



June 20, 2011

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ENVIRONMENTAL

Kevin McLaury
Division Administrator
Federal Highway Administration
585 Shepard Way
Helena MT 59601

**Subject: Programmatic Categorical Exclusion (PCE) Concurrence Request
NH 24-4(18)127
Simms-Jct US 89
Control Number: 7462000**

MASTER FILE
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Dear Kevin McLaury:

This submittal requests approval of the above-mentioned proposed project as a Categorical Exclusion under the provisions of 23 CFR 771.117(d) and the Programmatic Agreement as signed by MDT and FHWA on April 12, 2001. This proposed action also qualifies as a Categorical Exclusion under ARM 18.2.261 (MCA 75-1-103 and MCA 75-1-201).

The following form provides documentation required to demonstrate that all of the conditions are satisfied to qualify for a Programmatic Categorical Exclusion. A copy of the Preliminary Field Review Report/Scope of Work Report, dated May 16, 2011, and a project location map are attached. In the following form, "N/A" indicates not applicable; "UNK" indicates unknown.

NOTE: A response in a large box will require additional documentation for a Categorical Exclusion request in accordance with 23 CFR 771.117(d).

	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>UNK</u>
1. This proposed project would have (a) significant environmental impact(s) as defined under 23 CFR 771.117(a).	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. This proposed project involves (an) unusual circumstance(s) as described under 23 CFR 771.117(b).	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. This proposed project involves one (or more) of the following situations where				
A. Right-of-way, easements and/or construction permits would be required.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1. The context or degree of the right-of-way action would have (a) substantial social, economic, or environmental effect(s).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. A high rate of residential growth exists in the area of the proposed project.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. A high rate of commercial growth exists in the area of the proposed project.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Work would be on and/or within approximately 1.6 kilometers (1± mile) of an Indian Reservation.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>UNK</u>
5. Parks, recreational, or other properties acquired/improved under Section 6(f) of the 1965 National Land & Water Conservation Fund Act (16 USC 460L, <i>et seq.</i>) are on or adjacent to the proposed project area.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The use of such Section 6(f) sites would be documented and compensated with the appropriate agencies (MDFWP, local entities, etc.).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Sites either on, or eligible for the National Register of Historic Places with concurrence in determination of eligibility or effect under Section 106 of the National Historic Preservation Act (16 USC 470, <i>et seq.</i>) by the State Historic Preservation Office (SHPO) would be affected by this proposed project.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Parks, recreation sites, school grounds, wildlife refuges, historic sites, historic bridges, or irrigation that might be considered under Section 4(f) of the 1966 US Department Of Transportation Act (49 USC 303) are on or adjacent to the project area.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
a. The proposed project would not impact the site(s), so a 4(f) evaluation is not necessary.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. A de minimis finding has been secured for this project.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Nationwide Programmatic Section 4(f) Evaluation forms for those sites are attached.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. This proposed project requires a full Section 4(f) Evaluation.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
B. The activity would involve work in a streambed, wetland, and/or other water body (ies) considered as "waters of the United States" or similar (e.g., "state waters").	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1. Conditions set forth in Section 10 of the Rivers and Harbors Act (33 USC 403) and/or Section 404 of the Clean Water Act (33 USC 1251-1376) codified at 33 CFR 320-330 would be met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Impacts in wetlands, including but not limited to those referenced under Executive Order (EO) #11990, and proposed mitigation would be coordinated with the US Army Corps of Engineers and other Resource Agencies (Federal, State, and Tribal) as required for permitting.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. A 124SPA would be obtained from the MDFWP.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. A delineated floodplain exists in the proposed project area under FEMA's Floodplain Management criteria.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The water surface at the 100-year flood limit elevation would exceed floodplain management criteria due to an encroachment by the proposed project.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. A Tribal Water Permit would be required.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Work would be required in, across, and/or adjacent to a river that is a component of, or proposed for inclusion in Montana's Wild and/or Scenic Rivers system as published by the US Department of Agriculture, or the US Department of the Interior.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>UNK</u>
The designated National Wild and/or Scenic River systems in Montana are:				
