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Montana Department of Transportation
2701 Prospect Avenue
PO Box 201001
Helena MT 59620-1001

Jim Lynch, Director
Brian Schweitzer, Governor

October 19, 2009

MASTER FILE COPY

Lloyd Rue
Federal Highway Administration (FHWA)
585 Shepard Way
Helena MT 59602

Subject: Statewide Programmatic Categorical Exclusion for Pavement Preservation Projects
Marias Pass-East
NH 1-3(61)199
Control Number: 6952000

Dear Lloyd Rue:

The MDT Environmental Services Bureau has reviewed the Preliminary Field Review/Scope of Work Report (PFR/SOW) for the subject project. Based on the completed Environmental Checklist for Pavement Preservation Projects (Checklist), we conclude that the Statewide Programmatic Categorical Exclusion for these types of projects would cover this project. For your information, I have attached a copy of the PFR/SOW (including the location map) and the signed Environmental Checklist. Environmental-related Special Provisions will be included in the contract plans.

If you have questions or concerns, please contact Eric Thunstrom at 444-7648. He will be pleased to assist you.

Sincerely,

Heidy Bruner

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

Attachments: Environmental Checklist, PFR/SOW Report

copies with attachment (Checklist only, unless noted):

Michael P. Johnson	Great Falls District Administrator
Tom Martin, P.E.	Environmental Services Bureau Chief
Heidy Bruner, P.E.	Environmental Services Bureau Engineering Section Supervisor
Eric Thunstrom	Environmental Services Bureau Project Development Engineer
Paul Ferry, P.E.	Highways Engineer
Dustin Rouse, P.E.	Road Design Area Engineer
Kevin Christensen, P.E.	Construction Engineer
Suzy Price	Contract Plans Bureau Chief
David Jensen	Fiscal Programming Section Supervisor
Montana Legislative Branch	Environmental Quality Council (w/ PFR/SOW also)
File	Environmental Services Bureau

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(FOR PROJECTS WITH NO RIGHT-OF-WAY INVOLVEMENT)

Applicant cannot be authorized to proceed with the proposed work until ALL of the conditions of the checklist have been satisfied.

ENVIRONMENTAL CHECKLIST FOR PAVEMENT PRESERVATION PROJECTS (CRACK SEALING, SEAL & COVER, THIN OVERLAYS, MILL & FILL, PLANT MIX LEVELING, MILL OGFC, MICRO SURFACING, FOG SEAL)

Project No.: NH 1-3(61)199 **ID:** UPN 6952000 **Project Name:** MARIAS PASS -EAST

Reference Post (Station) RP 197.8± **to Reference Post (Station)** RP 204.0±

Applicants Name: MDT **Address:** 2701 Prospect, Helena MT 59620-1001

Type of Proposed Pavement Preservation Activity: Work Type : 180 Resurfacing – Asphalt (Thin Lift ≤ 0.20 ft)

IMPACTS ON THE PHYSICAL ENVIRONMENT (TO BE COMPLETED BY APPLICANT)				
	Impact Questions	[Y/N] There are Potential Impacts; or Item Requires Documentation, Evaluation, Mitigation Measures, and/or (a) Permit(s).		
		Yes	No	Comment or List Documentation, Evaluation, Mitigation Measure, and/or (a) Permit(s) Required for Items 1 through 7.(Use attachments if necessary)
1.	Does the proposed action require work in, across, and/or adjacent to a river which is a component of, or proposed for inclusion in Montana's Wild and/or Scenic Rivers system. (See listing on page 3)	☐	☒	
2.	Are there any recorded occurrences, and/or critical habitat for Federally-listed Threatened and Endangered Species in the vicinity of the proposed activity?	☒	☐	
3.	Does the proposed action have an impact on water quality? If answer is NO go to question 4.	☐	☒	
3a.	If the answer to number 3 is yes, is a Clean Water Act ' Section 402 permit required? (MPDES issued by MDEQ)	☐	☐	☒ N/A
4.	Does the proposed project have impacts to wetlands or waters of the U.S.? If answer is NO go to question 5.	☐	☒	
4a.	If the answer to number 4 is yes, is a Clean Water Act ' 404 permit authorization required?	☐	☐	☒ N/A
4b.	If the answer to number 3 or 4 is yes, is a Stream Protection Act ' 124SPA permit required? (Issued by MDFWP)	☐	☐	☒ N/A
5.	Does the proposed project involve hazardous waste site[s]? (Superfund, spills, underground storage tanks, etc.)	☐	☒	
6.	Is the proposed activity on and/or within approximately 1.6 Km (1 mile) of an Indian Reservation? If answer is NO go to question 7.	☐	☒	
6a.	Are any Tribal water permits required?	☐	☐	☒ N/A
7.	Is the proposed project in a "Class I Air Shed" (Some Indian Reservations)?	☐	☐	☒ N/A

