EXPERIMENTAL PROJECTS WORK PLAN

Location: Lookout Pass/Mineral County: Interstate 90 (I-90) – Reference Point 0.0-5.7

Project Name: Taft-West

Project Number: IM 90-1(215)0: UPN 8769000

Experimental Project No.: MT-14-08

Type of Project: Fog Seal on Chip Seal

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

Technical Contact: Jim Davies P.E.: Pavement Analysis Engineer

Description

The proposed project has been nominated to determine if the application of a fog seal over the top of a chip seal (FSCS) will extend the service life of the pavement treatment compared to that of a conventional chip seal (CS).

The area selected is a high mountain section of interstate with has historically extreme weather promulgating maintenance activities which has severely limited the effectiveness of past preventative maintenance treatments.

A special provision will be drafted to address application rate, materials, and timing restrictions for the fog seal, which will be detailed in the construction report.

Experimental Design

The Project will be located on Interstate 90 at the Montana/Idaho border starting at reference point (RP) 0.0 and ending approximately at the Taft exit, RP 5.7. Alternating sections of FSCS (test sections) and CS (as the control), are represented by the diagram on the last page of this document. Figure 1 represents an overview of the project.

Evaluation Procedures

Research will document the installation for best practice and any constructions concerns germane to the performance of the project test and control sections. Semi-annual inspections will report on seal integrity and any other measurable outcomes.
Additional site inspections may supplement the semi-annual visits based on need. Monitor and report on long-term performance.

**Construction Documentation:** Will include information specific to the installation events of the fog seal and conventional sections.

**Post Documentation:** Will entail semi-annual inspections of the seals durability based on visual distress.

**Evaluation Schedule**

Research will monitor performance for a minimum period of five years annually, with every year up to ten years (informally if project requires additional quantitative data). 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 with all project information is located at: [http://www.mdt.mt.gov/research/projects/seal_coat.shtml](http://www.mdt.mt.gov/research/projects/seal_coat.shtml)

2015: Installation/Construction Report  
2016-2019: Semi-Annual Inspections/ Annual Evaluation Reports  
2020: Final Evaluation/Final Report

Figure 1
PROPOSED EXPERIMENTAL LAYOUT FOR FOG SEAL/SEAL & COVER PROJECT: Taft West/IM 90-1(2150)

All values are approximate; Not to scale.

*Westbound Eastbound

Taft IM 90-1(2150)

Fog Seal over Chip Seal

Conventional Chip Seal

Fog Seal over Chip Seal

Conventional Chip Seal

Lookout Pass

RP-0 RP-0

RP-0 RP-0

RP-0 RP-0

RP-0 RP-0

RP-0 RP-0

RP-0 RP-0

RP-0 RP-0