

DESIGN | BUILD / INTEGRATED PROJECT DELIVERY



KEOUGH
CONSTRUCTION MANAGEMENT
Managing Success One Project At a Time

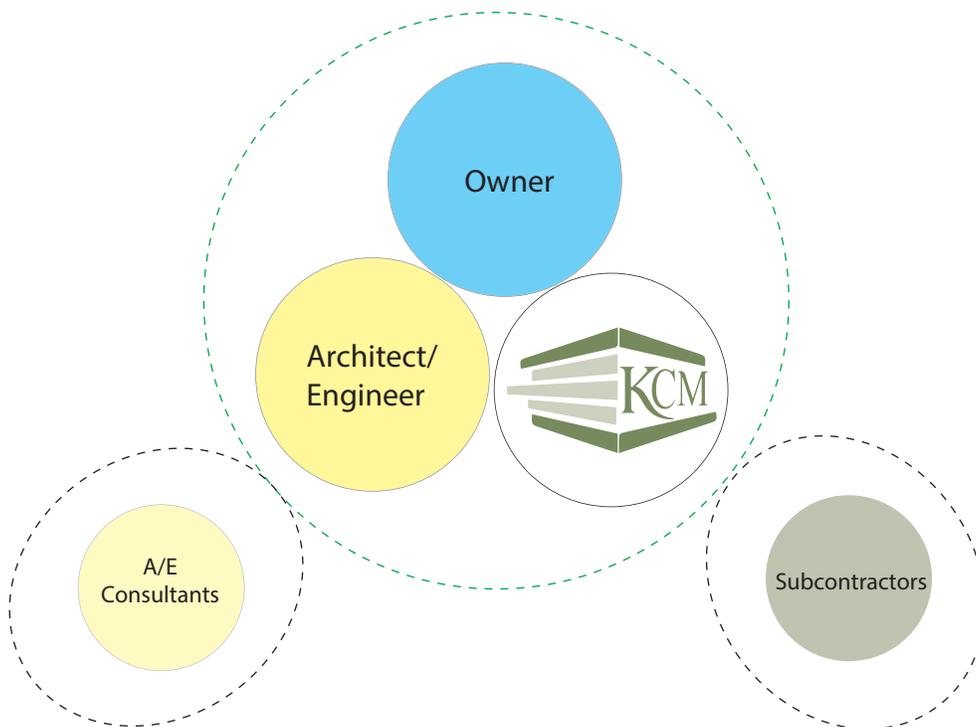


PROponents OF DESIGN-BUILD SERVICES

We are big proponents of Design-Build services, and to a greater extent, Integrated Project Delivery, because it places designers and builders in the same room, with the same goals thus providing the opportunity for the kind of collaboration that the construction industry so badly needs. *In a traditional Design-Bid-Build delivery method, nearly 80% of cost decisions are made during the first 20% of the design phase of a capital project—this is a staggering fact. By not collaborating, you, as an owner, just passed on the biggest source of potential project cost savings—and this is too big of an opportunity to pass on!*

Opportunity for collaboration is not the same as a guarantee of collaboration.

Collaborative opportunity does not by itself, guarantee a better project-- rather it provides the sandbox where the stakeholders on a project gather together to share the risk and reward of construction. Ownership of design and ownership of cost is based on the entire team buy-in-- to the goals of the project. You don't want the designer preparing design documents without the input of the building team—there is no cost validation or constructability assessment; nor would you an aggressive contractor achieving aggressive cost savings at the expense of quality design, and treating the architect and engineer like vendors instead of partners. Poor collaboration is as bad for a project team, as no collaboration.



Streamlining project delivery through a single contract between the owner and the design-build team transforms the relationship between designers and builders into an alliance, which fosters collaboration and teamwork. United from the outset of every project, an integrated team readily works to successfully complete a project faster, more cost effectively and with fewer change orders.

ADVANTAGES OF DESIGN/BUILD

FASTER DELIVERY

Collaborative project management means work is completed faster with fewer problems. Design-build projects can be completed in a shorter time because bid time is reduced, scheduling for the project can begin before the design is finalized, potential construction problems are uncovered early, and enhanced communication keeps everything moving.

Construction activities can begin well in advance of design completion. For example, the designer can size major, long-lead-time equipment, allowing orders to be placed before the final detailed design is complete. Or a site civil construction package can be purchased and started before the final details of the interior design have been defined. Similarly, the foundation work might also be issued in its own early package.

COST SAVINGS

An integrated team is geared toward efficiency and innovation. Communicating the cost implications of design decisions helps the airport play 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 firm.

BETTER QUALITY

Design-builders meet performance needs, not minimum design requirements, often developing innovations to deliver a better project than initially envisioned. The design-build method helps to remove ambiguity that may arise in material and construction specifications--the focus remains on protecting the clients' interest.

DESIGN BUILD APPROACH



COMPETITIVE BID



SINGULAR RESPONSIBILITY

One entity is held accountable for cost, schedule and performance. With the undivided accountability, responsibility for defects or non-performance cannot shift to another party. The design-build approach provides a single source of accountability for your entire project.

