



County **BROADWATER**

June 22, 2005

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LEGISLATIVE ENVIRONMENTAL
POLICY OFFICE

To Whom It May Concern:

Subject: Cooperating Agency Environmental Documentation

As a Cooperating Agency under the provisions of 23 CFR 771.111 the Montana Department of Transportation (MDT) is providing you a copy of this project's environmental documentation.

This environmental documentation complies with the provisions of 23 CFR 771.117(a) and (d) for categorically excluding this proposed project from further National Environmental Policy Act (NEPA) (42 U.S.C. 4321, et seq.) documentation requirements. The attached also complies with the provisions of 75-1-103 and 75-1-201, MCA (see ARM 18.2.237 and 18.2.261, MEPA "Actions that qualify for a Categorical Exclusion" as applicable to the MDT).

If you have any questions concerning the attached environmental documentation please call the MDT Environmental Services Division at (406) 444-7228.

Sincerely,

Jean A. Riley, P.E.
Bureau Chief
Environmental Services Division

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Attachment



Montana Department of Transportation

2701 Prospect Avenue
PO Box 201001
Helena MT 59620-1001

Jim Lynch, Director
Brian Schweitzer, Governor

June 14, 2005

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ENVIRONMENTAL

MASTER FILE
COPY

Janice W. Brown, Division Administrator
Federal Highway Administration (FHWA)
2880 Skyway Drive
Helena, MT 59602

Subject: STPS 284-3(5)23
12 KM S BROADWATER CO. LINE
(P.M.S. Control # 4474)

This is to request approval of this proposed project as a Categorical Exclusion (CE) under the provisions of 23 CFR 771.117(d), and the Programmatic Agreement as signed by the MONTANA DEPARTMENT OF TRANSPORTATION (MDT) and the FHWA on April 12, 2001. Copies of its Alignment and Grade Review Report (dated June 6, 2005) and Project Location Map are attached. This proposed action also qualifies as a CE under ARM 18.2.261 (Sections 75-1-103 and 75-1-201, MCA).

The following form provides the documentation required to demonstrate that all of the conditions are satisfied to qualify for a Programmatic Categorical Exclusion Approval (PCE) as initially agreed by the (former) MONTANA DEPARTMENT OF HIGHWAYS (MDOH) and the FHWA on December 6, 1989. (Note: An "X" in the "N/A" column is "Not Applicable" to, while one in the "UNK" column is "Unknown" at the present time for this proposed project.)

NOTE: A response in a box will require additional documentation for a Categorical Exclusion request in accordance with 23 CFR 771.117(d).

Table with 4 columns: YES, NO, N/A, UNK. Contains 3 main items and 2 sub-items with checkboxes and 'X' marks in the NO column.

Environmental Services
Phone: (406) 444-7228
Fax: (406) 444-7245

Web Page: www.mdt.state.mt.us
Road Report: (800) 226-7623
TTY: (800) 335-7592

YES NO N/A UNK

- | | |
|--|---|
| 3. There is a high rate of commercial growth in this proposed project's area. | _____ <u> X </u> _____ _____ |
| 4. Work would be on and/or within approximately 1.6 kilometers (1± mile) of an Indian Reservation. | _____ <u> X </u> _____ |
| 5. There are parks, recreational, or other properties acquired/improved under <i>Section 6(f)</i> of the <i>1965 National Land & Water Conservation Fund Act (16 U.S.C. 460L, et seq.)</i> on or adjacent to proposed the project area. | _____ <u> X </u> _____ |
| The use of such <i>Section 6(f)</i> sites would be documented and compensated with the appropriate agencies. (e.g.: MDFW&P, local entities, etc.). | _____ <input type="checkbox"/> _____ <u> X </u> |
| 6. Are there any sites either on, or eligible for the National Register of Historic Places with concurrence in determination of eligibility or effect under <i>Section 106</i> of the <i>National Historic Preservation Act (16 U.S.C. 470, et seq.)</i> by the State Historic Preservation Office (SHPO), which would be affected by this proposed project. | _____ <u> X </u> _____ |
| 7. There are parks, recreation sites, school grounds, wildlife refuges, historic sites, historic bridges, or irrigation that might be considered under <i>Section 4(f)</i> of the <i>1966 U.S. DEPARTMENT OF TRANSPORTATION Act (49 U.S.C. 303)</i> on or adjacent to the project area. | _____ <u> X </u> _____ |
| a. "Nationwide" Programmatic <i>Section 4(f)</i> Evaluation forms for these sites are attached. | _____ <input type="checkbox"/> _____ <u> X </u> |
| b. This proposed project requires a full (i.e.: DRAFT & FINAL) <i>Section 4(f)</i> Evaluation. | <input type="checkbox"/> _____ <u> X </u> |
| B. The activity would involve work in a streambed, wetland, and/or other waterbody(ies) considered as "waters of the United States" or similar (e.g.: "state waters"). | <u> X </u> _____ |
| 1. Conditions set forth in <i>Section 10</i> of the <i>Rivers and Harbors Act (33 U.S.C. 403)</i> and/or <i>Section 404</i> under <u>33 CFR Parts 320-330</u> of the <i>Clean Water Act (33 U.S.C. 1251-1376)</i> would be met. | <u> X </u> <input type="checkbox"/> _____ |
| 2. Impacts in wetlands, including but not limited to those referenced under Executive Order (E.O.) #11990, and their proposed mitigation would be coordinated with the Montana Inter-Agency Wetland Group. | _____ <input type="checkbox"/> _____ <u> X </u> |
| 3. A 124SPA Stream Protection permit would be obtained from the MDFW&P? | <u> X </u> _____ _____ |

