

CE News "Risky Business" No. 17

Why is civil engineering such a risky business? In part, because the process of designing and constructing our infrastructure is extremely complicated, and huge amounts of money are at stake. But the real culprit tends to be many civil engineers' naiveté.

Are you naïve? Let's find out. What's the best defense against claims?

Did you say good design? If so, you're wrong. The best defense is being penniless, because, if you don't have money, no one will sue you. As it so happens, few practicing civil engineers are penniless, if only because they have insurance.

Without question, good design is important, but it does not have nearly the protective quality that many civil engineers attribute to it. Just ask my friend Hank. One of the most prominent and highly respected engineers in his "neck of the woods," he practiced for 35 years without even the hint of a claim. Then, one day, he made the mistake of signing what appeared to be a seemingly harmless document. In just a few agonizing years, he lost his practice and his reputation, not to mention almost all his money. It did not help that the design involved was virtually flawless, or even that he was not the engineer of record. Which is why naiveté creates so much risk. Hank learned the hard way that civil engineers need to function well in two worlds. In one, they are engineers. They identify the technical challenges confronting their clients and then apply their knowledge, experience, and judgment to create systems that achieve the desired outcome. In the other world – the engineering service industry – the ability to engineer is not nearly enough to survive, let alone thrive. There, civil engineers need to comprehend tort law, contract law, and statutory law. They need to know how to lead and to manage; how to support and to supervise. They must be good writers and good speakers. They need to master human resources, accounting, client relations, sales, and even bill collection. And that doesn't even begin to scratch the surface of what's required. So who can blame civil engineers for wanting to believe that the ability to design well is all they need, given that, once that myth is exposed, there's so much to learn! But learn you must, because failing to gain and apply the requisite knowledge is what makes the business of civil engineering so risky.

In my biased judgment, the best place to begin your quest for knowledge is www.asfe.org, website of ASFE/The Best People on Earth. ASFE has been focusing on the business of civil engineering since its creation in 1968. It has developed an array of materials and programs designed to help. Believe it or not, however, one of the most important lessons ASFE imparts is something I can tell you about between here and the end of this issue's column!

About six of every ten claims against design professionals are filed by owners, your direct and indirect clients. Another 20% are filed by contractors. And while just about all of these owners and contractors are organizations rather than individuals, people make the decision to sue. As such, about eight of every ten claims are filed by people whom civil engineers should know well, and with whom they should have good relationships.

It's not that having good relationships with owner and contractor representatives will make you bulletproof; it won't. But it surely can facilitate the kind of communication that nurtures nonlitigated resolutions when problems occur. And bear in mind what those problems are really all about. If you are under the impression that the sequence of events is design error/construction problem/search for the guilty/claim, you're wrong. The real sequence is budget overrun/search for financial assistance/claims against the vulnerable, with "vulnerable" being defined as those with money who will have a difficult time convincing a jury they're not liable. Want to make civil engineering less risky for yourself? Just develop better relationships with owners and contractors. In that way you'll be in a much better position to help make budgets more reasonable and, should overruns occur, you'll enjoy a lower likelihood of being in harm's way.

Here's another question: Every year you have about 1,000 opportunities to "break bread" with representatives of clients and contractors. How many of those opportunities are you using? If it's less than 25, your risk is far higher than it should be. You need to establish good relations to enhance your communication and good will. The fact that doing so can be – and should be – enjoyable is not a good reason to avoid doing it. It's your risk. Lower it!