



July 20, 2012

Alan Woodmansey, P.E.
Great Falls and Billings Districts Operations Engineer
Federal Highway Administration (FHWA)
585 Shepard Way
Helena MT 59602

**MASTER FILE
COPY**

Subject: Statewide Programmatic Categorical Exclusion for Pavement Preservation Projects
UPP 5816(4)
Broadway-Park to MT-Hlna
Control Number: 7723000

Dear Alan Woodmansey:

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, P.E.
Environmental Services Bureau Engineering Section Supervisor

Attachments: Environmental Checklist, PFR/SOW Report

electronic 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
Robert Snyder, P.E.	Road Design Area Engineer
Kevin Christensen, P.E.	Construction Engineer
Suzy Price	Contract Plans Bureau Chief
Nicole Pallister	Fiscal Programming Section Supervisor
Tom Erving	Fiscal Programming Section
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 Number: UPP 5816(4) Control No 7723000 Project Name: Broadway – Park to MT-Hlna
 Reference Post (Station): RP 0.000 To Reference Post (Station): RP 1.023
 Applicant's Name: Montana Department of Transportation Address: PO Box 201001; Helena, MT 59620-1001
 Type of Proposed Pavement Preservation Activity: Mill / Fill – ADA Upgrades

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 (Use attachments if necessary)
1. Does the proposed action require work in, across, and/or adjacent to a listed or proposed Wild or Scenic River? (See http://www.rivers.gov/wildriverslist.html)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2a. Are there any listed or candidate threatened or endangered species in the vicinity of the proposed activity?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> Unknown
2b. Will the proposed action adversely affect listed or candidate threatened or endangered species, or adversely modify critical habitat?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> Unknown
3. Will the proposed action have potential to affect water quality? If 'Yes', an environment-related permit or authorization may be required. If 'No', go to question 4.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3a. If the answer to question 3 is yes, is a Clean Water Act Section 402 permit (i.e., MPDES or NPDES permit) required? (Need for an MPDES or NPDES is generally triggered by a disturbance area equal to or greater than one acre.)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> N/A
3b. Is the proposed project within an MS4 Permit Area? (See http://deq.mt.gov/wqinfo/MPDES/StormWater/ms4.mcp). (Billings, Great Falls, and Missoula Urbanized areas, and Butte, Bozeman, and Helena)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4. Does the proposed project have impacts to wetlands, streams, or other water bodies? If 'No', go to question 5.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4a. If the answer to question 4 is 'Yes', is a Clean Water Act Section 404 permit authorization required?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> N/A
4b. If the answer to question 3 or 4 is 'Yes', is a Stream Protection Act 124SPA consultation required?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> N/A
5. Are solid wastes, hazardous materials or petroleum products likely to be encountered? (For example, project occurs in or adjacent to Superfund sites, known spill areas, underground storage tanks, or abandoned mines.) (See http://nris.mt.gov/deq/remsitequery/portal.aspx)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
6. Is the proposed activity on and/or within approximately 1 mile of an Indian Reservation? If answer is 'No', go to question 7.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
6a. Are any Tribal water permits required?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> N/A
7. Is the proposed project in a "Class I Air Shed" or a nonattainment area? (See http://deq.mt.gov/AirQuality/Planning/AirNonattainment.mcp) (Class I Air Sheds include the Northern Cheyenne, Flathead, and Fort Peck Reservations; Glacier and Yellowstone National Parks; Anaconda-Pintlar, Bob Marshall, Cabinet Mountains, Gates of the Mountains, Medicine Lake, Mission Mountain, Red Rock Lakes, Scapegoat, Selway-Bitterroot, and U.L Bend Wilderness Areas)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**MASTER FILE
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Checklist prepared by:

RJ Snyder

Applicant

Project Design Engineer

Title

5/18/2012

Date

Approved by: [Signature]

ENVIRONMENTAL ENGINEER
SECTION SUPERVISOR

7/24/12

Click here to enter a date.

Environmental Services

Title

Date

(When any of the above questions are checked "Yes")

The Applicant is **not** authorized to proceed with the proposed work until the checklist has been reviewed and approved, as necessary, and any requested conditions of approval have been incorporated.