YES NO N/A UNK

4. There is a delineated floodplain in the proposed project area under FEMA's Floodplain Management criteria.

___ X

The water surface at the 100-year flood limit elevation would exceed floodplain management criteria due to an encroachment by the proposed project.

 ___ X

5. Tribal Water Permit would be required.

___ X

6. Work would be required in, across, and/or adjacent to a river which is a component of, or proposed for inclusion in Montana's Wild and/or Scenic Rivers system as published by the U.S. Department of Agriculture, or the U.S. Department of the Interior.

___ X

The designated National Wild & 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 U.S.C. 1271 – 1287)*, this work would be coordinated and documented with either the Flathead National Forest (Flathead River), or U.S. Bureau of Land Management (Missouri River).

___ X

- 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.

___ X

1. If yes, are there potential noise impacts?

___ ___ X

2. A Noise Analysis would be completed.

___ X

3. There would be compliance with the provisions of both 23 CFR 772 for FHWA's Noise Impact analyses and MDT's Noise Policy.

___ X

YES NO N/A UNK

D. There would be substantial changes in access control involved with this proposed project.

___ X

If yes, would they result in extensive economic and/or social impacts on the affected locations?

 ___ X

E. The use of a temporary road, detour, or ramp closure having the following conditions when the action(s) associated with such facilities:

1. Provisions would be made for access by local traffic, and be posted for same.

X ___

2. Adverse effects to through-traffic dependant businesses would be avoided or minimized.

X ___

3. Interference to local events(e.g.: festivals) would be minimized to all possible extent.

X ___

4. Substantial controversy associated with this pending action would be avoided.

X ___

F. Hazardous wastes /substances, as defined by the U.S. 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.

___ X

All reasonable measures would be taken to avoid and/or minimize substantial impacts from same.

___ X

G. The Montana Pollutant Discharge Elimination System's conditions (ARM 16.20.1314), including temporary erosion control features for construction would be met.

X ___

H. Permanent desirable vegetation with an approved seeding mixture would be established on exposed areas.

X ___ ___

I. Documentation of an "invasive species" review to comply with both E.O.#13112 and the *County Noxious Weed Control Act (7-22-21, M.C.A.)*, including directions as specified by the county(ies) wherein its intended work would be done.

X ___

J. There are "Prime" or "Prime if Irrigated" Farmlands designated by the Natural Resources Conservation Service on or adjacent to the proposed project area.

___ X

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 U.S.C. 4201, et seq.).

___ X

K. Features for the *Americans with Disabilities Act* (P.L. 101-336) compliance would be included.

___ X

L. A written Public Involvement Plan, would be completed in accordance with MDT's Public Involvement Handbook.

X

4. This proposed project complies with the *Clean Air Act's Section 176(c)* (42 U.S.C. 7521(a), as amended) under the provisions of 40 CFR 81.327 as it's 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.

X ___

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's Air Quality Division, etc.).

___ X

C. Is this proposed project in a "Class I Air Shed" (Indian Reservations) under 40 CFR 52.1382(c)(3)?

___ X

5. Federally listed Threatened or Endangered (T/E) Species:

A. There are recorded occurrences, and/or critical habitat in this proposed project's vicinity.

X ___

B. Would this proposed project result in a "jeopardy" opinion (under 50 CFR 402) from the Fish & Wildlife Service on any Federally listed T/E Species?

