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

Jim Lynch, Director
Brian Schweitzer, Governor

July 8, 2005

Carl James
Federal Highway Administration (FHWA)
2880 Skyway Drive
Helena MT 59602

Subject: Statewide Pavement Preservation Projects Concurrence
STPS 432-2(4)40
RUDYARD - SOUTH
CN 5509000

The Environmental Services Bureau of the Montana Department of Transportation has reviewed the Preliminary Field Review/Scope of Work Report and the Environmental Checklist for Pavement Preservation Projects. We have determined that the Statewide PCE for these types of projects would cover this project.

The following special provision will be included in this project:

- Protection of Wetland Areas and Other Drainages

I have attached the Preliminary Field Review/Scope of Work Report, location map, Environmental Checklist for Pavement Preservation Projects, and the special provision listed above.

If you have any questions concerning this letter, please contact me at 444-0456.

Thomas L. Hansen, P.E.
Engineering Section Supervisor
Environmental Services Bureau

Attachments:

TLH:tgg: S:\PROJECTS\GREAT-FALLS\5509000\5509ENCSPFHW01.DOC

copies: Michael P. Johnson – District Administrator-Great Falls
Loran Frazier, P.E. – Chief Engineer
Paul Ferry, P.E. – Highway Engineer
Jean A. Riley, P.E. – Environmental Services
Mark Wissinger, P.E. – Construction
Suzy Althof – Contract Plans
Dave Jensen – Fiscal Planning
Environmental Quality Council
File

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

Memorandum

To: Jean A. Riley, P.E.
Chief - Environmental Services Bureau

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

Date: June ~~16~~ 20, 2005

Subject: STPS 432-2(4)40
Rudyard – South
UPN 5509000
Work Type 181 Resurfacing – Asphalt (Thin Lift <= 0.20')

Attached is the Preliminary Field Review/Scope of Work Report for the subject project. The project meets the criteria for the Statewide Programmatic Categorical Exclusion for pavement preservation projects and the environmental checklist is attached.

Please send the notification for the environmental documentation on this project to the FHWA. If you need additional information, contact Jere Stoner at 6229.

PRF.dmk:jjs

Attachment

cc:
Paul Ferry
Highways File

(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.: 5509000 ID: STPS 432-2(4)40 Project Name: Rudyard - South

Reference Post (Station) 40.47 to Reference Post (Station) 46.48

Applicants Name: Montana Department of Transportation Address: 2701 Prospect Ave., Helena, MT 59620-1001

Type of Proposed Pavement Preservation Activity: Overlay, Seal & Cover, Pavement Markings

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?	☐	☒	Any bald eagle nests in the area will be identified and protected by timing/activity restrictions for work that may disturb nests.
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.)	☐	☒	None Anticipated
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: Jere Stoner — Area Engineer — June 13, 2005
Applicant — Title — Date

Approved by:
ENVIRONMENTAL ENGINEERING SECTION SUPERVISOR — 7/11/05
Environmental Services — Title — Date
(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: Paul R. Ferry, P.E.
Highways Engineer

From: for Damian M. Krings, P.E.
Road Design Engineer

Date: June 16, 2005

Subject: STPS 432-2(4)40
Rudyard - South
UPN 5509000
Work Type 181 Resurfacing – Asphalt (Thin Lift<=0.2')(Scheduled Maintenance)

We request that you approve the **Preliminary Field Review/Scope of Work Report** for the subject project.

Approved _____ Date 6/20/05
for Paul R. Ferry, P.E.
Highways Engineer

We are requesting comments from those on the distribution list. We will assume their concurrences if no comments are received within **two weeks** of the approval date.

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

WMS:JJS:SB:server:5509000RDSOW001.DOC

Distribution: (all with attachment)
Jim Walther, Engineering
Ivan Ulberg, Traffic & Safety
Mark Goodman, Hydraulics
Pierre Jomini, Safety Mgmt.
Sue Rowell, E.I.S.S.
Greg Pizzini, Access Management-R/W
Dan Bisom, Traffic Data & Collection - Planning
Highways File
Jere Stoner, Road Design
Bret Boundy, Geotechnical
Dave Jensen, Fiscal Programming
Walt Scott, Utilities
Alice Flesch, Acting ADA Coord.
Pamela Langve-Davis, Bicycle & Peds
Drew Livesay, M.C.S.