- A. Complete the checklist items 1 through 7, indicating "Yes" or "No" for each item. Include comments, explanations, information sources, and a description of the magnitude/importance of potential impacts in the right hand column. Attach additional and supporting information as needed. The checklist preparer, by signing, certifies the accuracy of the information provided.
- B. When "Yes" is indicated on any item, the checklist preparer 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. **Any proposed mitigation measures will become a condition of approval.**
- 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 Bureau. Electronic format is preferred. 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 Bureau 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.
- F. The links above are provided as a starting point for potential sources of information for completing the checklist. The Applicant is encouraged to consult Environmental Services Bureau and/or other information sources.



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

Memorandum

To: Distribution

From: Paul Ferry, P.E.
 Highways Engineer

Date: 5/21/12

Subject: UPP 5816(4)
 Broadway – Park to MT - Hlna
 UPN 7723000
 Resurfacing – Asphalt (thin lift <=0.20')(including Safety Improvements)

Attached is the Preliminary Field Review Report/Scope of Work Report which was approved on 6/1/12. 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
 Kent Barnes, Bridge Engineer
 Roy Peterson, Traffic and Safety Engineer
 Robert Stapley, Right-of-Way Bureau Chief

Tom Martin, Environmental Services Bureau Chief
 Lynn Zanto, Rail, Transit, & Planning Division Administrator
 Jake Goettle, Construction Engineering Services Bureau
 Matt Strizich, Materials Engineer
 Jon Swartz, Maintenance Administrator

cc:

Dawn Stratton, Fiscal Programming Section
 Damian Krings, Road Design Engineer

RJ Snyder, GF Road Design - Helena

Ben Sautter, Street Superintendent
 316 N. Park Ave
 Helena, MT 59624
 Ryan Leland, City Engineer
 316 N. Park Ave
 Helena, MT 59624

Preliminary Field Review/Scope of Work Report

UPP 5816(4)

Project Manager: RJ Snyder

Introduction

This report was developed from information taken from the preliminary field review conducted on November 29, 2011 with the following in attendance:

Steve Prinzing	Great Falls District Engineering Services Supervisor
Jimmy Combs	Great Falls District Traffic Engineer
Dan Hill	Pavement Analysis Engineer - Supervisor
Steve McEvoy	Pavement Analysis Engineer
Jim Hansen	Urban Design - Designer
Jim Cornell	Traffic Signing
Charles Pierce	Urban Design – Design Supervisor
RJ Snyder	Great Falls District Project Design Manager
Ryan Leland	City Engineer – City of Helena
Eric Thunstrom	Great Falls District Environmental Project Development Engineer

Proposed Scope of Work

The proposed project has been nominated for a preventative maintenance thin lift overlay. The proposed work includes new asphalt surfacing, cold milling, new pavement markings, and updated signs. Curb ramps within the project limits will be upgraded to meet PROWAG criteria and any drainage issues that arise from these improvements will be addressed as well.

Purpose and Need

The intent of the project is to extend the life of the roadway by milling and filling the roadway with 0.15' feet of 3/8" Grade S plant mix bituminous surfacing full width.

Project Location and Limits

- a. The project is located on Broadway St. (U-5816) within the city limits of Helena (in the Helena Urban Boundary) in Lewis and Clark County beginning at the intersection of Park Ave (U-5805 - RP 0.000±) and extending east to just west of the intersection with Montana Ave. (U-5811 - RP 1.023).
- b. The functional classification of U-5816 is an urban minor arterial.
- c. The project length is 1.023 miles.
- d. This project lies in Township 10 North, Range 3 West, Sections 31 and 32,
- e. The As-Builts from Park St. to Warren St. are City of Helena project #94-13. The As-Builts for the section from Warren St. to Montana Ave are project M-5816(3).
- f. This project will connect with MDT maintained routes:
 - U-5805 Park Ave.
 - U-5815 Cruse Ave.
 - U-5811 Montana Ave.

