

Case Study



State Road 22 Warm-Mix Asphalt Reconstruction

E&B Area Office: Kokomo

Customer: Indiana Department of Transportation

Designer: Indiana Department of Transportation



Project Overview and Implementation

Overview

This case study demonstrates the environmental benefits of Warm-Mix Asphalt (WMA). As part of Irving Materials, Inc., E&B Paving is committed to continually improving and expanding upon our heritage of responsible environmental stewardship – WMA is a key contributor to our environmental sustainability leadership position.

WMA represents a group of technologies that lowers the temperatures at which asphalt pavement is produced, placed and compacted. This temperature reduction offers several environmental sustainability benefits, including reduced fuel consumption, lower asphalt plant emissions, and the ability to incorporate higher percentages of recycled asphalt product into pavement mixes.

You can learn more about WMA by visiting www.ebpaving.com/site/solutions/warm_mix_asphalt/.

Implementation

State Road 22 is the main link between the city of Kokomo, Ind. and outlying communities to the west. This reconstruction project was a mill and overlay job with multiple deep strength patches and four pipe crossings. Notably, it required continual communication with the public to provide them with daily construction updates.

To start, our team constructed the pipe crossings due to the temporary road closures that would be required – we communicated these closures to the public through advance signage. By installing the cross pipes one at a time, our crews kept only small sections of the roadway closed for one to two days at a time.

Next, we completed the deep strength patching under traffic in a moving operation and only closed half of the road in small areas as we completed this work. Using WMA, we then paved the approaches simultaneously with the mainline, thus reducing traffic restrictions.

In total, E&B's Kokomo team placed 19,762 tons of warm-mix asphalt on SR 22 at a depth of 1.5". By using WMA on this project, we reduced fuel consumption because the mix ran at lower temperatures. We maintained the mix's workability by planning a short haul to the jobsite from our local asphalt plant.

Working closely with the project owner, the Indiana Department of Transportation, our public communications effort minimized traffic disruptions and resulted in a smooth ride for motorists.

