



Preston Paving Mat Road Interlayer Solution



Innovative Geotextile saves time and money for a small town's main street paving project.

LOCATION:

Preston, Idaho

PRODUCT:

Mirafi MPM-30 Paving Mat High-Strength Geotextile

PROJECT PARTNERS:

*Owner and Consultant
Idaho Transportation Department*

*Contractor
Kilgore Companies / LeGrand Johnson
Construction Company (KC/LGJ)*

*Completion Date
September 2016*

Preston, Idaho, is a small town whose main street was in need of repaving. The owner, the Idaho Transportation Department (ITD), and its contractors were looking for an intelligent pavement solution with lasting results, but were cautious about using pavement interlayers.

Challenge

With several miles of paving to accomplish, “cooperative” material is understandably important for installation crews. Some interlayer material can undulate after being applied. This slows down work, which impacts project budget. The ITD needed to find a balance between budget (both for labour and materials) and improving the quality of their new paved road, to reduce cracking and other damage, and thus delay the need for future paving.

Solution

Mirafi's MPM Paving Mat is designed for use with high-temperature hot-mix asphalt, and can be recycled at the end of its use. By acting as a moisture barrier, it helps reduce reflective cracking to extend the life of the pavement. As this is Preston's main street, extending the life of the road means less construction impact on residents over time. For the ITD and its contractors, another crucial factor was its ease of installation. The paving mat rolls out using standard equipment, and unlike other pavement reinforcement geotextiles ITD contractors have used in the past, it remains wrinkle-free. Ease of use helps reduce overall project costs related to installation labor.

Preston Paving Mat Road Interlayer Solution

Installation

Although the paving mat remains wrinkle-free naturally, choosing the right equipment for installation is still a critical factor. The crew from KC/LGJ used a grizzly fabric roller, which incorporates brooms behind the roller bar to keep the material flat as it's applied.



Rainy and cold conditions required a change in tack coating to ensure the mats adhered to the road surface, otherwise, applying the mats proved to be one of the smoothest parts of the project. Nilex was on site to assist with this work. Four people were involved in the mat installation, ultimately using 69,000 square yards (approximately 58,000 m²).

Results

Designing with paving mats able to withstand hot-mix asphalt helped the ITD eliminate the need for a four-inch mill and repave. With technical and on-site support from Nilex, the client experienced success with an interlayer material that installed with no delays or issues.

The paving mats were installed with equipment standard to most paving contractor fleets, including front end loaders, pick up machines and belly dump trucks. Paving mats will reduce cracking in the pavement to extend its life and reduce the impacts on road users from otherwise more frequent repair cycles.

The Nilex Advantage

Nilex is committed to unearthing better results. Whether it's for a civil, resource or environmental project, we offer the latest engineered and technically-superior materials and techniques to save our customers time and money, minimize the need to move or remove earth, and reduce the need for granular materials.

With 40 years' experience, a long-standing commitment to the environment and highly qualified staff, Nilex delivers the products and technologies that give clients an economic advantage with environmental benefit.

