



Environmental Services
MONTANA DEPARTMENT OF TRANSPORTATION
Helena, Montana 59620

Memorandum

To: Lisa Hurley
Fiscal Programming Section Supervisor

From: Heidy Bruner, P.E.
Engineering Section Supervisor
Environmental Services Bureau

Date: April 13, 2016

Subject: Categorical Exclusion (c)(26)
STPS 263-1(30)11
Frenchtown - SE
Control Number: 8962000

The Environmental Services Bureau has reviewed the proposed project and concluded that it will not involve unusual circumstances as described under 23 CFR 771.117(b). As a result, the project qualifies as a Categorical Exclusion under the provisions of 23 CFR 771.117(c), part (26), which describes modernization of a highway by resurfacing, restoration, rehabilitation, reconstruction, adding shoulders, or adding auxiliary lanes (including parking, weaving, turning, and climbing lanes), if the action meets the constraints in paragraph (e) of this section. The proposed action also qualifies as a Categorical Exclusion under the provisions of ARM 18.2.261 (Sections 75-1-103 and 75-1-201, MCA).

This resurfacing/pavement preservation project involves a full width seal & cover followed by a full width fog seal and pavement markings. The project is located in Missoula County on Secondary 263 (Mullan Road) from RP 10.526 to RP 14.8.

electronic copies:

Ed Toavs	Missoula District Administrator
Shane Stack, P.E.	Missoula District Engineering Services Supervisor
Ben Nunnallee, P.E.	Missoula District Projects Engineer
Robert Stapley	Right-of-Way Bureau Chief
Suzy Price	Contract Plans Bureau Chief
Bill Squires, P.E.	Road Design Area Engineer
Lesly Tribelhorn, P.E.	Highways Engineer
Tom Martin, P.E.	Environmental Services Bureau Chief
Heidy Bruner, P.E.	Environmental Services Engineering Section Supervisor
Susan Kilcrease	Environmental Services Project Development Engineer
Tom Erving	Fiscal Programming Section
Montana Legislative Branch Environmental Quality Council	

copies:

Gene Kaufman	FHWA Operations Engineer
File	Environmental Services Bureau



Montana Department of Transportation

PO Box 201001

Helena, MT 59620-1001

Memorandum

To: Distribution

From: Lesly Tribelhorn, P.E.
Highways Engineer

Date: March 29, 2016

Subject: STPS 263-1(30)11
Frenchtown - SE
UPN 8962000
Work Type 183 – Resurfacing – Seal & Cover

Attached is the Preliminary Field Review Report/Scope of Work Report which was approved on _____.

We request that those on the distribution review this report and submit your concurrence within two weeks of the approval date.

Your comments and recommendations are also requested if you do not concur or concur subject to certain conditions. When all personnel on the distribution list have concurred, and the environmental documentation is approved, we will submit this report to the Preconstruction Engineer for approval.

I recommend approval:

Approved _____ Date _____

Distribution:

- | | |
|---|--|
| Ed Toavs, District Administrator | Tom Martin, Environmental Services Bureau Chief |
| Kent Barnes, Bridge Engineer | Lynn Zanto, Rail, Transit, & Planning Division Administrator |
| Lesly Tribelhorn, Highways Engineer | Kevin Christensen, Construction Engineer |
| Roy Peterson, Traffic and Safety Engineer | Matt Strizich, Materials Engineer |
| Robert Stapley, Right-of-Way Bureau Chief | Jon Swartz, Maintenance Division Administrator |

cc:

- | | |
|--|--|
| Nate Walters, EPS Project Manager, Missoula District | Bill Squires, District Road Design Area Engineer |
|--|--|

e-copies:

Located at the end of this document



Montana Department of Transportation

*PO Box 201001
Helena, MT 59620-1001*

Memorandum

To: Lesly Tribelhorn, P.E.
Highways Engineer

From: Ben Nunnallee, P.E.
Missoula District Projects Engineer

Date: March 29, 2016

Subject: STPS 263-1(30)11
Frenchtown - SE
UPN 8962000
Work Type 183 – Resurfacing – Seal & Cover

Please approve the attached Preliminary Field Review Report/Scope of Work Report.

