Project Delivery Strategy Selection Workshop

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| Workshop Summary |
| Project Name: |  |
| Workshop Date: |  |
| Workshop Location: |  |
| Facilitator: |  |

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| Workshop Participants |
| Name | Email |
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Project Delivery Strategy Selection Workshop Process

Overview

This document contains forms to support a process for a project delivery strategy selection workshop. Following the guidance in this document, the workshop should take between 2-4 hours. The primary objectives of this process are to:

* Provide a structured approach to assist owners in selecting an appropriate project delivery strategy;
* Enhance team integration and team cohesion in all project delivery strategies; and
* Provide documentation of the selection decision.

Background

This project delivery strategy workshop process is based on the results of more than 200 U.S. building projects completed between 2008 and 2013. The research was conducted by Pennsylvania State University and the University of Colorado with funding from the Pankow Foundation and the Construction Industry Institute. Complete details for the research can be found at <http://bim.psu.edu/delivery>.

Workshop and Facilitation

The selection of a project delivery method is best made in a workshop setting with the owner and key project stakeholders. This process will enhance the owner’s understanding of the delivery choice and create alignment on the delivery strategy from the beginning. Facilitation of the workshop will make the process more efficient. A facilitator need only be familiar with the various project delivery, contracting and procurement methods. Facilitation also helps to answer questions and make sure the process stays on track and the team moves towards a formal selection.

Timing and Participation

Selection of the project delivery strategy should occur as early as possible, ideally during the programming and/or conceptual design phases. Key participants may include, but are not limited to the owner, facility manager, user representative, owner’s construction representative or other key design and construction professionals depending upon how the owner is structured. Participation of a minimum 3-5 people and a maximum of 12-15 is recommended, but this number varies depending upon the project size/complexity and owner profile.

Potential Bias

The best approach is for workshop participants to keep an open mind about the delivery strategy. Preconceived ideas can introduce bias into the discussions. However, when participants have a bias towards a potential method, it is best to discuss it with the entire selection team at the beginning of the workshop. Putting ideas on the table helps others to understand the potential advantages of the different strategy approaches available.

Workshop Preparation

Pre-workshop planning will result in a more concise and informative session. It is helpful for the owner and facilitator to complete all known project information, goals and constraints prior to the workshop. The best approach is to complete the *Project Delivery Description* and the *Project Delivery Goals* and provide them to the workshop participants before conducting the workshop. However, these worksheets can be completed in the workshop if required.

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| **Process Step** | **Worksheet or Form Name** |
| ***Step 1: Define the project needs*** |  |
| a. Describe the project  | ***Project Attributes*** |
| b. Set project goals | ***Project-Specific Goals*** |
|  |  |
| ***Step 2: Explore the delivery strategy options*** |  |
| a. Design responsibility | ***Design Responsibility Opportunities/Obstacles*** |
| b. Timing of involvement | ***Timing of Involvement Opportunities/Obstacles*** |
| c. Cost transparency | ***Cost Transparency Opportunities/Obstacles*** |
| d. Selection criteria | ***Selection Opportunities/Obstacles Criteria*** |
| e. Prequalification | ***Prequalification Opportunities/Obstacles*** |
| f. Experience working together | ***Experience Working Together Opportunities/Obstacles*** |
| g. Interview process | ***Interview Process Opportunities/Obstacles*** |
|  |  |
| Step 3: Select the optimal delivery strategy |  |
| Summarize delivery strategy preferences | *Delivery Strategy Preferences* |
| b. Identify delivery constraints | ***Project Constraints***  |
| c. Select the delivery strategy | ***Delivery Strategy Selection***  |
|  |  |

NOTE: Typically, the entire selection process can be completed by the project team in a 2-4 hour workshop session, as long as each team member has individually reviewed the project description, goals and constraints prior to the workshop.

**Project Delivery Selection Worksheets and Forms**

The following forms and supplements are included to facilitate this process.

Step 1 – Define the Project Needs

1a. Project Attributes

Provide information on the project. This includes attributes such as size, type, funding, risks, complexities, etc. All known information should be listed for the specific project, but the information should be concise.

