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PROMOTION ASSOCIATION

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PROMOTION SPOTLIGHT | 2019

Prominent Private University in Durham, NC Reconstructs Its Parking Lots Using Full-Depth Reclamation with Cement (FDR)

1 Prior to reconstruction with FDR, the parking lot's pavement was in an advanced state of decay.

2 Deterioration was widespread, making this site a perfect candidate for FDR. When the need for patching exceeds 15% - 20% of the total area, FDR is often cheaper in initial cost as well as long-term cost.

3 Ruston Paving's thoughtful staging and careful construction allowed them to work in close proximity to parked vehicles with minimal disruption.

Parking lot repairs are a necessary part of most any large institution's facilities maintenance program. A prominent private university in Durham, NC was bedeviled with parking lot deterioration. However, to eliminate their blues over poor pavement, facility managers have chosen Full-Depth Reclamation with Cement (FDR) to achieve a durable solution.

Parking Lots Deteriorate from Traffic and Exposure

Like all campuses, the day-to-day operations at this busy university have taken a toll on its roads and parking facilities. Limited maintenance funds have to be shared among many infrastructure needs and parking lot maintenance is not exactly glamorous. Consequently, parking lots here, as elsewhere, have been functioning for far too many years without full repairs.

In recent years, the decision-makers at this busy university have found a sustainable solution in FDR with Cement. They can economically recycle their existing pavements, thus utilizing the materials that they already own and have paid to transport. By rebuilding the pavements in place, they save hauling in and out and are able to build a better and longer-lasting pavement with minimal disruption.

Project Staging Minimizes Disruption

Ruston Paving's Triangle Region North Carolina Division, also located in Durham, has been working with the region's many schools, colleges, and universities to improve their facilities. In this case, parking lots in need of repair were divided into small, easily manageable segments. Then, FDR with Cement was used to reconstruct each segment with very little inconvenience to the students and faculty. Since FDR with Cement is a rapid process and the primary emphasis was on structuring projects to lessen interference for the parking lot users, it proved to be a perfect fit.

Pavement and Soils Specialist Tim McConnell with Ruston Paving, said, "We make every effort to work with customers and have been successful at causing little, if any disruption. Because we are local, we can economically do small segments and only affect about 15% of a parking facility at any given time. We aim to please all our customers by working within their time and use restrictions."

In July 2018, Ruston began work on a large parking lot near the center of campus. The large lot was divided into six segments, each small enough that work could be accomplished in a 4-6 hour timeframe. Work on the FDR started early each day with reclamation work being complete before the afternoon rush. The existing pavement was pulverized and mixed to a depth of 10 inches with a controlled rate of cement, supplied by Argos USA, designed to achieve an unconfined compressive strength between 300 and 450 psi at 7 days. The reconstructed base was then overlaid with a single 2-inch lift of asphalt surface within three days and promptly returned to service. Repaving with asphalt can proceed as early as the next morning.

Ruston Paving's North Carolina Regional Manager Mark Rogers, stated, "We have created a good working relationship with our customers and they know what to expect when we move to the site. With all of

4 Modern reclaiming equipment is highly maneuverable, so working around existing curb and gutter, as well as obstructions such as drop inlets, manholes, and bollards is not a problem. Here, the existing pavement has been pulverized and the reclaimer is mixing a carefully controlled, predetermined amount of cement with the pulverized material.

our customers, we try to provide them with a quality, high-value product. Full-Depth Reclamation with Cement surfaced with a lift of asphalt delivers that."

Ruston's quality product can be seen at the many parking facilities that they have reclaimed in the Research Triangle area of North Carolina, as well as other sites throughout North Carolina.

FDR with Cement is the Long-Lasting Solution

All schools strive for excellence in academics and the quality of their facilities. These parking lots, inexpensively reconstructed with FDR, should embody excellence by providing decades of maintenance-free performance thanks to the efforts of **Ruston Paving** and **Full-Depth Reclamation with Cement.**

Projects of all sizes, from parking lots to scenic highways to crowded interstates can be made ready for future traffic in a rapid, economical, and sustainable manner with cement. If you have distressed pavements needing repair, FDR with Cement should be on your list of paving options. You can find the Southeast Cement Promotion Association's representative in your area by visiting www.secement.org. Our staff can demonstrate how the entire range of cement-based paving solutions can work for you.

5 The area has been rolled with a padfoot roller to achieve deep compaction. Ruston's precision cement spreader is visible in the background.

7 The bollards shown in photos 4 and 5 were maintained and back in use in the finished project.

6 Facing the same direction as photo 3, the completed pavement is flush with the preexisting curb-and-gutter and should be trouble-free for years to come.

8 Drainage structures in the pavement, such as shown here, and other obstructions can be handled in the FDR process.

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