a. Middle Fork of the Flathead River (headwaters to South Fork confluence).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. North Fork of the Flathead River (Canadian Border to Middle Fork confluence).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. South Fork of the Flathead River (headwaters to Hungry Horse Reservoir).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Missouri River (Fort Benton to Charles M. Russell National Wildlife Refuge).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
In accordance with Section 7 of the Wild and Scenic Rivers Act (16 USC 1271 – 1287), this work would be coordinated and documented with either the Flathead National Forest (Flathead River), or US Bureau of Land Management (Missouri River).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
C. This is a "Type I" action as defined under 23 CFR 772.5(h), which typically consists of highway construction on a new location or the physical alteration of an existing route which substantially changes its horizontal or vertical alignments or increases the number of through-traffic lanes.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1. If yes, are there potential noise impacts?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. A Noise Analysis would be completed.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. There would be compliance with the provisions of both 23 CFR 772 for FHWA's Noise Impact analyses and MDT's Noise Policy.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D. Substantial changes in access control would be associated with the proposed project.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If yes, would they result in extensive economic and/or social impacts on the affected locations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
E. The use of a temporary road, detour, or ramp closure having the following conditions when the action(s) associated with such facilities:				
1. Provisions would be made for access by local traffic, and be posted for same.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Adverse effects to through-traffic dependant businesses would be avoided or minimized.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Interference to local events would be minimized to all possible extent.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Substantial controversy associated with this pending action would be avoided.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F. Hazardous wastes /substances, as defined by the US Environmental Protection Agency (EPA) and/or the Montana Department of Environmental Quality (MDEQ), and/or (a) listed "Superfund" (under CERCLA or CECRA) site(s) are currently on and/or adjacent to this proposed project.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>UNK</u>
All reasonable measures would be taken to avoid and/or minimize substantial impacts from same.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
G. The Stormwater Discharge conditions (ARM 17.30.1101-1117), including temporary erosion control features for construction would be met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
H. Permanent desirable vegetation with an approved seeding mixture would be established on exposed areas.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I. Documentation of an invasive species review to comply with both EO #13112 and the County Noxious Weed Control Act (7-22-2152, MCA), including directions as specified by the county(ies) wherein its intended work would be done would be conducted.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
J. There are "Prime" or "Prime if Irrigated" Farmlands designated by the Natural Resources Conservation Service on or adjacent to the proposed project area.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If the proposed work would affect Important Farmlands, then an AD 1006 Farmland Conversion Impact Rating form would be completed in accordance with the Farmland Protection Policy Act (7 USC 4201, <i>et seq.</i>).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
K. Features for the Americans with Disabilities Act (PL 101 336) compliance would be included.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
L. A written Public Involvement Plan would be completed in accordance with MDT's Public Involvement Handbook.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. This proposed project complies with the Clean Air Act's Section 176(c) (42 USC 7521(a), as amended) under the provisions of 40 CFR 81.327 as it is either in a Montana air quality:				
A. "Unclassifiable"/attainment area. This proposed project is not covered under the EPA's September 15, 1997 Final Rule on air quality conformity.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
and/or				
B. "Nonattainment" area. However, this type of proposed project is either exempted from the conformity determination requirements (under EPA's September 15, 1997 Final Rule), or a conformity determination would be documented in coordination with the responsible agencies (Metropolitan Planning Organizations, MDEQ Air Quality Division, etc.).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
C. Is this proposed project in a "Class I Air Shed" under 40 CFR 52.1382(c)(3)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Federally listed Threatened or Endangered (T/E) Species:				
A. Recorded occurrences, and/or critical habitat are in the vicinity of the proposed project.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B. Would this proposed project result in a "jeopardy" opinion (under 50 CFR 402) from the Fish and Wildlife Service on any Federally listed T/E Species?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The proposed project would not induce significant land use changes, nor promote unplanned growth. No significant effects on access to adjacent property or to present traffic patterns would occur.

