

EXPERIMENTAL PROJECTS WORK PLAN

Base One for Aggregate Base Stabilization

Location:	Valley County/Glendive District: Nashua – MT 117
Project Name:	Milk River – North
Project Number:	STPP 17-1(10)11
Experimental Project:	MT-16-03
Type of Project:	Soil Stabilization
Principal Investigator:	Craig Abernathy: Experimental Project Manager (ExPM)
Technical Contact:	Jacquelyn Smith, P.E.; Consultant Design

Description

The project is located on State Primary Route 17 (MT 17) in Valley County, from the north end of the Milk River Bridge, RP 11.21, extending north 1.91 miles to a new proposed intersection of MT 117 and US2. The project includes major widening, improved geometrics, highway realignment, grade, gravel, plant mix, new culverts, lighting, pavement markings, MSE walls and a new overpass structure over the BNSF Railway. The project includes mill and overlay of the existing highway through the town of Nashua.

With this project, the Department has elected to test the **Team Lab (T15) Base One® Soil Stabilization** as an experimental feature in this project. The following link directs you to the products information page:

<HTTP://WWW.TEAMLAB.NET/PRODUCT?ID=BASE-ONE>

Experimental Design

The project will involve the incorporation of the Base One soil stabilizer in reclaimed surface sections of the project.

Proposed project limits:

MT 117:

- STA 584+67 to 618+31 – Reclaim existing pavement section in-place and stabilize top 6-inches of the reclaimed material with Base One.

- STA 618+31 to 641+65 – Incorporate Base One into top 4-inches of 0.95' thick new crushed aggregate course.

Existing MT 117:

- STA 100+16 to 119+77 – Incorporate Base One into 8-inches of new crushed aggregate course section. Reduced CAC section due to use of Base One.
- STA 119+77 to 158+05 – Reclaim existing pavement section in-place and stabilize top 4-inches of the reclaimed material with Base One.

Evaluation Procedures

Pre-inspection: Document general condition of dedicated sections.

Construction Documentation: The Research Section will document the construction methods, activities and equipment regarding the how the soil stabilizer was introduced to the base (currently specified by injection and blade incorporation) and to what extent; weather, and specification conformance etc. Once paving is complete the stabilized section will be marked in the field for location purposes.

Post Documentation: Will entail annual site visits/inspections of the section for visual documentation for inclusion into the annual and final reports; in addition to include any maintenance activities associated with the surface or base treatment during the analysis timeline.

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.

2017: Installation/Construction Report

2017-2020: Semi-Annual Inspections/ Annual Evaluation Reports

2021: Final Evaluation/Final Report

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

Project Location

Valley County-Glendive District: MT-17 (P-17/C000017) Approximate Location within Township

