Finding of No Significant Impact

for

STPP 69-1(9)22

Boulder-South

(CN 2019)

in

Jefferson County, Montana

June 2011

MONTANA MDT DEPARTMENT OF TRANSPORTATION

U.S. Department of Transportation Federal Highway Administration

FEDERAL HIGHWAY ADMINISTRATION
FINDING OF NO SIGNIFICANT IMPACT

for

Project Number: STPP 69-1(9)22
Project Name: Boulder - South
Control Number: 2019

in

Jefferson County, Montana

The Montana Department of Transportation (MDT) and the U.S. Department of Transportation Federal Highway Administration (FHWA) have determined that the Preferred Alternative, as described in the attached Environmental Assessment (EA) dated January 2011, will have no significant impact on the human environment. This Finding of No Significant Impact (FONSI) is based on the January 2011 EA and information obtained during the public and agency coordination process. After independent evaluation of the EA, MDT and FHWA conclude that the EA adequately and accurately discusses the need, environmental issues, and impacts of the proposed project and appropriate mitigation measures. The EA provides sufficient evidence and analysis for determining that an Environmental Impact Statement (EIS) is not required. MDT and FHWA take full responsibility for the accuracy, scope, and content of the attached January 2011 Environmental Assessment.

For purposes of compliance with the Montana Environmental Policy Act (MEPA) (ARM 17.4.609(3)(j) and ARM 18.2.239(3)(j)), this FONSI and conclusion that an EIS is not required should be considered part of the EA.

Montana Department of Transportation — Date 6/30/2011

Federal Highway Administration — Date 6/30/2011

Project Abstract and Location:
The proposed action is to rehabilitate/reconstruct an approximately 5.7-mile section of MT 69 in Jefferson County. The project would widen the existing MT 69 alignment from the current 26.2± feet to 34± feet over the project limits from MP 31.8± to MP 37.5± and update the roadway design to current standards to address the lack of shoulders and steep side slopes. The project would also improve pedestrian and bicycle facilities in the corridor. The primary purpose of the project is to improve safety for users of the project corridor while mitigating project impacts to the surrounding natural and built environments.

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Appendix A – NEPA/MEPA Coordination Process

The proposed project fully defined in the attached Environmental Assessment (EA) has been coordinated with the appropriate federal, state, and local agencies in compliance with the requirements of the National Environmental Policy Act (NEPA) and the Montana Environmental Policy Act (MEPA), as well as guidelines provided by the Council on Environmental Quality (CEQ) and the U.S. Department of Transportation (FHWA Technical Advisory T6640.8A).

Availability of EA for Review and Comment

The Montana Department of Transportation (MDT) and the Federal Highway Administration (FHWA) approved the EA for distribution in January 2011, and a Notice of Availability was distributed to area newspapers as follows:

- Boulder Monitor on February 2, 9, and 23, 2011
- Helena Independent Record on February 2, 6, and 20, 2011

A postcard was also sent out to 369 people/businesses that either attended previous public meetings or expressed an interest in the project.

Copies of the EA were available for public review at the following locations:

- Boulder Community Library (202 S. Main)
- Jefferson County Commission Office (118 West Centennial)
- City of Boulder Office (304 North Main Street)
- MDT Butte District Office (3751 Wynne)
- MDT Helena Office (2701 Prospect Avenue)

Copies of the EA were also available upon request from MDT and the EA could be viewed on the MDT website at http://www.mdt.mt.gov/pubinvolve/boulder/

The EA was mailed to all agencies contained on the Distribution List on pages 63 and 64 of the EA on February 4, 2011. The public review and comment period began on February 8, 2011 and ended on March 10, 2011.

Additional copies of the EA were mailed to individuals upon their request.

Public Hearing

A Formal Public Hearing was held to present the Preferred Alternative and take comments on the EA. The Hearing was held on February 23, 2011 at the Jefferson High School Cafeteria, and 30 members of the public were in attendance. A transcript of the Hearing is provided in Appendix D.

Comments Received

Two verbal comments were received at the Public Hearing, and 12 comments were submitted in writing during the comment period. An additional two comments were submitted the week before the official opening of the comment period. All of these comments and responses from MDT and FHWA are contained in Appendix C.

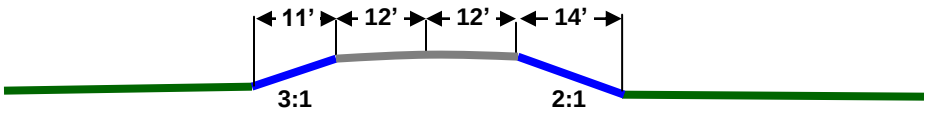
Appendix B – Edits / Corrections to the EA

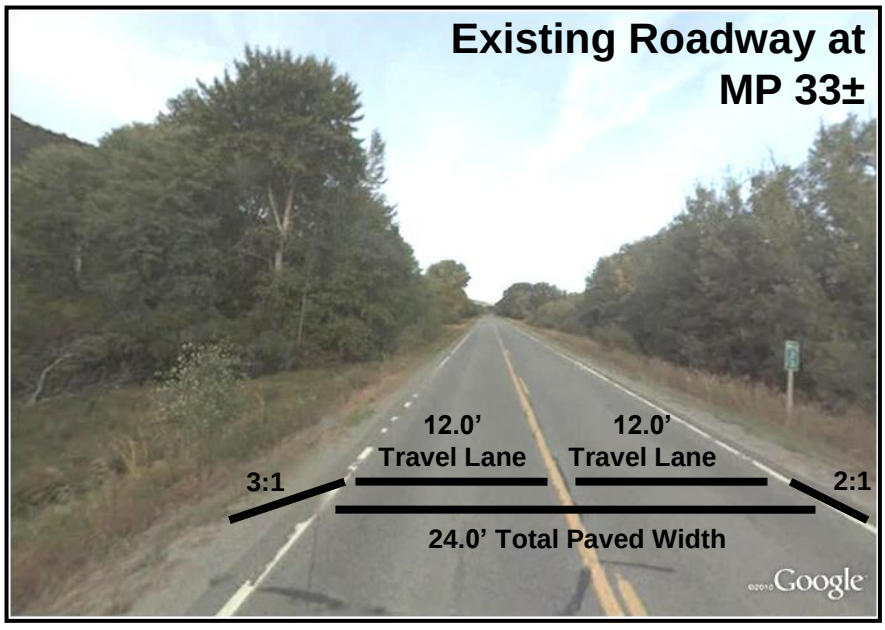
The following edits are to be considered part of the approved Environmental Assessment (EA) prepared for this project and are intended to provide further clarification in response to comments received.

The edits are identified by their location in the EA, the type of edit made, and a depiction of the edit made to the text.

Location	Action	Edit
Page 7, Figure 2-1	Clarification	The Existing Cross Section presented in Figure 2-1 represents the best case condition. In many locations within the corridor, side slopes are steeper and shoulders are narrower than shown in Figure 2-1. An example is provided below where the existing roadway does not include a one-foot shoulder or 3:1 side slopes on both sides of the roadway.

Existing Roadway at MP 33±





Location	Action	Edit
Page 16	Clarification	The EA states that the two elevated structure alternatives were eliminated from further consideration due to substantial cost. It should also be noted that an elevated structure would make it difficult to perpetuate existing access points, and construction of access ramps would likely result in additional right-of-way and natural resource impacts.
Page 22, page xii	Text Correction	National Register ~~for~~ **of** Historic Places
Page 33, Figure 3-7, Key to Map Zone Explanation	Formatting Correction	A Areas of 100-year flood; base flood elevations and flood hazard factors not determined. C Areas of minimal flooding (no shading).
Page 46, Table 3.6	Deletion	~~[1]Key to rankings: G = Global rank based on range-wide status, S = State rank based on status of species in Montana.~~
Page 53	Text Correction	• *Basin – Boulder* This mill/fill seal and cover project is located on I-15 from RP 157.7 to 163.1 and was let to contract in February 2009. ~~Project completion is estimated for~~ **The project was completed in the** summer of 2010.
Page 65	Text Correction	Garcia and Associates. *Biological Resources Report for the Boulder South, Highway 69 Project, Project # STPP 69-1(9)22, Control # 2019, Work Type 140*. 200~~8~~**9**.

Appendix C – Comments and Responses

The following pages contain the comments made at the Public Hearing, as well as copies of the comment letters received (on the left side of the page), and the FHWA/MDT response (on the right side of the page). Comment letters are presented in date order, and each is numbered sequentially. The response to each letter is identified with the number corresponding to the comment.

The following comments have been transcribed from the Public Hearing held on the EA on Wednesday, February 23, 2011. Responses have been developed by MDT and FHWA subsequent to the Hearing.

Recorded Comment A

A-1

My name is Carolyn Lewis, and I'm speaking as a member of the Boulder Area Recreation and Trails Committee, otherwise known as BART-COM. Thank you very much for this opportunity to comment on the Boulder-South Environmental Assessment. Having read through the Boulder-South Environmental Assessment, we would like to submit the following comments: The citizens of the Boulder area and BART-COM asked for a bike/pedestrian facility to be included in the design and implementation of the project. Our reasons for the request were based on enhancing the quality of life for our citizens; attracting visitors to the area; providing economic stimulus to local businesses; and, last but not least, our concern that if the facility was not implemented during the rebuild, it basically would never happen. We knew that the primary purpose of the project was to make Highway 69 safe, and we wanted to expand that concept to include all travelers, not just motorized vehicles.

Response A

A-1

Thank you for your comment. With this project, MDT has strived to improve safety for all users of the MT 69 corridor, including pedestrians and bicyclists.

A-2
It appears that our requests have been addressed in several areas of the EA. Roman numeral II in your executive summary says, "The project would provide a shoulder width suitable for bicycle use in accordance with the American Association of State Highway and Transportation Officials ... guidelines." And then, on page 19 of the main body of the document, it states, "The Preferred Alternative would widen the MT 69 top width and include shoulders that are consistent with national standards to provide adequate space for bicycle and pedestrian use. In addition, MDT is considering design options for a pedestrian/bicycle facility parallel to MT 69 along with appropriate pedestrian crossings on MT 69."

A-2
As noted in your comment, the EA documents the ways in which this project would improve pedestrian and bicycle facilities in the corridor, including wider shoulders and consideration of design options for a pedestrian/bicycle facility.

A-3
So the citizens of Boulder and BART-COM would like to thank MDOT for addressing our requests in the EA, and we will continue to ask for and work towards a bicycle/pedestrian facility to be included for the entire length of the project along with safe crosswalks at the Jefferson County Fairgrounds, Hubbard Lane, the Boulder Hot Springs, and other frequently used junctions. Currently, two BART-COM members serve on an ad hoc citizens committee appointed by the Jefferson County Commissioners to provide input to MDOT on the project. We look forward to continuing this process and appreciate your willingness to listen to our concerns. For everybody in the audience, if any of you, during the project design, have any concerns, we do have the citizens committee; you can call any one of us. And I don't think I'm stepping out of line to name the people on the committee. They are Anika McCauley, Colleen Teeling, Kerri Kumasaka, Sam Samson, myself, Carolyn Lewis, and Dave Kirsch, our county commissioner. You can call any of these people at any time with your concerns, and we can bring these concerns as we meet regularly with the MDOT. Personally, I'd like to thank Jeff, Gabe, Will, and the entire MDOT staff -- these guys didn't just sit there, they really listened -- and all the BART-COM members who canvassed the neighborhoods to find out if the bike path was an idea that, really, the citizens wanted, and we found out they did; and all of you that sent in – that filled out the postcards and sent them in. They received over 400 postcards in favor of the bike/ped path. And I'd like to thank Jan Anderson, who very speedily and professionally printed those postcards, and Jefferson Broadband, who put up the funds for that citizen initiative; and, last but not least, all of the community organizations that wrote letters, from the school board to the county commissioners, asking MDOT to please include a bike path.
Thank you.

A-3
MDT will continue to work with the citizens committee to identify the most appropriate bicycle/pedestrian option for this corridor.

Recorded Comment B

B-1

I'm Barb Reiter. Thank you, Carolyn, for what you just put out. I appreciate that very much. And I do appreciate the fact that you have had numerous meetings with us and have taken our concerns. I have to say that -- When the project was done, the nine miles that was completed, I have to say I was quite devastated by the amount of land torn up, and vegetation. It just -- it shocked me. I wasn't expecting to see that. And where I went with that was, what is it going to look like when we do this portion of 69 that we're talking about tonight, and particularly the portion with the half-mile that I think you referred to a number of times with the overpass issue and so on? I just don't know why we have to disturb that place, that portion. I agree with the shoulders on the other portions between Boulder and out to where that starts and then on the other side until Elkhorn. But it just seems to me that that is such a sacred and wonderful place that I just would hate to see that disturbed, and that was mainly the point I wanted to make.

B-2

Why couldn't there be some speed limit put there slowing people down? You have to already slow down to get around those curves. You know, flashing lights like they have on Highway 15 between Basin and some of those areas; we've got flashing lights in those areas. Anyway, just a thought that I've had about that whole area. It's just so beautiful, and why do we want to disturb that? That's it. Thanks.

Response B

B-1

MDT will minimize impacts to vegetation to the extent practicable. MDT will shift the alignment and use non-standard fill slopes in the locations identified in Table 2.1 in order to minimize project-related ground disturbance.

On page 32, the EA states that the disturbed area would be reseeded with desirable vegetation. To soften the view shed, MDT will revegetate and replant trees in appropriate locations where a single line of trees within the construction limits must be removed. For example, a single row of trees that will be impacted by construction limits exists from MP 32.1 to 32.8. Replanting will be conducted in this location. It should be noted that natural regeneration of aspen and cottonwood is anticipated post-construction in locations where large stands now exist throughout the project corridor. An example of an aspen stand exists at MP 33.2; natural regeneration is anticipated in this location and replanting would likely not be needed. MDT intends to replant trees in areas where single rows have been impacted and allow for natural regeneration in areas where clones exist in order to maintain the view shed, habitat diversity, and stabilization that trees provide.

B-2

The Manual on Uniform Traffic Control Devices (MUTCD) recommends use of flashing warning beacons as needed to supplement a warning sign. Horizontal alignment warning signs are appropriate where an advisory speed at a curve differs from the posted speed limit for the remainder of the roadway corridor. There are no curves in the Boulder-South corridor with an advisory speed lower than the posted speed limit. Further, the Boulder-South project will correct any roadway components that do not meet current design standards.

Page 17 of the EA notes that "the speed limits for highways within the state are set by the Montana legislature and are detailed in Montana Code Annotated (MCA) § 61-8-303. Accordingly, this project would have no impact on the posted speed limit for MT 69, which would remain at 70 miles per hour (mph) during the daytime and 65 mph during the nighttime." As provided in MCA § 61-8-309, "[i]f the [Transportation] commission determines upon the basis of an engineering and traffic investigation that a speed limit set by 61-8-303 is greater or less than is reasonable or safe under the conditions found to exist at an intersection, curve, or dangerous location or on a segment of a highway less than 50 miles in length under its jurisdiction, the commission may set a reasonable and safe special speed limit at that location." Local residents wishing to pursue this issue should contact their County Commissioners to request a speed study.

The following comments were submitted in writing to MDT during or immediately prior to the official public comment period on the EA.

Written Comment #1

Wed 2/2/2011 8:49 AM

What kind of impact will this have on the businesses and residences that are on that stretch of highway?

Linda Stevens

Response #1

Page 20 of the EA states that "[n]o adverse economic impacts are anticipated as a result of the proposed project. An improved roadway would facilitate safer and more efficient commutes for area workers." On page 22, the EA notes that "[t]here would be private right-of-way acquisitions under the Preferred Alternative, although there would be no residential or business relocations."

With regard to temporary impacts, page 51 of the EA states that "[c]onstruction activities from the Preferred Alternative would likely cause temporary impacts to traffic flow, especially in relation to the removal of the existing bridge and construction of the new bridge crossing the Little Boulder River. MDT may consider a temporary closure, phased construction, or a temporary detour in order to accommodate construction activities, including blasting and bridge construction activities."

Written Comment #2
Wed 2/2/2011 8:51 AM

Could I also get a copy of the agreement the State made with the City of Boulder that literally "took" 30 feet of the front yard of properties on Main Street in Boulder. In most cities this is recorded as an easement and not outright ownership by the State. Where are the documents requiring owners to maintain this property that belongs to the state.

Thanks. ls

Linda Stevens

Response #2
The action referenced in your comment is not part of the proposed Boulder-South project. We recommend that you contact the City of Boulder.

Written Comment #3
Mon 2/21/2011 7:41 AM

3-a I have reviewed the EA online for the future development and reconstruction of Highway 69, however, there was no display of the actual architectual proposal of construction. Is there somewhere that this can be reviewed? I would like to be familiarized with the actual design.

3-b Some of this area is very environmentally sensitive, so it is important for the public to know and be familiar with how much will be affected by reconstruction. Example, how many trees and terrain will be removed and how will this impact the present flow of the river?

3-c Has an alternative route been considered?

Sincerely, Carol E. Christensen

Response #3

3-a The final design phase of this project will be conducted following completion of the environmental decision document. Conceptual cross sections and pedestrian / bicycle facility design options are presented on pages 7 and 8 of the EA document.

3-b Impacts to natural resources are documented in Chapter 3 of the EA. As stated on page 39 of the EA, "[i]mpacts to larger tree species such as cottonwoods and aspens may be substantial, depending on the final alignment, and could potentially affect numerous trees over the entire project area." Page 44 of the EA notes that "[w]idening of the road surface may reduce or alter riparian vegetation along the river channel, which may disrupt river channel dynamics and increase sedimentation during stormwater runoff events, thereby impacting aquatic species."

MDT has committed to shift the alignment and use non-standard fill slopes in the locations identified in Table 2.1 in order to minimize project-related ground disturbance and avoid project-related encroachment into the Boulder River. MDT will also "re-seed disturbed soil and replant trees in appropriate locations where a single line of trees within the construction limits must be removed to improve safety and sight distance" (page 40 of the EA).

3-c MDT completed an Alternatives Analysis (AA) document in December 2009. This document may be viewed online at http://www.mdt.mt.gov/pubinvolve/boulder/docs/alternatives_analysis_complete.pdf

The AA document analyzed five proposed alternatives, including the No Build, Spot Improvements/Speed Reduction/Enforcement, Existing Alignment, Eastern Alignment, and Western Alignment Alternatives. All but the No Build and Existing Alignment were eliminated from further analysis due to their inability to address the safety concerns in the corridor and impracticability and unreasonableness resulting from high cost, considerable constructability challenges, known and anticipated right-of-way acquisition difficulties, expressed community concerns, and political obstacles.

The EA considered three additional alternatives that were proposed by members of the public during public meetings and through written comments, including the Citizens' Alternative and two elevated structure alternatives. These alternatives were eliminated from further consideration due to their inability to address the safety concerns in the corridor, high cost, and access difficulties. It was determined that the Preferred Alternative best meets the project Purpose and Need.

A discussion of alternatives considered but eliminated from further analysis is contained in Section 2.4 beginning on page 11 of the EA document.

Written Comment #4

Boulder - South Environmental Assessment

Public Hearing
Wednesday, February 23, 2011

MDT Invites Your Comments:

4-a I SUPPORT NOT DOING ANY MAJOR WORK ON THE ½ MILE SECTION WHICH INCLUDES THE BOULDER RIVER & CLIFFS – NEAR TOM COLELLA'S PLACE. WOULD LIKE TO SEE A BIKE PATH/PEDESTRIAN THROUGH THAT AREA. – SUPPORT MINIMAL DISTURBANCE.

4-b BIKE PATH NEEDED FROM BOULDER TO ELKHORN TURNOFF.

4-c VERY CONCERNED ABOUT TRUCK TRAFFIC & THE SPEED LIMIT. THIS IS AS DANGEROUS AS THE CURVES & LACK OF SHOULDERS.

THANKS

To receive further project information, please provide your name and address:

Name: BARB REITER
Address: P.O. Box 284
BOULDER, MT 59632

Please leave your comments with Project Team staff at the meeting, or mail to:

Sarah Nicolai
DOWL HKM
PO Box 1009
Helena, MT 59624

Please indicate comments are for the Boulder-South EA and submit comments by **March 10, 2011.**

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Response #4

4-a Please see page 3 of the EA, which notes that "[t]he purpose of rehabilitation/reconstruction and widening of MT 69 is to improve safety for users of the project corridor while mitigating project impacts to the surrounding natural and built environments." Rehabilitation/reconstruction of the entire length of the corridor, as opposed to discrete segments, is required in order to bring MT 69 up to current safety and operational standards.

4-b Figure 2-2 (page 8 of the EA) presents pedestrian/bicycle facility design options that are under consideration as part of this project. MDT is working with Jefferson County, the City of Boulder, and local pedestrian/bicycle groups to identify the best facility option, the appropriate extents of a facility, and possible funding and maintenance arrangements.

4-c Commercial vehicles are allowed to use MT 69 under current state and federal statutes. Please refer to response B-2 regarding speed limits.

Written Comment #5

Wed 2/23/2011 10:43 PM

5-a As a volunteer firefighter for the Bull Mtn and EMT for Boulder, I believe widening the road would keep accidents down. I live at the 22 MM on 69 where the 2010-2011 construction is going on and can see the benifit in having a wider road and shoulders.

5-b Where the right of way was widened onto our property, it had no effect on our ranch. Another plus from the deal was getting new fence. I felt we were properly compensated for the lost land and we had some issues with the temporary fence but were resolved in a matter of days. We also faced an issue where we could not get out of our lane easily due to grading and paving lifts but after one phone call that issue was also resolved.

5-c The only down side i see with having the road widened is the possibility of more truck traffic. The last road rutted out and caused many hydroplaning accidents. The ruts were for sure caused by the heavy load of truck traffic.

5-d It would be nice to see more law enforcement of this highway and maybe a full time scale to detur some of the trucks. I hope my comments are not too late for I have been in a series of Fire Fighter 1 trainings.

Thanks,
Steve Carey

Response #5

5-a It is anticipated that this project will improve safety performance in the corridor. As stated on page 9 of the EA, "[t]he Build Alternative would widen the existing roadway and improve non-standard features. As noted in the Alternatives Analysis document, the results of the safety and operational crash model developed for this project showed that a new roadway template including five-foot shoulders and side slopes flatter than 4:1 would result in a 41 percent decrease in crashes in the design year (2032) as compared to current conditions (2008)."

5-b MDT will coordinate with landowners regarding impacts to private property, including perpetuating access and grading. As stated on page 22 of the EA, "[t]here would be private right-of-way acquisitions under the Preferred Alternative, although there would be no residential or business relocations…Lands needed for right-of-way under the Preferred Alternative which are in private ownership would be acquired in accordance with both the *Uniform Relocation Assistance and Real Property Acquisition Act* of 1970 (P.L. 91-646), and the *Uniform Relocation Act Amendments* of 1987 (P.L. 100-17). Compensation for right-of-way acquisitions would be made at 'fair market value' for the 'highest and best use' of the land. Fencing will be provided according to MDT policy." On page 43, the EA also notes that "MDT will negotiate wildlife fencing options with adjacent landowners and install appropriate wildlife fencing combinations as negotiated or on MDT right-of-way to facilitate wildlife movement within the highway corridor."

5-c Please see response 4-c regarding truck traffic.

5-d MDT does not intend to build a full-time permanent weigh station as part of this project. As noted on page 16 of the EA document, wider shoulders proposed under the Preferred Alternative may facilitate greater speed limit enforcement, although these efforts are under the jurisdiction of law enforcement. The recently upgraded weigh station to the south of this project may also enhance enforcement of commercial vehicle requirements.

Written Comment #6

Wed 3/2/2011 3:00 PM

Dear Sir;

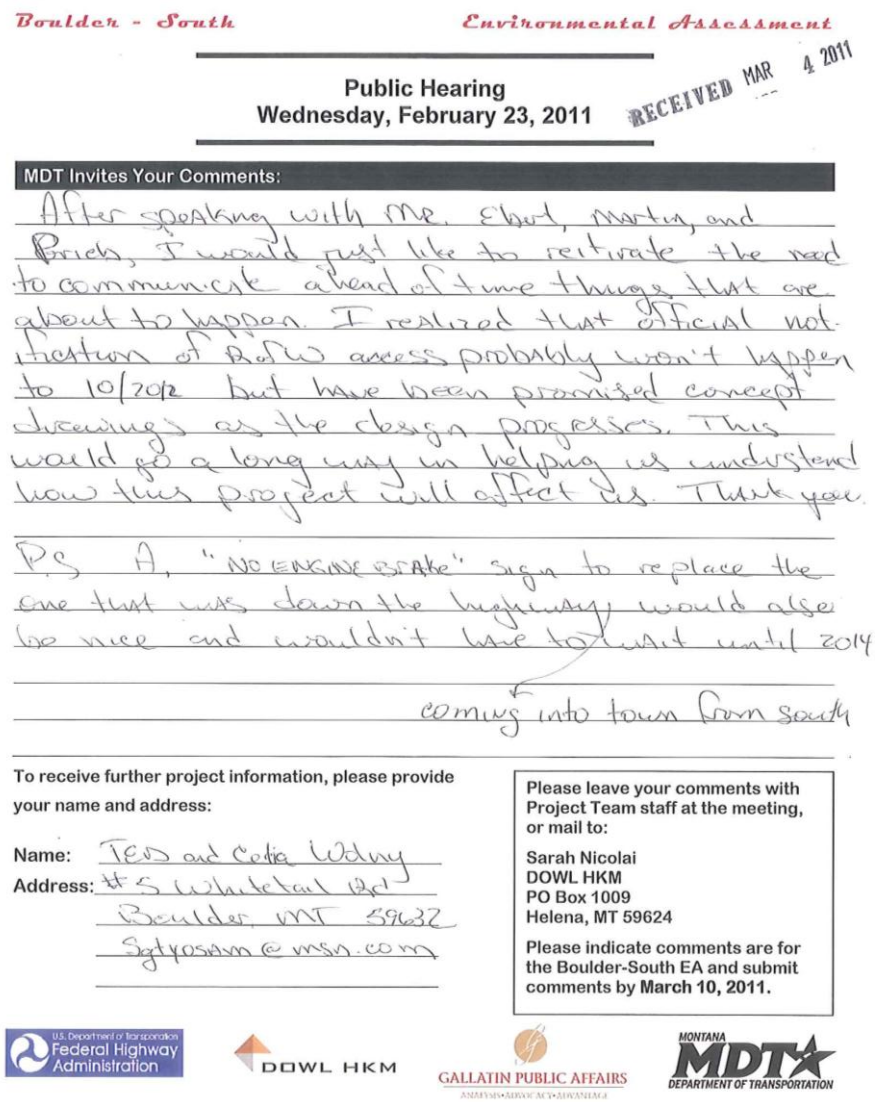
We own the Clover Meadow Investments LLC, which controls/owns a ranch on State Highway 69 South. We are on the straight stretch of road just North of the ElkHorn turnoff. We are on both sides of the current road. The address is: 3171 Highway 69. We are concerned about your removing any trees on the West side of the highway. This tree screen makes a very large impact on the looks and livability of our ranch. These trees provide a noise barrier and visual barrier to our home. We would request that you push the road as much to the East as you can. We have trees on that side also but they will not impact the ranch as much as the ones on the West side. We ask for your consideration in this request.

Thank you;
Robert M. Neary, Manager, Clover Meadow LLC.

Response #6

MDT will maintain the existing alignment in this location to minimize impact to wetlands and utilize as much of the existing roadbed as possible. It would be difficult to shift the alignment in this location due to the close proximity to the connection with the recently constructed Elkhorn Road-South project. The proposed preliminary construction limits will generally extend near the existing fence\right-of-way line on the west side of the road in this area. Trees located within the clear zone (which is the zone provided for recovery of errant vehicles) will be removed, and any of the remaining trees on MDT right-of-way between the roadway and the right-of-way line may be removed depending upon construction impacts. During final design, efforts will be made to avoid tree impacts where practicable. Please see response B-1 regarding mitigation for unavoidable impacts to trees and other vegetation.

Written Comment #7



Boulder - South Environmental Assessment

Public Hearing
Wednesday, February 23, 2011

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MDT Invites Your Comments:

7-a After speaking with Mr. Ebert, Martin, and Brady, I would just like to reiterate the need to communicate ahead of time things that are about to happen. I realized that official notification of ROW access probably won't happen to 10/2012 but have been promised concept drawings as the design progresses. This would go a long way in helping us understand how this project will affect us. Thank you.

