MDT
Montana Department of Transportation
2701 Prospect Avenue
PO Box 201001
Helena MT 59620-1001
Jim Lynch, Director
Brian Schweitzer, Governor

May 12, 2011

RECEIVED
MAY 12 2011
ENVIRONMENTAL

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

Subject: **Programmatic Categorical Exclusion (PCE) Concurrence Request**
STPS 358-2(2)24
Cut Bank S Slide S-358
Control Number: 7682000

MASTER FILE COPY

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 9, 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).

	Yes	No	N/A	UNK
1. This proposed project would have (a) significant environmental impact(s) as defined under 23 CFR 771.117(a).	☐	☒	☐	☐
2. This proposed project involves (an) unusual circumstance(s) as described under 23 CFR 771.117(b).	☐	☒	☐	☐
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.	☒	☐	☐	☐
1. The context or degree of the right-of-way action would have (a) substantial social, economic, or environmental effect(s).	☐	☒	☐	☐
2. A high rate of residential growth exists in the area of the proposed project.	☐	☒	☐	☐
3. A high rate of commercial growth exists in the area of the proposed project.	☐	☒	☐	☐
4. Work would be on and/or within approximately 1.6 kilometers (1± mile) of an Indian Reservation. **Note**-This proposed project is located on the Blackfeet Indian Reservation.	☒	☐	☐	☐

	Yes	No	N/A	UNK
5. Parks, recreational, or other properties acquired/improved under Section 6(f) of the 1965 National Land & Water Conservation Fund Act (16 USC 460L, *et seq.*) are on or adjacent to the proposed project area.	☐	☒	☐	☐
The use of such Section 6(f) sites would be documented and compensated with the appropriate agencies (MDFWP, local entities, etc.).	☐	☐	☒	☐
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, *et seq.*) by the State Historic Preservation Office (SHPO) would be affected by this proposed project.	☐	☒	☐	☐
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.	☐	☒	☐	☐
a. The proposed project would not impact the site(s), so a 4(f) evaluation is not necessary.	☐	☐	☒	☐
b. A de minimis finding has been secured for this project.	☐	☐	☒	☐
c. Nationwide Programmatic Section 4(f) Evaluation forms for those sites are attached.	☐	☐	☒	☐
d. This proposed project requires a full Section 4(f) Evaluation.	☐	☐	☒	☐
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").	☒	☐	☐	☐
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.	☒	☐	☐	☐
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.	☒	☐	☐	☐
3. A 124SPA would be obtained from the MDFWP.	☐	☒	☐	☐
4. A delineated floodplain exists in the proposed project area under FEMA's Floodplain Management criteria.	☐	☒	☐	☐
The water surface at the 100-year flood limit elevation would exceed floodplain management criteria due to an encroachment by the proposed project.	☐	☐	☒	☐
5. A Tribal Water Permit would be required. **Note**-An ALPO #90-A permit will be required.	☒	☐	☐	☐
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.	☐	☒	☐	☐

	Yes	No	N/A	UNK
The designated National Wild and/or Scenic River systems in Montana are:				
a. Middle Fork of the Flathead River (headwaters to South Fork confluence).	☐	☐	☒	☐
b. North Fork of the Flathead River (Canadian Border to Middle Fork confluence).	☐	☐	☒	☐
c. South Fork of the Flathead River (headwaters to Hungry Horse Reservoir).	☐	☐	☒	☐
d. Missouri River (Fort Benton to Charles M. Russell National Wildlife Refuge).	☐	☐	☒	☐
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).	☐	☐	☒	☐
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.	☐	☒	☐	☐
1. If yes, are there potential noise impacts?	☐	☐	☒	☐
2. A Noise Analysis would be completed.	☐	☐	☒	☐
3. There would be compliance with the provisions of both 23 CFR 772 for FHWA's Noise Impact analyses and MDT's Noise Policy.	☒	☐	☐	☐
D. Substantial changes in access control would be associated with the proposed project.	☐	☒	☐	☐
If yes, would they result in extensive economic and/or social impacts on the affected locations?	☐	☐	☒	☐
E. The use of a temporary road, detour, or ramp closure having the following conditions when the action(s) associated with such facilities: **NOTE**-traffic will be maintained throughout the project during construction.				
1. Provisions would be made for access by local traffic, and be posted for same.	☒	☐	☐	☐
2. Adverse effects to through-traffic dependant businesses would be avoided or minimized.	☒	☐	☐	☐
3. Interference to local events would be minimized to all possible extent.	☒	☐	☐	☐
4. Substantial controversy associated with this pending action would be avoided.	☒	☐	☐	☐
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.	☐	☒	☐	☐

