



## Who Hijacked My Plan Review?

By David Pierson, S.E.

**H**istorically, societies have placed a high value on professionals, trusting that those who possess the higher knowledge associated therewith will serve the interests of society with that knowledge. But now, perhaps due to political or economic pressures, we find society struggling to determine the value of having licensed, regulated professional engineers.

Traditionally, the status of being a professional comes with an associated increase in responsibility. As professional structural engineers, ours is the responsibility to provide structural designs that protect the health and safety of those who use them. The significant risk associated with providing these designs is an ever-present reality. As long as society is willing to recognize this responsibility by granting us the status of a professional license, we need to remain vigilant in abiding by the high standards of professional practice associated with structural engineering.

So, what does it mean when we stamp and sign construction documents with a professional engineer's stamp? I hope it means that we are certifying that, to the best of our knowledge, those documents comply with the building code and, if properly constructed, will result in a safe structural system. We abide by a code of ethics that requires it to be so. In accomplishing this work, it is our responsibility to have proper QA/QC procedures in place, which may include an independent peer review.

Generally, the documents we prepare are submitted to a jurisdiction. What, then, is the purpose of a plan review conducted by this jurisdiction? This is a complicated issue and crosses over into a political realm. However, it seems to boil down to a simple matter – how much does the jurisdiction trust us? Perhaps they believe that there should be a “belt and suspenders” approach – that an independent review may find something inadvertently overlooked by the engineer. This may be justified, but who should pay for that?

Many would say that the public at-large has some responsibility to pay for such a review. In this paradigm, since the structures we design are integral to society and their proper performance will affect many people, taxpayers should pay for some level of review of the documents. Since they pay the salaries of the building department employees, perhaps part of that can justifiably be allocated to plan reviews. In this case, the review should be a cursory, high-level review. The effort and associated costs should not be more than a small percentage of the effort put forth by the engineer of record in the course of preparing the documents.

*The trend, however, seems to be toward increasing government oversight. More and more, we find the authority having jurisdiction delving deeper into the design process, seeking to find the smallest of errors in our drawings and calculations.*

I occasionally submit stamped construction documents and receive the following comment: “Are you a licensed engineer authorized to perform work in this state?” Having ascertained this, the jurisdiction then approves the plans, relying on the state's professional licensing board as their means of acting in good faith to protect the citizens under their jurisdiction. This approach seems to be more common in states where the prevailing political attitude leans toward smaller, limited government. This certainly shows significant respect for the status of a licensed professional engineer.

The trend, however, seems to be toward increasing government oversight. More and more, we find the authority having jurisdiction delving deeper into the design process, seeking to find the smallest of errors in our drawings and calculations. They are acting more like a professor grading an exam. They look for opportunities to reject decisions we make utilizing our professional judgment.

And, often, due to the effort required to probe so deeply into the design, they are outsourcing this work. Since the cost to taxpayers is now excessive, they generally require the applicant to pay for the “review” (more accurately described as a critique) through assessed fees. This seems wrong. Essentially, they are mandating a peer review without giving the applicant the right to choose if it is done, who will do it, or how much it will cost. If the jurisdiction wants to have this level of control over our work product, then they should stamp the documents and assume the associated responsibilities and liabilities.

We need to get involved (and it may require us to get a bit political) in finding a way to reign in this plan review process that is morphing into something it ought not to be. We should make it clear that we deserve to be recognized as professionals and, when we stamp construction documents, our clients and the public at large can know that the work complies with the high standards required of us. It is not perfect – we are not perfect – nor do our clients or society expect us to be perfect. However, we adhere to our code of ethics, and we only prepare documents that we are qualified to produce and we stand behind them. Perhaps a limited review is helpful – just to see that we complied with the appropriate code and that our load path appears to be complete. However, enough of the endless critiques. Stop letting jurisdictions force owners (or the public) to pay to have our work evaluated, line by line, by a person (often not even licensed as a professional engineer) who is being paid hourly, has no incentive to stop critiquing, and has no skin in the game. ■

*David Pierson (davep@arwengineers.com) is a Vice President at ARW Engineers in Ogden, Utah. He currently serves as vice-chairman of TMS 402/602 and is past chairman of the Utah Uniform Building Codes Commission.*

*Structural Forum is intended to stimulate thoughtful dialogue and debate among structural engineers and other participants in the design and construction process. Any opinions expressed in Structural Forum are those of the author(s) and do not necessarily reflect the views of NCSEA, CASE, SEI, C<sup>3</sup> Ink, or the STRUCTURE® magazine Editorial Board.*