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 Transportation Management Plan (TMP) consisting mainly of a Traffic Control Plan (TCP). A limited Public Information (PI) component to address lane closures and wide load detours will also be included in the plan package. These issues are discussed in more detail under the Traffic Control and Public Involvement sections.

Preliminary Field Review/Scope of Work Report

UPP 5816(4)

Project Manager: RJ Snyder

Physical Characteristics

- a. Broadway Street begins as a 2 lane facility with 12' lanes and 8' shoulders. There is both diagonal and parallel on-street parking with various time restrictions. At the beginning of the project, the adjacent development is commercial with limited mid-block access until Warren St (\approx 850 ft). East of Warren St., development becomes mixed with residential properties with some scattered private approaches until Davis Street (\approx 730 ft). East of Davis Street, Broadway narrows to 6' shoulders with adjacent development that is strictly residential in nature. On-street parallel parking is allowed on the north side of the roadway as are private approaches from Davis to Montana Avenue. The south side of the roadway prohibits all parking and private approaches from Davis to Montana Avenue (\approx 3830 ft).
- b. It is unknown when original roadway construction was completed, but it was surfaced with bituminous asphalt under project M-5816(3) in 1978. The roadway surfacing has been upgraded by the City of Helena in the past. It is unknown when the roadway was last resurfaced.
- c. The Road Log shows an average pavement thickness of 2 inches and a 5 inch base course thickness from RP 0.0 – 0.132. From R.P. 0.132 – 1.023 the average pavement thickness is 3 inches with a 4.2 inch base course thickness.

Urban Route data is not obtained for inclusion in the yearly PvMS Pavement Condition and Treatment Report. This project was nominated and scoped based on City of Helena's pavement preservation plan.

- d. This project is located on level terrain with one steep long hill (grade 7 % +/-) within an urban area. The adjacent land is used for both commercial and residential property.

Traffic Data

The Traffic Data Collection Section provided the following traffic data:

2012 ADT	8,820 (PRESENT)
2013 ADT	8,910 (LETTING DATE)
2033 ADT	11,020 (FUTURE)
DHV	1,210
T	28
AGR	1.1%

Crash Analysis

ENGINEERING STUDY EVALUATION

DESCRIPTION: BROADWAY – PARK TO MT AVE – HELENA

ROUTE & RP: U-5816 RP 0.000 TO RP 1.023

DATE TIME FRAME: 01-01-2008 TO 12-31-2010

STATEWIDE RATES NOT AVAILABLE FOR URBAN ROUTES

Preliminary Field Review/Scope of Work Report

UPP 5816(4)

Project Manager: RJ Snyder

STUDY AREA

ALL VEHICLE CRASH RATE: 6.67¹⁾

ALL VEHICLES SEVERITY INDEX: 1.48²⁾

ALL VEHICLE SEVERITY RATE: 9.91³⁾

TOTAL RECORDED CRASHES: 66

¹⁾ Crash rates are defined as the number of crashes per million vehicle miles

²⁾ Severity index is defined as the ratio of the sum of fatal and incapacitating injury crashes times 8 plus the number of other injury crashes times 3 plus the number of property damage crashes to the total number of crashes.

³⁾ Severity rate is defined as the crash rate multiplied by the severity index.

I. VARIATIONS FROM AVERAGE OCCURANCE:

- 18.2% Snow Weather conditions vs. 6.8% Statewide Average for Cities.
- 47.0% Clear Weather Conditions vs. 60.0% Statewide Average for Cities.
- 50.0% Dry Road Conditions vs. 66.2% Statewide Average for Cities.
- 40.9% Rear End Collisions vs. 61.2% Statewide Average for Cities.

II. CRASH CLUSTERS OR SAFETY PROJECTS

- No crash clusters were identified within the study area during the study period

III. REMARKS & RECOMMENDATIONS:

The following is a summary of the crashes within the study area:

- 39 crashes occurred either in or were related to an intersection.
- 27 crashes in a rear end collision.
- 23 crashes reported ice, snow, or slushy road conditions.
- 15 crashes occurred during snow or blowing snow weather conditions.
- 17 crashes resulted in a right angle collision.
- 11 crashes occurred during dark-lit conditions.
- 1 crash involved a pedestrian.