7-b P.S. A, "NO ENGINE BRAKE" sign to replace the one that was down the highway would also be nice and wouldn't have to wait until 2014 coming into town from south

To receive further project information, please provide your name and address:

Name: Ted and Celia Wiley
Address: 44 S Whitetail Dr
Boulder MT 59632
Sgtyosam@msn.com

Please leave your comments with Project Team staff at the meeting, or mail to:

Sarah Nicolai
DOWL HKM
PO Box 1009
Helena, MT 59624

Please indicate comments are for the Boulder-South EA and submit comments by **March 10, 2011.**

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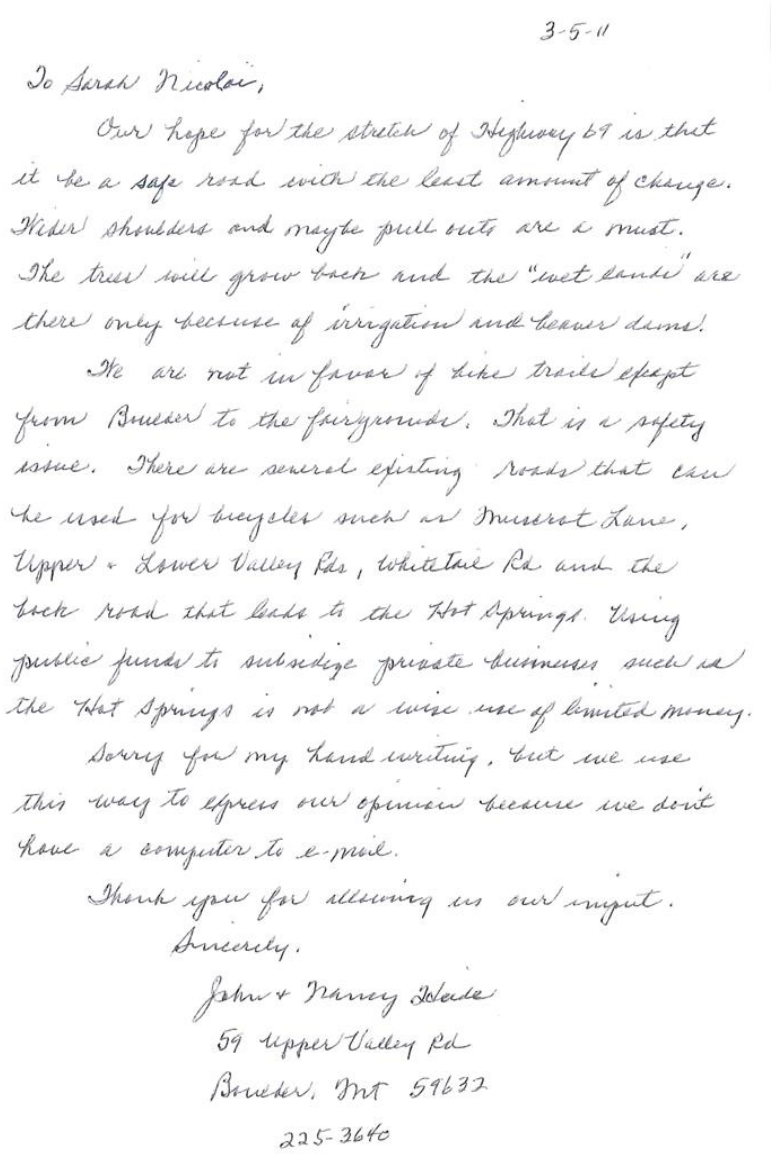
Response #7

7-a The final design phase of this project will be conducted following completion of the environmental decision document. Conceptual cross sections and pedestrian / bicycle facility design options are presented on pages 7 and 8 of the EA document.

7-b As part of the Boulder – South project, MDT will consider installation of appropriate signing throughout the project corridor.

MDT cannot restrict the use of engine brakes. As provided in MCA § 61-9-321, "A commercial motor vehicle equipped with an engine compression brake device must be equipped with a muffler in good working condition to prevent excessive noise. An operator of a commercial motor vehicle that has an engine compression brake device with a factory-installed muffler or an equivalent after-market muffler may not be prohibited from using the engine compression brake device."

Written Comment #8



3-5-11

To Sarah Nicolai,

8-a Our hope for the stretch of Highway 69 is that it be a safe road with the least amount of change. Wider shoulders and maybe pull outs are a must. The trees will grow back and the "wet lands" are there only because of irrigation and beaver dams.

8-b We are not in favor of bike trails except from Boulder to the fairgrounds. That is a safety issue. There are several existing roads that can be used for bicycles such as Mussrot Lane, Upper + Lower Valley Rds, Whitetail Rd and the back road that leads to the Hot Springs. Using public funds to subsidize private businesses such as the Hot Springs is not a wise use of limited money.

Sorry for my hand writing, but we use this way to express our opinion because we don't have a computer to e-mail.

Thank you for allowing us our input.

Sincerely,

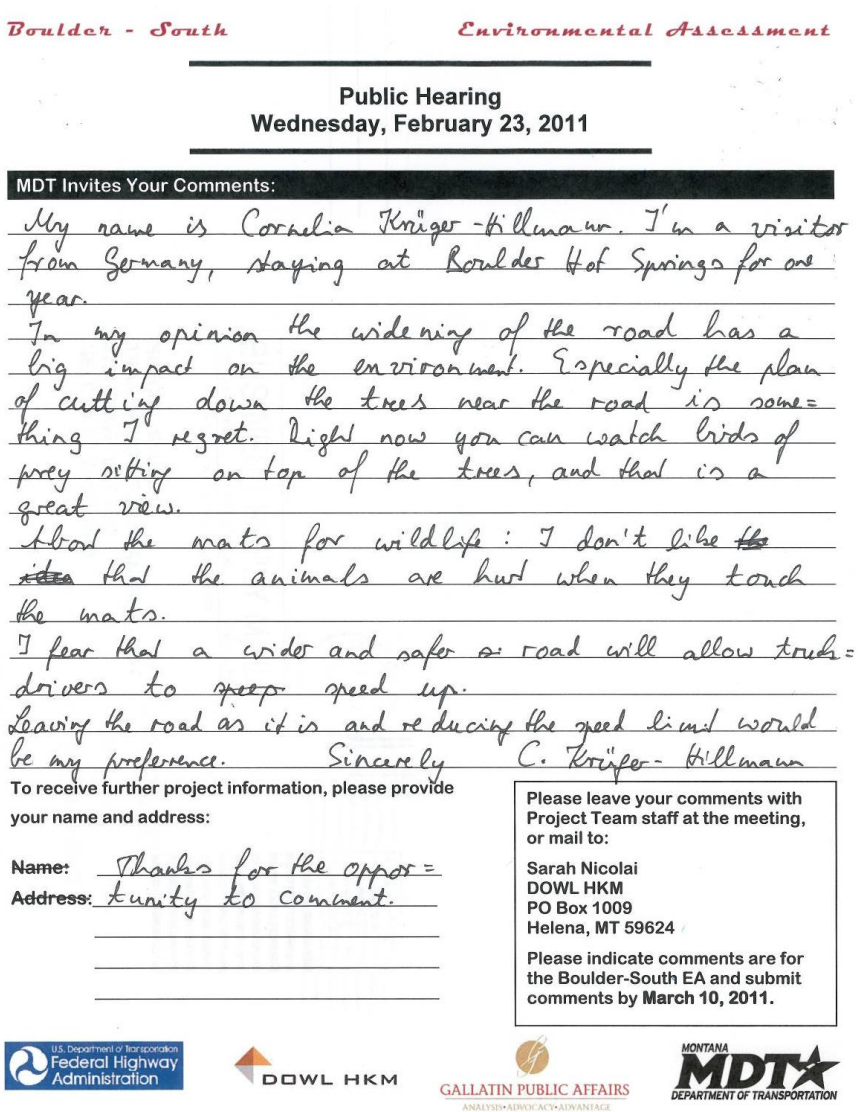
John + Nancy Wade
59 Upper Valley Rd
Boulder, MT 59632
225-3640

Response #8

8-a On page 3, the EA notes that "[t]he purpose of rehabilitation/reconstruction and widening of MT 69 is to improve safety for users of the project corridor while mitigating project impacts to the surrounding natural and built environments." As noted in your comment, MDT anticipates "natural regeneration of aspen and cottonwood post-construction in locations where large stands now exist throughout the project corridor" (page 39 of the EA).

8-b Given the large volume of public comments requesting consideration of a bicycle / pedestrian facility, MDT will consider this element as part of the Boulder – South project. Figure 2-2 (page 8 of the EA) presents pedestrian/bicycle facility design options that are under consideration as part of this project. MDT is working with Jefferson County, the City of Boulder, and local pedestrian/bicycle groups to identify the best facility option, the appropriate extents of a facility, and possible funding and maintenance arrangements.

Written Comment #9



Boulder - South Environmental Assessment

Public Hearing
Wednesday, February 23, 2011

MDT Invites Your Comments:

My name is Cornelia Krüger-Hillmann. I'm a visitor from Germany, staying at Boulder Hot Springs for one year.

9-a In my opinion the widening of the road has a big impact on the environment. Especially the plan of cutting down the trees near the road is some=

9-b thing I regret. Right now you can watch birds of prey sitting on top of the trees, and that is a great view.

9-c Idea the mats for wildlife: I don't like ~~the~~ idea that the animals are hurt when they touch the mats.

9-d I fear that a wider and safer road will allow truck= drivers to speed speed up.

9-e Leaving the road as it is and reducing the speed limit would be my preference. Sincerely C. Krüger-Hillmann

To receive further project information, please provide your name and address:

~~Name:~~ Thanks for the oppor=
~~Address:~~ tunity to comment.

Please leave your comments with Project Team staff at the meeting, or mail to:

Sarah Nicolai
DOWL HKM
PO Box 1009
Helena, MT 59624

Please indicate comments are for the Boulder-South EA and submit comments by **March 10, 2011.**

U.S. Department of Transportation Federal Highway Administration · DOWL HKM · GALLATIN PUBLIC AFFAIRS ANALYSIS•ADVOCACY•ADVANTAGE · MONTANA MDT DEPARTMENT OF TRANSPORTATION

Response #9

9-a Please see pages 39 and 40 of the EA, which note that "MDT will shift the alignment and use non-standard fill slopes in the locations identified in Table 2.1 in order to minimize project-related ground disturbance." Please see response B-1 regarding mitigation for unavoidable impacts to trees and other vegetation.

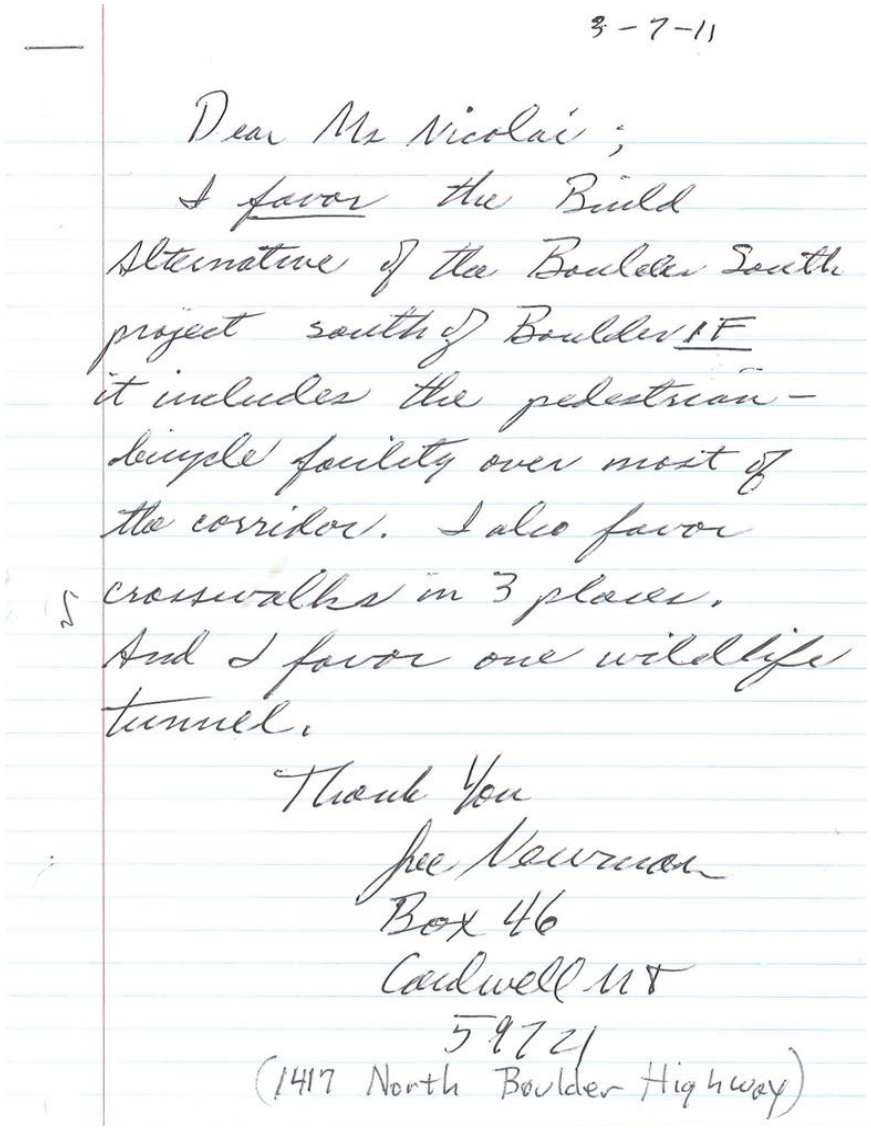
9-b As noted on page 48 of the EA, "[b]ased on the guidelines listed in Table 3.7 [which details the sensitivity of nesting bald eagles to human activity], some construction activities, including structure and vegetation removal, may be subject to timing restrictions. The large perching trees near the Boulder River will be avoided during the critical periods as defined in Table 3.7; however, it is unlikely that any of these trees will need to be cleared during this project."

9-c The electro-mat works by delivering a harmless pulsed deterrent shock to the animal attempting to cross the mat.

9-d Please refer to response 4-c regarding truck traffic.

9-e Please refer to response B-2 regarding speed limits.

Written Comment #10



3-7-11

Dear Mr Nicolai;

I favor the Build Alternative of the Boulder South project south of Boulder. It includes the pedestrian-bicycle facility over most of the corridor. I also favor crosswalks in 3 places. And I favor one wildlife tunnel.

Thank You

Jim Newman
Box 46
Cardwell MT
59721
(1417 North Boulder Highway)

10-a

10-b

Response #10

10-a Figure 2-2 (page 8 of the EA) presents pedestrian/bicycle facility design options that are under consideration as part of this project. MDT is working with Jefferson County, the City of Boulder, and local pedestrian/bicycle groups to identify the best facility option, the appropriate extents of a facility, appropriate crosswalk locations, and possible funding and maintenance arrangements.

10-b MDT will consider structure enhancements to provide wildlife crossing opportunities, including adjusting the dimensions of the bridge over the Little Boulder River to enhance underpass crossing and appropriately sizing culverts to allow small animal movement, where practicable. As noted on pages 43 and 44 of the EA, "[w]ith the exception of the Little Boulder River, underpass crossings are not feasible due to the high water table and low road grade throughout this corridor. Elevating the road grade to accommodate underpasses is not feasible because it would increase the fill footprint, resulting in increased wetland, irrigation, river, and vegetation impacts, and would require additional right-of-way acquisition. MDT has also determined that wildlife overpass crossing facilities are not feasible in this corridor due to high cost, additional right-of-way needs, and associated impacts to wetland, irrigation, river, and vegetation resources in the corridor."

10-b, cont. With regard to MDT's strategy for at-grade wildlife crossings, page 43 of the EA notes that MDT intends to implement wildlife friendly fencing and vegetation management in order to encourage at-grade wildlife crossings in desired locations with adequate sight distance and visibility, while barrier fencing would be implemented around curves and in areas with limited roadside visibility. This combination of strategies is intended to facilitate wildlife use of designated crossing points in locations with adequate sight distance, allowing drivers to detect animals and avoid collisions. In general, wider shoulders and vegetation management efforts are expected to improve visibility throughout the corridor.

Written Comment #11

Thursday, March 10, 2011 2:23 PM

To the Members of MDT,

I attended the meeting on February 23, 2011 in Boulder. Since then I've been trying to compose my thoughts and surmount my grief so I can effectively respond to the proposed changes to Hwy. 69.

11-a In my experience, you have not been open thus far to public input, and I have no reason to believe anything I say will be effective. I have read many comments/letters sent to you by local residents, and I have attended the meetings for public comment. My experience is that you will do whatever you decide to do, despite so much intelligent input from so many intelligent residents.

11-b I am a landowner and local resident, and I will be mightily affected by the disruption of Highway 69. I do not believe the "improvements" will correct the problem.

11-c I don't think there is any question that the damage that will be done will affect the Boulder River, local species, and the integrity of the land.

11-d Those of us who will be impacted by traffic diversions, noise, infestations of noxious weeds (they settle WHEREVER the land is disrupted), and other outcomes of the project---we will find a way to cope. As a taxpayer, my ongoing experience is that government institutions and officials are not responsive to citizen input, and the Boulder South Project is a sterling example. You have "invited" yet disregarded most of our input. I find it truly unfortunate.

A local citizen, landowner and taxpayer,

Mary Peg Fitzmaurice
P.O. Box 982
Boulder, MT 59632

Response #11

11-a In response to numerous public comments, MDT expanded the list of alternatives considered in the AA and EA documents to include a Spot Improvements / Speed Limit Reduction / Enforcement Alternative, the Citizens' Alternative, and two Elevated Structure Alternatives. Although these alternatives were eliminated from further consideration as stand-alone alternatives, some elements of Citizens' Alternative have been incorporated into Preferred Alternative. These elements include

- Pedestrian / Bicycle Facility (Options A, B, and C could be part of project; Option D could be pursued at local level)
- Minimization of impacts to trees and replanting where natural regeneration is not anticipated
- Wildlife mitigation measures, including wing fencing, barrier fencing, and wildlife-friendly fencing, all in coordination with additional signing, vegetation management and wider shoulders.

11-b MDT expects that this project will improve safety performance in the corridor. As stated in the EA on page 9, "[t]he results of the safety and operational crash model developed for this project showed that a new roadway template including five-foot shoulders and side slopes flatter than 4:1 would result in a 41 percent decrease in crashes in the design year (2032) as compared to current conditions (2008)."

11-c The proposed project will result in some unavoidable impacts. Tables ES.1 and ES.2 (pages ii through viii of the EA) provide a summary of MDT's commitments to mitigate unavoidable permanent and temporary impacts.

11-d MDT will minimize temporary construction impacts to the extent practicable. As noted on page 51 of the EA, "[c]onstruction activities from the Preferred Alternative could cause temporary inconveniences to area residents and tourist travelers. These could occasionally result in longer travel times, detours, temporary closures, and noise and dust due to the use of heavy machinery…Traffic interruptions would be minimized to the extent possible. Advance warning and detour signing would be in accordance with the Manual on Uniform Traffic Control Devices. The project's contractor would be subject to all applicable laws and regulations and all requirements contained in the contract regarding noise pollution. Dust control would also be implemented by using either water or another approved dust-suppressant."

As stated on page 40 of the EA, "[a]ll construction activities are required to comply with the Montana Noxious Weed Law; MDT Standard Specification 107.11.5, titled Noxious Weed Management; follow the requirements of the Noxious Weed Management Act, Title 7, Chapter 22, Part 21; other BMPs; and Jefferson County requirements. The area will be replanted with desired species in accordance with current MDT construction specifications."

Written Comment #12

Thursday, March 10, 2011 4:47 PM

As a resident of Jefferson County, living in the midst of the proposed rehabilitation/reconstruction project, I must register my emphatic opposition to what has been presented.

12-a If the recent project undertaken down the road is an indication, the subsequent project will be out of scale with what is required to make this piece of highway safer. I feel that the impact to the river, the trees and the surrounding environment would be substantial, and a far less destructive solution should be examined.

12-b My hope is that some consideration will be given to the rural/ranching character of this stretch of road. The old cottonwoods and aspen that line the straightaway where we live embody essential elements of Montana's character and heritage; losing them is unnecessary and irrevocable. There is great value in preserving a place while working to make it safe. Surely there are compromises to be made, but the broad strokes that are commonly taken are inappropriate for this area.

Sincerely,

John Reedy

Response #12

12-a As noted in response 3-c, MDT has considered a number of alternatives within the project corridor, including a Spot Improvements Alternative, an Eastern Alignment Alternative, a Western Alignment Alternative, the Citizens' Alternative, and two elevated structure alternatives. For the reasons documented in the AA and the EA, rehabilitation/reconstruction of the exiting alignment was selected as the alternative that best meets the project Purpose and Need.

Under the Preferred Alternative, MDT has narrowed the roadway footprint to the extent practicable in order to avoid impacts to the Boulder River and minimize impacts to adjacent wetlands and vegetation. Table 2.1 in the EA (page 43) lists these efforts.

The proposed project will result in some unavoidable impacts. Tables ES.1 and ES.2 (pages ii through viii) provide a summary of MDT's commitments to mitigate unavoidable permanent and temporary impacts.

12-b MDT is committed to minimizing project impacts to the extent practicable. Please see response B-1 regarding mitigation for tree impacts.

Written Comment #13

Thursday, March 10, 2011 4:51 PM

Dear Mr. Martin & Mr. Ebert,

As a resident and property owner south of Boulder I have an interest and concern for the stretch of MT 69 being examined for reconstruction. I also have a concern for the Boulder River and for the wildlife of the area. Although I have not attended any of the public meetings concerning the proposed reconstruction I have read the meeting accounts in the newspaper and spoken with several others who have been present and involved with the public meetings. But, most informatively, I read the complete Environmental Assessment copy on file at the Boulder Library.

13-a I understand the need to contain costs for the reconstruction and therefore why there will be no alternative to provide a better situation for wildlife crossings. BUT "wildlife friendly fencing" and "experimental electric mats" (solar-powered) do not take into account that wildlife will surely continue to cross within this riparian zone stretch because they are always going to be heading for the river or back into the hills from it.

Response #13

13-a MDT recognizes that wildlife will continue to cross MT 69. Please refer to response #10-b regarding wildlife crossings.

13-b Improving the road as proposed will certainly encourage people to drive faster no matter whether the speed limit is kept the same or not. The speed limit is already too high in that stretch, no matter the time of day, for safe driving to avoid an animal who comes suddenly into the road. There is certainly not going to be an increase in either speed enforcement or truck traffic enforcement anyhow, just as there is already none in the improved stretch of highway south of the Elkhorn turnoff (which truckers certainly know). Improving the road and widening it will make it "safer", indeed -- and will encourage greater speed just as occurs on every other such road improvement. Yes, there will be more room for a good driver to take evasive action but unless there is actually an effort to force drivers to slow down there will still be plenty of animal deaths, whether wildlife or domestic animals.

13-b Please see responses B-2 and 5-d regarding posted speed limits and speed limit enforcement. This project would not affect the posted speed limit on MT 69. Although wider shoulder may facilitate greater speed limit enforcement, these efforts are under the jurisdiction of law enforcement.

13-c Insofar as the accommodation for cyclists, of the three possible solutions in the EA, solution C is the best but the excluded solution D would be safer. As a member of the first city bicycle advisory board in Bozeman and an urban bicycle commuter in both Bozeman and Chicago for over 35 years, I claim first hand experiential knowledge about road cycling safety.

13-c MDT is working with Jefferson County, the City of Boulder, and local pedestrian/bicycle groups to identify the best facility option, the appropriate extents of a facility, and possible funding and maintenance arrangements.

13-d Finally, I am also concerned about the negative impacts on the river and the riparian zone as a whole, both from the construction itself and from the consequences of straightening the road route and having it closer to the river.

13-d Please refer to response 3-b regarding anticipated impacts and MDT's mitigation commitments.

13-e I know from other citizens, both first hand and from news reports, that I am not alone in these concerns. Also, as indicated by the agency letters in the EA, the Montana DEQ and the US Environmental Protection Agency have expressed comparable concerns. While I think the very best solution would be spot reconstruction and a lower speed limit, I do not expect such a solution.

Please keep me apprised. Thank you.

Sincerely,

Charlotte Trolinger

13-e In response to public and resource agency comments, MDT evaluated a spot improvements alternative as part of the Alternatives Analysis. MDT determined that this alternative would not address the safety concerns in the corridor. Rehabilitation/reconstruction of the exiting alignment was selected as the alternative that best meets the project Purpose and Need.

Although the spot improvements alternative was eliminated from further consideration, MDT has attempted to address public and agency concerns by minimizing project impacts to the extent practicable. MDT's commitments to minimize project impacts are listed in Table 2.1. Additionally, Table 2.1 lists other minimization strategies that will remain under consideration as the project progresses through final design.

Written Comment #14

Thursday, March 10, 2011 9:52 PM

Dear Sirs,

14-a After going over the EA it appears that the spot improvement option was made to be doomed. I would have thought that by merely refilling the existing barrow ditches to create a "recoverable slope" would have been a part of that option.

14-b Most of the reasoning to actually do a rework of this roadway centers around crash data and its linkage to speed. It states that a study indicates that 85% of vehicles drive under the posted speed limit of 70 mph. This is grossly flawed as the limits on trucks is 65 mph and their limit at night is 55 mph. It would stand to reason that given the truck traffic on this road and my own observations that the use of this flawed study skews the need as proposed. The EA also states, that of the crashes, only a few were a result of speed. I know that in my case of the Canadian truck crashing into me, the driver stated to MHP that he was driving the limit when clearly he could not have closed on me as quickly at the posted limit. If an officer isn't present to determine actual speed not many will self incriminate when asked how fast they were traveling, most will underestimate, which flaws the reasoning for the project and the EA. There is no distinguishing between night and day on the crash study when limits are different.

Response #14

14-a The spot improvement alternative was designed in response to public request for an option that would provide pullout locations throughout the corridor for emergency and law enforcement stops, while minimizing impacts to adjacent natural resources. Due to the close proximity of the Boulder River and associated wetland areas, only four locations were identified that would provide an adequate area for a pullout facility while only minimally impacting wetlands.

As noted in your comment, it is necessary to fill some existing borrow ditches through the corridor in order to create recoverable slopes. This is accomplished under the Preferred Alternative.

14-b As documented in Section 1.3 of the EA, the need for this project is based on the corridor's higher crash rate, severity rate, and percentage of crashes involving trucks as compared to statewide averages for similar facilities. It is not based on the speed at which vehicles travel.

14-c I would disagree with the finding of minimal impact to adjacent lands if a rebuild is chosen and a detour from Hubbard Lane to White Bridge Road is allowed along that County Road. Local traffic and ranch activities that take place along that route currently will be affected and safety jeapordized. Dust will affect pastures and fields immediately adjacent to the road. Travelers will increase the use of this route even without an official detour. It will need to be mitigated through the EA. Nowhere in the EA did it give a" project width" which should have been.

14-d I'll say it one last time, Fill the ditches at a slope to the existing fence lines, widen the top to the 34',straighten some corners, replace the bridge and the culverts all without digging up the whole road and we'll have a very safe and functional highway for many years to come. I know this section of road other than a chip seal or two hasn't been paved for over 30 years and when that was done it was done by MDT with road graders and rollers while I -15 has been reworked several times in less than the same time period.

Thank you for the chance to comment,
Ed McCauley

14-b, cont. If drivers are speeding in this corridor, as suggested in the comment, "[i]mproved enforcement may bring more drivers into compliance with the speed limit in this corridor. Enforcement of posted speed limits on MT 69 is currently difficult given the narrow shoulders through the corridor. Law enforcement personnel are generally unable to pull drivers over for speeding or other infractions due to lack of any space to pull over a vehicle. Enforcement efforts are most successful when there are relatively continuous pullout opportunities, with continuous shoulders providing the most effective enforcement opportunities" (page 28 of the AA document).

Wider shoulders included under the Preferred Alternative may facilitate greater speed limit enforcement, although these efforts are under the jurisdiction of law enforcement.

14-c As noted on page 52 of the EA, "MDT may consider a temporary detour to accommodate construction activities. If agreeable to the County, it may be possible to utilize the County Road system from Hubbard Lane to White Bridge Road as a detour…If this detour is not feasible, a more localized detour at the Little Boulder River Bridge may be required." If a temporary detour is utilized, temporary construction impacts would be anticipated, including noise, dust, and traffic interruptions. MDT will minimize temporary construction impacts to the extent practicable. Please see Table ES.2 for a full list of MDT's commitments to minimize temporary impacts.

