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# GEOSTRATA

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## PORTS, HARBORS AND SHORELINES





## The Smaller They Are...

By John P. Bachner



I'm absolutely convinced that the *GBA Case History* series should be required reading for any geoprofessional in private practice: The cases document just about every possible mistake a geoprofessional could make. And they're not technical mistakes: They're mistakes that arise from the humanity within us all. And it's precisely because of that humanity that the case histories document a seemingly counterintuitive finding: The smaller the project, the bigger the risk. Why? Several factors contribute, but the number-one factor is attitude, and no case history illustrates that better than no. 100.

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An architect engaged a GBA-Member Firm in 1989 to conduct a geotechnical-engineering study for a proposed condominium development comprising two three-story, wood-frame structures on a site created from fill of unknown origin. The site had been built upon, abandoned, and filled some more. The architect gave the firm a geotechnical-exploration report another firm prepared for the site's previous owner, in 1981. After reviewing the report, the GBA-Member Firm proposed drilling three borings to 20 feet. The architect agreed and the firm proceeded, finding fill of varying depths across the site. The firm recommended a driven-pile foundation, with piles to be embedded 20 feet into the soil for a 10-ton pile and 25 feet for a 20-ton pile. The work was never done, however, because the developer abandoned the project and sold the site, along with the Member Firm's report.

Three years later, the Member Firm's engineering department manager – an accomplished PE – received a call from a civil engineer who was working on a hotel project proposed for the site. He had a simple request: Could the Member Firm provide driving criteria for a 25-ton pile? As it so happened, the national economy was in a cyclic trough at the time, encouraging the department manager to say, "Sure." He then went on to ask for details and wrote down what the civil engineer told him. The two agreed orally to a \$100, lump-sum fee

and, because the project was so small and had such a quick turnaround time, they also agreed that a proposal and written contract weren't needed.

Two days later, the Member Firm's department manager issued a letter conveying pile-driving criteria of 30 blows per foot based on the building code's dynamic-driving formula. The civil engineer called a few times asking for assistance, then sent the department manager a site plan and driving logs. The department manager called the next day to express some concerns about a few individual piles, but overall, he said, everything seemed fine. The department manager took no notes during the call. The invoice he issued was never paid. But the hotel did get built, with no apparent difficulty. Then it happened.

A hurricane hit the coast in 1996, causing the river to flood and wash away a portion of the hotel's foundation. The wash-out revealed serious foundation cracking. The hotel owner, alarmed, retained a structural engineer to investigate. The structural engineer retained a geotechnical engineer who specialized in forensics.

The forensic specialist submitted his report in early 1998. He concluded that the hotel was settling differentially and had a long way to go before reaching equilibrium. The problem? The piles were too short. Whoever specified the length of embedment failed to consider the 7 to 9 feet of fill that had been added to the site.

A few months later the hotel owner sued the architect, the civil engineer, the pile-driving constructor, and – of course – the Member Firm. And then "the fun" began, stretching over a seemingly interminable three years of document production, interrogatories, and depositions, punctuated by indignant shouts of "fishing expedition" and frequent visits to one judge or another, complaining about tactics used by "the other guy." Unfortunately, the GBA-Member Firm had a problem the others did not have: Try as it might, it could not find a reputable expert who believed the firm had met the standard of care. Unable to proclaim it was not liable, the Member Firm had no choice but to argue that others were complicit and the damages sought were inflated.

Then things got worse.

The architect, who had no professional-liability insurance, closed his practice and moved to Florida, a homestead state, where he bought a new home.

The civil engineer was a one-person, sole proprietorship that had never been successful and never purchased professional liability insurance.

The pile-driving constructor – "I just did what I was told and they approved it." – settled early with the plaintiff, paying an undisclosed amount before trial.

The amount of the damages involved became known in January 2001, when the hotel was closed for three months for micropile installation. The hotel's



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owner claimed the defendants owed \$2 million, and the Member Firm was the only defendant in a position to pay. At the urging of its insurer, the Member Firm settled the lawsuit for an amount it has been unwilling to disclose, except to say "more than \$1 million." Although the insurer paid the lion's share, it did not reimburse the Member Firm for the value of the productivity and opportunity it lost, an amount that easily exceeded \$100,000.

The lessons learned from this case are important, with the overriding issue being this: If the commission is so small that you find it necessary to achieve profitability by eliminating a step as fundamental as proper contract formation, you should not take accept the commission. Had the engineering department manager done it right and met with the civil engineer in person to form a contract, it's highly likely the manager would have proposed a far more robust scope of service. Another two lessons can be summed by aphorisms:

The first one: **"If it isn't in writing, it didn't happen."** Because the engineering

department manager couldn't be bothered with taking notes, the Member Firm was unable to refute some of the charges against it. At trial, plaintiff's counsel probably would have pounced on the failure to take notes in order to portray the engineering department manager as a slipshod professional, an image that would have been highly detrimental to the Member Firm's position.

The second aphorism: **"When you want something in the worst way, you get it just that way."** Yes, the economy was in a rut, but that doesn't mean that any business is better than no business. No matter what economic conditions may prevail, a firm needs to maintain the same client- and project-acceptance criteria. And to not have a written contract of any kind, let alone one that included a limitation-of-liability provision? What was that engineering department manager thinking?

In response to that question, I infer that he was thinking, "It's a small project, so I don't have to do all the stuff that's required for something more substantial." Stated another way, "When it's a

small project, I don't have to conduct myself as a professional in private practice." But you *do have to*, of course, because that's what being a professional is all about. You don't turn professionalism on and off: It needs to stay on 24-7, which is why learning about private-practice issues is so important. As George Santayana so famously said, "Those who cannot remember the past are condemned to repeat it." Step one: Learn from others' mistakes. (FYI: *GBA Case Histories* are available to all.) 

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