



# APPENDIX D

## CULTURAL RESOURCES



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ENVIRONMENTAL

December 18, 2013

Jon Axline, Historian  
Environmental Services  
Montana Department of Transportation  
2701 Prospect Avenue  
P.O. Box 201001  
Helena, MT 59620-1001


RE: NCPD-MT 56(55)  
Bypass Feasibility Study – Billings  
UPN 4199

Dear Mr. Axline:

Thank you for the letter (received December 16, 2013) and attached addendum to the cultural resource inventory for the proposed Billings Bypass project in Yellowstone County, Montana. Based on the received documentation, we concur with the determination that the following properties are ineligible for listing in the National Register of Historic Places (NRHP): 832 Mary Street (24YL1898), 838 Mary Street (24YL1899), 1748 Mary Street (24YL1900), 946 Mary Street (24YL1901), 1414 Mary Street (24YL1902), 1506 Mary Street (24YL1903), 1822 Mary Street (24YL1904), 1914 Mary Street (24YL1905), and 1920 Mary Street (24YL1906).

Please note that our concurrence does not substitute for a good faith effort to consult with interested parties, local government authorities, and American Indian tribes. If you receive a comment that relates to the eligibility of the above-mentioned properties, please forward it to our office for review. Include documentation of how the comment was addressed. In the meantime, do not hesitate to contact me at (406) 444-0388 or [kore@mt.gov](mailto:kore@mt.gov). Thank you for consulting with us.

Sincerely,



Kathryn Ore  
Review and Compliance Officer  
Montana State Historic Preservation Office



December 3, 2013

Jon Axline, Historian  
Environmental Services  
Montana Department of Transportation  
2701 Prospect Avenue  
P.O. Box 201001  
Helena, MT 59620-1001



RE: NCPD-MT 56(55)  
Bypass Feasibility Study – Billings  
UPN 4199

Dear Mr. Axline:

Thank you for the letter (received December 3, 2013) and documentation regarding the eligibility of the Five Mile Creek Bridge (24YL1867) in Yellowstone County, Montana. Based on the provided documentation, we concur with the determination that 24YL1867 is not eligible for listing in the National Register of Historic Places due to its diminished integrity.

Please note that our concurrence does not substitute for a good faith effort to consult with interested parties, local government authorities, and American Indian Tribes. Please immediately notify our office if any additional information arises regarding the historical significance or integrity of 24YL1867. In the meantime, do not hesitate to contact me at (406) 444-0388 or [kore@mt.gov](mailto:kore@mt.gov). Thank you for consulting with us.

Sincerely,

Kathryn Ore  
Review and Compliance Officer  
Montana State Historic Preservation Office



RECEIVED  
SEP 17 2013  
ENVIRONMENTAL

September 16, 2013

Jon Axline, Historian  
Environmental Services  
Montana Department of Transportation  
2701 Prospect Avenue  
P.O. Box 201001  
Helena, MT 59620-1001



RE: NCPD-MT 56(55)  
Billings Bypass (Addendum)  
UPN 4199

Dear Mr. Axline:

Thank you for the letter (received September 11, 2013) and opportunity to comment on the addendum to Ethnoscience's 2011 Cultural Resource Inventory for the Billings Bypass project in Billings, Yellowstone County, Montana. We appreciate that the Montana Department of Transportation took time to evaluate the ten (currently nine) properties that were not included in the original inventory report. Based on the received documentation, we concur that the following properties are not eligible for listing in the National Register of Historic Places: 812 Mary Street (24YL1869); 818 Mary Street (24YL1870); 1045 Firth Street (24YL1871); 1101 Firth Street (24YL1872); 1110 Firth Street (24YL1873); 1207 Johnson Lane (24YL1874); 2401 Mary Street (24YL1875); 2547 Roundup Road (24YL1876); 2551 Roundup Road (24YL1877). In the future, could you make sure that MDT's contracted cultural resource specialists include photographs of each site in both the submitted inventory report and the site forms?

Please note that our concurrence does not substitute for a good faith effort to consult with interested parties, local government representatives, and American Indian tribes. If you receive a comment that substantially relates to potentially affected historic properties located within or adjacent to the undertaking APE, please immediately forward it to our office for review. In the meantime, do not hesitate to contact me at (405) 444-0388 or [kore@mt.gov](mailto:kore@mt.gov). Thank you for consulting with us.

