



*American Council of Engineering Companies of New York*

## **Design-Build: Engineered for Success**

ACEC New York believes in the value of project delivery systems that guide the design of public and private facilities, are in the best interest of the owner, utilize a Qualifications-Based Selection (QBS) procedure for the selection of design professionals, provide unbiased protection for existing and future infrastructure, and protect the health, welfare and life safety of the public. ACEC New York recognizes that the traditional design-bid-build project delivery system is utilized for the majority of constructed projects. However, ACEC New York also acknowledges design-build as an alternative project delivery system that, while not appropriate for every project, is a useful delivery tool to have in certain circumstances for private and public projects.

Design-build is an integrated approach that provides the owner with design and construction services under one contract with a single source of project responsibility. Design professionals may engage in a variety of roles in design-build execution agreements: as the lead entity; in a joint-venture relationship with a contractor; as lead designer in a sub-contract role to a contractor or as a sub-consultant to the lead designer; or as the independent owner's design consultant.

As a public policy issue, when design-build is utilized, ACEC New York endorses a two-step procedure and implementation process, sometimes referred to as the "bridging method," as the process that best protects the interests of the owner, design professional, contractor, and the public.

### **When should Design-Build be used as the Project Delivery Mechanism?**

As noted above, while design-build is a useful delivery tool to have in certain circumstances for private and public projects, it is not appropriate for every project. Factors affecting the decision to use the design-build method include:

#### **Time**

Although primary objective is to reduce the total time to deliver the project, there needs to be additional time spent "upfront" through formal means for the owner to gather critical information from prospective bidders interested in doing the work. Examples of such include Requests for Information/Interest (RFI's) and Requests for Qualifications (RFQ's) to identify the competitive playing field and any/all factors that have a direct bearing on ensuring a successful conclusion.

### Owner/Contractor Working Groups

In order for the process of design-build to be successful, both in team selection and in completing the project on time and within budget, a framework must be established for the owner to work with each contractor in making sure all parties are fully aligned in all aspects of the work to be done. This alignment includes a clear understanding of the scope of work to be done, the criticality of the schedule commitments, a thorough vetting of any/all innovative work methods and the removal of restrictions that affect cost and schedule. These working groups need to follow a structured process with special consideration being given to four areas of concern as outlined below.

**Attributes of Working Group Members** – Need to have experienced and open-minded people who have worked on at least one alternative delivery project and are not wedded to design-bid\*build mechanisms. Client needs to have staff who are willing to listen and not be rigid in their thinking about design requirements and construction methods. Contractor needs to be aware of and responsive to absolute requirements that owner might have based on strong historical experience. Examples include safety and reliability issues. Ability to objectively articulate concerns and positions is a necessity as is the demonstrated ability to achieve consensus.

**Innovation** – Need to provide strong incentive for use of innovative designs and methods of construction with constant reinforcement of same throughout the entire procurement and delivery process. There needs to be strong encouragement of “outside-the-box” ideas and especially those that have been successfully used elsewhere on similar projects.

**Sharing of Common Elements** – Recommended revisions to owner-issued requirements and stipulations that are offered by one contractor should be shared with all other proposers provided so that they do not include proprietary items. An example of such would be a relaxation of the workable hour provision that most contracts have or a more liberal interpretation of a contract requirement in the favor of a contractor.

**Protection of Proprietary Information/Approaches/Methods**- The owner must offer a commitment of confidentiality for those uniquely different ideas a contractor might share with the client during the working group process- ideas that may not require the approval of the client, but result in the work getting done faster and/or at less cost.

