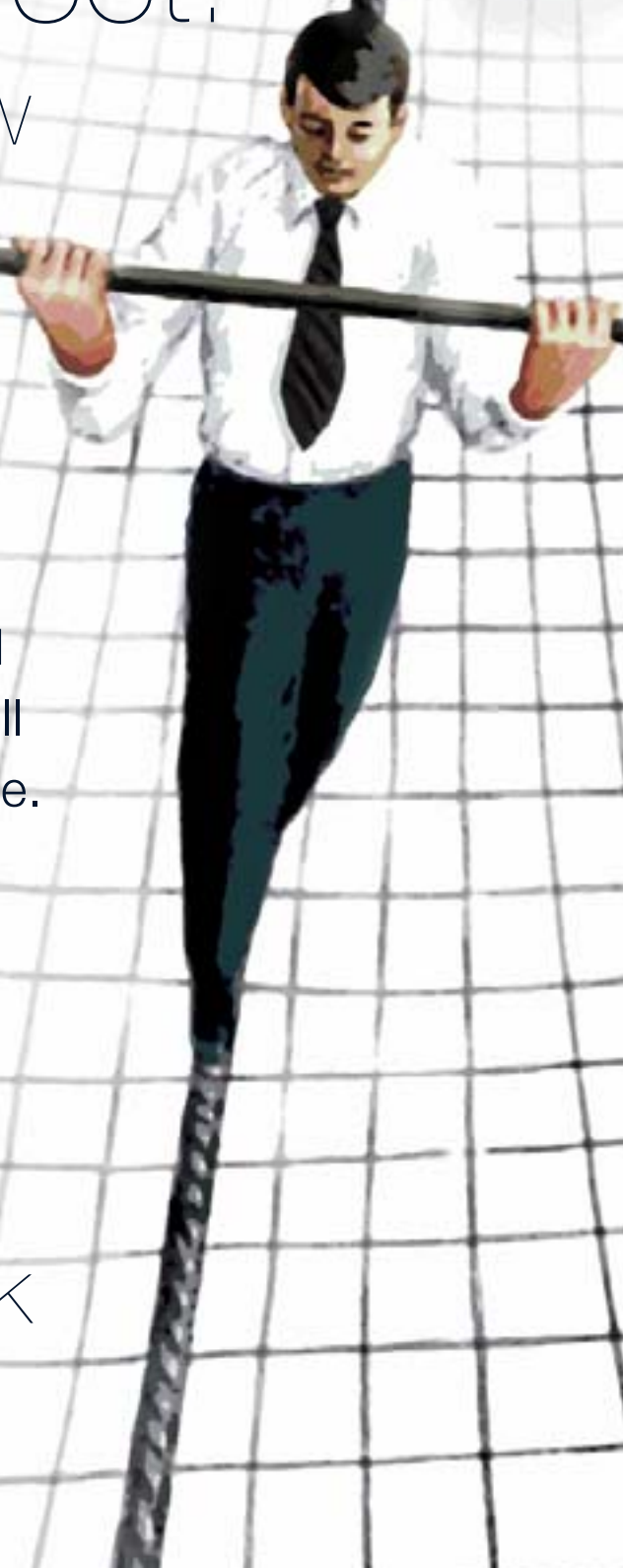


# Practice Perfect: Steer clear of the law

Building a safety net to cushion the blows of error, oversight or bad judgment need not be too great a burden. Often, common sense, seeking sound advice and understanding human nature will help engineers steer a safe course.

By Steven Haddock





## Get it in writing

The basic mistake of many professionals, including engineers, is failing to have a written contract before starting work. It is a falsehood to believe that written contracts are important only when the amounts of money and work are substantial, since the biggest liabilities often arise from the smallest fees when clients don't fully understand what they are buying. Unless you tell them, clients who hire you for an inspection won't know that the \$1,000 they have spent doesn't guarantee the brick work, if there is no obvious external damage.

Remember also that all work done for clients is already done under a contract: Your choice is simply whether it's a written contract or an oral one. The clear advantage of a written contract is that the terms are there for everyone to see once a dispute starts. With an oral contract, the dispute can start with what the terms of the contract actually were. If you want to go to court based on an oral understanding, remember that courts tend to believe the recollections of clients over those of engineers, especially when it comes to scope of work and the limit of the fee. Similarly, an unsigned contract is like listening to one side of a telephone conversation: clear evidence of the intentions and beliefs of one party, but not of the other.

