



Design-Build — Legal Obstacles and Solutions

This article originally appeared in the *Journal of Management and Engineering*.

Written By:

Mark C. Friedlander

t 312.258.5546

mfriedlander@schiffhardin.com

SCHIFF HARDIN LLP

6600 Sears Tower

Chicago, Illinois 60606

t 312.258.5500

f 312.258.5600

www.schiffhardin.com

Design-Build as a project delivery method is not new. It was the dominant method in ancient times when the distinction between design and construction had not yet been developed. Much more recently, early in our century, it was common for architects and engineers to be “Master Builders,” constructing or arranging for the construction of the structures that had they designed.

As the twentieth century progressed, with lawyers in courtrooms playing an increasing important role in the construction process, distinctions developed and protective practices promulgated that created a chasm between design and construction. Lawyers and insurers warned design professionals to steer clear from the means, methods and sequences of construction and to avoid any involvement in issues of jobsite safety. The increasing prevalence of “claims contracting” and controversies concerning competitive bidding led to the need for contractors, but not design professionals, to develop a bonding capacity and to maintain strong financial capitalization.

The method of project delivery known as “design-bid-build” has become the dominant method of project delivery in the United States. Its features have been endorsed and standardized by professional trade organizations, most notably the American Institute of Architects, the Engineers Joint Contract Documents Committee and the Association of General Contractors, who have published standard form contracts and related documents widely used in the construction industry. Financial products, such as insurance and bonds; laws and regulations, such as licensing rules and competitive bidding laws; and other assumptions regarding business structures and financial arrangements have developed around the design-bid-build model.

The resurgence in popularity of design-build as a project delivery method threatens to upset many of the settled expectations that have developed around the design-bid-build model. Particularly in the private sector, the growth of design-build project delivery has been nothing short of astounding. Owners, recognizing its inherently greater efficiency, ability to shorten project delivery times and single-point responsibility, will likely ensure that its usage will continue to increase.

In the meantime, however, both owners and design-builders have run into numerous obstacles resulting from the assumptions, both in the laws and in the private marketplace, that have grown up around design-bid-build construction. The laws, financial instruments and business assumptions that serve valuable purposes in the design-bid-build marketplace often fit less well into the design-

build marketplace. They may form barriers or obstacles to use of design-build delivery methods, or at the very least, they were not designed to best serve the needs of members of the construction industry who desire to use design-build methods. The purposes of this article is to identify the legal and business issues that are unique to design-build project delivery methods, as opposed to traditional design-bid-build methods, to identify the obstacles that these differences pose and to suggest solutions to the obstacles. Throughout the remainder of this article, I use the term “legal issues” to describe issues that also have significant financial, business and strategic content.

The legal issues arising uniquely out of the design-build method of project delivery are not overly complex. Although all complex construction projects involve important legal issues, there are not a great number of additional legal issues that arise in design-build projects as opposed to the traditional design-bid-build mode.

After having been involved in a large number of design-build projects in both the public and private sectors, it seems to me that the legal issues that are unique to design-build projects can be broken down into the following categories:

- The relationships and loyalties among the parties.
- The design professional's standard of care.
- Performance warranties.
- Entitlement to Change orders.
- Licensing problems.
- Insurance/Bonding problems.
- Conflicts with competitive bidding laws.

In the limited space below, this article will describe the consequences of the legal issues listed above, the obstacles that they may pose for design-build project delivery methods and possible solutions to those obstacles. The conclusions and opinions expressed are solely those of the author and are not necessarily endorsed by others.

The Relationships Among The Parties

The most obvious change distinguishing design-build from traditional design-bid-build projects is that the design professional is not the owner's consultant, and is instead the contractor's teammate. Design professionals have

contractual incentives to perform their services so as to further the design-build team's goals, which ordinarily are not fully congruent with those of the owner. The design professional has a disincentive to call the owner's attention to problems with the construction work, and the design is likely to value such factors as cost and constructability over other criteria that the owner may prefer.

Thus, the owner can no longer rely on the design professional to be a "policeman," on guard to protect him from defects or deviations in the contractor's work. To a limited extent, the architect or engineer retains this function; the A/E has a duty to the project to ensure that it is not perverted from its original intent. However, the design professional has financial counter-incentives to making the owner aware of problems with the construction and will not be concerned with protecting the owner to the same degree as would an architect or engineer in a traditional design-bid-build context.