When considering these factors, the types of projects that lend themselves to the design-build delivery method include:

- Projects that are to be done, essentially in a “greenfield”, and where there is no need to interact or coordinate with ongoing operations;

- Projects where there is an urgency to deliver the project as soon as possible;
- Projects where there is no need for extensive owner reviews and/or approvals, thus facilitating a speedier process;
- Projects with multiple opportunities for use of innovation in methods, means and/or use of new technologies in delivery of the project or equipment installed;
- Projects where general performance requirements will suffice, allowing for less than 30% design detail being provided in bid documents;
- Projects with a great ability to transfer risk; and
- Projects where there is the ability and willingness on the part of the owner to utilize working groups to fully vet and understand all aspects of each proposal, especially “outside-the-box” ones.

Conversely, using similar criteria, projects that do not lend themselves to the design-build delivery method include:

- Projects where the work will be in a “brownfield” or on a facility where the work will require direct coordination with an ongoing function and/or day-to-day activities;
- Projects where detailed design requirements exist, and greater than 50% design detail need be provided in bid documents;
- Projects where there is limited/constrained ability to transfer risk;
- Projects where there is no specific time urgency with ultimate completion of project to be delivered;
- Projects where there are no or limited opportunities for innovation in means, methods and/or incorporation of new technologies in the delivery of the project or equipment installed; and
- Projects where detailed reviews and owner approvals are required of all final designs as well as methods and means to be utilized for construction.

### **Selection of Owner’s Design Consultant**

A New York-licensed and registered design firm should be retained to represent the owner throughout the entire project as the owner’s design consultant. The owner’s design consultant should be selected based on their qualifications and experience and should prepare a preliminary design and bridging contract documents that include performance criteria. ACEC New York recommends that the owner’s design consultant develop these bridging contract documents to a level that provides sufficient design concepts such that the owner can receive competitive, fixed-price proposals based on the bridging contract documents for the full project from the design-build teams.

The owner’s design consultant should be retained by the owner to carry out observation of the work and act as a representative of the owner. The design consultant will provide review for the owner, while the design-build team advances the design, including the construction documents phase, construction phase, and the project closeout phase, in order to check

compliance with the Request for Proposal (RFP) requirements and to ensure design intent is met. Additionally, the design consultant will assist the owner with technical evaluation and feedback on proposed design-build team concepts.

### **Selection of Design-Build Team – a Two-Step Process**

The design-build team should include a New York-licensed and registered design firm. Such firm must be independent from the owner's and should be selected based on qualifications and expertise.

The owner should select the design-build team on the basis of solicited proposals based on criteria developed by the owner. A two-phase Qualifications-Based Selection (QBS) process should be utilized. Owners who choose their design-builders based largely on qualifications reap substantial benefits that help achieve project success. Private owners have long understood these benefits of QBS as have as federal and state agencies, which select their design professionals through qualifications under the Brooks Act.

Phase I: A request for qualifications (RFQ) is issued by the owner, and design-build teams are shortlisted on the basis of qualifications and experience criteria listed in the RFQ. Given the enormous costs associated with putting together the full design proposals required in the second phase of the two-phase procedure, a short list of no more than five teams is recommended. After teams are shortlisted, changing the design firm should be forbidden.

Phase II: A request for proposal (RFP) is prepared, and the shortlisted teams submit a project scope, approach and cost proposal for the project, upon which a final selection is made considering the best value to the owner. ACEC New York strongly recommends that the basis for evaluating best value design-build proposals be both clearly articulated by the owner in the RFP and used in making the award. Weight of the technical solution should not be less than the weighting given to the price.

### **Threat to the Qualifications-Based Selection Process**

It is essential that the owner require that a bidders' proposal include a copy of the executed contract between the designer and the contractor. This is in the best interest of both the owner and the designer. Owners have become used to the designer being there to protect the integrity of the design of their project. In the design-build process, the designer is under contract to the contractor, not the owner, and it is in the contractor's interest to begin construction as quickly as possible. If the design-build contract between them contains conditions that are onerous to the designer, or are unsustainable, the contractor can use a rift between them to engage in "*bid shopping*" for the design. This practice would imperil the QBS process employed by the owner. As a result, the standard of care that would have existed with the designer selected by the owner as part of the original team will no longer exist, likely to the detriment of the design and therefore the project.