	Yes	No	N/A	UNK
All reasonable measures would be taken to avoid and/or minimize substantial impacts from same.	☐	☐	☒	☐
G. The Stormwater Discharge conditions (ARM 17.30.1101-1117), including temporary erosion control features for construction would be met. **Note**-A NPDES permit will likely be required.	☒	☐	☐	☐
H. Permanent desirable vegetation with an approved seeding mixture would be established on exposed areas.	☒	☐	☐	☐
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.	☒	☐	☐	☐
J. There are "Prime" or "Prime if Irrigated" Farmlands designated by the Natural Resources Conservation Service on or adjacent to the proposed project area.	☐	☒	☐	☐
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, *et seq.*).	☐	☐	☒	☐
K. Features for the Americans with Disabilities Act (PL 101 336) compliance would be included.	☐	☐	☒	☐
L. A written Public Involvement Plan would be completed in accordance with MDT's Public Involvement Handbook.	☒	☐	☐	☐
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.	☒	☐	☐	☐
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.).	☐	☐	☒	☐
C. Is this proposed project in a "Class I Air Shed" under 40 CFR 52.1382(c)(3)?	☐	☒	☐	☐
5. Federally listed Threatened or Endangered (T/E) Species:				
A. Recorded occurrences, and/or critical habitat are in the vicinity of the proposed project. **Note**-Grizzly bears are in the vicinity.	☒	☐	☐	☐
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?	☐	☒	☐	☐

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 Date: 5/12/2011
Eric Thunstrom
Environmental Services Bureau
Great Falls District Project Development Engineer

Concur Heidy Bruner Date: 5/12/11
Heidy Bruner, P.E.
Environmental Services Bureau
Engineering Section Supervisor

Concur Date: 12 May 2011
Federal Highway Administration

Attachment

electronic copies with attachment:

Tom Martin, P.E.	Environmental Services Bureau Chief
Heidy 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.

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

Memorandum

To: Distribution

From: Paul R. Ferry, P.E. *Lesly Tribelhorn for Paul Ferry 5/9/11*
Highways, Engineer

Date: May 9, 2011

Subject: STPS 358-2(2)24
Cut Bank S Slide S-358
UPN: 7682000
Work Type 140: Reconstruct – without added capacity

Attached is the Preliminary Field Review Report/Scope of Work Report which was approved on May 9, 2011. We request that those on the distribution review this report and submit your concurrence within one week 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:
Michael Johnson, District Administrator
Kent Barnes, Bridge Engineer
Tom Martin, Environmental Services Bureau Chief
Danielle Bolan, Acting Traffic and Safety Engineer
Robert Stapley, Right-of-Way Bureau Chief
Paul Ferry, Highways Engineer
Lynn Zanto, Rail, Transit, & Planning Division Administrator
Jake Goettle, Construction Engineering Services Bureau
Matt Strizich, Materials Engineer
Jon Swartz, Maintenance Administrator
Alan Woodmansey, FHWA - Operations Engineer

cc:
Dawn Stratton, Fiscal Programming Section
Dustin Rouse, Project Design Manager
Damian Krings, Road Design Engineer
Glacier County Commissioners 512 E. Main St. Cut Bank MT. 59427
Don White, Director of Transportation Black Feet Tribe P. O. Box 850, Browning MT. 59417
Memory Overcast BIA, Blackfeet Indian Agency P.O. Box 880, Browning MT. 59417

e-copies:
Jim Walther, Engineering, Preconstruction Engineer
Lesly Tribelhorn, Highways Design Engineer
Mark Goodman, Hydraulics Engineer
Kurt Marcoux, District Hydraulics Engineer
Bonnie Gundrum, Env. Res. Section Supervisor
Paul Sturm, District Biologist
Eric Thunstrom, District Project Development Engineer
Danielle Bolan, Traffic Engineer
Ivan Ulberg, District Traffic Project Engineer
Kraig McLeod, Safety Engineer
Stephanie Brandenberger, Bridge Area Eng., G.F. District
Mary Gayle Padmos, PvMS Engineer
Daniel Hill, Pavement Analysis Engineer
Lee Grosch, District Geotechnical Manager
Bryce Larsen, Supervisor, Photogrammetry & Survey
Marty Beatty, Engineering Information Services
Jason Sorenson, Engineering Cost Analyst
Jake Goettle, Construction Bureau – VA Engineer
Steve Prinzing, District Preconstruction Engineer
Christie McOmber, District Projects Engineer
Stan Kuntz, G.F. District Materials Lab
Tony Strainer, Havre Maintenance Chief
Walt Scott, R/W Utilities Section Supervisor
David Hoerning, R/W Engineering Manager
Greg Pizzini, Acquisition Manager
Joe Zody, R/W Access Management Section Manager
Paul Johnson, Project Analysis Bureau
Sue Sillick, Research Section Supervisor
Doug Wilmot, G.F. District Construction Engineer
Jerilee Weibel, District R/W Supervisor
James Combs, District Traffic Engineer
Dennis Ghekiere, District Utility Agent

