



Environmental Services
MONTANA DEPARTMENT OF TRANSPORTATION
Helena, Montana 59620

Memorandum

To: Lisa Hurley
Fiscal Programming Section Supervisor

From: Heidi Bruner, P.E. *Heidi*
Engineering Section Supervisor
Environmental Services Bureau

Date: September 5, 2013

Subject: Categorical Exclusion (c)
HSIP 335-1(16)7
SF 129-SFTY Fencing Glendive
UPN 8056000

Environmental Services Bureau has reviewed the proposed project and concluded that it will not involve unusual circumstances as described under 23 CFR 771.117(b). As a result, the project qualifies as a Categorical Exclusion under the provisions of 23 CFR 771.117(c), part (8), which describes installation of fencing, signs, pavement markings, small passenger shelters, traffic signals, and railroad warning devices where no substantial land acquisition or traffic disruption will occur. The proposed action also qualifies as a Categorical Exclusion under the provisions of ARM 18.2.261 (Sections 75-1-103 and 75-1-201, MCA).

In accordance with the Federal Highway Administration (FHWA) letter of March 29, 1999, please notify FHWA that the proposed action is being processed in accordance with 23 CFR 771.117(c).

copies: Shane Mintz, Glendive District Administrator
Paul Ferry, P.E., Highways Engineer
Kevin Gilbert, P.E., Area Engineer
Robert Stapley, Right-of-Way Bureau Chief
Suzy Price, Contract Plans Bureau Chief
Tom Martin, P.E., Environmental Services Bureau Chief
Lisa Applebee, P.E., FHWA Operations Engineer
Environmental Services Bureau File
Tom Erving, Fiscal Programming

e-copy: Montana Legislative Branch Environmental Quality Council



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

Memorandum

To: Paul Ferry, P.E.
Highways Engineer

From: Damian Krings, P.E. *DKK*
Road Design Engineer

Date: August 29, 2013

Subject: **HSIP 335-1(16)7**
SF 129-SFTY Fencing Glendive
UPN 8056000
Work Type 310-Roadway & Roadside Safety Improvements

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

Approved LESLY TRIBELHORN Date Sept. 3, 2013
Paul Ferry, P.E.
Highways Engineer

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

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

Preliminary Field Review/Scope of Work Report

HSIP 335-1(16)7, SF 129-SFTY Fencing Glendive, CN 8056000

Project Manager: Steve Heidner, P. E.

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Introduction

A field review was held August 16, 2013. The following attended:

Shane Mintz, DA-Glendive

Jim Frank, DPE-Glendive

Steve Heidner, DPDE-Glendive

Kevin Gilbert, Road Design-Helena

Jay Fleming, DCOE-Glendive

Shane Jarvis, Road Design-Glendive

Steve McEvoy, Surfacing-Helena

Larry Sickerson, Environmental-Helena

Scott Walter, Bridge-Helena

Mike Skillestad, Maintenance-Glendive

Proposed Scope of Work

The scope of this project is to fence an area where there is an identified crash cluster involving domestic animals. The type of fencing will likely be wildlife friendly as this is Bureau of Land Management land; however the type of fence will still be a right of way negotiated item. The adjacent landowner will be responsible for the maintenance of the fence after it is constructed.

This project will also include open range signing, approaches, and cattle guards.

Purpose and Need

This section of roadway has been identified as a crash cluster with domestic animal collisions being the source of the crashes. Since this area has been identified as a crash cluster, this project will provide fencing as per state law to mitigate these domestic animal crashes.

Project Location and Limits

- County: Dawson, T 14 N, R 55 E
- Route and Functional Classification: State Secondary 335, Major Collector
- Begin RP 8.5±, station 317+60 on S-359(11), 1971
- End RP 7.4±, station 380+08.6 on S-359(11), 1971
- Stations run from south to north, RPs run north to south
- Length: Eastbound 1.1 miles

Work Zone Safety and Mobility

At this time, Level 3 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 Traffic Control Plan (TCP). Traffic control will likely be minimal and bid as lump sum as this is a fencing project and the work will not be on the roadway; however there will be cattleguards on some approaches.

Physical Characteristics

- a. As-builts:

This section of roadway was reconstructed in 1971 with project S-359(11).

The following is the recent improvement:

STPS 335-1(14)0, RP 0.337 to RP 8.487, Overlay 2004

- b. Pavement width and number of lanes:

The pavement width is approximately 30 ft. converted from metric which includes 2-12 ft. driving lanes 2-3 ft. shoulders.