8. **Magnitude and significance of potential impacts: To be completed by applicant.**

Checklist prepared by: Dustin Rouse — Project Design Engineer — October 15, 2009
Applicant — Title — Date

Approved by: [signature] — ENGINEERING SECTION SUPERVISOR — 10/19/9
Environmental Services — Title — Date

Project Number: UPN 6952000 ID: NH 1-3(61)199 Designation: MARIAS PASS - EAST

(when items 1, 2, 3, 3a, 4, 4a, 4b, 5, 6, 6a, or 7 are checked "Yes")

A. The applicant shall complete the checklist indicating a "Yes" or "No" for each item, except number 8 which may require a narrative response.

B. When a "Yes" is indicated on any number of items 1 through 7, MDT must explain why and provide the appropriate documentation, evaluation, permit, and/or mitigation measures required to satisfy environmental concerns for the project. Use attachments if necessary.

C. If the applicant checks "Yes" for any one item, the checklist and MDT's mitigation proposal, documentation, evaluation and/or permit shall be submitted to MDT Environmental Services. Contact Number 444-7228.

D. When the applicant checks a "Yes" item, MDT cannot be authorized to proceed with the proposed work until Environmental Services reviews the information and signs the checklist.

E. MDT will obtain all necessary permits or authorizations from other entities with jurisdiction prior to beginning the Pavement Preservation Activity.

Montana's Wild and/or Scenic Rivers system as published by the U.S. DEPARTMENT OF AGRICULTURE (USDA), or the U.S. DEPARTMENT OF THE INTERIOR (USDoI)

1. Middle Fork of the Flathead River (headwaters to South Fork of the Flathead River confluence)
2. North Fork of the Flathead River (Canadian Border to Middle Fork of the Flathead River confluence)
3. South Fork of the Flathead River (headwaters to Hungry Horse Reservoir)
4. Missouri River (Fort Benton to Charles M. Russell National Wildlife Refuge)

Montana Department of Transportation
PO Box 201001
Helena, MT 59620-1001

Memorandum

To: Distribution

From: Paul R. Ferry, PE (PRF)
Highways Engineer

Date: September 28, 2009

Subject: NH 1-3(61)199
Marias Pass - East
UPN 6952 000
Work Type : 180 Resurfacing – Asphalt (Thin Lift ≤ 0.20 ft)

Attached is the Preliminary Field Review Report/Scope of Work Report which was approved on 9/29/09. 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 Chief Engineer for approval.

I recommend approval:
Approved _____ Date _____

Distribution:
Mick Johnson, District Administrator
Tom Martin, Environmental Services Bureau Chief
Duane Williams, Traffic and Safety Engineer
John Horton, Right-of-Way Bureau Chief
Paul Ferry, Highways Engineer
Lynn Zanto, Rail, Transit, & Planning Division Administrator
Jake Goettle, Construction Engineering Services Bureau
Matt Strizich, Materials Engineer
Jon Swartz, Maintenance Administrator

cc:
Dave Jensen, Fiscal Programming Section Supervisor
Dustin Rouse, Project Design Manager
Damian Krings, Road Design Engineer
Highways File

e-copies:
Jim Walther, Preconstruction Engineer
Lesly Tribelhorn, Highways Design Engineer
Mark Goodman, Hydraulics Engineer
Kurt Marcoux, District Hydraulics Engineer
Bonnie Gundrum, Env. Resources Section Supervisor
Paul Sturm, District Biologist
Eric Thunstrom, District Project Development Engineer
Danielle Bolan, Traffic Engineer
Ivan Ulberg, G.F. District Traffic Project Engineer
Pierre Jomini, Safety Management Engineer
Mike McDonald, Havre Maintenance
Jon Watson, Pavement Engineer
Lee Grosch, District Geotechnical Manager
Bryce Larsen, Supervisor, Photogrammetry & Survey
Marty Beatty, Engineering Information Services
Paul Grant, Public Involvement Officer
Jean Riley, Planner
Jason Sorenson, Engineering Cost Analyst
Jake Goettle, Construction Bureau – VA Engineer
Steve Prinzing, District Preconstruction Engineer
Christie McOmber, District Projects Engineer
James Blossom, G.F. District Materials Lab
David Hand, G.F. District Maintenance Chief
Walt Scott, R/W Utilities Section Supervisor
Jim Mullins, R/W Design Manager
Greg Pizzini, Acquisition Manager
Joe Zody, R/W Access Management Section Manager
Gary Larson, Project Analysis Bureau Chief
Sue Sillick, Research Section Supervisor
Mark Keeffe, Bicycle/Pedestrian Coordinator
Kim Janzen, Havre Maintenance
Mike McDonald, Havre Maintenance