1b. Project-Specific Goals (including example project goals)

A precise determination of the project goals is an instrumental first step of the process that will guide the selection of the appropriate project delivery strategy.

Step 2 – Explore the Delivery Strategy Options

2a-g. Opportunities/Obstacles

These eight forms are used to summarize the assessments made by the workshop team of the specific opportunities and obstacles associated with the two delivery method factors, one contract payment term factors, and the four procurement process factors. At the end of each form, the workshop team documents the preferred option for each factor. A second page is provided for comments and conclusions. The ratings are then transferred to the ***Delivery Strategy Preferences*** form in Step 3a.

Supplements a-g. Opportunities/Obstacles Checklists

These eight forms provide the workshop team with additional guidance concerning general opportunities and obstacles associated with the two delivery method factors, one payment terms factor, and four procurement process factors. The list of opportunities and obstacles should only be referenced *after* the workshop team has exhausted ideas about the specific project on the ***Opportunities/Obstacles*** worksheets in Step 2a-h.

Step 3 – Select the Optimal Delivery Strategy for the Project

Delivery Strategy Preferences

This form collects the workshop team’s preferred options for the two delivery method factors, the two contract payment terms factors, and the four procurement process factors. The completed ***Delivery Strategy Preferences*** form should provide an executive summary of the initial decisions needed to identify an optimal project delivery strategy.

3a. Project Constraints

Review any organizational policy or legal constraints on the delivery process. These constraints can limit, or even eliminate, the consideration of certain project delivery strategies. Identifying constraints prior to discussing the selection of a delivery strategy will help narrow the potential choices down to only viable strategies. The viable strategies are then carried forward to the ***Delivery Strategy Selection*** worksheet, where they are compared against workshop team’s preferred options summarized in Step 3a.

3b. Delivery Strategy Selection

This worksheet allows for comparison of the viable project delivery strategies (identified in Step 3b) against the workshop team’s preferred delivery options (from Step 3a). After completing this comparison, the workshop team will have identified the optimal delivery strategy for the project.

Step 1 – Define the Project Needs

Step 1a) Describe the Project

The following attributes should be considered in describing the specific project. Other items can be added to the bottom of the form if they influence the project delivery decision. Relevant documents can be added as appendices to the final summary report.

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| Project Attributes |
| Project Name: |
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| Location: |
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| Estimated Budget (or range): |
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| Estimated Project Delivery Period: |
|  |
| Estimated Size (or range, in square feet): |
|  |
| Required Delivery Date (if applicable): |
|  |
| Source(s) of Project Funding: |
|  |
| Function Project Scope (i.e., what will be delivered): |
|  |
| Major Schedule Milestones: |
|  |
| Major Project Stakeholders: |
|  |
| Main Identified Sources of Risk: |
|  |
| Safety Issues: |
|  |
| Sustainable Design and Construction Requirements: |
|  |
| **Key Specialty Trades:** |
|  |

1b) Set Project Goals

An understanding of project goals is essential to selecting an appropriate project delivery strategy and ultimately to defining project success. Therefore, project goals should be set prior to using the project delivery strategy selection process. Typically, the project goals can be defined in three to five items that deal with project management and project success. Example goals are provided below, but the report should include project-specific goals. Note that these goals should remain consistent over the life of the project.

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| Project-Specific Goals |
| Goal #1: |
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| Goal #2: |
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| Goal #3: |
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| Goal #4: |
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| Goal #5: |
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Example Project Goals (for reference)

Schedule

* Minimize project delivery time
* Complete the project on schedule
* Accelerate start of project revenue

Cost

* Minimize project cost
* Maximize project budget
* Complete the project on budget
* Maximize the project scope and improvements within the project budget

Quality

* Meet or exceed project requirements
* Select the most qualified team
* Provide a high quality design and construction constraints
* Provide an aesthetically pleasing project

Functional

* Maximize the life cycle performance of the project
* Minimize inconvenience to current facility users
* Maximize worker and user safety

*Step 2. Explore the Delivery Strategy Options*

Step 2a) Design Responsibility - Opportunities/Obstacles

Organizationally, when considering design responsibility for design and construction services, the Owner has two choices. The Owner can choose to hire a designer and primary builder separately (D-B-B or CM at-Risk), or the Owner can choose to use a single contract that combines the design and construction into one entity (D-B or IPD).

