

## EXPERIMENTAL PROJECTS WORK PLAN

### KWIK BOND PPC 1121 POLYESTER POLYMER CONCRETE (PPC) OVERLAY

**Location:** Interstate 90/Stillwater County /Billings District: Three  
Decks Selected: (100090391+00402) SEP COUNTY  
ROAD, (100090400+03661) BERRY CREEK,  
(100090400+03662) BERRY CREEK

**Project Name:** Br Deck Rehab/Repair 11

**Project Number:** BH STWD (043) - CN 6837000

**Experimental Project:** MT-13-05

**Type of Project:** Bridge Deck Rehabilitation

**Principal Investigator:** Craig Abernathy: Experimental Project Manager (ExPM)

**Technical Contact:** Jeff Olsen, Bridge Bureau; Billings District

#### Description

This project is a bridge deck rehabilitation system using an engineered composite polyester polymer concrete overlay system that can rehabilitate ride defects; seal out moisture, oxygen and chloride ions from permeating into the deck and return traffic in two hours (based on thickness of overlay) at temperatures down to 40°F.

#### Experimental Design

Apply Kwik Bond 1121 Polyester Polymer Concrete overlay on three (3) designated bridge decks for purpose of extending the life of the deck and restoring skid integrity. Overlay thickness will be on average of .75" (1.9cm). A High Molecular Weight Methacrylate (HMWM) sealer will be applied prior to the overlay application.

## **Evaluation Procedures**

**Construction Documentation:** Will include information specific to the installation events of the HMWM sealer and PCC overlay on each deck.

**Post Documentation:** Will entail periodic site visits/inspections of PCC overlays for inclusion in to the annual and final reports; in addition to include any maintenance activities associated with the overlays.

## **Evaluation Schedule**

Research will monitor and report on performance for a minimum period of five years annually, with every year up to \*ten years (informally). This is in accordance with the Department's "Experimental Project Procedures". Delivery of a construction/installation report, interim, annual or semi-annual reports is required as well as a final project report (responsibility of Research). A web page will be dedicated to display all reporting from the project.

2013:	Installation/Construction Report
2014-2017:	Semi-Annual Inspections/ Annual Evaluation Reports
2018:	Final Evaluation/Final Report

\*If considered the extra data collection and analysis will add value to the overall results of the project.