

EXPERIMENTAL PROJECT WORK PLAN

PORTLAND CEMENT CONCRETE PAVEMENT (PCCP) WITH DIAMOND GRIND TO ACCEPT PLANT MIX SEAL (PMS)

Location: Interstate 94, C000094, Dawson County, Glendive District:
Approximate Reference Point (RP) 210 to 218

Project Name: Glendive East & West (EB)

Project Number: IM 94-6(51)210

FHWA Project Number: MT 10-01

Project Type: This is a PCCP rehabilitation project which includes the
placement of plant mix seal (PMS) after diamond grinding

2008 AADT: 4810 (22% Trucks)

Principal Investigators: Kris Christensen, Research Project Manager
Craig Abernathy, Experimental Program Manager

Objective

Determine the effectiveness and durability of bond in applying a 16mm (.625") plant mix seal (PMS) to rehabilitated PCCP with a diamond grind. In addition the PMS has the potential to reduce the winter maintenance costs (labor and material) by approximately 80% as compared to PCCP.

Experimental Design

Designate 300 ft.(92m) test sections per mile (estimate 8) to document in detail all visual distress which may include but not limited to rut, debonding, cracking, stripping, etc. The entire length of the project will be generally inspected as well to report on any pronounced distress or anomalies. Research will also task the District to submit annual cost for winter maintenance for this project.

Evaluation Procedures

Research will document the construction project to record all practices of the PCCP rehabilitation prior to application of the PMS (dowel-retrofit, diamond grind, etc.). The PMS application will be documented with an emphasis to report on the practice and to determine if areas of placement conformed to proper application and to record those portions which may have not been placed correctly to delineate on site and as not to be included in the overall analysis.

Research will inspect/analyze the project at a minimum annually to document performance of the PMS (more if there is an incident with the project that requires formal reporting). All information pertaining to the performance of the PMS (including official documentation by district personnel, safety data, anecdotal, etc.) will be included in the annual and final reports. All project information generated will be posted at:

<http://www.mdt.mt.gov/research/projects/plantmix.shtml>

Evaluation Schedule

Research will monitor performance for a period of five years annually, with every year up to *ten years (informally/optional). 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). All products will be distributed internally to appropriate staff and posted to the Departments intra/internet site. A formal presentation of results will be made to applicable staff.

2010:	Installation	Research Installation/Construction Report
2011-2014:	Annual Evaluation	Annual Reports
2015:	Final Evaluation	Final Report-Formal Presentation of Research
*2016-2021:	Annual Evaluation	Annual Reports (Informal)