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| **Multiple Contracts**: Design and construction responsibility can be split into separate contracts. Design-bid-build contract forms have a clear separation with the builder’s contract beginning after design is complete. Construction manager at risk forms of contract have separable preconstruction and construction contracts for the builder. |
| Opportunities | Obstacles |
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| **Single Contract:** Design and construction responsibilities can be combined into one contract. Design-build contracts have one contract between the owner and the design-builder. Integrated project delivery forms of contracts use multiparty agreements between the owner, designer, builder and specialty contractors. |
| Opportunities | Obstacles |
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| **Preferred Option:** Based on discussion of the opportunities/obstacles identified above, enter your preferred contract arrangement into Box 2a. | **Box 2a** |

Step 2b) Timing of Involvement - Opportunities/Obstacles

Organizationally, timing of involvement relates to when the primary builder and other key specialty contractors are hired and become involved with the project. Three primary times during design provide the options for hiring of the primary builder and key specialty contractors: During the construction documents phase of design or later, after schematic design and before construction documents, and prior to Schematic Design.

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| **During Construction Documents or Later:** The primary builder is procured once the construction documents phase of design is complete or near complete. This allows a complete bid package to be set for bids. Total cost of construction are typically a requirement in soliciting bids for the project (D-B-B).  |
| Opportunities | Obstacles |
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| **Between Schematic Design and Construction Documents:** The primary builder is procured after 30% of the design is complete, but before design is 100% complete. This method allows for the primary builder to be involved during the critical detailed design stages to provide construction input and constructability reviews during design. However, obtaining an accurate total construction cost from bid can be more difficult as design is not complete at time of procurement. Procurement typically involves technical and qualification factors in addition to total construction cost (D-B or CM at-Risk).  |
| Opportunities | Obstacles |
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| **Prior to Schematic Design:** The primary builder is procured when either there is limited design information, but no more than 30% of the design is complete. This method allows for the earliest involvement of the builder for the project and can provide pre-construction and construction management services throughout the design process. Obtaining total construction cost during procurement is not possible. Procurement of builders at this stage relies on Qualifications-Based Selection with the potential to include fees as a price factor (D-B, CM at-Risk, or IPD). |
| Opportunities | Obstacles |
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| **Preferred Option:** Based on discussion of the opportunities/obstacles identified above, enter your preferred timing of involvement for the primary builder and key specialty trades into Box 2b. | **Box 2b***Primary Builder* |
| *Key Specialty Trades* |

Step 2c) Cost Transparency- Opportunities/Obstacles

Cost transparency refers to the use of either closed-book or open-book payment terms between the primary builder and the Owner. It may also refer to the payment terms between primary builder and key specialty trades.

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| **Closed Book:** Closed-book accounting does not allow the Owner or the team members to access one another’s financial information associated with the project. Lump sum contracts are typically used for estimating total costs and schedule of values are used for payment of work performed. |
| Opportunities | Obstacles |
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| **Open Book:** Open book accounting allows for the Owner and all team members to participate actively in the cost estimation and project budgeting. The team members allow access to each other’s financial information related to the project and participate in the payment for completed work based upon the cost of the work in place plus a fee.  |
| Opportunities | Obstacles |
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| **Preferred Option:** Based on discussion of the opportunities/obstacles identified above, enter your preferred contract payment terms for the primary builder and key specialty trades into Box 2c. | **Box 2c***Primary Builder* |
| *Key Specialty Trades* |

Step 2d) Selection Criteria - Opportunities/Obstacles

Once the decision to begin the procurement phase is made, the Owner needs to develop the selection criteria for selecting the builder for the project. The Owner has the choice to procure based solely on price, or to use price and/or non-price factors such as technical requirements and qualifications.

