MDT
Montana Department of Transportation
2701 Prospect Avenue
PO Box 201001
Helena MT 59620-1001
Timothy W. Reardon, Director
Brian Schweitzer, Governor

November 14, 2011

MASTER FILE COPY

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

Subject: Statewide Programmatic Categorical Exclusion for Pavement Preservation Projects
NH 105-1(1)0
2nd Ave N-57th to 63rd GTF
Control Number: 7458000

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

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
Dawn Stratton	Fiscal Programming Section
Alyce Fisher	Fiscal Programming Section
Brad Burns	Budget and Planning Bureau
Nicole Pallister	Helena Purchasing

Montana Legislative Branch Environmental Quality Council (w/ PFR/SOW also)
copies with attachments:

File	Environmental Services Bureau

HB:ejt: S:\PROJECTS\GREAT-FALLS\7000-7999\7458\7458000ENCED001.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: NH 105-1(1)0 Control No 74580000 Project Name: 2nd Ave N. - 57th to 63rd - GTF

Reference Post (Station): R.P. 0.035 To Reference Post (Station): R.P. 0.52

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

Type of Proposed Pavement Preservation Activity: Mill and fill

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.	☐	☒	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.)	☐	☐	☒ 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)	☐	☒	
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)	☐	☒	

Checklist prepared by:

R.J. Snyder	Project Design Engineer	10/25/2011
Applicant	Title	Date

Approved by: ENG SECTION SUPERVISOR 11/14/11

Environmental Services	Title	10/25/2011
		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.

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

Memorandum

To: Distribution

From: Paul Ferry, P.E.
Highways Engineer

Date: October 26, 2011

Subject: NH 105-1(1)0
2ND AVE N – 57TH TO 63RD GTF
UPN 7458000
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 _____. 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:

Paul Ferry, Highways Engineer
Michael Johnson, District Administrator
Kent Barnes, Bridge Engineer
Tom Martin, Environmental Services Bureau Chief
Roy Peterson, Traffic and Safety Engineer
Lynn Zanto, Rail, Transit, & Planning Division Administrator
Jake Goettle, Construction Engineering Services Bureau
Matt Strizich, Materials Engineer
Rob Stapley, Right-of-Way Bureau Chief

cc:
Dawn Stratton, Fiscal Programming Section
Damian Krings, Road Design Engineer
Robert Snyder, Road Design Area Engineer
Andrew Finch, City-County Planning Department, P.O. Box 5021, Great Falls MT 59403
Dave Dobbs, City of Great Falls, PO Box 5021, Great Falls, MT 59403
Jim Rearden, City of Great Falls, P.O. Box 5021, Great Falls MT 59403

e-copies:
Jim Walther, 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, Project Development Engineer
Danielle Bolan, Traffic Engineer
Ivan Ulberg, G.F. District Traffic Project Engineer
Kraig McLeod, Safety Management Engineer
Stephanie Brandenberger, Bridge Area Eng, G.F. District
Mary Gayle Padmos, PvMS Engineer
Daniel Hill, Pavement Analysis Engineer
Lee Grosch, District Geotechnical Manager
Jean Riley, Planner
Marty Beatty, Engineering Information Services
Paul Grant, Public Involvement Officer
Alyce Fisher, Fiscal Programming
James Combs, District Traffic Engineer
Scott Bunton, Engineering Cost Analyst
Jake Goettle, Construction Bureau – VA Engineer
Phillip Inman, R/W Utilities Section
David Hoerning, R/W Design Manager
Greg Pizzini, Acquisition Manager
Joe Zody, R/W Access Management Section Manager
Paul Johnson, Project Analysis Bureau
Susan Sillick, Research Section Supervisor
Alice Flesch, ADA Coordinator
Mark Keeffe, Bicycle/Pedestrian Coordinator
Doug Wilmot, G.F. District Construction Engineer
Dennis Ghekiere, District Utility Agent
Jerilee Weibel, District R/W Supervisor
Tony Strainer, Great Falls District Maintenance Chief
Steve Prinzing, District Preconstruction Engineer
Christie McOmber, District Projects Engineer
Stan Kuntz, G.F. District Materials Lab
Linda Cline, District R/W Design

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: October 26, 2011

Subject: NH 105-1(1)0
2nd AVE N 57th TO 63rd - GTF
UPN 7458000
Work Type: 180 Resurfacing-Asphalt (Thin Lift ≤ 0.20 ft)

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

Approved Lesly Tribelhorn for Paul Ferry Date 10/26/ 2011
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
This report was developed from information taken from the preliminary field review conducted on August 16, 2011 with the following in attendance:

