



EMC SQUARED® SYSTEM

ADVANCED BASE STABILIZATION
“THICKENS” EFFECTIVE PAVEMENT LAYER



Paving in progress on
EMC SQUARED® Stabilized Base Course
at the

 **Springs Preserve**

LAS VEGAS, NEVADA

SOIL STABILIZATION PRODUCTS COMPANY, INC.
Ph: (800)523-9992 or (209)383-3296, Fax: (209)383-7849, Email: info@sspc.com



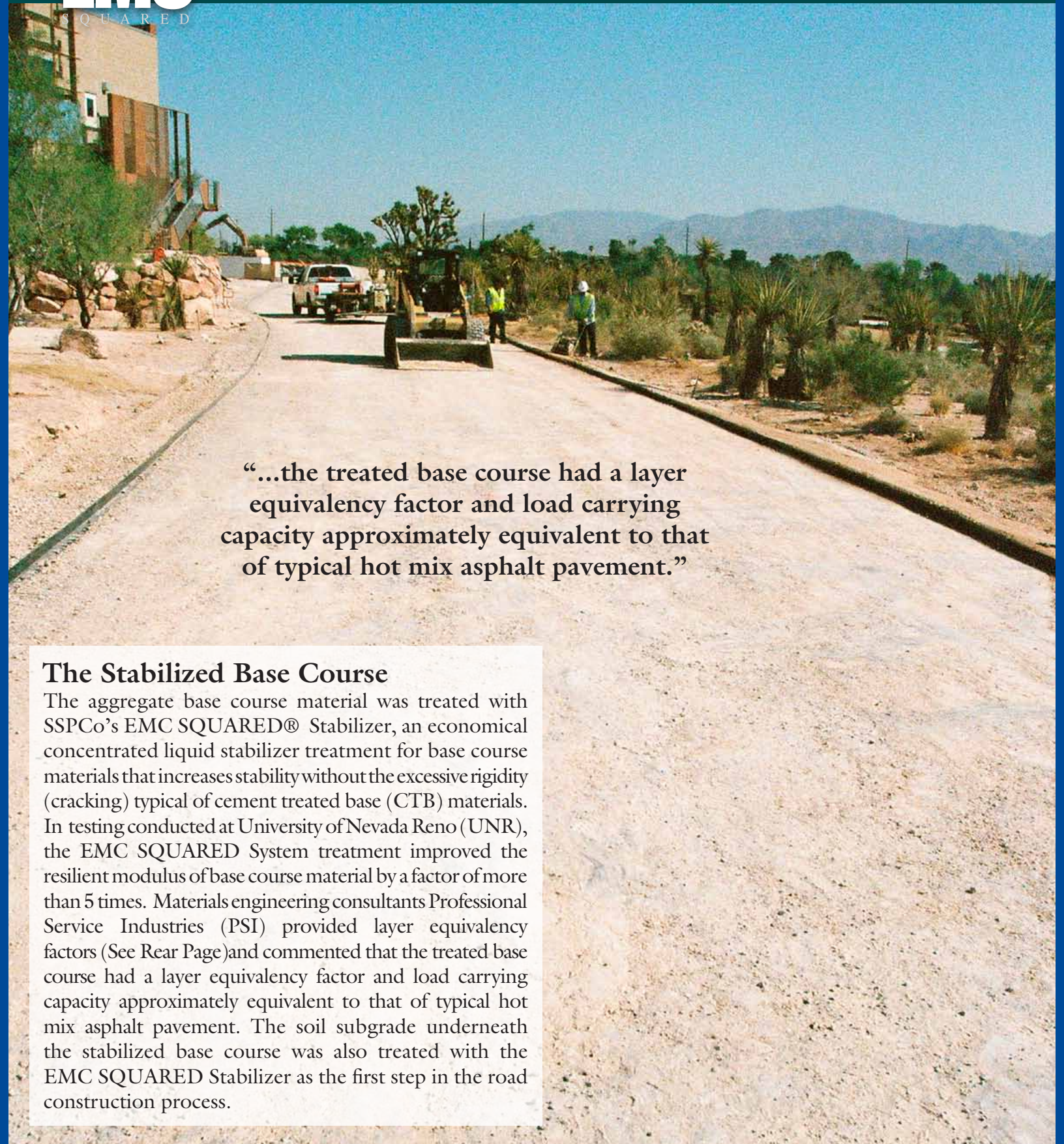
The SSPCo Globe and EMC SQUARED are registered trademarks of Soil Stabilization Products Company, Inc.
© 2011 Soil Stabilization Products Company, Inc. - All Rights Reserved