This realignment of interests is a disincentive to owners' use of design-build. Owners who nevertheless desire to use design-build delivery methods for their projects and who desire that someone play a "policeman" role cope in one of two ways: they either closely monitor the project themselves or through their own employees, or else they retain a consultant to act as their representative.

The existence of a "team" comprised of contractor and designer raises unique legal issues regarding the relationship between them. Will one be prime to the owner with the other as a subcontractor? If the design-builder is not already a single entity, do the contractor and designer form a single entity to contract with the owner, and if so, should the entity be a joint venture, corporation, or limited liability company? Within the design-build entity how will decisions be made, and how will disagreements be resolved? These issues all involve important legal and business planning decisions.

Of particular importance is the issue of who controls the design-build team. In the vast majority of design-build projects, the contractor is the lead member of the team, either hiring the A/E as a subcontractor or dominating the entity formed jointly with the design professional. This arrangement has usually been justified by the fact that 90% of the project revenues flow through the contractor, who is the only party with the financial capitalization necessary to secure performance of the construction obligations. Furthermore, as a practical matter, contractors have demonstrated greater flexibility and entrepreneurial interests than design professionals and so have taken the lead in exploring and assuming the risks in this non-standard project delivery method.

However, the results of contractor-led design-build projects have often been criticized for mediocre design. One school of thought believes that by having the contractor lead the design-build team, the design often overvalues considerations of cost and constructability at the expense of programming, aesthetics and other traditionally important design criteria. Of course, such subjective complaints are difficult or impossible to quantify, except perhaps on the basis of satisfaction with the results, but the perception itself is an obstacle to increased use of design-build project delivery methods.

There is a small but increasing trend toward designer-led design-build, in which the architect or engineer is the lead member of the team, either subcontracting the construction to one or more contractors or else dominating the entity formed jointly with the contractor(s). Designer-led design-build has the advantage of allowing the design professional, rather than the contractor, to balance issues of costs and constructability with those of programming, aesthetics and others. Although design professionals are professional organizations, rarely with the financial capital necessary to secure the construction obligations, there are legal mechanisms by which the contractor(s) actually performing the construction can supply the financial capacity necessary to secure the construction obligations, such as by legal and financial instruments giving owners direct claims against the construction contractor(s) and its financial assets.

The Design Professional's Standard of Care

The design-build relationship allows, but does not require, a change in the designer's standard of care. Ordinarily, an engineer (or an architect) is only held responsible for exercising the degree of skill or care that the average, similarly situated design professional would employ, and does not ordinarily warrant or guarantee a successful outcome for his services. The ordinary rule for a contractor is different: contractors do impliedly warrant that the result of their services will be a successful project, provided that the design and other factors over which they have no control are proper and appropriate.

Most courts to consider the issue have held that a design-build contractor is more nearly akin to a contractor than to a design professional. Accordingly, design-builders are usually held to the same warranty standards as contractors. This is true even of the design services that they offer. (This is one of the primary reasons why owners like design-build construction: the whole truly is greater than the sum of its parts because the designer is held to a

stricter standard in a design-build context than when there is a separate contract for design services.)

It is important to note, however, that the standard of care applicable to design in design-build projects can be changed by contractual agreement. The design-builder's liability for design problems can be returned to the usual "average levels of skill and care" standard by including a contractual provision in the design-build agreement that so provides.

This legal change in the standard of care poses two potential obstacles. It opens a small window of liability for the design-builder, who may in theory be liable for a design that fails to achieve its intended purpose despite the design professional not having deviated from the legal standard of care. Alternatively, if the design professional consents to assuming that window of liability for the design-builder, its services then cease to be judged by the traditional standard of care and are instead judged by their actual effectiveness.

In practice, however, these obstacles are more theoretical than real. It is exceedingly rare for the standard of care to permit a design that does not achieve its intended results — particularly as such matters are determined in dispute resolutions processes like arbitration or court litigation. Although some architects and engineers have attempted to defend their failed designs on the grounds that the techniques necessary to make the design function properly were not yet known (*i.e.* the "state of the art" defense), such defenses are rarely successful in the eyes of the typical judge or jury. In the overwhelming majority of projects, which deal with well understood technology and circumstances, it is difficult to maintain any distinction between a design which is negligent and one which simply fails to function properly after other possible causes of the failure (such as improper construction, improper operation, etc.) are ruled out.

