

Owner's Perspective on ...

U.S. Route 52, Rivers Avenue, Charleston, South Carolina

Q & A with Sarah Hamrick, Project Manager, South Carolina Department of Transportation

Q: What do you see as the biggest maintenance task for maintaining roadways in your part of the country?

A: From a maintenance standpoint, managing stormwater drainage is probably the most challenging task we face. Geographically, Charleston, South Carolina is located on the Atlantic Coastal Plain, which is relatively flat. This in itself creates unique drainage challenges, since it can be difficult to capture and channel stormwater and keep free of debris with so little ground slope. Additionally, roads cannot be feasibly designed to handle intense storm events without significant cost and consequently, they frequently flood during heavy rains, storm surges and unusually high tides. Overall, it is a continual challenge to keep our drainage systems clean and running smoothly.

Q: What was your biggest challenge with the US Route 52 Rivers Ave construction?

A: Underground utilities created a major obstacle during the construction of US 52. Like the roadway itself, the utility infrastructure was beyond its useful service life. Undetected leaks were found in both the water and sewer systems, which led to severe washouts. There were also numerous culverts and crossline pipes that had settled over time, thereby reducing their effectiveness. All of these issues were discovered while trying to correct the original problem areas, which caused somewhat of a delay since the secondary hurdles had to be addressed before the initial problem could be solved.

Q: What are your thoughts on the full depth patching and diamond grinding repairs made? Do you feel the repairs will lend the same longevity that the road has experienced in the past?

A: Since this particular section of roadway was in such poor condition, full depth patching was absolutely necessary. The diamond grinding brought the road back to life, both from an aesthetic and a rideability standpoint. It is highly likely that the repairs made here will meet, if not exceed, the expected service life.

Q: Additional comments on the project?

A: This was a unique and complex project to have been involved with. Although we were faced with several difficult challenges, it was a fantastic learning experience and has given me a greater appreciation for the skills required to maintain our state's roadway system.