Getting contracts signed up front need not mire you in paper work. Your lawyer can draw up a standard form that will be appropriate for most of your routine work. As the stakes rise, negotiation and re-drafting can be lessened by an understanding of why a contract has to be so specific on some issues, and by making an effort to write the contract in plain language.



## You're not an insurance company

It's surprising how often engineers take on responsibilities that properly belong to contractors, contractors' engineers, or even bonding companies, checking every drawing and every area that might pose a safety hazard, while making more and more promises to keep their clients happy.

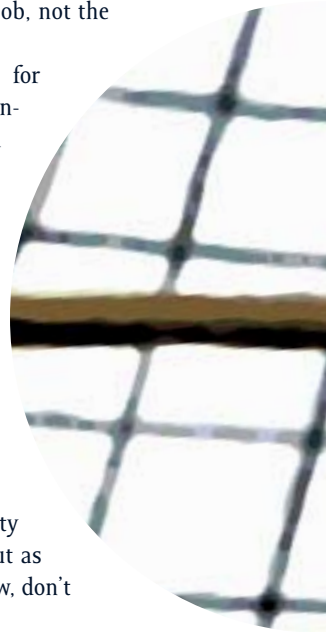
But when things go wrong, the courts often hold such helpful engineers responsible for the representations they made before the contract was signed because of their subsequent conduct during the job, despite the written terms of the contract. For example:

- Engineers who promised special expertise in an area have been held to a higher standard of care than engineers who claimed only to be "experienced" in the area. Ensuring the success of the project is the owner's job, not the engineer's.
- Engineers have been found at fault for errors on shop drawings they didn't contractually have to review, even when the error was committed by the contractor's engineers and the reviewing engineer had no obligation to review the drawings. Review only those drawings you are responsible and can clearly be found liable for; send the others back without even looking at them.
- Engineers have been found liable for workplace accidents when they took an active role in workplace safety. Point out to the appropriate authority unsafe conditions you come across, but as the engineer in charge of general review, don't look for trouble.

Although you can't contract out of your responsibilities as an engineer, you can contract into responsibilities that are properly those of others. You wouldn't sign a contract with these responsibilities, so don't take them on when the job starts.

## Know your adversary

When engineers think "lawsuit," they think of someone injured by a building or product they designed. However, about 90 per cent of business-related lawsuits involve one business suing another it has a relationship with. In other words, you're about 10 times more likely to be sued by a client, or by someone you have a close professional relationship with, than by a total stranger.



Naturally, good client relationships are one way to manage this risk. Friends rarely sue friends. However, acts like returning phone calls promptly, or taking the time to explain what you are doing, often go a lot further to build good client relationships. So does admitting when you have made a mistake and working to correct it.

Fees, of course, are often the biggest source of problems. Forget about deadbeats; the litigation that can really tie you up is when a client is fundamentally dissatisfied with your work. It's not uncommon for a client who has suffered a loss to counter-sue for damages when you sue for your unpaid fees. It's also not uncommon for those awards to be much larger than the fees in dispute.

Every engineer also knows that delays are always the major concern of clients, since they can cost a client thousands of dollars a day—which the client will be looking to get back from someone. It's unfortunate that bonuses are often based on speedy completion rather than careful planning—and that many of them disappear when a problem requires overtime to fix.

### Keep friends close, but adversaries closer

Projects can take the concerted and coordinated efforts of many people. But engineers have control over only their own staffs, and can exercise some influence over either owners (in bid-design-build projects) or contractors (in design-build projects). This means that dozens of subcontractors with whom engineers have no direct contractual relationship have the potential to bring their beautiful designs crashing to the ground.

An engineer can't be on site every minute, and if you could, would you really want to take on that much extra liability? Nevertheless, engineers can and should anticipate where people on projects are likely to run into difficulties or try to cut corners. Be prepared to deal with well-meaning but misguided efforts to save the owner a few bucks—or even with the occasional underhandedness.