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c. Surfacing:

The existing surfacing is approximately 0.4 ft. of plant mix surfacing on a base of crushed base course. The thickness of the base course varies from 0.65 ft. to 1 ft.

*PvMS Index Numbers & Recommended Treatments for 2013 and 2015:

Section	Ride	Rut	ACI	MCI	Construction	Maintenance
RP 0 to RP 8.49	79.0	56.2	98.8	97.9	AC Thin O'lay	AC Crack/S&C
Treatment for 2015					AC Thin O'lay	AC Thin O'lay

This information was provided to show potential future roadwork in this area.

d. Thickness of existing overlays:

The latest overlay in 2004 was 0.15 ft. with project STPS 335-1(14)0. The surfacing inslopes was steepened from 6:1 to 4: 1 and a 3 ft. shoulder was maintained.

e. Terrain:

The existing terrain is rural rolling off road vehicle recreation site and pasture land.

f. Existing horizontal and vertical alignments:

The horizontal and vertical alignments will not be affected by this fencing project.

g. Existing Structures:

There are no existing structures within the project limits.

Traffic Data

RP 7.3 to RP 9.1	
2013 AADT	80 – Present
2014 AADT	80 – Letting Year
2034 AADT	100 – Design Year
DHV	10
D	
T	22.5%
EAL	5
AGR	1.0%

Crash Analysis

The following is from the Traffic Safety Management Section:

Summarized below is the crash analysis for the subject project as requested by email dated August 6, 2013. The analysis is for State Secondary Route 335 from reference point 7.3 to reference point 9.1.

The Montana Highway Patrol records indicate a total of 11 crashes occurred along this section of roadway from January 1, 2001 through December 31, 2012. The main observed crash trend is domestic animal-vehicle collisions (6). All of the domestic animal-vehicle collisions occurred at night. The remaining crashes were single vehicle run off the road crashes, three of which resulted in the vehicle overturning and two entering a roadside ditch near a pavement-gravel transition.

For the time period from January 1, 2001 through December 31, 2010 there were a total of four domestic animal-vehicle collisions. All four of these crashes were considered addressable by

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installing domestic animal fencing and “open range” signs. The safety improvements in this area yielded a benefit-to cost ratio of 7.48, assuming a \$193,090 project cost.

From January 1, 2011 through December 31, 2012 an additional four crashes occurred, two were domestic animal-vehicle collisions and the other two were single vehicle run off the road crashes.

Major Design Features

a. **Design Speed.**

The design speed for this Secondary Roadway in rolling terrain is 50 mph. The posted speed is 55 mph.

b. **Horizontal Alignment.**

This project will not affect the horizontal alignment.

c. **Vertical Alignment.**

This project will not affect the vertical alignment.

d. **Typical Sections and Surfacing.**

Not applicable with this fencing project.

e. **Geotechnical Considerations.**

Not applicable with this fencing project.

f. **Hydraulics.**

There is an existing 180” culvert at station 327+76 that is completely submerged and has become a Maintenance issue. This project was nominated a safety fencing project so this culvert issue is not within the scope of this fencing project even though it is within the project limits of this safety project. The intent is to not delay this fencing project by trying to address this drainage issue at this time. The fencing project could potentially be completed before an investigation on the drainage issue could even begin; therefore, this drainage issue will not be addressed with this safety project.

g. **Bridges.**

There are no bridges within the project limits.

h. **Traffic.**

Traffic will provide the open range signs for this project.

i. **Pedestrian/Bicycle/ADA.**

Not applicable with this fencing project.

j. **Miscellaneous Features.**

Fencing: The fencing type will negotiated with the landowner, likely wildlife friendly because this is Bureau of Land Management property.

Approaches:

The following changes to approaches were discussed at the field review. A right of way agreement for approach elimination, relocations, or additional approaches will be required.

Eliminate approach at sta. 326+19± LT

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Improve as necessary (32 ft.) approach at 334+50± LT (entrance to the recreational parking area)

New 16 ft. approach sta. 334+50± RT

New 24 ft. approach sta. 374+45± LT

New 16 ft. approach sta. 374+45± RT

Cattleguards:

New 32 ft. cattleguard at BOP sta. 317+60

New 32 ft. cattleguard at sta. at 334+50± LT (entrance to the recreational parking area)

New 16 ft. approach sta. 334+50± RT

New 24 ft. cattleguard at sta. 374+45± LT

New 16 ft. cattleguard at sta. 374+45± RT

New 32 ft. cattleguard at EOP sta. 380+08.6

Salvage cattleguard at EOP to county if they want it or the contractor

Signing: Open range signing will be provided by the Traffic Section.

k. Context Sensitive Design Issues.