Preliminary Field Review Report

STPS 358-2(2)24 Cut Bank S Slide S-358
Project Manager: Stephen Prinzing, P.E.

Paul Grant, Public Involvement Officer
Jean Riley, Planner
Wayne Noem, Secondary Roads Engineer
Linda Cline, District R/W Design
Alyce Fisher, Fiscal Programming
Jim Lynch, Tribal Coordinator

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

Memorandum

To: Paul R. Ferry, PE
Highways Engineer

From: Stephen Prinzing, PE SP
District Preconstruction Engineer

Date: May 9, 2011

Subject: STPS 358-2(2)24
Cut Bank S Slide S-358
UPN: 7682000
Work Type 140: Reconstruct – without added capacity

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

Approved *Lesly Tribelhorn for* Date *5/9/11*
Paul R. Ferry
Highways Engineer

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

cc (w/attach.):
Damian Krings, Road Design Engineer
Highways File

Preliminary Field Review/Scope of Work Report

Introduction

The field review on site was May 5, 2011. The list of attendees includes:

Mick Johnson	District Administrator	Great Falls
Steve Prinzing	District Preconstruction Engineer	Great Falls
Lee Grosch	Geotechnical Section	Helena
Jeania Cereck	Design Supervisor	Great Falls
Kurt Marcoux	Hydraulic Engineer	Helena
Eric Thunstrom	Environmental Services Bureau	Helena
Matt Ladenburg	Havre Maintenance	Havre
Don Weaver	Maintenance	Cut Bank
Gerry Brown	C.E.S. Bureau	Lewistown
Don McNett	Maintenance	Havre
Tony Strainer	Havre Maintenance Chief	Havre
Mark Beckedahl	Project Manager	Cut Bank
Krista Ferguson	District ROW Agent	Great Falls

Proposed Scope of Work

The proposed scope of work for this project is slide repair and stabilization. The proposed work includes flattening existing fill slopes to achieve a minimum slope ratio of 4:1 on both sides of the roadway. This may include installing temporary erosion control measures prior to construction, permanent erosion control measures with construction, vegetating slopes immediately after construction and periodic inspections by Maintenance to monitor the stability of the site.

Purpose and Need

The purpose of the project is to stabilize a slope failure that is affecting approximately 200 +/- feet of the east and west embankment slopes on Secondary 358. The embankment is located approximately 3.5 miles south of the intersection with U.S. Highway 2, near the town of Cut Bank, in Glacier County MT. The project is immediately south of the bridge crossing Spring Creek, a tributary of Cut Bank Creek.

When last inspected in December 2010, the failure consisted of a series of parallel tension cracks on the fill slope near the roadway and a mass of slumped material near the toe of the slope. These failure features began some 200 to 250(±) feet north of Buck Wiley Rd. and extended northward. It appears that surface runoff from the southeast may be contributing to the instability. At the time of the inspection in December of 2010 and at the field review on May 5, 2011there was no apparent evidence of distress in the pavement surface adjacent to the failure features, but there is a high probability that the failure will worsen with significant springtime precipitation events. If the events are severe enough, the travelling surface will be impacted.

Project Location and Limits

a. The project is located in Glacier County.
b. This project is approximately 3.5 miles south of the intersection with U.S. Highway 2, near the town of Cut Bank.
c. The project is located on the Blackfeet Indian Reservation.
d. The project is located on Secondary 358.
e. The project is functionally classified as a Rural Collector Road.

f. The project begins at RP 24.2, the Buck Wiley Road, and runs north approximately 0.3 miles to RP 24.5 the end of the proposed guardrail of the north side of the structure at Spring Creek.
g. The project was constructed in 1968 under S-193(10). An overlay of 0.15'was also placed in 2003. The proposed project will be designed with English stationing referencing the 1968 project stationing of S-193(10).
h. The project stationing will run from south to north with the reference posts.