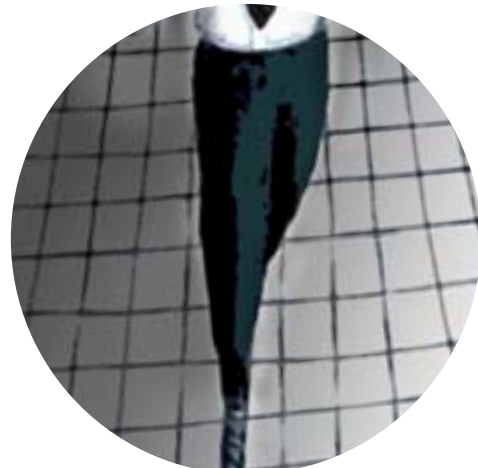
Expect people to take advantage of your good nature and don't agree to help out when shop drawings arrive just as you're about to leave for a long weekend and you're told that they "absolutely, positively" have to be stamped by Tuesday morning. Your contract should state clearly and realistically how long you will need for review. Even better, it should contain a schedule and give you the power to follow up with contractors and subcontractors when documents don't arrive on time. Too many lawsuits have arisen when engineers rush through the review of shop drawings, or assign them to junior staff to save time.



Although contracts can't bind parties who don't sign them, they should provide remedies for the contracting parties when third parties don't live up to their ends of the bargain. For example, in a bid-design-build contract, engineers won't have contracts with contractors, but their contracts with the owners should provide clear remedies with the owners when contractors fail to review documents before submitting them, or fail to submit documents in a timely manner.

### Risk and reward

Although bidding on jobs might keep an engineer working and out of the poor house, it could also land the engineer in a court house. Like everyone else on a project, engineers have to balance the risks they are taking by working on the project against the rewards they can expect if everything goes well. Big projects with tight margins might seem very tempting, but they also bring big risks. A good rule of thumb is that for every \$500,000 a project is worth, expect to spend one day away from the office in a deposition, or in court, if a legal dispute arises. Multiply these days by the number of owners, contractors and professionals involved for an idea of how much time can be tied up in these proceedings. Multiply that total by two for the time needed to review documents and prepare for court. The risk of legal action is just as real as the risk of legal liability. Your insurance company might pay your legal bills if you're unjustly sued, but it won't compensate you for lost days of work.





## Deal with it

But no matter how carefully specifications and contracts have been reviewed, mistakes in design assumptions or calculations can happen, requiring changes to be made for which someone will have to pay. This is when the parties can agree that everyone will be properly compensated later when cost savings are found—so that everyone keeps working hard to get the project finished on schedule—or things go even more wrong, which is when the lawsuits fly.

Sometimes, however, the parties will sit down and work it all out before they move forward, which is the sort of behaviour that can save money for all involved in the long run—even if one party doesn't make a profit on that particular project or all lose their early completion bonuses. This is the kind of situation where the parties should involve their lawyers, to remind everyone where blame might actually lie. In such situations, it will be necessary to change even carefully worded contracts, and occasionally work that has already been completed will have to be trashed. However, all engineers and contractors understand that it's often easier to tear down and start again than to build on a weak foundation.

## Put it in writing again, or not

If one were to suggest the three most important words in law, they would be “document, document and document.” Recollections fade; documents can last forever. But documents are also like chocolates: Too many are just as bad as too few. Some things should always be put in writing and kept in a safe place, including change orders, memoranda of agreement, minutes of meetings, notes of observations, or any other document that changes any detail of the original agreement between the parties. Not only should these matters be put in writing, time is of the essence. Waiting a few weeks to write it all down makes the exercise pointless.

However, engineers need to be wary of everyone keeping their own rough notes, drafts and preliminary calculations. If you're preparing a report or plans, there are good reasons for keeping only the most recent draft. If an earlier rough draft contains errors that would result in substantially different conclusions from the final report, it effectively contradicts the final report. Once work is superseded, and after it has ceased to become the source of future drafts, it should be destroyed.

## Make your lawyer your best friend

Legal problems can be like medical problems or engineering problems: An ounce of prevention is worth a pound of cure. Often, when a dispute arises, lawyers aren't called in until the positions for all involved have hardened, for fear that they will escalate the problem. However, by then, the money at stake may be less important than the reputations of the parties.