14-d As noted on page 3 of the EA, "the pavement surfacing and roadway base have begun to deteriorate and will continue to do so if no improvements are made." Given current pavement conditions, it is appropriate to consider rehabilitation/reconstruction for this portion of MT 69.

As stated on page 5 of the EA, the Preferred Alternative would widen the roadway's top width to 34± and "the new roadway would generally conform to Non-National Highway System Primary Minor Arterial standards where practicable, including 6:1 inslopes, 10 feet of 20:1 ditch, and standard cut and fill slopes, although these standards would be evaluated relative to environmental impacts in sensitive areas along the Boulder River corridor, and deviations from standards would be used where appropriate."

Appendix D – Public Hearing Transcript

The following pages contain a transcript of the Public Hearing.

MONTANA DEPARTMENT OF TRANSPORTATION
BOULDER-SOUTH ENVIRONMENTAL ASSESSMENT PUBLIC HEARING

TRANSCRIPT OF THE PROCEEDINGS

Held at Jefferson High School Cafeteria
312 South Main Street
Boulder, Montana

February 23, 2011
7:00 p.m.

REPORTED BY: CHERYL ROMSA
CHERYL ROMSA COURT REPORTING
P. O. BOX 1278
HELENA, MONTANA 59624
(406) 449-6380

I N D E X

WHEREUPON, the proceedings were had as follows:

(Paul Grant opened the meeting, made introductions.)

MR. GRANT: Are there any public officials present tonight?

MR. WORTMAN: Leonard Wortman, Jefferson County Commissioner.

MS. RUX: Kathleen Rux, City Council.

MS. BUCKLES: Sally Buckles, City Council.

(Darryl James gave an overview of the environmental assessment.)

MS. LEWIS: Is that on one side or both?

MR. JAMES: I think for our comparative analysis here, it's just on one side. So it's the same paved width -- It would still be five feet wider than just the basic 12-foot travel lanes with five-foot shoulders.

(Continuation of overview.)

UNIDENTIFIED SPEAKER: Would it be flat or sloped?

MR. JAMES: It would be flat.

(Continuation of overview.)

MS. LEWIS: Carolyn Lewis.

Would a law enforcement officer be able to pull over someone safely on a five-foot shoulder?

MR. JAMES: Good question. A five-foot shoulder

is not going to accommodate the whole vehicle, but, again, it's a heck of a lot better than what you have today. And you've got a wide enough side slope that you could pull tires off onto that side slope and easily be out of the traveled way.

(Continuation of overview.)

MS. LEWIS: Carolyn Lewis.

The formal decision in the late spring, I'm just wondering what type decisions will be made. Would it be like the build/no build, some very basic --

MR. JAMES: It's literally this decision. Do we have a significant impact, do we need to do an EIS, or do we issue the finding of no significant impact? That's the decision point.

MS. LEWIS: And then the further details will be worked out from that point, like more of the design?

MR. JAMES: Absolutely.

MS. LEWIS: I understand that the design is very much in the infancy stage.

MR. JAMES: Absolutely.

MS. LEWIS: Okay. Thank you.

MR. JAMES: And that's an important point that I should dwell on for just a second.

The environmental assessment is based on a very preliminary, again, footprint that's been designed

throughout the corridor. So anything that we can do in final design based on input or local constraints, as long as we can do it within this footprint (indicating), we've got the clearance to do that. Okay? So if you've got specific issues with, you know, how your driveway is going to tie into the project, those are important to know, but it's not like we're going to affect the outcome of the environmental assessment. Okay? So as long as your ideas fit within this general prism, they're all fair game within this final design.

MS. LeMIEUX: Lucille LeMieux.

I'm sure this has something to do with environmental. I'm wondering if you're even considering the irrigation ditches coming through that area in the spring. It's just like the Boulder River.

And I just want you to know that down in Fergus County, at one point, they realigned a county road. They had really high water that spring, and the darn road acted like a dam, and it backed up water everywhere and created a lot of mosquito problems that they had never had before. And I just want you to know that we have so many mosquitos that we don't need anymore. So I want you to really consider that.

MR. JAMES: Just in quick response to that, there will be a detailed hydrologic analysis -- hydraulic/

hydrologic analysis done on the roadway. So if there is an existing watercourse, whether it's an irrigation ditch or a natural stream that has a culvert, every one of those is analyzed to make sure that the new roadway still accommodates that or improves that situation. And if there's a lateral irrigation ditch -- and I'm not aware of any -- that would be impacted by the project, that would be worked out with the individual landowner on how that's relocated and either piped or moved or whatever.

So good question. Thank you.

Any other questions?

MS. CHRISTENSEN: I have a question. I'm Carol Christensen.

I noticed on your aquatic species spot there, it says, "Potential impacts to fisheries resources may result from disruption of the river channel dynamics, removal of riparian vegetation along right-of-way, and sedimentation during the construction process and stormwater runoff events."

So is this going to disrupt the river channel in case of more water impact or whatever? Are we talking about changing the river, the direction of it?

MR. JAMES: You're on Roman numeral V, right, aquatic species?

MS. CHRISTENSEN: Yes.

MR. JAMES: No. What it's saying is, reduce or alter riparian vegetation along the river channel, which may disrupt river channel dynamics.

MS. CHRISTENSEN: Right.

MR. JAMES: So there's no actual impact on the river channel itself. It's saying if we take out -- It's what I was talking about earlier. If we take out a bunch of trees and there's faster or more runoff into the river, it could change the dynamics of the stream.

MS. CHRISTENSEN: Right.

MR. JAMES: It doesn't change the stream itself. We're not encroaching on the stream. But it could change -- You know, literally, if you've got a bunch of roadway runoff and it's coming through a grassy swale, it's got time to filter and cool before it hits the stream. If you narrow that up and provide very little opportunity, the water is coming in faster, dirtier, hotter, so that affects the stream -- I'm not going to use the technical term. It affects the dynamics of the stream. So there's certainly the potential, but, again, as we look at detailed design options, we're looking at, is there an opportunity to put in a grassy swale or some kind of a catchment basin to make sure that doesn't happen?

So what we're outlining here are potential impacts.

We have to note, Hey, this could happen, but what we're looking at here is, let's shift it away, steepen up that side slope, and look at the opportunity for something to catch that water before it runs straight in. That's the mitigation commitment in the next column.

MS. CHRISTENSEN: Thank you.

MR. JAMES: You bet. Good question.

MR. COLELLA: Tom Colella.

I'm curious about any comparison that's been done. When we're talking about a wetlands bridge option, specifically, let's say the shorter of the two that you mentioned earlier, it sounds like we've kind of discounted that at this point. But I'm just curious cost-wise. I remember, I think, $30 million per mile of an elevated wetlands style bridge, 15 million to do a half-mile stretch.

How would that compare against basically rebuilding the Little Boulder River, enhancing it for the bike path to cross through that area, maybe even, as has been mentioned, enhancing it for an animal crossing incorporated in the design of the new Little Boulder Bridge, also taking into account a temporary bridge that has to be built while that construction is going on, again, assuming that the Little Boulder Bridge is rebuilt along with the existing roadway? I'd just be curious to

know what the comparison is.

Has anyone thought that far ahead to know how many dollars is it going to cost to get the Little Boulder Bridge up to speed versus the 15 million we're talking about for a half-mile brand new elevated stretch where animals can migrate through in a fast area?

MR. JAMES: I guess two things. The cost comparison certainly comes into play. It's about 30 million a mile for an elevated -- a fully elevated structure. It's about 1.5 million, roughly, for just reconstruction. So huge cost difference.

As far as lengthening or raising that bridge structure in that location, the Department, just based on funding constraints, would rarely do something like that unless there's a significant issue there or significant improvement to be gained. It's mostly done just on the hydrologic conditions there: Does it pass the flood flow at an appropriate level?

Again, if we had a substantial number of either wildlife conflicts at that location or it was a high pedestrian crossing location or a trail connection, something like that, you might consider some kind of an improvement at that location. We're not seeing that concentrated in that area that would warrant a substantial investment of money at that single location in the

corridor.

I don't know if that specifically answers your question. Maybe the answer is no.

MR. COLELLA: What specifically do you plan to do with the Little Boulder Bridge, or is it still too early in the process to know?

MR. JAMES: It's a reconstruct to provide the widening. And, again, the bridge opening itself would be based largely on the hydraulic needs. But as we noted, if there's need for a wider opening or a higher opening based on some wildlife activity, that's something that was in our mitigation -- I can't remember if it was in a commitment or a consideration. But it's something we will look at, but it's not going to solve the same issues that you were talking about earlier with, you know, providing a huge elevated structure all the way through.

Deb, did you want to expand on that?

MS. WAMBACH: Yeah, I can just add a little bit.

I do know what you said is accurate, but we are considering a multispan structure that is definitely longer than the existing structure. And one of the goals of that is not only to provide a span for the river itself, which will include some floodplain benches, you know, in addition to the riprap necessary to protect the structure itself, but the active channel itself will be

spanned. But because there's going to be potentially multiple spans, there may be a pier on the sides of the active channel. However, there will be an additional span that the intention is to provide for mid and small animal movement underneath the structure there.

So that's in a conceptual design right now. It certainly hasn't been finalized, and it has to be vetted through our agencies as well for their comments and input, but it's definitely under consideration, to not only provide for more room for the river to move through there, but, in addition, to also provide for some wildlife movement at the structure.

MR. JAMES: Thanks, Deb.

Any other questions or clarifications needed before we move into the hearing portion?

(No audible response.)

MR. JAMES: A couple of quick things. We're going to have Paul run around with the mic here and take formal comments on the EA. As he noted, please keep them pertinent to the EA and the preferred alternative or other alternatives that you might think that we need to consider. Don't think that decisions are made. I mean, I think we're already talking about some design options that are still open. We're still anticipating input from the community on the bike and pedestrian facility, on the

wildlife crossings, those kinds of treatments. We want that kind of input.

As I noted earlier, every comment that you provide to us tonight will get a formal written response either in the next phase as we decide on an EIS or if we move forward with a finding of no significant impact. Two or three ways you can leave us comments. You should have grabbed a comment sheet on your way in. If you didn't, there's some on the table over here (indicating). Fill that out and leave it with us tonight or mail it in. There's a mailing address for Sarah Nicolai here in the box at the lower right. E-mail address up here (indicating).

Comments are due March 10th, so you don't have to do it tonight. If you want to take it home and fill it out or give it to your neighbors and friends and have them fill it out or fill out additional comments, please feel free to do that.

And then one last housekeeping thing: You should have gotten a survey thing (indicating) on your way in. Don't forget to fill that out as well.

So with that, I think we'll turn it over to the formal hearing portion.

MR. GRANT: So we'll go ahead and start the formal hearing process. Again, I apologize for asking you

to state your name, stand up, but, again, this is being taken verbatim and Cheryl just needs to have some visual sign when you're talking. So if you're able to stand, we appreciate that. And when you do take the microphone, if you'd speak into the microphone like this and not like this or like this (illustrating), because she won't be able to hear it and we won't be able to hear your comments.

Again, this is a formal hearing, so all we're going to do is listen to your comments. So go ahead and raise your hand, take the microphone, and then just kind of be respectful of your neighbors as far as time. We want to make sure that we get everybody's comments, so if we can just kind of keep that in mind, that would be great.

So if you want to go ahead, raise your hand.

MS. LEWIS: My name is Carolyn Lewis, and I'm speaking as a member of the Boulder Area Recreation and Trails Committee, otherwise known as BART-COM.

Thank you very much for this opportunity to comment on the Boulder-South Environmental Assessment. Having read through the Boulder-South Environmental Assessment, we would like to submit the following comments:

The citizens of the Boulder area and BART-COM asked for a bike/pedestrian facility to be included in the design and implementation of the project. Our reasons for

the request were based on enhancing the quality of life for our citizens; attracting visitors to the area; providing economic stimulus to local businesses; and, last but not least, our concern that if the facility was not implemented during the rebuild, it basically would never happen. We knew that the primary purpose of the project was to make Highway 69 safe, and we wanted to expand that concept to include all travelers, not just motorized vehicles.

It appears that our requests have been addressed in several areas of the EA. Roman numeral II in your executive summary says, "The project would provide a shoulder width suitable for bicycle use in accordance with the American Association of State Highway and Transportation Officials ... guidelines."

And then, on page 19 of the main body of the document, it states, "The Preferred Alternative would widen the MT 69 top width and include shoulders that are consistent with national standards to provide adequate space for bicycle and pedestrian use. In addition, MDT is considering design options for a pedestrian/bicycle facility parallel to MT 69 along with appropriate pedestrian crossings on MT 69."

So the citizens of Boulder and BART-COM would like to thank MDOT for addressing our requests in the EA, and we

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will continue to ask for and work towards a bicycle/ pedestrian facility to be included for the entire length of the project along with safe crosswalks at the Jefferson County Fairgrounds, Hubbard Lane, the Boulder Hot Springs, and other frequently used junctions. Currently, two BART-COM members serve on an ad hoc citizens committee appointed by the Jefferson County Commissioners to provide input to MDOT on the project. We look forward to continuing this process and appreciate your willingness to listen to our concerns.

For everybody in the audience, if any of you, during the project design, have any concerns, we do have the citizens committee; you can call any one of us. And I don't think I'm stepping out of line to name the people on the committee. They are Anika McCauley, Colleen Teeling, Kerri Kumasaka, Sam Samson, myself, Carolyn Lewis, and Dave Kirsch, our county commissioner. You can call any of these people at any time with your concerns, and we can bring these concerns as we meet regularly with the MDOT.

Personally, I'd like to thank Jeff, Gabe, Will, and the entire MDOT staff -- these guys didn't just sit there, they really listened -- and all the BART-COM members who canvassed the neighborhoods to find out if the bike path was an idea that, really, the citizens wanted, and we found out they did; and all of you that sent in -- that

filled out the postcards and sent them in. They received over 400 postcards in favor of the bike/ped path. And I'd like to thank Jan Anderson, who very speedily and professionally printed those postcards, and Jefferson Broadband, who put up the funds for that citizen initiative; and, last but not least, all of the community organizations that wrote letters, from the school board to the county commissioners, asking MDOT to please include a bike path.

Thank you.

MR. JAMES: Thanks.

Other comments?

MS. REITER: I'm Barb Reiter.

Thank you, Carolyn, for what you just put out. I appreciate that very much.

And I do appreciate the fact that you have had numerous meetings with us and have taken our concerns.

I have to say that -- When the project was done, the nine miles that was completed, I have to say I was quite devastated by the amount of land torn up, and vegetation. It just -- it shocked me. I wasn't expecting to see that. And where I went with that was, what is it going to look like when we do this portion of 69 that we're talking about tonight, and particularly the portion with the half-mile that I think you referred to a number of times

with the overpass issue and so on?

I just don't know why we have to disturb that place, that portion. I agree with the shoulders on the other portions between Boulder and out to where that starts and then on the other side until Elkhorn. But it just seems to me that that is such a sacred and wonderful place that I just would hate to see that disturbed, and that was mainly the point I wanted to make.

Why couldn't there be some speed limit put there slowing people down? You have to already slow down to get around those curves. You know, flashing lights like they have on Highway 15 between Basin and some of those areas; we've got flashing lights in those areas. Anyway, just a thought that I've had about that whole area. It's just so beautiful, and why do we want to disturb that?

That's it. Thanks.

MR. JAMES: Thank you.

Any other comments?

(No audible response.)

MR. JAMES: Going once, going twice, going three times.

I'll tell you what, we'll have folks hang out at the displays here for another half hour or so. You're more than welcome to come up and ask more questions. But please do fill out those comment sheets. Use this web

address (indicating) to leave any comments on the web page. And, again, you have until March 10th. Don't forget the viewing locations for the environmental assessment, if you want to take a look at those.

Otherwise, thank you very much for coming out tonight. We really appreciate it, and we really do appreciate your comments. Thank you very much.

(The hearing was concluded at 8:00 p.m.)

* * * * * * *

COURT REPORTER'S CERTIFICATE

STATE OF MONTANA)
ss.
COUNTY OF LEWIS AND CLARK)

I, CHERYL ROMSA, Court Reporter, Notary Public in and for the County of Lewis and Clark, State of Montana, do hereby certify:

That the foregoing proceedings were reported by me in shorthand and later transcribed into typewriting; and that the -18- pages contain a true record of the proceedings to the best of my ability.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my notarial seal this 25th day of February 2011.

s/Cheryl A. Romsa
CHERYL A. ROMSA
Court Reporter - Notary Public
My Commission Expires 8/4/2011

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Public Hearing
Wednesday, February 23, 2011

Name:	Address:	Phone:	E-mail:
BARB KEITER	P.O. Box 284 BOULDER	225-3304	barbekt@jeffnb.net
C. Krüger-Hillmann	31 S. Hot Springs Road, Boulder	225-3174	
Allen & Lucille LeMieux	39 Hubbard Lane	225-3359	
Tom Cobella	Po Box 1185 Boulder MT	439-6365	
Leonard Wortman	Box H Boulder	439-2495	lwortman@ttffice.mt.gov
Carol LeBoeuf	Box 286 Boulder	225-3528	
Mary Peg Fitzmaurice	Box 482 Boulder	498-0800	
Eric Boysen	PO Box 1351 Boulder	461 405 W	
Sarah Bauer	P.O. Box 789 Boulder	594-1919	sbauer@mt.net
Dustin Farnum	P.O. Box 419 Boulder	465-7282	wobblyboy@geti.net
Sam Samson	Box 358 Boulder	225-3678	
Celia Wolny	#5 Whitetail Rd Boulder	225-3887	
Danielle Lattin	16N. Whitetail Rd Boulder	225-3191	

U.S. Department of Transportation Federal Highway Administration

DOWL HKM

GALLATIN PUBLIC AFFAIRS
ANALYSIS • ADVOCACY • ADVANTAGE

MONTANA MDT DEPARTMENT OF TRANSPORTATION

Public Hearing
Wednesday, February 23, 2011

Name:	Address:	Phone:	E-mail:
Leona Helvey / Clover Meadows LLC	1506 Rainbow Rd Bozeman MT 59715	406-587-3608	rlhelvey@msn.com
Ben Donaldson	140 Little Boulder Rd	406-225-4221	NONE
Kathy Rux	Box 519 Boulder	225-9177	kathyrux@jeffbb.net
Carolyn Lewis	8 Hubbard Ln Boulder	225-3668	firstlight@jeffbb.net
Darrel & Carol Christensen	14 Bull Mt View	225-3239	DChrist129@Gmail.com
Newton L. Skoien	PO 1310 36 Boulder	225-9509	None
Sally Bucklis	Box 497 - Boulder		pobox497@msn.com
Cheryl Ramsey	Box 1278 Helena		
Jan Anderson	Boulder Monitor, PO Box [illegible]		
Colleen Teeling	PO Box 1622, BDR	465-8589	cmteeling@hotmail.com
Jan Zeitler	PO Box 924 Boulder	225-3411	
~~Jeff~~ Pallister	PO Box 84 Boulder	783-7223	
Kerri Kumasaka	PO Box 919 Boulder	225-3802	bhs@boulderhotsprings.com

Public Hearing
Wednesday, February 23, 2011

Name:	Address:	Phone:	E-mail:
Kim Francis	91 Upper Valley Rd	225-3768	
Josh Pallister	" " "		
Dave Kusch	Box 209	225-3737	DKusch@JeffCo.mt.gov
Lawrence Wojcik	P.O. Box 669	431-1661	

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Appendix E – Environmental Assessment

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ENVIRONMENTAL ASSESSMENT

for

STPP 69-1(9)22

Boulder-South

(CN 2019)

in

Jefferson County, Montana

January 2011

MONTANA DEPARTMENT OF TRANSPORTATION

U.S. Department of Transportation Federal Highway Administration

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This document may be obtained electronically from the Montana Department of Transportation Website at:
http://www.mdt.mt.gov/pubinvolve/boulder/
Public comments on this Environmental Assessment may also be submitted at this website address.

ENVIRONMENTAL ASSESSMENT

for

STPP 69-1(9)22

Boulder - South

(CN 2019)

in

Jefferson County, Montana

This document is prepared in conformance with the Montana Environmental Policy Act (MEPA) requirements and contains the information required for an Environmental Assessment under the provisions of ARM 18.2.237(2) and 18.2.239. It is also prepared in conformance with National Environmental Policy Act (NEPA) requirements for an Environmental Assessment under 23 CFR 771.119, and Section 4(f) of the U.S. Department of Transportation Act under 23 CFR 771.135.

Submitted pursuant to 42 U.S.C. 4332(2)(c), 49 U.S.C. 303, Sections 75-1-201 & 2-3-104, M.C.A.,

and Executive Orders 11990, 11988, and 12898, by the

U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION

AND THE

MONTANA DEPARTMENT OF TRANSPORTATION

Submitted by: _____ Date: 1/20/11

Montana Department of Transportation
Environmental Services Bureau

Reviewed &
Approved
for Distribution: Jeffrey A Patten Date: 1/20/11

U.S. Department of Transportation
Federal Highway Administration

The following persons may be contacted for additional information concerning this document:

Tom Martin, P.E.
Bureau Chief, Environmental Services
Montana Department of Transportation
2701 Prospect Ave., PO Box 201001
Helena, Montana 59620-1001
(406) 444-7228

Jeffrey A. Patten
Operations Engineer
Federal Highway Administration
585 Shepard Way
Helena, Montana 59601
(406) 441-3917

Abstract: The proposed project is a highway safety project initiated by the Montana Department of Transportation (MDT). The Proposed Action is the rehabilitation/reconstruction and widening of approximately six miles of roadway. The Preferred Alternative improves roadway geometry and provides a total top width of 34 feet.

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EXECUTIVE SUMMARY

The proposed project is located in Jefferson County on Montana State Primary Route 69 (MT 69). It begins at mile post (MP) 31.8± and extends to the north approximately six miles, ending at MP 37.5± just south of Boulder. The proposed project would widen the existing MT 69 alignment from MP 31.8± to MP 37.5± and update the roadway design to current standards to address the lack of shoulders and steep side slopes.

Purpose and Need for the Proposed Action

The purpose of rehabilitation/reconstruction and widening of MT 69 is to improve safety for users of the project corridor while mitigating project impacts to the surrounding natural and built environments.

There is a need for this project due to the safety concerns in the Boulder corridor. Over the period January 1, 1998 through December 31, 2007 for the portion of MT 69 from MP 31.8± to MP 37.5±, the all-vehicle crash rate and the all-vehicle severity rate were respectively 44 percent and 17 percent greater than the statewide average for rural state primary highway systems. Additionally, the percentage of crashes involving trucks over this portion of MT 69 was approximately 27 percent greater than the percentage of crashes involving trucks for rural state primary highways over the same time period. There have been 23 injuries and one fatality during the period from 1998 through 2007.

Alternatives Evaluation and Identification of Preferred Alternative

The following two project alternatives were considered in this Environmental Assessment (EA):

- The **No Build Alternative** would essentially maintain existing conditions along the entire length of the project corridor by providing routine maintenance.
- The **Build Alternative** would involve rehabilitation/reconstruction and widening of the existing top width from 26.2± feet to 34± feet over the project limits.

Based on its ability to meet the project Purpose and Need, the Build Alternative is forwarded as the Preferred Alternative for improvements in the MT 69 corridor.

Three additional Build Alternatives were initially considered for this project in an Alternatives Analysis document completed in December 2009, including a Spot Improvements Alternative, an Eastern Alignment Alternative, and a Western Alignment Alternative. For the reasons articulated in the Alternatives Analysis, these three alternatives were eliminated from further consideration and were not carried forward into this EA. The Alternatives Analysis document is available from MDT upon request.

Based on public request, the Citizens' Alternative and two elevated structure alternatives were also considered, but were eliminated from further consideration as stand-alone alternatives due to their inability to address the safety concerns in the corridor and high cost, respectively. It should be noted, however, that some elements of these eliminated alternatives will be considered as part of the Build Alternative, including a pedestrian/bicycle facility and animal crossing measures.

Impacts and Mitigation

The following resources would not be permanently or temporarily impacted by this project:

- Land Use
- Community Resources
- Local and Regional Economies
- Environmental Justice
- NL&WCF – Section 6(f) Lands
- Hazardous Materials

Table ES.1 presents a summary of anticipated permanent impacts and mitigation strategies; more detailed descriptions of permanent impacts and mitigation measures are presented later in the document.

Table ES.1 Summary of Anticipated Permanent Impacts and Proposed Mitigation Measures

Resource	Permanent Impacts	Mitigation Commitments
Traffic	No permanent traffic impacts are anticipated.	No mitigation is proposed or required.
Access	Existing access points may be modified.	Access points would be perpetuated, and modifications would be negotiated with property owners.
Safety	No adverse safety impacts are anticipated; safety performance is expected to improve due to the wider paved surface and flatter side slopes.	No mitigation is proposed or required.
Pedestrians & Bicyclists	Removal of the currently non-functional pedestrian underpass will not result in an adverse impact to pedestrians or bicyclists. The project would provide a shoulder width suitable for bicycle use in accordance with American Association of State Highway and Transportation Officials (AASHTO) guidelines.	No mitigation is proposed or required.
Right-of-Way and Relocations	There would be private right-of-way acquisitions under the Preferred Alternative, although there would be no residential or business relocations.	Lands needed for right-of-way under the Preferred Alternative which are in private ownership would be acquired in accordance with both the *Uniform Relocation Assistance and Real Property Acquisition Act* of 1970 (P.L. 91-646), and the *Uniform Relocation Act Amendments* of 1987 (P.L. 100-17). Fencing and mailbox turnouts will be provided according to MDT policy.
Utilities	Utilities identified within the corridor are expected to be relocated. No adverse impacts to utilities are expected to occur.	No mitigation is proposed or required.

Resource	Permanent Impacts	Mitigation Commitments
Cultural / Archeological / Historic Resources	Although up to 300 feet of the three-mile-long State Ditch would be rechanneled, this work would result in **No Effect** because the ditch would continue to function in its historic capacity and there would be no change in the existing alignment of the ditch, its dimensions, setting, use, or appearance. The Little Boulder River Bridge does not meet current design standards and therefore would be replaced with another bridge in approximately the same location. This action would constitute an **Adverse Effect**.	No mitigation would be required for the State Ditch. Mitigation for the Little Boulder River Bridge is addressed under the Historic Roads and Bridges Programmatic Agreement.
Noise	No permanent noise impacts are anticipated as a result of the proposed project.	No mitigation is proposed or required.
Farmlands	Roadway widening would result in the conversion of approximately five acres of farmland classified as Prime Farmland if Irrigated to non-productive use near MP 33.6±.	No mitigation is proposed or required (Appendix B).
Abandoned Structures	The currently non-functional pedestrian underpass structure will be removed, and will not be replaced due to the existing high water table and accessibility issues in this location. The structure as it exists was non-functional prior to the proposed project. MDT will investigate irrigation crossings to determine if they need to be perpetuated or if they can be abandoned.	No mitigation is proposed or required.
Visual Resources	The project would result in the permanent loss of trees and other vegetation due to the widened roadway footprint and the need to improve safety and sight distance.	To soften the view shed, MDT will revegetate and replant trees in appropriate locations where a single line of trees within the construction limits must be removed.

Resource	Permanent Impacts	Mitigation Commitments
Floodplains	Existing hydraulic conditions would be maintained or improved throughout the corridor through the installation of new conveyance structures developed in coordination with appropriate resource agencies. Impacts from new conveyance structures would be designed to have no detrimental impact on the flood risk in the corridor.	No mitigation is proposed or required. MDT will secure and adhere to the floodplain permit.
Water Resources / Quality	In general, there would be an increase in the total surface area of paved road, which would decrease the overall permeability of substrate and increase the rate and quantity of surface water runoff from the roadway. The minor increase in paved surface area would result in a negligible increase in runoff in the watershed.	MDT will shift the alignment in the locations identified in Table 2.1 in order to avoid project-related encroachment of the road into the Boulder River. MDT will follow the Permanent Erosion and Sediment Control Design Guidelines (October 2010) in identifying appropriate permanent erosion and sediment control measures and determining which measures can practicably be incorporated into the design. MDT will design the bridge over the Little Boulder River to eliminate deck drainage directly into adjacent state waters.
Wetlands	The extent of unavoidable impacts to wetlands resources will be determined by the final alignment and construction limits. MDT estimates that total wetland impacts resulting from the project will be less than 20 acres. Final quantitative impacts will be determined once the final alignment and construction limits have been determined.	MDT will shift the alignment in the locations identified in Table 2.1 in order to minimize project-related encroachment of the road into adjacent wetlands. The project design team has made and will continue to make all practicable efforts to avoid and minimize wetlands impacts. MDT is required to mitigate for permanent wetland impacts, regardless of USACE jurisdiction under E.O. 11990 (No Net Loss). Consultation with the USACE will be necessary to determine acceptable mitigation sites.
Vegetation	The project would result in the permanent loss of trees and other vegetation due to the widened roadway footprint.	MDT will shift the alignment and use non-standard fill slopes in the locations identified in Table 2.1 in order to minimize project-related ground disturbance. MDT will re-seed disturbed soil and replant trees in appropriate locations.