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| **Price Only:** Owner procures the builder based on the price provided in the received bids. The bid that is fully responsive and has the lowest price is typically chosen as the builder for the project. No technical or qualifications factors are considered in the selection. |
| Opportunities | Obstacles |
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| **Best Value:** The Owner procures the primary builder using price as well as non-price factors such as time, quality, value-added design, qualifications, and other project specific factors.  |
| Opportunities | Obstacles |
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| **Qualifications-Based Selection (QBS):** The Owner procures the primary builder using exclusively non-price factors such as time, quality, value-added design, qualifications, and other project specific factors. Price of the work is not considered in the selection. |
| **Opportunities** | **Obstacles** |
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| **Preferred Option:** Based on discussion of the opportunities/obstacles identified above, enter your preferred selection criteria for the primary builder and key specialty trades into Box 2e. | **Box 2e** *Primary Builder*  |
| *Key Specialty Trades* |

Step 2e) Prequalification - Opportunities/Obstacles

Owners have the option to solicit bids or proposals for any and all builders interested in the project or to pre-qualify builders who then are the only organizations that are allowed to submit a bid/proposal for the project.

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| **Open Procurement:** For open procurement, Owners typically invite any and all builders to submit a bid for a project. This induces more competition among many firms that could result in lower initial total costs to the Owner. |
| Opportunities | Obstacles |
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| **Shortlist:** The use of shortlist allows the Owner to prequalify firms based on financial ability, safety performance, competitive processes, or any other important factors required before the primary procurement process takes place. Shortlisting firms means fewer proposals to review and the potential that all bidding firms are the most qualified for the project, which can assure the Owner is selecting a builder that will perform as expected. |
| Opportunities | Obstacles |
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| **Preferred Option:** Based on discussion of the opportunities/obstacles identified above, enter your preferred approach to prequalification for the primary builder and key specialty trades into Box 2f. | **Box 2f***Primary Builder* |
| *Key Specialty Trades* |

Step 2f) Experience Working Together - Opportunities/Obstacles

When constructing a project, the Owner procures a builder based on the criteria important to the project. The selected construction firm can be one that the Owner has never worked with or a builder whom the Owner has experience working with on previous projects.

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| **First Time Working Relationship:** First time working relationship summarizes the Owner’s selection of a builder that the Owner has no experience working with in past projects. The relationship is new and there will be a learning curve at the beginning of the project on how the Owner and builder will work together on the project so that alignment of project goals and objectives occurs.  |
| Opportunities | Obstacles |
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| **Previous Working Relationship:** When the Owner selects a builder that they are familiar with from previously working together, there is a reduced learning curve and an understanding of the relationship that already exists between the Owner and builder. When repeat business occurs, the builder may be more lenient with changes and claims in order to further the relationship with the potential to work on future projects together.  |
| Opportunities | Obstacles |
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| **Preferred Option:** Based on discussion of the opportunities/obstacles identified above, enter your preferred working relationship with the primary builder into Box 2g. | **Box 2g** |

Step 2g) Interview Process - Opportunities/Obstacles

The use of an interview process when selecting a builder means that the Owner is utilizing non-price factors in the procurement process. Interviews can range in intensity from simple clarifications of proposals to in-depth questions about complex scenarios that may be encountered during design and construction of the project. Owners need to choose prior to soliciting bids if interviews will be used or not.

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| **No Interview Prior to Selection:** If price only factors are used to select a builder or specialty contractor, then the Owner most likely will not need to interview the potential construction firms. Not using interviews can shorten the procurement time as well as puts less burden on the Owner to carry out additional steps in the procurement process.  |
| Opportunities | Obstacles |
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| **Interview Prior to Selection:** When non-price selection criteria are used to procure a builder or specialty contractor, the Owner can choose to use interviews or not. Depending on the complexity of the project and the non-price factors used in the RFP, Owners will typically conduct interviews with 3-5 potential construction firms in order to clarify the proposals as well as inquire about specific scenarios for the project and overall attributes of the construction firm.  |
| Opportunities | Obstacles |
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| **Preferred Option:** Based on discussion of the opportunities/obstacles identified above, enter your preferred stance on conducting interviews of the primary builder, prior to selection, into Box 2h. | **Box 2h** |

*Step 3. Select the Optimal Delivery Strategy for the Project*

Summarize Delivery Strategy Preferences

Transfer your preferred options to each project delivery strategy selection factor (Boxes 2a-h) into the table below. This table represents a summary of initial decisions comprising a project delivery strategy. The remainder of Step 3 will assist you in selecting an optimal strategy for your project goals that is compatible with your organization’s existing delivery policies and constraints.