With the executed contract included in the design-build proposal, the client can specify requirements that favor retention of the designer, and in so doing, maintain the standard of care they expect.

### **Payments and Stipends**

As Phase II services performed by the designer may be relied upon by the contractor in preparation of his proposal, the designer should be compensated for these services by the lead entity. To offset the cost of preparing detailed proposals in Phase II, a financial stipend should be specified in the RFQ and paid by the owner to those shortlisted teams who submitted compliant proposals but were not selected for the project.

Project owners want to encourage innovation and creative solutions that will save money and time, while providing the best project possible. Stipends are a way to encourage this innovation and creativity, and the public owner also gets the benefit from all of the competing team's ideas, not just the successful team. A lump sum amount should be paid, within a reasonable time frame, to all qualified proposers without further documentation or audits being required. If a project is cancelled after proposals are submitted the same stipend should be paid to all proposers.

While stipends do not cover the full cost of the proposal, the overall small percentage of project dollars involved will ensure that future design-build projects will have enough proposing teams to make the system successful for all.

Once a design-build project is underway payment schedules need to be fair and equitable. Design work is front loaded, so paying a designer at project milestones puts undue financial burden on the design professionals. A lump sum should be allocated for design and paid based on percent of design completed on a monthly basis. Construction administration should be compensated on a T&M basis.

Design retention should be 100% released when design is 100% complete. Waiting until the end of a multi-year project again puts undue financial burden on the designer whose work is complete at the beginning of the project.

### **Selection Criteria**

The selection process and criteria for evaluation must be clearly stated and transparent. Technical responses should be analyzed and scored. The financial terms should be evaluated after the technical evaluation is complete. A clear rubric of technical scoring criteria should be included in the RFP. Weight of the technical solution should be equal to the weight given to the price.

### **Bridging Documents**

It is important that robust and accurate information pertaining to high risk issues like sub surface conditions, property ROW, 3rd party utilities and other existing conditions be provided

to the design-build teams as part of the bridging documents. This will prevent major design and construction delay claims and additional costs.

### **Differing Site Condition Relief for Inaccurate Information in RFP**

Owners should avoid shifting *all* liability on to the Design-Builder for information the Owner provides in its RFP. Too often owners include provisions in RFPs and/or contracts stating that the “RFP is for information only.” Owners should grant the Design-Builder (and through it the designer) relief where the Design-Builder could not have known the RFP’s information was unreliable/inaccurate.

Proper assignment of liability benefits both the owner and the Design-Build team. Extensive unknowns in a project, where the bidders assume a significant amount of the liability will necessarily result in significantly higher bids. Where there is no built-in appeal process for unforeseen conditions in the project, the result will be higher insurance and, therefore, higher bid prices. It is in the best interest of all parties that the unknowns be minimized and that a reasonable mechanism for appeal, when different site conditions do occur, be established.

ACEC New York suggests that the Owner include a provision in its design-build contract that includes a definition of “differing site condition” that provides:

“Differing Site Conditions” are defined as concealed or latent physical conditions at the Site that (i) materially differ from the conditions reasonably assumed to exist based on the information contained in the RFP, this Agreement and its Exhibits; or (ii) are of an unusual nature, differing materially from the conditions ordinarily encountered and generally recognized as inherent in the work.

In this way the Design-Builder must exert a reasonable review and analysis of the Owner’s information in the RFP, but the Design-Builder is afforded an opportunity for relief where it could have not known (should this be “could not have known”?) that information was inaccurate.

