



Onyx[®]
**BACKED
BY SCIENCE,
PROVEN IN
THE FIELD**



 **Ergon Asphalt
& Emulsions, Inc.**

11612 RM 2244
Building 1, Suite 250
Austin, Texas 78738

OFFICE: (512) 469-9292
FAX: (512) 469-0391

Onyx[®]

FRictional Mastic Surface Treatment

Engineered for high-speed pavement maintenance

 **Ergon Asphalt
& Emulsions, Inc.**

ergonasphalt.com/onyx

PAVING THE ROAD TO INNOVATION

Why Onyx?

Onyx frictional mastic surface treatment combines the durability you want from a pavement maintenance application with the frictional characteristics achieved from improving micro texture on the pavement surface.

Onyx is a mixture of asphalt emulsion, increased levels of angular fine aggregates, polymers and catalysts. Onyx is designed to protect your investment, minimize future maintenance treatments and get traffic back on your pavement more quickly.



Speed to Open

Onyx frictional mastic surface treatment has been engineered to develop early strength. Using Onyx minimizes the often unseen cost of downtime with predictable dry times and faster application resulting in rapid return to traffic.

Engineered Toughness

Onyx is a central plant-manufactured technology that is applied without dilution. This manufacturing method allows for increased quality control and quality assurance. Additionally, Onyx has significantly higher loadings of unique polymers and catalysts that deliver the long-term performance you demand.

Onyx is formulated to maximize your asphalt's durability through permeability, friction and color. Despite containing higher aggregate loadings, Onyx consistently achieves results superior to the competition in the Wet Track Abrasion Test.

Friction

Onyx has been designed with an increased level of high-quality fine aggregate material. The design procedure relies on industry-standard testing to provide assurance in the friction characteristics of Onyx.

ONYX: IMPROVING ROADWAY PERFORMANCE LONG TERM CASE STUDY PROFILES

PROJECT FACTS

Pebble Creek Subdivision
College Station, Texas

Harbour Town Court & Commonwealth Court

Road Owner
City of College Station, Texas

Scope of Project

- Two subdivision streets with cul-de-sac
- Approximately 6000 yd²

Material
Onyx Frictional Mastic Surface Treatment

Equipment Used
FD-3000 Distributor



The City of College Station (COCS) has many neighborhoods with pavements 10 years or older. A previous attempt to address the ongoing degradation of these older streets (primarily through crack filling) had resulted in a "graffiti" appearance and subsequent complaints from residents. Onyx frictional mastic surface treatment seemed to be a perfect candidate to correct the issues presented. Ingevity approached the COCS with Onyx as a solution due to its sealing and aesthetic qualities.



Following approval by COCS, Onyx was applied to Harbour Town Court and Commonwealth Court. Upon completion of the Onyx application, the "graffiti" look to the roadway was gone, and several residents commented on how good the product looked on the road. The COCS public works department was also pleased with the finished roadways. As a result, COCS is preparing to use Onyx on one of their main roadways in the city and looking to budget Onyx frictional mastic surface treatment for more of their roadways in the near future.

PROJECT FACTS

Treasure Island Subdivision
Guadalupe County, Texas

Road Owner
Guadalupe County, Texas

Scope of Project
Seven subdivision streets with cul-de-sac

Material
Onyx Frictional Mastic Surface Treatment

Equipment Used
FD-3000 Distributor



Roads in the Treasure Island subdivision located in Guadalupe County, Texas, began to show signs of cracking and, in some places, base failure. The county needed not only to repair these roadways but also find a way to extend their life cycles.

After being introduced to the product, the county engineer decided Onyx frictional mastic surface treatment would provide the robust wearing course needed to enhance the overall performance and appearance of these roads for the long term.

Prior to the Onyx application, structural issues with these roads had to be addressed. Crack sealing was applied to appropriate areas. And in the cul-de-sacs, where previous hot mix asphalt and chip seal had been pushed up over a



period of time due to heavy utility traffic, the distressed sections were cut out, replaced with new hot mix and compacted.

Once these issues were repaired, the contractor, Clark Construction, applied Onyx to each of the seven roads within the Treasure Island subdivision at 0.25 gallons per square yard, one day at a time, one road per day. The cure time per pass was 45 minutes to an hour for each of the treated roads, which were quickly reopened to traffic soon after the Onyx application.

One year later, Onyx is performing well. Pleased with the outcome, the county is planning to apply this treatment in more places throughout their network.