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| **Initial Delivery Strategy Preferences** |
| **Selection Factors** | **Preferred Option** |
| **Box 2a.** Design Responsibility |  |
| **Box 2b.** Timing of Involvement | *(Primary Builder)* |
|  | *(Key Specialty Trades)* |
| **Box 2c.** Cost Transparency |  |
| **Box 2d.** Selection Criteria | *(Primary Builder)* |
|  | *(Key Specialty Trades)* |
| **Box 2e.** Prequalification | *(Primary Builder)* |
|  | *(Key Specialty Trades)* |
| **Box 2f.** Experience Working Together |  |
| **Box 2g.** Interview Process |  |

Step 3a) Identify Delivery Constraints

Identify the most appropriate project delivery strategies that can accommodate your organization’s policies on delivery methods, contract payment terms and the procurement processes. The terms “required” and “prohibited” connote constraints dictated by law or policy. Review the list of constraints below and check each constraint that applies to your organization or project. For each constraint, a rating is provided for the appropriateness of each project delivery strategy. If an “X” appears under any project delivery strategy, you should discontinue evaluation of that strategy, as it is not compatible with your project constraints.

If multiple constraints are checked, then only note the strategies that are appropriate for *all* of the checked constraints. For example, if the “Owner is prohibited from using a single contract by law or policy” (I, II, III are Appropriate, IV has a Fatal Flaw and V is Challenging if Selected) and “Early GC, CM or DB involvement is prohibited by law or policy” (I, II are Appropriate, III is Challenging if Selected and IV, V have a Fatal Flaw), then the most appropriate delivery strategies for your project are I and II.

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| --- | --- |
| **Project Constraints** | **Project Delivery Strategy Rating** |
| **I** | **II** | **III** | **IV** | **V** |
| **2a. Design Responsibility** |  |
| [ ]  Owner has a long history of using traditional delivery methods | **++** | **+** | **+** | **–** | **–** |
| [ ]  Owner is prohibited from using a single contract  | **+** | **+** | **+** | **X** | **–** |
| **2b. Timing of Involvement**  |  |
| [ ]  Early GC, CM or DB involvement is prohibited  | **+** | **+** | **–** | **X** | **X** |
| [ ]  Early trade involvement is prohibited  | **+** | **+** | **+** | **X** | **X** |
| [ ]  Early GC, CM or DB involvement is required  | **X** | **X** | **+** | **+** | **+** |
| [ ]  Early trade involvement is required  | **X** | **X** | **–** | **+** | **++** |
| **2c. Cost Transparency** |  |
| [ ]  Owner staffing cannot participate in monthly cost audits | **++** | **+** | **X** | **+** | **–** |
| [ ]  Closed book contract for GC, CM, or DB is required  | **++** | **+** | **X** | **+** | **X** |
| [ ]  Open book contract for GC, CM or DB is required  | **X** | **–** | **++** | **–** | **+** |
| **2d. Selection Criteria** |  |
| [ ]  Selection of GC, CM or DB must be based solely on the cost of work | **++** | **+** | **X** | **X** | **X** |
| [ ]  Selection of trades must be based solely on the cost of work | **++** | **+** | **+** | **–** | **X** |
| [ ]  Selection of GC, CM or DB must be a competitive, best value decision | **–** | **+** | **+** | **++** | **X** |
| [ ]  Selection of trades must be a competitive, best value decision | **–** | **+** | **+** | **++** | **X** |
| [ ]  Qualification-based selection of GC, CM or DB is prohibited  | **++** | **+** | **–** | **+** | **X** |
| [ ]  Qualification-based selection of trades is prohibited  | **++** | **+** | **+** | **+** | **–** |
| **2e. Prequalification** |  |
| [ ]  Prequalification of GC, CM or DB is prohibited  | **++** | **–** | **–** | **X** | **X** |
| [ ]  Prequalification of trades is prohibited  | **++** | **–** | **–** | **X** | **X** |
| [ ]  Prequalification of GC, CM or DB is required  | **X** | **+** | **+** | **++** | **+** |
| [ ]  Prequalification of trades is required  | **–** | **+** | **+** | **++** | **+** |
| **2f. Experience Working Together** |  |  |  |  |  |
| [ ]  Owner must procure GC, CM or DB from a list of approved partners | **–** | **–** | **+** | **+** | **++** |
| **2g. Interview Process** |  |  |  |  |  |
| [ ]  Interviewing the GC, CM or DB is prohibited  | **++** | **+** | **X** | **X** | **X** |
| [ ]  Interviewing the GC, CM or DB is required  | **X** | **–** | **+** | **+** | **++** |

