



CUTTING SOME TIES WITH THE PAST

After 35-Plus Years, Gerald D. Bowman Contractors, Inc. Finds Liberation in Changes Brought by Stringless Technology *By Larry Trojak*

Conducted properly, any business can be a positive, evolving, continually learning experience. Resisting the call for improvement can often lead to failure; heeding it can help ensure success and growth. No one knows that better than Jerry Bowman who, after more than three decades in business – and sensing impending change within the industry – chose to dramatically upgrade his paving process. The addition of a stringless, millimeter-grade GPS solution from Topcon Positioning Systems to his existing stringline machines opened his eyes to a world of new possibilities. Not only has it freed his operation from the metaphoric shackles of stringline and its man-hour-intensive tasks, but it has also reduced his reliance on the schedules of others, a dependence that has cost him productivity in the past.

First Time's a Charm

For most of us, our earliest jobs were little more than a way to make spending money, to assert our independent nature and to serve as steppingstones into the adult world. For

Bowman, it was a different feeling entirely. For him, the curb and gutter business grabbed hold at an early age and literally never let go.

“When I was a teenager, a guy from our neighborhood went into the curbing business,” he said. “Because he also rented space from my dad to store his paving machine, I found out that he needed help and, even though I knew nothing about curb and gutter, I went to work for him. I really took to it and stayed with him for a number of years.”

During that time, Bowman learned the paving business but, more importantly, saw the opportunity there was for curb and gutter work in and around the north-central Maryland area and beyond. In 1986, with that as a basis and his sister, Kim Driver, as a co-partner, Gerald D. Bowman Contractors, Inc. was formed.

Unexpected Growth

As is most often the case, Bowman's entry into the paving world was low-key and measured. Armed with a single Power Curber machine, he set out to make his mark on the Maryland paving scene.

“We started out small and continued that way for a number of years,” he said. “Then, when growth in the area took off, so too did the business. To meet the demand, we had to staff up and make additional equipment purchases. I never envisioned being a larger company – truth is, we grew without even trying.”

Today, Bowman runs three Power Curber paving machines and generally maintains a staff of about 50 people – not as huge as some, but admittedly bigger than he thought he would ever be.

Technology Calls

For the majority of its 35-year existence, Bowman Contractors has been content ensuring the best service, the finest quality product and the highest level of customer satisfaction. That is not to say, however, that they were blind to the changes taking place in the industry, particularly those regarding GPS-based paving.

“We've been a Power Curber customer from day one and a couple years ago they made us aware that they offered a stringless machine

that ran the Topcon Millimeter GPS system,” he said. “We'd been watching developments in that area for years but this really solidified things for us. When Power Curber demoed it at their facility and invited us down to see it run, Martin Languth, one of my superintendents, and I went down and it definitely got our attention. So, in 2019, working with Mike Ayres at the Topcon Solutions Store's Maryland branch, we purchased the 5700-D, which allows both stringline and stringless paving. It was a huge step for us to take but we felt we were ready.”

At the heart of that decision was a desire for improved efficiency and accuracy, both hallmarks of the Millimeter GPS paving solution from Topcon. Millimeter GPS provides Bowman's crew with all the benefits of GPS positioning technology, enhanced by a zone laser reference to improve the overall vertical accuracy of the curb machine.

“Up until then, the curb machines available wouldn't do anything our older machines couldn't do – we saw no need to change. By nature of providing great results without the need for stringline, the 5700-D with GPS changed all that,” said Bowman.



With a Little Help

With the new machine in hand, Bowman's team, aided by support staff from Topcon, began the process that would take them from initial doubt to self-assuredness.

"I can't say enough about them. They really helped us understand things," said Project Superintendent Sean McCane. "Dane Peters, a Topcon support specialist, worked with me and Chuck Anderson, a 20-year veteran operator for Jerry, giving us both a crash course to get where we needed to be. Chuck, who's been a paver operator all his life, was the logical choice when it came time to introduce GPS to our operation. He picked up on it very quickly and was training others not long afterward."