No context sensitive design issues were discussed at the preliminary field review.

Other Projects

There are no other projects in this area at this time.

Location Hydraulics Study Report

Not applicable with this fencing project.

Design Exceptions

No design exceptions are anticipated for this fencing project.

Right-of-Way

This property is an off road vehicle recreation site owned by the Bureau of Land Management. The fencing will likely be wildlife friendly. MDT Right-of-Way will negotiate the type of fencing and locations of approaches and cattleguards that will be placed with this project. A fencing agreement will be required to be clear who will maintain the new fence; similar to what is done with the Forest Service.

Existing right of way retracement will be required for this project for proper placement of the fencing and cattleguards.

Access Control

Vehicular access control will not be affected by this project.

Utilities/Railroads

There are utilities in the area. Any conflicts that may arise by the placing of the fencing or cattleguards will be mitigated. At this time no conflicts are anticipated.

There is a railroad adjacent to the project and it crosses the roadway; however this fencing project is south of the railroad crossing and no railroad agreement will be needed.

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Maintenance Items

A fencing agreement will be required that explains who will maintain the fencing.

The maintenance issue with the existing 180" culvert at sta. 327+76 will not be addressed with this project. See the Hydraulics section above in this report.

Intelligent Transportation Systems (ITS) Features

Not applicable with this fencing project.

Survey

Right of way retracement will be required for this project. Any other design related survey needed to complete this fencing project will be provided by the Glendive District Road Design Section.

Public Involvement

It is anticipated that the following level of public involvement will be sufficient at this time:

Level A

News release explaining the project and including a department point of contact.

Environmental Considerations

A programmatic categorical exclusion environmental document is appropriate for this project. **This PFR/SOW report will not be approved until there is a signed environmental document.**

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 (2005 English edition) for erosion and sediment control Best Management Practices. The installation of temporary erosion control measures will be paid as "Miscellaneous Work." No water quality permits are anticipated at this time.

This project will not require a COE 404 permit or an SPA 124 notification.

Environmental will provide any necessary environmental related special provisions.

Energy Savings/Eco-Friendly Considerations

No energy savings/eco-friendly considerations were discussed at the field review for this fencing project.

Experimental Features

No experimental features were discussed at the field review for this fencing project.

Traffic Control

A traffic control plan will be developed as the design of the project progresses. Traffic will be maintained during construction activities throughout the project. Appropriate traffic control devices and signing will be used throughout the project in accordance with the *Manual of Uniform Traffic Control Devices*. Minimal traffic control is anticipated for the fencing project as the work will be conducted off of the roadway.

Preliminary Field Review/Scope of Work Report

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Project Manager: Steve Heidner, P. E.

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Project Management

Steve Heidner of the Glendive District Office will be the project manager. This project is not under full FHWA oversight.

Preliminary Cost Estimate

The following is taken from the nomination estimate on PPMS. The estimate will be updated at plan review stage when quantities are available.

	Estimated cost	Inflation (INF) (from PPMS)	TOTAL costs w/INF + IDC (from PPMS)
Road Work	\$107,000		
New Structure	0		
Remove Structure	0		
Detour	0		
Traffic Control	\$13,000		
Subtotal	\$120,000		
Mobilization (10%)	\$12,000		
Subtotal	\$132,000		
Contingencies (10%)	\$14,000		
Total CN	<u>\$146,000</u>	<u>\$20,000</u>	<u>\$ 182,000</u>
CE (%)	<u>\$22,000</u>	<u>\$3,000</u>	<u>\$ 27,000</u>
TOTAL CN+CE	<u>\$168,000</u>	<u>\$ 23,000</u>	<u>\$ 209,000</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 9.12% for FY 2014.

Ready Date

This project will be let when ready.