Mick Johnson	District Administrator	MDT- Great Falls
Stephen Prinzing	District Engineering Services Engineer	MDT- Great Falls
Doug Wilmot	District Construction Engineer	MDT- Great Falls
Tony Strainer	District Maintenance Chief	MDT- Great Falls
James Combs	District Traffic Engineer	MDT- Great Falls
Gerry Brown	Construction Engineering Services	MDT- Lewistown
Steve McEvoy	Surfacing	MDT- Helena
Darcy O'Dell	Traffic Geometrics	MDT- Helena
Jim Cornell	Traffic Signing	MDT- Helena
Charles Pierce	Road Design	MDT- Helena
John Kunda	Road Design	MDT- Helena
Rick Schultz	Cascade County	Great Falls
Dave Sutton	Cascade County Roads	Great Falls
Anita McNamara	Cascade County Planning	Great Falls
Andrew Finch	City Planner	Great Falls
Ryan Smith	L'hevrevx Page Werner	Great Falls
Joe Murphy	Big Sky Civil & Environmental	Great Falls

Proposed Scope of Work
The proposed project was nominated as a roadway rehab for 2nd Ave. N. Great falls between 57th St. and 63rd St. After looking at the condition and thickness of the roadway surfacing and the type and amount of traffic, the Surfacing Section has recommended a plant mix mill and overlay for this project. The raised median curb throughout the project limits, excluding the 57th St. intersection median curb, will be removed and replaced with a 16' center turn lane. The only curb & gutter and sidewalk within the project limits is on the east side of the 63rd St. intersection. The project will include construction and updating the curb & gutter and sidewalk with ADA compliant curb ramps on all corners of the 63rd St. intersection.

Purpose and Need
The asphalt surfacing throughout the project limits shows severe stripping and needs resurfacing. Commuter traffic for Malmstrom Air Force Base was noted as the primary traffic on the roadway during the PFR. Significant queues for multiple blocks can occur when security is heightened at the Base. The raised medians with left turn bays were installed to absorb future capacity and control access for future development. The anticipated build-out did not happen. Currently some left turn lanes turn in to dead ends. The raised median forces right in / right out access at affected businesses and private driveways. As a result, motorist along 2nd Ave. N. perform "U" turns at the breaks in the raised median. The landscaping that was originally in the raised median died and was removed after the group who had agreed to maintain it did not. Removing the raised median will improve the operation of traffic movements along 2nd Ave. N.

Project Location and Limits
a. The project is located in Cascade County, just beyond the city limits of Great Falls but within the urban limits. The project limits start on route N-105 at RP 0.035 just east of 57th St. at the end of the PCCP and extends to RP 0.52 at 63rd St.
b. This route is classified as a Principal Arterial.

c. The road log shows the county reconstructed the road in 1957, it also looks like several overlays have been placed on the roadway and median curb have been put in since this date.
d. The project stationing will start at 57th St. and run east to 63rd St.

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 Transportation Operations (TO) component and a limited Public Information (PI) component will also be included in the TMP. These issues are discussed in more detail under the Traffic Control and Public Involvement sections.

Physical Characteristics

a. According to the road log, this roadway was reconstructed in 1957. It has been overlaid and median curb and landscaping has been done since. The landscaping is currently barren.
b. The road log shows a total roadway width of 76 ft. On inspection of the roadway it appears to have been widened to a total width of 82 ft. consisting of 4-12' lanes, 8' shoulders and a 16' median with 1' shoulders.
c. The surfacing is plant mix surfacing with an as built thickness of 0.25' and a 1.5' base from the road log. There appears to have been several overlays since the reconstruction in 1957. Recent cores show existing plant mix surfacing thickness range from 0.54' to 0.75'.
d. This project corridor is not listed in the Pavement Management System's pavement condition and treatment recommendations.
e. The project begins with an incline from 57th St. and becomes fairly flat after approximately 800 ft. with drainage throughout the project appearing to flow to the west.
f. The full length of the project is urban.
g. The project appears to be on a horizontal tangent beginning at 57th St. and heading east to 63rd St. The vertical alignment consists of a vertical sag curve at the beginning of the project connecting to a 3.50 % grade. The alignment continues with a vertical crest followed by a long vertical sag for the remainder of the project.
h. The maximum grade on the project is 3.50%
i. The roadway does not have any noticeable fill or cut slopes. The edge of the pavement in most locations is the beginning of the resident's yard or business's parking lot. The edge of the pavement in most locations is built up from sanding gravel and forms a type of berm to prevent flow from entering the resident's yard.
j. There are no bridges on this project.
k. The Malmstrom Air force Base is bordering this project at the east end on 63rd St.