Resource	Permanent Impacts	Mitigation Commitments
Wildlife and Migratory Birds	Widening of the road surface may reduce or alter some wetland habitats, thereby impacting birds, mammals, and amphibians that rely on this habitat for breeding, forage, or travel. These are anticipated to be sliver impacts on large wetland complexes that extend far beyond the highway corridor.	As documented in the list of commitments and considerations in Section 2.2, the Preferred Alternative will minimize the roadway footprint and associated impacts to existing wildlife habitat to the extent practicable. MDT will implement appropriate combinations of wildlife mitigation strategies, including wildlife friendly fencing and vegetation management facilitating at-grade crossings at desired locations with additional signing and barrier fencing around curves and in areas with limited roadside visibility. MDT is pursuing experimental application of an electro-mat feature in association with at-grade crossings for wildlife, facilitated by a combination of barrier and wildlife friendly fencing. MDT will continue to evaluate this technology for use within the Boulder-South corridor and incorporate it if appropriate. If overhead power lines are relocated during construction, they will be raptor-proofed in accordance with MDT policies.
Aquatic Species	Widening of the road surface may reduce or alter riparian vegetation along the river channel, which may disrupt the river channel dynamics and increase sedimentation during stormwater runoff events, thereby impacting aquatic species.	MDT will shift the alignment in the locations identified in Table 2.1 in order to avoid project-related encroachment of the road into the Boulder River.
Species of Concern	The project is not anticipated to adversely affect any Species of Concern.	No mitigation is proposed or required.
Threatened and Endangered Species	The project is not likely to adversely affect any Threatened or Endangered species or its habitat.	No mitigation is proposed or required.
Air Quality	No permanent air quality impacts are anticipated as a result of this proposed project.	No mitigation is proposed or required.

Table ES.2 presents a summary of anticipated temporary construction impacts and mitigation strategies; more detailed descriptions of temporary impacts and mitigation measures are presented later in the document.

Table ES.2 Summary of Anticipated Temporary Impacts and Proposed Mitigation Measures

Resource	Temporary Impacts	Mitigation Commitments
Traffic	Construction activities from the Preferred Alternative would likely cause temporary impacts to traffic flow, especially in relation to the removal of the existing bridge and construction of the new bridge crossing the Little Boulder River. MDT may consider a temporary closure, phased construction, or a temporary detour in order to accommodate construction activities, including blasting and bridge construction activities.	Traffic interruptions would be minimized to the extent practicable. Advance warning and detour signing would be in accordance with the Manual on Uniform Traffic Control Devices. Blasting activities would be conducted in accordance with the Controlled and Production Blasting guidelines contained in MDT's Special Provisions.
Right-of-Way and Relocations	Right-of-way in the form of an easement or construction permit would need to be obtained from the State of Montana, USFS, and BLM.	No mitigation is proposed or required.
Utilities	Utility relocations will be required and may result in temporary outages for utility customers.	Utility relocations would be coordinated with the lines' owners and done prior to this proposed project's construction. Notification of service interruptions due to these relocations would be the responsibility of these utility lines' owners.
Noise	Construction activities could occasionally result in noise due to the use of heavy machinery.	The contractor would be subject to all applicable laws and regulations and all requirements contained in the contract regarding noise pollution.
Abandoned Structures	Existing irrigation crossings would be temporarily impacted.	MDT will coordinate with ditch owners during construction to ensure there would be no disruption of irrigation service as a result of the project.
Visual Resources	Construction activities would result in the temporary loss of some vegetation.	Techniques would be employed, if practicable, to mitigate the visual impact of typical brush and tree clearing that would provide a random, meandering woodline edge, as opposed to a linear woodline edge. Disturbed areas would be reseeded with desirable vegetation. To soften the view shed, MDT will revegetate and replant trees in appropriate locations where a single line of trees within the construction limits must be removed to improve safety and sight distance.

Resource	Temporary Impacts	Mitigation Commitments
Floodplains	The proposed project would involve construction within the 100-year floodplain. A floodplain permit may be required for construction activities and temporary facilities associated with this project.	As necessary, the contractor will obtain the appropriate permit and adhere to the conditions.
Water Resources / Quality	There is potential for short-term water quality impacts due to increased erosion and sedimentation during construction activities. During construction, surface water runoff could be contaminated by spills of petroleum products, lubricants, and hydraulic fluid from construction equipment.	In accordance with MDT standard specifications, the contractor will be required to prevent or reduce water quality impacts caused by sediment or petroleum contaminated run-off. The construction contractor will obtain authorization under the construction General Storm Water Discharge Permit from DEQ and will prepare and adhere to their Storm Water Pollution Prevention Plan (SWPPP).
Vegetation	Construction activities would result in the temporary loss of some vegetation.	Techniques would be employed, if practicable, to mitigate the visual impact of typical brush and tree clearing that would provide a random, meandering woodline edge, as opposed to a linear woodline edge. The area will be replanted with desired species in accordance with current MDT construction specifications. To soften the view shed, MDT will replant trees in appropriate locations where a single line of trees within the construction limits must be removed to improve safety and sight distance.
Noxious Weeds	Construction activities could spread weed seed and/or roots to new areas.	All construction activities are required to comply with the Montana Noxious Weed Law; MDT Standard Specification 107.11.5, titled Noxious Weed Management; follow the requirements of the Noxious Weed Management Act, Title 7, Chapter 22, Part 21; other BMPs; and Jefferson County requirements. The area will be replanted with desired species in accordance with current MDT construction specifications.
Wildlife and Migratory Birds	Construction activities could temporarily disturb wildlife and migratory birds, although more mobile species such as adult birds, elk, moose, large carnivores, and other large and mid-size mammals generally move to adjacent habitats to avoid direct mortality from construction activities.	No mitigation is proposed or required.

Resource	Temporary Impacts	Mitigation Commitments
Aquatic Species	Potential impacts to fisheries resources may result from disruption of the river channel dynamics, removal of riparian vegetation along right-of-way, and sedimentation during the construction process and stormwater runoff events.	In accordance with MDT standard specifications, the contractor will be required to prevent or reduce water quality impacts caused by sediment or petroleum contaminated run-off. The construction contractor will obtain authorization under the construction General Storm Water Discharge Permit from DEQ and will prepare and adhere to their Storm Water Pollution Prevention Plan (SWPPP). Construction activities will be in compliance with the conditions of the SPA 124 (FWP) and the CWA 404 (USACE), which may include instream timing restrictions to minimize impacts to the fishery.
Species of Concern	It is not likely that this project will jeopardize the wolverine, western spotted skunk, or gray wolf. These species are highly mobile and will likely avoid human activity during construction. Potential impacts to westslope cutthroat trout may result from disruption of the river channel dynamics, removal of riparian vegetation along right-of-way, and sedimentation during the construction process and stormwater runoff events. With regard to the bald eagle, human activity may cause adults to abandon nest, exposing young to risk of mortality.	MDT and the contractor will follow permitting conditions, which may include timing restrictions that protect westslope cutthroat trout. To minimize impacts to actively nesting birds in the project area, contractors will follow suggested timing restrictions for activities likely to cause disturbance, including blasting, structure and vegetation removal. The large perching trees near the Boulder River will be avoided during the critical periods as defined in Table 3.7; however, it is unlikely that any of these trees will need to be cleared during this project.
Threatened and Endangered Species	No adverse impacts are anticipated.	No mitigation is proposed or required.
Air Quality	Construction activities could occasionally and temporarily result in road dust and combustion emissions due to the use of heavy machinery and generators.	In accordance with MDT Standard Specifications, the contractor will be required to operate all equipment to meet the minimum air quality standard established by federal, state, and local agencies.

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APPENDICES

Tables

Figures

Photos

Abbreviations and Acronyms

± ..... approximately
AASHTO.....American Association of State Highway and Transportation Officials
ADA ..... Americans with Disabilities Act
BLM .....Bureau of Land Management
BMPs..... Best Management Practices
BRR.....Biological Resources Report
CFR ..... Code of Federal Regulations
CWA ..... Clean Water Act
DEQ.....Montana Department of Environmental Quality
DNRC .....Montana Department of Natural Resources and Conservation
DPS .....distinct population segment
EA.....Environmental Assessment
E.O. .....Executive Order
EPA ..... United States Environmental Protection Agency
ESA .....Endangered Species Act
FHWA..... Federal Highway Administration
FPPA.....Farmland Protection Policy Act
FWP ..... Montana Fish, Wildlife & Parks
MBEWG ..... Montana Bald Eagle Working Group
MCA ..... Montana Code Annotated
MDT.....Montana Department of Transportation
MEPA ..... Montana Environmental Policy Act
MFISH ..... Montana Fisheries Information System
MNHP..... Montana Natural Heritage Program
MP .....Mile Post
MPDES.....Montana Pollutant Discharge Elimination System
mph .....miles per hour
MT 69 .....Montana State Primary Route 69
MSATs.....Mobile Source Air Toxics
NEPA..... National Environmental Policy Act
NL&WCF .....National Land and Water Conservation Fund
NPDES .....National Pollutant Discharge Elimination System
NRHP .....National Register for Historic Places
NRIS.....Natural Resource Information System
NRM .....Northern Rocky Mountains
PFRR.....Preliminary Field Review Report
RP .....Reference Post
SAFETEA-LU .....Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
SHPO ..... State Historic Preservation Office
SSD .....Stopping Sight Distance
SPA ..... Stream Protection Act
SWPPP .....Storm Water Pollution Prevention Plan
TMDL.....Total Maximum Daily Load
USACE ..... United States Army Corps of Engineers
U.S.C. ..... United States Code
USFS..... United States Forest Service
USFWS ..... United States Fish and Wildlife Service
USGS ..... United States Geological Survey

1.0 Purpose of and Need for the Proposed Action

1.1 Project Description

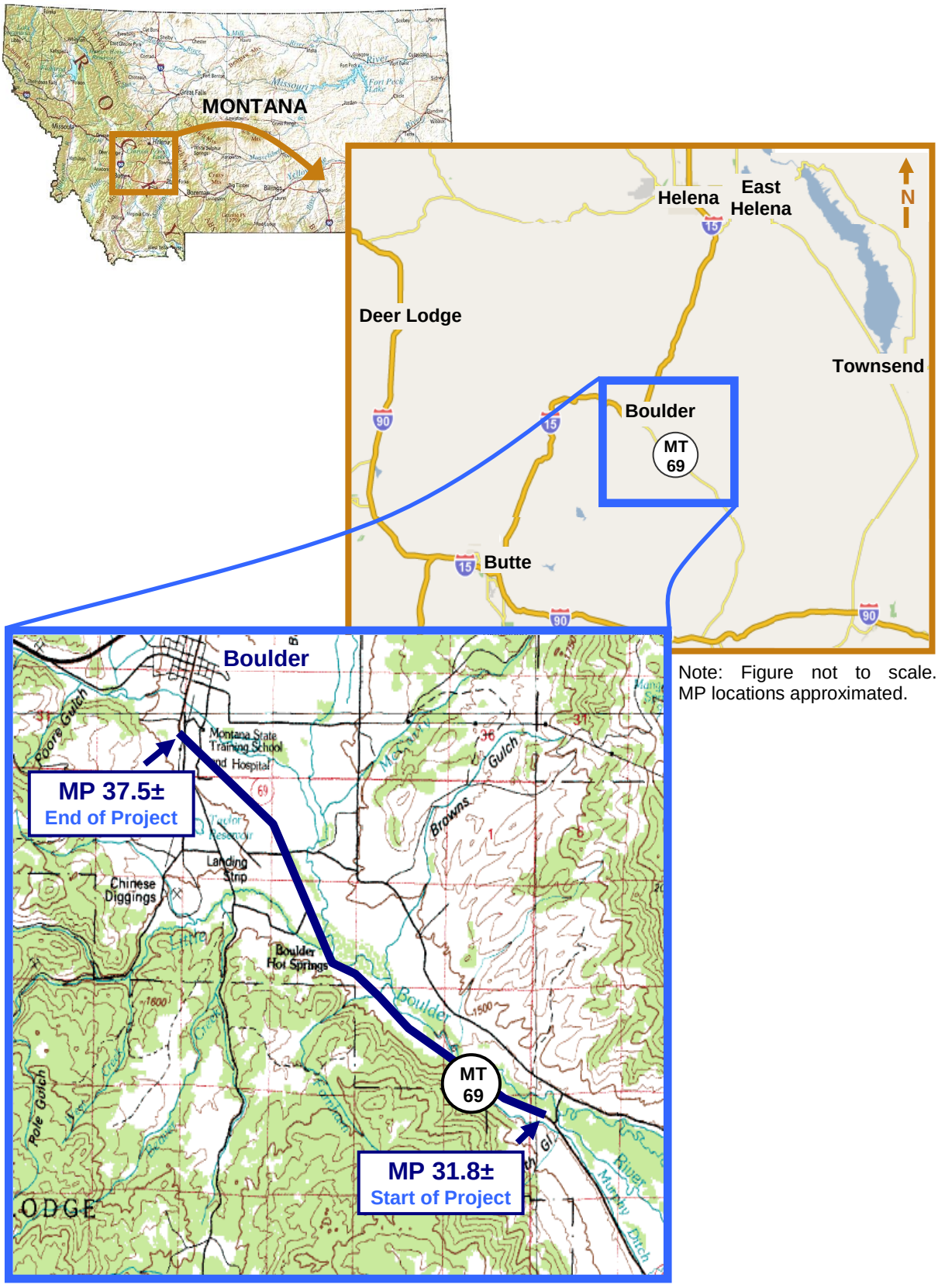
Proposed Project Area Description

The proposed project is located in Jefferson County on Montana State Primary Route 69 (MT 69). It begins at mile post (MP) 31.8± and extends to the north approximately six miles, ending at MP 37.5± just south of Boulder.

As shown in Figure 1-1, the proposed project is located within the following legal description(s):

Township	Range	Section(s)
5 N	3 W	18, 19
5 N	4 W	2, 3, 4, 10, 11, 13, 14, 24
6 N	4 W	32, 33

Figure 1-1 Project Area



Note: Figure not to scale. MP locations approximated.

Proposed Action

This proposed project would widen the existing MT 69 alignment from MP 31.8± to MP 37.5± and update the roadway design to current standards to address the lack of shoulders and steep side slopes.

The project's southern terminus at MP 31.8± will connect with the separate overlay and widen project over the southern portion of the corridor. The project's northern terminus at MP 37.5± is intended to tie into the recently completed Boulder-Main Street project, which included replacing the bridge over the Boulder River. Accordingly, MDT and FHWA have determined that these end points represent logical termini for this proposed project.

1.2 Purpose of the Proposed Action

The purpose of rehabilitation/reconstruction and widening of MT 69 is to improve safety for users of the project corridor while mitigating project impacts to the surrounding natural and built environments.

1.3 Need for the Proposed Action

There is a need for this project due to the safety concerns in the Boulder corridor. Over the period January 1, 1998 through December 31, 2007 for the portion of MT 69 from MP 31.8± to MP 37.5±, the all-vehicle crash rate and the all-vehicle severity rate were respectively 44 percent and 17 percent greater than the statewide average for rural state primary highway systems. Additionally, the percentage of crashes involving trucks over this portion of MT 69 was approximately 27 percent greater than the percentage of crashes involving trucks for rural state primary highways over the same time period. There have been 23 injuries and one fatality during the period from 1998 through 2007.

Single vehicle off-road accidents resulting in overturn are of particular concern in this corridor. Of the crashes that occurred during the period January 1, 1998 through December 31, 2007, nearly 73 percent (37 out of 51) involved single vehicles. Of these, 30 percent (11 out of 37) resulted in overturn. An additional crash involving two vehicles also resulted in overturn. Speed was indicated as a factor in six of the 51 total crashes and one-third of the rollover crashes over the reporting period.

Conflicts with wild and domestic animals is another cause of crashes in the project corridor. Of the crashes over the period January 1, 1998 through December 31, 2007, just over 21 percent (or 15 crashes out of 51 total crashes) involved collisions with animals. Of these 15 crashes, one-third (or 5 out of 15) involved domestic animals, while the remaining two-thirds (or 10 out of 15) involved wild animals.

Factors appearing to contribute to these types of crashes on MT 69 include narrow to non-existent shoulders, insufficient sight distance, periodic icing, and steep fill slopes throughout the project corridor.

In addition to the high incidence of crashes on MT 69, the roadway is overdue for rehabilitation. This means that the pavement surfacing and roadway base have begun to deteriorate and will continue to do so if no improvements are made.

1.4 Enhancement Opportunities

During a Public Scoping Meeting held on June 1, 2005, a public information meeting held on March 23, 2010, and Agency Coordination Meetings held on July 30, 2008, December 17, 2008, and November 20, 2009, meeting attendees expressed concern about potential impacts to the natural environment that may result from the proposed project. Specifically, meeting attendees noted potential for impacts to the Boulder River channel, water quality, wildlife and habitat, wetlands, floodplains, and fisheries and requested that the following efforts be considered:

- Maintain integrity of and minimize encroachment on river channel
- Minimize impacts to water quality
- Minimize impacts to riparian habitat and seek opportunities to improve wildlife movement across highway
- Minimize impacts to wetlands
- Minimize impacts to floodplains
- Minimize impacts to fisheries and improve/retain recreation access

These concerns are considered in Chapter 2 in the identification and development of mitigation measures that could be used to protect and enhance the surrounding area.

2.0 Alternatives

This chapter describes the alternatives that were developed for the proposed Boulder - South project and identifies the Preferred Alternative.

2.1 Development of Alternatives

Through public involvement activities and interdisciplinary coordination with federal, state, and local transportation officials and resource agencies, four Build Alternatives were developed and analyzed in an Alternatives Analysis completed in 2009. The Alternatives Analysis is incorporated into this Environmental Assessment (EA) by reference.

As documented in the Alternatives Analysis, rehabilitation/reconstruction and widening of the existing MT 69 alignment is the only reasonable and practicable alternative in this portion of MT 69 that is able to satisfy the project Purpose and Need. For the reasons articulated in the Alternatives Analysis and summarized in Section 2.4, the three other Build Alternatives were eliminated from further consideration.

Following completion of the Alternatives Analysis, only the No Build and a single Build Alternative have been forwarded for detailed analysis.

The **No Build Alternative** would essentially maintain existing conditions along the entire length of the project corridor by providing routine maintenance. There would be no improvement in safety since the roadway width and other geometric features would remain unchanged.

The **Build Alternative** would involve rehabilitation/reconstruction and widening of the existing MT 69 roadway. This alternative would widen the existing alignment over the portion of MT 69 from MP 31.8± to MP 37.5± and improve several non-standard features. Specifically, this alternative would provide updated shoulder widths and side slopes.

Under this alternative, the roadway's top width would be widened from the existing 26.2± feet to 34± feet. The MDT Route Segment Plan recommends a minimum top width of 32 feet for MT 69. Since 1996, it has been MDT policy to add two feet of width on reconstruction projects in order to provide sufficient width for a future overlay with standard slopes and still maintain Route Segment Plan width.

In an effort to minimize impacts to natural resources, MDT initially considered a 32-foot top width. It was determined that the savings in wetland impacts (less than one acre) were not substantial enough to justify the loss in safety benefits that would result from a narrower top width. Accordingly, a 34-foot top width was selected for this project.

Under the Build Alternative, the new roadway would generally conform to Non-National Highway System Primary Minor Arterial standards where practicable, including 6:1 inslopes, 10 feet of 20:1 ditch, and standard cut and fill slopes, although these standards would be evaluated

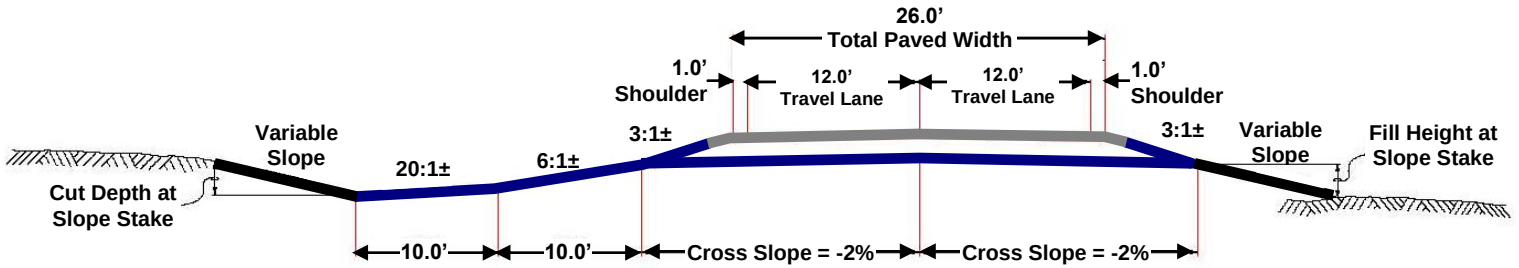
relative to environmental impacts in sensitive areas along the Boulder River corridor, and deviations from standards would be used where appropriate.

Figure 2-1 presents conceptual cross sections for the existing and proposed roadways in order to illustrate the wider shoulders and flatter side slopes of the proposed cross section as compared to the existing cross section. It should be noted that there is some variance in cross section elements on the existing roadway over the length of the project corridor. It should also be noted that the proposed cross section does not account for adjustments to the vertical elevation of the roadway; the necessity of a grade raise would be determined later in the design of the project.

Figure 2-2 presents four design options for a ten-foot wide pedestrian/bicycle facility that would run along the MT 69 alignment over a portion of the Boulder corridor yet to be determined. Design Option A would entail construction of a 10-foot wide shoulder adjacent to the travel lane. Design Option B would entail construction of a pathway directly adjacent to the shoulder. Under Design Option C, the pathway would be physically separated from the paved roadway surface, but would still be located on the fill slope within the project's construction limits. Design Options A, B and C would fall within the project construction limits and would not result in further impacts to natural resources beyond those disclosed in this document. Under Design Option D, a separated pathway would be located entirely outside the project's construction limits. A combination of Design Options A, B, and C may be appropriate over portions of the corridor to minimize impacts to resources and accommodate water body crossings; for the reasons discussed in Section 2.2 Design Option D will not be included as part of this project and would need to be pursued at the local level. It should be noted that these design options are not shown in Figure 2-1, which is only intended to illustrate the shoulder and side slope variations between the existing and proposed roadway.

Figure 2-1 Existing and Proposed Cross Sections

Existing Cross Section



Proposed Cross Section

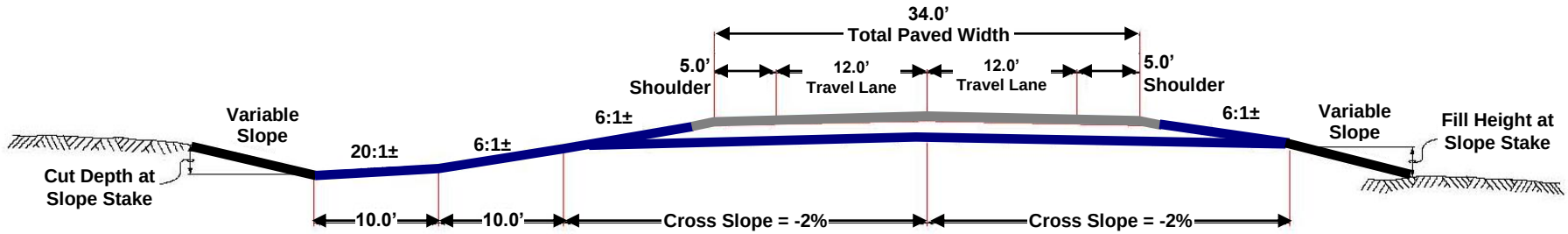
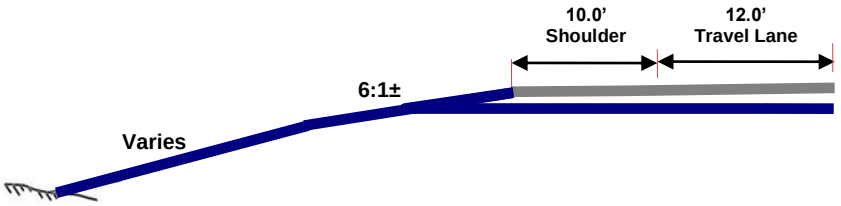
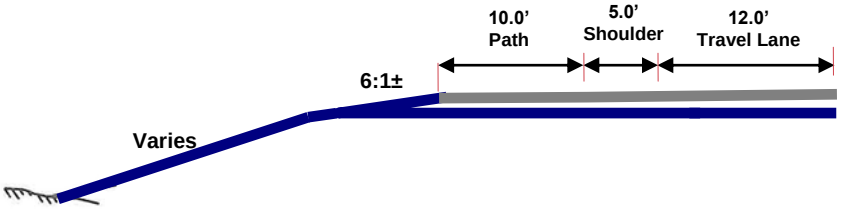


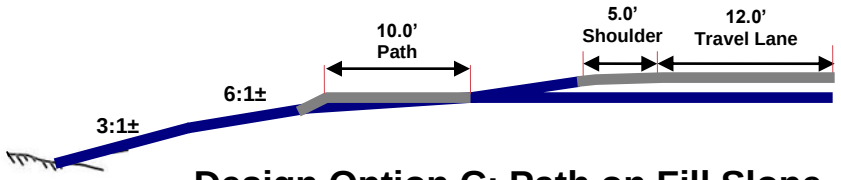
Figure 2-2 Pedestrian/Bicycle Facility Design Options



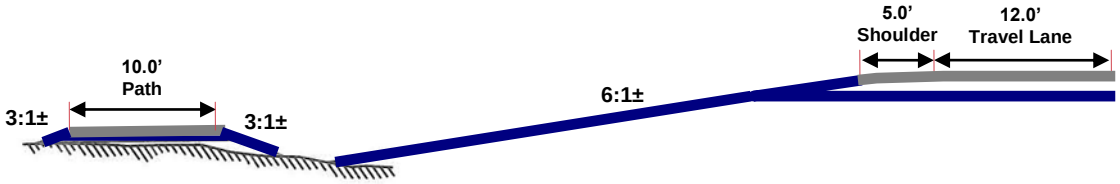
Design Option A: 10-foot Shoulder



Design Option B: Shoulder-Adjacent Path



Design Option C: Path on Fill Slope



Design Option D: Path Separated from Reconstruction

2.2 Alternatives Evaluation

Because the existing roadway would remain unchanged under the No Build Alternative, there would be no improvements to safety within the project corridor. In accordance with National and Montana Environmental Policy Act (NEPA/MEPA) requirements, the No Build Alternative was forwarded as a baseline for comparative analysis and as a viable option if the impacts from the Build Alternative appear to outweigh the benefits of the proposed project.

The Build Alternative would widen the existing roadway and improve non-standard features. As noted in the Alternatives Analysis document, the results of the safety and operational crash model developed for this project showed that a new roadway template including five-foot shoulders and side slopes flatter than 4:1 would result in a 41 percent decrease in crashes in the design year (2032) as compared to current conditions (2008). Accordingly, the Build Alternative meets the Purpose and Need for the proposed project and is carried forward for more detailed analysis.

Impact Minimization Efforts

Members of the public who attended the June 2005 Public Scoping Meeting and the March 2010 Public Information Meeting and resource agency representatives who attended the July 2008, December 2008, and November 2009 Agency Coordination Meetings expressed concern for natural resources through the Boulder River corridor, including the river channel, water quality, wildlife and habitat, wetlands, floodplains, and fisheries.

In an effort to minimize anticipated impacts, the Project Team is exploring refinements of the conceptual design for the Build Alternative. In some cases, the Project Team has committed to implementing certain minimization efforts, while other efforts will remain under consideration as the project progresses through final design. Commitments and considerations to reduce project-related impacts are listed below in Table 2.1.