X

The proposed project would not induce significant land use changes, nor promote unplanned growth. There would be no significant effects on access to adjacent property, nor to present traffic patterns.

This proposed project would not create disproportionately high and/or adverse impacts on the health or environment of minority and/or low-income populations (E.O.#12898). It also complies with the provisions of *Title VI* of the *Civil Rights Act* of 1964 (**42 U.S.C. 2000d**) under the FHWA's regulations (23 CFR 200).

In accordance with the provisions of 23 CFR 771.117(a), this pending action would not cause any significant individual, secondary, or cumulative environmental impacts. Therefore, the FHWA's concurrence is requested that this proposed project is properly classified as a Categorical Exclusion.



Thomas Hansen, P.E.
Engineering Section Supervisor
MDT Environmental Services

Concur Jeffrey A Patter, Date: 6-20-05
Federal Highway Administration

Attachments

"ALTERNATIVE ACCESSIBLE FORMATS OF THIS DOCUMENT WILL BE PROVIDED ON REQUEST."

cc: Jeff Ebert, P.E. - MDT Butte Administrator
Kent Barnes, P.E. - MDT Bridge Engineer
Paul Ferry, P.E. - MDT Highway Engineer
John H. Horton - MDT Right-of-Way Bureau Chief
Suzy Althof - MDT Contract Plans Section Supervisor
David W. Jensen, Supervisor - MDT Fiscal Programming Section
file



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

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JUN - 6 2005

ENVIRONMENTAL

To: Paul Ferry, P.E.
 Highways Engineer

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

Date: June 1, 2005

Subject: STPS 284-3(5)23
 12 km South of Broadwater County Line South
 Control Number 4474
 Work Type 151 – Major Rehabilitation Without Added Capacity

We request that you approve the **Alignment and Grade Review Report** for the subject project.

Approved Lucy Lind Date 6/2/05
 for Paul Ferry, P.E.
 Highways Engineer

We are requesting comments from those individuals on the distribution list. We will assume their concurrence, if no comments are received within **two weeks** from the approval date.

Distribution: (all with attachments)

- | | | | |
|---------------|------------------------|-------------------|----------------------|
| Jeff Ebert | Butte D.A. | Walt Scott | Utilities |
| Damian Krings | Road Design Engineer | Ben Juvan | Information Services |
| Mark Goodman | Hydraulics | Pierre Jomini | Safety |
| Mac McArthur | Construction, 2 copies | John Horton | Right of Way |
| Matt Strizich | Materials | Rich Jackson | Geotechnical |
| John Blacker | Maintainence | Duane Williams | Traffic |
| Sandy Straehl | Planning | Kevin Christensen | Butte Construction |
| Jean Riley | Environmental | Jeff Patten | FHWA |

Cc: Dave Jensen, Fiscal Programming, w/attachment
 Highways File, w/attachment

Return to Bill When "Initial Column" Completed By 6-15

Comments?	Y	N	Initials/Date
Biological p.5	X		DAW 6/9
Cultural		✓	Jan 4/7
Haz Mat		✓	QJAB/10
Erosion Control			
Engineer		✓	BCB 6/13
Seeding			

p.5 - where is white file?

ALIGNMENT REVIEW REPORT

An Alignment and Grade Review was held April 29, 2005 with the following attendees:

Joe Olsen	MDT – DESS – Butte District
Jim Davies	MDT – Road Design – Helena
Roger Schultz	MDT – Road Design – Helena
Scott Helm	MDT – Geotechnical – Helena
Wayne Noem	MDT – Secondary Roads – Helena
Walt Ludlow	MDT – Hydraulics – Helena
Tom McCormick	MDT – DCOE – Butte District
Zach Cunningham	MDT – Right of Way – Helena
Jeff Patten	FHWA
Roy Peterson	MDT – Traffic – Helena
Pat McCann	MDT – Geotechnical – Helena
Ray Sacks	MDT – CESB – Helena
Jiro Pedersen	MDT – Construction (Rotational) – Helena
Ross Gammon	MDT – Bozeman Maintenance – Bozeman

I. INTRODUCTION

At the time of the 2000 PFR the intent of this project was to reconstruct the roadway to present secondary standards. Subsequent reviews of the project and forensic testing of the existing surfacing indicate a more cost effective approach would be to widen the shoulders and then apply a thin lift overlay followed by a seal & cover treatment. Fill slopes will be flattened to secondary road standards. Cut slopes will be minimized to reduce right-of-way needs.