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 consist mainly of a Traffic Control Plan (TCP) and a limited Public Information (PI) component. These issues are discussed in more detail under the Traffic Control and Public Involvement sections.

Physical Characteristics

a. The general terrain of the area is considered rolling.
b. The area is in a rural setting.
c. The existing roadway surface is 30.0' wide with 12' travel lanes and 3' shoulders.
d. The horizontal alignment is on a tangent throughout this area.
e. The vertical alignment of the roadway is on a 6.806% down grade, crossing the bridge on a1000' vertical curve to a 2.309% uphill grade.
f. The existing fill slopes through the project area are a barn-roof section.
g. The slide area is south of the Spring Creek concrete Structure.
h. The design speed will be 50 mph due to the rolling terrain.
i. PVMS Index Numbers & Recommended Treatment for 2011:

Section	Ride	Rut	ACI	MCI
RP 17.70 to RP 27.85	81.3 (Good)	80.5(Good)	100(Good)	99.4(Good)

Section	Construction	Maintenance
RP 17.70 to RP 27.85	Crack Seal & Cover	Crack Seal & Cover

Traffic Data

Based on the Scope and exigency of the project Traffic Data will not be requested.

Crash Analysis

Based on the Scope and exigency of the project Crash Data will not be requested.

Major Design Features

a. **Design Speed.** The design speed for this project will be 50 mph. The posted speed in the area is currently marked as 70 mph.
b. **Horizontal Alignment**. The existing tangent alignment will be utilized for this project.
c. **Vertical Alignment**. The existing vertical alignment will be utilized for this project. The vertical alignment of the roadway is on a 6.806% down grade, crossing the bridge on a 1000' vertical curve to a 2.309% uphill grade. The slide is on the 6.806% grade. A rural collector road has a maximum grade of 7% according to the geometric design criteria.
d. **Typical Sections and Surfacing**. The existing surface has a 30.0' finish top width with 12' travel lanes and 3' shoulders. The existing surfacing according to the asbuilts S-193(10) is made up of 0.20' PMBS, 0.20' of Crushed Top Surfacing Type "A", 0.50'

Crushed Base Course Type "A " Gr. 5 and then 0.75' Crushed Base Course Type "A " Gr. 2. The surfacing inslopes are 6:1's. The overlay of 0.15' was placed in 2003. The existing fill slopes have a 4:1 +/- barn-roof section.
The existing surfacing is not anticipated to be disturbed. At the time of the inspection (Dec. 2010) and at the PFR/SOW field review there was no apparent evidence of distress in the pavement surface adjacent to the failure features, but there is a high probability that the failure will worsen with significant springtime precipitation events. If the events are severe enough, the travelling surface will be impacted.
The project will be constructed with embankment in place. This will entail removing the saturated soils and bringing in new materials to build the fill slopes.

e. **Geotechnical Considerations**.

1. Geology: The geology of the immediate area is mapped as the Cretaceous-aged Two Medicine River Formation, consisting primarily volcanically-derived sandstone, siltstone and mudstone, sometimes with volcanic ash. Although not mapped as such, the adjacent lowland areas likely contain silts, sands, and gravels associated with Quaternary alluvial and glacial outwash deposits, and recent channel and overbank (flood) deposits.
2. Modeling and Future Investigation: Slope stability was modeled using the Slope/W software. Many of the input parameters were back-calculated since a subsurface investigation of the site has not been conducted. Other soil parameters were estimated based on the results from the investigation and analyses of the failure at M.P. 16.4± north of Valier. Profiles were modeled with a high water table in order to ensure a conservative approach. Several slope geometries were modeled, including the existing, as-built conditions, to determine the minimum recommended slope necessary for stabilization. Results indicate that the minimum slope ratio (H:V) necessary to provide an acceptable factor of safety is 3:1.
   It is important to provide mitigation recommendations for this site as soon as possible – ideally allowing enough time for reconstruction before heavy spring rains begin – in order to diminish the potential for damage to the existing roadway surface.
3. Discussion: The Geotechnical Section recommends reconstruction to flatten the existing slopes on both sides of the embankment from Buck Wiley Rd to the bridge to obtain a final slope ratio of no steeper than 3:1 (H:V). The district prefers a 4:1 (H:V) slope design. Locally-derived borrow from the adjacent hillsides should perform adequately for the reconstruction if sufficient Right of Way or easements can be obtained. The proposed work will not require road closure, but traffic control will be necessary. It appears that soil erosion from within the ditch is contributing to the instability by removing the mass at the toe and by slope over-steepening. Local soils appear to be easily erodible, and the thought is that minimizing the final drainage gradients, promoting area sheet flow (as opposed to focused drainage), and installing permanent erosion control will be beneficial to long term stability.