Approved _____ Date _____
Lesly Tribelhorn, P.E.
Highways Engineer

The same report is also being distributed under a separate cover as a Scope of Work Report for comments and approval recommendations.

cc (w/attach.):
Damian Krings, Road Design Engineer

Preliminary Field Review/Scope of Work Report

STPS 263-1(30)11, Frenchtown - SE, UPN 8962000
EPS Project Manager: Nate Walters

Page 1 of 7

Introduction

An onsite field review was held on September 15, 2015. The following people attended:

- Ben Nunnallee – Missoula District Projects Engineer (Missoula)
- Nathaniel Walters – Missoula District Design Supervisor (Missoula)
- Mike Dodge – District Materials Supervisor (Missoula)
- Andy White – MDT Surfacing Design (Helena)
- Hunter Dow – Missoula District Road Design (Missoula)

Proposed Scope of Work

A seal & cover is proposed for this project followed by a fog seal. Replacement of pavement markings will also be included.

Purpose and Need

The purpose of this project is to preserve the pavement in order to extend the service life of the existing asphalt surfacing.

Project Location and Limits

This project is located in Missoula County west of Missoula on Secondary 263 (Mullan Road). It begins at Reference Post (RP) 10.526 at English As-Built station 216+28.20 (FAS 10-B(1)). The project extends westerly to RP 14.8 which is in Frenchtown at the I-90 Frenchtown Interchange at English As-Built F-line station 17+00.00 (I 90-2(35)85, 1972). The English As-Built stationing runs from north to south and the reference post numbering runs from south to north. The total project length is 4.2 miles.

This segment of road is located in:

- Township 14 N, Range 21 W, Sections 1, 2, 12, 13
- Township 15 N, Range 21 W, Sections 34, 35

S-263 is on the Secondary Highway System and is functionally classified as a Major Collector. See the attached location map.

Work Zone Safety and Mobility

At this time, Level 3 construction zone impacts are anticipated for this project as defined in the Work Zone Safety and Mobility (WZSM) guidance. The plans package will include a Transportation Management Plan (TMP) consisting of a Traffic Control Plan (TCP). A limited Public Information (PI) component to address public notification will also be included. These issues are discussed in more detail under the Traffic Control and Public Involvement sections.

Physical Characteristics

The road is located in level terrain. The roadside environment is primarily agricultural land with a few scattered residences. The project is in a rural environment except for the northern segment of the project which ends in Frenchtown where the residential development is somewhat denser than the rest of the project and there are also several commercial businesses in this area. The intersection with S-474 (Pulp Mill Road) occurs at RP 10.57. The inactive pulp mill industrial facility (Smurfit Stone Container) is located at this intersection.

There is one creek crossing within the project limits. It occurs at RP 14.54 for Mill Creek. The Frenchtown Irrigation Ditch runs parallel to Mullan Road throughout most of the project length on the east side.

Preliminary Field Review/Scope of Work Report

STPS 263-1(30)11, Frenchtown - SE, UPN 8962000

EPS Project Manager: Nate Walters

Page 2 of 7

The existing roadway throughout the project limits consists of two 12' wide travel lanes with no shoulders. There are some sections of the roadway on the north end of the project towards Frenchtown that include paved shoulders (either 2.5' or 4' wide). There are nearby roadside V-ditches on both sides of the roadway. There is a long stretch of guardrail in one section where the roadway gets close to an adjacent irrigation ditch facility.