Table 2.1 Minimization Commitments and Considerations

Minimization Commitments	Minimization Considerations

• Use non-standard fill slopes where appropriate in order to reduce the footprint of the roadway
  ○ Locations where non-standard fill slopes have been implemented include:
  ▪ MP 32.3 to 32.7 (ditch avoidance)
  ▪ MP 32.5 to 32.7 (river avoidance)
  ▪ MP 33.4 to 33.5 (ditch avoidance)
  ▪ MP 34.8 to 34.9 (ditch avoidance)
  ▪ MP 34.5 to 34.7 (river avoidance)
• Shift the alignment in order to avoid or minimize project-related encroachment of the road into the Boulder River and adjacent wetlands and ditches
  ○ Locations where alignment shifts have been implemented include:
  ▪ MP 32.3 to 32.4 (wetland avoidance)
  ▪ MP 32.5-32.7 (river avoidance)
  ▪ MP 34.8 to 34.9 (ditch avoidance)
  ▪ MP 34.5-34.7 (river, wetland, and pond avoidance)
  ▪ MP 36.0 to 36.5 (ditch avoidance)
• Incorporate pedestrian/bicycle facility within the project construction limits by using non-standard slopes in order to minimize impacts to adjacent areas.
• Minimize width of rock catchment ditches to the extent practicable to minimize footprint
• Use guardrail to allow steepened slopes in appropriate locations where the roadway closely parallels water bodies
• Implement revegetation plan that includes improved woody vegetation component adjacent to river in appropriate locations
• Use appropriate deck and rail design on the Little Boulder River bridge structure to reduce or eliminate deck drainage directly into the water body
• Implement appropriate combinations of wildlife mitigation strategies, including wing fencing, barrier fencing, wildlife-friendly fencing, signing, and vegetation management to encourage or discourage at-grade crossing movement in appropriate locations
• Size bridge structure and culverts appropriately to avoid or minimize encroachment into the active channel, facilitate floodplain connectivity, allow for bedload and natural sediment transport, and to pass aquatic organisms and wildlife, as appropriate
	• Install retaining walls or other stabilization structures where the roadway is immediately adjacent to the river's edge to reduce encroachment into the river channel
	• Install bioengineered bank stabilization measures in appropriate locations
	• Adjust roadway grades to reduce the roadway footprint
	• Use structure enhancements to provide wildlife crossing opportunities, including adjusting the dimensions of the bridge over the Little Boulder River and appropriately sizing culverts to allow small animal movement, where practicable
	• Install an animal detection system with flashing lights to warn drivers of animal movement in appropriate at-grade crossing locations
	• Construct berms, sediment control basins, catchment areas, or vegetated swales as appropriate to reduce water quality impacts

As a result of the minimization commitments noted above, the proposed Boulder – South project will not encroach into the Boulder River.

Design Options

As noted in Section 2.1, four design options for a pedestrian/bicycle facility are being considered in the Boulder corridor. Design Options A, B, and C fall within the construction limits of the Boulder – South rehabilitation/reconstruction project and therefore either a single independent option or a combination of the three options could be included as part of the project. Because of their location inside the project's construction limits, these three options would not result in any additional impacts to resources within the corridor and would not require any additional right-of-way above what would otherwise be needed for the project.

Design Option D would be located outside the project's construction limits and is considered outside the scope of the project. The Boulder – South project does not preclude independent consideration of Design Option D should the local community elect to pursue it as a separate project.

MDT is working with Jefferson County, the City of Boulder, and local pedestrian/bicycle groups to determine the most appropriate option as well as the extents of the facility, how the facility might be funded, and long-term maintenance arrangements.

2.3 Identification of the Preferred Alternative

Based on its ability to meet the project Purpose and Need and the associated mitigation opportunities identified above, the Build Alternative is forwarded as the Preferred Alternative for improvements in the MT 69 corridor. Design Options A, B, C and potential minimization efforts will continue to be considered as the project progresses. Again, it should be noted that Design Options A, B, and C would be located within the project construction limits and would not require any additional right-of-way.

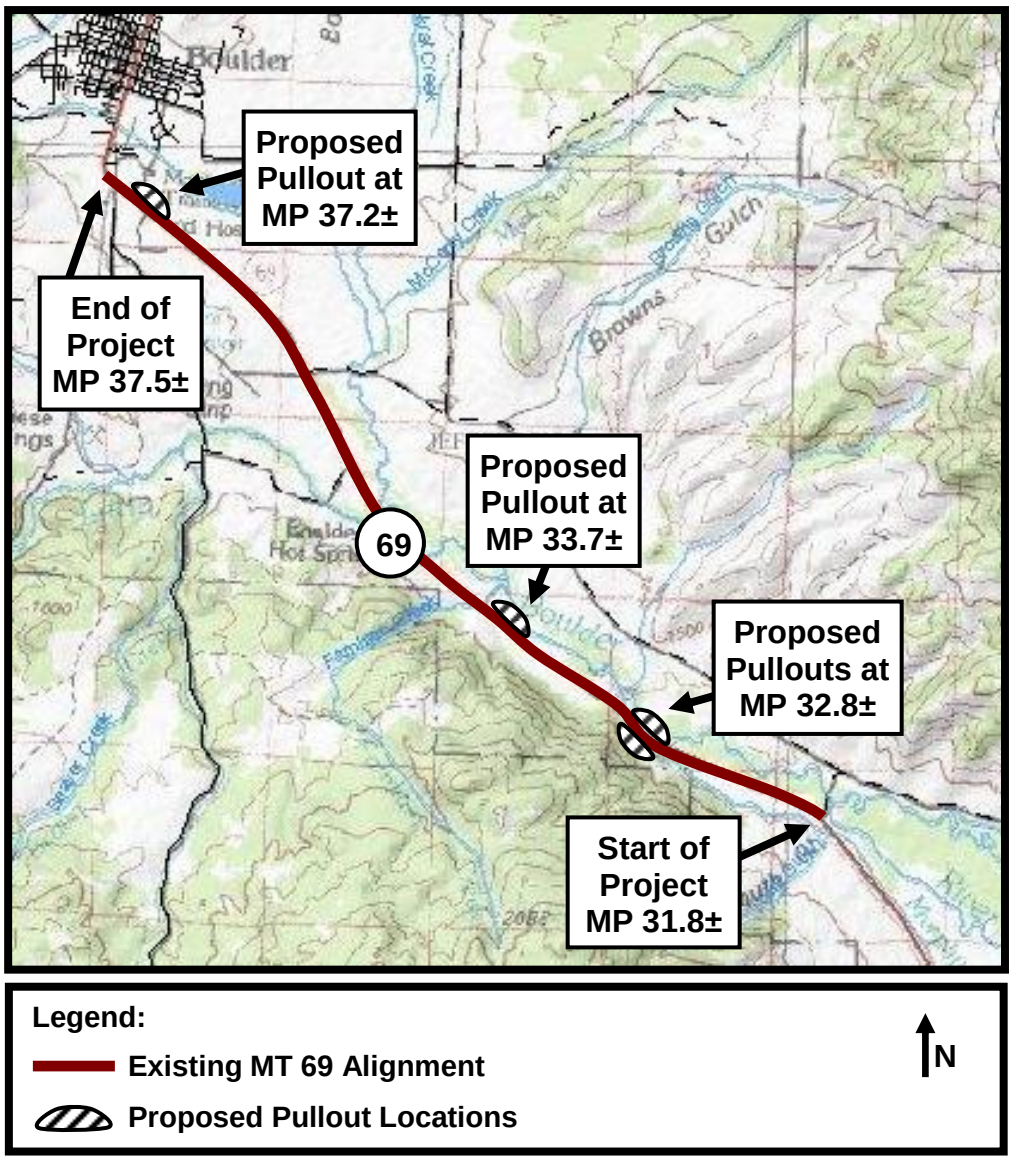
2.4 Alternatives Considered but Eliminated from Further Analysis

Alternatives Analysis

As noted previously, three additional Build Alternatives were initially considered for this project in an Alternatives Analysis completed in December 2009. These alternatives included a Spot Improvements Alternative, an Eastern Alignment Alternative, and a Western Alignment Alternative.

The Spot Improvements Alternative would include construction of several pullout locations through the corridor in order to provide opportunities for emergency and law enforcement stops. Additionally, the roadway would be resurfaced in order to extend the design life of the facility, but the existing travel width and side slopes would remain unchanged. Pullout locations proposed under this alternative are illustrated in Figure 2-3.

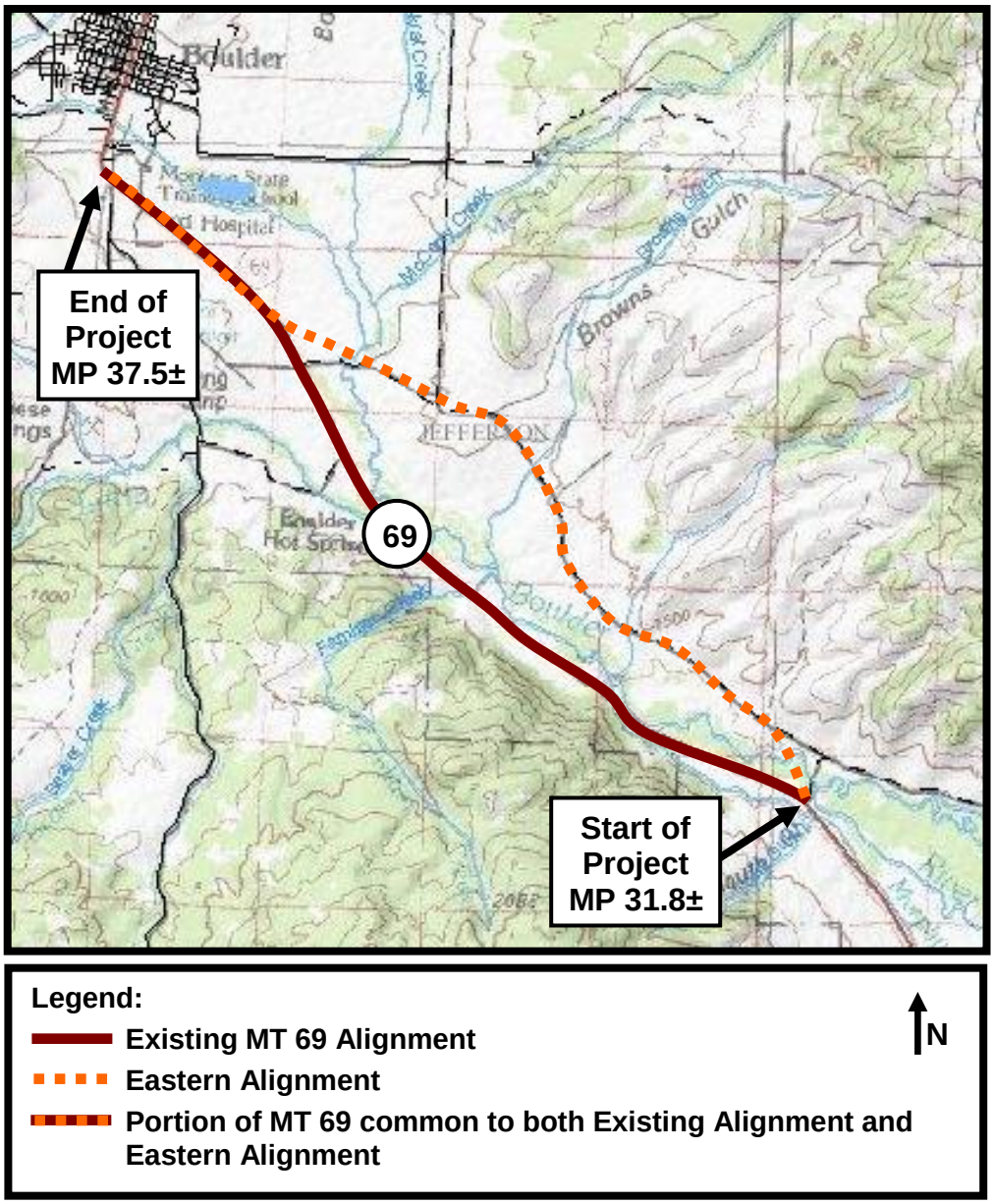
Figure 2-3 Spot Improvements Alternative



Note: Figure not to scale. MP locations approximated.

The Eastern Alignment Alternative would diverge from the existing alignment near MP 31.8± and generally follow an existing Jefferson County road alignment as much as practicable. It would rejoin the existing MT 69 alignment near MP 35.7±, and follow the existing MT 69 alignment from MP 35.7± to the project termini at MP 37.5±. The Eastern Alignment Alternative is illustrated in Figure 2-4.

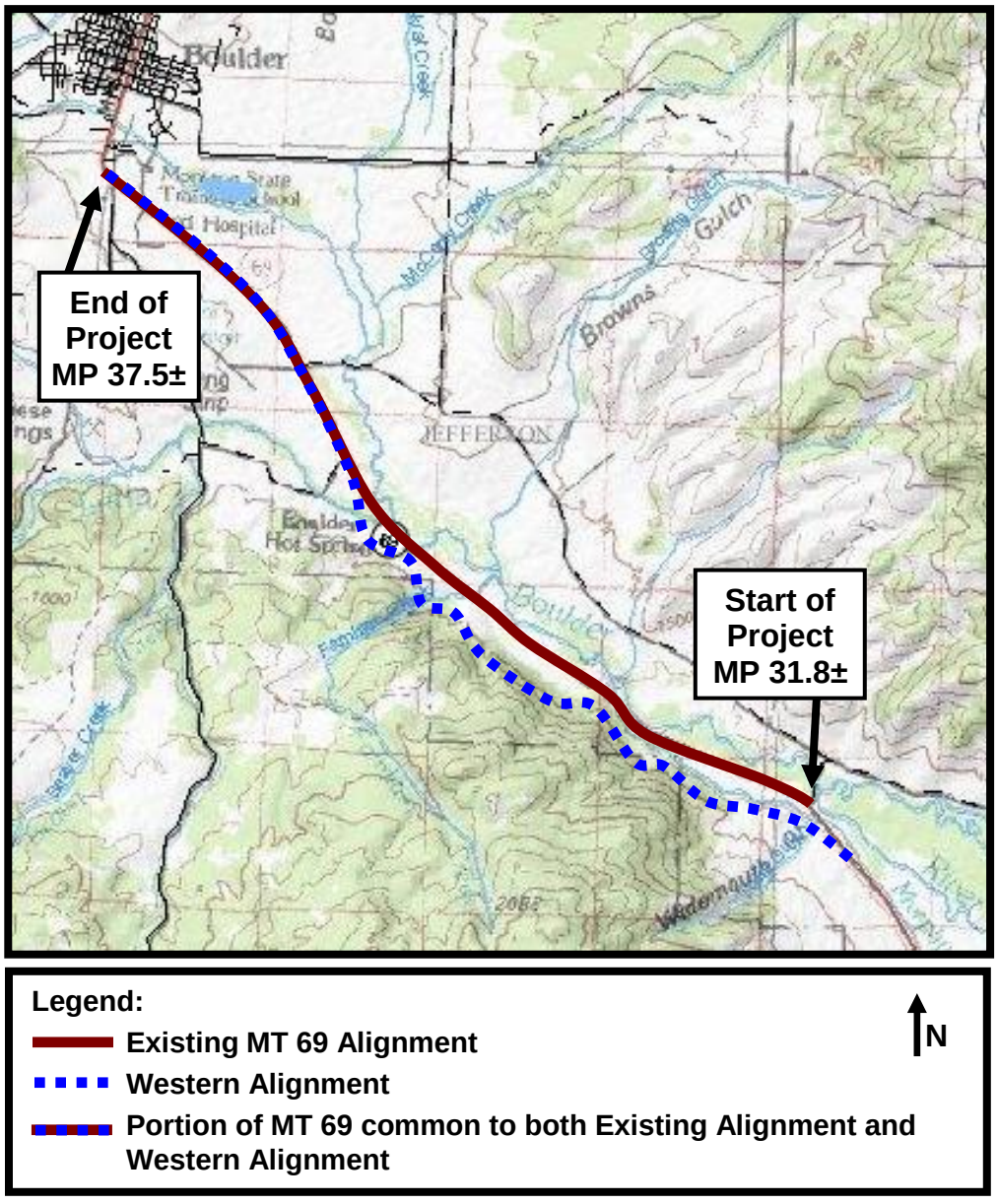
Figure 2-4 Eastern Alignment Alternative



Note: Figure not to scale. MP locations approximated.

A Western Alignment Alternative was developed that would diverge from the existing MT 69 alignment south of the project termini and generally follow the existing terrain to the west of the existing roadway outside the Boulder River floodplain. It would rejoin the existing MT 69 alignment near MP 35±, and follow the existing MT 69 alignment from MP 35± to the project termini at MP 37.5±. The Western Alignment Alternative is illustrated in Figure 2-5.

Figure 2-5 Western Alignment Alternative



Note: Figure not to scale. MP locations approximated.

As detailed in the Alternatives Analysis document, the Spot Improvements Alternative was eliminated based on its inability to address the safety concerns in the corridor. While the four proposed pullout locations may help facilitate enforcement efforts, speed limit enforcement is most successful when there are continuous shoulders along each side of a roadway. Even if

enforcement efforts were improved through the construction of pullout locations, speed limit enforcement alone likely would not appreciably affect the high incidence of crashes in the corridor given that speed was indicated as a factor in only six of the 51 total crashes and one-third of the rollover crashes over the period from January 1, 1998 through December 31, 2007. Further, a speed study conducted in February 2009 on MT 69 from the town of Boulder to MP 35.0 shows that 85 percent of vehicles traveled at or below 71 miles per hour (mph) over the portion of the corridor with a posted speed limit of 70 mph. Based on a safety and operational crash model developed as part of the 2009 Alternatives Analysis, the existing roadway is predicted to experience 29 percent more crashes in 2032 as compared to 2008 if no improvements are made to widen shoulders and flatten side slopes. The Spot Improvements Alternative would neither reduce the number of collisions with wild and domestic animals nor would it reduce the number of single vehicle crashes resulting in overturn, which are the primary safety concerns on MT 69. Accordingly, this alternative fails to meet the Purpose and Need of the project and has therefore been eliminated from further consideration.

New alignment alternatives were eliminated based on their impracticability and unreasonableness resulting from high cost, considerable constructability challenges, known and anticipated right-of-way acquisition difficulties, expressed community concerns, and political obstacles. The concept of a new alignment in the Boulder corridor was met with strong opposition from members of the public and local officials. Further, landowners adjacent to the existing county road noted they would be unwilling to voluntarily sell their land to MDT. In addition to public opposition, the eastern alignment would be approximately $7.5 million more costly than rehabilitation/reconstruction and widening of the existing roadway. A western alignment would be exponentially more costly at approximately $68.5 million and would be more difficult to construct given the rough terrain to the west of the existing alignment.

For the reasons articulated in the Alternatives Analysis, the Spot Improvements Alternative, Eastern Alignment Alternative, and Western Alignment Alternative were eliminated from further consideration.

Other Alternatives Proposed by Members of the Public

MDT also considered three additional alternatives that were proposed by members of the public during public meetings and through written comments.

The first of these has been termed the Citizens' Alternative and includes the following elements:

- A pedestrian walkway and bicycle facility along the highway's current route;
- Safe crosswalks at the Jefferson County Fairgrounds, Boulder Hot Springs, and other frequently utilized junctions;
- Retention of the valley's lush aspen and cottonwood;
- Underpasses or overpasses for elk, deer, moose, bear, pronghorn and other wildlife;
- A full-time truck weighing station;
- Lower speed limits for the safety of vehicles, trucks, pedestrians, ranchers and their equipment, bicycles, wildlife and livestock; and
- Strict enforcement of these lower speed limits.

Like the Spot Improvements Alternative considered in the Alternatives Analysis, the Citizens' Alternative alone would not address the crash history in the corridor. As noted previously, speed was indicated as a factor in only six of the 51 total crashes (approximately 12 percent) over the January 1, 1998 through December 31, 2007 reporting period and a 2009 speed study found that 85 percent of vehicles were traveling at or below the posted speed limit. Without changes to the roadway template, more crashes are anticipated over the planning horizon as compared to current conditions. Accordingly, the Citizens' Alternative has been eliminated from further consideration as a stand-alone alternative. It should be noted, however, that a number of the elements in the Citizens' Alternative are being considered as part of the Build Alternative, including a pedestrian/bicycle facility and animal crossing measures, and MDT has committed to replanting appropriate vegetation in areas disturbed by the project. It should also be noted that the wider shoulders proposed under the Build Alternative may facilitate greater speed limit enforcement, although these efforts are under the jurisdiction of the Montana Highway Patrol.

The second of these alternatives would involve an elevated structure spanning the length of the Boulder – South project corridor. This concept was proposed with the intent to completely avoid impacts to trees, the Boulder River, and associated wetland complexes that currently parallel the existing roadway, as well as provide for wildlife movement under the roadway. The proposal also includes the construction of a pedestrian/bicycle facility underneath the elevated highway. Based on a planning-level order of magnitude assessment, an elevated structure would cost approximately $30 million per mile of roadway as compared to approximately $1.5 million per mile of roadway for rehabilitation/reconstruction proposed under the Build Alternative, which includes the cost of resource mitigation efforts. Accordingly, the elevated structure alternative was eliminated from further consideration due to its substantial cost.

The third alternative would entail construction of an elevated wetlands bridge spanning approximately a half-mile segment of MT 69 near MP 34.5± in order to flatten a curve in this location, provide safer access to private approach roadways, avoid wetland and river impacts, provide a wildlife undercrossing opportunity, and allow pedestrian/bicycle use along what is currently the existing alignment. As with the elevated structure alternative, a wetlands bridge would be very costly at approximately $15 million for a half-mile span and was therefore eliminated from further consideration due to its substantial cost.

3.0 IMPACTS AND MITIGATION

This chapter contains information on potential social, economic, and environmental resource impacts resulting from the Preferred Alternative. This information was developed in cooperation with state and federal agencies and members of the general public. NEPA, MEPA, and the FHWA Technical Advisory (T6640.8A) outline specific areas of environmental concern to be addressed through environmental analysis.

It should be noted that no additional impacts beyond those disclosed in this chapter would result from a pedestrian/bicycle facility under Design Options A, B, and C since the facility would be located within the construction limits of the project. Design Option D would result in additional impacts, and is therefore not being considered for inclusion as part of this project.

3.1 Effects on Transportation System

Traffic

While this project would provide a wider paved surface as compared to the existing roadway, it would not increase the capacity of MT 69. Under the Preferred Alternative, MT 69 would remain a two-lane highway and would generally follow the existing alignment with some minor alignment modifications to accommodate widening while minimizing impacts to natural resources.

It should be noted that the speed limits for highways within the state are set by the Montana legislature and are detailed in Montana Code Annotated (MCA) § 61-8-303. Accordingly, this project would have no impact on the posted speed limit for MT 69, which would remain at 70 miles per hour (mph) during the daytime and 65 mph during the nighttime.

Impacts

No permanent traffic impacts are anticipated as a result of the proposed project. Temporary traffic impacts related to construction are discussed in Section 3.4.

Mitigation

No mitigation is proposed or required.

Access

There are a number of scattered rural ranch and residential access points along the portion of MT 69 within the study area.

Impacts

Existing access points may need to be modified in order to accommodate the widened roadway.

Mitigation

Access points would be perpetuated, and modifications would be negotiated with property owners.

Safety

The Preferred Alternative would result in a marked improvement in safety performance over existing conditions. As shown in Table 3.1, with no improvements the existing roadway is predicted to experience 29 percent more crashes in 2032 as compared to 2008. In comparison, the Preferred Alternative's new roadway template with flatter side slopes combined with wider shoulders is expected to result in a 41 percent reduction in crashes in 2032 as compared to the existing roadway in 2008.

Table 3.1 Results of Safety and Operational Crash Model

Parameter		Existing Roadway 1-foot Shoulder; Side Slopes Generally 3:1 (2008)	Existing Roadway 1-foot Shoulder; Side Slopes Generally 3:1 (2032)	Preferred Alternative 5-foot Shoulder; Side Slopes Flatter than 4:1 (2032)
Input Values	Average Annual Daily Traffic	900	1,170	1,170
	Lane Width (feet)	12	12	12
	Paved Shoulder Width (feet)	1	1	5
	Unpaved Shoulder Width (feet)	0	0	0
	Hazard Rating	5	5	2
Crash Comparison	Total Crashes (10 years)	36.4	46.9	21.2
	Total Crashes (10 years) Calibrated**	51.0	65.8	29.8
	Total Crashes (per year)	10.2	13.2	6.0
	Percent Change in Total Crashes (per year) Compared to Existing Roadway (2008)	NA	29% Higher	41% Lower

** Calibration Multiplier = 1.402 (Actual crashes/predicted crashes)
Source: MDT, 2009.

Again, it should be noted that although residents in the MT 69 corridor south of Boulder perceive that a majority of vehicles exceed the posted speed limit on MT 69, a 2009 speed study shows that 85 percent of vehicles traveled at or below 71 miles per hour (mph) over the portion of the corridor with a posted speed limit of 70 mph.

Impacts

No adverse safety impacts are anticipated as a result of the proposed project. The Preferred Alternative is expected to improve safety performance in the corridor by providing a wider paved surface and flatter side slopes.

Mitigation

No mitigation is proposed or required.

Pedestrians and Bicyclists

Pedestrian/bicycle traffic in the vicinity of the proposed project is currently limited, and the narrow paved width and lack of shoulders through much of the corridor may discourage pedestrian/bicycle use of the existing MT 69 facility. Area residents have submitted numerous comments requesting consideration of a separated bicycle facility as part of this project that would run parallel to MT 69, at a minimum, from the Boulder River Bridge south to the Boulder Hot Springs turnoff, with some requesting that the facility extend over the entire project limits between the Boulder River Bridge and the Elkhorn Road turnoff.

The Preferred Alternative would widen the MT 69 top width and include shoulders that are consistent with national standards to provide adequate space for bicycle and pedestrian use. In addition, MDT is considering design options for a pedestrian/bicycle facility parallel to MT 69 along with appropriate pedestrian crossings on MT 69. MDT is working with Jefferson County, the City of Boulder, and local pedestrian/bicycle groups to identify the best facility option, the appropriate extents of a facility, and possible funding and maintenance arrangements.

Impacts

No adverse impacts to pedestrians or bicyclists are anticipated as a result of the proposed project. The Preferred Alternative would improve pedestrian and bicycle facilities in the corridor by providing a shoulder width suitable for bicycle use in accordance with American Association of State Highway and Transportation Officials (AASHTO) guidelines.

Because the pedestrian underpass is currently non-functional, its removal would result in no adverse impact to pedestrians or bicyclists.

Mitigation

No mitigation is proposed or required.

3.2 Effects on Community

Land Use

Land within the immediate project area is primarily undeveloped, uncultivated wetland. Land uses within the broader MT 69 corridor include low-intensity agriculture, open lands, grazing, small forested areas, and dispersed home sites. The Boulder River lies to the east of the MT 69 alignment over the entire project area, with some portions of the roadway running directly adjacent to the river.

Impacts

Although some existing wetland areas would be converted to transportation uses, no broad changes in land use or development patterns are anticipated as a result of this proposed project.

Mitigation

No land use mitigation is proposed or required; wetland mitigation is discussed in Section 3.3.

Community Resources

There are no community resources (e.g., schools, churches, parks, municipal buildings, fire stations) within the construction limits for the Preferred Alternative.

Impacts

No impacts to community resources are anticipated as a result of this proposed project.

Mitigation

No mitigation is proposed or required.

Local and Regional Economies

Major industries in the Jefferson County area include education, health, and social services; public administration; retail trade; construction; and agriculture, forestry, fishing and hunting, and mining. A high percentage of the employed citizens of Jefferson County work outside their homes. Many residents of Jefferson County commute an average of over 22 minutes into surrounding communities for work.

Impacts

No adverse economic impacts are anticipated as a result of the proposed project. An improved roadway would facilitate safer and more efficient commutes for area workers.

Mitigation

No mitigation is proposed or required.

Environmental Justice

Under Title VI of the 1964 Civil Rights Act and related statutes, federal agencies are required to ensure that no person is excluded from participation in, denied the benefit of, or subjected to discrimination under any program or activity receiving federal financial assistance on the basis of race, color, national origin, age, sex, disability, or religion.

Executive Order (E.O.) 12898 requires each federal agency to make achieving environmental justice part of its mission "by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low income populations."

