



VELA SYSTEMS®



Bond Brothers Deploys Vela Systems Field Software at Harvard University's Northwest Lab and Central Plant

Commissioning, worklists, and document synchronization software on Tablet PCs accelerates completion, improves communication with the owner, and creates electronic handover documents

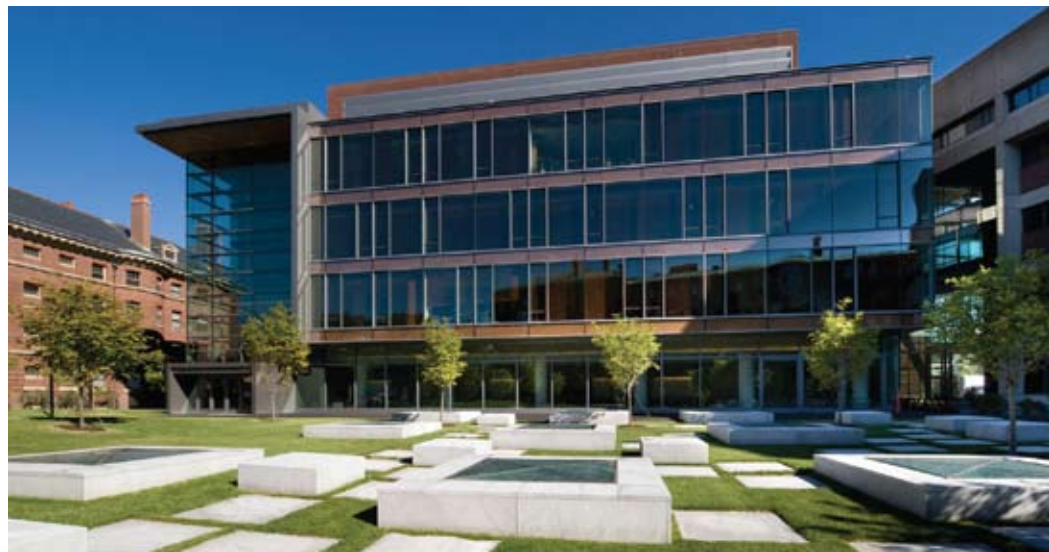
Bond Brothers, a Massachusetts-based multi-faceted construction company with more than a century of experience, had been delivering excellence for Harvard University for decades. Always in search of ways to increase quality and efficiency, Bond Brothers has adopted the use of field management software on Tablet PCs from Vela Systems across multiple projects. The company then added its own innovation - commissioning.

The Harvard University Northwest Lab project is a 450,000-square-foot building that provides state-of-the-art laboratory space, office space, classrooms, seminar rooms, collection space, and teaching laboratories, as well as an underground garage, a new chilled water plant and an electrical substation.

David LaMarco, a Bond Brothers Project Engineer who worked on the project's 7,500-ton chilled water plant,

"We just about completely eliminated the paper side of the process."

—Kevin Cooke, Director of Operations
Bond Brothers



Vela's commissioning module helps streamline Harvard University's Northwest Lab project

employed Vela Systems' commissioning module to help streamline the project. With Vela Commissioning, contractors, engineers and commissioning agents track systems and equipment as they are delivered, installed, readied for testing and then tested. All relevant documentation is available at the fingertips of the field personnel and is then tied back to the specific equipment electronically. This creates an electronic handover document set that can be delivered to the owner and speeds up the delivery of the commissioning process.

"It probably eliminated five to ten hours of data entry every week," LaMarco said. "I was able to focus my attention to synching lists, taking a look at what was

open and then supplying these lists by subcontractor. It definitely accelerated the timeframe to getting lists into the field and completed. Everyone had access to the same database. One engineer had an office in Baltimore and a field office in Massachusetts, while Bond Brothers had field staff on site, but we always had access no matter where we were."

Kevin Cooke, Director of Operations at Bond Brothers, oversaw the entire project and made the decision to deploy Vela Systems.

"I was researching technologies that would allow us to streamline the delivery of that lab," Cooke said. "Harvard wanted us to present them with a



process that would allow both the design team and our construction management team to deliver a job of the highest quality with no uncompleted tasks on the punchlist.”

Vela Systems’ mobile field software replaces the notebooks and tubes of drawings normally carried by construction personnel. Using a special pen or stylus that comes with the Tablet PC, field personnel can write directly on the screen in their own handwriting, which the tablet can display as pen strokes, highlighter marks, or automatically convert to electronic text.

“The owners became very aware of what was going on at the field level,” Cooke said. “I could call someone in the field and say, ‘There are 4,000 open items at mid-point and 20 percent of these are old. Do you need more people on the job?’ Likewise, when a subcontractor senior manager sees that his organization is responsible for 22 percent of the punchlist, he’s going to make sure something is done about it. To have the same effect without Vela, I’d have had to call a sub in my office, throw a pile of paper at him and, even after he had thumbed through it, his reaction would still be, ‘Well, how many of these are mine?’”

Cooke estimates that he would have had to add up to two FTEs to manage the punchlist without Vela, because the software allowed him to use the engineers on the job.

“We just about completely eliminated the paper side of the process,” Cooke said, “and basically used data right off the machine.”

In the field, Vela Systems also improved communications about punchlist items. Dave Pilcher, Assistant Project Manager for Bond Brothers on the same laboratory job, made heavy use of Vela’s ability to put all of the contract documents at his fingertips in the field.

“When you try to orient yourself in the field,” Pilcher said, “the documents on the tablet screen show you exactly where the columns were when it was raw steel. Without Vela, you’re running around in the field with a bunch of 11 x 17 drawings, flipping through them while trying to keep them clean and taking handwritten notes that you’ll later put on a spreadsheet.”

“If there were a lot of windows that didn’t operate properly, for instance,” Pilcher continued, “I could take a photo of each, download it into the system and then write on the images. I could also indicate directly on the plans on the screen which window doesn’t work and show where the column lines were.”



About Vela Systems

Vela Systems construction field software automates the execution and oversight of field activities on construction and capital projects for architects, engineers, contractors and owners. Instead of carrying a field notebook and paper plans or specs, jobsite users work with Vela Systems software on mobile computers to electronically access documents and to complete field reports, QA/QC inspections, worklists, punchlists, update the BIM and many other critical field activities. Vela’s customers routinely save 5-10 hours per week per user, accelerate project delivery by two days per month, capture the true Cost of Quality™ and reduce litigation risk through standardized documentation. Construction happens in the field - Automate it.™