   The Geotechnical Section advises involvement by Hydraulics to evaluate current conditions and provide recommendations for permanent drainage improvements as necessary. Temporary erosion control measures installed prior to the height of snow melt should help minimize erosional damage and further instability that may occur prior to construction. The Geotechnical Section also advises a review

by Environmental staff to evaluate the potential impact to drainages and wetlands, and requirements for permitting, if any. Finally, Maintenance is asked to continue periodic inspections to monitor the stability of the site, and inform the Geotechnical Section if any are discovered.

The Geotechnical Section has been drilling the site to obtain more specific information and will run the simulations again with any new data acquired to determine if changes to the recommendations are justified, and provide any new information in a supplemental report.

The Road Design staff will determine the necessary volumes for slope flattening and provide plans and a cost estimate for the work recommended.

f. **Hydraulics**. No culverts are in the project location. However, in the 1968 set of construction plans, a channel change was constructed to build the Spring Creek Bridge in its current location further north from the immediate slide area. Hydraulics will provide recommendations for permanent and/or temporary erosion control.
g. **Bridges.** At RP 24.47 a 91.5' x 33.5' prestressed concrete bridge is located at Spring Creek north of the slide area and was built in 1968. No changes to the bridge are necessary. Guardrail bridge approach sections will be added to the 4 corners of the structure. The existing guardrail attached to the north end of the structure will be removed.
h. **Traffic.** Due to the limited scope of this project, no Traffic items are necessary at this time.
i. **Pedestrian/Bicycle/ADA**. Due to the limited scope of this project no pedestrian or bicycle facilities will be addressed.
j. **Miscellaneous Features**. Fencing will be replaced where the new right of way is acquired for the slope flattening. Guardrail shielding all four bridge corners of the structure is proposed along with the removal of the existing "Texas Twist" guardrail on the north end of the structure.
k. **Context Sensitive Design Issues**. Recommendations for permanent drainage improvements may become necessary. Temporary erosion control measures installed prior to the height of snow melt should help minimize erosional damage and further instability that may occur prior to construction. The Geotechnical Section also advises a review by Environmental staff to evaluate the potential impact to drainages and wetlands, and requirements for permitting, if any. MDT Maintenance will continue to monitor the site for changes, before and after reconstruction, and inform the Geotechnical Section if any issues are discovered.

Other Projects
There are no known projects adjacent to this slide project.

Location Hydraulics Study Report
The Location Hydraulics Study Report will not be prepared by the Hydraulics Section. The project is not in a delineated flood plain.

Design Exceptions
No design exceptions are anticipated for this project.

Right-of-Way
The existing right of way limits are 90' both left and right of centerline. Locally-derived borrow from the adjacent hillsides should perform adequately for the reconstruction if sufficient Right of Way is obtained through a permit or by purchasing. Fencing impacted by the slide and/or construction will be restored.

Cold-In-Place Recycle
The surfacing section is not anticipated to be disturbed with this project.

Access Control
There will be no modification to the existing access control.

Utilities/Railroads
No overhead utilities are present. An underground telephone line is in the vicinity on the west side of the roadway running parallel to the fence. One telephone pedestal is located north of the present slide area and will not be disturbed.
No Railroads are in the vicinity of the project.

Intelligent Transportation Systems (ITS) Features
There are no ITS solutions that will be designed within this project.

Survey
Survey was completed in November 2010, but since the slide is progressing daily a pickup survey was requested during the site review to get a better interpretation of the progress.

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

Environmental Considerations
The anticipated level of environmental documentation for the proposed project will be a Programmatic Categorical Exclusion. Wetland impacts are expected and will be delineated on the plans. A Clean Water Act Section 404 permit and an Aquatic Lands Protection Ordinance #90-A permit will be required.

Energy Savings/Eco-Friendly Considerations
There are no opportunities for Energy Savings/Eco-Friendly Considerations with this project

Experimental Features
No experimental features have been identified.

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

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. Two-way traffic is to be maintained at all times after working hours. Closing

one lane at a time to shield equipment and workers from the travelling public will be necessary. Flagging of traffic will also be necessary. The contractor will be required to remove the existing traffic control and establish contractor furnished traffic control during construction.