II. PHYSICAL CHARACTERISTICS

This project is in a rural area and traverses rolling terrain on a bench east of Canyon Ferry Reservoir. The existing roadway was constructed in 1955 and 1964 with a 7.3-meter pavement surface under project number S 6(2) – 1955 and S 6(4) - 1964. The present land use is predominately pastureland comprised of short grass prairie. Some irrigated cropland is scattered along both sides of the roadway. The design speed is 100 km/hr in accordance with secondary road standards.

III. PROJECT LOCATION AND LIMITS

The project is located in Broadwater County, approximately 12 km south of the Lewis and Clark – Broadwater County line on Secondary 284 (S-284). The project is located in Sections 3 and 10, T. 8 N., R. 2 E., Sections 7, 8, 16, 17, 21, 27, 28, and 34, T. 9 N., R. 2 E., Section 1 and 12, T. 9 N., R. 1 E.

The mainline of this project begins at station 10+00.00 metric \approx 572+33.965 ENGLISH, RP 31.66, and ends at station 141+53.42 metric \approx 1004+44.00 ENGLISH, RP 23.54.

IV. HORIZONTAL ALIGNMENT

The existing horizontal alignment will remain unchanged. There are eight curves within the limits of this project. All are simple curves. The minimum radius is 582 meters at station 33+78.24, RP 30.18 and station 75+62.15, RP 27.58. Except for not having spiral transitions all eight curves exceed the minimum design standards for the 100 km/hr design speed.

V. VERTICAL ALIGNMENT

The existing vertical alignment has a minimum grade of 0.23 % and a maximum grade of 4.43 %. There are twelve crest vertical curves and ten sag vertical curves. All vertical curves meet or exceed the design standards for the design speed of 100 km/hr.

VI. TYPICAL SECTION

The new roadway will provide an 8.4m wide surface. This includes two 3.6 meter travel lanes and two 0.60m shoulders. Existing cross-slopes and supers will be extended onto the widening.

Surfacing slopes will be 6:1 throughout the project. The surfacing structure will be composed of:

- 45mm Plant Mix Bituminous Overlay
- 45mm Plant Mix Bituminous Surfacing (first lift – widening)
- 260mm Crushed Aggregate Course
- 350mm Total

