

CHAMPION NEEDED An Associated Press report from Thursday, August 16, related the discovery of two more sets of human remains amid the wreckage of the interstate bridge that collapsed in Minneapolis. That raised the known death toll to 11. The report went on to say that navy divers were continuing their efforts.

For me, the context through which to view the above information was the article "The Vision for Civil Engineering for 2025," which appeared in the August issue, along with the Editor's Note in that issue. In reading these two pieces, it is interesting to note how many times the word "master" appears, along with the concept, in one form or another, of trust by society. Lest one take offense at the use of the word "master," it can be defined as one who has special knowledge and is willing to serve society's most pressing needs.

Then, keeping the Associated Press report above in mind, consider the national and state lists recently published of the dangerous conditions related to so many of our bridges that are in use today.

The most frequent response I hear from engineers when such a matter surfaces is roughly as follows: "We documented our findings and presented them to the client for their action." In the case of the most recent failure in Minneapolis, engineers told the state to repair their bridge. They didn't. People died.

Given the dramatic loss of life and the front-page coverage reminiscent of the walkway collapse in 1981 at the Hyatt Regency in Kansas City, Missouri, the past suggests that we can expect the following steps:

- A blue-ribbon panel;
- More seminars on professional liability insurance and policy rewrites;
- Yet another manual produced some three to five years from now.

Meanwhile, right now the water supply pipelines in our older cities are leaking at volumes that-according to my readings-boggle the imagination, infrastructure for handling floods remains suspect, and subways have reached ages in the range of 50 to 75 years. And some engineers (see the Letters section of the August issue) are saying that they should have made a stronger case for infrastructure improvements.

Yet today we have expert engineers who could stand at a microphone on national television and simply tell the truth, but they do not. That truth, for example, would include the following statements:

- 1. There are bridges in existence that we are surprised haven't failed already, and we have noted this in reports to our clients.
- 2. There are other bridges in very bad shape, and we have noted this in reports to our clients.
- 3. As a minimum, right now, we need to place "Bridge closed" signs on the bridges in category 1 above and signs that read "No school buses" and "One lane only at 25 mph" on the bridges in category 2.
- 4. A number of the bridges on both lists would probably also warrant the sign "You cross this bridge at your own risk."

I realize my remarks above ignore other glaring engineering issues that are of little or no concern to the public. Why should the public be concerned? They trust us.

When I discussed this issue with a colleague, he said, "What is telling the public?" Does it mean, he wondered,

- Telling your boss?
- Telling the boss of your boss?
- Telling your client (if you're in private practice)?
- Telling the secretary of the state highway department after you're been fired by your employer?
- Telling the chair of the legislative committee that has jurisdiction in this area?
- Telling the governor?
- Telling the newspaper when nobody above in this list listens to you?
- Telling the radio station when the newspaper doesn't listen to you?
- Telling the TV station when the radio station doesn't listen to you?

Would it mean perhaps putting on a hair shirt, picking up a picket sign, and walking out on the bridge to block traffic when none of the above will listen to you?

And in the last case, how many staff engineers at public agencies or private consulting firms have the financial wherewithal to spend the rest of their career unemployed or as plaintiffs in wrongful discharge lawsuits (presuming the engineer can persuade a friendly personal injury attorney to take his or her case on contingency)?

So there you have it.

FORUM

We have a very real "defining moment" here, an unfortunate accident, the analysis of which will teach us still more about such matters. It occurs to me that ethical principles were always intended to protect those least able to protect themselves.

Of course, I may be wrong.

-William M. Hayden Jr., Ph.D., P.E., F.ASCE This letter was originally published by ASCE in Civil *Engineering*, 77(10), 8.