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Design-build allows an owner to wrap the design and construction services into one complete package

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Is your company running out of space? One look at your current building needs may lead you to consider a building addition, renovation or even a new modern facility. You need space and you need it fast.

Long gone are the days of a quick visit to the local building department for a permit. Today's building projects require months of designing, planning and approvals from various regulatory boards and commissions at the local level before construction can begin. State and federal approvals may also be required, depending on the size and complexity of the project. In most of the projects I am involved in, time schedules are as important as price. Time frames for today's projects continue to be reduced making it more difficult to employ a more traditional Design Bid Build method.

In order to address these requirements and produce a facility in a fast track manner, many owners are turning to firms that specialize in design-build project delivery. Design-build allows an owner to wrap the design and construction services into one complete package. Many design builders have engineers, designers and construction managers on staff or they work closely with an independent architect or engineering firm to formulate a design-build team. Normally these firms are selected on past experience in the type of facility required. Whether commercial, industrial, institutional or residential, there is a team out there that's "Been there and done that."

In its recent study on design-build, the American Society of Civil Engineers maintains that "Design-Build has been used successfully on complex power plant and chemical process facilities and on simple straightforward office buildings and family housing. In fact," claims the ASCE report, "There is no reason that design-build cannot be used on most types of construction projects, including traditional civil infrastructure projects."

Contracting with a design-build firm can involve several different contract methods. Depending on the amount of time and information available to solicit a design-builder, the owner may elect to contract on a lump sum for the complete project or cost plus a fee with a guaranteed maximum price option. If the project is well defined, a lump sum may be readily acquired. If the project is less defined, a design-builder may establish a guaranteed maximum price and monitor the budget during the design phase.

No matter what type of design-build firm or method of contract the owner selects, the benefits are numerous and significant. They include the following:

Single Point of Responsibility

With both design and construction in the hands of a single entity, there is a single point of responsibility for quality, cost and schedule adherence. The design-builder is motivated to deliver a successful project by fulfilling multiple parallel objectives, including aesthetic and functional quality,

budget, and schedule for timely completion. With design-build, the owner is able to focus on scope/needs definition and timely decision-making, rather than on coordination between designer and builder. Using design-build, team work is fostered, an essential formula for a success of any construction project.

Quality

The single responsibility inherent in design-build serves to motivate the contractor for quality and performance. The owner's requirements are documented in performance terms and the design-builder accepts responsibility to produce results accordingly.

Cost Savings

During the design phase, designers, estimators, and construction personnel continually evaluate the project design to ensure compatibility with the established budget. Alternative building materials and construction methods are considered. Value engineering is used continuously from schematic design documents to actual construction. Budget overruns are identified at an earlier stage which allows for adjustments and early financial decision making by the owner.

Time Savings

When the design and construction are overlapped and the bidding period and redesign are, the total design and construction time can be significantly reduced. Design-build is ideal for fast track applications. The design-build contractor's ability to control the design process and flow of information will allow construction to commence with early trades while the design is being completed. Due to the single responsibility and fostered team work, the design-builder can handle field issues that arise and coordinate with the design team quickly and efficiently.

With careful selection of a qualified design-builder, an owner can take advantage of an innovative process for designing and constructing facilities of high quality at a competitive cost, while establishing the valuable relationship required maintaining a physical plant for years to come.

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