Sincerely,

Kathryn Ore  
Review and Compliance Officer  
Montana State Historic Preservation Office

File: MDT - 2013 - 2013091103





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*Historic Preservation  
Museum  
Outreach & Interpretation  
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Research Center*

September 12, 2013

Jon Axline, Historian  
Environmental Services  
Montana Department of Transportation  
2701 Prospect Avenue  
P.O. Box 201001  
Helena, MT 59620-1001

RE: NCPD-MT 56(55)  
Billings Bypass (Addendum)  
UPN 4199

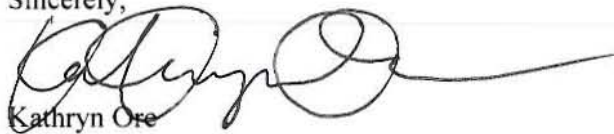
Dear Mr. Axline:

Thank you for your letter (received September 12, 2013) regarding the eligibility of the Coulson Ditch (24YL0272) in Yellowstone County, Montana. As you know, irrigation ditches are one of those special linear features that can drive a cultural resource specialist crazy. It is always difficult to determine eligibility, particularly for smaller-scale ditches not associated with a large irrigation project. Consequently, it is often easier to come up with a hard and fast rule than to deal with all the ambiguities.

Although the Water Resources Survey books are an invaluable resource, we agree that a nuanced approach is necessary for determining the eligibility of an irrigation ditch. There are several factors we believe are important to consider. These include (feel free to add to our list): when the ditch was constructed relative to the settlement of the surrounding area, who took part in the construction, how many people were involved, how many homesteads/farmsteads/ranches were served, whether Federal funds were involved, if the ditch is connected into a larger irrigation system, if the ditch is primary, secondary or tertiary...

We appreciate that you took time to really dig (no pun intended!) into the history of 24YL0272 and look beyond its inclusion in the 1943 and 1971 Yellowstone County Water Resources Survey. Based on the presented argument, we concur with the determination that 24YL0272 is not eligible for listing in the National Register of Historic Places. If you have any questions or concerns, do not hesitate to contact me at (406) 444-0388 or [kore@mt.gov](mailto:kore@mt.gov). Thank you for consulting with us.

Sincerely,



Kathryn Ore  
Review and Compliance Officer  
Montana State Historic Preservation Office

File: MDT - 2013 - 2013091201

225 North Roberts Street  
P.O. Box 201201  
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2701 Prospect Avenue  
PO Box 201001  
Helena MT 59620-1001

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DEC 16 2011

BY: SHPO

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JAN 3 2012

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CONCUR  
MONTANA SHPO

DATE 29 Dec 2011 SIGNED

Josef  
MDT  
Axline:  
Billings  
Bypass EIS  
NAE  
YLC

December 15, 2011

Mark Baumler, Ph.D.  
State Historic Preservation Office  
1410 8<sup>th</sup> Avenue  
P O Box 201202  
Helena, MT 59620-1202

Subject: NCPD 56(55)  
Billings Bypass EIS  
UPN 4199

Dear Mark:

Enclosed is the Determination of Effect for the above project in Yellowstone County. We have determined that the proposed project would have **No Adverse Effect** to the Billings Bench Water Association Canal (24YL0161), the Northern Pacific Railway (24YL0277) and the Coulson Ditch (24YL0272) for the reasons specified in the document. Less than 2,000 feet of the abandoned Billings and Central Montana Railroad (24YL1592) would be impacted by this project. Consequently it is covered under the terms of the MDT's Abandoned Historic Railroad Grade Programmatic Agreement. Impacts to the Five Mile Creek Bridge (24YL1867) are covered under the Historic Roads and Bridges Programmatic Agreement. We request your concurrence.

If you have any questions, please contact me at 444-6258.

Jon Axline, Historian  
Environmental Services

Enclosure

Copies: Stefan Streeter, P.E., Billings District Administrator  
Tim Conway, P.E., Consultant Design  
Bonnie Gundrum, Resources Section



# DETERMINATION OF EFFECT

## NCPD 56(55) Billings Bypass EIS Control No. 4199

### Introduction

The Montana Department of Transportation (MDT), in cooperation with the Federal Highway Administration (FHWA), intends to complete an Environmental Impact Statement (EIS) for the Billings Bypass project. The project is located in Yellowstone County partially within the City of Billings limits. The project limits extend from Interstate 90 (I-90) to Old Highway 312 (Old Hwy 312), a distance of approximately 3.5 miles.