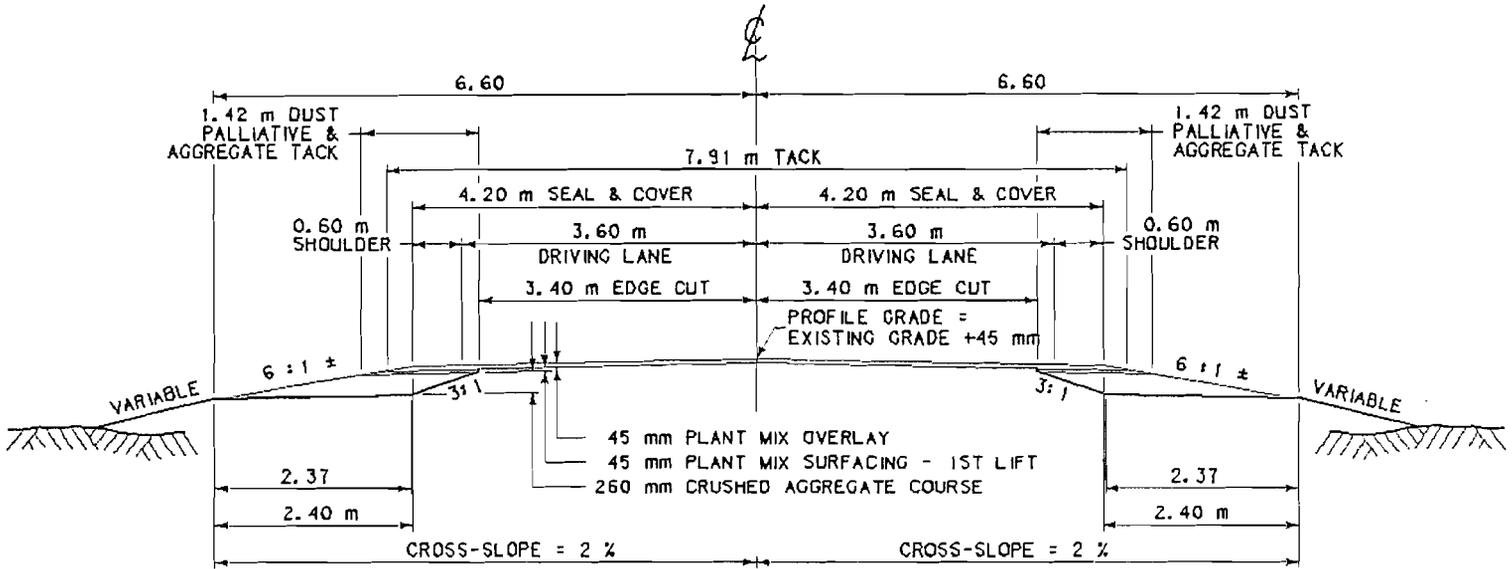


Figure 1 - Typical Section No. 1

Type 1 seal & cover will be specified.
 The plant mix surfacing will be Grade S -12.5mm with 64-28 PG binder.
 Design R-Value = 5 (widening).

VII. GRADING (ROADWAY CROSS-SECTION)

Grading on this project will be unclassified excavation and borrow

Slope Design

Standards slopes for secondary highways will be used for this project with the exception listed below:

- Listed below is the cut and fill slope criteria used.

A. Cut Slopes

V ditches will be used to minimize cuts and aid in modifying the cross-sections so the existing ditches can be used to the extent possible.

Depth (meters)	Slope
0.0 – 1.5	5:1
1.5 – 3.0	4:1
3.0 – 4.5	3:1
4.5 – 6.0	2:1
Over 6.0	2:1

B. Fill Slopes	0.0 – 3.0	4:1
	3.0 – 6.0	3:1
	6.0 – 9.0	3:1
	Over 9.0	2:1

C. SG Shoulder Daylight Slopes

4:1 depths > 150mm & < 200mm
 20:1 depths < 150mm

Road approaches will have slopes flattened to 6:1 within the clear zone then warped to match existing at the right-of-way.

VIII. HYDRAULICS

Numerous irrigation ditches *and other jurisdictional drainages* cross the PTW and will be perpetuated as needed. Irrigation ditches parallel both sides of the PTW. If they are still in use and are disturbed by construction they will be relocated outside the new right of way. Some may have been replaced by sprinkler systems. An irrigation study has been requested through the Right-of-Way.

Some of the larger structural plate pipes may need to be replaced. Hydraulics will make recommendations.

Most of the existing pipes under the PTW seem to be in good condition. Pipes will be lengthened as needed. Approach pipes will be lengthened or replaced on a case-by-case basis.

Stage construction will be used for constructing the pipe replacements.

IX. BRIDGES

There are no existing bridges on this project.

X. TRAFFIC DATA

2005	380	Present ADT
2007	390	Letting Year ADT
2027	610	Design Year ADT
DHV	70	
T	2.2%	
ESAL	4	
AGR	2.2%	

XI. ACCIDENT HISTORY

The following information is from a Safety Management report dated May 23,2005.

DESCRIPTION: 12 km south of Broadwater County line; East of Canyon Ferry Lake

ROUTE & MP: S-284 RP 23.54 TO 31.66

DATA TIME FRAME: 1-1-1995 TO 12-31-2004

STATEWIDE AVERAGE FOR RURAL	STATE SECONDARY	STUDY AREA
ALL VEHICLES ACCIDENT RATE:	1.73 ¹⁾	1.89
ALL VEHICLES SEVERITY INDEX:	2.39 ²⁾	2.88
ALL VEHICLES SEVERITY RATE:	4.16 ³⁾	5.44
TRUCK ACCIDENTS:		0
TOTAL RECORDED ACCIDENTS:		17

¹⁾Accident rates are defined as the number of accidents per million vehicle-miles.

²⁾Severity index is defined as the ratio of the sum of fatal and incapacitating injury accidents times 8 plus the number of other injury accidents times 3 plus the number of property damage accidents to the total number of accidents.

³⁾Severity rate is defined as the accident rate multiplied by the severity index.

⁴⁾Statewide average truck accident rate, truck severity index, and truck severity rate are for the years 1995 through 1999.

I. VARIATIONS FROM AVERAGE OCCURRENCE:

88% of accidents occurred on dry pavement, compared to the statewide average of 67%.

