NCDOT Guilford and Randolph Shoulder Reconstruction

When the North Carolina DOT needed to reconstruct a failing asphalt shoulder along the heavily traveled Interstate in Guilford and Randolph Counties, they opted for roller compacted concrete (RCC).

This shoulder reconstruction marked the DOT’s first use of RCC and served as a pilot project.

The total project included 14 miles of 10 ft outside shoulder construction, which was expected to last at least 6 weeks, considering traffic restrictions, weather, and scope of the work. Andale completed the outside shoulder construction in 10 paving days, and the inside shoulder plus ramps added another 11 days for a total of 21 paving days.

This project was so successful that the DOT increased the original contract to install RCC on the 4 ft inside shoulders, as well as the removal and installation of an exit and entrance ramps. In all, the contractor placed 83,000 SY of 8 in. RCC pavement utilizing a specialized trowel, which created a smooth, consistent, and durable surface. In fact, no corrective actions were required on any of the pavement.