Site Map

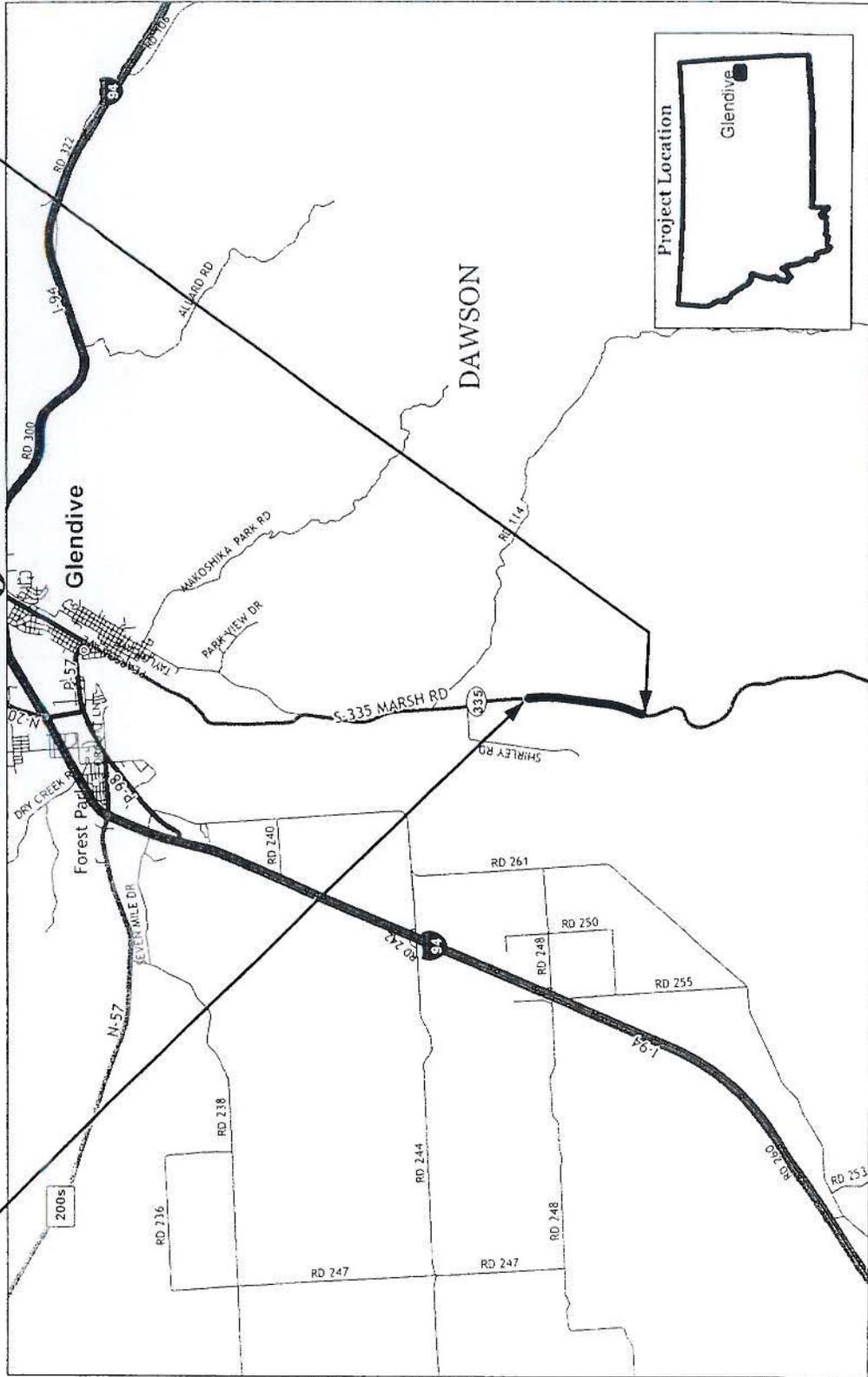
The project site map is attached.

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HSIP 335-1(16)7, SF 129-SFTY Fencing Glendive, CN 8056000

Project Manager: Steve Heidner, P. E.

SF 129 - SFTY FENCING GLENDIVE
UPN # 8056



Created 2012
Date: 12/7/2012 Path: X:\PROJ\HLY18_MAFSCOMMISSION\2013_COMMISSION\ANUARY\8056_SF129_SFTY_FENCING_GLENDIVE.MXD

Atkins, Tom

From: Anderson, Aaron
Sent: Thursday, September 05, 2013 2:39 PM
To: Atkins, Tom
Subject: FW: HSIP 335-1(16)7, SF 129-SFTY Fencing Glendive, CN 8056000 PFR/SOW report

There is an oil pipeline in the vicinity, but it should not impact the project. No comments on this one, Tom.