Traffic Data

2011 AADT	=	8,990	(Present)
2012 AADT	=	9,080	(Letting Year)
2032 AADT	=	11,080	(Design Year)
DHV	=	1,110	
T	=	3.7%	
EAL	=	108	
AGR	=	1.0%	(Annual)

Crash Analysis

ENGINERING STUDY EVALUATION
DESCRIPTION: 2ND Ave N. 57th to 63rd-GTF
ROUTE & RP: N-105 RP 000+0.000 TO RP 000+0.530
DATA TIME FRAME: 01-01-2006 TO 12-31-2010

	NI-NHS and State Primary Routes within City Limits (06-10)	STUDY AREA
ALL VEHICLES CRASH RATE:	4.86[1)]	3.63[1)]
ALL VEHICLES SEVERITY INDEX:	1.68[2)]	1.67[2)]
ALL VEHICLES SEVERITY RATE:	8.16[3)]	6.05[3)]
TRUCK CRASHES		1
TOTAL RECORDED CRASHES		33

[1)]Crash rates are defined as the number of crashes per million vehicles 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:

- 27.27% of the reported crashes had "other injury" severity vs. 16.18% for the Statewide Average for NI-NHS Routes within City Limits.
- 21.21% of the reported crashes occurred on icy road conditions vs. 11.07% for the Statewide Average for NI-NHS Routes within City Limits.
- 18.18% of the reported crashes occurred during snow weather conditions vs. 5.72% for the Statewide Average for NI-NHS Routes within City Limits.
- 30.30% of the reported crashes occurred with dark-lighted light conditions vs. 15.34% for the Statewide Average for NI-NHS Routes within City Limits.

II. CRASH CLUSTERS OR SAFETY PROJECTS:

No crash clusters or safety projects were identified during this study period.

III. REMARKS & RECOMMENDATIONS:

Following is a summary of crash information occurring in the area:

- 25 of the 33 reported crashes involved two vehicles.
- 20 of the 33 reported crashes were in an intersection or intersection related.

The main crash trend identified is inattentive driving crashes for all vehicles.

Major Design Features

a. **Design Speed.** The design speed for this project is 45 mph. The posted speed limit is also 45 mph.
b. **Horizontal Alignment**. The horizontal alignment will remain the same as the existing.
c. **Vertical Alignment**. The vertical alignment will remain the same as the existing.
d. **Typical Sections and Surfacing**. The proposed typical section for this project will include 4-12' driving lanes, a 16' center turn lane, and 9' shoulders signed as bike lanes for a total of 82'. The project will be milled 0.20' and filled with 0.20' of 3/8" commercial plant mix wearing course and will not require a seal and cover.
e. **Geotechnical Considerations**. No Geotechnical features will be considered at this time.
f. **Hydraulics**. Due to the scope of the project (mill and fill), there should be no hydraulic features impacted on this project.
g. **Traffic.** The center turn lane will be the only change in traffic movements.
h. **Pedestrian/Bicycle/ADA**. It is proposed that the 63rd street intersection curb radii be reconstructed to meet ADA requirements. Bike lane striping is also proposed on the 9.0' shoulders on both sides of the roadway for the length of the project.
i. **Context Sensitive Design Issues**. The original drainage design along this roadway looks as though water should drain off the 2.0% cross slope into each property along the roadway. Berms created by years of sanding operations and berms created by some land owners along the roadway edge now channel the water along the shoulder down the street. This water eventually flows into yards and approaches where there is not a berm. It was decided during the PFR meeting to leave these existing berms where they are present to maintain the drainage patterns as they currently are.

Other Projects

No other current projects exist near this one.

Location Hydraulics Study Report

A Hydraulic Study Report will most likely not be needed for this project.

Design Exceptions

The is no need for any design exceptions as this is a pavement preservation project.

Right-of-Way

No new right of way is anticipated for this project since it will be built in the existing footprint. Construction permits are not anticipated for any properties on this project. All work should be able to be performed within current ROW limits.

Access Control

The roadway through this project has regulated access control. No changes to existing access control are anticipated with this project.

Utilities/Railroads

No overhead utilities were noted during the Field Review. At this time it is unknown how many buried utilities exist within the project limits. A utility pick up survey should not be necessary due to the work type of the project. Manholes and water valves that currently exist in the median will require adjusting. Parts of a median landscaping irrigation system, including one manhole, will be abandoned or removed. There are no railroads located within the vicinity of this project.

Intelligent Transportation Systems (ITS) Features
No ITS features were discussed at the PFR.

Survey
A metric survey for a previous project was conducted in this location and will be converted to English. It appears to have the information that will be needed to design this project. The original control survey will be updated to state plane coordinates.

Public Involvement
The project will have a portion of the level B public involvement which includes the following:

Level B
1. News release explaining the project and including a department point of contact. Alternatively, contact with a newspaper or papers serving the area to develop a story and graphics that explain and illustrate the proposal. Radio and TV contacts.
2. Personal contacts with local government officials, interest groups, and Malmstrom Air force Base.
3. Personal contacts with adjacent landowners explaining final design.
4. Construction notification and information during construction.