Montana Department of Transportation
PO Box 201001
Helena, MT 59620-1001

Memorandum

To: Paul R. Ferry, PE
Highways Engineer

From: Damian M. Krings, PE (DMK)
Road Design Engineer

Date: September 28, 2009

Subject: NH 1-3(61)199
Marias Pass - East
UPN 6952 000
Work Type : 180 Resurfacing – Asphalt (Thin Lift ≤ 0.20 ft)

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

Approved Paul R. Ferry _____ Date _____9/29/09_____
Paul R. Ferry, 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
Highways File

Introduction

This report was developed from information taken from the preliminary field review conducted on August 17, 2009. The following people were in attendance:

Mick Johnson	District Administrator	MDT - Great Falls
Steve Prinzing	D.E.S.E.	MDT - Great Falls
Dustin Rouse	Road Design, Project Manager	MDT - Great Falls
Lotse Townsend	Road Design	MDT - Helena
Louise Stoner	Road Design	MDT - Helena
Steve McEvoy	Pavement Analysis	MDT - Helena
Kim Janzen	Maintenance	MDT - Havre
Mike McDonald	Maintenance	MDT - Havre

Proposed Scope of Work

This project has been nominated for a pavement preservation mill, PMS overlay, and seal and cover. Work for this project will entail the entire roadway width milled 0.2 feet, followed by a 0.2 ft. overlay of plant mix bituminous surface and seal and cover. Additionally, sections along centerline with longitudinal cracking may be milled deeper depending on core results. The intent of this project is to extend the life of the existing surfacing and provide new striping.

Purpose and Need

Numerous transverse cracking and centerline separation was observed during the preliminary field review. The purpose of this project is to improve the safety and functional condition of the road. Guardrail will also be upgraded on this project to improve safety.

Project Location and Limits

A. The project begins on the county line leaving Flathead County and entering Glacier County at RP 197.8± and extends north for 6.2 miles (9.98 km), ending at RP 204.0±. This project was originally nominated to begin at RP 198.8 but during the field review conditions on the road from RP 197.8 thru RP 198.8 was observed to be in poor condition. Great Falls District decided it would be best to start on the district boundary line that begins at RP 197.8.
B. This project is located in Glacier County on National Highway Route 1/US 2. The entire project is within the Lewis and Clark National Forest.
C. The route is functionally classified as a principal arterial.
D. The last improvement made on this project was in 2000 under the project number SFCN 1-3(39)198.
E. Adjacent project number F 1 2 40 connects with this project on the south side and F260 7 connects at the end of the project on the north side.

Work Zone Safety and Mobility

At this time, Level 2 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 Traffic Management Plan (TMP) consisting of a Traffic Control Plan (TCP). A limited Public Information (PI) component to address lane closures will also be included in the plan package.

Physical Characteristics

A. This project is located in a rural environment with rolling terrain. The existing pavement width is 26 feet.

B. The properties adjacent to the project primarily consist of forest and grazing.

C. The existing surfacing data obtained from as-built plans from 1952, project number F-260(6), show two inches of plant mix surfacing over three inches of compact crushed top course. Plans from 1982, project number FR 1-3(5)198, show a three inch plant mix surfacing overlay.

C. PvMS Index Numbers & Recommended Treatments

The indices and condition levels for the 2008 survey year are given in the following table:

Ride	70.8 (Fair)
Rut	82.3 (Good)
Alligator Cracking	99.6 (Good)
Miscellaneous Cracking	78.7 (Fair)
Recommendation (Construction)	AC Thin Overlay
Recommendation (Maintenance)	AC Thin Overlay

Traffic Data

The Traffic Data Collection Section provided the follow traffic data:

Table 2. Traffic Data

2009 ADT = 1,320 (Present)
2010 ADT = 1,350 (Letting Date)
2030 ADT = 1,920 (Design Year)
DHV = 320
T = 10.1%
ESAL = 85 (Daily)
Growth Rate = 1.8% (Annual)

Accident Analysis

An accident analysis was completed for Non-Interstate National Highway 1 (US 2), from RP 198.80 to RP 204.00, for the dates January 1, 2004 through December 31, 2008.
The following table shows how the data in the study area compared to the statewide averages:

	Statewide Average for Rural Non-Interstate NHS (2004-2008)	Study Area
All Vehicles Accident Rate:	1.07	2.23
All Vehicles Severity Index:	2.20	2.63
All Vehicle Severity Rate:	2.36	5.86
Total Recorded Accidents		32

Variations from Average Occurrences:

- 62.5% off road crashes vs. 20.7% statewide average for NINHS routes
- 53.1% dry road conditions vs. 66.5% statewide average for NINHS routes
- 33.8% icy, snow or slush road conditions vs. 24.4% statewide average for NINHS routes

- 25.0% blowing snow or severe crosswinds vs. 4.5% statewide average for NINHS routes
- 18.8% snow weather conditions vs. 8.4% statewide average for NINHS routes
- 21.9% dark-not lighted conditions vs. 35.4% statewide average for NINHS routes

Accident Clusters and Safety Projects:

Under STPHS 1-3(48)199, UPN 4744000, a guardrail project from RP 198.7 to 199.8 was completed in 2006.

A cluster area from RP 198.2 to RP 199.1 was identified in 2009 and review is pending.

A cluster area from RP 202.2 to RP 203.4 was identified. The trend was single vehicle off road crashes on curves. Slope flattening was recommended however the benefit-cost ratio was below 1.0.

Project STPHS 1-2(127)153, UPN 5362000 installed in 2008 variable message signs along the US 2 corridor between West Glacier and East Glacier to warn drivers of roadway conditions, road closures, incidents and other activities.

Remarks:

Note the high crash rate and severity rate. Discuss feasibility of higher level project of shoulder widening and slope flattening, considering State law 60-2-133.

27 of the 32 reported crashes were single vehicle off road crashes. 13 of these crashes cited overturn as the first or most harmful event.
16 of the 32 reported crashes cited as occurring on a curve.
10 of the 32 reported crashes cited icy or slushy as a contributing circumstance, while 14 of the crashes reported icy, snow or slush road conditions.
9 of the 32 reported crashes cited ditch or embankment as the first or most harmful event.

Upgrade signing, delineation and pavement markings. Check for uniformity of curve signing. Replace cable rail with most likely box beam rail due to drifting snow. Check the height of the existing W-Beam guardrail.
Review the super elevation on the curves.
Install fencing per MDT policy and State law 60-7-103.
Check feasibility to cover the exposed pipe between RP 204-204.1. with 10:1 side slopes.

Signing, delineation, guardrail, and pavement markings will be upgraded. Shoulder widening and slope flattening are not feasible at this time and is beyond the scope of this project. These improvements may be considered for future projects.

Major Design Features

a. **Design Speed.** Design Speed is not an applicable design criterion since this project is a preventative maintenance overlay located in a rural location.

b. **Typical Sections and Surfacing**. No additional changes in Typical Section widths are planned for this project.

c. **Geotechnical Considerations** Due to this being a pavement preservation project no geotechnical recommendations were requested.

d. **Hydraulics**. A survey will be done on a culvert near RP 199.15± to determine if the culvert shall remain as is, extended, or cleaned out.

e. **Bridges.** There are no structures involved with this project.

f. **Traffic.** No changes in traffic patterns are proposed. New pavement markings will be required. Signing will not be replaced.

g. **Pedestrian/Bicycle/ADA**. Existing pedestrian or bicycle facilities will not be impacted with this mill and fill project.

h. **Miscellaneous Features**. Guardrail deficiencies will be upgraded to current standards, including inadequate length of need, incorrect rail height, and no rail at locations that meet warrants.

i. **Context Sensitive Design Issues**. There are no Context Sensitive Design issues on this project.

Other Projects
No other projects are tied to this project.

Design Exceptions
There are no design exceptions being proposed with this project.

Right-of-Way
The acquisition of right-of-way/easements/permits is not anticipated for this project.

Cold-In-Place Recycle
Cold-in-place recycle is not appropriate for this project because of the narrow width of the road and high traffic volume. Surfacing unit determined the area too cold and FHWA guidelines for CIPR require ambient air temperature typically a minimum of 10ºC (50ºF) and rising.

Access Control
Access control will not be required for this project.

Utilities/Railroads
There is no railroad and utility involvement with this project.

Intelligent Transportation Systems (ITS) Features
ITS will not be included with this project. There are no WIM sites located on this project.

Survey
Survey will be needed for a culvert buried near RP 199.15±. Side slopes should be cross-sectioned in any existing guardrail locations so new warrants can be determined

Public Involvement
Due to the limited scope of the project, a level "A" public involvement plan should suffice. This will include a news release to the local media.

Environmental Considerations
No apparent significant environmental impacts or issues were identified. We believe the project meets the criteria for the Programmatic Agreement as a Categorical Exclusion. The appropriate environmental documentation will be provided in order to comply with applicable regulations.