The purpose of the proposed project is to improve access and connectivity between I-90 and Old Highway 312 to improve mobility in the eastern area of Billings. The proposed roadway would connect between two existing transportation corridors – the I-90/I94 corridor and Old Hwy 312. Three alternatives are under consideration for the proposed roadway.

- Mary Street Option 1 Alternative
- Mary Street Option 2 Alternative
- Five Mile Road Alternative

Each alternative begins at the I-90 interchange with Johnson Lane, which would be reconstructed as part of the project. Each alternative uses the same alignment between the Johnson Lane interchange and the Yellowstone River. North of the river, the alternatives use different alignments. The alternatives would also include improvements to secondary corridors to meet design objectives for operations and safety.

The project is proposed as a four-lane principal arterial designed to NHS standards. There are five typical sections used for the proposed alternatives. The typical sections to be used for the alternatives vary by segment and are based on the design standards assigned to each segment.

Mary Street Option 1 Alternative – The primary corridor would use design standards for an urban principal arterial and include four travel lanes (two in each direction), a two-way left turn lane, paved shoulders, drainage channels and side slopes. The segment of this alternative adjacent to Mary Street would use urban principal arterial standards with a frontage road system. Mary Street would be retained as a frontage road to the proposed new roadway.

Mary Street Option 2 Alternative – Same typical sections as Mary Street Option 1 Alternative.

Five Mile Road Alternative – South of the Yellowstone River, the primary corridor would use design standards for an urban principal arterial and include four travel lanes (two in each direction), a two-way left-turn lane, paved shoulders, drainage channels and side slopes. North of the Yellowstone River, the primary corridor would use design standards for a rural principal arterial. The main difference between the urban principal arterial and rural principal arterial

typical sections is that the rural standards call for a 50-foot depressed median instead of a two-way left-turn lane. The secondary corridor (Mary Street) would be reconstructed to City of Billings standards for an urban arterial roadway. This would include two travel lanes (one in each direction), a two-way left-turn lane, curb and gutter, bike lanes, and sidewalks on both sides of the roadway.

### **Significant Cultural Resources**

A cultural resource survey of the project area was conducted in 2011. Three previously recorded National Register of Historic Places-eligible historic properties are located within the Area of Potential Effect (APE) of this project: the Billings Bench Water Association Canal (24YL0161), the Northern Pacific Railway (24YL0277), and the abandoned Billings Central and Montana Railroad (24YL1592). Although the MDT doesn't agree with SHPO's determination that the Coulson Ditch (24YL0272) is eligible for the National Register of Historic Places (NRHP), impacts to it are included in this document. For the purposes of this Determination of Effect, the Five Mile Creek Bridge (24YL1867) is also included in this document.

The Billings Bench Water Association (BBWA) Canal consists of an extensive system of canals, ditches, and lateral on the Billings Bench in northeastern Billings. Construction of the ditch began in 1903 and it is currently owned and operated by the BBWA. The ditch has played a significant part in the agricultural development of the Billings area and is NRHP eligible under Criterion A.

Completed in 1883, the Northern Pacific Railway (now BNSF Railway Co.) has had a very significant impact on Montana. It is the reason why the city of Billings exists (along with many other communities along its line in the state) and it played a significant role in the history of Montana. Because of that, it is eligible for the NRHP under Criterion A.

Constructed in 1913, the Billings and Central Montana Railroad connected Billings with the agricultural community of Shepherd, about 13 miles northeast of the Magic City. Referred to by locals as the Sagebrush Limited, the railroad operated until 1968; the tracks were removed in 1975. The abandoned railroad grade is eligible for the National Register under Criterion A.

Built in 1895, the Coulson Ditch carried water to farms and ranches on the Billings Bench northeast of Billings. The unlined ditch has good integrity and could be eligible for the National Register under Criterion A.

The Five Mile Creek Bridge was constructed sometime in the 1910s by Yellowstone County. The steel stringer bridge may be eligible for the National Register under Criteria A and C.

### **Project Impact**

Less than 2,000 feet of the Billings and Central Montana Railroad (24YL1592) would be impacted under all three proposed alternatives. The three alternatives specify a crossing of the abandoned railroad grade for the proposed bypass routes. Because less than 2,000 feet of the abandoned railroad grade would be impacted by the proposed Billings Bypass project, it falls under the terms of the MDT's Abandoned Historic Railroad Grades Programmatic Agreement. The Billings and Central Montana Railroad will not be mentioned further in this document.

