



May 17, 2013

Kevin L. McLaury  
Division Administrator  
Federal Highway Administration  
585 Shepard Way, Suite 2  
Helena, MT 59601-9785

RECEIVED  
MAY 29 2013  
FHWA  
MONTANA DIVISION

Attention: Gene Kaufman

Subject: Programmatic Categorical Exclusion (PCE) Concurrence Request  
SF 109-GR/CBR – S of Somers  
HSIP 5-3(114)100  
CN 7496000

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 the Montana Department of Transportation (MDT) and the Federal Highway Administration (FHWA) on April 12, 2001. This proposed action also qualifies as a Categorical Exclusion under ARM 18.2.261 (Sections 75-1-103 and 75-1-201, MCA).

The following form provides the documentation required to demonstrate that all of the conditions are satisfied to qualify for a PCE. A copy of the Preliminary Field Review Report is 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"/>

	<u>YES</u>	<u>NO</u>	<u>N/A</u>	<u>UNK</u>
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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. There is a high rate of residential growth in this proposed project's area.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. There is a high rate of commercial growth in this proposed project's area.	<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"/>
5. There are parks, recreational, or other properties acquired/improved under <i>Section 6(f)</i> of the 1965 <i>National Land &amp; Water Conservation Fund Act</i> (16 USC 460L, <i>et seq.</i> ) on or adjacent to proposed the project area.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The use of such <i>Section 6(f)</i> sites would be documented and compensated with the appropriate agencies. ( <i>e.g.</i> : MDFWP, local entities, etc.).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Are there any sites either on, or eligible for the National Register of Historic Places with concurrence in determination of eligibility or effect under <i>Section 106</i> of the <i>National Historic Preservation Act</i> (16 USC 470, <i>et seq.</i> ) by the State Historic Preservation Office (SHPO), which would be affected by this proposed project.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. There are parks, recreation sites, school grounds, wildlife refuges, historic sites, historic bridges, or irrigation that might be considered under <i>Section 4(f)</i> of the 1966 <i>US DEPARTMENT OF TRANSPORTATION Act</i> (49 USC 303) 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. De minimis finding(s) is/are necessary for this project.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. "Nationwide" Programmatic <i>Section 4(f)</i> Evaluation forms for these sites are attached.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. This proposed project requires a full ( <i>i.e.</i> : DRAFT & FINAL) <i>Section 4(f)</i> 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 waterbody(ies) considered as "waters of the United States" or similar ( <i>e.g.</i> , "state waters").	<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>
1. Conditions set forth in <i>Section 10</i> of the <i>Rivers and Harbors Act</i> (33 USC 403) and/or <i>Section 404</i> under 33 CFR Parts 320-330 of the <i>Clean Water Act</i> (33 USC 1251-1376) would be met.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Impacts in wetlands, including but not limited to those referenced under Executive Order (E.O.) #11990, and their 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 Stream Protection Authorization would be obtained from the MDFWP?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. There is a delineated floodplain 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. Tribal Water Permit would be required.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Work would be required 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 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"/>
The designated National Wild & 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 <i>Section 7</i> of the <i>Wild and Scenic Rivers Act</i> (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"/>

	<u>YES</u>	<u>NO</u>	<u>N/A</u>	<u>UNK</u>
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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
D. There would be substantial changes in access control involved with this 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 ( e.g. festivals) 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"/>
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"/>

	<u>YES</u>	<u>NO</u>	<u>N/A</u>	<u>UNK</u>
I. Documentation of an “invasive species” review to comply with both EO #13112 and the <i>County Noxious Weed Control Act</i> (7-22-2152, MCA), including directions as specified by the county(ies) wherein its intended work would be done.	<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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If the proposed work would affect Important Farmlands, then a CPA 106 Farmland Conversion Impact Rating form would be completed in accordance with the <i>Farmland Protection Policy Act</i> (7 USC 4201, <i>et seq.</i> ).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
K. Features for the <i>Americans with Disabilities Act</i> (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 <i>Clean Air Act’s Section 176(c)</i> (42 USC 7521(a), as amended) under the provisions of 40 CFR 81.327 as it’s either in a Montana air quality:				
A. “Unclassifiable/Attainment” area. This proposed project is <u>not</u> 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’s Air Resources Management Bureau, 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)(2-4) and 40 CFR 81.417? (Northern Cheyenne, Flathead, and Fort Peck Indian 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"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Federally listed Threatened or Endangered (T/E) Species:				
A. There are recorded occurrences and/or critical habitat in this proposed project’s vicinity.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>