This proposed project would not create disproportionately high and/or adverse impacts on the health or environment of minority and/or low-income populations (EO #12898). The project also complies with the provisions of Title VI of the Civil Rights Act of 1964 (42 USC 2000d) under FHWA regulations (23 CFR 200).

In accordance with the provisions of 23 CFR 771.117(a), this pending action would not cause significant individual, secondary, or cumulative environmental impacts. FHWA concurrence that this proposed project is properly classified as a Categorical Exclusion is requested.



Eric Thunstrom
Environmental Services Bureau
Great Falls District Project Development Engineer
Date: 6/20/2011



Concur Heidi Bruner, P.E.
Environmental Services Bureau
Engineering Section Supervisor
Date: 6/20/11



Concur Federal Highway Administration
Date: 27 June 2011

Attachment

electronic copies without attachment:

Tom Martin, P.E.	Environmental Services Bureau Chief
Heidi Bruner, P.E.	Environmental Services Bureau Engineering Section Supervisor
Michael P. Johnson	Great Falls District Administrator
Kent Barnes, P.E.	Bridge Engineer
Paul Ferry, P.E.	Highways Engineer
Rob Stapley	Right-of-Way Bureau Chief
Dawn Stratton	Fiscal Programming Section
Christie McOmber, P.E.	Great Falls District Projects Engineer
Suzy Price	Contract Plans Bureau Chief
Steve Prinzing, P.E.	Great Falls District Engineering Services Supervisor
Stacy Hill, P.E.	Great Falls District Environmental Engineering Specialist
Walt Scott	Right-of-Way Bureau Utilities Section
Montana Legislative Branch Environmental Quality Council (EQC)	

copies with attachment:

File Environmental Services Bureau

MDT attempts to provide accommodation for any known disability that may interfere with a person participating in any service, program or activity of the Department. Alternative accessible formats of this information will be provided upon request. For further information, call 406.444.7228 or TTY (800.335.7592) or call Montana Relay at 711.



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

Memorandum

To: Distribution

From: Paul R. Ferry, P.E. [Lesly Tribelhorn 5/16/11](#)
 Highways Engineer

Date: May 16, 2011

Subject: NH 24-4(18)127
 Simms-Jct US 89
 UPN: 7462000
 Work Type: 183 ~ Resurfacing-Seal & Cover

Attached is the Preliminary Field Review Report/Scope of Work Report which was approved on [5/16/11](#). 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:

- | | |
|---|--|
| Mick Johnson, District Administrator | Lynn Zanto, Rail, Transit, & Planning Division Administrator |
| Kent Barnes, Bridge Engineer | Jake Goettle, Construction Engineering Services Bureau |
| Tom Martin, Environmental Services Bureau Chief | Matt Strizich, Materials Engineer |
| Roy Peterson, Traffic and Safety Engineer | Paul Ferry, Highways Engineer |
| Robert Stapley, Right-of-Way Bureau Chief | Alan Woodmansey, FHWA Operations Engineer |
| Jon Swartz, Maintenance Administrator | |

cc:

- | | |
|---|-------------------------------------|
| Dawn Stratton, Fiscal Programming Section | Damian Krings, Road Design Engineer |
| Dustin Rouse, District Project Design Manager | |

e-copies:

