



**ERGON**

Asphalt & Emulsions

SUCCESS STORY

---

**Alabama DOT Fills Ruts,  
Saves \$2.3 Million with  
Micro Surfacing**



## CHALLENGE

Fill ruts, level roadway profile and enhance durability

## SOLUTION

Micro surfacing



### LOCATION

U.S. 82 in Chilton County, Alabama



### DISTRESS

Rutting and oxidation



### TRAFFIC

4,807 ADT; 14% trucks; 52% passenger vehicles



### AGENCY

Alabama Department of Transportation – Tuscaloosa Division



### CONTRACTOR

Whitaker Contracting Corp



### SUPPLIERS

Ergon Asphalt & Emulsions – CQS-1HP; Madison Materials - Aggregate

### Background

A section of U.S. 82 in Chilton County was oxidized and experiencing rutting due to heavy truck traffic constantly braking on hills prevalent along the highway. The Alabama Department of Transportation (ALDOT) needed a solution that would fill the ruts, provide a tougher wearing course and extend the service life of the roadway.

### Solution

Based on results from a successful 2019 project on another section of U.S. 82, the ALDOT – Tuscaloosa Division determined micro surfacing was the best choice for addressing the distresses along U.S. 82 in Chilton County.

In 2019, the ALDOT – Montgomery Division performed an emergency rut fill on a section of U.S. 82. The success of this project caught the attention of the Tuscaloosa Division. Lyndi Blackburn, P.E., ALDOT's Assistant Region Engineer, West Central Region, consulted with Ergon Asphalt & Emulsions' (Ergon A&E) Matt Jeffers about using the same method for U.S. 82 in Chilton County.

Following Jeffers' review of the section of U.S. 82 and his recommendation to move forward with micro surfacing to address the issues, Blackburn determined the treatment would be most suitable and cost effective. In addition to filling ruts,

additional lifts of micro surfacing would increase surface friction and also provide a smoother and more durable riding surface able to withstand repeated heavy truck traffic, including log trucks traveling to and from two lumber mills.

In the past, mill-and-fill was ALDOT's go-to treatment for rut filling. While an effective treatment, mill-and-fill is not always the most cost effective for agencies. By utilizing micro surfacing, ALDOT was able to save millions, allowing them to refurbish a well-used rest area adjacent to the project.

### Application Highlights


Whitaker Contracting Corp began treating U.S. 82 on June 27, 2022, and the project was completed the week of August 8, 2022. Ruts were filled with a mixture of CQS-1HP micro surfacing emulsion supplied by Ergon A&E and Type III aggregate, applied at 22 lbs/sy. Because ruts were greater than a half inch, they were filled with a continuous paver using a specialized rut-filling spreader box. *Note that ruts less than a half inch can be filled with a continuous paver using a standard spreader box.*

Following the rut fill application, micro surfacing was applied in two lifts using the CQS-1HP and Type II aggregate, totaling 38 lbs/sy. The first lift was applied to level the profile of the roadway and the second would serve as a surface course for improved durability, safety and enhanced friction.

### Results

ALDOT has been pleased with the initial performance of the 2022 project. They plan to continue rut filling with micro surfacing along sections of U.S. 82 as necessary, with one project already in the works.





**“Micro surfacing saved us approximately \$2.3 million and allowed us to upgrade the parking in a rest area. We expect to get at least eight or more years of service from this project.”**

**LYNDI BLACKBURN, P.E.**

The 2019 and 2022 projects have put micro surfacing on the map as a cost-effective rut fill solution for Alabama highways while proving the versatility of preservation and maintenance treatments. The ALDOT – Tuscaloosa Area earned national recognition for their project, receiving the Asphalt Emulsion Manufacturers Association’s 2023 Past Presidents’ Award for Emulsion Excellence.

---

If you’re interested in finding out how you can apply award-winning micro surfacing solutions to improve the performance of your roadways, contact your local Ergon A&E salesperson today at [ergonasphalt.com/locations](https://ergonasphalt.com/locations).

**ERGON**<sup>®</sup>  
Asphalt & Emulsions