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Design-Build vs. Progressive Design-Build: Addressing Key Differences and Common Misconceptions

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Many owners throughout the U.S. use alternative delivery methods on their construction projects to drive collaboration, cost efficiency, schedule certainty, and overall project success. In fact, according to the Design-Build Institute of America, design-build alone is expected to account for nearly half of all construction spending in the country by 2028.

Despite their prevalence, owners and their project teams may not understand alternative delivery methods as well as traditional design-bid-build delivery. This can lead to challenges in differentiating between the various flavors of alternative delivery or deciding which method is most appropriate for a given project, especially when considering similar methods such as design-build and progressive design-build.

SO, WHAT'S THE DIFFERENCE?

On design-build projects, owners award a single contract for design and construction services to a single entity. To procure a design-builder, owners generally provide a basic design concept that bidders respond to with technical proposals. In their proposals, bidders provide a design-level effort to advance the design and establish cost and schedule parameters. Owners select a bidder based on proposed designs and costs, and the project begins.

A variation on design-build, progressive design-build typically takes a multi-phased approach to procurement. Prior to the first phase, owners select their progressive design-



builder based on qualifications alone, sometimes requiring a conceptual technical approach that is significantly reduced compared to a design-build technical approach. For example, not all owners require cost estimates in progressive design-build technical proposals. However, even in the absence of full design development, some owners do require contractors to submit price proposals separately from qualifications for the first phase of progressive design-build projects, or include price range requirements in their requests for proposals, scoring lower price proposals better during evaluations. This can promote increased competition among bidders.

Following contract award, owners collaborate with their team during the first phase to advance the design, develop detailed cost estimates, and establish a project schedule. The second phase, which includes final design and construction, proceeds only if the owner accepts the progressive design-builder's second-phase proposal and both parties agree on the cost, scope, and terms developed during the first phase.

The progressive design-builder's limited design-level effort in technical proposals, along with built-in collaboration between the owner and their team during the first phase of progressive design-build projects constitute key differences between the alternative delivery methods. These key differences shape project implementation in subtle, often misunderstood ways. To clear up some of the confusion, I will focus on their implications for risk management and owner control over projects.

Risk Management

An owner may work with their design-builder to define and allocate risks, but only after they've awarded a design-build contract and established a fixed price. This can result in some incorrect assumptions, as well as unforeseen or unallocated risks that cause schedule and price issues later on.

Because of the baked-in owner involvement during design, progressive design-build projects are less likely to have blind spots related to risk. Before pricing for final design and construction is finalized, the team will generally address and allocate known and unknown risks together, helping ensure adequate risk sharing, management, and mitigation throughout a project's lifecycle.

A common assumption related to permitting on design-build projects helps illustrate the difference. Having assigned permitting responsibilities to their design-builder, an owner may assume the design-builder carries all risk associated with permitting activities. However, third-party utilities and other authorities having jurisdiction may require direct agreements with owners and may even change requirements and timelines after the design-builder is brought on board. Coordinating new permitting agreements with owner involvement after a submittal has been rejected can result in costly delays through no or limited fault of the design-builder.

Progressive design-build projects tend not to invite the same assumption. As owners work closely with their progressive design-build teams during design and scoping, the teams are more likely to formally address permitting risk, review the

requirements of relevant authorities having jurisdiction, and delegate responsibilities and risks accordingly.

I was involved with a progressive design-build project where, during the first phase, our project management team worked closely with the contractor and the owner to engage permitting agencies, clarify requirements, develop agreements, and coordinate timelines. This proactive approach helped prevent permitting delays and enabled us to strategically phase the project by breaking it into separate packages, which we aligned with evolving project conditions and schedule milestones. We also were able to refine the scope according to the available budget.

Control Over Projects

In traditional design-build, owner influence on design depends mostly on how they write procurement and contract documents. Without clear design criteria and rapid review processes, owners and their stakeholders may feel they have less flexibility to add or adjust scope items as design progresses. Or, at least, they may not be able to add or adjust scope items in a cost-effective and timely manner. If the owner adds scope after contract award or does not meet review timelines, the design-builder may be entitled to additional compensation or may file claims.

As owners are more involved during the design phase of progressive design-build projects, they have more flexibility to add scope, negotiate prices, and tailor schedules as the design evolves.

On a design-build rail and transit station project that I worked on, the owner provided general specifications and guidelines for architectural finishes and awarded the contract accordingly. The design-builder submitted detailed designs that met all specified criteria, but once they presented the final design and renderings, the owner expressed dissatisfaction with the look and feel of the station. Because the design met the contract requirements, the only contractual path for the owner to better achieve their vision was through betterments and changes. This required the owner to cover the additional cost of modifications.

Even with due diligence and owner efforts to incorporate as much information as possible into the contract documents, this situation is not unique. On many design-build transit projects, similar gaps emerge between what is contractually compliant and what the owner wants. Other examples include utilitarian canopy designs that meet structural requirements but lack architectural finishes expected by the owner, or standard concrete soundwalls that don't meet community expectations. In such cases, owners have to pursue costly modifications or make do.

GENERAL SELECTION GUIDELINES

Based on the two areas described above, it may seem as if progressive design-build is a curative for issues associated with design-build. However, progressive design-build is not a superior version of design-build. To be successful, it requires more owner involvement.

Design-build remains an excellent option for projects with many standardized scope elements. For example, state departments of transportation throughout the country have detailed specifications and standards for projects like roadway repaving or the addition of new lanes. On such projects, design-build can deliver more efficient cost and schedule results without straying from the owner's vision or increasing risk.

While progressive design-build may require more owner time and staffing early on, it can reduce risk-driven contingencies and change orders, potentially offsetting those early investments. Accordingly, this delivery method works best for projects with many unknowns and limited existing criteria and guidelines, projects for which owners and stakeholders need to see design details before making critical scope decisions. A project to deliver a new subway beneath a busy urban neighborhood, for instance, would benefit from progressive design-build's flexible, transparent design process and thorough owner involvement.

THE BOTTOM LINE

Both design-build and progressive design-build can offer potential advantages. They are associated with increased collaboration and can streamline design and construction, helping a project team achieve on-time, within-budget delivery in line with all owner expectations. By developing a nuanced understanding of the two delivery methods, owners will be more likely to select the right delivery frameworks and position their projects for success from the get-go.



About the Author

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