IN THE 25 YEARS THAT I'VE WORKED FOR GENERAL CONTRACTORS, OWNERS, AND ENGINEERING FIRMS, I'VE RECOGNIZED THE REQUEST FOR INFORMATION (RFI) PROCESS AS A HUGE SOURCE OF WASTED EFFORT AND NEEDLESS CONFRONTATION

BY JOHN STRICKLAND
SO WHAT IS AN RFI? IT WAS ONE OF THE FIRST THINGS I learned about back when I started my project management career with my first large construction firm. I learned how to use these forms as a convenient and effective means of documenting the many legitimate clarifications needed on a major project. However, like most other young engineers, I also learned to use the RFI as a weapon in the ongoing battle between owners, or their designer and the construction contractors. Recently, our project team has done a few simple things to greatly reduce the waste and frustration that comes from this type of battle.

WHAT'S THE PROBLEM?
The RFI form can be a great tool if used properly, and I certainly don't recommend that they be eliminated entirely. The RFI form was created to document the many clarifications that are commonly required on projects. Typically, the contractor uses the top half of the form to clarify—or request permission to vary from—the contract documents. The bottom half of the form is used to record the answer. But this seemingly simple process is plagued by a number of problems.

From the contractor's perspective, RFIs are needed to secure information that should have been in the contract documents in the first place. The missing information keeps their crews from working effectively, and it makes hitting already demanding cost and schedule targets even more difficult. Owners, or their design firms, often view the RFI as a means of harassment. Both sides of the issue have legitimate complaints, and both sides cause most of their own pain.

Considering that year after year these problems appear on countless projects across the country, the total wasted effort involved is beyond comprehension. To make matters worse, many of the problems (and many of the RFIs) are completely unnecessary and represent waste in its purest form.

WHAT WENT WRONG?
It is easy to understand how the RFI was transformed from a convenient means of documentation into a weapon of project administration. Just start with the owner/designer side of the contract: tough-minded contract administrators or field inspectors would require contractors to remove and replace work that didn't match the contract documents—even if there was no functional reason to require the re-work. Contractors quickly learned to document even the slightest variation. But they also learned to write as many RFIs as possible in order to substantiate future claims. I recall a general contractor's manager explicitly instructing his staff to maximize the number of RFIs in order to establish that the design was flawed. And I'm sure experienced project managers can cite many other examples of wasted effort.

LOOKING FOR ANSWERS
We have learned that life on the project does not need to be as difficult as we make it. And there are some ways that I've managed to avoid these difficulties by focusing on communications skills and creating a culture of collaboration.

I managed to do this on one of my recent projects, a state-of-the-art facility constructed in the Pacific Northwest for one of the world's leading technology companies. Our scope was to install and connect hundreds of highly sophisticated machines in the shortest feasible amount of time. Contractors worked on very competitive fixed-price agreements and employed up to 1,000 craft employees at the peak of construction. Although hundreds of RFIs were generated, there were remarkably few complaints (if any at all) about RFI turn-around time, which averaged about three days.

OPEN YOUR MOUTH
The key to our good experience was recognizing the difference between documentation and communication. RFI forms are great for documentation, but they are no substitute for conversations. Our simple rule was that nobody should receive an unexpected RFI. The first step in our RFI process was to discuss the issue with
the construction coordinator in charge of the work. Many of the potential RFIs were answered before they were ever written, and no effort was wasted getting them through the system. The RFIs that were necessary could be answered very quickly, because it simply documented an agreement that had already been made.

**REDDUCING WASTE BY REDUCING NUMBERS**
Several other techniques were used to reduce the need for RFIs, including thorough pre-construction job walks and design reviews to make sure that everybody understood the scope. We made sure that the construction management and design teams had good access to one another and provided many different forums for communication. When RFIs were necessary, they were electronically routed and tracked. We learned that an electronic RFI system can be a good tool, but will certainly not eliminate all of the friction in the RFI system. It's easy to imagine the computer-based RFI tracking programs as simply more powerful weapons in the battle.

When RFIs were necessary, contractors were happy, because they got their answers quickly. The designers were happy, because they got far fewer poorly worded RFIs that were unnecessary in the first place. The owner was happy, because there were essentially no change orders due to the RFI process to cause delays, disruption, or field coordination issues. The entire project benefited from the effort to develop a collaborative culture, and we set new benchmarks for safety and schedule performance as well.

The real lesson I took from this experience was what an amazing effect good communication can have on teamwork and project performance. Much of the conflict and confrontation that burdens the project team is largely unnecessary. There are countless other opportunities on our projects—from contracts to technical submittals—for improving project performance, as well as the quality of life for project team members. These opportunities stem from establishing a collaborative culture, even on projects with rigorous contractual requirements. One way I've found to start effecting change is to take a look at RFI processes, as well as other processes where communication is the key.

**John Strickland** has led numerous major design/build and construction management projects within the microelectronics industry. He has developed a strong track record for completing projects ahead of schedule and under budget, and has helped pioneer numerous strategies that have dramatically improved "time to money" for clients. He has expertise in all phases of construction operations—including safety management, project controls, contract management and field operations—as well as the application of "Total Quality Management" and "Lean Manufacturing" techniques to complex construction projects.