76% of accidents occurred during clear weather conditions, compared to the statewide average of 53%.

76% single vehicle off road crashes.

II. ACCIDENT CLUSTERS AND SAFETY PROJECTS:

No portion of S-284 between RP 23.54 to 31.66 has been identified as an accident cluster location within the data timeframe.

III. REMARKS:

In seven of the seventeen recorded crashes, the patrolmen reported that the vehicle overturned. Check in-slopes.

The proposed project will correct all sub-standard fill slopes.

XII. GEOTECHNICAL

The gypsum deposit between R.P. 28.5 and 28.6 will be avoided to the extent possible.

XIII. DESIGN EXCEPTIONS

A design exception will be prepared for using a 1.5 meter width for the 4:1 ditch slopes.

XIV. RIGHT-OF-WAY/UTILITIES/RAILROADS

Due to the change in scope a large portion of the project can be constructed within the existing right-of-way however, some new right-of-way or construction permits, will still be required.

An irrigation study has been requested to determine which irrigation systems can be abandoned. The study will include the disposition of all existing irrigation crossings and parallel ditches on the project. Cost-to-cure negotiations for irrigation items should be considered for this project. All new irrigation ditches and control structures will be built outside of the permanent Right-of-Way. Irrigation crossings will extend outside the permanent Right-of-Way one meter. Irrigation crossings in cut sections may be designed as siphons.

There are overhead power and underground telephone utilities along the PTW and left of the centerline of this project. There are 6 overhead power crossings and 7 underground telephone crossings along this project.

New fencing will be placed where new right-of-way is obtained and as required by the fencing policy.

XV. PUBLIC INVOLVEMENT

This project will require level "C" involvement and include the following:

1. Letter of Intent and News Release was completed May 9, 2001, explaining the project and including a department point of contact. 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 local government officials, interest groups.
3. Personal contacts with adjacent landowners explaining final design.
4. Public information meeting to present basic concepts/information and seek input.

A public meeting was held on March 27, 2003 at the Townsend High School, Townsend, Montana.

- a) The general consensus was that there are other roads that need work more urgently than this one.

In response we have greatly reduced the scope of this project from full reconstruction to overlay & widening thus releasing some secondary funding to be used elsewhere.

- b) There were two comments on the Confederate Creek crossing. First stated that the 1981 flood did a lot of damage to surrounding property and the person suggested building a new bridge at this crossing because the pipes became plugged with trees.

The other comment was received by mail after the meeting and was opposed to a bridge because it would make moving farm equipment more difficult.

This crossing will be designed in accordance with the MDT Hydraulics Manual.

- c) There were comments on irrigation crossings and we answered by saying that we would design each crossing individually.

The parallel ditches that will be perpetuated will be located outside the permanent right-of-way or will be handled on a case-by-case basis if that proves impractical.

- d) There was a lot of confusion about the reference post locations. We said we would look into this.

5. Personal contacts with adjacent landowners explaining final design.
6. Construction notification and information during construction.

XVI. ENVIRONMENTAL & HISTORICAL CONSIDERATIONS

A Categorical Exclusion will be prepared for this project.

Wetlands

There are no jurisdictional wetlands on this project.

Biological Concerns

Two nesting pair of Ferruginous hawks and one pair of nesting Osprey are known to occur along the project corridor. Timing restrictions may be required during their active nesting season. Numerous creek crossings and other drainages including irrigation ditches were observed along the project corridor. SPA 124 Permits will be required for most of these crossings. Perched culverts and other fish barriers should be remedied through appropriate design. Fish passage will likely be required at all creek crossings.

Timing restrictions may be required to protect spawning fish species within creeks identified as having a fisheries value.

Care should be given through design to minimize impacts to the riparian vegetation, including mature tree stands and shrubbery components located at the crossings and along the banks of the channels.

XVII. TRAFFIC CONTROL

Traffic will be maintained during construction activities throughout the project. No acceptable detour route is available. Through traffic will be advised to use alternate routes. The installation of the large culverts will be done in stages while maintaining one lane two-way traffic.

XVIII. READY DATE

The ready date for this project is November, 2007.

XIX. COST ESTIMATE

The preliminary cost estimate for this project is \$2,629,769 for the letting year of 2007. This estimate includes 10% for CE, 15% for contingencies, 15% for mobilization, and a 3% inflation rate and is based on 2004 average bid prices.