Many litigants want their lawyer to zealously advocate their position. But a lawyer can and should do more for you at any stage of a dispute, such as give you advice on the strength of your position. Unfortunately, clients all too often ignore the advice of lawyers who tell them that they are on shaky ground, even though they have done little wrong. Clients also

commonly hold back their own misgivings about their actions, which misleads their lawyers about the strength of their case.

Once a dispute starts, it's in everyone's interest to settle, since there are no “winners” once a matter gets to trial. Not only does settlement save legal fees, it saves the lost time and effort of all involved. If the other parties are being unreasonable, your lawyer will let you know and fight for your interests. If your adversaries do have a point, your lawyer won't scare them off.

## But everyone else does it

But let's say you know you're in the right, that no one in your industry would have done anything different from what you did, and that you can call on 50 engineers more experienced than you are to say this. Yet your lawyer continues to tell you you're negligent and that you might be lucky to get out at the limit of your insurance coverage. Should you fight?

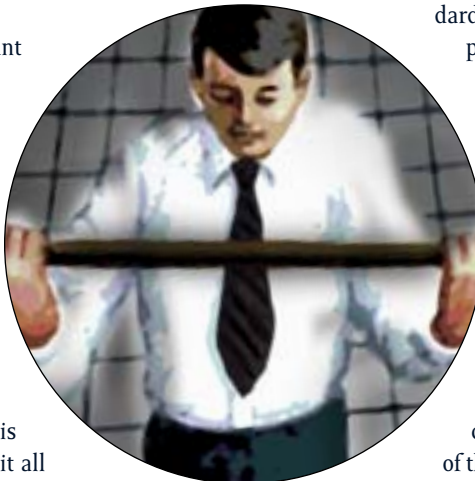
Unfortunately, professional standards of care aren't set by engineers, but by judges and juries. Certainly, the opinions of other experts in the field are persuasive when helping a court determine the standard of care, but the law is clear that if the standard is within the understanding of an ordinary person, the opinion of experts on the point isn't relevant. For example, in a case where a lawyer failed to tell the client that the property being bought included a non-compliant sewage system and the client suffered a huge loss when the property couldn't subsequently be sold, the judge agreed with the client although the client called no expert testimony. The lawyer argued that telling the client wasn't necessary because everyone in the area knew that the laws weren't being enforced. The client argued that the lawyer knew of the risk of the property being nearly worthless if the laws were enforced and should have disclosed that risk.

Certainly, you are allowed to call upon your experience and judgment when making decisions. But you're not allowed to rely upon what everyone else has always done in the situation. Always put yourself in the client's shoes and ask: “Would I want to know about this?”

None of us expect to be involved in legal action, especially when we do our jobs well. However, mistakes are made, things do happen outside of our control, and there are rarely situations where everyone will be satisfied with the outcome. In many engineering disasters, no engineer is ever found at fault, but in almost every case, someone is at least considering a lawsuit. When this happens, engineers who have done everything possible will look organized and competent.

Take this case from the 19th century, for example. When a tram bridge collapsed in Victoria, the only person found without fault, and who was commended by the coroner, was the city engineer, who had given his warnings in writing. Disaster cannot always be avoided, but it need not be compounded.

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## Liability clause apportions risk

Faced with the liability risks inherent in the practice of professional engineering, many practitioners in independent practice are trying to manage their risk. One method to consider is using a "limited liability" clause in written contracts.

Although written contracts should be standard procedure whenever an engineering firm is retained, the commonly seen phrase "we will not be held responsible for any damage, however caused" isn't worth the ink it will take to print it on the page. Courts will not allow professionals, including engineers, to disavow any responsibility for their own negligence. Engineers are hired because they have skills that others lack. As part of the bargain, they also give an implied warranty that they will perform the work to the same standard as any competent practitioner in the same field. What engineers should not do, however, is guarantee the success of a project and take all the risk of failure. This is where a "limited liability" clause comes in.

### Sympathetic courts?

Courts are actually sympathetic to the position of the engineer. On a typical project, the engineer's fees rarely exceed five per cent of the total cost. The owner stands to realize a benefit not only far more than the engineer's fee, but usually more than the total cost of the work. As such, courts generally hold that the engineer and the owner can agree to apportion the risk fairly in relation to the benefit the parties can expect from the contract.

