



## Experimental Feature Work Plan August 2022

Experimental Feature:	Plant Mix Reinforcing Paving Fibers
Location:	Missoula District, Flathead County, City of Kalispell, US
	Hwy 93, RP 114.9 – 115.9
MDT Project Name:	Grandview Dr – Reserve Dr (Kal)
MDT Project Number:	NH 5-3(154)115[9862]
Experimental Project Number:	MT-22-02
Principle Investigator:	Chad DeAustin, Experimental Project Manager, (ExPM)
Technical Contact:	Oak Metcalfe, Materials Engineer

## Project Map



## **Project Description & Outline**

Reinforcing fibers for plant mix is a type of aramid (heat resistant) fiber that advertises increased strength and longevity of a roadway. These fibers are added to plant mix in the production phase and if done correctly will be uniformly mixed through the plant mix.

MDT has used fibers in plant mix a few times of the years with differing results. The purpose of this experimental feature is to compare this section of roadway with others that have been completed in the past while also analyzing how this attempt fairs in the delay of reflective cracking.

Per the special provision in the contract, MDT is looking for a dosage rate of 2.1 ounces of aramid fibers per ton of plant mix. There is also a requirement of having a technical representative from the manufacturer on site for the duration of the project. As well as a required automatic feeding system to feed the fibers into the asphalt production plant.

## **Evaluation Procedures & Schedule**

The measure of effectiveness (MOE) prevalent with this project will focus on:

- Construction practices (constructability, construction time, cost effectiveness, etc.),
- Reflective crack tracking against preconstruction locations,
- Ride and rut data evaluation.

In accordance with the Department's 'Experimental Project Procedures,' Research will monitor and report on performance for a minimum of five years annually. This includes delivery of a work plan, construction report, annual reports, and final project report.

2022: Installation/Construction Report
2023-2027: Annual Inspections/Evaluation Reports
2027: Final Evaluation Report/Project Conclusion

A web page will be dedicated to display all reporting from the project.