The following areas had more than 5 crashes:

- Intersection of Broadway and Ewing (6 crashes)
- Intersection of Broadway and Montana (6 crashes)
- Intersection of Broadway and Raleigh (5 crashes)

The Safety Engineering Section checked reported crashes for the first 6-months of 2011. There have been 14 reported crashes. The following is a summary of those crashes:

- 10 crashes occurred either in or were related to an intersection.
- 5 crashes resulted in a rear-end collision.
- All crashes happened during daylight conditions.

Preliminary Field Review/Scope of Work Report

UPP 5816(4)

Project Manager: RJ Snyder

Major Design Features

- a. **Design Speed.** The posted speed limit is 25 mph throughout the project. Due to the fact that horizontal and vertical alignment will not be adjusted, design speed will not be analyzed.
- b. **Geometrics.** Due to the scope of the project, the existing horizontal and vertical alignment of the roadway will remain.
- c. **Typical Sections and Surfacing.** There are no proposed changes to the typical section with this pavement preservation project. The proposed surfacing is full width mill with 3/8" plant mix surfacing and no chip seal. One of the goals of the project is to improve rutting and bring the road back into section.
- d. **Geotechnical Considerations.** No geotechnical issues are anticipated with this project.
- e. **Hydraulics.** Ryan Leland (City Engineer, Helena) mentioned ponding issues at the Base Camp (\approx R.P. 0.1). A low-lying area exists between centerline and on-street, angle parking at the Base Camp. The cross-sectional grade of the surface will be redesigned to promote this area to drain. Other hydraulic features may need to be redesigned to accommodate ADA ramp modifications. We anticipate hydraulic involvement with these two aspects of the design.
- f. **Bridges.** There are no bridges within the project limits.
- g. **Traffic.** New signage and striping will be included with this project.
- h. **Pedestrian/Bicycle/ADA.** ADA compliance outlined in PROWAG guidelines has been surveyed and inventoried. ADA corner modifications will occur at the intersections of:

- | | | |
|---------------------|-------------------|-------------------|
| 1. Park Ave. | 2. N. Jackson St. | 3. Wong St. |
| 4. S. Cruise St. | 5. Vawter St. | 6. S. Warren St. |
| 7. S. Ewing St. | 8. N. Ewing St. | 9. Rodney St. |
| 10. Spencer St. | 11. Davis St. | 12. Chaucer St. |
| 13. Gem St. | 14. Beattie St. | 15. Raleigh St. |
| 16. Shiland St. | 17. Hoback St. | 18. Alta St. |
| 19. Stabern St. | 20. N. Dakota St. | 21. S. Dakota St. |
| 22. S. Montana Ave. | | |

The existing paths of travel will be perpetuated throughout the project. One additional crossing will be provided at the intersection of Broadway St. and N. Ewing St. The possibility of adding crossings across Broadway St. between Last Chance Gulch and N. Ewing St. was analyzed but it was determined that providing ramp access to a street with a slope of 7%, would provide a false signal that there was a traversable way. Therefore, only the one additional crossing at Broadway St. and N. Ewing St. will be built as part of this project.

- i. **Miscellaneous Features.** Retaining walls pertinent to the modification of ADA ramps may be constructed.
- j. **Context Sensitive Design Issues.** There are no Context Sensitive Design issues on this project.

Other Projects

There is a pavement preservation job UPP 5805(15) Park Ave – Brdwy to Neill – Hlna UPN 7722000 that is scheduled to be let March of 2013. These two projects connect at the intersection of Broadway St. and Park Ave.

Preliminary Field Review/Scope of Work Report

UPP 5816(4)

Project Manager: RJ Snyder

Design Exceptions

Design exceptions are not required for substandard design elements pertaining to preventative maintenance projects.

Right-of-Way

No new right-of-way is needed or anticipated for this project. Construction permits are expected for new sidewalk and upgrades to ADA accessibility.

Cold-In-Place Recycle

CIPR is not being used due to short length of the project and maneuverability issues within the project limits regarding the CIPR equipment.