### **Insurance Requirements for Designers in a Design-Build Procurement**

#### **Background**

As agencies move toward a more frequent use of design-build procurement methods in place of the more traditional design-bid-build ones, the issue of insurance to cover errors and omissions in the design of the project needs to be thoroughly discussed. In some cases, owners require the Design-Builder to provide project specific professional liability insurance (PSPL), but in other cases owners chose to rely on a designer’s practice professional liability insurance (that is, the insurance the designer carries as an ongoing business matter). Still in other cases owners assume that Protective Professional Indemnity (PPI) insurance is sufficient to provide the necessary coverage for design errors and omissions.

This last approach, where the owner or the Design-Builder provides PPI, does not provide the parties with sufficient insurance protection because a PPI policy is only intended to sit in excess of other, available professional liability coverage. In this way, a PPI policy can be useful to an owner where it is concerned other professional liability insurance may not be sufficient to protect it in the event of a large claim. However, owners in some instances require a PPI only, and require the policy to insure the owner, the design-builder, and the designer. With this approach, a PPI policy will not cover claims made by one insured party against another party (i.e., a claim by the owner against the design-builder, or by the design-builder against the designer).

In the case of PSPL, owners should be aware that for design-build projects with low construction values (\$50 million range), it is difficult, if not impossible to obtain PSPL and premiums can be extremely expensive (particularly on relatively small projects). Where PSPL is available, note that such a policy benefits all parties because:

- 1) The owner knows it has dedicated limits of insurance for its projects only (a designer's practice insurance insures *all* work done by the designer in a policy year);
- 2) The Design-builder team of contractor and designer are able to propose on large/mega projects without having to pass on the costs of risks to the owner; and
- 3) Small design sub-consultants, which are oftentimes used to meet owner-specified M/W/DBE requirements, are able to participate on large projects even though they only have small amounts of insurance, which by themselves do not meet the owner's basic requirements.

Instead of requiring a "one-size-fits-all" approach for insurance, it would be preferable to have the owner and prospective bidders discuss professional liability insurance requirements as part of the upfront RFP process. This could even be in the form of an open and interactive discussion among all affected parties to ensure the desired objectives are achieved in the most cost-effective and efficient manner. That would serve to help vet which projects lend themselves well to the use of PSPL.

### **Design-Builder Payment Withholding**

A recent trend in design-build contracting has put designers at tremendous payment risk even though the owner has not withheld payment from the design-builder. Several design-builders include in their design subcontracts a right which gives the design-builder unchecked ability to unilaterally withhold designers' progress payments, and/or back charge the designer for amounts (solely determined by the design-builder) to protect the design-builder from claims that arise from the designer's negligence. The design community objects to this concept because:

- a) This action neglects the concepts of 'due process' and 'standard-of-care';
- b) Owners do not normally have a similar right to withhold from the design-builder;

- c) The design-builder is already protected from designer negligence by way of contractual indemnification; and
- d) The designer has provided professional liability insurance;

*Owners should write into their contracts with design-builders an express prohibition of this type of withholding.*

### **Miscellaneous**

If a Project Labor Agreement is going to be assigned, it should be announced no later than Letter of Intent as such agreements often change the financial nature of a project and cause teams to drop out after considerable work has been done (and costs accrued).

The Resident Engineer Inspection (REI) / Construction Inspection (CI) function on projects should report directly back to the owner and should not be contracted through the design-builder. The design-builder may not commit to a comprehensive inspection regiment in an effort to keep costs down.

### **Conclusion**

Design-build is a useful project delivery tool for New York City and State agencies and other authorities to have. While not appropriate for every project, design-build can offer innovative design and faster project delivery schedules on certain projects. Transparency and communication are vital to successful design-build collaboration and will guarantee long-term viability of the design-build process.

Since its authorization in 2011, design-build has allowed the state to deliver projects that would not have been awarded without this project delivery tool. The industry and state owners have worked together to address concerns that have arisen about the process of delivering a design-build project. This continued collaboration is key to completing a successful design-build project, and ACEC New York looks forward to working with our industry partners and state and city public policy makers to expand authorization of design-build in New York State and New York City in 2018 and further refine and enhance its effective use in the future.

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