The existing roadway was constructed under several different projects, a list of these projects is provided below:

RP		Project	Year	Roadway Width	Paved Shoulder Width
Begin	End				
9.44	9.564	County construction	1945	24'	0'
9.564	11.583	FAS 10-B(1)	1940	24.5'	0'
11.583	13.7	S(10)3	1956	24'	0'
13.7	14.124	S(10)3	1956	32'	4'
14.124	14.493	77-1509	1980	29'	2.5'
14.493	14.5	S(10)3	1956	29'	2.5'
14.5	14.699	S(10)3	1956	24'	0'
14.699	14.8	I-90(2)35	1972	32'	4'

As-Built information was found for projects FAS 10-B(1), S-10(3), 77-1509 and I-90(2)35. All vertical curves listed in these two project sections meet stopping sight distance standards for a 60 mph design speed and all longitudinal grades are less than the maximum allowed for level terrain. There are a total of eight horizontal curves in this project. There was no superelevation data listed in the As-Built. One of these horizontal curves (at PI Sta. 249+74.3 of the FAS 10-B(1) As-Built section) has a radius of 1146' which is less than the 1200' minimum radius allowable for a 60 mph design speed.

Through Frenchtown, S-263 generally follows an east-west alignment and is known as Beckwith St. when it crosses north of the railroad tracks. At RP 14.7, S-263 takes a sharp 90 degree turn to the north where S-263 ends at the I-90 Frenchtown Interchange about 0.15 miles further (the short section between here and the Interchange is known as Demer Street). The radius of this turn is about 80' which is less than the 154' minimum radius allowable for a 25 mph design speed (this is the existing posted speed in this area) using low-speed urban design standards.

The Pavement Management System generated the following performance indices for the survey year 2015 and treatment recommendations for the years 2016 and 2018:

TREATMENT YEARS 2016 & 2018

BEG RP	END RP	RIDE	RUT	ACI	MCI	CONST. TREAT. REC.
10.53	14.85	74.5 (fair)	71.0 (good)	95.2 (good)	99.4 (good)	Crack Seal & Cover ('16), Crack Seal & Cover ('18)

Preliminary Field Review/Scope of Work Report

STPS 263-1(30)11, Frenchtown - SE, UPN 8962000
EPS Project Manager: Nate Walters

Page 3 of 7

Traffic Data

Project specific traffic data is not required for this seal & cover project. According to the 2014 Traffic By Sections Report, the ADT on S-263 in 2014 was:

- RP 10.569 – 11.602, 1,420 (45 of which were commercial vehicles)
- RP 11.602 – 14.707, 1,740 (45 of which were commercial vehicles)
- RP 14.707 – 14.845, 4,260 (45 of which were commercial vehicles)

Crash Analysis

A crash analysis is not required for this seal & cover project.

Major Design Features

This project will be developed in accordance with the latest Guidelines for Pavement Preservation Projects. The plans will be developed in English units and using reference posts for roadway segments.

- Design Speed.** The geometric design criteria for Rural Collector Roads (Secondary System) indicate that the design speed should be 60 mph based on the level terrain. The existing posted speed limit is 55 mph throughout the majority of the project. There is a southbound speed reduction approaching the Pulp Mill Road intersection at RP 10.5 from 55 mph to 45 mph then to 35 mph. The southbound 45 mph and 35 mph signs and the northbound 45 mph sign are all missing and will be replaced by Maintenance prior to the construction of this project. There is also a posted speed reduction from 55 mph to 45 mph entering Frenchtown at RP 13.825. The posted speed limit continues to step down to 35 mph and finally to 25 mph at RP 14.064. Design speed is not an applicable design criterion for this pavement preservation project.
- Horizontal Alignment.** The existing horizontal alignment will not be changed with this seal and cover resurfacing project.
- Vertical Alignment.** The existing vertical alignment will not be changed with this seal and cover resurfacing project.
- Typical Sections and Surfacing.** The current typical section widths will remain unchanged. A full width chip seal (Cover Type 1 and CRS-2P seal oil) will be placed across the entire roadway, followed by a full width fog seal.
- Geotechnical Considerations.** There are no geotechnical considerations for this resurfacing project. The existing roadside slopes will not be disturbed and there are no grading considerations.
- Hydraulics.** There are no hydraulics considerations for this resurfacing project.
- Permanent Erosion and Sediment Control (PESC) Features.** There are no PESC measures proposed to be installed with this pavement preservation project.
- Bridges.** There are no bridges on this segment of S-263.
- Traffic.** The existing pavement marking layout will be used to re-stripe the roadway. Traffic Engineering will provide the quantities, details, and specifications for interim paint and final epoxy. These items will be included in the road plans package.

