



April 18, 2012

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

MASTER FILE
COPY

Subject: Statewide Programmatic Categorical Exclusion for Pavement Preservation Projects
IM 15-4(131)196
Helena-North
Control Number: 7623000

Dear Alan Woodmansey:

The MDT Environmental Services Bureau has reviewed the Preliminary Field Review/Scope of Work Report (PFR/SOW) for the subject project. Based on the completed Environmental Checklist for Pavement Preservation Projects (Checklist), we conclude that the Statewide Programmatic Categorical Exclusion for these types of projects would cover this project. For your information, I have attached a copy of the PFR/SOW (including the location map) and the signed Environmental Checklist. Environmental-related Special Provisions will be included in the contract plans.

If you have questions or concerns, please contact Eric Thunstrom at 444-7648. He will be pleased to assist you.

Sincerely,

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

Attachments: Environmental Checklist, PFR/SOW Report

electronic copies with attachment (Checklist only, unless noted):

- Michael P. Johnson Great Falls District Administrator
- Tom Martin, P.E. Environmental Services Bureau Chief
- Heidy Bruner, P.E. Environmental Services Bureau Engineering Section Supervisor
- Eric Thunstrom Environmental Services Bureau Project Development Engineer
- Paul Ferry, P.E. Highways Engineer
- Robert Snyder, P.E. Road Design Area Engineer
- Kevin Christensen, P.E. Construction Engineer
- Suzy Price Contract Plans Bureau Chief
- Tim Tilton Contract Section Supervisor
- Nicole Pallister Fiscal Programming Section Supervisor
- Tom Erving Fiscal Programming Section
- Montana Legislative Branch Environmental Quality Council (w/ PFR/SOW also)
- File Environmental Services Bureau

HB:ejt: S:\PROJECTS\GREAT-FALLS\7000-7999\7623\7623000\ENCED001.DOC

(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: IM 15-4(131)195 Control No 7623000 Project Name: Helena – North

Reference Post (Station): 195.875 To Reference Post (Station): 205.000

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

Type of Proposed Pavement Preservation Activity: Work Type: 180 Resurfacing - Asphalt(Thin Lift ≤ 0.20 ft)

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

Checklist prepared by:

RJ Snyder

Applicant

Project Design Engineer

Title

3/28/2012

Date

Approved by:


Environmental Services

ENVIRONMENTAL ENGINEERING
SECTION SUPERVISOR
Title

4/18/12
Click here to enter a date.
Date

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

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

- A. Complete the checklist items 1 through 7, indicating "Yes" or "No" for each item. Include comments, explanations, information sources, and a description of the magnitude/importance of potential impacts in the right hand column. Attach additional and supporting information as needed. The checklist preparer, by signing, certifies the accuracy of the information provided.
- B. When "Yes" is indicated on any item, the checklist preparer must explain why and provide the appropriate documentation, evaluation, permit, and/or mitigation measures required to satisfy environmental concerns for the project. Use attachments if necessary. **Any proposed mitigation measures will become a condition of approval.**
- C. If the applicant checks "Yes" for any one item, the checklist and MDT's mitigation proposal, documentation, evaluation and/or permit shall be submitted to MDT Environmental Services Bureau. Electronic format is preferred. Contact Number 444-7228.
- D. When the applicant checks a "Yes" item, MDT cannot be authorized to proceed with the proposed work until Environmental Services Bureau reviews the information and signs the checklist.
- E. MDT will obtain all necessary permits or authorizations from other entities with jurisdiction prior to beginning the Pavement Preservation Activity.
- F. The links above are provided as a starting point for potential sources of information for completing the checklist. The Applicant is encouraged to consult Environmental Services Bureau and/or other information sources.



Memorandum

To: Distribution

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

Date: March 28, 2012

Subject: IM 15-4(131)196
 Helena - North
 UPN 7623000
 Work Type: 180 Resurfacing - Asphalt(Thin Lift ≤ 0.20 ft)

Attached is the Preliminary Field Review Report/Scope of Work Report which was approved on 3/29/12. We request that those on the distribution review this report and submit your concurrence within two weeks of the approval date.

Your comments and recommendations are also requested if you do not concur or concur subject to certain conditions. When all personnel on the distribution list have concurred, and the environmental documentation is approved, we will submit this report to the Preconstruction Engineer for approval.

