MDT
Montana Department of Transportation
2701 Prospect Avenue
PO Box 201001
Helena MT 59620-1001
Michael T. Tooley, Director
Steve Bullock, Governor

November 19, 2013

Lisa Applebee
Federal Highway Administration (FHWA)
585 Shepard Way
Helena MT 59602

Subject: Statewide Programmatic Categorical Exclusion for Pavement Preservation Projects
STPS 201-2(12)48
Girard – E & W
UPN 8155000
Work Type 180 - Resurfacing (Pavement Preservation)

Dear Lisa Applebee:

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 and the signed Environmental Checklist. Environmental-related Special Provisions are not anticipated at this time.

If you have questions or concerns, please contact Tom Atkins or me at 444.7202. We will be pleased to assist you.

Sincerely,

Heidy Bruner, P.E.
Environmental Services Bureau Engineering Section Supervisor

Attachments: PFR/SOW Report, Environmental Checklist

Enclosure

e-copies w/checklist encl.:
Shane Mintz, Glendive District Administrator
Tom Martin, P.E., Environmental Service Bureau Chief
Heidy Bruner, P.E., ESB Engineering Section Supervisor
Paul Ferry, P.E., Highways Engineer
Kevin Christensen, P.E., Construction Engineer
Suzy Price, Contract Plans Bureau Chief
Lisa Hurley, Fiscal Programming
Tom Erving, Fiscal Programming
Montana Legislative Branch Environmental Quality Council
File
HB: S:\PROJECTS\GLENDIVE\8155000\8155000ENCED_PAVEPRES.docx

Tom Martin
Environmental Serv

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

RECEIVED
NOV 18 2013
ENVIRONMENTAL

Memorandum

To: Tom S. Martin, P.E, Chief, Environmental Services Bureau

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

Date: November 14, 2013

Subject: **STPS 201-2(12)48**
Girard-E & W
UPN 8155000
Project Work Type 180-Resurfacing (Pavement Preservation)

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

Please send the notification for the environmental documentation on this project to the FHWA. If you need additional information, contact Steve Heidner at 406-345-8247.

Attachments (Environmental Checklist and PFR)

Environmental Services
Date 12/2
Routing
Bureau Chief
Engineering Supervisor
Resources Supervisor
Haz Waste Supervisor
PCCP Supervisor
TOM A
LARRY 11/19
JON 11/19
AARON
No Comments
File
11-19-13

copies: Damian Krings, w/attach (checklist only)
Steve Heidner, District Projects Engineer- Glen... District
Highways File

(FOR PROJECTS WITH NO RIGHT-OF-WAY INVOLVEMENT)

Applicant cannot be authorized to proceed with the proposed work until ALL of the conditions of the checklist have been satisfied.

ENVIRONMENTAL CHECKLIST FOR PAVEMENT PRESERVATION PROJECTS
(CRACK SEALING, SEAL & COVER, THIN OVERLAYS, MILL & FILL, PLANT MIX LEVELING, MILL OGFC, MICRO SURFACING, FOG SEAL)

Project Number: STPS 201-2(12)48 **Control No** 8155000 **Project Name:** Girard-E & W

Reference Post (Station): 47.526 **To Reference Post (Station):** 57.8

Applicant's Name: Montana Department of Transportation **Address:** PO Box 201001; Helena, MT 59620-1001

