The following project was in collaboration with the Missouri Department of Transportation (MODOT) and was completed in 2014. Concrete Fiber Solutions’ CFS 150-5 Concrete Reinforcing Steel Fibers were used on this bridge deck project in order to provide durability, longevity, and to reduce maintenance costs.

For more information on CFS products please contact Mike McPhee directly atConcrete Fiber Solutions (704) 609.0020.
E-mail: mikem@concretesolutions.com
CFS IN THE FIELD

POPLAR STREET BRIDGE

PROJECT DESCRIPTION

The Missouri Department of Transportation (MODOT) was in need of restoring the west bound lanes of the Poplar Street Bridge. They were concerned with finding a product that would withstand heavy traffic wear and harsh weather elements, and subsequently, something that would extend the projected life of the bridge deck. Concrete supplier Kienstra Ready Mix engaged Concrete Fiber Solutions for both their expertise in product design and the inherent benefits of fiber technology.

FIBERS IN BRIDGES AND ROADS

The use of concrete fibers to reinforce bridges and roads is becoming more and more popular and setting a new standard for the industry. Traditional reinforcement methods like wire mesh and stand-alone rebar simply can’t measure up to the protection fibers provide – less shrinkage and cracking to the concrete means the pavement lasts longer with fewer maintenance costs along the way.

THE OUTCOME

The four-inch concrete overlay features 1,600 cubic yards of concrete, reinforced with 300,000 pounds of CFS type 5 steel fibers. This mix provided additional temperature and shrinkage reinforcement. Restoration on the east bound lanes is slated for the very near future.

“When I first saw this mix design, I was quite sure there was no way it would be a workable mix. But to my surprise, and I am happy to say, the mix was very workable and the steel fibers were evenly distributed throughout the entire pour. The CFS steel fibers absolutely worked and will be a big benefit in making this an extremely durable project.”

Scott Maberry
Vice President
Kienstra Illinois