Impacts

Right-of-way impacts are evenly distributed throughout the corridor, and no residences or businesses would need to be acquired under the Preferred Alternative. Therefore, both the No Build Alternative and the Build Alternative are in accordance with E.O. 12898, and would not create disproportionately high and/or adverse impacts on the health or environment of minority and/or low-income populations. These alternatives also comply with the provisions of Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000(d), as amended) under the FHWA's regulations (23 CFR 200).

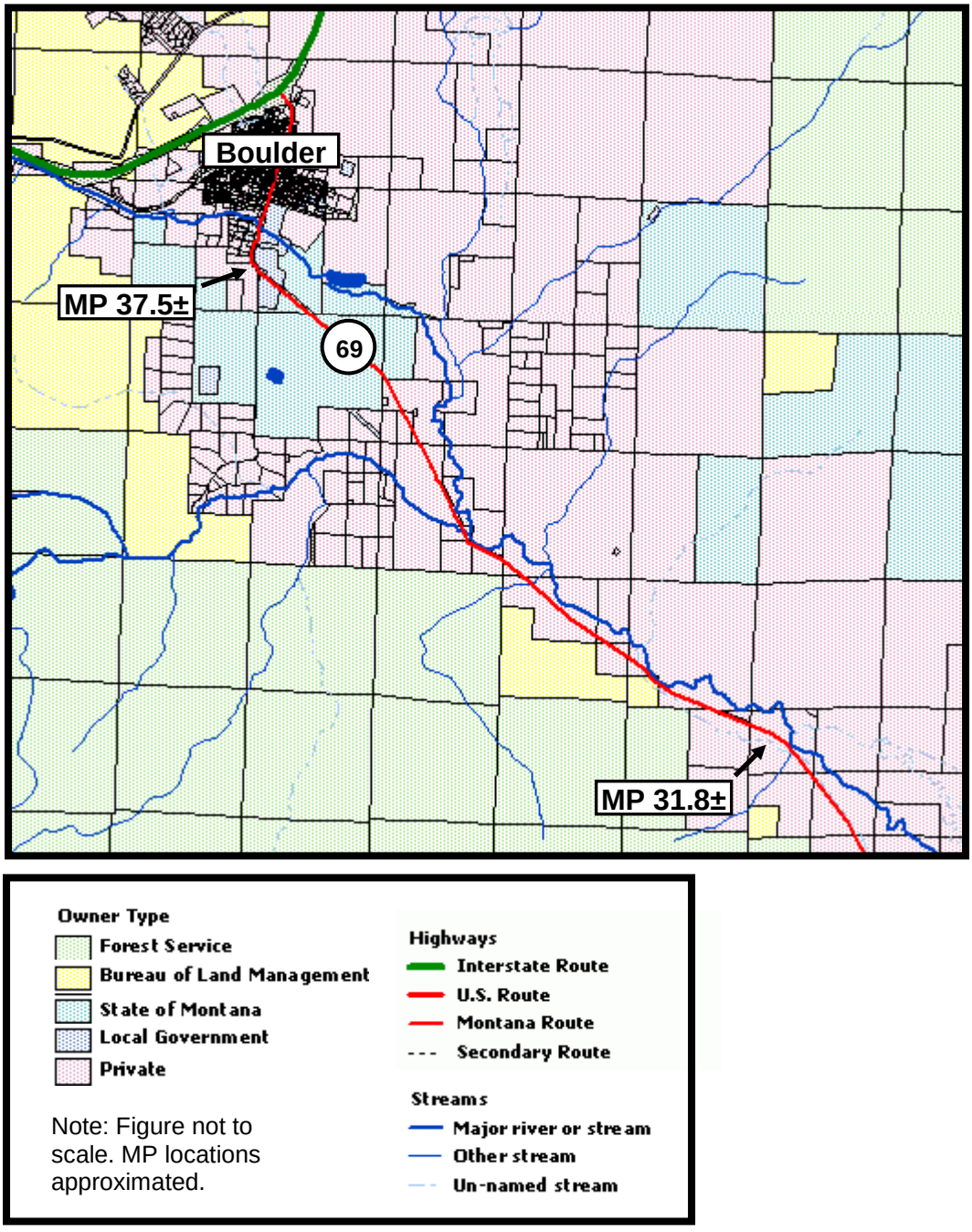
Mitigation

No mitigation is proposed or required.

Right-of-Way and Relocations

As illustrated in Figure 3-1, the project area is largely under private ownership, although there are interspersed land areas owned by the State of Montana, the U.S. Forest Service (USFS), and the Bureau of Land Management (BLM) directly adjacent or in close proximity to MT 69. New right-of-way and easements would need to be obtained from land owners for the proposed widening.

Figure 3-1 Land Ownership



Source: Natural Resource Information System (NRIS), 2010.

There are no residences or buildings within the construction limits for the Preferred Alternative, although a residence is located at the top of the rock outcropping located near MP 34±. An alignment shift into the rock face at this location may impact the privately-owned parcel, but relocation is not expected.

Impacts

There would be private right-of-way acquisitions under the Preferred Alternative, although there would be no residential or business relocations. Additionally, right-of-way in the form of an easement or construction permit would need to be obtained from the State of Montana, USFS, and BLM.

Mitigation

Lands needed for right-of-way under the Preferred Alternative which are in private ownership would be acquired in accordance with both the *Uniform Relocation Assistance and Real Property Acquisition Act* of 1970 (P.L. 91-646), and the *Uniform Relocation Act Amendments* of 1987 (P.L. 100-17). Compensation for right-of-way acquisitions would be made at "fair market value" for the "highest and best use" of the land. Fencing will be provided according to MDT policy. Because the shoulder width will be less than 6 feet, mailbox turnouts will be provided in accordance with MDT policy.

Utilities

A number of public utilities have been identified within this corridor. These utilities include water, electrical, and telecommunications transmission lines and natural gas pipelines.

Impacts

Utilities identified within the corridor may be impacted by the new right-of-way requirements for the proposed project.

Mitigation

Utility relocations would be coordinated with the lines' owners and done prior to this proposed project's construction. Notification of service interruptions due to these relocations would be the responsibility of these utility lines' owners. Disruptions are normally minor and are usually limited to the customers on the affected lines.

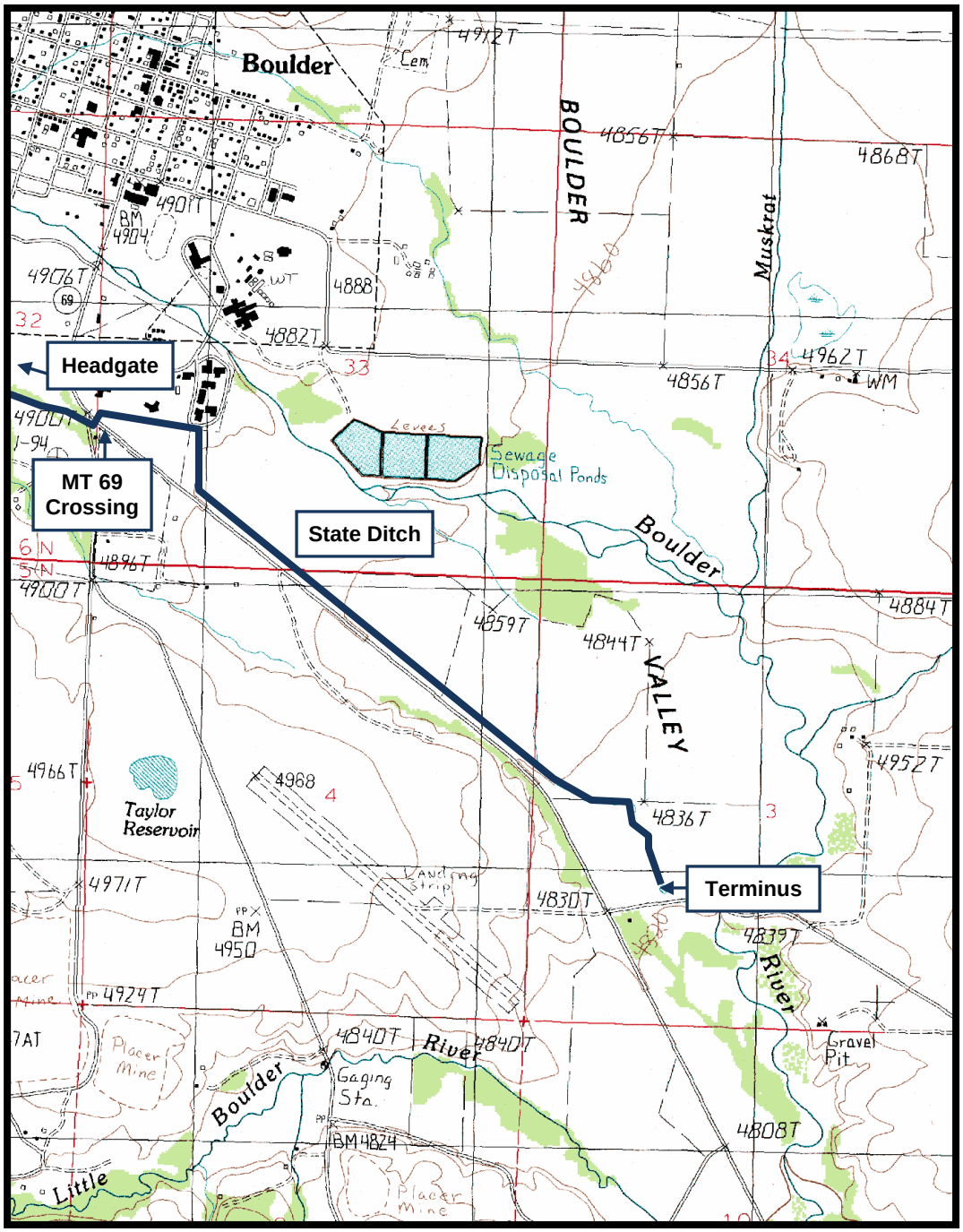
Cultural/Archeological/Historical Resources

On October 20 and 31, 2006, Frontier Historical consultants conducted an intensive-level cultural resource survey of the Boulder-South project area. As a result of the inventory, six historic sites were identified and recorded, including one previously recorded site. No prehistoric sites were located during the survey.

Sites recorded during the survey include the Wolny House (24JF1877), Rock Wall (24JF1878), Adit (24JF1879), State Ditch Bridge (24JF1880), State Ditch (24JF1881), and the previously recorded Little Boulder River Bridge (24JF0813). Of these, it was determined that only the State Ditch and the Little Boulder River Bridge are eligible for listing in the National Register for Historic Places (NRHP). The other sites either did not meet the criteria for eligibility or had diminished integrity, which precluded their consideration for the NRHP.

The State Ditch consists of a return flow irrigation collector and ranges from one to three feet in depth and from a few feet to approximately 12 feet in width. In its upper segments above Little Boulder Road, the ditch collects return flow from irrigated fields. It crosses under Little Boulder Road in a modern metal culvert. On the east side of Little Boulder Road, the ditch then crosses under MT 69 to the north via the State Ditch Bridge (24JF1880), as shown in Figure 3-2. The ditch runs east from MT 69 crossing to irrigate a small field associated with the farm of the Montana State Training School (now the Boulder River School and Hospital). From the east side of the school, it runs south and then parallel to the highway for approximately one mile. The ditch then curves away from the highway to its terminus. The site has good integrity and has not changed from its original function and appearance, with the exception of modern culverts placed under Little Boulder Road and MT 69. Further, the site has played an important role in local agriculture.

Figure 3-2 Location of State Ditch

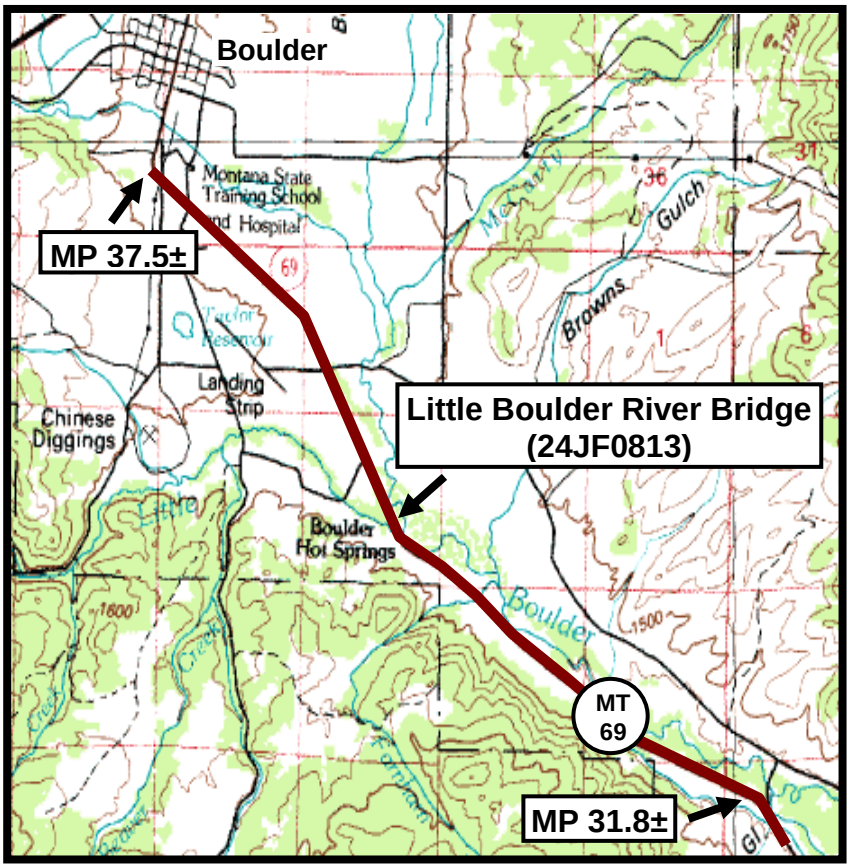


Source: Cultural Resource Inventory and Assessment, Boulder South, Jefferson County, 2007 and DOWL HKM, 2010.
Note: figure not to scale; location of state ditch approximated.

The Little Boulder River Bridge is a three-span timber bridge with an asphalt overlay and is located approximately 2.5 miles southeast of the town of Boulder, as shown in Figure 3-3. The

site has excellent integrity and is recommended to be eligible for listing in the NRHP as an example of a 1940s-era timber-stringer bridge.

Figure 3-3 Location of Little Boulder River Bridge



Note: Figure not to scale. MP locations approximated.

Impacts

Up to 300 feet of the three-mile-long State Ditch would be rechanneled under the Preferred Alternative. Based on coordination with SHPO, this would result in a **No Effect** determination because the ditch would continue to function in its historic capacity and there would be no change in the existing alignment of the ditch, its dimensions, setting, use, or appearance. SHPO concurrence is attached in Appendix A. A full description of the State Ditch is provided in Chapter 4 - Section 4(f) Resources.

The Little Boulder River Bridge does not meet current design standards. Accordingly, as part of this project the bridge would be replaced with another bridge in approximately the same location. This action would constitute an **Adverse Effect**. Further information is included in the Programmatic Section 4(f) Evaluation contained in Appendix B and in the Historic Roads and Bridges Programmatic Agreement contained in Appendix C.

Mitigation

No mitigation would be required for the State Ditch.

Mitigation for the Little Boulder River Bridge is addressed under the Historic Roads and Bridges Programmatic Agreement.

NL&WCF - Section 6(f) Lands

No National Land & Water Conservation Fund (NL&WCF) Act - Section 6(f) (16 U.S.C.460) properties have been identified within the vicinity of the proposed project. No acquisition of NL&WCF - Section 6(f) properties would occur, and there would be no impacts resulting from the Preferred Alternative.

Impacts

No impacts are anticipated.

Mitigation

No mitigation is proposed or required.

Noise

The proposed Build Alternative for this project will generally follow the existing MT 69 alignment, with only minor alignment modifications to accommodate widening and to bring the roadway up to current standards. Because the Build Alternative will not substantially alter the road alignment, the project does not qualify as a Type I project according to the U.S. Code of Federal Regulations Part 772 (23 CFR 772) *Procedures for Abatement of Highway Traffic Noise and Construction Noise*, and a detailed traffic noise analysis is not required according to MDT's *Traffic Noise Analysis and Abatement: Policy and Procedure Manual, June 2001*.

Impacts

No permanent noise impacts are anticipated as a result of the proposed project. Temporary noise impacts related to construction are discussed in Section 3.4.

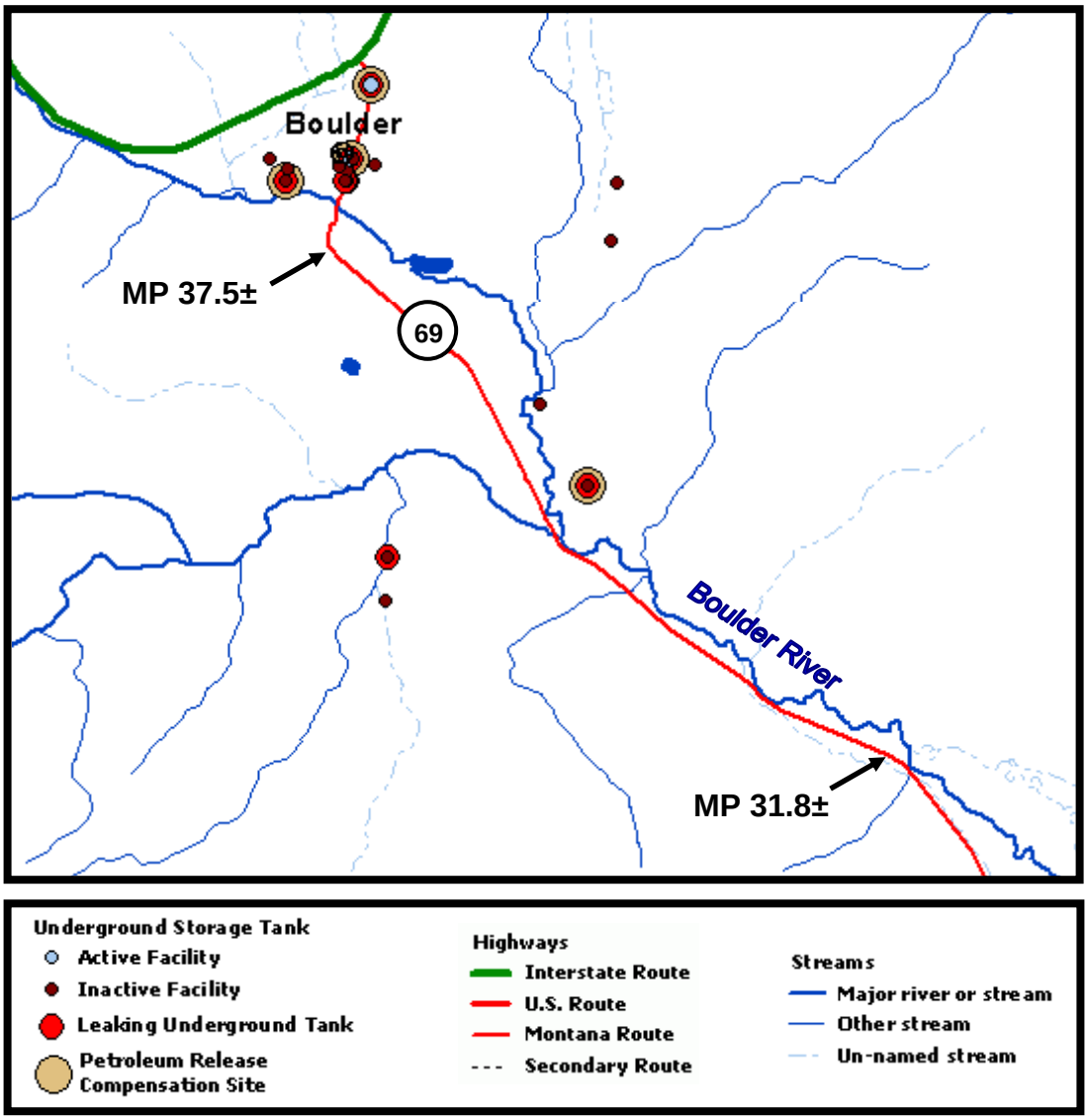
Mitigation

No mitigation is proposed or required.

Hazardous Materials

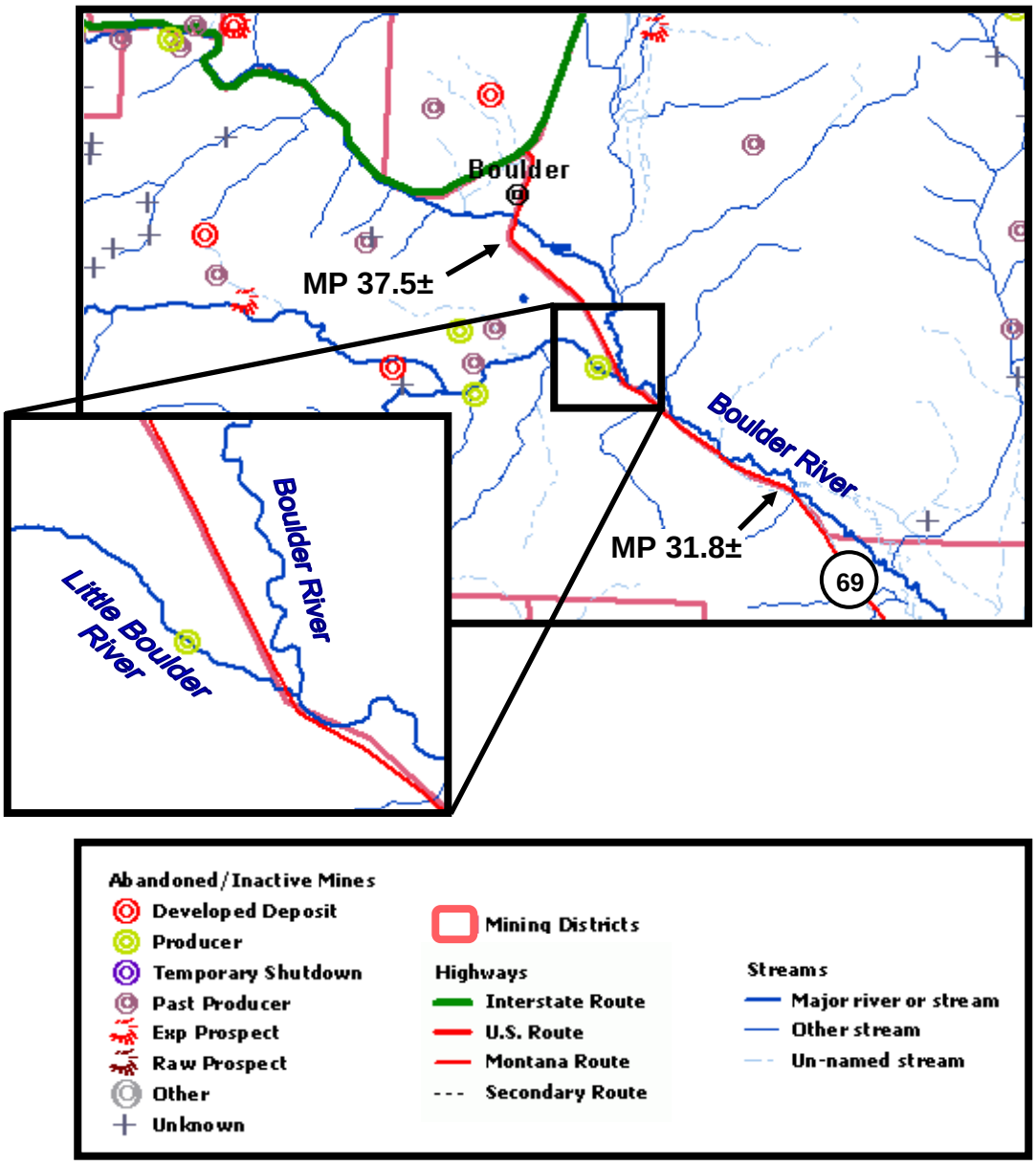
Based on an NRIS database search, there are no hazardous waste sites in the immediate project area. As shown in Figure 3-4, the closest leaking underground storage tank sites are located to the east of MT 69 across the Boulder River. There is an abandoned mine site located on the Little Boulder River, but this site is also outside the immediate project area, as shown in Figure 3-5.

Figure 3-4 Location of Underground Storage Tanks and Petroleum Tank Release Compensation Board Sites



Source: NRIS, 2009.
Note: Figure not to scale. MP locations approximated.

Figure 3-5 Abandoned and Inactive Mines



Source: NRIS, 2010.
Note: Figure not to scale. MP locations approximated.

Impacts

No impacts are anticipated.

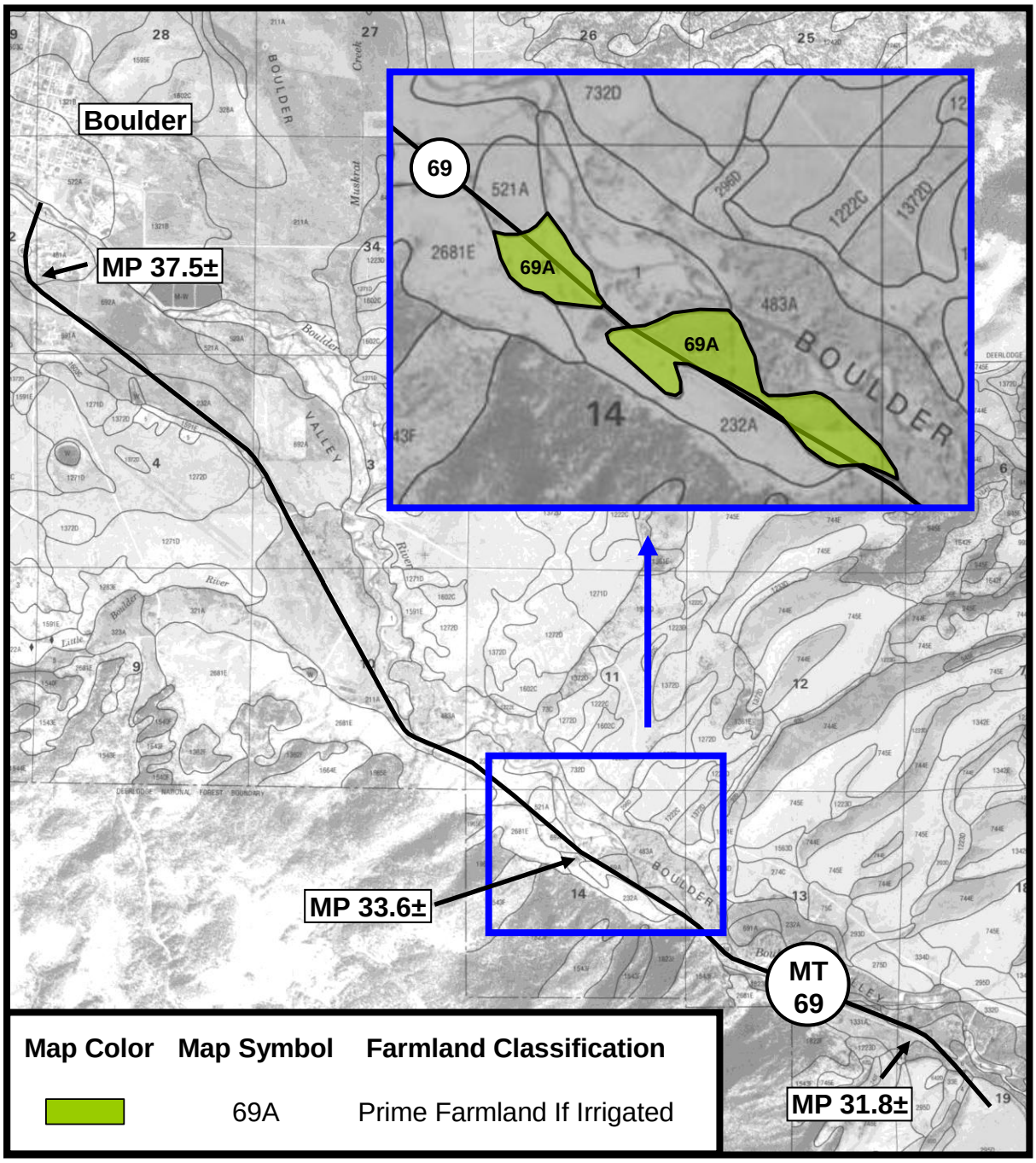
Mitigation

No mitigation is proposed or required.