Type of Proposed Pavement Preservation Activity: Overlay, Seal and Cover

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)	☐	☒	
2a.	Are there any listed or candidate threatened or endangered species in the vicinity of the proposed activity?	☐	☒	☐ Unknown
2b.	Will the proposed action adversely affect listed or candidate threatened or endangered species, or adversely modify critical habitat?	☐	☒	☐ 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.	☐	☒	
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.)	☐	☐	☐ N/A
3b.	Is the proposed project within an MS4 Permit Area? (See http://deq.mt.gov/wqinfo/MPDES/StormWater/ms4.mcpx). (Billings, Great Falls, and Missoula Urbanized areas, and Butte, Bozeman, and Helena)	☐	☐	
4.	Does the proposed project have impacts to wetlands , streams, or other water bodies? If 'No', go to question 5.	☐	☒	
4a.	If the answer to question 4 is 'Yes', is a Clean Water Act Section 404 permit authorization required?	☐	☐	☐ N/A
4b.	If the answer to question 3 or 4 is 'Yes', is a Stream Protection Act 124SPA consultation required?	☐	☐	☐ 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)	☐	☒	No known sites. -concur JZ 11-19-13
6.	Is the proposed activity on and/or within approximately 1 mile of an Indian Reservation? If answer is 'No', go to question 7.	☐	☒	
6a.	Are any Tribal water permits required?	☐	☐	☒ N/A
7.	Is the proposed project in a "Class I Air Shed" or a nonattainment area? (See http://deq.mt.gov/AirQuality/Planning/AirNonattainment.mcpx) (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)	☐	☒	- concur - JZ 11-19-13

Checklist prepared by:

Kevin Gilbert	Project Design Engineer	11/13/2013
Applicant	Title	Date

Approved by: Vicky Bruner — ENVIRONMENTAL ENGINEERING SECTION SUPERVISOR — 11/19/13

Environmental Services	Title	Date

Project Number: STPS 201-2(12)48Control No.: 8155000 Project Name: Girard-E & W

(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: Paul Ferry, P.E.
Highways Engineer

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

Date: November 14, 2013

Subject: **STPS 201-2(12)48**
Girard-E & W
UPN 8155000
Project Work Type 180-Resurfacing (Pavement Preservation)

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

Approved _____ Date 11/18/13
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

Introduction

A field review was held October 10, 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
Gerry Brown, Construction-Lewistown
Tom Roberts, Maintenance-Miles City
Larry Sickerson, Environmental-Helena
Marc Wotring, Hydraulics-Helena
DJ Berg, Geotechnical-Helena
Scott Walter, Bridge-Helena

Proposed Scope of Work

Scope of work includes:
0.15 ft. overlay and 0.07 ft. isolation lift as there is crack sealant present
Seal & Cover type 1
Pavement Markings
Signing and delineation upgrade as necessary to meet reflectivity standards
Leveling, 150 tons/mile
Rumble strips (reduced lateral width)
Transverse Rumble Strips at the intersection with MT-16 (they are currently in-place)

Purpose and Need

The purpose of this project is to extend the existing pavement life and provide a safer, smoother riding surface.

Project Location and Limits

- County: Richland, T. 24, 25 N., R. 57, 58 E.
- Route and Functional Classification: State Secondary Route 201, Major Collector
- Begin: RP 47.526* as-built station 85+00 on S-361(12), 1964
- End: RP 57.8± as-built station 634+86.8± on S-361(10), 1961
- Length: 10.3 miles

*Note: this project was programmed to begin at RP 49.7±; however, this would have left an unimproved gap of 2.2 miles. Through discussion with the District, Secondary Roads Engineer, and Fiscal Programming it was determined not to leave this gap. The project limits will be revised to begin at RP 47.526, which is the RP where a pavement preservation project completed in 2010 or 2011 ended.

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). These issues are discussed in more detail under the Traffic Control and Public Involvement sections.

Physical Characteristics

a. As-builts:

This roadway was reconstructed with the following projects:
S-361(12), RP 45.5± to RP 52.5±, 1964
S-361(10), RP 52± to RP 58±, 1961
There have been no programmed improvements according to the 2009 MDT Roadlog.

b. Pavement width and number of lanes:

The pavement width from the 1961 and 1964 as-builts is 28.0 ft. finished top, which includes 2-12 ft. driving lanes and two 2 ft. shoulders. The width measured in the field is 26 ft. finished top, probably do to overlays.

c. Surfacing:

The roadway was constructed with 0.20 ft. of plant mix bituminous surfacing on top of 0.15 ft. crushed top surfacing; on top of 1 ft. depth crushed base course on top of 0.65 ft. compacted select surfacing. There is crack sealant in place. The existing inslopes are 4:1 or steeper.