Environmental Considerations
The statewide categorical exclusion checklist for this project has been forwarded to Environmental Services. No other environmental considerations are anticipated.

Energy Savings/Eco-Friendly Considerations
Cold In-Place Recycling is not practical for this project due to its short length.

Traffic Control
Traffic will be maintained during construction according to the MUTCD. It is anticipated that the route will remain open during construction through the use of lane closures. Alternate routes do exist and it is anticipated that much of the local traffic will choose an alternate route around construction.

Project Management
The project will be designed in Helena on the Road Design Urban crew and RJ Snyder will be the project manager.

Preliminary Cost Estimate

Below is the preliminary cost estimate based on the Preliminary Field Review discussions. Cost per mile is $588,125.00 based on this preliminary estimate for a mill and overlay.

	Estimated cost	Inflation (INF) (from PPMS)	TOTAL costs w/INF + IDC (from PPMS)
Road Work	230,873		
Traffic Control	22,000		
Subtotal	252,873		
Mobilization (10%)	25,287		
Subtotal	278,160		
Contingencies (15%)	41,724		
Total CN	**$319,884**	**$10,940**	**$ 362,716**
CE (10%)	**$31,988**	**$1,094**	**$ 36,271**
TOTAL CN+CE	**$ 351,872**	**$ 12,034**	**$ 398,987**

Note: During the writing of this report, PPMS was not updated for this project, an estimated value of 3.42% was used for inflation.

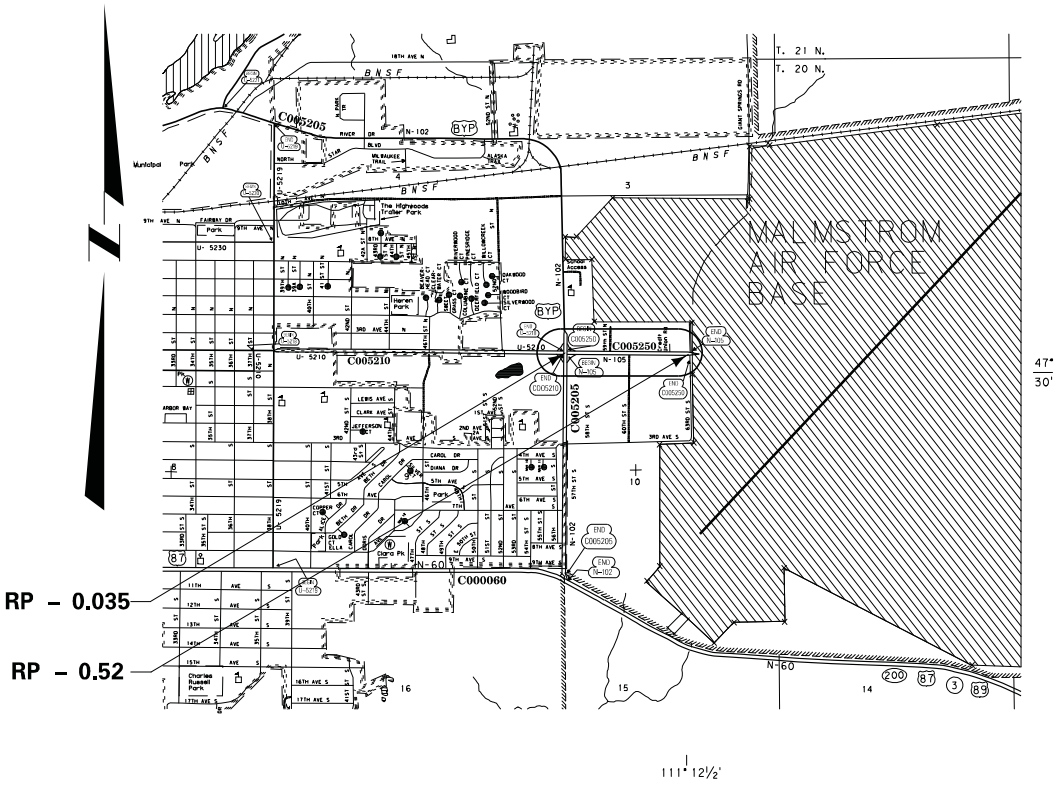
Ready Date

The ready date described in PPMS for this project is Jan 2012. The anticipated letting date is March 2012 according to PPMS.

Site Map

The project site map is attached.

2nd AVE N 57th TO 63rd – GTF
NH 105–1(1)0
UPN 7458000



GREAT FALLS
CASCADE COUNTY