



Superior Road Solutions for over 75 years

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New Driveway Sealer Options for 2011

Special points of interest:

- TEAM—March 16-18
- APWA Mid America 2011
May 18—20

In 2011, Missouri Petroleum will be modifying our line of Endura Seal driveway sealers. The sealer will be manufactured in three different formulations so that we can provide our customers with a variety of pavement treatment options:

Endura Seal AB, our asphalt based sealer, is a low cost surface treatment with a proven performance record.

Endura Seal TR, blends modified asphalt, tire rubber and fillers to produce a high quality surface seal.

Endura Seal GS uses Gilsonite, a 99.85% pure asphalt ore, to form a surface sealer with a rich black appearance and superior wearing capabilities.

Endura Seal GS will slow the infiltration of oils and other petroleum based products into the pavement. It has superior bonding capabilities to both asphalt and coal tar surfaced pavements.

Our new Endura Seal products do not contain coal tar, are environmentally sound and safe for your workers to apply. Since Endura Seal is asphalt based, it has superior binding capabilities to asphalt surfaces. Please contact Mike Hartman at 314-378-3915 or at mhartman@missouripetroleum.com to obtain additional information on our driveway sealers.



Todd Bruening of Parking Lot Maintenance applied Endura Seal to this St. Louis County Library lot in Ladue, Missouri. He advised that the Endura Seal appeared to be blacker and thicker in consistency and had much better coverage than the product he is currently using.

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City of Clayton's Wydown Boulevard is awarded the American Planning Association's "Top 10 Great Streets in the United States" Award

The City of Clayton was recognized by the American Planning Association for having one of the Top 10 Great Streets in 2010. The Linear Park Concept, one of many aspects of the project, involved transforming

the wide median of Wydown Boulevard into a scenic park with a walking and jogging trail. GrassPave2, manufactured by Invisible Structures, was an integral part of the improvement design. The footpath, con-

structed by three different contractors over a four year period, extends from Hanley Road to Clayton's east city limits, approximately 400 feet west of

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City of Clayton's Wydown Boulevard (Cont.)

Skinker Boulevard. Total Length of the improvement project was one mile, which is the total length of Wydown Boulevard.

If you would like more information on Grasspave2 systems, please contact Andy Carrigan at 314-378-3906 or at AndyC@missouripetroleum.com.



Grasspave2 was installed over a prepared sub-grade with a drainable aggregate base.



Soil and sod were placed over the Grasspave2 grid.

Gilsonite Rejuvenator is Introduced to the St. Louis Region

There is a new asphalt pavement rejuvenator in town! GSB-88 Emulsified Sealer/Rejuvenator reintroduces oils and resins that have been lost through oxidation and normal use of asphalt pavements. GSB-88, manufactured by Asphalt Systems, Inc., contains Gilsonite, a 99.85% pure asphalt ore with a rich black appearance. GSB-88 is applied through a spray distributor and cures in just a few hours. An application of sand is optional since GSB-88 has minimal effect on the skid resistance of the treated surface compared to other pavement rejuvenators.

The product appears to be very versatile. This summer, when the City of Shrewsbury encountered some raveling and bleeding on a two year old chip seal, GSB-88 was applied to the pavement's surface. The Gilsonite capped the surface and eliminated aggregate loss and bleeding.

"We were excited with the results achieved in Shrewsbury so we thought we would establish a couple of test sections in the region" cited Pat Palmer, Missouri Petroleum's Government Service Representative. Streets managers in the cities of St. Louis, Sunset Hills and St. Louis County offered to participate in the demonstration project. A test section was also installed

near Spirit of St. Louis Airport. GSB-88 was applied (at rates between 0.10 and 0.15 gallons per square yard) to streets with a variety of pavement conditions. The treated pavement sections will be monitored to determine the effectiveness of the Gilsonite system.

For more information on GSB-88, contact Pat Palmer at 314-330-8633 or at ppalmer@lionmark.com.

This pavement was sealed in two phases to allow partial access into the subdivision. Streets cured in about four hours.



GSB-88 is applied to a recently constructed chip seal.

Meet the Staff

This edition features our field supervisors; the individuals responsible for construction services:

Santo Greco—now manages the Novachip crew. He has been employed with Missouri Petroleum for 20 years and has worked on various crews on his way to achieving foreman status. He and his wife Lydia, have two children (Michael and Rachael) and two grandsons (Drew and Reese).