I recommend approval:

Approved _____ Date _____

Distribution:

- | | |
|---|--|
| Michael P. Johnson 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:

- | | |
|---|---|
| Robert Snyder Project Design Manager, GF District | Dawn Stratton, Fiscal Programming Section |
| Damian Krings, Road Design Engineer | Master file |

e-copies:

- | | |
|---|---|
| Jim Walther, Engineering, Preconstruction Engineer | Scott Bunton, Engineering Cost Analyst |
| Lesly Tribelhorn, Highways Design Engineer | Stephen Prinzing, District Preconstruction |
| Mark Goodman, Hydraulics Engineer | Christie McOmer, District Projects Engineer |
| Kurt Marcoux, District Hydraulics Engineer | Stanley Kuntz, District Materials Lab |
| Bonnie Gundrum, Env. Resources Section Supervisor | Tony Strainer, District Maintenance Chief |
| Paul Sturm, District Biologist | Walt Scott, R/W Utilities Section Supervisor |
| Eric Thunstrom, District Project Development Engineer | Phillip Inman, Utilities Engineering Manager |
| Danielle Bolan, Traffic Engineer | David Hoerning, R/W Engineering Manager |
| Ivan Ulberg, District Traffic Project Engineer | Greg Pizzini, Acquisition Manager |
| Kraig McLeod, Safety Engineer | Joe Zody, R/W Access Management Section Manager |
| S Brandenberger, Bridge Area Engineer, G Falls District | Paul Johnson, Project Analysis Bureau |
| Matt Strizich, Materials Engineer | Sue Sillick, Research Section Supervisor |
| Daniel Hill, Pavement Analysis Engineer | Duane Williams, Motor Carrier Services Division Administrator |
| Lee Grosch, District Geotechnical Manager | Alice Flesch, ADA Coordinator |
| Bryce Larsen, Supervisor, Photogrammetry & Survey | Mark Keeffe, Bicycle/Pedestrian Coordinator |
| Marty Beatty, Engineering Information Services | Alyce Fisher, Fiscal Programming |
| Paul Grant, Public Involvement Officer | Becky Duke, Traffic Data Collection Section Supervisor (WIM) |
| Jean Riley, Planner | Dave Hand, Maintenance Division Operations Manager (RWIS) |



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

Memorandum

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

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

Date: March 28, 2012

Subject: IM 15-4(131)196
Helena - North
UPN 7623000
Work Type: 180 Resurfacing - Asphalt(Thin Lift \leq 0.20 ft)

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

Approved Paul Ferry Date 3/29/12
Paul R. 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
Master file

Preliminary Field Review/Scope of Work Report

IM 15-4(131)196

Project Manager : RJ Snyder

Page 2 of 8

Introduction

This report was developed from information taken from the preliminary field review conducted on January 27, 2012. The following people were in attendance:

Steve Prinzing	District Preconstruction	MDT - Great Falls
Mathew Mogstad	Road Design	MDT - Helena
RJ Snyder	Road Design	MDT - Helena
Steve McEvoy	Pavement Analysis	MDT - Helena
Jim Cornell	Traffic	MDT - Helena

Proposed Scope of Work

The proposed scope of work for this project is to mill & fill the outside northbound and southbound driving lanes to a depth of 0.20' and seal & cover the entire roadway. Guardrail height has been inspected and the existing conditions do not warrant raising the guardrail. New pavement markings will be needed throughout. Two bridges at RP 197.0 will require deck milling and concrete overlay, and joint replacement. Bridge will incorporate this design into the plans.

Purpose and Need

The project has rutting in the outside northbound and southbound driving lanes and a mill & fill is proposed to preserve the roadway surface and improve the ride.

Project Location and Limits

- a. The project is located in Lewis & Clark County.
- b. The project begins just north of Helena.
- c. The project is on Interstate 15.
- d. This project is functionally classified as a Rural Principal Arterial - Interstate.
- e. The project begins at RP 195.875 and ends at RP 205.000.
- f. The project is 9.125 miles.
- g. The project crosses route JCT S-279/S-453 (Lincoln Rd.) at RP 200.1
- h. There are 5 bridges on the project.
- i. The start of the project is 0.5 miles north of Helena, MT.
- j. The as-built project numbers are F 269B, IM 15-4(6)186, IM 15-4(81)195, SFCI 15-4(97)200 and SFCI 15-4(98)196
- k. Project runs south to north.

Work Zone Safety and Mobility

At this time, Level 2 construction zone impacts are anticipated for this project as defined in the Work Zone Safety and Mobility (WZSM) guidance. The plans package will include a Transportation Management Plan (TMP) consisting mainly of a Traffic Control Plan (TCP). A limited Public Information (PI) component to address lane closures and wide load detours will also be included in the plan package. These issues are discussed in more detail under the Traffic Control and Public Involvement sections.