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| Rating Key |
| **++** | Most Appropriate  |
| **+** | Appropriate  |
| **–** | Challenging if Selected  |
| **X** | Fatal Flaw (Discontinue evaluation of this delivery strategy) |

Step 3b) Select the Delivery Strategy

In the form below, scratch out or cover the columns with delivery strategies that were not found viable in the constraint analysis in Step 3b. Compare the workshop team’s preferred delivery options with the remaining columns to determine the optimal strategy for the project.

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| --- | --- |
| **Selection Factors** | **Delivery Strategy Selection** |
| **I** | **II** | **III** | **IV** | **V** |
| **Box 2a.** Design Responsibility | Separate | Separate | Separate | Combined | Separate; **Combined** |
| **Box 2b.** Timing of Involvement |  |  |  |  |  |
| *Primary Builder* | CD or later | DD or CD**;****CD or later** | Pre-SD | Pre-SD | Pre-SD |
| *Key Specialty Trades* | CD or later | DD or CD**;****CD or later**  | DD or CD**;****CD or later** | **Pre-SD;**DD or CD | Pre-SD |
| **Box 2c.** Cost Transparency | Closed book | **Closed book;** Open book | Open book | **Closed book** | Closed book, **Open book** |
| **Box 2d.** Selection Criteria |  |  |  |  |  |
| *Primary Builder* | **Price only**;Best value | Best value | Best value;**QBS** | Best value | QBS |
| *Key Specialty Trades* | Price only | Price only;**Best value** | Price only;**Best value** | Best value | QBS |
| **Box 2e.** Prequalification |  |  |  |  |  |
| *Primary Builder* | Open | Shortlist | Open;**Shortlist** | Shortlist | Shortlist |
| *Key Specialty Trades* | Open | Shortlist | Shortlist | Shortlist | Open;**Shortlist** |
| **Box 2f.** Experience Working Together | First time | First time | Repeat | First time;**Repeat** | Repeat |
| **Box 2g.** Interview Process | No interview | No interview | Interview | Interview | Interview |
| *Abbreviations:* SD=Schematic Design; DD=Design Development; CD=Construction Documents; QBS=Qualifications-Based Selection |

Project Delivery Strategy Selection Summary Conclusions and Comments

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Supplement a-g: Opportunities/Obstacles Checklists

Step 2a) Delivery Method – Design Responsibility Opportunities and Obstacles

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| MULTIPLE CONTRACTS (DBB or CM at-Risk) |
| Opportunities | Obstacles |
| [ ]  Legal processes are well understood by the industry[ ]  Separate procurement processes can simplify each parties selection[ ]  If design is not well defined, it allows time for concepts to develop before the builder is engaged | [ ]  Linear design and construction process is inherent; fast-tracking requires aligned contract language with all parties[ ]  Design changes can increase costs or drive adversarial relationships[ ]  Errors in design lead to change orders and schedule delays |
| SINGLE CONTRACTS (DB or IPD) |
| Opportunities | Obstacles |
| [ ]  Single point of responsibility for design and construction[ ]  Higher level of design constructability[ ]  Easier to align risk and reward with project goals[ ]  Non-adversarial designer-builder relationship[ ]  Designs can be more concise since the contractor is involved during design | [ ]  Early selection of team members can be challenging[ ]  Scope must be well-defined early[ ]  Selection is often constrained to performance based design and construction criteria[ ]  Fewer checks and balances between design and cost |