Farmlands

Pursuant to the Farmland Protection Policy Act (FPPA), an inventory of farmland within the study area has been completed. According to a review of the soils mapping provided by the U.S. Department of Agriculture – Natural Resource Conservation Service, the project area contains two small areas of land classified as Prime Farmland If Irrigated located near MP 33.6±, as illustrated in Figure 3-6.

Figure 3-6 Prime Farmland



Source: Natural Resources Conservation Service, 2010.
Note: Figure not to scale. MP locations approximated.

Impacts

The proposed project would widen MT 69 from its existing top width of approximately 26.2 feet to a total top width of 34± feet. This widening would result in the conversion of approximately five acres of farmland classified as Prime Farmland if Irrigated to non-productive use near MP 33.6±.

Mitigation

In accordance with the FPPA, a Farmland Conversion Impact Rating Form has been completed for this proposed project. Both the Preferred Alternative and the No Build Alternative result in "Total Site Assessment Points" of less than 160; therefore, under the provisions of 7 CFR 658.4(c)(2), no further consideration for protection is necessary. A copy of the form is included in Appendix D. Best Management Practices (BMPs) will be used to limit disturbance, control erosion, and to re-vegetate disturbed areas within the construction limits.

Abandoned Structures

A structure located at MP 36.6± previously served as a pedestrian underpass leading to the Montana State Training School (now the Boulder River School and Hospital), but has since been abandoned and is generally filled with water through most of the year. In order to function as an undercrossing, the structure would require regular pumping to eliminate the standing water that naturally occurs due to the high water table. Due to the maintenance requirements that would be necessary to ensure functionality and the associated cost and safety considerations, it was determined that this structure would be removed as part of the project.

In addition to this structure, there are also a number of irrigation ditch crossings within the project area, some of which appear to be abandoned.

Impacts

The pedestrian underpass structure will be removed, and will not be replaced due to the high water table and accessibility issues in this location. Because the pedestrian underpass is currently non-functional, its removal would result in no adverse impact to pedestrians or bicyclists. There would also be impacts to existing irrigation crossings in the study area.

Mitigation

MDT will investigate irrigation crossings to determine if they need to be perpetuated or if they can be abandoned.

MDT will coordinate with ditch owners during construction to ensure there would be no disruption of irrigation service as a result of the Preferred Alternative.

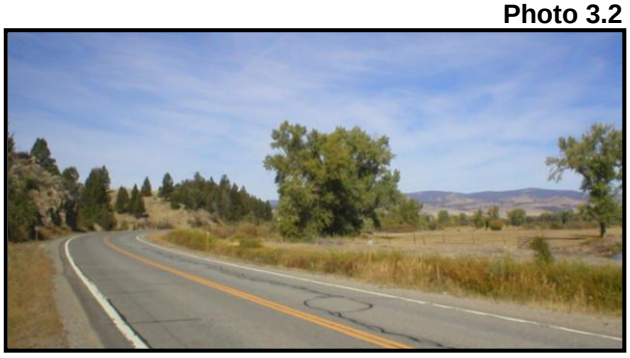
Visual Resources

The land on either side of MT 69 is heavily vegetated over much of the project area, as shown in Photo 3.1. Wooded hillsides dominate the view, with mountains visible on the horizon.

Photo 3.1

MT 69 also traverses more open areas that provide relatively expansive views, as shown in Photo 3.2.

Photo 3.2



Over some portions of the corridor, wetland areas are directly adjacent to the MT 69 alignment, as illustrated in Photo 3.3.

Photo 3.3

MT 69 parallels a deep rock cut over a portion of the project area, as shown in Photo 3.4.

Photo 3.4

The Preferred Alternative would largely follow the existing alignment, except for minor alignment shifts to minimize impacts to important resources.

Impacts

Construction would result in the loss of some vegetation, including trees and brush within the roadway clear zone. As a result, views would potentially be disrupted due to reconstruction and widening of the roadway and subsequent loss of trees and other vegetation along the current alignment.

Mitigation

Techniques would be employed, if practicable, to mitigate the visual impact of typical brush and tree clearing that would provide a random, meandering woodline edge, as opposed to a linear woodline edge. The disturbed area would be reseeded with desirable vegetation. It should be noted that natural regeneration of aspen and cottonwood is anticipated post-construction in locations where large stands now exist throughout the project corridor. An example of an aspen clone exists at MP 33.2; natural regeneration is anticipated in this location and replanting would likely not be needed. To soften the view shed, MDT will revegetate and replant trees in appropriate locations where a single line of trees within the construction limits must be removed. For example, a single row of trees that will be impacted by construction limits exists from MP 32.1 to 32.8. Replanting will be conducted in this location. MDT intends to replant trees in areas where single rows have been impacted and allow for natural regeneration in areas where clones exist in order to maintain the view shed, habitat diversity, and stabilization that trees provide.

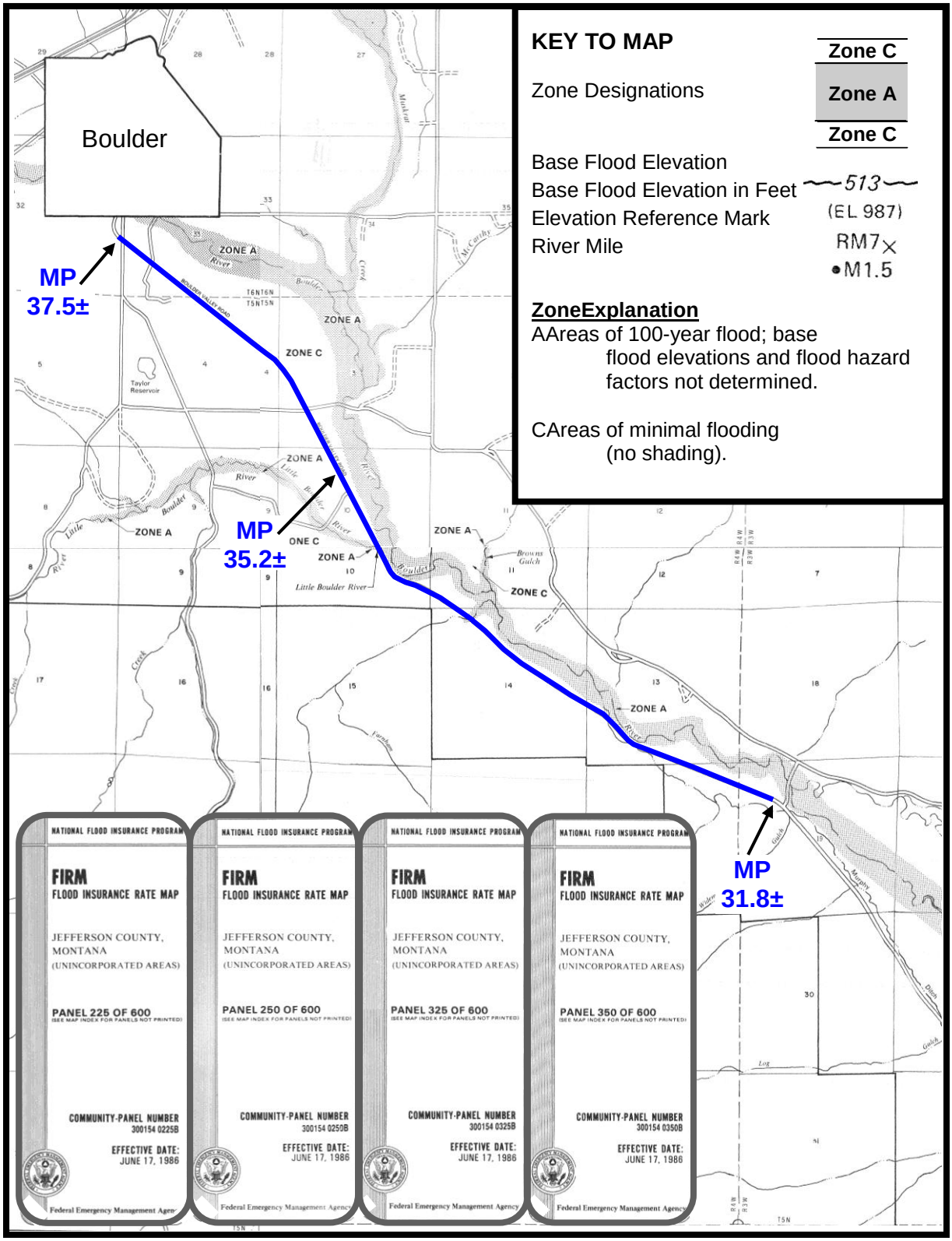
3.3 Effects on Natural and Physical Environment

Floodplains

E.O. 11988 and FHWA's floodplain regulation (23 CFR 650, Subpart A) require an evaluation of any proposed action to determine if any of its alternatives encroach on the base floodplain. The base floodplain is defined as the area that is encompassed by the 100-year floodplain.

As illustrated in Figure 3-7, the MT 69 alignment is either within or closely parallels the 100-year floodplain for the Boulder River over the portion of the corridor between MP 31.8± to roughly MP 35.2±. Roadway widening in this portion of the corridor would involve encroachments into the floodplain area.

Figure 3-7 100-Year Floodplain Mapping



Source: Federal Emergency Management Agency, 2010.
Note: Figure not to scale. MP locations are approximated.

Impacts

The proposed project would involve construction within the 100-year floodplain. Existing hydraulic conditions would be maintained or improved throughout the corridor through the installation of new conveyance structures developed in coordination with appropriate resource agencies. Impacts from new conveyance structures would be designed to have no detrimental impact on the flood risk in the corridor.

Mitigation

As necessary, MDT will obtain the appropriate permit and adhere to the conditions.

Water Resources/Quality

The main water bodies with potential to be impacted by the project include the main Boulder River, the Little Boulder River, three named and three unnamed perennial streams originating in the hills north of Bull Mountain. Progressing from the town of Boulder towards the south along the project alignment, the main perennial tributaries to the Boulder River include the Little Boulder River, unnamed perennial stream one, Farnham Creek (Goat Canyon), Killian Spring, unnamed perennial stream two, unnamed perennial stream three, and Rear Gulch. The Murphy Ditch is also a major aquatic feature and parallels the roadway on the southwestern side from the project's southern terminus to approximately MP 31.8. There are no intermittent or ephemeral drainages indicated on the U.S. Geological Survey (USGS) topographic map for the area (Boulder East, Montana 1996), nor were intermittent drainages observed during the field surveys conducted in 2005 or 2008.

As noted in Table 3.2, there are five named irrigation ditches within the vicinity of the project area. Irrigation ditches with return flow to a Water of the U.S. fall under the jurisdiction of U.S. Army Corps of Engineers (USACE). Jurisdictionality was determined through review of field notes, aerial photographs, and USGS mapping. Based on these sources, it appears that four of the five ditches in the project area deliver return water to the Boulder River. The ditch network in the valley is extensive and complex with many of the ditches feeding water into other ditches before they return water to the Boulder River. At least three of the ditches cross underneath MT 69, and will need to be addressed in the design of the new roadway.

Table 3.2 Named Ditches and Jurisdictional Status

Ditch Name (DNRC 2008)	Orientation	Source water (USGS 1996)	Return Water	Jurisdictional Status	Wetlands with surface connection
Evans	North-South	Un-named perennial stream (outside of project area)	no	No	WL 13
State	Parallel to MT 69	Evans ditch	Yes, Boulder River	Yes	WL 12
Frascht-Smith	Parallel to MT 69	Little Boulder River	Yes, via State ditch to Boulder River	Yes	WL 9, 10, 11, 12, 15, 16, 17
Killiam (also labeled Franchi)	Parallel to MT 69	Killian Spring and Goat Canyon	Yes, Boulder River	Yes	WL 5, 6, 7, 19, 21, 22
Jones-Nelson or McCauley Murphy	Meanders south of MT 69, but is generally parallel to MT 69	Fed by several perennial streams	Yes, Boulder River	Yes	WL 2,3,4

Source: Biological Resources Report for the Boulder South, Highway 69 Project, 2009.

Much of the Boulder and Little Boulder River channels are relatively undisturbed by adjacent land use, which are limited to seasonal hay production, grazing, and limited crop production such as wheat. It is apparent from a review of the aerial photos that the main Boulder River channel has meandered considerably over time. The edge of the channel of the Boulder River maintains a healthy riparian community dominated by cottonwood trees and willows. The lands on the south side of the Little Boulder River near its confluence with the main Boulder River slope steeply down to the Little Boulder River channel. The lands on the north side of the Little Boulder channel are a mix of dense willow and shrub/scrub habitat and seasonally hayed agricultural land. Rip-rap placement is concentrated at bridge crossings and at points where the highway encroaches into the channel. The encroachments occur where the highway passes between the river channel and steep hillsides. The current rip-rap placement indicates the need to stabilize the channel in order to prevent erosion.

The portion of the Little Boulder River near the project area flows through a large undeveloped wetland adjacent to the Boulder Hot Springs. Review of aerial photos shows that the Boulder River meanders considerably across the existing floodplain. The riparian habitat along these meanders varies from open gravel and sand bars to mature cottonwood forests. Substrate is generally small cobble and gravel with some interstitial fines. Biologists observed undercut banks, large riffle and pool complexes, and mature riparian vegetation along much of the Boulder River channel. There are active beaver dams near the confluence of the Little Boulder and the main Boulder Rivers and evidence of past beaver activity in other parts of the project area.

Downstream of the City of Boulder, the floodplain widens and the Boulder River meanders through cottonwoods, aspen, and willows. Intensive hard rock mining in the drainage in the late 1800's and early 1900's left behind acid mine seeps and mill tailings which today still affect the

river and fishery below the town of Basin to the west. Portions of the Boulder River have been relocated due to mining, agriculture, and road and railroad building, and it has been subject to rip-rapping and channel restructuring. Flows in the river depend primarily on mountain snowpack, while a number of large springs add to the river in the lower valley.

The Montana Department of Environmental Quality (DEQ) is required by Section 303(d) of the Clean Water Act (CWA) to identify and prioritize those waters which do not support irrigation, fisheries, and recreation; or provide drinking water, stockwater and wildlife habitat. Total Maximum Daily Loads (TMDLs) are an assessment of the amount of pollutant a water body can receive and not violate water quality standards. The TMDL determines how much "pollutant load" a lake or stream can assimilate. There are several TMDL water quality impaired stream reaches in and around the project area. The Little Boulder River and the stretch of the Boulder River from the town of Basin to the town of Boulder are water quality impaired from highway construction, as well as other causes. The Boulder River stretches from the town of Boulder downstream to Cottonwood Creek and from Cottonwood Creek to the Jefferson River are also water quality impaired, with wetland and habitat alteration impairment as a major cause. Other impairments include metals, sediment, and flow alteration. The metals impairment is due to historical mining upstream of the project area near the town of Basin.

According to MDT maintenance personnel in Boulder, sand and occasionally magnesium chloride are used on the portion of MT 69 between Boulder and the Elkhorn Road turnoff in order to ensure safe winter driving conditions. Maintenance personnel estimate that approximately one-quarter to one yard of sand material is used per storm event on this stretch of roadway, depending on the storm severity. This material has the potential to enter adjacent state waters through stormwater runoff, thereby adversely impacting water quality.

Impacts

Through consultation, DEQ identified potential impacts to water quality as a major concern. DEQ noted that the water bodies crossed by the proposed project are considered impaired due to upstream historic mining and dewatering.

In general, there would be an increase in the total surface area of paved road related to widening and reconstruction under the Preferred Alternative. The increase in total road surface area decreases the overall permeability of substrate and increases the rate and quantity of surface water runoff from the roadway. The quality of runoff from roadways is impacted by vehicle-related contaminants, such as motor oil, grease, and tire rubber. In addition, surface water runoff is impacted by herbicides and pesticides that may be used in landscaped or maintained areas along the highway. The minor increase in paved surface area would result in a negligible increase in runoff in the watershed.

It should be noted that the use of winter maintenance materials is expected to be relatively minimal in this corridor, given the relatively flat roadway profile. Through the majority of the corridor, vegetated areas lie between the roadway and adjacent state waters, providing natural buffers to filter such materials.

Mitigation

MDT will shift the alignment in the locations identified in Table 2.1 in order to avoid project-related encroachment of the road into the Boulder River.

Actions that prevent sedimentation may prevent or reduce many of the direct and indirect impacts described above. These activities include those described under MDT's Standards and Specifications Section 107.11, titled "Environmental Protection," Section 208 titled "Water Pollution Control and Stream Preservation," and the requirements of the Montana Stream Protection Act (SPA 124). In accordance with MDT's standard specifications, the contractor will be required to prevent or reduce water quality impacts caused by sediment or petroleum contaminated runoff.

The Preferred Alternative may impact water quality through storm water runoff and erosion. Mitigation of these impacts is achieved through engineering controls such as the use of erosion and sediment control features, revegetation, as well as other BMPs. The Preferred Alternative would require a Storm Water Pollution Prevention Plan (SWPPP) and field monitoring/oversight to minimize temporary impacts to water quality due to construction. Water quality impacts would also be minimized through appropriate deck and rail design on the Little Boulder River bridge structure, which would reduce or eliminate deck drainage directly into adjacent state waters.

Resource agencies specifically requested consideration of berms, sediment control basins, catchment areas, or vegetated swales to ensure that stormwater runoff, sand, or other friction material is prevented from directly entering adjacent state waters. MDT has developed Permanent Erosion and Sediment Control Design Guidelines (October 2010) which include procedures for evaluating the need for permanent erosion and sediment control measures and determining which measures can practicably be incorporated into the design. Such measures are intended to reduce soil erosion and sediment deposition into adjacent waterways. MDT will follow these guidelines in determining appropriate control measures for this project.

Wetlands

Twenty-four wetlands were delineated during site visits in July 2005 and August 2008. Of these, 23 would be considered jurisdictional under the USACE 404(b) permitting guidelines because they border on or are directly connected to a Water of the U.S.

The project corridor is bordered by wetlands for almost the entire length. Maps showing each wetland's delineated extent and locations along MT 69 are included in Appendix E.

Wetland jurisdictional status is noted in Table 3.3 Wetlands are numbered progressing north from the southern end of the project on the west side of the road, up to the city of Boulder and then proceeding south along the eastern side of the road. Wetland 1 is located outside the project area, and is therefore not included in Table 3.3.

Table 3.3 Wetlands

Wetland Number	Total Delineated Acreage	Estimated Impact Acreage	Category	Jurisdictional Status	Source of Wetland Hydrology (See Table 3.2 for Ditch Source Water)
2	2.8	0.1	III	Yes	Murphy ditch connected to Boulder River
3	4.4	0.5	III	Yes	Irrigation seepage from Murphy ditch
4	1.1	0.3	II	Yes	Murphy ditch connected to Boulder River
5	1.6	0.4	III	Yes	Perennial un-named stream
6	13.6	0.7	III	Yes	Killiam/Franchi ditch and Goat Canyon Creek
7	1.8	0.1	III	Yes	Goat Canyon Creek
8	0.1	0.1	III	No	Roadside drainage, flow from uplands
9	9.2	0.1	III	Yes	Little Boulder River
10	8.0	0.6	III	Yes	Frascht-Smith ditch connected to Boulder River
11	3.4	0.5	III	Yes	Frascht-Smith ditch connected to Boulder River
12	2.3	0.8	III	Yes	Frascht-Smith ditch connected to Boulder River
13	1.5	1.4	III	Yes	Subsurface flow, roadside drainage, State Ditch connects to Boulder River
14	0.2	0.2	III	Yes	Subsurface flow and roadside drainage
15	5.9	1.2	III	Yes	Frascht-Smith and State ditches connected to Boulder River
16	2.4	0.5	III	Yes	Frascht-Smith and State ditches connected to Boulder River
17	3.7	1.1	III	Yes	Frascht-Smith and State ditches connected to Boulder River
18	1.4	0.5	III	Yes	Frascht-Smith ditch connected to Boulder River
19	13.3	3.6	III	Yes	Killiam/Franchi irrigation ditch connected to Boulder River
20	7.0	2.3	III	Yes	Goat Canyon Creek
21	1.4	1.0	III	Yes	Killiam/Franchi irrigation ditch connected to Boulder River
22	2.1	0.6	III	Yes	Killiam/Franchi irrigation ditch connected to Boulder River
23	1.1	0.00	III	Yes	Roadside drainage, subsurface flow
24	4.6	1.4	III	Yes	Old river channels with seasonal connection to Boulder River
25	0.1	0.0	III	Yes	Groundwater seepage or intercepted groundwater flow
TOTALS	**93.0**	**18.0**			

Source: Biological Resources Report for the Boulder South, Highway 69 Project, 2009.

Category II - More common than Category I, providing habitat for sensitive plants or animals. These wetlands function at very high levels for fish/wildlife habitat, or are unique for a given region, or are assigned high ratings for many of the assessed functions and values. The total actual functional points for a Category II wetland must total 65% or greater of the possible.

Category III - These wetlands are more common, generally less diverse, and often smaller and more isolated than Category I or II wetlands. Category III wetlands can provide many functions and values, but will not have as high ratings as a Category I or II. Wetlands that do not meet criteria for Category I, II, or IV classification are considered Category III wetlands.

The total delineated wetland acreage is approximately 93 acres, nearly all of which is considered jurisdictional.

Impacts

The extent of unavoidable impacts to wetlands resources will be determined by the final alignment and construction limits. MDT estimates that total wetland impacts resulting from the project will be less than 20 acres. Final quantitative impacts will be determined once the final alignment and construction limits have been determined.

Mitigation

The project design team has made and will continue to make all practicable efforts to avoid and minimize wetland impacts. MDT will shift the alignment in the locations identified in Table 2.1 in order to minimize project-related encroachment of the road into adjacent wetlands.

The large wetland complexes bordering the project that are considered USACE jurisdictional will require permitting under the CWA Section 404(b). The permit application will be submitted to the USACE after wetland determinations and delineations are reviewed and construction limits are finalized through design.

MDT is required to mitigate for permanent wetland impacts, regardless of USACE jurisdiction under E.O. 11990 (No Net Loss). Current USACE guidance no longer recommends on-site mitigation as a first priority. Unavoidable wetland impacts may be mitigated at an established MDT Wetland Reserve or via in-lieu fee within Watershed #6 (Upper Missouri). Consultation with the USACE will be necessary to determine acceptable mitigation sites.

Vegetation

The project area is dominated by native plant communities intermixed with non-native species dominated pastures. The non-native grasses in the project area are species commonly seeded for agriculture in hay meadows and pastures. The project area also contains non-native weedy forbs that most likely invaded the site after human-caused disturbances.

Impacts

Direct impacts to plants resulting from this project include the removal of vegetation during the clearing and grubbing stages of construction and loss of habitat due to road widening and straightening. For some species (non-native weedy forbs), these impacts may be considered beneficial by reducing the seed source of undesired species in the area. Impacts to larger tree species such as cottonwoods and aspens may be substantial, depending on the final alignment, and could potentially affect numerous trees over the entire project area. It should be noted that natural regeneration of aspen and cottonwood is anticipated post-construction in locations where large stands now exist throughout the project corridor. An example of an aspen clone exists at MP 33.2; natural regeneration is anticipated in this location and replanting would likely not be needed. Recolonization will be influenced by final slopes and hydrological characteristics after the project is completed. Grass, forb, and shrub species recolonize relatively quickly, while natural re-establishment of other species may be slower.

Mitigation

MDT will shift the alignment and use non-standard fill slopes in the locations identified in Table 2.1 in order to minimize project-related ground disturbance. Construction activities are required to comply with BMPs and Jefferson County requirements. The area will be replanted with

desired species in accordance with current MDT construction specifications. MDT will re-seed disturbed soil and replant trees in appropriate locations where a single line of trees within the construction limits must be removed to improve safety and sight distance. For example, a single row of trees that will be impacted by construction limits exists from MP 32.1 to 32.8. Replanting will be conducted in this location. MDT intends to replant trees in areas where single rows have been impacted and allow for natural regeneration in areas where clones exist in order to maintain the view shed, habitat diversity, and stabilization that trees provide.

Noxious Weeds

During the June 29, 2005 site visit, five species of noxious weeds were found in the project area's existing alignment along MT 69 from MP 22.186 to MP 37.1, as detailed in Table 3.4.

Table 3.4 Noxious Weeds Observed within Project Area

Common Name	Scientific Name
spotted knapweed	*Centaurea biebersteinii*
Canada thistle	*Cirsium arvense*
leafy spurge	*Euphorbia esula*
Dalmatian toadflax	*Linaria dalmatica*
tall buttercup	*Ranunculus acris*

Source: Biological Resources Report for the Boulder South, Highway 69 Project, 2009.

Impacts

Because the disturbed area would be reseeded with desirable vegetation, revegetation may replace noxious and weedy species, resulting in a beneficial impact on plant community composition and structure. If construction spreads weed seed and/or roots to new areas, weeds may impact additional lands.

Mitigation

All construction activities are required to comply with the Montana Noxious Weed Law; MDT Standard Specification 107.11.5, titled Noxious Weed Management; follow the requirements of the Noxious Weed Management Act, Title 7, Chapter 22, Part 21; other BMPs; and Jefferson County requirements. The area will be replanted with desired species in accordance with current MDT construction specifications.

Wildlife and Migratory Birds

Wildlife habitats in the project area are comprised mainly of riparian, wetland, and aspen pastureland and hayfield habitats.

The Biological Resources Report (BRR) prepared for the proposed project lists 34 species documented during June 2005 field surveys, including 28 avian species, five mammals, and one amphibian species.

The project area is located within unique habitat features that attract wildlife from both low and high elevation areas surrounding the river corridor. The wetlands, riparian zone, and mosaic of meadows, cropland, and forests provide a variety of life history needs and seasonally significant habitats for many species.

A high-use wildlife crossing area was observed just north of MP 33 where forest cover borders the road on both sides, and an irrigation ditch corridor (Murphy Ditch) on the western side facilitates travel parallel to the road. Deer, elk, and moose adult and fawn/calf tracks and pellets were observed on both sides of the highway, with the highest concentrations on the west side approximately 330 feet southeast of the fence corner. Coyote tracks and scat were also observed on both sides of the highway. Travel routes were concentrated along the ditch right-of-way and fence line, and appeared to form a network of trails that connected a series of crossing points. The Wetland 4 area has several characteristics that combine to create a good wildlife crossing zone, and many of these characteristics are found in other parts of the project area. On the southwest side of the road, an irrigation ditch provides a good travel corridor between the steep rock cliff and the road, and the Boulder River provides similar benefits on the east side. The Boulder River corridor provides good browse, water, cover, and travel habitat to access prominent tributaries draining the uplands to the northeast, such as Browns Gulch.