Physical Characteristics

- a. The project was last reconstructed in 1964. In 1997 the roadway had a cold milling, PMS overlay and a seal & cover with IM 15-4(81)195 (RP 195.683 to RP 200.425) and IM 15-4(75)200 (RP 200.425 to RP 217.477). In 2003 the roadway was seal & covered with SFCI 15-4(98)196 (RP 195.683 to RP 200.425) and SFCI 15-4(97)200 (RP 200.425 to RP 217.477).
- b. The existing surfacing cross section for this project has 0.35' Plant Mix Surfacing on top of 0.15' Crushed Top Surfacing, 0.50' Crushed Base Course & 0.70' Select Surfacing.

Preliminary Field Review/Scope of Work Report

IM 15-4(131)196

Project Manager : RJ Snyder

Page 3 of 8

- c. The 2011 Pavement Management System's pavement condition and treatment recommendations:

PVMS INDICES RP 195.868 TO RP 200.425		
Index	Roadbed Left	Roadbed Right
Ride	84.2 (Good)	82.9 (Good)
Rut	56.5 (Fair)	56.5 (Fair)
Alligator Cracking	92.9 (Good)	94.9 (Good)
Miscellaneous Cracking	98.2 (Good)	86.8 (Good)
Recommendations		
Construction 2011	Do Nothing	Crack Seal & Cover
Construction 2013	Minor Rehab_Rut	Minor Rehab_Rut
Maintenance 2011	Do Nothing	Crack Seal & Cover
Maintenance 2013	Maintenance Rut Fill	Maintenance Rut Fill

- d. The general terrain of the area is rolling.
- e. The location is rural.
- f. Due to the nature of the project, horizontal and vertical alignment will be unchanged
- g. There are 5 bridges within the project limits:
1. I00015196+01921-R 51.0' structure @ R.P. 196.2 (Ten Mile Creek)
 2. I00015196+01922-L 51.0' structure @ R.P. 196.2 (Ten Mile Creek)
 3. I00015197+00391-R 47.0' structure @ R.P. 197.0 (Sep. Co. Road.)
 4. I00015197+00392-L 47.0' structure @ R.P. 197.0 (Sep. Co. Road.)
 5. S00279000+00001-N 61.0' structure @ R.P. 200.1 (Lincoln Rd. Int.)

Traffic Data

- a. 2012 AADT = 5,730
- b. Letting date 2014 AADT = 5,840
- c. Design year 2034 AADT = 8,340
- d. DHV = 1030
- e. 13.8 percent are trucks
- f. The expected daily 18,000 lb (8165 kg) Equivalent Single Axle Load (ESAL) = 421
- g. The basis of projected traffic growth = 1.8%.

Crash Analysis

- a. The All Vehicles Crash Rate for the study area was 0.92, compared to 0.93 for statewide average for rural interstates. The All Vehicles Severity Index for the study area was 1.86, compared to 1.72. The All Vehicles Severity Rate was 1.70 for the study area compared to 1.60.
- b. 53.4% On Roadway vs. 42.6% Statewide Average for Interstate Routes. 73.9% Dry Road Conditions vs. 54.1% Statewide Average for Interstate Routes.
- c. No crash clusters or safety projects were identified within the study area during the study period. A before/after analysis was completed within the study area in 2010 for the Lincoln Interchange.
- d. The main crash trend identified is single vehicle run-off-the-road crashes. 47 of the 92 reported crashes were cited as single vehicles running off the roadway. The second crash trend identified is wild animal vehicle collisions. 30 of the 92 reported crashes were cited as involving wild animals.
- e. The following list provides a summary of the primary crash trends:

Preliminary Field Review/Scope of Work Report

IM 15-4(131)196

Project Manager : RJ Snyder

Page 4 of 8

- a. 18 of the 92 reported crashes resulted in overturn.
- b. 13 of the 92 reported crashes involved hitting guardrail.
- c. 15 of the 92 reported crashes involved two or more vehicles.
- d. 7 of the 92 reported crashes were commercial vehicles.
- f. The Safety Engineering Sections checked reported crashes for the first 6-months of 2011 and found 6 crashes within the study area. The major trend identified for the crashes is single vehicle run-off-the-road crashes. 5 of the 6 reported crashes were cited as single vehicles running off the roadway. One of the 6 crashes involved a wild animal.