*PvMS Index Numbers & Recommended Treatments for 2013:

Section	Ride	Rut	ACI	MCI	Construction	Maintenance
RP 45.71 to RP 52.27	60.5	61.1	98.7	97.5	AC Thin Overlay	AC Thin Overlay
RP 52.27 to RP 57.76	59.0	61.3	99.4	93.4	AC Thin Overlay	AC Thin Overlay

*PvMS Index Numbers & Recommended Treatments for 2015:

Section	Ride	Rut	ACI	MCI	Construction	Maintenance
RP 45.71 to RP 52.27	60.5	61.1	98.7	97.5	AC Thin Overlay	AC Thin Overlay
RP 52.27 to RP 57.76	59.0	61.3	99.4	93.4	AC Minor Rehab	AC Reactive Maintenance

d. Thickness of existing overlays:

According to the MDT Roadlog there has been no programmed overlay on this roadway since it was reconstructed in 1961 and 1964.

e. Terrain:

The existing terrain is rural rolling pasture and farmland with oil activity in the area.

f. Existing horizontal and vertical alignments:

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

g. Existing Bridge:

There are no existing bridges within the project limits.

Traffic Data

	RP 49.7 to RP 57.8
2013 AADT	1,220 – Present
2014 AADT	1,260 – Letting Year
2034 AADT	2,500– Design Year
DHV	350
T	30.1%
EAL	274
AGR	3.5%

Crash Analysis

The following is the crash analysis is for State Secondary Route 201, reference points 49.7 to 57.8, for the dates January 1, 2003 through December 31, 2012, provided by the Safety Management Section September 19, 2013:

ENGINEERING STUDY EVALUATION — DATE: September 13, 2013
DESCRIPTION: Girard-E & W
ROUTE & MP: Secondary Route 201 RP 49.7 – 57.8
DATE TIME FRAME: 01-01-2003 TO 12-31-2012

STATEWIDE AVERAGE FOR RURAL SECONDARY ROUTES (2008-2012) (2003-2012)		STUDY AREA
ALL VEHICLES CRASH RATE:	1.31[1)]	0.51
ALL VEHICLES SEVERITY INDEX:	2.19[2)]	2.20
ALL VEHICLES SEVERITY RATE:	2.88[3)]	1.12
TOTAL RECORDED CRASHES:		20

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 OCCURRENCE:
• 15.0% blowing snow weather conditions vs. 1.6% statewide average for rural State Secondary routes.

II. CRASH CLUSTERS AND SAFETY PROJECTS:
There are no crash clusters and/or programmed safety projects within the study area during the 2008-2012 study period.

III. REMARK:
The main crash trend is road/lane departure crashes (14) in which 8 resulted in an overturn and 4 struck a fixed object. There were 7 crashes that involved a truck/tractor.
The Safety Engineering Section recommends removing trees located within the clear zone. *MDT Maintenance is looking into this.*

Major Design Features

a. **Design Speed.**
The design speed for this major collector in rolling terrain is 50 mph. The posted speed is 70 mph day/65 mph night and 60 mph day/55 mph night for trucks.

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.**
The overlay will be Grade S ¾" with PG 64-28 and an asphalt content of 5.04%. The overlay will be 0.15 ft. and include an isolation lift of 0.07 ft. There is crack sealant present and the leveling will be 150 tons/mile per the Leveling Guidance memo. The existing width will be maintained as much as practical with a 4:1 surfacing inslope. Strip vegetation and place shoulder gravel were needed to maintain the existing width.

e. **Geotechnical Considerations**.
No geotechnical considerations were identified at the preliminary field review. The areas of RP 50.4 to RP 50.7 and RP 55 to RP 56 were looked at in the field and it was determined these areas could be improved with leveling and that digouts were not needed.

f. **Hydraulics**.
No hydraulic issues were identified at the preliminary field review.

g. **Bridges.**
There was no bridge work identified during the preliminary field review.

h. **Traffic.**
The Traffic Section will determine if the existing signing meets reflectivity requirements and if the delineation needs to be upgraded or not. The Traffic Section will also provide pavement marking quantities.

i. **Pedestrian/Bicycle/ADA**.
No pedestrian/bicycle/ADA concerns with this pavement preservation project.

j. **Miscellaneous Features**.
Guardrail:
There is no existing guardrail on the project.