Step 2b) Timing of Involvement Opportunities and Obstacles

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| --- |
| CONSTRUCTION DOCUMENTS OR LATER |
| Opportunities | Obstacles |
| [ ]  Owner can finish design prior to beginning construction[ ]  Allows for price to be known prior to beginning construction[ ]  Procurement includes total construction cost that becomes the contract amount | [ ]  Constructability advice is costly to integrate into the design[ ]  Greater potential for errors and omissions in the design documents[ ]  Errors in design can lead to change orders and schedule delays |
| AFTER SCHEMATIC DESIGN AND BEFORE CONSTRUCTION DOCUMENTS |
| Opportunities | Obstacles |
| [ ]  Base scope provides knowledge of construction methods during procurement[ ]  Opportunity for team integration through constructability feedback and early modeling for shop drawings[ ]  Potential reduction of changes and RFIs during construction[ ]  Contractor input into the design[ ]  More efficient procurement of long-lead items[ ]  Ability to start construction before completing entire design[ ]  Procurement can include price and non-price factors | [ ]  Constructability advice can cause design to incorporate rework [ ]  Designers and builders may not have a pre-existing relationship[ ]  Value engineering opportunities may be limited based on committed concepts[ ]  Benefit of builder involvement during design can be limited if the designer and builder cannot work together effectively |
| BEFORE SCHEMATIC DESIGN |
| Opportunities | Obstacles |
| [ ]  Constructability advice can be provided proactively with decisions[ ]  Teams can design to the cost and schedule through timely input, rather than pricing what is designed[ ]  Builder can assist the designer and owner in developing the project requirements and scope[ ]  Potential reduction of changes and RFIs during construction[ ]  Contractor input into the design[ ]  More efficient procurement of long-lead items[ ]  Ability to start construction before completing entire design | [ ]  Procuring the builder before the scope is fully understood limits the procurement options available to the Owner[ ]  Trade contractor involvement at this stage is new to many markets and finding qualified team members can be challenging[ ]  Benefit of builder involvement during design can be limited if the designer and builder cannot work together effectively[ ]  Construction costs are not fully known until late in the design phase |

Step 2c) Contract Payment Terms – Cost Transparency Opportunities and Obstacles

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| CLOSED-BOOK ACCOUNTING (Lump Sum/Fixed Price) |
| Opportunities | Obstacles |
| [ ]  Can require less owner effort to manage payment[ ]  Is well understood in the construction industry[ ]  Accounting is handled on an individual basis and is simpler to handle throughout the project | [ ]  Required builder to assume more risk and charge accordingly[ ]  Can create adversarial relationships if disputes arise[ ]  May be difficult for owners to understand what they are paying for beyond the schedule of values and checking physical progress [ ]  Difficult to develop trust as the builder can hide issues in their finances and pay applications |
| OPEN-BOOK ACCOUNTING (Cost Plus/GMP) |
| Opportunities | Obstacles |
| [ ]  Allows the owner to pay the true cost of the work plus the builder’s fee[ ]  Can provide owner with more cost knowledge for future projects[ ]  Allows trust to be built through clear understanding of costs[ ]  Fewer chances for disputes between owner and builder | [ ]  Requires more owner effort and administration in accounting and payment of the builder[ ] Can provide disincentives to complete work at the lowest possible cost[ ]  Without incentives, limits the builder’s drive to save costs[ ]  Potential for builders to utilize higher initial costs in order to realize savings later[ ]  There is the possibility that costs could exceed the owner’s budget substantially unless a GMP is implemented |

Step 2d) Procurement Process – Procurement Selection Criteria Opportunities and Obstacles Checklist