Preliminary Field Review/Scope of Work Report

j. **Pedestrian/Bicycle/ADA.**

There are no dedicated facilities for bicycles or pedestrians. Sections of roadway on the north end of the project towards Frenchtown have 4' wide paved shoulders that could be used by bicyclists. The rest of the roadway does not have any shoulders. Despite the lack of shoulders, this route is used by bicyclists. Due to the nature of this chip seal resurfacing project, no new accommodations will be added. On the south side of the Pulp Mill Rd intersection at RP 10.47, just outside of the project limits, there is a flashing pedestrian crossing for Smurfit Stone Container.

k. **Miscellaneous Features.** There are no additional miscellaneous features that require attention.

l. **Context Sensitive Design Issues.** There are no special context sensitive design issues identified for this pavement preservation project.

Other Projects

Currently, there are several other projects in the vicinity of this project.

- UPN 6137000, Huson – East, S-574, RP 0-11.0, Reconstruct (2017)
- UPN 6141000, West of Missoula – NW, S-263, RP 5.5-10.6, Reconstruct (Beyond 2020)
- UPN 7522, Frenchtown – E&W, I-90, RP 84.2-94.4, Crack & Seat, Overlay, Seal & Cover (Beyond 2020)

Due to either timing or scope difference, it is not likely that this project will be tied with any of these projects for construction.

Location Hydraulics Study Report

A Location Hydraulics Study Report will not be needed for this pavement preservation project.

Design Exceptions

There are no necessary design exemptions for this project.

Right-of-Way

There will be no right-of-way involvement on this pavement preservation project.

Access Control

This section of highway is not an access control facility. This project will not include access control.

Utilities/Railroads

Utilities – There will be no utility involvement on this pavement preservation project.

Railroads – There is an existing at-grade railroad crossing at RP 14.316. Standard railroad agreements will be required for the work within the vicinity of this crossing. The seal & cover will be applied up to each side of the crossing surface at RP 14.316.

Maintenance Items

No specific work is required by Maintenance forces in association with this project.

Intelligent Transportation Systems (ITS) Features

Implementation of ITS solutions will not be included with this pavement preservation project.

Preliminary Field Review/Scope of Work Report

STPS 263-1(30)11, Frenchtown - SE, UPN 8962000
EPS Project Manager: Nate Walters

Page 5 of 7

Survey

No survey is required for this project.

Public Involvement

A Level A public involvement plan is appropriate for this project. A News Release explaining the project and including a department point of contact will be distributed to the local media.

Environmental Considerations

No significant environmental impacts or issues were identified. We reviewed the project and determined it meets the criteria for the Programmatic Agreement as a Categorical Exclusion under the provisions of 23 CFR 771.117(d) as signed by MDT on February 18, 2005 and concurred by FHWA on March 4, 2005. The Environmental Checklist for Pavement Preservation Projects has been submitted separately.

Energy Savings/Eco-Friendly Considerations

No energy savings/eco-friendly considerations are proposed for this pavement preservation project.

Experimental Features

There are no experimental features identified for this pavement preservation project.

Traffic Control

Traffic will be maintained through the construction of the project with appropriate signing, flagging, pilot cars, etc., in accordance with the Manual on Uniform Traffic Control Devices. The work zone will require single lane closures during construction operations. A minimum of one lane will remain open for traffic at all times during the construction of this project.

A Transportation Management Plan (TMP) consisting of a Traffic Control Plan (TCP) is appropriate for this project. Due to the relatively simple nature of the work, the TCP will consist of only the Standard Specifications, Supplemental Specifications, and MDT Detailed Drawings. Other than the press release, the PI component will consist of only the standard MDT construction project notification process in place.

Preliminary Construction Cost Estimate

The nomination cost estimate (without IDC) that was originally programmed for this project was \$209,000 (CN = \$190,000 and CE = \$19,000). The total nomination cost estimate including IDC and Inflation was \$249,231.