Performance Warranties

In a traditional construction contract, the contractor is asked to warrant the results of its work, but not the overall success of the project. This is because there are many other factors (primarily design) over which the contractor has no control that determine the success of the project.

In most design-build projects, the situation is reversed. The design-build contractor is responsible for so much of the project that it becomes feasible to require the contractor to warrant the project's performance. Of course, there usually remain some aspects of the project for which the owner is responsible, such as operation and maintenance, supply of

feedstock, process design, etc. Any performance warranty must be drafted carefully to properly allocate the risks.

Because of the single-point responsibility inherent in design-build, it has become increasingly common for design-builders to "bundle" other services, such as operation, finance or leasing, along with design and construction. The design-builder may provide the services itself, or one or more other companies can be added to the design-build team for these purposes.

Some performance warranties actually guarantee the operation of the completed project for a period of time. More commonly, the contractor agrees to test the project following substantial or mechanical completion to verify that the appropriate performance criteria are met. The ability to quantify performance failure by comparing actual performance to specified performance criteria allows unusual precision in the drafting of liquidated damages provisions and often leads contractors to request certain limitations of liability (such as to a small percentage of the construction price, immunity from consequential damages such as lost profits, etc.).

The availability of such performance warranties is an enhancement, not an obstacle, to owners considering design-build project delivery methods. It often greatly simplifies project finance, particularly for projects that are financed by industrial revenue bonds or through other private markets. Bond underwriters, for example, need to be able to rely on a secure revenue stream which design-build performance warranties can provide far more easily than in traditional design-bid-build projects.

However, the design-builders' liability under the performance warranty may be difficult to distribute between the contractor and the designer. Some of the liability borne by the contractor may be considered professional, and the nature of the professional liability borne by the design professional may not be fully insurable. These problems of risk allocation are considered in the Insurance/Bonding section below.

Entitlement to Change Orders

In ordinary construction contracts, the contractor is usually entitled to a change order if any of three situations occur:

- Impacts caused by owner (*i.e.* scope changes, interference or disruption by owner or other parties for whom owner is responsible)
- Changed conditions (*i.e.* unknown subsurface obstacles, *force majeure*)

- Design problems (*i.e.* errors, omissions, ambiguities, etc. in the plans and specifications)

In design-build projects, the first two categories may still result in change orders, but the third category ordinarily does not. Since the design-builder is responsible for the plans and specifications, it can not make use of errors and ambiguities in them to claim entitlement to an extra. However, if the owner's criteria from which the design-builder prepares the design have ambiguities or omissions, the need to change the design to accommodate new or clarified owner's criteria may result in change orders.

The elevated role of owner's programming criteria leads to a somewhat more adversarial relationship between the owner and the design-builder during the early design phase. In a traditional design-bid-build project, the architect ordinarily takes the responsibility for documenting programming criteria and decisions, and the owner relies on the design professional's documentation because he perceives their interests to be aligned. However, the owner's and design professional's interests may differ if a problem develops in implementing the owner's program, such as not being able to fit it all within the budget or a disagreement between the owner and design professional regarding the substance of the programming communications. In design-build projects, the possibility of an adversarial relationship on programming issues is amplified because owners recognize the design professional's incentive to profit from the construction and are more likely to query how much value (*i.e.* how much of their program) they are receiving for the project price. The owner may therefore want to maintain control of the documentation during the programming phase and possibly consult with a different design professional regarding the design-builder's opinions and recommendations.

Similar disputes arising out of unclear communications regarding programming may develop between the designer and the contractor on a design-build team. In particular, the construction documents might not develop the design intent with the same degree of specificity that may appear on documents intended for competitive bidding; one of the efficiencies of design-build is that much of the communication between designer and constructor is oral, rather than consisting of laborious details on drawings or requirements in specifications. The contractor and design professional must agree on how to divide responsibility for circumstances arising from misunderstandings about the intent of the construction documents. For example, many design-build teams in which the contractor provides extensive preconstruction services agree that it is part of the contractor's responsibility to detect minor omissions, such as a door omitted from the door schedule or failure to

show plumbing lines leading to a water fountain because these items would ordinarily be detected by the contractor during pricing. On the other hand, design omissions that are not readily apparent, such as the need for an extra column for structural support, would be charged to the account of the design professional. Many agreements are more sophisticated, such as the contractor providing an allowance for extra items required because of omissions or ambiguities in the plans, with the A/E being responsible above that threshold.