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

Preliminary Field Review/Scope of Work

STPS 432-2(4)40
Rudyard - South
UPN 5509000

I. Introduction

This report was developed from information taken from the preliminary field review conducted on May 23, 2005 with the following personnel in attendance:

Christie McOmber	Projects Engineer	MDT – Great Falls
Jeania Cereck	Design Supervisor	MDT – Great Falls
Keri O'Reilly	Road Design	MDT – Great Falls
Scott Bunton	Road Design	MDT – Great Falls
Jere Stoner	Road Design, Area Engineer	MDT - Helena
Tom Gocksch	Environmental Services	MDT – Helena
Ed Shea	Pavement Analysis	MDT – Helena
Jim Cornell	Traffic Signing	MDT – Helena
Kevin McCray	Bridge	MDT – Helena
Gerald Brown	Engineering Review	MDT - Lewistown

II. Proposed Scope of Work:

A. This project is nominated as a preventative maintenance overlay. The intent is to overlay the existing roadway with 0.15 ft. of Plant Mix Bituminous Surfacing Grade S (NV) ½", and apply a seal and cover.

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

C. The project was originally nominated for $660,000. The cost of the proposed project is currently estimated to be $628,880. This figure was determined by utilizing calculated quantities and district unit prices. The estimate includes mobilization (10%), traffic control (lump sum), contingency (5%), inflation, and construction engineering (10%). The current ready date for the project is July 2005. A cost breakdown is provided on the last page of the report.

III. Project Location and Limits:

A. This project is located in Hill County on Secondary Route 432. The project begins at MP 40.47 and proceeds northerly for approximately 6.01 miles ending at MP 46.48.

B. The Mile Posts have been measured using a distance meter from a recorded point of origin from the Road Log, and may not match the Image Viewer.

IV. Physical Characteristics:

A. The project is located in level terrain within a rural area. The adjacent land is used primarily for agriculture.

B. The horizontal alignment is virtually on tangent through the entire project. There are three deflection angles that are so small that a curve is not required (less than 0°00'25").

C. The vertical alignment consists of 21 curves and grades that range from 0 to 3.37 percent. All of the vertical curves provide minimum stopping sight distance at 60 mph, appropriate for a secondary route in level terrain.

D. The following table identifies the as-built projects and construction activities prior to this project:

MP to MP	As-Built Project	Year	Activity
40.465 – 40.495	S 219(9)	1971	PMS/Grade/Gravel
40.495 – 46.479	S 219(1)	1957	CTB/Grade/Gravel
40.495 – 46.479	S 219(3)	1959	PMS
40.495 – 46.479	RS 432-2(1)40	1986	PMS Overlay

The as-built project S 219(9) and the Road Log shows that the existing surfacing from MP 40.465 to MP 40.495 consists of 0.40' of crushed base course (Type A), 0.35' of plant mix bituminous base, and 0.45' of plant mix surfacing.

The as-built project S 219(1) shows that the existing surfacing from MP 40.495 to MP 46.479 consists of 0.17' of compacted soil aggregate and 0.5' of compacted soil cement stabilized base, which was later paved with 0.20' of plant mix bituminous surfacing under S 219(3).

As-built project RS 432-2(1)40 was a 0.25' plant mix surfacing overlay placed from MP 40.495 to MP 46.479.

E. The existing surface widths measured in the field are as follows:

From MP to MP	Distance (mi.)	Finished Top Width (ft.)
40.47 – 40.49	0.02	28.8
40.49 – 46.48	5.99	25.6

F. **PVMS Data:** The following year 2004 indices and 2005 recommended treatments for the roadway are listed in the PVMS database:

MP 40.465 TO MP 40.495

PVMS INDICES	
Ride	72.2 (Fair)
Rut	69.3 (Fair)
Alligator Cracking	100.0 (Good)
Miscellaneous Cracking	99.3 (Good)
Recommended Treatment	Do Nothing

MP 40.495 TO MP 46.479

PVMS INDICES	
Ride	70.1 (Fair)
Rut	74.6 (Fair)
Alligator Cracking	80.7 (Good)
Miscellaneous Cracking	95.8 (Good)
Recommended Treatment	C_AC Thin O'lay, M_AC Thin O'lay

V. Traffic Data:

The Traffic Data for this project is as follows:

2005	ADT	= 100
2025	ADT	= 120
	DHV	= 20
	Com Trks	= 6.0%
	ESAL	= 2
	AGR	= 1.0%

VI. Accident History:

A. The accident analysis for this project was taken from October 1, 1994 through September 30, 2004, from MP 40.5 to MP 46.5.

