CFS IN THE FIELD POPLAR STREET BRIDGE, ST. LOUIS – PHASE 2



In the fall of 2014, the Missouri Department of Transportation (MODOT) started the restoration process of the westbound lanes of the Poplar Street Bridge. The bridge was reinforced with four-inch concrete overlays at a dosage rate of 200 lbs. of CFS 150-5 Type V steel fibers per cubic yard. This mix not only provided additional temperature and shrinkage reinforcement, but it was an extremely cost-effective method for increasing the durability and longevity of the bridge.

Since bridge decks such as this one experience a tremendous amount of flexing and movement throughout their lifecycles, cracking is always a major challenge. Typically, that challenge is met by applying an additional overlay. Due to the very nature of steel fibers, cracking is virtually eliminated, so there was no need for an additional overlay. The only concern that MODOT engineers had was the potential of fibers appearing on the surface. The top picture is a close-up of the concrete after the vibratory truss screed passed over it. There are no fibers on the surface. The bottom right photo is a close-up of the paving after the tining process. Again, no fibers appear on the surface.





MODOT engineers and the general contractors are extremely pleased with the results and finishability and anticipate utilizing CFS fibers in future bridge decks.



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