The Five Mile Creek Bridge (24YL1867) would not be impacted under the proposed Mary Street 1 and 2 Options, but would be replaced under the Five Mile Road Alternative. The bridge is treated under the MDT's Historic Roads and Bridges Programmatic Agreement and will not be mentioned further in this document.

#### Billings Bench Water Association Canal (24YL0161)

Under the Mary Street 1 and 2 Option Alternatives, the proposed project would include crossings of the canal. The crossings would consist of either 6-foot diameter pipes or box culverts. There would be no change in the alignment of the ditch or diminution of its function. It would carry the same water capacity as it does now.

The proposed Five Mile Road alternative would include a crossing near Mary Street. The crossing would consist of a 6-foot diameter pipe or box culvert. There would be no change in the alignment of the ditch or diminution of its existing function.

#### Northern Pacific Railroad (24YL0277)

For this site, all three proposed alternatives would have the same impacts. A grade separation structure is proposed to carry the roadway over the railroad tracks. Two of the structure's bents would be located within the existing railroad ROW, but would not encroach on the existing railroad grade.

#### Coulson Ditch (24YL0272)

At the Coulson Ditch all three alternatives would have the same impacts. Two existing roadways, Johnson Lane and Coulson Road, would be realigned to connect into the proposed arterial roadway. Both of these realigned segments of roadway would cross the ditch. Additionally, the existing portion of Coulson Road that crosses the ditch east of Johnson Lane would be removed. The proposed arterial roadway would also cross the ditch. The crossings would include 4-foot diameter round pipes for all three crossing locations.

At the Johnson Lane crossing of the ditch, the existing pipe would be replaced lengthened. The location of the pipe would not change. The embankment slopes of the ditch adjacent to crossing may be re-graded.

East of Johnson Lane, approximately 400 – 500 feet of the ditch would realigned because the slopes of the proposed roadway would encroach on the ditch. The removal of the exiting segment of Coulson Road would also affect the ditch at this location. The ditch would be reconstructed to match the existing ditch construction.

The existing ditch crossing at the access route south of Coulson Road would be removed and relocated to the west because Coulson Road would be realigned. The pipe would be 4-foot round and longer than the pipe for the existing crossing. The ditch may be realigned to provide for a perpendicular crossing of the Coulson Road realignment.

### **Project Effect**

There would be **No Adverse Effect** to the Billings Bench Water Association Canal (24YL0161) by the Mary Street 1 and 2 Option Alternatives. Impacts would consist of the construction of a new crossing of the ditch and the placing of the ditch in a 6-foot diameter round pipe or a box culvert. The existing ditch alignment would be perpetuated as would its existing carrying capacity and function. There has been considerable residential development in proximity of the ditch which has already impacted the setting in the vicinity of the proposed crossing. For the Five Mile Road Alternative, approximately 1,650 feet of the BBWA canal would be realigned to accommodate a proposed new roadway. Although the ditch would be realigned, it would still function as an irrigation facility and there would be no change in its function or carrying capacity. The realignment would involve the construction of a ditch similar in appearance to what would be destroyed. The proposed realignment would be on the same general tangent as the existing ditch. None of the Criteria of Adverse Effect would apply in this case.

There would be **No Adverse Effect** to the Northern Pacific Railway (24YL0277). Under all three proposed alternatives for this proposed project, a grade separation structure would be constructed to carry the roadway over the railroad tracks. Two of the bents for the proposed grade separation structure would be located within the existing BNSF Railway Co. ROW, but would not encroach on the railroad grade and would not impact the function or historic significance of the railroad to Yellowstone County and Montana. The impact would be visual and to the setting. However, the setting has already been compromised by adjacent industrial, commercial, and residential development. The proposed grade separation would not detract significantly enough to render the Northern Pacific Railway ineligible for the NRHP.

There would be **No Adverse Effect** to the Coulson Ditch (24YL0272). For the most part, impacts caused to the Coulson Ditch would involve the construction of new crossings and the perpetuation of existing crossings. In one instance a crossing would be perpetuated, but the ditch rechanneled to provide a perpendicular crossing rather than a skewed crossing. None of the crossings would adversely effect the ditch in that the existing function of the facility would be perpetuated as would its contribution to the historic development of irrigation and agriculture in the Yellowstone Valley. Approximately 400-500 feet of ditch would be realigned to accommodate a new road alignment. The ditch would continue to function in its historic capacity and its significance to the agricultural development of Yellowstone County would be perpetuated. None of the Criteria of Adverse Effect can be applied to this ditch.