- | | |
|---|---|
| Jim Walther, Engineering, Preconstruction Engineer | Jason Sorenson, Engineering Cost Analyst |
| Lesly Tribelhorn, Highways Design Engineer | Jake Goettle, Construction Bureau – VA Engineer |
| Mark Goodman, Hydraulics Engineer | Steve Prinzing, District Preconstruction |
| Kurt Marcoux, District Hydraulics Engineer | Christie McOmber, District Projects Engineer |
| Bonnie Gundrum, Env. Resources Section Supervisor | Stan Kuntz, District Materials Lab |
| Paul Sturm, District Biologist | Dave Hand, District Maintenance Chief |
| Eric Thunstrom, District Project Development Engineer | Walt Scott, R/W Utilities Section Supervisor |
| Danielle Bolan, Traffic Engineer | David Hoerning, R/W Engineering Manager |
| James Combs, District Traffic Engineer | Greg Pizzini, Acquisition Manager |
| Kraig McLeod, Safety Engineer | Joe Zody, R/W Access Management Section Manager |
| Stephanie Brandenberger, District Bridge Engineer | Paul Johnson, Project Analysis Bureau |
| Matt Strizich, Materials Engineer | Sue Sillick, Research Section Supervisor |
| Daniel Hill, Pavement Analysis Engineer | Alyce Fisher, Fiscal Programming |
| Lee Grosch District Geotechnical Manager | Jerilee Weibel, District R/W Supervisor |
| Ivan Ulberg, District Traffic Project Engineer | Linda Cline, District R/W Design |
| Marty Beatty, Engineering Information Services | Doug Wilmot, District Construction Engineer |
| Paul Grant, Public Involvement Officer | Dennis Ghekiere, District Utilities Agent |
| Jean Riley, Planner | Dawn Stratton, Fiscal Programming |



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

Memorandum

To: Paul R. Ferry, P.E.
Highways Engineer

From: Christie W. McOmber, P.E. *CWM*
District Projects Engineer

Date: May 16, 2011

Subject: NH 24-4(18)127
Simms-Jct US 89
UPN: 7462000
Work Type: 183 ~ Resurfacing-Seal & Cover

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

Approved Lesly Tribelhorn Date 5/16/11
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
Dustin Rouse, Road Design Area Eng. - GTF

Preliminary Field Review/Scope of Work Report

NH 24-4(18)127, Simms-Jct US 89

Project Manager: Christie W. McOmber

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Introduction

This report was derived from information taken from the Preliminary Field Review conducted on April 27, 2011, with the following individuals in attendance:

Steve Prinzing	District Preconstruction Engineer	Great Falls
Christie McOmber	District Projects Engineer	Great Falls
Jeania Cereck	District Design Supervisor	Great Falls
Steve McEvoy	Pavement Analysis	Helena
Gerry Brown	Construction Reviewer	Lewistown
Gary Engman	District West Area Maintenance Superintendent	Great Falls
Dave Trusty	Sun River Maintenance Supervisor	Great Falls
Laci Bogden	Road Designer	Great Falls

Proposed Scope of Work

This project was nominated as a preventative maintenance crack seal and seal and cover. The intent of this project is to rout and fill longitudinal and transverse pavement cracks. The newly crack sealed roadway will receive a seal and cover to protect the asphalt surface, provide traction, and prevent the crack seal product from being pulled out of the routed grooves by traffic.

All signing will be updated with this project.

The intersection with US-89 will also receive a seal and cover with this project.

Two digouts will be included near RP 135.300 and a culvert adjacent to the digouts will be evaluated for potential replacement.

Purpose and Need

The intent of this project is to extend the life of the roadway surface. In addition to the longitudinal and transverse cracking that has been observed, the project's existing seal and cover has reached its 10 year life expectancy.

Project Location and Limits

The project is located in Cascade County on MT-200 (N-24) beginning at the junction with S-565 at Station 1+20.30 (RP 127.475) continuing east 11.961 miles to the junction with MT-89 at Station 633+50.00 (RP 139.436). The functional classification of N-24 is Principal Arterial and the project will be design to the Geometric Design Criteria for Rural Principal Arterials (NHS-Non Interstate). This project traverses through the towns of Simms, Fort Shaw, and Sun River.

The plans for the project will be in English Stationing taken from RTF 24-4(9)127 and NH-BR 24-4(12)138 F. The Stationing increases west to east with the route posts.

A connection will be included to complete the intersection with US-89. This connection will begin at Station 633+50 (RP 139.436) and continue for 1,050' east of the junction to Station 644+00.00 (RP 8.244). It will also continue 430' north of the junction with US-89 at Station 1583+01.44 (RP 8.516) to just past the Mill Coulee Creek Bridge.

Adjacent project NH 24-3(46)117, Simms South, connects to the west end of this project and adjacent project NH 3-1(33)0, Vaughn-Sun River, connects to the east end of this project.