Rumble Strips:
Currently there are no existing rumble strips. Laterally reduced width rumble strips will be included in this project at the outside edge of the plant mix surfacing as the finished top width will only be 26 ft. There is currently transverse rumble strips at the intersection with MT 16. These will be replaced after the overlay and seal and cover are completed.

Fencing:
Fencing appeared to be in good condition and will not be included in this project.

Approaches:
There are approximately 27 farm field approaches, 8 private, and 9 public. The actual number of approaches will be verified by the Designer for quantity calculation purposes. The existing public and private approaches will be paved to the right of way and farm field approaches will receive a paved 12ft. strip. Motor grader hours will be used to reshape some of the approaches and mailbox turnouts prior to paving.

Mailboxes and Mailbox turnouts:
There are eight existing mailboxes and five existing mailbox turnouts. The mailboxes will be replaced with new large mailboxes and the turnouts will be improved and paved.

Cold Milling:
Cold mill the beginning and end connections. The millings can be used for shoulder gravel or given to the contractor due to the small quantity.

Curb and Gutter:
There is no curb and gutter within the project limits.

Digouts:
No digout areas were identified at the field review.

k. **Context Sensitive Design Issues.**
No context sensitive design issues were raised at the preliminary field review.

Other Projects
There are no other projects in the immediate vicinity of this project.

Location Hydraulics Study Report
A LHSR is not needed for this pavement preservation project.

Design Exceptions
No design exceptions are anticipated for this pavement preservation project.

Right-of-Way
No right of way acquisition or permits are needed for this pavement preservation project.

Access Control
No change to the current access will be needed for this pavement preservation project.

Utilities/Railroads
There is overhead power, underground gas line, and underground telephone in the area. There are no impacts to utilities anticipated with this pavement preservation project.

There is no railroad within the vicinity of this project.

Maintenance Items
Maintenance did not bring up any issues with this project. Safety Management has requested that Maintenance remove tree from the clear zone.

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

Survey
Survey will not be needed for this pavement preservation project.

Public Involvement
The appropriate level of public involvement for this pavement preservation project is level A:

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

Environmental Considerations
A programmatic categorical exclusion environmental checklist is appropriate for this project. 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.

Environmental will provide any necessary environmental related special provisions.

Energy Savings/Eco-Friendly Considerations
No energy savings/eco-friendly considerations were discussed for this pavement preservation project.

Experimental Features
No experimental features were discussed at the field review for this pavement preservation 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.*

Project Management
Steve Heidner of the Glendive District will be the Project Design Engineer. This project is not under full FHWA oversight.