Current Cost Estimate:

	Estimated cost	Inflation (INF) (from PPMS)	TOTAL costs w/INF + IDC (from PPMS)
Road Work	\$177,000		
Traffic Control	\$13,000		
Subtotal	\$190,000		
Mobilization (10%)	\$19,000		
Subtotal	\$199,000		
Contingencies (8%)	\$16,000		
Total CN	\$215,000	\$18,190	\$257,370

Preliminary Field Review/Scope of Work Report

STPS 263-1(30)11, Frenchtown - SE, UPN 8962000
EPS Project Manager: Nate Walters

Page 6 of 7

CE (10%)	\$22,000	\$1,861	\$26,335
TOTAL CN+CE	\$237,000	\$20,051	\$283,705
G-Match Items	\$30,000		
Subtotal	\$30,000		
Mobilization (10%)	\$3,000		
Subtotal	\$33,000		
Contingencies (8%)	\$3,000		
G-Match CN	\$36,000	\$3,045	\$43,093

Note: Inflation is calculated in PPMS to the letting date. If there is no letting date, the project is assumed to be inside the current TCP and is given a maximum of 5 years until letting. IDC is calculated at 10.37% as of FY 2016.

Preliminary Engineering

The anticipated level of Preliminary Engineering for this project will not be too significant seeing as this pavement preservation project is relatively simple to design and does not have any complex design issues. It is anticipated that the project will not require a modification to the current federal aid agreement for PE. The nominated PE amount for this project should suffice.

Project and Risk Management

The Missoula District Design Crew will be responsible for developing the plans. Nate Walters will manage the design of this project. See contact information below:

Nathaniel R. Walters
Montana Department of Transportation
2100 West Broadway, PO Box 7039
Missoula, MT 59807-7039
(406) 523-5833
e-mail: nwalters@mt.gov

This project is not considered a Project of Division Interest (PoDI) by FHWA.

There are no current risks to the project cost and schedule. This is a relatively simple design project and there is no active management strategy.

Ready Date

The project has a Ready Date of October 1, 2016. The project is currently about 1.5 months ahead of schedule to meet the Ready Date.

The EPS Activities that should be revised based on the information in this Report include:

- Activity 414 – Prepare Signing & Pavement Marking Plans: The hours and durations should be reduced to reflect only needing to provide pavement marking quantities.

The Letting Date currently established for this project is January 25, 2018. However, this project is being designed so that it could be used as a backup project in 2016 if additional funding becomes available. The current PE End Date is 12/31/2020. A review of the remaining EPS schedule, critical path activates, and target letting date indicates that a modification to the PE End Date isn't needed.

Preliminary Field Review/Scope of Work Report

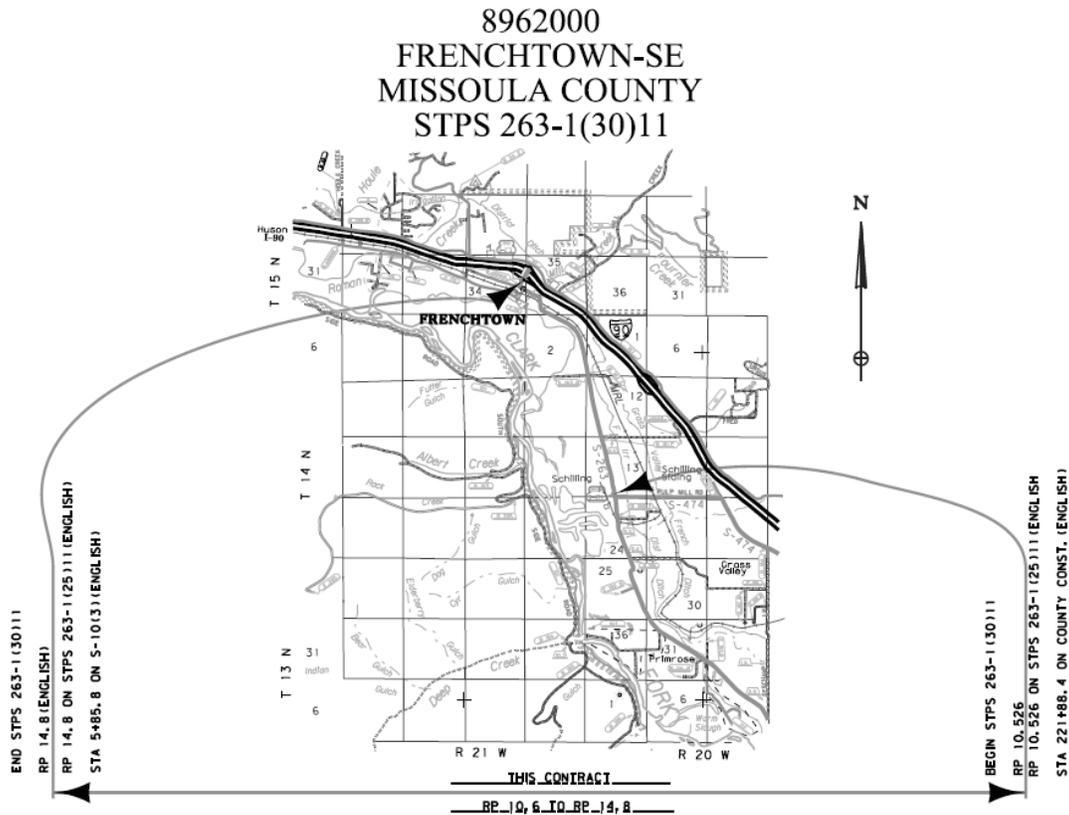
STPS 263-1(30)11, Frenchtown - SE, UPN 8962000