From: Radonich, Joe
Sent: Thursday, September 05, 2013 2:18 PM
To: Anderson, Aaron
Cc: Atkins, Tom
Subject: FW: HSIP 335-1(16)7, SF 129-SFTY Fencing Glendive, CN 8056000 PFR/SOW report

Aaron,

I have assigned this to you. Can you review and provide comments back to Tom by tomorrow? Thanks – Joe.

From: Atkins, Tom
Sent: Thursday, September 05, 2013 9:40 AM
To: Radonich, Joe; Axline, Jon
Subject: FW: HSIP 335-1(16)7, SF 129-SFTY Fencing Glendive, CN 8056000 PFR/SOW report

Please send your Scope of Work comments/concurrence to me by 9/6/13.

Thanks

From: Gilbert, Kevin
Sent: Tuesday, September 03, 2013 4:47 PM
To: Walther, James; Tribelhorn, Lesly; Goodman, Mark; Wotring, Marc; Axline, Jon; Sickerson, Larry; Atkins, Tom; Bolan, Danielle; Ulberg, Ivan; Wosoba, LeRoy; McLeod, Kraig; Walter, Scott; Grover, Michael; Beatty, Marty; Grant, Paul; Sillick, Susan; Fisher, Alyce; Christensen, Thomas; Keeffe, Mark; Flesch, Alice; Applebee, Lisa; Goettle, Jake; Frank, James; Heidner, Steven; Peaslee, Raymond; Gower, Kevin; Patterson, Patty (MDT); Inman, Phillip; Hoerning, David; Pizzini, Gregory; Zody, Joseph; Strizich, Matt; Hill, Dan; Johnson, Paul; Berg, Donald; Larsen, Bryce; Riley, Jean; Stratton, Dawn; Fleming, Jay; Williams, Duane; Duke, Becky; Maze, Matt; Jackson, Jeff
Subject: HSIP 335-1(16)7, SF 129-SFTY Fencing Glendive, CN 8056000 PFR/SOW report

The PFR/SOW for the subject project is on DMS. The report can be accessed by clicking on the attached link. The filename is 8056000rdpfrsow.DOCX. The report is also available on DMS under 8056000/RD. Please note that this is an electronic distribution and only a limited number of people are receiving an actual hard copy of the report.

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Thanks, Kevin

Atkins, Tom

From: Axline, Jon
Sent: Thursday, September 05, 2013 9:48 AM
To: Atkins, Tom
Subject: RE: HSIP 335-1(16)7, SF 129-SFTY Fencing Glendive, CN 8056000 PFR/SOW report
Expires: Tuesday, March 04, 2014 12:00 AM

No comments, Tom. Jon

From: Atkins, Tom
Sent: Thursday, September 05, 2013 9:40 AM
To: Radonich, Joe; Axline, Jon
Subject: FW: HSIP 335-1(16)7, SF 129-SFTY Fencing Glendive, CN 8056000 PFR/SOW report

Please send your Scope of Work comments/concurrence to me by 9/6/13.

Thanks

From: Gilbert, Kevin
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Thanks, Kevin

Atkins, Tom

From: Sickerson, Larry
Sent: Wednesday, September 04, 2013 2:27 PM
To: Atkins, Tom
Subject: FW: HSIP 335-1(16)7, SF 129-SFTY Fencing Glendive, CN 8056000 PFR/SOW report

I have no comments or concerns.

Larry

From: Gilbert, Kevin
Sent: Tuesday, September 03, 2013 4:47 PM
To: Walther, James; Tribelhorn, Lesly; Goodman, Mark; Wotring, Marc; Axline, Jon; Sickerson, Larry; Atkins, Tom; Bolan, Danielle; Ulberg, Ivan; Wosoba, LeRoy; McLeod, Kraig; Walter, Scott; Grover, Michael; Beatty, Marty; Grant, Paul; Sillick, Susan; Fisher, Alyce; Christensen, Thomas; Keeffe, Mark; Flesch, Alice; Applebee, Lisa; Goettle, Jake; Frank, James; Heidner, Steven; Peaslee, Raymond; Gower, Kevin; Patterson, Patty (MDT); Inman, Phillip; Hoerning, David; Pizzini, Gregory; Zody, Joseph; Strizich, Matt; Hill, Dan; Johnson, Paul; Berg, Donald; Larsen, Bryce; Riley, Jean; Stratton, Dawn; Fleming, Jay; Williams, Duane; Duke, Becky; Maze, Matt; Jackson, Jeff
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Thanks, Kevin