EMC SQUARED® SYSTEM

ADVANCED BASE STABILIZATION

“THICKENS” EFFECTIVE PAVEMENT LAYER

A wide-angle photograph of a construction site. In the foreground, a wide, light-colored gravel or aggregate base course is being laid out. Two workers in safety vests and hard hats are visible in the middle ground, one standing near a concrete curb and another further back. A white pickup truck is parked on the left side of the road. The background shows a desert landscape with various plants, including a large Joshua tree, and distant mountains under a clear blue sky.

“...the treated base course had a layer equivalency factor and load carrying capacity approximately equivalent to that of typical hot mix asphalt pavement.”

The Stabilized Base Course

The aggregate base course material was treated with SSPCo's EMC SQUARED® Stabilizer, an economical concentrated liquid stabilizer treatment for base course materials that increases stability without the excessive rigidity (cracking) typical of cement treated base (CTB) materials. In testing conducted at University of Nevada Reno (UNR), the EMC SQUARED System treatment improved the resilient modulus of base course material by a factor of more than 5 times. Materials engineering consultants Professional Service Industries (PSI) provided layer equivalency factors (See Rear Page) and commented that the treated base course had a layer equivalency factor and load carrying capacity approximately equivalent to that of typical hot mix asphalt pavement. The soil subgrade underneath the stabilized base course was also treated with the EMC SQUARED Stabilizer as the first step in the road construction process.