B. The average accident rate of 0.33 for this project is below the statewide average of 1.73 for Rural State Secondary.

C. The severity index is 1.00 compared to the statewide average of 2.39.

D. The severity rate is 0.33 compared to the statewide average of 4.16.

E. Accidents: 1 Total

F. Variations from Average Occurrence:

There was insufficient accident history for comparison to statewide average occurrences.

G. Clusters:

There were no accident clusters identified and no safety projects within the 10-year study period from 1994 to 2004.

VII. Major Design Features:

A. **Design Speed:**

Design speed is not an applicable design criterion since this project is a preventative maintenance overlay.

B. **Alignment:**

The existing horizontal and vertical alignments are adequate for a preventative maintenance overlay and no changes are proposed.

C. **Typical Section:**

The new designed widths will be as follows:

From MP to MP	Distance (mi.)	Finished Top Width (ft.)
40.47 – 40.49	0.02	27.4
40.49 – 46.48	5.99	24.2

D. **Surfacing Design:**

1. Due to the nature of this project, no surfacing design was requested.
2. Milling is required on the connections to the P.T.W.
3. Leveling quantity of 25% will be used.
4. The removed cold milled material will be utilized within the vicinity of the milled areas on public approaches as a surface dressing to correct surface irregularities.
5. A 7.5' plant mix apron will be placed on all adjacent approaches.

E. **Slope Design:**

1. Generally, the existing surfacing in-slopes will not be altered. Overlay in-slopes of 4:1 will be used on top of the existing roadway surface. There will be no disturbance to slopes outside of the existing finish top surface, except for minor shaping of shoulders and approaches. All disturbed shoulder areas will be revegetated where necessary.
2. Shoulder gravel will be used as a shoulder dressing throughout the overlay sections.

F. **Grading:**

There is no grading involved with this project.

G. **Hydraulics:**

Due to the nature of this project, hydraulic considerations will not be addressed.

H. **Geotechnical Considerations:**

Due to the nature of this project, Geotechnical recommendations are not necessary.

I. **Bridges:**

There are no bridges within the limits of the project.

J. **Traffic and Safety:**

New pavement markings will be required. No signing or rumble strips are proposed on this project. The shoulder width is too narrow to accommodate rumble strips.

K. **Safety Enhancements:**

1. No trends or clusters were identified that require a safety upgrade.
2. There is no guardrail within the project limits, therefore no guardrail upgrades are necessary.
3. No revisions to existing fill slopes or clear zone encroachments will be made.

VIII. Design Exceptions:

The design exception process does not apply to pavement preservation projects.

IX. Right–of-Way:

No new right-of-way will be required for this project.

X. Utilities/Railroad:

A. No utility involvement is expected with this overlay project.

B. There is a BNSF railroad located approximately 1930 feet north of the end of the project. No involvement will be required.

XI. Environmental Considerations:

No apparent significant environmental issues have been identified. It is anticipated that the project meets the criteria for the Statewide Programmatic Categorical Exclusion. An environmental checklist is being supplied with the Preliminary Field Review/Scope of Work Report.

XII. 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.

XIII. Public Involvement:

A Level "A" public involvement plan will suffice for the project. This will include a news release in the local newspaper.

XIV. Cost Estimate:

Roadwork	$454,600
Subtotal	$454,600
Mobilization (10%)	$ 45,460
Subtotal	$500,060
Traffic Control (LS)	$ 30,000
Contingency (5%)	$ 25,000
Subtotal	$555,060
Inflation (3%/yr. for 1 yr.)	$ 16,650
Construction Total	$571,710
Const. Eng. (10%)	$ 57,170
Total Project Estimate	**$628,880**