Project Management

The Great Falls District will be responsible for the plans. Steve Prinzing, P. E. will be the Project Manager. This project is not under full FHWA oversight.

Preliminary Cost Estimate

The nominated cost estimate was $400,000. After the field review included in the Preliminary cost estimate is the earthwork, fence, guardrail, topsoil, seeding, and erosion control. The total cost with Mobilization, CN, CE, and IDC is approximately $486,802.

Project Name		Estimate Costs	Inflation (INF) (from PPMS)	w/INF + IDC (from PPMS)
Road work		$262,382		
Traffic Control		$20,000		
Subtotal		**$282,382**		
Mobilization	15%	$42,357		
Subtotal		**$324,739**		
Contingencies	15%	$48,711		
Total CN		**$373,450**	**$0**	**$423,306**
CE	15%	**$56,018**	**$0**	**$63,496**
IDC:	13.35%		**TOTAL**	**$486,802**
		Inflation Factor (ppms)	*0*	

Note: No inflation is necessary. IDC is calculated at 13.35% as of FY 2011.

Ready Date

The project will not have an established ready date but will be prepared for contract as soon as possible. A short advertisement and notice to proceed date will facilitate the repair. The plans are anticipated to be complete and to Contract Plans by June 3, 2011. The letting date is tentatively set for June 24, 2011.

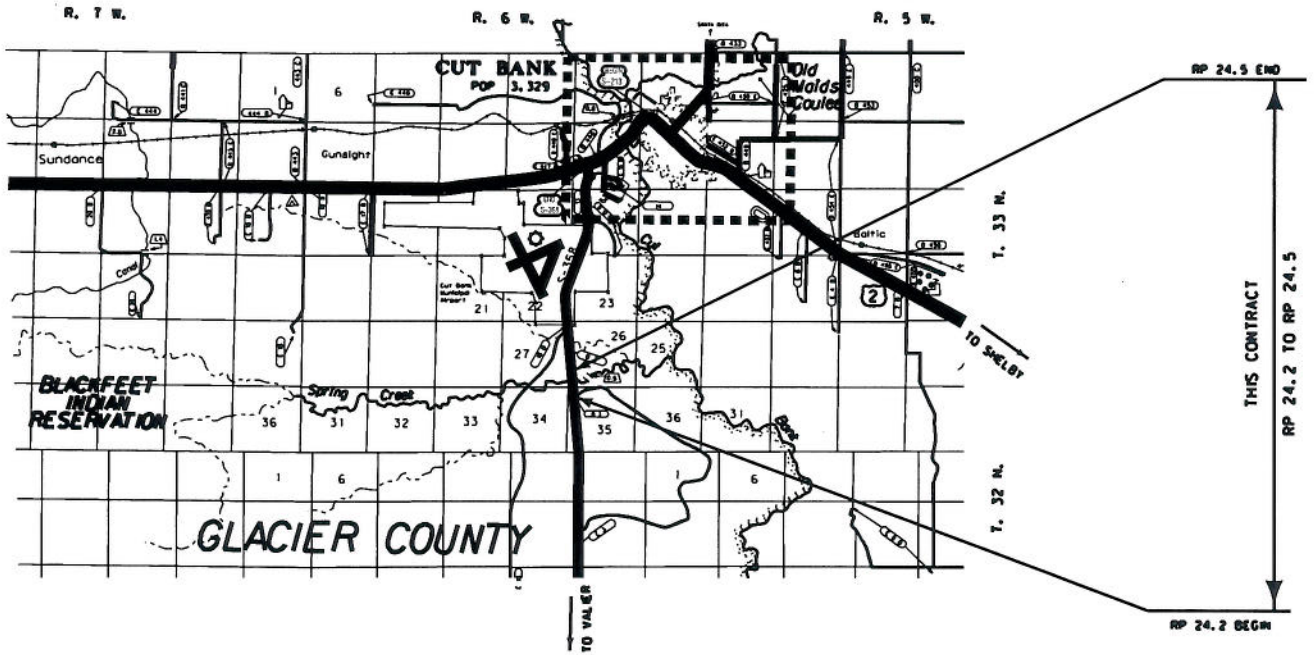
Site Map

The project site map is attached.

MONTANA DEPARTMENT OF TRANSPORTATION

FEDERAL AID PROJECT STPS 358-2(2)24
ROADSIDE SAFETY IMPROVEMENTS
CUT BANK S SLIDE S-358
GLACIER COUNTY

LENGTH 0.3 MILES



REV 9/30/10