

EXPERIMENTAL PROJECTS WORK PLAN

POLYMER CONCRETE (PC) OVERLAY

LOCATION: Sweet Grass County – Billings District: Route 191 (P-45),
Approximate Reference Point 1; Yellowstone River Bridge

Project Name: Big Timber - North

Project Number: STPP 45-1(26)0

EXP Project Number: MT-14-05

Type of Project: Bridge Deck Rehabilitation

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

Technical Contact: Randy Boysen: Helena Construction

Note: Update - 06/2014

Research was informed in June of 2014 that this project was changed to a high friction surface treatment (HFST) using the Dayton Superior Unitex process.

Description

This project is a bridge deck rehabilitation method using an engineered 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 and appropriate temperature).

Experimental Design

Polymer Concrete (PC) overlay on designated bridge deck for purpose of extending the life of the deck and restoring skid integrity. Overlay thickness will be based on a two course application. The PPC will be selected by the contractor per submitted specifications based on contract No. 10314.

Evaluation Procedures

Construction Documentation: Will include pre-deck condition documentation and information specific to the installation events and phases of the HMWM sealer and

PPC overlay

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

The Department will submit to Research known costs associated with the applications of the experimental feature.

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.

2014:	Installation/Construction Report
2015-2018:	Semi-Annual Inspections/ Annual Evaluation Reports
2019:	Final Evaluation/Final Report

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

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