FEDERAL AID PROJECT NO. STPS 432–2(4)40

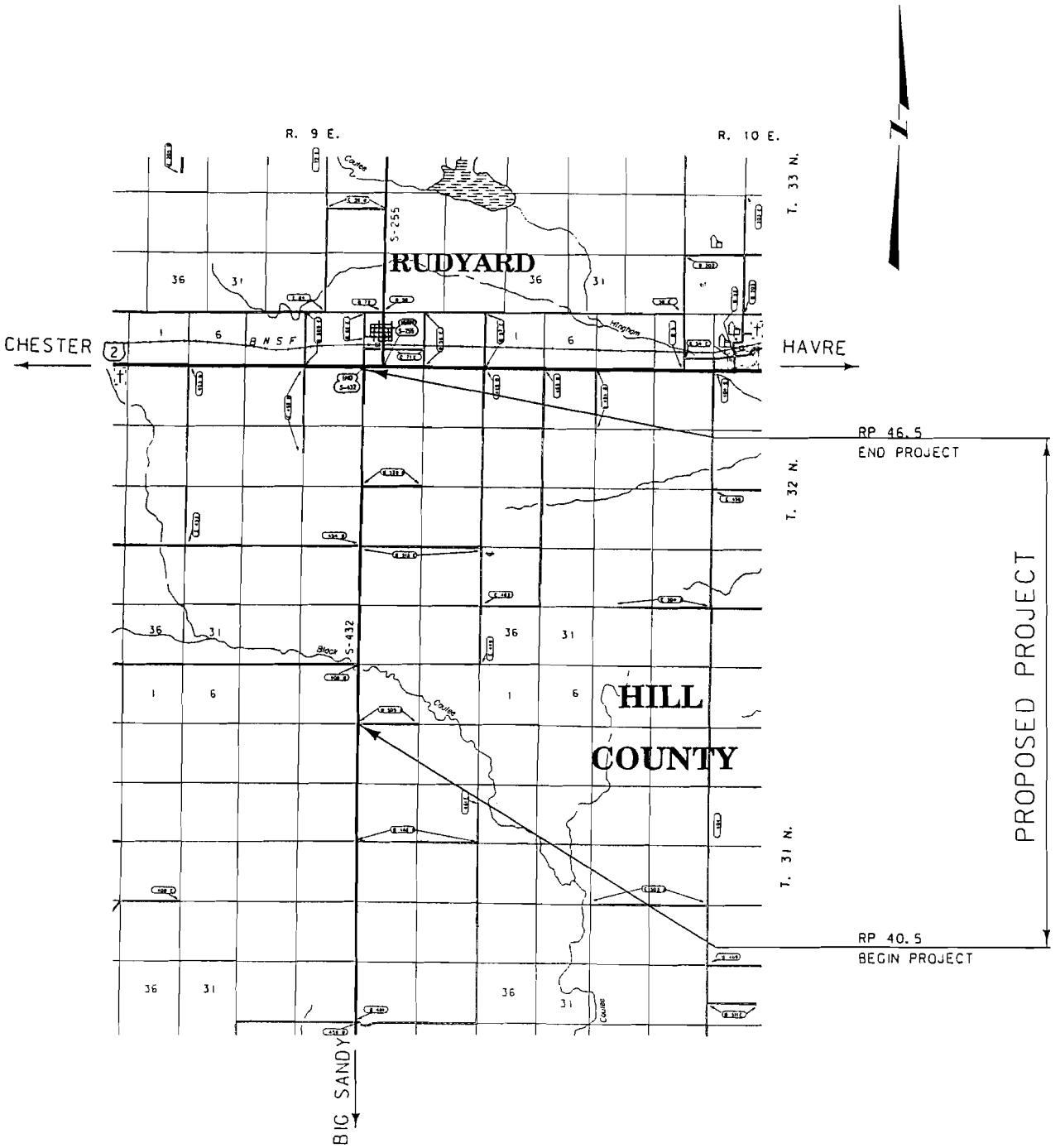
WORK TYPE 181 RESURFACING – ASPHALT (THIN LIFT)

RUDYARD – SOUTH

HILL COUNTY

UPN 5509000

6.0 Miles



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1. PROTECTION OF WETLAND AREAS AND OTHER DRAINAGES

Impacts to any and all wetland areas and other drainages, including spring drainages, located adjacent to the project are not anticipated in association with this project. MDT has NOT acquired any water quality permits, including a Clean Water Act Section 404 permit, a Stream Protection Authorization 124 permit, or a 318 Authorization permit. Therefore, impacts to any and all wetland areas and other drainages, including spring drainages, located adjacent to the project are not permitted. Avoid all equipment traffic, fill material, staging activities and other disturbances to the wetland areas and other drainages. If situations are observed during construction that may potentially impact water quality, including wetland areas, utilize Best Management Practices (BMP) and/or Temporary Erosion Control measures as necessary to protect the resource. Refer to Section 208 of the MDT Detailed Drawings (2004 metric edition) for Erosion and Sediment Control Best Management Practices.

Install Temporary Erosion Control measures as deemed necessary by the Engineer. Payment to be determined using the Erosion and Sediment Control rate schedule and paid under Miscellaneous Work.

If complete avoidance of all impacts to these areas is not possible, contact the District Biologist at 444-9438 or the Construction Permit Coordinator at 444-7648, so that the proper permits can be secured prior to working in these areas. Any impacts to these areas and associated consequences, without the proper permitting, are the responsibility of the Contractor.