Licensing Problems

Every state in the country regulates and restricts the practice of professional engineering and architecture, establishing educational, testing and organizational requirements. Most design-build contractors do not meet one or more of these requirements and therefore are not themselves licensed as design professionals. Design-build contractors usually provide engineering and architectural services by joining with a design professional or subcontracting these services to such a firm.

Somewhat surprisingly, many states forbid these practices. Many states will not allow a contractor to hold itself out as performing professional services as part of a design-build project unless the contractor itself is a registered design professional. There is a slow trend toward liberalizing these rules so as to allow a design-build contractor to hold itself out as offering architectural or engineering services provided that the professional services are performed by duly registered firms or individuals. Every state's law is different.

An interesting conflict may arise for design-build projects that are procured or funded by the federal government. Federal laws ordinarily preempt inconsistent state laws, but there is no federal law licensing or regulating the practice of architecture and engineering so as explicitly to supersede restrictive state laws.

There are usually several solutions to the licensing obstacles. When the design professional leads the design-build team, these problems disappear unless the jurisdiction requires contractors to be licensed. Another solution is for the design professional and contractor to form a new entity, which meets all the licensing requirements for design professionals and contractors, to act as the design-builder. Alternatively, it may be possible for a construction company to structure itself or a captive company that it creates so that it or the captive company can be licensed as a design professional.

Insurance/Bonding Problems

Issues relating to insurance and bonding affect the relationship between the design-build parties. Design professionals' errors and omissions insurance ordinarily excludes construction services, and contractors' general liability policies exclude professional services. These policies may have disparate impacts on the parties, since general liability policies ordinarily have little or no deductible, whereas professional liability policies have large deductibles. Certain states have anti-indemnity laws for construction projects that limit the parties' contractual ability to redress this disparate impact.

Surety bonds can lead to similar problems. For example, performance bonds may not cover an affiliated engineer's design services. Although it is certainly possible to arrange adequate and appropriate insurance and bonding, the unique legal issues require additional analysis. This is because insurance policies and surety bonds, as well as owner's requirements, may vary from project to project.

A primary concern of contractors on design-build teams is protection from claims of professional errors and omissions pertaining to the design. One solution is appropriate cross-agreements with the design professional(s), supported by the design professional(s)' errors and omissions insurance. Recently, a number of companies have begun to write professional errors and omissions insurance policies specifically for contractors.

Another potential obstacle is the approach of surety companies toward the design risks in a design-build project. Traditionally, performance bonds underwrote the contractor's construction obligations but not professional liability claims pertaining to the design. Owners expect to see, and some laws require, performance bonds in the full amount of the project, which for design-build includes the cost of the design. Sureties are increasingly willing to underwrite the design risks provided that they can arrange to be subrogated to the contractor's rights against a satisfactorily insured design professional.

Conflict With Competitive Bidding Laws

Projects funded with public money usually require a competitive process to choose a contractor, even in design-build projects. For federal projects, the process is well-established: the administering agency seeks competitive proposals from design-build contractors or teams and chooses the proposal with the best overall value for the government.

The federal government solicits competitive proposals for numerous other types of procurement action, including design professional's services, so there are few unique legal issues arising out of competitive proposals for design-build projects. The primary difference arises out of the fact that the competitive proposals are for the entire project at once, rather than in stages like a traditional design-bid-build job. This may create some new issues involving responsiveness of the proposals. For example, if a budget is identified, may the administering agency determine that a proposal that exceeds the budget is nevertheless the most valuable?

More difficult restrictions exist at the state and local levels. Some statutes and regulations absolutely require competitive bidding on the basis of price, a problem for design-build projects. As design-build increases in popularity, interesting issues of municipal law will likely arise, such as whether contractors can compete on the basis of number and quality of widgets for a fixed price, as opposed to the price of a fixed number of widgets described in technical specifications. In projects administered by state or local agencies but with federal funds, legal issues will likely arise as to whether federal procurement requirements will preempt inconsistent state or local requirements that could be read to restrict design-build.

