation...but the Agency will have correspondingly less control over the Trade Sub-contractors. I would suggest this approach: If your Agency has technically qualified staff (engineers and architects) and the project is large and/or unique, Trade Sub-contracts direct with your Agency may be appropriate. If the project is small and/or straight-forward, Trade Sub-contracts with Construction Manager may be better.

- ❑ **CONSTRUCTION MANAGEMENT HAS A BENEFIT THAT TWO-ENVELOPES DOES NOT: THE AGENCY HAS BETTER CONTROL OVER THE DESIGNER (ARCHITECTURAL ENGINEERING FIRM).** This is because the designer is part of the construction management “entity” which is contracted to the agency. With Two-Envelopes, the designer is contracted not to the agency but to the builder. The designer’s first obligation is to the builder, not the agency.
- ❑ **CONSTRUCTION MANAGEMENT HAS ANOTHER ADVANTAGE OVER TWO-ENVELOPES: BETTER QUALITY CONTROL.** The scope of work for the construction manager should include inspection of the work by trade contractors. Since the construction manager has no economic interest in the trade contractors, the construction manager can be expected to be fairly objective. With Two-Envelopes, the design-builder’s economic interest is tied to the ability of the trade contractors to do the work as inexpensively as possible. The design-builder can be expected to put its economic interests ahead of the quality control interests of the agency.

10. **GOOD LUCK!**