

Managing the Engineer's Risk in Design-Build Contracts

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As design-build continues to gain increasing use as a project delivery method, structural engineers should be aware of the added risk lurking in the design-build contract. Disproportionate risk allocation and an elevated standard of care are two primary culprits in expanding the engineer's risk exposure. Much of this risk can be managed with fair and carefully worded contracts that cover the design-build project and any design services performed prior to contract award. Close attention to the provisions of the design-builder's contract with the owner that flow down to the engineer's contract is also essential in confining the engineer's risk to a reasonable level.

Pre-Award Risks

Additional risks may arise even before a design-build project is awarded. Design-builders must often base their proposals on preliminary information. That information, in the form of a conceptual design or estimated quantities, may be provided by engineering consultants who are part of the design-build team. Since this information is rarely complete and may be at no more than a 30% design development stage, there is a significant risk to the design-builder preparing its bid. Should the scope of the fully developed project significantly exceed the design-builder's estimate, the design-builder may seek remedy from the engineer. For this reason, any preliminary design services that are the basis of a builder's bid should be performed under an agreement containing a Limitation of Liability (LoL) clause.

There is also the issue of compensation for these preliminary design services. It is fair and reasonable for a professional engineering firm to receive compensation for its efforts. The design-builder's argument that "we are a team; we should both be at risk" is a poor one. An engineering firm may need to perform a significant portion of design work to develop a preliminary scope from which the design-builder can prepare an estimate. Consider that a contractor is never asked to construct part of the work before they are awarded a project. Why should an engineer be expected to perform a portion of their services without a promise of remuneration?

These issues can be addressed in a Teaming Agreement. A Teaming Agreement is a contract between entities for the purposes of jointly pursuing a project. The Engineers Joint Contract Documents Committee publishes EJCDC D-580, specifically intended for design-build projects. It contains

clauses for Standard of Care, Limitation of Liability, and Payment which specifically address pre-award engineering services. The American Institute of Architects provides AIA C102-2015, which may be used on design-bid-build projects, design-build projects, and public/private partnerships. This agreement must be appended by terms and conditions covering the pre-award design activities.

Elevated Standard of Care

Professional liability insurance, also known as errors and omissions insurance, protects against claims of negligence by the contracted party. For the practicing engineer, negligence is defined as the failure to exercise the care and skill customarily exercised by similarly experienced engineers performing their engineering services under similar conditions. In the absence of any contract language, this is the definition courts apply when considering professional negligence. Professional liability insurance coverage may be limited or denied if contract language heightens this standard of care.

There are several ways the Standard of Care can be elevated in design-build contracts. Many of these stem from the owner's expectations of the builder. Most constructors warrant their labor and materials, as well as that of their subcontractors, to be done in a workmanlike manner or be free of defects. The contractor, familiar with this degree of client expectation, may include language in the design consultant agreement to provide a similar level of expectation. Contract phrases and other language beyond the usual standard of care could be considered a warranty. Avoid the inclusion of words such as "careful," "diligent," or "highest" that tend to elevate the Standard of Care clause.

Disproportionate Risk Allocation

Rightly or not, one appealing aspect of the design-build delivery method for the owner is the ability to transfer project risk. This is accomplished via the contract between the owner and design-builder. Some or all of the provisions negotiated by these two parties may flow down to the engineer through reference in the designer's contract with the design-builder. Some flow-down provisions, such as those defining scope of work, dispute resolution, and insurance requirements, may be appropriate. Others, however, may impose risk vastly out of proportion with the compensation the engineer

expects to receive. And others may prove uninsurable under the engineer's professional liability insurance, such as the warranty provision described in the preceding paragraph.

Other provisions can also impose unreasonable risk on the engineer. The indemnification clause typically contained in the engineer's traditional contract may be expanded to include the indemnification of both the design-builder and the owner. A liquidated damages clause may be included in the contract that is triggered when schedule delays are attributed to the engineer's performance. There may be a requirement for the engineer to design within a budget, a condition over which the engineer has little control but could require costly re-design or result in other monetary damages. The contract may contain a backcharge clause, where the design-builder withholds payment for alleged design errors. This clause is particularly onerous since it could invalidate the engineer's professional liability coverage.

Finally, a termination clause may be included that would permit the design-builder to recover substantial damages if the design-builder terminates the contract for cause. Here is a portion of a dangerous bet-the-farm termination clause: "Upon declaring the Design-Build Subcontract terminated... the Design-Builder shall be entitled to recover against Design-Professional all of Design-Builder's costs. Such costs and expenses shall include not only the cost of completing the Services but also losses, damages, costs, and expenses, including attorney's fees and expenses, incurred by Design-Builder in connection with the re-procurement and defense of claims arising from Design Professional's default..." Few engineering firms have the professional liability coverage or financial wherewithal to survive such a claim.

Design-build contracts can expose the engineer to far greater liability than what they are accustomed to in a conventional contract. Therefore, the engineering firm must engage its professional liability insurer and seek legal counsel before entering into a design-build contract. Voiding the engineering firm's professional liability insurance is in no team members' best interest. A fair allocation of risk benefits all parties and encourages responsible engineering firms to participate confidently in design-build projects. ■

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