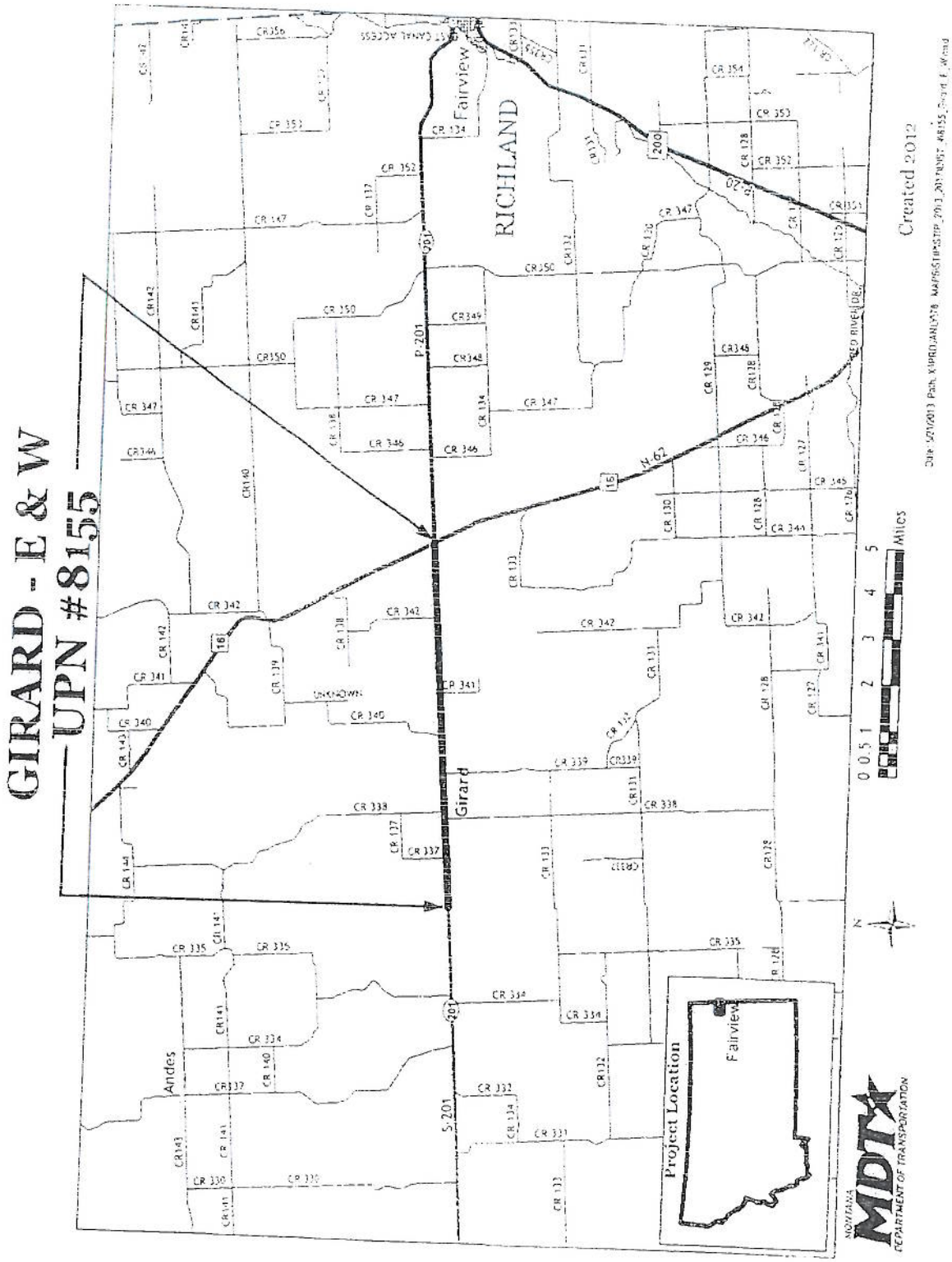
Preliminary Cost Estimate
The following is taken from the nomination estimate on PPMS. The estimate will be updated at plan review stage when quantities are available.

	Estimated cost	Inflation (INF) (from PPMS)	TOTAL costs w/INF + IDC (from PPMS)
Road Work	$1,250,000		
Traffic Control	$150,000		
Subtotal	$1,400,000		
Mobilization (10%)	$140,000		
Subtotal	$1,540,000		
Contingencies (10%)	$155,000		
Total CN	**$1,695,000**	**$21,000**	**$ 1,872,000**
CE (10%)	**$170,000**	**$2,000**	**$ 188,000**
TOTAL CN+CE	**$1,865,000**	**$ 23,000**	**$ 2,060,000**

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
The ready date in OPX2 is March 13, 2014. This project is in the 2013 Redbook with a June 12, 2014 letting date.

Site Map
The project site map is attached.


GIRARD - E & W
UPN #8155
Fairview
RICHLAND
Girard
Andes
Project Location
Fairview
Created 2012
Miles
0 0.5 1 2 3 4 5
MDT
MONTANA
DEPARTMENT OF TRANSPORTATION