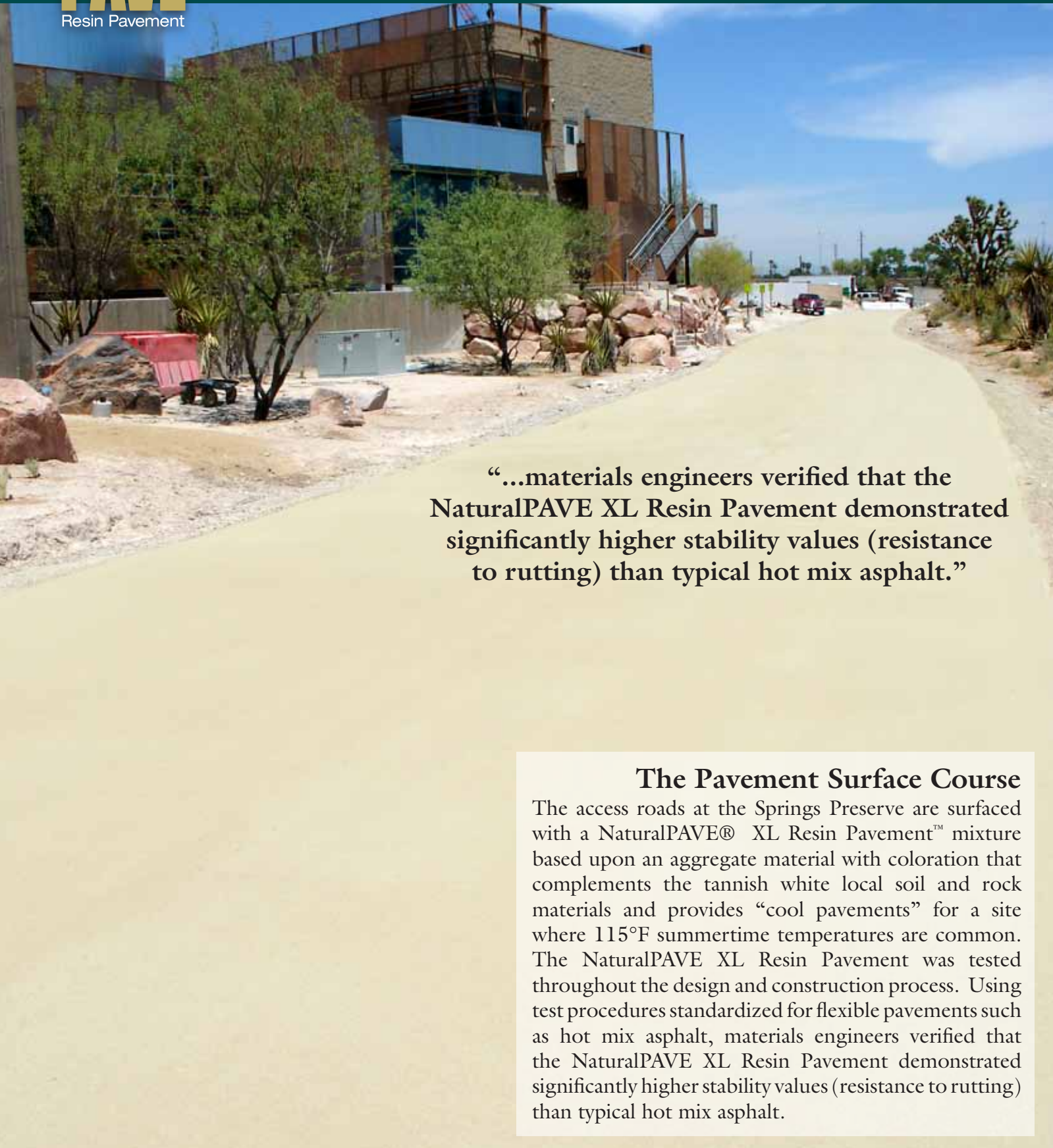




EMC SQUARED® SYSTEM

ADVANCED BASE STABILIZATION

“THICKENS” EFFECTIVE PAVEMENT LAYER



“...materials engineers verified that the NaturalPAVE XL Resin Pavement demonstrated significantly higher stability values (resistance to rutting) than typical hot mix asphalt.”

The Pavement Surface Course

The access roads at the Springs Preserve are surfaced with a NaturalPAVE® XL Resin Pavement™ mixture based upon an aggregate material with coloration that complements the tannish white local soil and rock materials and provides “cool pavements” for a site where 115°F summertime temperatures are common. The NaturalPAVE XL Resin Pavement was tested throughout the design and construction process. Using test procedures standardized for flexible pavements such as hot mix asphalt, materials engineers verified that the NaturalPAVE XL Resin Pavement demonstrated significantly higher stability values (resistance to rutting) than typical hot mix asphalt.





EMC SQUARED® SYSTEM

ADVANCED BASE STABILIZATION

“THICKENS” EFFECTIVE PAVEMENT LAYER

EMC SQUARED® Stabilized Base Course Prepared for paving

The Structural Section

Resilient Modulus testing evaluates the response of a pavement or base course material to dynamic loading. This test method is regarded by AASHTO (American Association of State Highway and Transportation Officials) as the primary factor in characterizing materials for highway pavement applications.

As indicated in the Resilient Modulus test results and the layer equivalency factor provided below for the aggregate base course treated with EMC SQUARED, the structural section on this project is more representative of “full depth asphalt,” rather than the typical flexible pavement layer on top of a weaker base course with distinctly different engineering characteristics. Given the low cost of the EMC SQUARED Stabilizer treatment, the pavement-like performance of the stabilized base provides a highly economical method of “thickening” the effective pavement layer.

Resilient Modulus Results and Layer Equivalency Factors

Sample ID	Average Resilient Modulus (psi)*	Layer Equivalency Factor**
Aggregate Base with EMC SQUARED	272,500	0.35***
Untreated Aggregate Base	51,000	0.10

*Resilient Modulus results reported by UNR

**Professional Service Industries, Inc.

*** Standard practice in Southern Nevada is to assign a layer coefficient of 0.35 for dense graded hot mix asphalt.

To learn more about Soil Stabilization Products Company and the EMC SQUARED System visit www.sspco.com

SOIL STABILIZATION PRODUCTS COMPANY, INC.

Ph: (800)523-9992 or (209)383-3296, Fax: (209)383-7849, Email: info@sspco.com



The SSPCo Globe and EMC SQUARED are registered trademarks of Soil Stabilization Products Company, Inc.
© 2011 Soil Stabilization Products Company, Inc. - All Rights Reserved