The federal government and several states have recently adopted new procurement laws specifically authorizing design-build delivery methods. Many procurement officials are attracted to design-build for the same reasons that their private sector counterparts are. In addition, design-build is uniquely well suited to the governmental budgeting process: it permits proposals to be sought for the particular sum budgeted, rather than contracting for design services and hoping that the construction bids are within budget.

The solution to restrictive competitive bidding laws is partly political and partly legal. There has been significant and successful political pressure applied at all levels in favor of changing the applicable laws and regulations to permit use of design-build methods of project delivery. The Design Build Institute of America has been a leader in these efforts.

However, many jurisdiction's competitive bidding laws are ambiguously worded, requiring awards to be made to the lowest competitive bidder without defining what that means and without expressly forbidding design-build. In those jurisdictions, attorney general opinion letters or court decisions may provide the authority for design-build projects. Furthermore, in many of these jurisdictions, public authorities have contracted for and completed design-build

projects without anyone challenging the legality of the process.

Conclusion

There are nearly as many variations of design-build structures and procedures as there are project delivery methods in general. One variant of design-build, called “bridging,” calls for one design professional to perform the early design services, developing the drawings to approximately the 25-35% level, after which the design and construction are completed by a design-builder that does not include the original design professional. The design professional, sometimes called the “design criteria professional,” then acts as the owner’s representative in dealings with the designer-builder. This structure has been severely criticized for reducing or eliminating both the creativity and efficiencies of design-build.

Another variation of design-build that deserves separate comment occurs when the design-build contract is written on a time and materials basis, often called “cost-plus” contracting. This approach is often used in renovation and refurbishing projects, where the scope of the design and construction services may not be known until well after the project has begun. When the design-builder is working under a cost-plus contract, different considerations arise. The design professional’s loyalty to the contractor becomes less pronounced because of the contractor’s lesser degree of risk. The relevance and importance of change orders is drastically diminished. The owner ordinarily assumes a larger role in the project, and some jurisdictions provide that the owner, rather than the contractor, is responsible for subcontractor defaults. A guaranteed maximum price provision affects these issues because to the extent that the project costs approach the guaranteed maximum price, the contractual consequences and the parties’ interests more nearly resemble those of a traditional lump sum contract.

Although design-build project delivery methods are carving out an ever-increasing niche in the construction industry, it would be a mistake to perceive design-build as a single, static project delivery structure. Design-build is continuing to evolve, as are the laws and regulations, financial instruments and business assumptions that regulate it. American history shows that the marketplace drives everything. To the extent that design-build continues to offer owners advantages that no other project delivery method can and owners continue to so perceive it, all of the obstacles that currently hinder design-build contractor will surely change or disappear.

About the Author

Mark C. Friedlander is a partner in the Construction Law Group at the law firm of Schiff Hardin LLP. He obtained his B.A. from the University of Michigan in 1978 and his J.D. from Harvard Law School in 1981. He is currently an adjunct professor at the University of Illinois at Chicago School of Architecture and a lecturer at Northwestern University's Engineering School, and had lectured at the Illinois Institute of Technology School of Civil Engineering from 1987-89, at the Engineering School of the University of Wisconsin in 1988 and 1990, and the Architecture School of the Georgia Institute of Technology in 1997-98. Mr. Friedlander concentrates his practice in construction law and litigation with particular emphasis on design-build methods of project delivery.

About Schiff Hardin LLP

Schiff Hardin LLP was founded in 1864, and we are Chicago's oldest large law firm. In the past 140 years we have grown to more than 325 attorneys, with additional offices in New York, New York; Washington, D.C.; Lake Forest, Illinois; Atlanta, Georgia; and Dublin, Ireland.

As a general practice firm with local, regional, national, and international clients, Schiff Hardin has significant experience in most areas of the law. For more information visit our Web site at www.schiffhardin.com.

This article has been prepared for general information. It is not meant to provide legal advice with respect to any specific matter. The reader should consult a lawyer regarding specific legal advice.

Available on the Schiff Hardin Web site at <http://www.schiffhardin.com/media/news/media.227.pdf>.