As long as it's clear the owner is aware and agrees to the limitation of liability, engineers can usually limit their liability in the contract to a fair amount that might be far less than the "worst case" outcome of an engineering failure. For example, the liability could be limited to the engineer's fee on the project, or even the available money under the engineer's insurance policy.

Courts are even more sympathetic to a limitation of liability when it's clear the engineer was willing to negotiate the terms. Like anything else in a contract for services, the engineer and owner can agree that the engineer will take on additional risk of liability in exchange for something else. For example, on a project larger than the engineer usually works on, it is fair to negotiate into the price the cost of additional liability insurance coverage. If the risks are such that putting more personnel on the project would decrease the risk for the engineering firm, it is acceptable to negotiate a higher fee, or a higher hourly rate.

This is not something an engineer should undertake alone, since courts look suspiciously at a limitation of liability clause. Legal advice should always be solicited when drafting a standard form contract so that the limitation clause stands out. Similarly, a lawyer familiar with the issues should always be contacted when a client wishes to re-apportion liability. Properly used, a limitation of liability clause can result in fewer nights of restless sleep.

—Steven Haddock

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## Words to the legal wise

PEO's professional practice guidelines can help engineers steer clear of liability trouble. Written by subcommittees of PEO's Professional Standards Committee (formerly the Professional Practice Committee), the guidelines complement the *Professional Engineers Act*, Regulation 941/90, and other applicable statutes, regulations, standards, codes, bylaws and rules governing engineering work. Here are guidelines aimed at helping engineers steer clear of legal liability. All are available for downloading from [www.peo.on.ca/publications/publicat3.html](http://www.peo.on.ca/publications/publicat3.html). Printed copies of the guidelines are available for purchase by faxing the online publication order form to PEO's publications desk at (416) 224-8168 or (800) 268-0496.

- *Use of Agreements Between Clients and Engineers on the Provision of Engineering Services* outlines basic steps to complete in formalizing the relationship between clients and engineers. It also emphasizes the understanding that while practically all engineer-client relationships are built on mutual confidence and trust, there is a clear value in detailing the expectations of service provider and client in any working arrangement. In

this, it echoes the advice of insurance providers and lawyers that the days of doing business by handshake, oral agreement, or assumed understanding have come to an end. Section 1.4(b) of the guideline discusses professional liability insurance, noting that Certificate of Authorization (C of A) holders are required to carry minimum liability coverage of \$250,000, unless they disclose to the client, and the client acknowledges, that they do not carry any insurance. The guideline recommends, however, "that some insurance be in place for every project. The appropriate amount of such insurance will depend on several factors, such as the project's complexity and risk potential." In the event a client requests additional insurance coverage above the engineer's policy coverage, it recommends that engineers take such requests into account in calculating fee schedules.

- *Agreement for Professional Consulting Services between Prime Consultant and Subconsultant*, describes steps to follow in engaging the services of a subconsultant. It also underscores the general practice of engineers obtaining written agreements from all parties, so that expectations, risk and liability are understood and shared.
- The *Guideline to Professional Practice* is a wide-ranging reference on engineer's responsibilities. Section 10 concentrates on contractual liability, particularly for employ-

ee engineers. For C of A holders, the guideline states, "After incorporation, it is the company that is the contracting party, and not the individual. As for protection from liability for negligence, there is nothing available to engineers, other than careful, thorough engineering and insurance."

- *Practice Bulletin: Use of the professional engineer's seal* offers additional guidance on signing and sealing engineering work, beyond that offered in the *Guideline to Professional Practice*. The bulletin includes the timely reminder that "absence of the seal does not relieve an engineer of professional or legal liability, since sealing of documents by engineers has nothing to do with the question of liability for negligence. In fact, engineers are liable because they prepared the documents, or because they supervised or approved them, not because they signed or sealed them."

The Use of Seal Subcommittee of the Professional Standards Committee has drafted a dedicated guideline on the use of the professional seal. According to Bernie Ennis, P.Eng., PEO's manager, standards and practice, the committee draft is at the editing stage, after which it will be reviewed by legal counsel, and approved by PEO Council prior to publication. It is scheduled for publication before year-end.

— Michael Mastromatteo