Access Control

Access control is not being implemented on this project. Existing approaches locations will be maintained. Requests for approach modifications and relocations will be evaluated based on proximity to intersections and location of adjacent approaches.

Utilities/Railroads

No railroad involvement on this project is expected.

The manholes, drop inlets, water valves, street monuments, and all other appurtenances inside the project limits will need to have elevations adjusted to accommodate the overlay due to the fact that the road is out of section. A SUE I survey will be required to identify possible conflicts.

Intelligent Transportation Systems (ITS) Features

There are no opportunities identified at this time for ITS solutions with this project.

Survey

Survey will be provided by the Survey Bureau in Helena. A survey request has already been submitted to the Survey Bureau and the survey is currently under way. Upon identification of conflicts between ADA ramps, existing curb inlets, and underground utilities, a SUE II survey may be required at certain locations. Sites will be determined as the design proceeds.

Public Involvement

A "Level B" public involvement plan is appropriate for this project. A limited PI component will be included in the project outlining strategies for public notification. The Level 'B' plan will include the following:

- News release explaining the project and including a department point of contact.
- Personal contacts with local government officials
- Personal contacts with affected landowners (where construction permits will be required) explaining final design
- Construction notification and information during construction.

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. This project is located in a designated MS4 area, and the project must comply with local requirements, such as Helena ordinances addressing urban storm water runoff.

Preliminary Field Review/Scope of Work Report

UPP 5816(4)

Project Manager: RJ Snyder

The Environmental Services Bureau will secure the appropriate Environmental documentation for this project.

The Environmental Checklist is attached at the end of the report.

Energy Savings/Eco-Friendly Considerations

Millings generated by the project will be recycled by the City of Helena. The contact for the city is Ben Sautter (406-447-1566).

Experimental Features

There will be no experimental features used for this project.

Traffic Control

The proposed traffic control plan includes limited sections of lane closures on Broadway St. during construction. Closure of the entire roadway section will be prohibited. Traffic will be maintained on at least one lane at all time with only minor delays allowed. Traffic will be maintained at Cruse Ave., Davis St., Montana Ave., and pedestrian crossings with only minor delays allowed. Local Access will be maintained to the maximum extent possible to minimize impact to local residents, businesses, and traveling public. Reasonable business access will be maintained and coordinated with local businesses during construction of this project. Alternate routes and possible detour designations will be discussed as the project develops.

The possibility of constructing this project at night was discussed. As this approach will increase the cost of the construction of the project, it is not a favorable approach at this time. However, pending public sentiment or other extenuating circumstances, it is not being ruled out.

Project Management

The Great Falls Road Design Unit and the MSU Design Unit will design this project and RJ Snyder is the Project Design Engineer.

Preliminary Cost Estimate

	Estimated cost	Inflation (INF) (from PPMS)	TOTAL costs w/INF + IDC (from PPMS)
Road Work	\$650,000		
ADA	\$180,000		
Subtotal	\$830,000		
Mobilization (10%)	\$83,000		
Subtotal	\$913,000		
Contingencies (8%)	\$73,040		
Total CN	<u>\$986,040</u>	<u>\$24,267</u>	<u>\$ 1,010,307</u>
CE (10%)	<u>\$98,604</u>	<u>\$2,426</u>	<u>\$ 101,030</u>
TOTAL CN+CE	<u>\$1,084,644</u>	<u>\$ 26,693</u>	<u>\$ 1,111,337</u>

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 9.64% as of FY 2012.

Preliminary Field Review/Scope of Work Report

UPP 5816(4)

Project Manager: RJ Snyder

Ready Date

The project has a ready date of October 1. The project is in the TCP with a letting date of March 25, 2013. There are -30 days of project float; this is due to ADA survey requirements needed for design. In order to keep the project on schedule the MSU Design Unit has been recruited and preliminary plan preparation is under way. We also expect activities on the critical path to occur simultaneously. The project is expected to meet the planned ready date.

Site Map

The project site map is attached.

UPP 5816(4)
Broadway – Park to MT - Hlna