Major Design Features

- a. **Design Speed.** The design speed for the project is 70 m.p.h. which is consistent with rolling terrain on the National Highway System-Interstate. The posted speed limit is 75 m.p.h.
- b. **Horizontal Alignment.** No changes are proposed to the horizontal alignment.
- c. **Vertical Alignment.** No changes are proposed to the vertical alignment.
- d. **Typical Sections and Surfacing.** The proposed surfacing section will involve a 0.20' mill & fill of the driving lane and rumble strips for a width of 14.0'. A seal & cover will be applied over the entire roadway. The existing surface top width will be maintained.
- e. **Geotechnical Considerations.** Surfacing cores have been already been done for this project.
- f. **Hydraulics.** No hydraulic problems were identified or will be addressed with this project.
- g. **Bridges.** There are 5 bridges within the project limits. The decks of the bridges over Sierra road are in "fair" condition. The northbound bridge has numerous spalls and delaminations with exposed deck reinforcing. The southbound bridge is in similar condition although not as severe. Joints on both bridges are torn and leaking. This type of damage will require deck milling and concrete overlay, and joint replacement to repair adequately. Bridge will incorporate details, quantities and special provisions to incorporate this work into this project. Existing deck elevation is intended to remain.
- h. **Traffic.** Due to the nature of this project as a pavement preservation project, traffic revisions will not be addressed with the project.
- i. **Pedestrian/Bicycle/ADA.** No improvements are planned for these features. The outside shoulder width is adequate for bicycle use throughout the project except for restrictions at narrow bridges.
- j. **Miscellaneous Features.** Attention should be paid to not disturb median concrete barrier (RP 204.7 to RP 205.00) during the application of the seal & cover. New standard rumble strips will be installed throughout the length of the project.
- k. **Context Sensitive Design Issues.** No context sensitive design issues have been identified.

Other Projects

Project IM 15-4(140) D-3 Signing (I-15), UPN 7618000 proposes to replace all interstate guide signs and delineators. The proposed let date is January 2014.

Design Exceptions

Due to the nature of the project no Design Exceptions will be needed with this project.

Right-of-Way

Due to the nature of the project no right-of-way will be needed or modified with this project.

Preliminary Field Review/Scope of Work Report

IM 15-4(131)196

Project Manager : RJ Snyder

Page 5 of 8

Cold-In-Place Recycle

Due to the rutting in the driving lane only and the good condition of the rest of the roadway, a mill & fill of the driving lane and seal & cover of the entire roadway was the selected option for the project.

Access Control

This is a limited access control project. No modifications are proposed, although the contractor may need to apply for limited access in the vicinity of their hot plant, but that is unknown at this time.

Utilities/Railroads

No utility impact is proposed for this project.

Intelligent Transportation Systems (ITS) Features

A transportable variable message sign is located near the Lincoln Interchange. The VMS sign could be used to alert motorists for ad-hoc construction activities.

Survey

Surfacing cores have been completed.

Public Involvement

Due to the limited scope of the project, a level "A" public involvement plan is appropriate. A news release will be distributed explaining the project and including a department point of contact.

Environmental Considerations

It is anticipated that the project meets the criteria for the Statewide Programmatic Categorical Exclusion. An environmental checklist is being supplied with this Preliminary Field Review/Scope of Work Report.

Energy Savings/Eco-Friendly Considerations

Local MDT Maintenance has been contacted and has declined the millings at this time. Other options will be explored as the project progresses.

Experimental Features

No experimental features have been proposed at this time.

Traffic Control

Traffic control will be addressed in the special provisions.

Project Management

The Helena Road Design crew will develop the plans in US Customary units. RJ Snyder is the Project Design Engineer. This project is not under full FHWA oversight.

Preliminary Cost Estimate

Estimated cost	Inflation (INF) (from PPMS)	TOTAL costs w/INF + IDC (from PPMS)
----------------	--------------------------------	---

Preliminary Field Review/Scope of Work Report

IM 15-4(131)196

Project Manager : RJ Snyder

Page 6 of 8

Road Work	\$2,097,000		
New Structure			
Remove Structure			
Detour			
Traffic Control	\$50,000		
Subtotal	\$2,147,000		
Mobilization (10%)	\$215,000		
Subtotal	\$2,362,000		
Contingencies (8%)	\$189,000		
Total CN	<u>\$2,550,000</u>	<u>\$61,663</u>	<u>\$2,863,427</u>
CE (10%)	<u>\$255,000</u>	<u>\$6,166</u>	<u>\$286,342</u>
TOTAL CN+CE	<u>\$2,805,000</u>	<u>\$67,829</u>	<u>\$3,149,729</u>

Note: Inflation is calculated in PPMS to the letting date. If there is no letting date, the project is assumed to be inside the current TCP and is given a maximum of 5 years until letting. IDC is calculated at 9.64% as of FY 2012.