EPS Project Manager: Nate Walters

Page 7 of 7

Site Map

The project site map follows.



e-copies:

Dustin Rouse, Preconstruction Engineer
James Combs, Highways Design Engineer
Dave Hedstrom, Hydraulics Engineer
Bryce Larsen, Supervisor, Photogrammetry & Survey
Danielle Bolan, Traffic Operations Engineer
Ivan Ulberg, Traffic Design Engineer
Kraig McLeod, Safety Engineer
Chad Richards, Engineering Cost Analyst
John Pirre, Engineering Information Services
Jan Nessel, Public Involvement Officer
Sue Sillick, Research Section Supervisor
Suzy Price, Contract Plans Bureau Chief
John McClafferty, Engineering Division
Wayne Noem, Secondary Roads Engineer
Sheila Ludlow, Bicycle/Pedestrian Coordinator
Matt Maze, ADA Coordinator
Shane Stack, Preconstruction Engineer
Mike Dodge, Materials Lab
Maureen Walsh, Right of Way Supervisor
Robert Vosen, Construction Engineer
Kenneth Yahvah, Hydraulics Engineer
Gabe Priebe, Traffic Project Engineer
Joe Weigand, Biologist
Benjamin Nunnallee, Projects Engineer
Mark Roedel, District Land Surveyor
Glen Cameron, District Traffic Engineer (Missoula)

Jake Goettle, Construction Bureau – VA Engineer
Steve Giard, Acting Utilities Engineering Manager
David Hoernig, Lands Section Supervisor
Greg Pizzini, Acquisition Section Supervisor
Joe Zody, R/W Access Management Section Manager
Jim Davies, Pavement Analysis Engineer
Darin Reynolds, Surfacing Design Supervisor
Jeff Jackson, Geotechnical Engineer
Paul Johnson, Project Analysis Bureau
Jean Riley, Planner
Dawn Stratton, Fiscal Programming Section
Alyce Fisher, Fiscal Programming Section
Kurtis Miros, Engineering Division
Bill Semmens, Environmental Resources Section Supervisor
Michelle Erb, Bicycle/Pedestrian Coordinator
Steve Felix, Maintenance Chief (Missoula)
Susan Foley, Right of Way Design Supervisor
Dean Jones, Construction Ops Engineer
Christopher Hardan, Bridge Area Engineer
Bret Boundy, Geotechnical Manager
Susan Kilcrease, Project Development Engineer
Pat Metzger, District MCS Captain
Andrew White, Surfacing Design
Patricia Hogan, District Utility Agent (Missoula)
Ray Sacks, Construction Bureau