ENHANCED COMMUNICATION

Specific design and construction details are being developed throughout the process, and the focus remains on owner value. Simultaneously working with construction and design professionals opens up communication, maximizing the potential for problems to be discovered before the project starts.

DECREASED ADMINISTRATIVE BURDEN

Value to owners is increased because they are able to focus on their business while all the design and construction needs are handled through one source. Instead of back-and-forth communication between the architect/owner and owner/contractor, it is now streamlined to a single point of contact.

REDUCED RISK

Design-build companies eliminate the additional costs that come with errors in planning or construction because only one company owns responsibility. In a design-bid-build situation, blame can be continually shifted resulting in costly delays, change orders and restarting work.

This simple but fundamental difference can save money and time by transforming the relationship between designers and builders into an alliance which fosters collaboration and teamwork.

BETTER EXECUTION: DESIGN/BUILD —

EXECUTION BASED UPON TRUST, TRANSPARENCY & INTEGRATION

In today's fast-paced environment, it is often necessary to deliver your project as soon as possible to support your mission. An integrated design-build approach can give you the flexibility to accomplish more of your goals.

Project execution focus on unique features of the design-build process, where successful execution is based upon relationships built upon trust, transparency and team integration. Individuals not only need to be competent in their specific areas of responsibility, but they also must understand the design-build process and that success is Projects.

EXECUTING THE DELIVERY OF DESIGN-BUILD

- 1** All design-build team members are educated and trained in the design-build process, and knowledgeable of the differences between design-build and other delivery systems.
- 2** Our project team establishes logistics and infrastructure to support integrated project delivery.
- 3** At the outset of the project, our team establishes processes to facilitate timely and effective communication, collaboration, and issue resolution.
- 4** Our project team focuses on the design management and commissioning/turnover processes and ensure that there is alignment among the team as to how to execute these processes.

- 5 The owner and the KEOUGH Design-Build acknowledge the significant level of effort required to manage the development and review of the design and, consequently: (a) dedicate sufficient resources to foster a collaborative environment for this work; and mutually develop a realistic design development plan that efficiently engages the owner and key members of the design-builder's team (e.g., designer(s)-of-record and key subcontractors) in purposeful meetings.
- 6 The owner and the KEOUGH Design-Build team should agree upon clear, realistic and expeditious submittal and review/approval processes that are in harmony with the parties' schedule and other project-specific goals.
- 7 The KEOUGH Design-Build team ensures that design advancement and changes to the contract documents are clearly, thoroughly, and contemporaneously documented, and that there is a clear understanding as to when the owner is integrated into the decision-making process for and notified of such advancement and changes.
- 8 The KEOUGH Design-Build team (a) establish a trend system early in the design development process to identify, track and evaluate any potential changes before they adversely impact the project's cost or schedule; (b) clearly, thoroughly, and contemporaneously communicate to the owner the information derived from the trend system; and (c) maintain the trend system throughout the construction process until it is no longer needed.

We are often asked about the advantages of design-build over the traditional method of hiring an architect and then a general contractor. It's a valid question and Keough has many compelling reasons why an owner should consider Design-Build or Integrated Project Delivery as a means to build a facility

COMPELLING CONSIDERATIONS —

Clients are involved from the very beginning. When clients want to give input into the design they are able to with relative ease. There is no wall between the designer and the client. Communication of one's needs in a building is of utmost importance because it reduces the risk of lost information.

Design-build firms are there to take the guesswork out of the construction process. We are a group of professionals that will guide you through the whole process start to finish; providing the best possible outcome.

There is accountability throughout the whole process. Since everyone is working on the same team, there is no excuse for the challenges encountered on a project. Everyone has to work together on cost-effective solutions. The continuity from the design process to the construction process is seamless, being experts in both fields and under the same roof greatly reduces the chances of things to go wrong.

Time is money; extra time spent in design or in construction can cause the client to carry a lot of unnecessary cost. Since both steps are streamlined under one team, projects are completed under faster timelines with a smaller budget.

When you take into account all of the above advantages it all comes down to cost savings and design quality. Design fees, construction mark-ups, and general condition fees, are all less than a typical architect and general contractor setup. Utilizing the the design-build delivery method will deliver you a better project and by engaging KEOUGH you will understand why clients place full trust in our team to deliver quality results !

TRADITIONAL COMPETITIVE BID METHOD		DESIGN-BUILD INTEGRATED PROJECT DELIVERY
Fragmented, Separate Roles Top-down, hierachical control	PROJECT PARTICIPANTS	Project Team Collaboration Open Constituencies
Linear management Limited information exchange	PROCESS	Concurrent project life-cycle shared information iterative process
Individually Managed	RISK	Collectively Shared & Managed
Cost-based, individually focused	COMPENSATION	Performance & Value Based
Print based, 2-D, spreadsheet report based systems	TECHNOLOGY	Team-Based Knowledge Systems Centralized data systems/reporting BIM / Cloud Based systems