Shortly after the machine purchase, one of Bowman's customers had a small project and asked if the company wanted to try it out. They did and it worked well, but after that job, business wound down and the paver sat all winter. "When spring came around, Topcon, anticipating our hesitancy, sent Dane Peters and Mike Hoffman back out to give us a quick refresher course," said McCane. "That helped tremendously."

Support for the new solution was bolstered even further by a solid relationship with Lyle Ballou, the GPS expert for DXI Construction, one of their long-time customers.

"We actually talked to Lyle before making the purchase of the paver and he assured us that it was a perfect fit for our operation," said Bowman. "But since adding it, he's also been great for those times when we just need a quick question answered or something confirmed. He's been a great resource to have."

An Amazonian Project

Bowman's first "real" job could not have been more of an example of baptism by fire – an Amazon distribution center for which they poured thousands of feet of curb for roadway and perimeter. The real showcase for the Millimeter solution, however, was a series of islands in the facility's parking lot, according to McCane.

"We had a total of 76 islands, all generally in the 5 feet by 30 feet range, many with some challenging radius pours," he said. "It was all done using the Millimeter system and the results were incredible. There were rows of 12 and 13 islands and seeing how perfectly they lined up confirmed the accuracy of the solution. It was a sight to see, for sure."

That project, in addition to resulting in a highly-satisfied customer, afforded Bowman's team the confidence of knowing that, with the new stringless solution, no project was too big or too challenging for their capabilities.

Model Employee

While it would have been easy for Bowman to outsource the digital models that are at the heart of any GPS machine control operation, they instead got help from within. According to McCane, one of the people running Mid-Atlantic Supply, a Bowman-owned construction materials supply store, expressed an interest in the modeling phase of the paving work.

“Her name is Jody Le, and thanks again to help from Mike Hoffman, she and I learned to build them together,” he said. “Mike gave us a quick mini-seminar on what we needed to create an effective model and that got us going. Jody quickly got comfortable with the whole process and now, in addition to running the supply store, she’s our modeling expert.”

Having that capability was important to Bowman’s operation. Being able to create models in their own time frame, rather than waiting for an outsourced model to be ready, helps them set – and keep – tighter production schedules.

Choice Cuts

One of Bowman’s primary goals in choosing the stringless Millimeter GPS solution was to improve the efficiency of the paving operation. On a recent residential development called Chase Oaks, in Lewes, Delaware, that benefit – and others – was clearly on display. According to McCane, it all starts with man-hours.

“At Chase Oaks, we poured nearly a mile of curb and gutter, 169 feet additional of DelDOT-spec curb and 22 inlets,” he said. “In addition to the costly advance survey staking time and costs, it would have taken three guys four eight-hour days of setting and removing stringline. That’s 96 hours saved right there. By comparison, in just four hours, I can localize and get myself set up to pour the following day. And not only is it a definite time-saver, in my opinion, it actually puts out a nicer product. There are so many glitches that can impact a curb pour with stringline. That is all removed with GPS.”

Also impacted have been Bowman’s production rates which, at the Chase Oaks job, were regularly in the 100 to 150 yards per day range. That can be key when ensuring one’s place in the ready-mix supplier’s line, said McCane.

“If we are pouring slowly or encountering issues with stringline, the daily volumes go down and we’re no longer a priority for the supplier,” he said. “On the other hand, if I can ensure that we will consistently put down the volumes we are with the Millimeter GPS solution, we can stay at the top of their schedule. It can make a huge difference.”

Brace for Impact

With the nearby Atlantic Coast beaches as a draw, Jerry Bowman sees continued growth in the area and an equally consistent opportunity for work as new subdivisions spring up.

“This winter we will train a couple more people on the Millimeter GPS system so that, come spring, we have a full staff with a comfort level on the machine,” he said. “We’ve already confirmed that adding that stringless machine to our fleet was a great move. But, as we get more proficient with it, we continue seeing additional benefits. With it, the entire curb and gutter process has been streamlined, allowing us to move on to the next job. A smoother operation and an immediate impact on the bottom line – how much more of a difference can there be?”