Ready Date

The Ready Date for this project is October 1, 2012. The Letting Date has not been established; however, the Tentative Construction Program (TCP) has the target letting date being January 24, 2013.

Site Map

The project site map is attached.

Preliminary Field Review/Scope of Work Report

IM 15-4(131)196

Project Manager : RJ Snyder

Page 7 of 8

FEDERAL AID PROJECT NO. IM 15-4(131)196

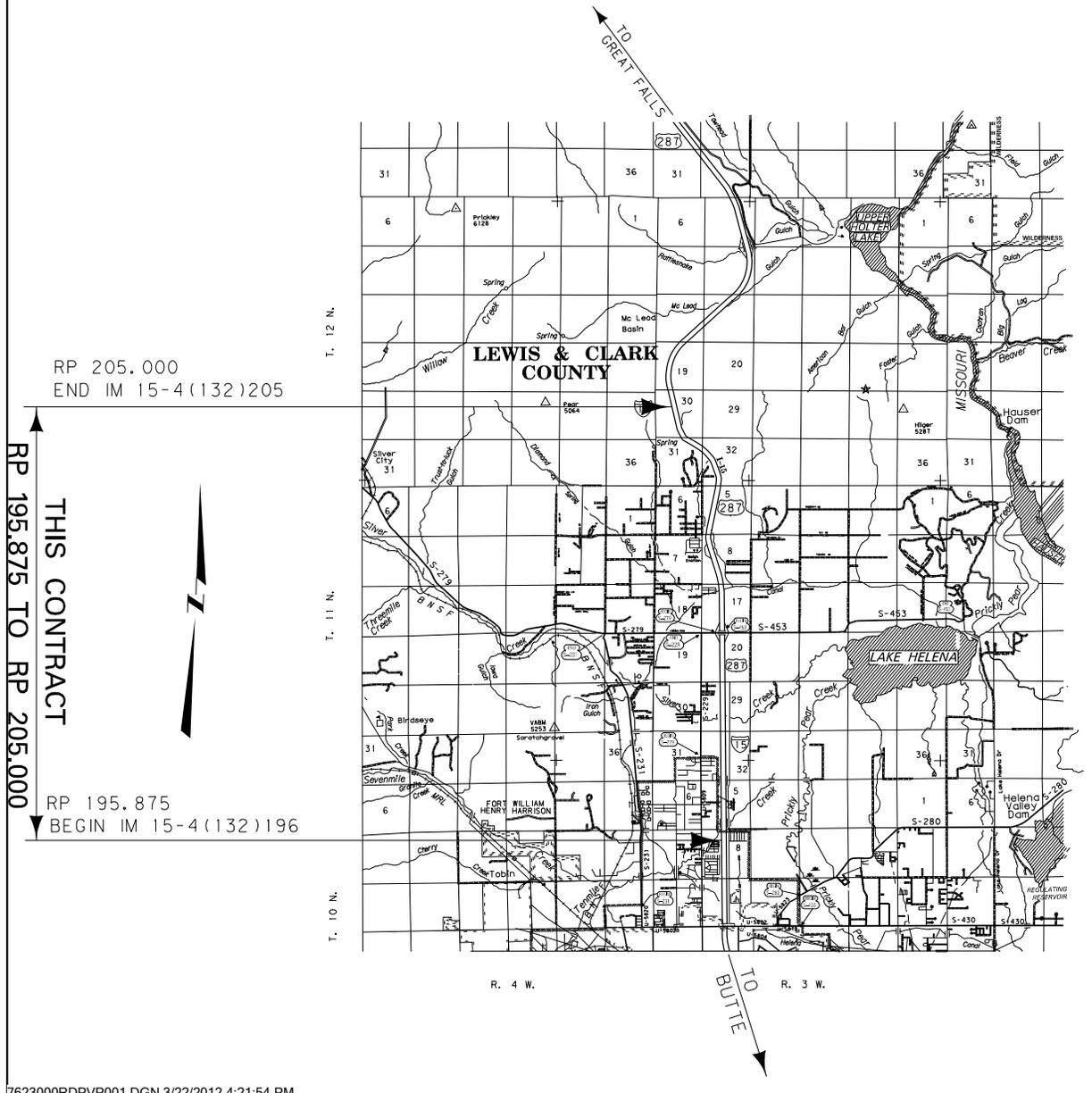
WORK TYPE: 180 RESURFACING-ASPHALT

HELENA - NORTH

LEWIS AND CLARK COUNTY

UPN 7623000

9.1 MILES



7623000RDPVP001.DGN 3/22/2012 4:21:54 PM