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

MASTER FILE  
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**Memorandum**

To: Paul R. Ferry, PE  
 Highways Engineer

From: Damian M. Krings, PE *DMC*  
 Road Design Engineer

Date: September 15, 2011

Subject: HSIP 5-3(114)100  
 SF 109-GR/CBR-S of Somers  
 UPN 7496000  
 Work Type 310 – Roadway & Roadside Safety Improvements

Please approve the attached Preliminary Field Review Report.

Approved *Paul R. Ferry* Date 9/15/11  
 For Paul R. Ferry  
 Highways Engineer

We are requesting comments from those on the distribution list. We will assume their concurrence if we receive no comments within two weeks of the approval date.

**Distribution:**

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

**cc:**

- Dawn Stratton, Fiscal Programming Section
- Bill Squires, Project Design Manager, Missoula District
- Damian Krings, Road Design Engineer

**e-copies:**

- |  |   |
|--|---|
| Jim Walther, Engineering, Preconstruction Engineer     | Jake Goettle, Construction Bureau – VA Engineer         |
| Lesly Tribelhorn, Highways Design Engineer             | Shane Stack, Missoula District Preconstruction Engineer |
| Mark Goodman, Hydraulics Engineer                      | Ben Nunnallee, Missoula District Projects Engineer      |
| KC Yahvah, Missoula District Hydraulics Engineer       | Darin Reynolds, Missoula District Materials Lab         |
| Bonnie Gundrum, Env. Resources Section Supervisor      | Kyle Demars, Kalispell Area Maintenance Chief           |
| Pat Basting, Missoula District Biologist               | Steve Giard, R/W Utilities Section                      |
| Susan Kilcrease, District Project Development Engineer | David Hoerning, R/W Engineering Manager                 |
| Danielle Bolan, Traffic Engineer                       | Greg Pizzini, Acquisition Manager                       |
| Ivan Ulberg, District Traffic Project Engineer         | Joe Zody, R/W Access Management Section Manager         |
| Kraig McLeod, Safety Engineer                          | Paul Johnson, Project Analysis Bureau                   |
| Nigel Mends, Bridge Area Engineer, Missoula District   | Sue Sillick, Research Section Supervisor                |
| Matt Strizich, Materials Engineer                      | Jean Riley, Planner                                     |
| Daniel Hill, Pavement Analysis Engineer                | Dawn Stratton, Fiscal Programming                       |
| Bret Boundy, Missoula District Geotechnical Manager    | Scott Bunton, Engineering Cost Analyst                  |
| Bryce Larsen, Supervisor, Photogrammetry & Survey      | Alyce Fisher, Fiscal Programming                        |
| Marty Beatty, Engineering Information Services         | Mark Keeffe, Bicycle/Pedestrian Coordinator             |
| Paul Grant, Public Involvement Officer                 |   |

## Preliminary Field Review Report

HSIP 5-3(114)0, SF 109-GR/CBR-S of Somers

Project Manager: Jeremy Terry

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### **Introduction**

The following MDT employees attended the June 15, 2011 field review:

William M. Squires, PE, Missoula Area Engineer, Road Design – Helena

Jeremy Terry, Lead Designer, Missoula Crew, Road Design – Helena

David Holien, PE, CE Specialist IV, Road Design – Helena

Jonathan Floyd, CE Specialist, Safety Management – Helena

Ben Nunnallee, Missoula District Projects Engineer – Missoula

Susan Kilcrease, Missoula District Project Development Engineer, Environmental – Missoula

Matt Erickson, Rollins Section Maintenance - Rollins

### **Proposed Scope of Work**

The proposed project has been nominated to improve highway safety. The proposed scope of work includes the installation of guardrail between US Highway 93 (N-5) and the adjacent frontage road, as well as the installation of concrete barrier rail along US 93 adjacent to jagged rock outcroppings.

The Safety Management Section recommended guardrail installation as a cost-effective countermeasure to address the crash trends between Reference Post (RP) 99.6 and RP 100.5.

### **Purpose and Need**

The purpose of this project is to improve the safety of the existing roadway by addressing a previously identified crash trend at this location.