The existing horizontal and vertical alignment will be used throughout this project.

Preliminary Field Review/Scope of Work Report

NH 24-4(18)127, Simms-Jct US 89

Project Manager: Christie W. McOmber

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As-Built:

Project ID	From		To		Year Built
	Station	RP	Station	RP	
DF 176(6)	1+20.30	127.475	302+25.00	133.169	1959
F-176(7)	302+25.00	133.169	580+65.40	138.436	1964
RTF 24-4(9)127	1+58.36	127.482	550+00.00	137.847	1991
NH-BR 24-4(12)138 F	550+00.00	137.847	644+00.00	8.244 (N-3)	1997
*SFCN 24-4(16)127	960+89.24	127.185	550+00.00	137.847	2001

*metric project

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) guide. Route N-24 from Bonner to the junction with US-89 is considered a Level 2 Corridor. The plans package will include a Transportation Management Plan (TMP) consisting mainly of a Traffic Control Plan (TCP). These issues are discussed in more detail under the Traffic Control and Public Involvement sections.

Physical Characteristics

This project traverses a rural area with level terrain surrounded mainly by ranching and farm land with the exceptions that it also passes through the towns of Simms, Fort Shaw, and Sun River.

Project History:

In 1957 under project DF 176(6), the roadway was reconstructed between the junction with S-565 at Station 1+20.30 (RP 127.475) at the west edge of Simms east to the junction with the county road at the west edge of Fort Shaw at Station 302+25.00 (RP 133.169). The roadway received 1.50' to 1.70' of crushed base course, a 32.0' wide lift of 0.125' plant mix and 24.0' wide lift of 0.125' plant mix. This design created a paved depressed shoulder. The resulting roadway surface width was 32.0'.

In 1964 under project F-176(7), the roadway was reconstructed between the end of DF 176(6) at Station 302+25.00 (RP 133.169) east to approximately 63' west of the Sun River Bridge at Station 580+65.40 (RP 138.436). The roadway received 1.50' to 1.70' of crushed base course and 0.25' of plant mix. The resulting roadway surface was 32.0' wide. Within the town of Sun River between Stations 560+50 and 578+50 left and Stations 570+00 and 578+50 right, a 12.0' wide graveled parking lane was constructed. A channel change was constructed between Stations 412+68 and 422+63 with excavation of unstable material at Station 420+75. This is the location of the proposed digouts.

In 1991 under project RTF 24-4(9)127, the paved depressed shoulders constructed in 1957 under DF 176(6) were filled to make them level with the existing roadway. The entire project between Stations 1+58.36 (RP 127.482) and 550+00.00 (RP 137.847) was widened to accommodate a 0.30' overlay and provide a 32.0' roadway surface with surfacing inslopes no steeper than 4:1.

In 1997 under project NH-BR 24-4(12)138 F, the section of roadway between Stations 550+00.00 (RP 137.847) and 578+20.00 (RP 138.381) received a 0.50' mill/fill. The section of roadway between Stations 578+20.00 (RP 138.381) and 644+00.00 (RP 8.244 on N-3), the junction with US-89, the roadway was dugout approximately 3.65' deep, fitted with a perforated underdrain,

Preliminary Field Review/Scope of Work Report

NH 24-4(18)127, Simms-Jct US 89

Project Manager: Christie W. McOmber

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filled with 2.00' special borrow and 1.65' crushed base course, and surfaced with 0.30' of plant mix. The finished roadway width is 40.0' between 579+00.00 and 624+48.00 and then widens to 44.0', incorporating a 12.0' turning, at Station 628+08.00 through the junction with US-89. In addition to the roadway width, a 5.0' bituminous walkway was added to the left side of the roadway between Stations 579+38.00 and 585+33.00. In the areas of the graveled parking lanes, 0.50' of material was removed and replaced with 0.50' of crushed base course and was then seal and covered. NH-BR 24-4(12)138 F also constructed the ramps at the intersection with US-89.