Traffic Control
Traffic will be maintained throughout the project during construction with the appropriate signing, flagging, etc. All signing will be in accordance with the Manual on Uniform Traffic Control Devices.

Project Management
MDT's Helena Road Design Great Falls Area will be responsible for the road design plans. The Project Design Manager will be Dustin Rouse.

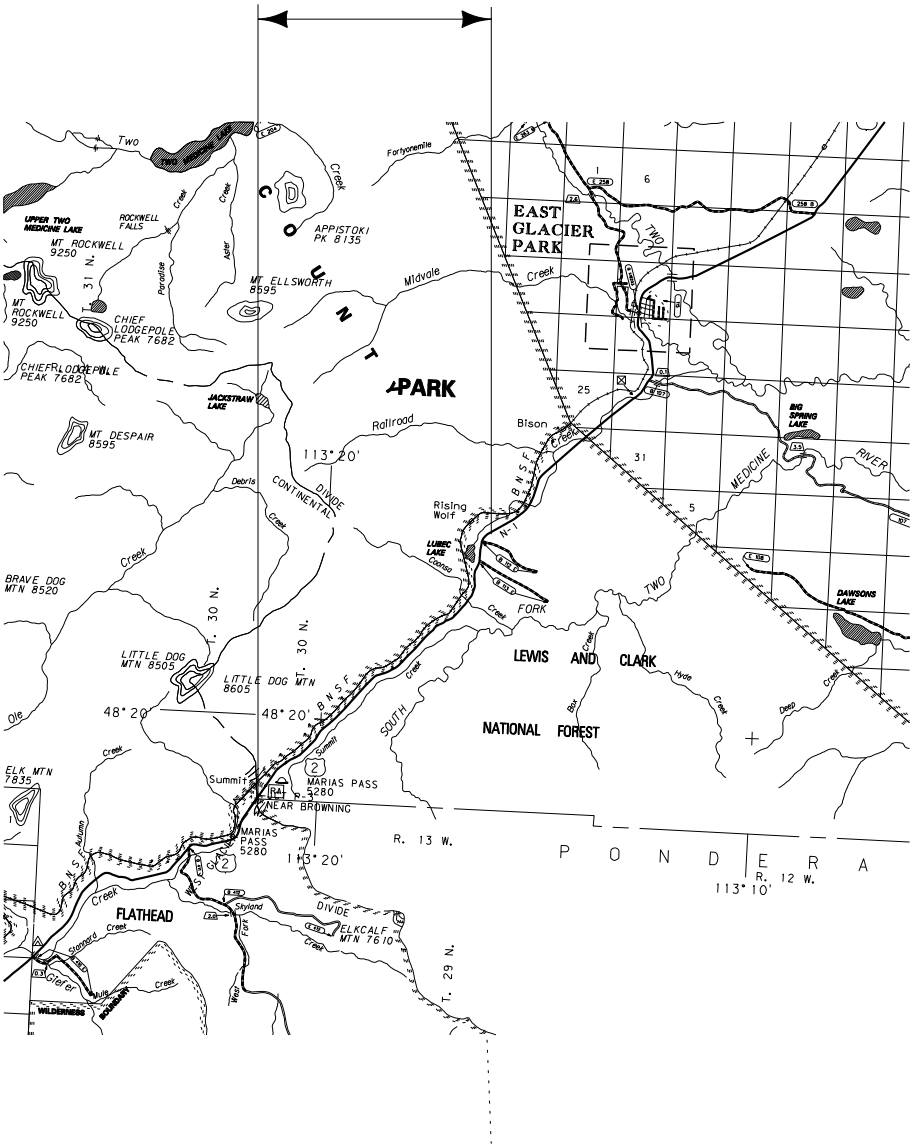
Preliminary Cost Estimate
The cost estimate includes: road work, traffic control, mobilization, contingencies, and CE. Estimated cost that has been programmed to construct this project is 2,840,611.

Cost Estimate

	w/o IDC	w/ IDC (17.48%)
Road Work	916,570	
Traffic Control	75,000	
Subtotal	991,570	
Mobilization (10%)	99,157	
Subtotal	1,090,727	
Contingencies (15%)	163,609	
Total CN	**$1,254,336**	**$1,473,594**
CE (10%)	**$125,434**	**$21,926**

Cost per mile of the estimated constructional total of $1,254,336 is $202,312.

Ready Date
Anticipated plan finish is August 1, 2009. The ready date shown in PMS for this project is October 1, 2009.

Site Map
The project site map is attached.

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