### **Project Location and Limits**

The project is located on US Highway 93 (N-5) in Flathead County. See the attached location map.

US Highway 93 is on the National Highway System (NHS Primary), and is functionally classified as a principle rural arterial – non-interstate.

The project begins at Reference Post (RP) 99.8±, approximately 0.8 miles north of Lakeside, and extends northerly roughly 0.7 miles to RP 100.5±; the project ends about 2.7 miles south of Somers.

The approximate as-built station limits are Station 1897+30± to Station 1936+05± on F-191(19). The project limits may change slightly as the design is refined. Revisions will be documented in the Scope of Work report.

### **Work Zone Safety and Mobility**

This project is located in a Level 1 corridor. Therefore, Level 1 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 Transportation Operations (TO) component and a limited Public Information (PI) component to address 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.

### **Physical Characteristics**

This section of US 93 was originally constructed in 1964 under project F-191(19). The original roadway was 32 feet wide and had two 12-foot driving lanes with 4-foot shoulders. The surfacing consisted of 0.25' plant mix bituminous surfacing atop 0.15' crushed top surfacing, which was placed over 1.3' crushed base surfacing – Type A.

In 1983, the roadway received a 0.25' plant mix overlay, under project F 5-3(11)93; a 32.0' wide seal and cover application was also administered under this project.

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Project Manager: Jeremy Terry

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A left-turn lane was added for southbound traffic, at the intersection near the beginning of the project, sometime between 1983 and 2006.

The current lane configuration is as follows (station ranges not listed represent width transitions):

As-Built Station Range	Dimensions	Notes
1895+49 to 1897+22	12.0' driving lane, 3.5' shoulder, 12.0' turn lane on centerline*	LT & RT
1902+36 to 2013+66	12.0' driving lane, 4.0' shoulder	LT & RT

In 2006, the roadway received a 0.2' plant mix overlay followed by a chip seal, under project SFCN 5-2(141)93.

The Pavement Management System (PvMS) generated the following performance indices for the survey year of 2010 and subsequent 2011 recommendations:

Reference Post	Ride	Rut	Alligator Crack	Misc. Crack	Construction Recommendation
93 to 103.3	80.9	78.5	100	100	Do Nothing

The numerical performance indices for Ride, Alligator Crack, and Miscellaneous Crack correspond to a general condition rating as follows: Good – 80 to 100, Fair – 60 to 79.9, Poor – 0 to 59.9. The Rutting Index corresponds as follows: Good – 60 to 100, Fair – 40 to 59.9, Poor – 0 to 39.9.

The project is located in a predominantly rural residential area. The highway is located in rolling terrain.

The horizontal alignment consists of two curves joined by a tangent section. Both of the curves meet a 70 mph design speed minimum radius of 1810 feet.

The vertical alignment is composed of three vertical curves and meets the 60 mph design speed criteria, with the exception of the +4.672% (uphill northbound) grade leading into the crest vertical curve at the beginning of the project.

Existing fill slopes are: 0 to 5 feet – 5:1, over 5 feet 1½:1.

Cut slopes are: 0 to 5 feet – 5:1, 5 to 10 feet – 3:1, 10 to 15 feet 2:1, over 15 feet 1½:1

There is a rock face approximately 13 feet from the shoulder stripe; it is located along the left side between Station 2004+00± and Station 2011+00±.

### Traffic Data

The following traffic data for the project was obtained from the 2009 Traffic by Sections Report:

MILE POST	SECTION DESCRIPTION	COUNTY	SECTION LENGTH	TRAFFIC TYPE	2007 ADT	2008 ADT	2009 ADT	VEHICLE MILES
093+0.537	ENT/LV FLATHEAD/LAKE CO	FLATHEAD	10.728	ALL VEHICLES	7308	6922	7094	76108
				COMMERCIAL	301	375	375	4029

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Project Manager: Jeremy Terry

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The letting date and design year traffic volumes were projected by applying an annual growth rate of 2.0%; this provides enough precision for the guardrail design criteria that is traffic-volume dependent.