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| --- |
| PRICE ONLY |
| Opportunities | Obstacles |
| [ ]  Allows for simplicity in procurement[ ]  Can allow a wider range of builders to bid for the work[ ]  Can be the shortest procurement period[ ]  Competitive bidding on price provides low initial construction costs based on a clearly defined scope of work | [ ]  Selecting the lowest price is not necessarily the best value for the project[ ]  The absence of non-price factors could lead to selecting an unqualified builder[ ]  Owner has to determine if the lowest bidding firm has included all components of the project to be fully responsive |
| PRICE AND/OR NON-PRICE FACTORS |
| Opportunities | Obstacles |
| [ ]  Can allow for competitive and value-adding proposal elements[ ]  Can serve to select team members with better project qualifications[ ]  Allows for innovation by bidding builders to provide the best value proposal for the project[ ]  Cost is not the only primary factor to evaluate proposals[ ]  Suggests the hiring of a team member rather than purchasing of services[ ]  Allows the team to focus on the “who” rather than “how much” | [ ]  Scoring of qualitative factors can be complex, and requires more time and resources to develop[ ]  May exclude builders who do not typically prepare qualifications/technical criteria[ ]  Time required to define technical requirements and expectations through RFP development can be intensive[ ]  Time required to evaluate proposals can be lengthy[ ]  Increased cost to prepare proposals can limit the number of responsive firms[ ]  Cost to prepare proposals can be substantial, which could increase bid amounts[ ]  Can be challenging to demonstrate an objective selection[ ]  More difficult to make a direct comparison between firms |
| NON-PRICE FACTORS ONLY |
| Opportunities | Obstacles |
| [ ]  Hiring of a team member rather than purchasing of services[ ]  Allows the team to focus on the “who” rather than “how much”[ ]  Owner does not have to award to the lowest, responsive bidder[ ]  Owner only has to evaluate qualifications and technical factors, no cost to consider | [ ]  Procurement does not include a cost portion in proposals |

Step 2e) Procurement Process – Prequalification Opportunities and Obstacles Checklist

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| OPEN PROCUREMENT |
| Opportunities | Obstacles |
| [ ]  May allow for more builders in the market place to propose on a project, which could drive down initial costs[ ]  Makes the selection process transparent | [ ]  Unqualified proposers may submit proposals and could be selected to construct the project[ ]  An unmanageable number of proposers may submit bids |
| SHORTLIST |
| Opportunities | Obstacles |
| [ ]  Allows the owner to select from only the best and most qualified proposing builders[ ]  A smaller number of proposing builders may increase the effort by builders to provide innovative solutions in order to offer the best value to the project | [ ]  Two-step process can add time to the procurement process[ ]  Qualitative elements can be complex to score |

Step 2f) Procurement Process – Experience Working Together Opportunities and Obstacles Checklist

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| FIRST-TIME WORKING RELATIONSHIP |
| Opportunities | Obstacles |
| [ ]  Can allow for a larger pool of builders to propose on a project[ ]  May infuse new idea or construction techniques not seen from familiar builders[ ]  Allows for the use of partnering/team building techniques to build a team relationship for the project | [ ]  Owner and builders will experience a learning curve for communication and working together[ ]  There is the possibility that the owner and builder will have differing cultures that could conflict[ ]  The level of trust between the owner and builder could be low during the initial stages of the project |
| PREVIOUS EXPERIENCE WORKING TOGETHER |
| Opportunities | Obstacles |
| [ ]  Business processes will be known to each party[ ]  Can include incentives to work together on future projects[ ]  The established relationship lends itself to providing favors for one another[ ]  A level of trust and collaboration already exists between the owner and builder | [ ]  Incentive for innovation from open competition may be diminished[ ]  Owner may have legal or functional constraints[ ]  Using the same builder does not mean the owner is receiving the best price or best value for the project |

Step 2g) Procurement Process – Interview Process Opportunities and Obstacles Checklist

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| NO USE OF INTERVIEWS |
| Opportunities | Obstacles |
| [ ]  Not conducting interviews can shorten the procurement time[ ]  Interviews may not provide a differentiator between proposing builders[ ]  Potential to clarify proposals in a non-formal atmosphere | [ ]  May not have another opportunity for verbal clarifications of proposals[ ]  May not have another chance to develop team chemistry[ ]  Procurement based solely on the information provided in the received proposals |
| USE OF INTERVIEWS |
| Opportunities | Obstacles |
| [ ]  Provides the opportunity to meet with potential key team members[ ]  Increases the opportunity to examine qualifications in a face to face setting | [ ]  Additional time is required to organize and conduct interviews[ ]  Need to determine method for ensuring interview process will lead to selection of optimal builder |