Within a two-year period, W.L. Harper Company from Hebron, Kentucky, an American Concrete Pavement Association member, will complete not one, but two slipform concrete pavement projects in Frankfort, Kentucky. Both projects are downtown near Kentucky’s Capitol and the Kentucky Transportation Cabinet (KYTC).

W.L. Harper Company completed the nearly $10 million Wilkinson Boulevard (Hwy. 127) project on time in late 2014. The second project, Highway 60 at 127 (Louisville Road), is scheduled to be completed in late 2015.

Wilkinson Boulevard, a 40-plus year old concrete pavement, was full of old utilities, from gas mains and fiber optics to deteriorating reinforced concrete pipe storm lines. Workers removed the old concrete pavement with a low-amplitude resonant breaker, so as not to damage the old utilities under the existing pavement. A Guntert & Zimmerman paver was used to complete the ten-inch thick pavement.

One critical innovative method used to minimize disruption and costs was a cured-in-place pipe liner for the old reinforced concrete pipe. In three months, more than 7,000 linear feet of cured-in-place lining was installed, saving a significant amount of time compared to a full replacement.

In the summer of 2014, the Kentucky Federal Highway Administration office, other KYTC employees, and the University of Kentucky Transportation Research Center attended a live slipform paving demonstration on Wilkinson Boulevard hosted by W.L. Harper Company and the Kentucky Concrete Pavement Association. The demonstration included experimental basket bracing developed by Jim Thomas of W.L. Harper Company. The University of Kentucky Transportation Center used a MIT-SCAN2-BT to evaluate experimental dowel and basket locations. A ground penetrating radar evaluated all other dowels in the 1.7 mile project.

Samantha Thomas, PE, project manager at W.L. Harper Company, said, “We enjoyed working on Wilkinson Boulevard, and continue to enjoy working with KYTC on Louisville Road. It is rewarding for us to see our pavement in use, knowing that it will last another 40-plus years.”

Close collaboration and communication were key not only on construction but also for efficient maintenance of traffic. After award of Wilkinson Boulevard, W.L. Harper Company worked with KYTC to improve the maintenance of traffic plan, which included two major intersections. As Thomas puts it, “We continue to strive for excellence, and hope that effective communication and scheduling will help us to complete our current project (Louisville Road) ahead of schedule, much like our Wilkinson Boulevard project.”

These two projects are a “one-two punch” for slipform concrete paving in Kentucky. The KYTC said, “We are completely pleased with the overall product and workmanship of the Wilkinson Boulevard project. This helped resolve a long-term maintenance issue for the Cabinet.”

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