Top 5 Considerations for Design-Build Projects





FIRM STATS AT-A-GLANCE

11 PERSONNEL

6 LICENSED ARCHITECTS

3 LEED ACCREDITED PROS

+ CONSULTANT SERVICES

SUSTAINED RECORD OF EXCELLENCE

- AIA: Award of Special Citation, Institutional/Commercial; Fostering Emerging Profesionals Recognition; Architectural Design Award for Merit (Eastern chapter)

-Architects & Engineers: Presidential Award of Excellence, Innovative Energy Efficient Design

- Associated Builders & Contractors: Award of Excellence

- Central PA: Forevergreen Award, Suburban Renewal School of the Year

- Masonry Contractors of Central PA: Excellence in Masonry Design; Judges Award for Craftsmanship Architectural project delivery methods include Design-Bid-Build, Design-Build, Construction Management, and Partnering, but which method is right for your project?

Before embarking on a Design-Build project, here are five key issues, and the advantages and disadvantages, Owners should explore.

ACCOUNTABILITY

Design-Build projects have single-source accountability, meaning there is a single point of contact for the Owner, and a concentration of responsibility. The Owner deals with the Design-Builder entity (typically a contractor), instead of separately hiring, and managing, Architects and Contractors. Because of this, the Design-Builder assumes the risk, instead of the Owner.

In this type of contract, the Architect is no longer the Owner's independent consultant, and is now directly working for the Contractor. The loss of the Architect's input and judgment may expose the Owner to control problems. If the Owner is used to having the Design Professional act as an agent, they will have to employ another entity to take that responsibility.

In a traditional Design-Bid-Build contract, there are Checks and Balances inherent. Both sides keep each other in-check and honest. With Design-Build, pecially where the Design-Build team members are from one firm, there is no one that the design-build entity is held accountable to, besides the Owner. This gives the Owner a greater responsibility and management role in the contract.

BUDGET MANAGEMENT

Since all Design-Build team members are involved in the project from the outset, the budget can be discussed through the design phase, instead of waiting until bids come in. This helps to keep the project within a realistic budget, and avoid surprises and unexpected value engineering.

A cost-effective design is easy to obtain because the Architect has access to construction pricing and information throughout the design phase. Communicating cost implications of design decisions ensures that the Owner plays a key role in arriving at the final project price. Once the scope of work has been finalized, the project costs are clearly defined and controlled by the design-build team.

The cost control is shifted to the Design-Build entity, and frequently the project design will gravitate towards the most profitable technologies for the Builder. Naturally, if the Builder is leading the project, the design decisions will be directed toward the most beneficial solutions for the Builder, instead of focusing on the most beneficial solutions for the Owner.

Design-Build projects are not bid out to the lowest Contractor, and because of the lack of competition, can have higher construction costs. Bidding projects can often keep construction costs competitive.

COMMUNICATION

In a Design-Build project, relationships are built between the team members during the design phase, ensuring that the stage is set for a successful construction project. All team members are involved from the beginning, and communication between the Builders and Design Professionals ensures that potential problems are discovered before construction starts.

In a successful Design-Build project, the relationship between the Design Professional and the Builder is an alliance that fosters collaboration and teamwork. This relationship also benefits both the Builder and the Design Professional, in that they support each other's marketing and business efforts.

There is a risk for an unequal relationship between the Designer and the Builder, in which the project lead does not understand, trust or value the role and expertise of the subcontractor(s).

SCHEDULING

Design-Build projects can usually be completed in a shorter timeframe because bid time is reduced, and scheduling can begin before the design is finalized. Potential construction problems are usually uncovered early and enhanced team communication can keep the project moving.

Traditional Design-Bid-Build projects must be phased so that each responsibility is completed before the next can begin. Design-Build projects can potentially overlap these features; the subcontractor bidding period can be simultaneous with the production of construction documents, and construction can even begin before the drawings are complete. An experienced Design-Build team can save time with simpler construction documents and a streamlined change order process.

QUALITY CONTROL

Team collaboration from the beginning of the project helps to remove ambiguity that may arise in construction documents. Since the project team should be effectively communicating throughout the design process, the construction documents are developed with input from all team members.

In a Design-Build contract, the Contractor is the Owner's representative, and therefore the change order risk is shifted to the party best able to control changes. The Builder is also able to correct the changes more quickly, without first having to determine the responsible party.

Since the Owner does not have separate contracts with the Designer and the Builder, they also do not have a system of checks and balances, as mentioned before. It may be necessary for the Owner to hire an independent consultant to manage problems and hold all team members accountable.

ABOUT THE AUTHOR

Dennis W. Rex, AIA, NCARB, Principal, serves as the firm's chief administrative officer. He brings over thirty-five years of architectural experience in the planning, design and rehabilitation of residential, commercial, institutional and industrial buildings.

Project experience includes both foreign and domestic research laboratories, transportation facilities, educational buildings, maintenance facilities, manufacturing structures, office complexes, medical facilities, housing, and, most recently, places of worship. Dennis is involved in all phases of projects from programming through construction administration.

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