In 2001 under metric project SFCN 24-4(16)127, the roadway between RP 127.475 and RP 136.480 received a 0.15' overlay with seal and cover. Surfacing inslopes of 4:1 were utilized to produce a finished roadway width of approximately 31.0'. The section between RP's 127.185 and 127.475 is included in pavement preservation project NH 24-4(18)127, Simms South (UPN 7459000).

The PvMS Data for survey year 2009 is given in the following table. Construction recommendations for 2010 and 2012 are crack seal, seal and cover.

PVMS INDICES	
RP 127.476 to RP 133.232	
Ride	85.8 (Good)
Rut	59.4 (Fair)
Alligator Cracking	100 (Good)
Miscellaneous Cracking	96.6 (Good)

RP 133.232 to RP 137.945	
Ride	84.4 (Good)
Rut	64.0 (Food)
Alligator Cracking	100 (Good)
Miscellaneous Cracking	96.3 (Good)

RP 137.945 to RP 139.439	
Ride	77.3 (Fair)
Rut	67.8 (Good)
Alligator Cracking	95.9 (Good)
Miscellaneous Cracking	93.1 (Good)

Traffic Data

Traffic data was not requested for this project due to its limited scope.

Crash Analysis

A crash analysis was not requested for this project due to its limited scope.

Major Design Features

- a. **Design Speed.** The design speed for Rural Principal Arterials (NHS-Non Interstate) for level terrain is 70 mph. NH-BR 24-4(12)138 F used a 60 mph design speed between Sun River and the junction with US-89, Stations 550+00.00 (RP 137.847) to 644+00.00 (RP 8.244 on N-3).
- b. **Horizontal Alignment.** The horizontal alignments will be perpetuated with this pavement preservation project. There are five deflections angles located within the

Preliminary Field Review/Scope of Work Report

project limits and located within the town limits of Simms and Sun River. All deflection angles are less than the maximum 1° allowed in Urban areas except the deflection angle located at station 572+38.26 in Sun River which is 1°14'40". Seven horizontal curves are located within the project limits. Six of the radii vary between 1,910' and 11,600' and exceed the minimum radii of 1,810' as stated in the Geometric Design Criteria for Rural Principal Arterials with a 70 mph design speed. The exception is the horizontal curve located between Sun River and the junction with US-89 with a radius of 1,637'. This curve exceeds the minimum radii of 1,200' as stated in the Geometric Design Criteria for Rural Principal Arterials with a 60 mph design speed.

- c. **Vertical Alignment.** The vertical alignments will be perpetuated with this pavement preservation project. The project consists of grades less than the 3% maximum allowed by Geometric Design Criteria for Rural Principal Arterials with a maximum grade of 2.53%.
- d. **Typical Sections and Surfacing.** The project will rout and fill the existing transverse and longitudinal cracks in the asphalt. The project will then receive a seal cover. Per as-built data the majority of the roadway averages 31.0'. The roadway through Sun River includes 12' graveled parking lanes that will not be addressed with this project. The majority of the roadway between Sun River and the Junction with US-89 is 40.0' increasing to 44.0' upon approaching the Junction with US-89. A recommended surfacing section for the digout area will be provided.
- e. **Geotechnical Considerations.** Geotech will recommend a depth and surfacing section for the digouts near RP 135.300. Cores for this area were ordered from the District lab on April 28, 2011. In 1964 under F 176(7) a channel change took place at this location. Maintenance has patched an approximate 1000' long area numerous times and it continues to settle.
- f. **Hydraulics.** There is a culvert located as the west end of the digout at Station 411+49 that will be evaluated for replacement. It appears to be sagging in the middle and the ends are separated. No other hydraulic issues will be addressed with this project. Three large culverts are located within the project limits.
 - 1) RP 130.80, 8.0' x 6.0' x 140' SSPPA, Fort Shaw Canal.
 - 2) RP 131.48, 7.3' x 5.3' x 223' SSPPA, Fort Shaw Canal.
 - 3) RP 134.09, 11.5' x 7.5' x 120' SSPPA with a 4" concrete floor, Adobe Creek.
- g. **Bridges.** No bridges will be addressed. The following structures are located on the project:

Structure Description	Number of Structures	Road Width (feet)	Length (feet)	Year Built	Structure Status
Sun River	1	40.0'	266'	1996	Continuous steel
Mill Coulee Creek	1	40.0'	69'	1996	Prestressed Concrete

- h. **Traffic.** New pavement markings and signing will be required. Thermoplastic placed in 1997 with project NH-BR 24-4(12)138 F will be removed with this project.
- i. **Pedestrian/Bicycle/ADA.** No new pedestrian/bicycle/ADA improvements were identified for this project.
- j. **Miscellaneous Features.** The historical marker turnout near Fort Shaw at Station 291+51 will receive a seal and cover treatment. A short segment of outdated guardrail near RP 131.230, with flared ends and offset 12.5' from the edge of traveled way, will not be upgraded due to the scope of this project and lack of crash history. It will be reserved for a future overlay project. The intersection with US-89 will receive a seal and cover.

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

Other Projects

Adjacent to the west side of this project, NH 24-3(46)117, Simms South, will receive a crackseal, seal and cover.

Adjacent to the east side of this project, NH 3-1(33)0, Vaughn-Sun River, will receive a seal and cover.

Location Hydraulics Study Report

No hydraulics issues are anticipated for this project.

Design Exceptions

No design exceptions are anticipated for this project.

Right-of-Way

There is no right-of-way involvement for this project.

Access Control

Access control will not be required for this project.

Utilities/Railroads

There will be no railroad or utility involvement with this project.

Intelligent Transportation Systems (ITS) Features

There are no known ITS solutions that should be designed with this seal and cover project. There are no WIM, ATR, or RWIS sites on the project.

Survey

District Maintenance is requested to provide a pipe condition survey for the culvert located at Station 411+49 (RP 135.29). No other survey will be necessary. Estimated plan quantities will be determined from as-builts and field inventory.

Public Involvement

Due to the limited scope of the project, a level "A" public involvement plan should suffice. This will include a news release explaining the project and include a department point of contact.

Environmental Considerations

The project meets the criteria for the Statewide Programmatic Categorical Exclusion for pavement preservation projects. An environmental checklist is being supplied with the Preliminary Field Review/Scope of Work Report.

Energy Savings/Eco-Friendly Considerations

No energy savings/eco-friendly considerations were identified.

Experimental Features

There are currently no experimental features planned for this project.

Traffic Control

Traffic will be maintained throughout the project during construction with the appropriate

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signing, flagging, etc. All signing will be in accordance with the Manual on Uniform Traffic Control Devices. Access to residences within the project will be maintained to the maximum extent possible.

Project Management

MDT's Great Falls District Road Design office will be responsible for the road design plans. The Project Design Manager is Christie McOmber. This project is not under full FHWA oversight.

Preliminary Cost Estimate

The estimated cost that has been programmed to construct this project without IDC is \$600,165. However, the preliminary estimate including digout excavation, crackseal, seal, cover, plant mix, pavement markings, signing, delineation, and traffic control is \$74,189 per mile.

		Estimate	Inflation (INF)	w/INF + IDC
		Costs	(from PPMS)	(from PPMS)
Road work		\$607,700		
Signs and delineation		\$14,000		
Traffic Control		\$45,000		
Subtotal		\$666,700		
Mobilization	10%	\$66,670		
Subtotal		\$733,370		
Contingencies	10%	\$73,337		
Total CN		\$806,707	\$143,945	\$1,077,564
CE	10%	\$80,671	\$14,394	\$107,756
IDC:	13.35%		TOTAL	\$1,185,320
Inflation Factor (ppms)			0.178435	

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 13.35% as of FY 2011.

Ready Date

The target ready date for this this project is September 11, 2011 with a letting date of March 2012.

Site Map

The project site map is attached.

MONTANA DEPARTMENT OF TRANSPORTATION

FEDERAL AID PROJECT NH 24-4(19)127

CRACKSEAL, SEAL & COVER

SIMMS-JCT US 89

CASCADE COUNTY

