



ERGON

Asphalt & Emulsions

SUCCESS STORY

Highly Modified Micro Surfacing Extends Service Life, Increases Friction on Alabama I-59



SCAN FOR
MORE ROADWAY
SUCCESS STORIES.

CHALLENGE

Prevent raveling, restore surface friction and extend service life.

SOLUTION

Highly modified eFlex premium micro surfacing application.



LOCATION

I-59;
Mile Markers
19-21



DISTRESS

Oxidation,
raveling, low-
friction surface



TRAFFIC

Interstate
(Principal
Arterial)



AGENCY

Alabama
Department of
Transportation



CONTRACTOR

Whitaker
Contracting



SUPPLIER

Ergon Asphalt &
Emulsions
(eFlex premium
micro surfacing);
Whitaker
(aggregate)

BACKGROUND: Safety is a big part of the Alabama Department of Transportation's (ALDOT) pavement management program. In recent years, ALDOT has applied Open-Graded Friction Courses (OGFCs) as a safety layer for high-volume roadways. OGFCs provide significant surface friction and serve as a porous pavement layer that allows water to drain to the sides of a roadway instead of collecting on the surface. Such benefits make OGFCs safe for high-traffic, high-speed roadways, especially during rain events where hydroplaning is a high probability.

Although these treatments help make roads safer, ALDOT found that OGFCs are highly susceptible to raveling, varying in durability from placement to placement and resulting in the need for resurfacing every 5-7 years. With OGFCs being ALDOT's most expensive solution, they needed a cost-effective, predictable alternative that would prevent raveling, improve surface friction and safety, and extend service life.

SOLUTION: ALDOT decided to test highly modified micro surfacing as a potential solution, applying the treatment on I-59 for the first time in 2017 at a fraction of the cost of an OGFC application. They have been impressed with the results thus far and are looking to expand the use of the treatment on more interstate sections moving forward.

Contact a local salesperson to find out if eFlex is the right solution to help improve your road's performance for the long haul.

CHOOSING THE RIGHT TREATMENT – TRIAL RUN

In 2017, ALDOT decided to test highly modified micro surfacing as part of their I-59 maintenance efforts. The treatment was applied along Mile Markers 19-21. Although highly modified micro surfacing had been applied on highways and in rest areas within Alabama, the 2017 project was the first on an Alabama interstate. Ergon Asphalt & Emulsions supplied eFlex premium micro surfacing emulsion for this project.

ABOUT EFLEX PREMIUM MICRO SURFACING

eFlex is a highly modified micro surfacing emulsion designed to address oxidation, prevent further raveling of the OGFC and provide a continual high-friction surface, enhancing road safety. Its enhanced polymer modification allows for a service life extension of 7-9 years at minimum. While an eFlex treatment can be applied anywhere conventional micro surfacing is applied, it is more durable when applied on high-volume roadways, like I-59, than its conventional counterpart.

APPLICATION HIGHLIGHTS

In August 2017, Whitaker Contracting applied the highly modified micro surfacing treatment in two lifts. For the first lift, the treatment was applied at 22 pounds per square yard utilizing eFlex and Type III aggregate. For the second lift, micro surfacing was applied at 23 pounds per square yard utilizing eFlex and Type III aggregate. Traffic was returned to each treated section within an hour after the application.

To date, the eFlex-treated section of I-59 along Mile Markers 19-21 is holding up well. ALDOT believes they will receive at least 10 years of additional service life out of the treatment. Results thus far have led to more widespread use of highly modified micro surfacing on Alabama interstates, highways and rest areas.

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