2013 ADT = 7,679 (Letting Date)  
2033 ADT = 11,410 (Design Year)  
Growth Rate = 2.0%

### Crash Analysis

Safety Management analyzed the reported crashes on NINHS Route 5 (US 93) from RP 99.6 to RP 100.5, for the ten-year period of 2001 through 2010. The crash data is summarized below:

The Montana Highway Patrol records show 43 crashes for the study area and time frame. The main crash trend identified was single-vehicle run-off-the-road crashes. There were 26 property damage only crashes, no fatal crashes, and 17 injury crashes. There were a total of 25 injuries.

WEIGHTED ANNUAL ADT FOR THE CRASH SECTION IS	6916
LENGTH OF SEGMENT (MILES) IS	0.91
AVERAGE VEHICLE MILEAGE FOR THE CRASH SECTION IS	6294
CRASH RATE BASED ON ADT FOR YEARS 2001 THROUGH 2010 IS	1.87
NUMBER OF CRASHES IN THIS SECTION IS	43
NUMBER OF FATAL INJURY CRASHES IN THIS SECTION IS	0
NUMBER OF INCAPACITATING INJURY CRASHES IN THIS SECTION IS	5
NUMBER OF NON-INCAPACITATING INJURY CRASHES IN THIS SECTION IS	6
NUMBER OF OTHER INJURY CRASHES IN THIS SECTION IS	6
TOTAL NUMBER OF INJURY CRASHES	17
NUMBER OF FATALITIES IN THIS SECTION IS	0
NUMBER OF INCAPACITATING INJURIES IN THIS SECTION IS	6
NUMBER OF NON-INCAPACITATING INJURIES IN THIS SECTION IS	9
NUMBER OF OTHER INJURIES IN THIS SECTION IS	10
TOTAL NUMBER OF INJURIES	25
CRASH SEVERITY INDEX FOR THIS SECTION IS	2.37
CRASH SEVERITY RATE FOR THIS SECTION IS	4.43

To address these crashes, the Safety Management Section recommended two separate improvements. One is the installation of guardrail from RP 99.8 to RP 100.5 on the east side (north bound) of the roadway. This recommended improvement, based on the ten year period from January 1, 1999 through December 31, 2008, yielded a benefit-to-cost ratio of 2.31. The other recommended improvement is the installation of Jersey Rail to transition into guardrail for RP 99.6 to RP 100.0 on the west side (south bound) of the roadway. This recommended improvement, based on the ten year period from January 1, 1999 through December 31, 2008, yielded a benefit-to-cost ratio of 2.8.

### Major Design Features

- Design Speed.** A 60 mph design speed is proposed. However, the grade leading into the first vertical curve does not satisfy the criteria for a 60 mph design speed in rolling terrain. The posted speed limit is 55 mph.
- Horizontal Alignment.** No changes to the horizontal alignment are proposed.
- Vertical Alignment.** No changes to the vertical alignment are proposed.
- Typical Sections and Surfacing.** No changes to the existing roadway surface are proposed. Shoulder gravel will be placed to a depth of 0.3± feet, where needed, to provide the required widening behind guardrail posts. Embankments will be widened to support the shoulder gravel where necessary.
- Geotechnical Considerations.** The review team discussed the possibility of trim blasting some of sharp rock protrusions, as an alternative to shielding the rock face with concrete

## Preliminary Field Review Report

- barrier and guardrail. There is a power line on top of the rock, which may preclude the blasting option.
- f. **Hydraulics.** No hydraulic involvement is anticipated.
  - g. **Bridges.** There are no bridges within the project limits.
  - h. **Traffic.** No Traffic Engineering involvement is anticipated.
  - i. **Pedestrian/Bicycle/ADA.** No evidence of road use by pedestrians or bicyclists was noticed on the field review. Pedestrians and bicyclists may experience a reduced “comfort level” when they travel the section or road adjacent to the new guardrail or concrete barrier. It is beyond the scope of this safety project to provide improved facilities for these users.
  - j. **Miscellaneous Features.** There are no miscellaneous feature considerations for this safety project.
  - k. **Context Sensitive Design Issues.** No issues characterized as context sensitive have been identified.

### **Other Projects**

HSIP-STPHS 5-3(93)97, 2003-Turn Lanes-S of Lakeside [5879000] is located on US Highway 93 (N-5) between RP 96.0 and RP 97.5. The scope of this project includes widening for the addition of a left-turn lane, slope flattening, scaling and trim blasting. The current letting date for this project is November 5, 2012.

### **Location Hydraulics Study Report**

A Location Hydraulics Study Report will not be necessary for this project.