Andy Bolm—was employed by Missouri Petroleum in October of 1979. Since that time he has held various positions on the chipseal and asphalt underseal crews and now manages both crews. Andy, his wife Christy, and their daughter Krystal live in St. Peters, Missouri.

Jason Ingram—has worked for Missouri Petroleum since 1994. He worked in various capacities on the chipseal, underseal and microseal crews before being promoted to manager of the slurry/microseal crews. Jason and his wife Cassie have been married for 15 years and have four children (Colton, Ashley, Kiley and Jason Cole). Jason enjoys watching and playing golf and basketball. He is an avid Cardinal Baseball fan and also coaches his kids' basketball teams.



Pavement Cracks and Sealants

Why should you seal cracks in your pavements?

Several factors contribute to deterioration of pavement, one of the most significant being subgrade deterioration. As clay based soils take in water, they expand, and as they dry out, they shrink. Soils with high moisture contents also expand when they freeze and contract when they thaw. This cyclic movement of the base is detrimental to the pavement. Filling the joints and cracks in pavement can significantly reduce the amount of water in the subgrade. Here are a few things to consider when crack sealing streets:

Material Selection

Hot applied, polymer-modified asphalt crack sealants are highly effective and moderately priced. This material will last up to seven years when properly applied. The material is generally melted and applied through a double jacketed melting kettle that uses heat transfer oil. The temperature of the material must be closely regulated. Applying the crack sealant at low temperatures introduces workability issues. Applying the sealant at excessively high temperatures can burn the polymers in the material destroying the elastic properties of the product.

Cold applied rubberized asphalt emulsions are a less costly material option

which will produce results specific to their formulations. Cold applied materials can be purchased in 5-gallon and 55-gallon containers and can be installed by hand.

Timing

As pavement expands in the summer and shrinks in the winter, the cracks and joints in the pavement shrink and expand. Joints and cracks should be sealed in the Fall, Winter and Spring when the crack/joint openings are at least 50% of their maximum size. Joints and cracks should also be sealed on streets that are scheduled for a surface treatment the following year.

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1620 Woodson Rd.
St. Louis, MO 63114
Phone: 314-219-7305
Fax: 314-991-9624

Henry Schmitt—Vice President
Mike Hartman—Territory Manager
Andy Carrigan—Geo Products Sales Manager
Pat Palmer—Government Services Representative
Debbie DuBois—Sales Assistant

*Superior Road Solutions For
Over 70 Years*

We're on the web:

www.missouripetroleum.com

We've Launched our New Website

Join us at www.missouripetroleum.com for the latest company news, product information and trending stories in the asphalt emulsion industry. We welcome your comments.

May we contact you by email? If the answer is yes, please supply us with your email address. You may do so on our website under contacts.



Pavement Cracks and Sealants (cont)

Joint Preparation

Dirt and debris should be blown from cracks and joints prior to the filling operation. We also recommend the use of a hot air lance to ensure that the crack is completely dry during the application of the sealant. Many agencies require the use of a mechanical wire brush or router to clean the joint and re-establish a reservoir for the sealant. One should forego the routing operation on unstable asphalt pavement if an excessive amount of delaminating occurs during joint preparation. Also, a well-trained router operator is required to ensure that crack reservoirs are centered over the crack with minimal meandering. Excessively deep joints or cracks (depth/width ratio greater than 2 to 1) should be filled with backer rod. Never use sand as joint filler in concrete pavement. Incompressible materials, such as sand in joints, prohibits proper expansion of concrete pavement during the summer months and promotes a condition called "street creep". Incompressible materials also place additional pressure at joints in concrete pavement causing spalling-delamination.

Application

The temperature of the material should be maintained within the range specified by the sealant manufacturer when it is applied. It should be applied when there is no forecast of rain. Material can either be placed in routed reservoirs or "banded" over the crack/joint. Material in reservoirs should be slightly recessed and banded joints should be squeegeed to form a band that extends 1—2 inches on each side of the crack/joint.

Many pavement managers believe that crack and joint sealing is the most important aspect of pavement maintenance. It is your first defense against water infiltration into the pavement's base. It is also one of the least expensive maintenance treatments.

Did you know . . . There is a difference between adhesion failure and cohesion failure in crack sealants. Adhesion is the bond between the sealant and the crack or joint sidewall. Cohesion is the internal bond within the joint sealant material. Lack of adhesion is often associated with improper application procedures, where cohesion failures may be attributed to application or material issues.