### **Design Exceptions**

The design exception process does not apply to safety projects. The applicable design elements that do not comply with MDT design criteria (i.e. guardrail details, shy distance, etc.) will be discussed in the scope of work report.

### **Right-of-Way**

The existing right-of-way widths are as follows:

<b>As-Built Station Range</b>	<b>Width of ROW LT. (ft.)</b>	<b>Width of ROW RT. (ft.)</b>
1897+00 to 1905+21.6	70	90
1906+01.6 to 1918+29.4 BK	50	90
1918+29.4 AH to 1922+28.3 BK	50	100
1922+28.3 AH to 1928+49.6 BK	50	110
1928+49.6 AH	50	117.5
1928+49.6 AH to 1929+45.9 BK	50	Transition
1929+45.9 AH	80	Transition
1933+82	80	220
1935+18.6 to 1941+00	80	114.9

No right-of-way involvement is anticipated.

### **Access Control**

No access control exists within the project limits. There are no proposed changes to access control under this project.

### **Intelligent Transportation Systems (ITS) Features**

There will be no ITS features on this project.

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### **Experimental Features**

No experimental features are proposed for this project.

### **Utilities/Railroads**

Overhead power lines run the length of the project. No impacts to utilities are anticipated unless trim blasting is pursued.

### **Survey**

A field survey will be requested to delineate the existing slopes, signs, utilities, and rock face. This information will be used to determine the guardrail length of need.

### **Public Involvement**

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

### **Environmental Considerations**

No significant environmental issues are anticipated. The level of environmental evaluation and documentation for a Programmatic Categorical Exclusion is appropriate.

### **Energy Savings/Eco-Friendly Considerations**

No energy savings/eco-friendly considerations will be implemented with this guardrail safety improvement project.

### **Traffic Control**

Traffic will be maintained through the construction of the project with appropriate signing, flagging, pilot cars, etc., in accordance with the Manual on Uniform Traffic Control Devices. The work zone may require single lane closures during construction operations. However, one lane in each direction will remain open for traffic when construction operations are not occurring.

A Transportation Management Plan (TMP) consisting of a Traffic Control Plan (TCP), a limited Transportation Operations (TO) component and a limited Public Information (PI) component is appropriate for this project.

### **Project Management**

The Helena Road Design Crew will develop the plans. Project management responsibilities will be handled by Jeremy Terry.

Jeremy Terry  
Helena Road Design, Missoula Section  
(406) 444-7859  
e-mail: [jterry@mt.gov](mailto:jterry@mt.gov)

This project is not under full FHWA oversight.

### **Preliminary Cost Estimate**

The estimated cost that was programmed to construct the project is \$367,000 for construction and \$37,000 for construction engineering.

	Estimated cost	Inflation (INF) (from PPMS)	TOTAL costs w/INF + IDC (from PPMS)
Road Work	\$167,000		

## Preliminary Field Review Report

HSIP 5-3(114)0, SF 109-GR/CBR-S of Somers

Project Manager: Jeremy Terry

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Traffic Control	\$ 17,000		
<b>Subtotal</b>	\$184,000		
Mobilization (14%)	\$ 26,000		
<b>Subtotal</b>	\$210,000		
Contingencies (8%)	\$ 17,000		
<b>Total CN</b>	<b><u>\$227,000</u></b>	<b><u>\$268,000</u></b>	<b><u>\$294,000</u></b>
<b>CE (10%)</b>	<b><u>\$ 23,000</u></b>	<b><u>\$27,000</u></b>	<b><u>\$29,000</u></b>
<b>TOTAL CN+CE</b>	<b><u>\$250,000</u></b>	<b><u>\$296,000</u></b>	<b><u>\$323,000</u></b>

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Cost per mile = \$322,000 (using CN total)

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.

### **Ready Date**

The ready date will be established through the OPX2 override process. It is expected that the project could be developed in time to construct as early as 2014.

### **Site Map**

The project site map is attached.

Preliminary Field Review Report

HSIP 5-3(114)0, SF 109-GR/CBR-S of Somers

Project Manager: Jeremy Terry

**FEDERAL AID PROJECT HSIP 5-3(114)0**  
**GUARDRAIL**  
**SF 109 - GR/CBR - S OF SOMERS**  
**FLATHEAD COUNTY**  
**0.7 MILES**