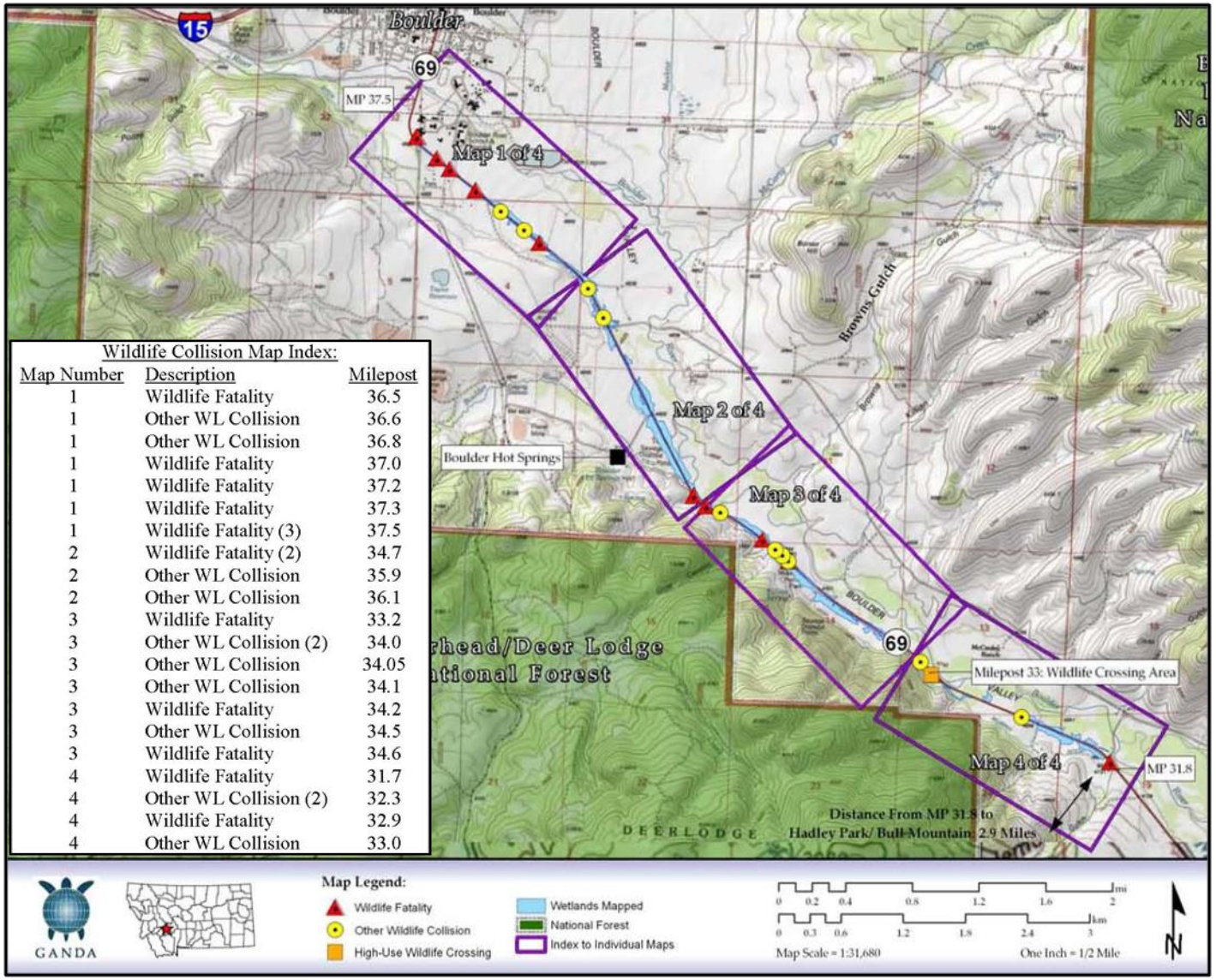
Vehicle collisions with wildlife and domestic animals occur within the project corridor potentially resulting in injury or death to wildlife. Not all incidents are documented due to lack of reporting to law enforcement; injured animals may also die outside of the road corridor and remain unreported. In cases where reports are filed and carcasses are found, two sources of reliable data are available to assess impacts within the project area: highway patrol crash report records and MDT maintenance records of road-kill carcass removal. The data are interpreted and presented somewhat differently because collision reports do not confirm death of the animal, nor do they identify date, sex, time of day, or species.

Crash data for the period of January 1, 1997 through December 31, 2006 was assessed with regard to animal-vehicle collisions. Of the crashes reported over this period, nearly 35 percent (or 19 out of 55 total crashes) involved animals. Of these 19 crashes, 37 percent (or 7 out of 19) involved domestic animals, while the remaining 63 percent (or 12 out of 19) involved wild animals. Five of 12 (42 percent) occurred between MP 34.0 and MP 34.5, and 4 of 12 (30 percent) occurred between MP 35.9 and MP 36.8.

The MDT roadkill database contained 19 records over a 9 year period between MP 32.9 and MP 37.5. The information contained in the database is not inclusive of all possible incidents of animal/vehicle collisions in the area because not all incidents are reported. The MDT Animal Incident Reporting System is an opportunistic collection and reporting system. As a result, there is no guarantee that the information being provided is accurate or statistically valid.

This sample size is too small to analyze statistically, however it does demonstrate that mule deer suffer the highest proportion of large mammal fatalities (11 out of 14 records, or 79 percent). One large carnivore, a mountain lion, was killed just south of the project area at MP 31. Other wildlife species included skunks, rabbits, and beaver. Based on roadkill data, two segments of the project area appear to have higher kill rates than the rest of the project area. Five mortalities occurred within MP 34 (36 percent), and six within MP 37 (43 percent) at the northern end of the project area. The two databases overlap near MP 34, but indicate different cluster areas at MP 36 (collisions) and MP 37 (roadkill). Figure 3-8 shows locations of collisions and road-kills.

Figure 3-8 Animal-Vehicle Collisions and Roadkill Locations



Source: Biological Resources Report for the Boulder South, Highway 69 Project, 2009.
Note: Individual maps from this map index are included in the BRR prepared for this project.

Impacts

Widening of the road surface may reduce or alter some wetland habitats, thereby impacting birds, mammals, and amphibians that rely on this habitat for breeding, forage, or travel. These are anticipated to be sliver impacts on large wetland complexes that extend far beyond the highway corridor.

The acreage loss for each habitat type depends on specific design features, such as shoulder widths, and on minimization of construction activities within the project area. Shrub and tree recovery depends on the plant species; it may take several years for the species to become re-established along the expanded right-of-way. Grass and forbs will begin to recover immediately and re-establish over subsequent growing seasons.

The project area is bordered by the Deerlodge National Forest to the west, and a riparian buffer and agricultural lands to the east. Therefore the project area will not be subject to an increase in development often associated with highway improvements.

Mitigation

As documented in the list of commitments and considerations in Section 2.2, the Preferred Alternative will minimize the roadway footprint and associated impacts to existing wildlife habitat to the extent practicable.

MDT will implement appropriate combinations of wildlife mitigation strategies, including wildlife friendly fencing and vegetation management facilitating at-grade crossings at desired locations with additional signing and barrier fencing around curves and in areas with limited roadside visibility. MDT will negotiate wildlife fencing options with adjacent landowners and install appropriate wildlife fencing combinations as negotiated or on MDT right-of-way to facilitate wildlife movement within the highway corridor. MDT will consider wider shoulders cleared of vegetation, which can improve sight distance for both wildlife and drivers throughout much of the corridor, while incorporating tree planting to provide cover to encourage animal movement at desirable locations.

MDT is pursuing experimental application of an electro-mat feature in association with at-grade crossings for wildlife, facilitated by a combination of barrier and wildlife friendly fencing. MDT will continue to evaluate this technology for use within the Boulder-South corridor and incorporate it if appropriate.

If overhead power lines are relocated during construction, they will be raptor-proofed in accordance with MDT policies.

MDT will consider structure enhancements to provide wildlife crossing opportunities, including adjusting the dimensions of the bridge over the Little Boulder River to enhance underpass crossing and appropriately sizing culverts to allow small animal movement, where practicable. With the exception of the Little Boulder River, underpass crossings are not feasible due to the high water table and low road grade throughout this corridor. Elevating the road grade to accommodate underpasses is not feasible because it would increase the fill footprint, resulting in increased wetland, irrigation, river, and vegetation impacts, and would require additional right-of-way acquisition. MDT has also determined that wildlife overpass crossing facilities are not

feasible in this corridor due to high cost, additional right-of-way needs, and associated impacts to wetland, irrigation, river, and vegetation resources in the corridor.

Aquatic Species

The Boulder and Little Boulder Rivers support several native fish species as well as brook, brown, and rainbow trout, as detailed in Table 3.5.

Table 3.5 Fish Species Documented in Boulder and Little Boulder Rivers

Common name	Scientific name	Abundance[a]	
		Little Boulder	Main Boulder
longnose dace	*Rhinichthys cataractae*	common	rare
white sucker	*Catostomus commersonii*	rare	rare
longnose sucker	*Catostomus catostomus*	rare	rare
mottled sculpin	*Cottus bairdii*	abundant	rare
mountain whitefish	*Prosopium williamsoni*	rare	rare
brown trout	*Salmo trutta*	common	common
brook trout	*Salvelinus fontinalis*	common	rare
rainbow trout	*Oncorhynchus mykiss*	common	rare/common
westslope cutthroat trout[b]	*Oncorhynchus clarkii lewisi*	rare	NA

[a]MFISH notes that the information on abundance for all species in these streams is extrapolated based on surveys conducted in 1976, 1994, and 2003.
[b]Most likely limited to upper reaches of the North Fork Little Boulder River, outside of the project area (MNHP 2008).
Source: Biological Resources Report for the Boulder South, Highway 69 Project, 2009.

Several small trout were observed in shallow areas of the Boulder River, and in ditches near their confluences with the Boulder River. No population estimates or quantitative surveys were conducted. Fish habitat in the Boulder River appeared to be of good diversity and quality. In 2005, filamentous algae coated rocks and substrate in some parts of the river. Water temperatures were much warmer in the main Boulder than in the tributaries, which probably contributed to the proliferation of algae in the Boulder River. Substrate in the tributaries and in the Little Boulder River was predominately clean and the water was much cooler. The tributaries are probably important refuges for trout when summer water temperatures climb in the main Boulder River.

All of the species listed in Table 3.5 and described in this section are assumed to occur in the project area, although many species are more common in the Little Boulder River than in the Boulder River. While these species have the potential to occur, some species such as westslope cutthroat trout and other salmonids have a low probability of occurring in the project area during the typical summer construction season because of elevated stream temperatures and dewatering, particularly in the Boulder River.

Impacts

Widening of the road surface may reduce or alter riparian vegetation along the river channel, which may disrupt river channel dynamics and increase sedimentation during stormwater runoff events, thereby impacting aquatic species.

Mitigation

MDT will shift the alignment in the locations identified in Table 2.1 in order to avoid project-related encroachment of the road into the Boulder River. Actions that prevent sedimentation and

restrict construction timing may prevent or reduce impacts to aquatic species. Construction activities will be in compliance with the conditions of the SPA 124 (FWP) and the CWA 404 (USACE), which may include instream timing restrictions to minimize impacts to the fishery.

Species of Concern

The term "Species of Concern" includes species that are at-risk or potentially at-risk due to rarity, restricted distribution, habitat loss, and/or other factors. The term also encompasses species that have a special designation by organizations or land management agencies in Montana, including BLM Special Status and Watch species; USFS Sensitive and Watch species; U.S. Fish and Wildlife Service (USFWS) Threatened, Endangered and Candidate species. Federally listed species are discussed in detail in a later section.

Table 3.6 lists animal species of concern which may occur in the project area.

Table 3.6 Animal Species of Concern in Project Area

Common name	Scientific name	Potential Impacts	Last Observed	Environmental Baseline / Occurrence in Project Area
bald eagle	*Haliaeetus leucocephalus*	Nesting bald eagles are sensitive to human disturbance and may abandon nests prior to hatching. Young may leave nest due to disturbance.	2008	Spring and fall migrant, nesting in project area.
gray wolf	*Canis latrans*	Minimal to none. Species is highly mobile and will likely avoid human activity during construction. Crossing mitigation may reduce chance of vehicle collisions.	2006	Resident in area. No known den sites or occupied pack territories.
wolverine	*Gulo gulo*	Minimal to none. Very low percentage of suitable habitat occurs in project area. Species is highly mobile and will likely avoid human activity during construction. Crossing mitigation may reduce chance of vehicle collisions.	2006	Resident in area. No known den sites.
western spotted skunk	*Spilogale gracilis*	Minimal. Animal is very rare in Montana, and has not been seen in the project area since 1995. If present, some temporary loss of foraging or cover habitat may occur during construction.	1995	Very rare in Montana. No known den sites.
westslope cutthroat trout	*Oncorhynchus clarkii lewisi*	Minimal. Species collected upstream in North Fork Little Boulder River. Species has a low probability of occurring in the project area during the typical summer construction season because of elevated stream temperatures and dewatering, particularly in the Boulder River. There is some potential for this species to occur in the project area.	NA	Migratory species; may reside in the Little Boulder River for some portions of the year. Species not documented in the area.

[1]Key to rankings: G = Global rank based on range-wide status, S = State rank based on status of species in Montana.
Source: Biological Resources Report for the Boulder South, Highway 69 Project, 2009; MNHP, 2010.

Bald Eagle

The bald eagle was federally delisted from the ESA on August 9, 2007 by the USFWS, but is still protected under the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. Therefore management guidelines taken from the Montana Bald Eagle Working Group (MBEWG) Bald Eagle Management Guidelines (2009) and the National Bald Eagle Management Guidelines (USFWS 2007) are discussed in this section.

The MBEWG defines Nest Site Management Zones as concentric circles expanding from an active nest and notes that visual buffers within ¼ mile of nest sites should not be removed. During field surveys conducted on May 28, 2008, an active bald eagle nest was identified along the main channel of the Boulder River on the east side of the highway opposite the Boulder Hot Springs property approximately 0.11 miles from MT 69 and visible from the road at MP 34.3±. Due to the relative proximity of the nest, a portion of the project is located in an area defined as Zone I, or the area within a ¼ mile (400 m) radius of an active nesting site. One chick was observed sitting on the edge of the nest, and both adults were viewed at different times. This occurrence was not included in the MNHP database and has been submitted for inclusion.

Other Species of Concern

The 2005 MNHP database searches documented two wildlife species of interest, which are located near the proposed project area. A great blue heron (*Ardea herodias*) rookery with eighty-six birds was located south of Clark Gulch, on the east side of MT 69, in large cottonwoods on the floodplain. A mountain plover (*Charadrius montanus*) occurrence documented attempted breeding in 1994 near Cabin Gulch on the east side of MT 69. However, these sites are outside of the current project boundaries and are unlikely to be affected by the project as currently described.

Impacts

Minimal impacts to the wolverine, western spotted skunk, and gray wolf are anticipated as a result of this project. These species are highly mobile and will likely avoid human activity during construction; further, animal crossing mitigation measures may reduce chance of vehicle collisions. With regard to the bald eagle, human activity may cause adults to abandon nest, exposing young to risk of mortality. Impacts to westslope cutthroat trout are similar to those described for other aquatic species.

Mitigation

Actions recommended for other aquatic species may also protect westslope cutthroat trout, including prevention of sedimentation and restricted construction timing.

Table 3.7 provides guidance on timing to avoid disturbing nesting bald eagles with human activity. Disturbance can include blasting, heavy machinery operations, road construction activities, and human noise and movement. Additional information can be found in the MBEWG (2009) guidelines.

Table 3.7 Sensitivity of Nesting Bald Eagles to Human Activity

Phase	Activity	Inclusive Dates	Sensitivity to Human Activity	Comments
I	Nest Building / Courtship	Feb 1 - April 15	Most sensitive	Most critical period manifested by nest abandonment. Nest site tenacity is weakest in new breeding areas.
		December 1 – December 31	Moderately sensitive	
II	Egg Laying / Incubation	Feb 15 - May 31	Most sensitive	Human activity of even limited duration may cause desertion, not only of nest sites, but also of long established breeding areas. Flushed birds leave eggs unattended. Eggs are susceptible to cooling, loss of moisture, overheating, and predation.
III	Hatching / Rearing	May 1 - Aug 15	Moderately sensitive	As hatching approaches most birds become tenacious to clutches. Generally uncommon to abandon a nest after young have hatched. First half of nesting period, unprotected young are most susceptible to elements.
IV	Fledging	June 15 - Aug 15	Least sensitive	Nestlings may miss feedings which may affect survival of young birds. Risk to young prematurely leaving nest due to disturbance.
V	Wintering / Migration	October 1 – April 15	Least sensitive	

Source: Biological Resources Report for the Boulder South, Highway 69 Project, 2009; MBEWG, 2009.

Based on the guidelines listed in Table 3.7, some construction activities, including structure and vegetation removal, may be subject to timing restrictions. The large perching trees near the Boulder River will be avoided during the critical periods as defined in Table 3.7; however, it is unlikely that any of these trees will need to be cleared during this project.

Threatened and Endangered Species

There are two Threatened and Endangered Species that may occur within the project area, as presented in Table 3.8.

Table 3.8 Threatened and Endangered Species with Potential to Occur in Project Area

Common name	Scientific name	Potential Impacts	Habitat	General Reasons for Decline	Last Observed	Environmental Baseline / Occurrence in Project Area
Canada lynx	*Lynx canadensis*	Minimal to none. Very low percentage of suitable habitat occurs in project area. Species is highly mobile and will likely avoid human activity during construction. Crossing mitigation may reduce chance of vehicle collisions.	The Elkhorn, Boulder, and Highland mountain ranges have relatively continuous habitat for this species.	Human-caused mortality, habitat loss and fragmentation	2003	Resident in area. No known den sites.
Ute ladies'-tresses	*Spiranthes diluvialis*	Habitat disturbance and hydrologic alteration due to construction.	Meandered wetlands and swales in broad, open valleys, at margins with calcareous carbonate accumulation	Land use and alteration of habitat	NA	Known to occur in Jefferson County

Source: Biological Resources Report for the Boulder South, Highway 69 Project, 2009.

Canada Lynx

Canada lynx exist near the project area and were last documented by MNHP in 2006. MNHP notes that Canada lynx are found in the Elkhorn Mountains, east of the project area. No critical lynx habitat exists in the project area. The adjacent Beaverhead/Deerlodge National Forest has no documented occupancy of lynx in the forest.

Suitable habitat in the project area is limited and lynx presence would likely consist of transitory animals. Direct mortality from project construction itself is not expected. Direct and indirect effects to lynx may occur through highway mortality, and through possible riparian and wetland habitat loss. Riparian and scrub/shrub wetland habitats are important to lynx because they provide foraging, breeding and cover habitat for their primary prey, snowshoe hare. Lynx may avoid the area during construction activities, and no known dens exist in the area.

No lynx road kills have been reported, and there are no known den sites in the project area. Lynx have large home ranges in this region due to low snowshoe hare densities. Low snowshoe hare densities lessen the impact of loss of riparian and wetland habitats in the project area. Based on this information minor project impacts are expected, and therefore the project is **not likely to adversely affect Canada lynx or its habitat.**

Ute ladies'-tresses

Potential habitat for Ute ladies'-tresses (*Spiranthes diluvialis*) was identified in the project area during botanical surveys performed in 2005. In early August 2008, the project corridor was surveyed and over 250 plants were catalogued. Through consultation with MNHP and the botanist who originally identified the species, it was determined that the plants within the Boulder – South project area are not Ute ladies'-tresses, but are the more common hooded ladies'-tresses (*Spiranthes romanzoffiana*). It is unlikely that both species inhabit the Boulder site as they are seldom found growing together, but a mixed population cannot be entirely ruled out.

Given this possibility, road construction has the potential to directly impact plants by crushing, displacing soil and plants, or smothering with slash or soil. Road construction would also render potential habitat unavailable for colonization or use.

Although the 250 individual plants were identified as *S. romanzoffiana*, it is not inconceivable that the populations observed might be mixed and contain some *S. diluvialis* individuals. Based on this conclusion, minor project impacts are expected and therefore the project is **not likely to adversely affect Ute ladies'-tresses or its habitat.**

Air Quality

The proposed project is located in an unclassifiable/attainment area of Montana for air quality under 40 CFR 81.327, as amended. As such, this proposed project is not covered under the U.S. Environmental Protection Agency (EPA)'s Final Rule of September 15, 1997 on Air Quality Conformity.

The EPA has also identified a group of 21 mobile source air toxics (as set forth in EPA's final rule, *Control of Emissions of Hazardous Air Pollutants from Mobile Sources*) and extracted six

priority Mobile Source Air Toxics (MSATs) considered to be priority transportation toxics. This project will not result in meaningful changes in traffic volumes, vehicle mix, location of the existing facility, or any other factor that would cause an increase in emissions impacts relative to the No Build Alternative. Consequently, this effort is exempt from analysis for MSATs.

Impacts

No permanent air quality impacts are anticipated as a result of this proposed project. Temporary air quality impacts related to construction are discussed in Section 3.4.

Mitigation

No mitigation is proposed or required.

3.4 Construction Impacts

No Build Alternative

Impacts

There would be no construction impacts resulting from the No Build Alternative.

Mitigation

No mitigation is proposed or required.

Transportation

Impacts

Construction activities from the Preferred Alternative would likely cause temporary impacts to traffic flow, especially in relation to the removal of the existing bridge and construction of the new bridge crossing the Little Boulder River. MDT may consider a temporary closure, phased construction, or a temporary detour in order to accommodate construction activities, including blasting and bridge construction activities.

Mitigation

Traffic interruptions would be minimized to the extent practicable. Advance warning and detour signing would be in accordance with the Manual on Uniform Traffic Control Devices. Blasting activities would be conducted in accordance with the Controlled and Production Blasting guidelines contained in MDT's Special Provisions.

Community

Impacts

Construction activities from the Preferred Alternative could cause temporary inconveniences to area residents and tourist travelers. These could occasionally result in longer travel times, detours, temporary closures, and noise and dust due to the use of heavy machinery.

Mitigation

Traffic interruptions would be minimized to the extent possible. Advance warning and detour signing would be in accordance with the Manual on Uniform Traffic Control Devices.

The project's contractor would be subject to all applicable laws and regulations and all requirements contained in the contract regarding noise pollution. Dust control would also be implemented by using either water or another approved dust-suppressant.

Natural/Physical Environment

Impacts

Temporary impacts to wildlife may include loss of some habitat within the vicinity of the construction zone. The project may also temporarily affect individual species through noise, vibration, human activity, and construction location and equipment. Loss of nesting, foraging, and cover habitat may occur from either direct removal of habitat for the road alignment and side slopes, or from temporary vegetation clearing for construction staging activities.

Effects vary by species and type of habitat occurring in the project area. During construction activity, more mobile species such as adult birds, elk, moose, large carnivores, and other large and mid-size mammals generally move to adjacent habitats to avoid direct mortality from construction activities. Some less mobile species or individuals may suffer direct mortality from construction activities. The habitats within the project area that may be disturbed during project construction are currently subject to relatively low levels of human development and recreational disturbance. These habitats extend far beyond the highway corridor, and refuge habitat will be available for occupation by the more mobile species moving away from the disturbance of construction activities.

There is potential for short-term water quality impacts due to increased erosion and sedimentation during construction activities.

During construction, surface water runoff could be contaminated by spills of petroleum products, lubricants, and hydraulic fluid from construction equipment.

Construction activities could occasionally and temporarily result in road dust and combustion emissions due to the use of heavy machinery and generators.

As noted previously, MDT may consider a temporary detour to accommodate construction activities. If agreeable to the County, it may be possible to utilize the County Road system from Hubbard Lane to White Bridge Road as a detour. If so, minimal temporary impacts would result to the land areas immediately adjacent to the County road system. If this detour is not feasible, a more localized detour at the Little Boulder River Bridge may be required. A localized detour would require a temporary bridge structure crossing the Little Boulder River and is anticipated to result in approximately 0.7 acres of temporary impacts to adjacent areas.

Mitigation

To minimize impacts to actively nesting birds in the project area, contractors will follow suggested timing restrictions for activities likely to cause disturbance, including blasting, structure and vegetation removal. The large perching trees near the Boulder River will be avoided during the critical periods as defined in Table 3.7; however, it is unlikely that any of these trees will need to be cleared during this project.

The construction contractor will obtain authorization under the construction General Storm Water Discharge Permit from DEQ and will prepare and adhere to their Storm Water Pollution Prevention Plan (SWPPP) and temporary facilities permits. In general, BMPs would be used to minimize the effect of sedimentation and/or run-off during the roadway construction periods.

Asphalt plants and gravel crushers that may be required for roadway construction for the Preferred Alternative may require air quality permits to be obtained by the contractor. The contractor will be required to operate all equipment to meet the minimum air quality standards established by federal, state, and local agencies. The location of any new staging, crushing or borrow sources will require review for cultural and biological resource impacts.

3.5 Cumulative Impacts

Other Recent and Pending Actions

- *Basin – Boulder*
  This mill/fill seal and cover project is located on I-15 from RP 157.7 to 163.1 and was let to contract in February 2009. Project completion is estimated for summer of 2010.
- *Elkhorn Road South*
  This roadway reconstruction project is located south of the Boulder – South project on MT 69 from approximately RP 22.3 to RP 31.8 and was let to contract in January 2010. Project completion is estimated for summer of 2011.
- *JCT S-359 – North*
  This seal & cover project is located on Montana Highway 69 from approximately RP 6.1 to RP 22.3 and is anticipated to be let to contract for the 2011 construction season.

Each of the above projects has safety enhancement and improved operations as key objectives. Their implementation could have positive cumulative effects on safety, but it is unlikely that they would have cumulative environmental impacts because of their distance from one another. There are no other projects in the area that would contribute to cumulative impacts when considered in conjunction with the proposed project.

Impacts

The Preferred Alternative would not increase roadway capacity and therefore would not induce land use changes or promote unplanned growth. Reconstruction of the roadway will likely result in positive impacts on safety performance for area residents, tourist travelers, and service and emergency vehicles. These improvements could not be provided under the No Build Alternative.

4.0 SECTION 4(f) IMPACT DETERMINATIONS

Section 4(f) was created when the US Department of Transportation was formed in 1966. It was initially codified in the US Code at 49 U.S.C. 1653(f) (or Section 4(f) of the USDOT Act of 1966). Later that year, 23 U.S.C. 138 was added. In 1983, Section 1653(f) was reworded and recodified at 49 U.S.C. 303. These two statutes have no real practical distinction and are still commonly referred to as "Section 4(f)."

Section 4(f) declares that "[i]t is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites."

Section 4(f) specifies that "[t]he Secretary [of Transportation] shall not approve a transportation program or project . . . requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of an historic site of national, State, or local significance (as determined by the Federal, State, or local officials having jurisdiction over the park area, refuge, or site) unless:

1) there is no prudent and feasible alternative to using that land; and

2) the program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.

Congress amended Section 4(f) in 2005 when it enacted the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). Section 6009 of SAFETEA-LU added a new subsection to Section 4(f), which authorizes FHWA to approve a project that results in a *de minimis* impact to a Section 4(f) resource without the evaluation of avoidance alternatives typically required in a Section 4(f) Evaluation. Section 6009 amended 23 U.S.C. 138 to state:

> The requirements of this section shall be considered to be satisfied and an alternatives analysis not required if the Secretary determines that a transportation program or project will have a *de minimis* impact on the historic site, parks, recreation areas, and wildlife or waterfowl refuges. In making any determination, the Secretary shall consider to be a part of the transportation program or project any avoidance, minimization, mitigation, or enhancement measures that are required to be implemented as a condition of approval of the transportation program or project. With respect to historic sites, the Secretary may make a finding of *de minimis* impact only if the Secretary has determined in accordance with the consultation process required under Section 106 of the National Historic Preservation Act that the transportation program or project will have no adverse effect on the historic site or there will be no historic properties affected by the transportation program or project; the finding has received written concurrence from the State Historic Preservation Officer; and the finding was developed in consultation with the parties consulted under the Section 106 process.

4.1 Coordination

As discussed in the EA for this proposed project, two historic NRHP-eligible properties would be impacted by the Preferred Alternative. As stated in the *Guidance for Determining De Minimis Impacts to Section 4(f) Resources* (FHWA 2005), SHPO must concur in writing with the Section 106 "no effect" determination and must be informed that FHWA intends to make a *de minimis* finding based on the Section 106 effect determination. Consulting parties under Section 106 must also be informed of the *de minimis* finding. On August 12, 2008, MDT submitted an initial letter to SHPO requesting concurrence with the determination of "no effect" for the State Ditch and noting that the Little Boulder River will be treated under the terms of the Historic Roads and Bridges Programmatic Agreement. On May 7, 2010, MDT submitted a second letter to SHPO requesting concurrence with a revised determination of "no effect" based on an updated understanding of project impacts to the State Ditch. SHPO concurred with the "no effect" determination on the State Ditch (see correspondence in Appendix A). FWHA subsequently made a *de minimis* finding with respect to the State Ditch.

In their letter dated July 8, 2010, the National Park Service (NPS) advised that Historic American Engineering Recording (HAER) documentation would not be necessary for the Little Boulder River Bridge (see correspondence in Appendix A).

There would be no parks, recreation areas, or wildlife or waterfowl refuges that would be converted to a transportation use by the Preferred Alternative.

4.2 Proposed Action

The proposed action is a rehabilitation/reconstruction and widening project on an approximately six-mile portion of MT 69 south of the town of Boulder. The work may include widening of the roadway, signing and pavement markings, facilities for pedestrians and bicyclists, and wildlife crossing measures. The purpose of the proposed project is to improve safety for users of the project corridor while mitigating project impacts to the surrounding natural and built environments.

4.3 Section 4(f) Properties

There are two properties in the Boulder-South corridor that are NRHP-eligible and protected by Section 4(f), including the historic State Ditch and Little Boulder River Bridge. Table 4.1 identifies each property and the location, eligibility for protection, and the determination of effect for each resource. Figures 4-1 and 4-2 illustrate the location of each protected property and the anticipated area of impact.

Table 4.1 Properties Protected by Section 4(f)

Property	Location	Site No.	Type of Structure	Eligibility	Effect
State Ditch	MP 37.2±	24JF1881	Ditch	Individually	No Effect
Little Boulder River Bridge	MP 34.6±	24JF0813	Bridge	Individually	Adverse Effect

Figure 4-1 Proposed Impacts to State Ditch

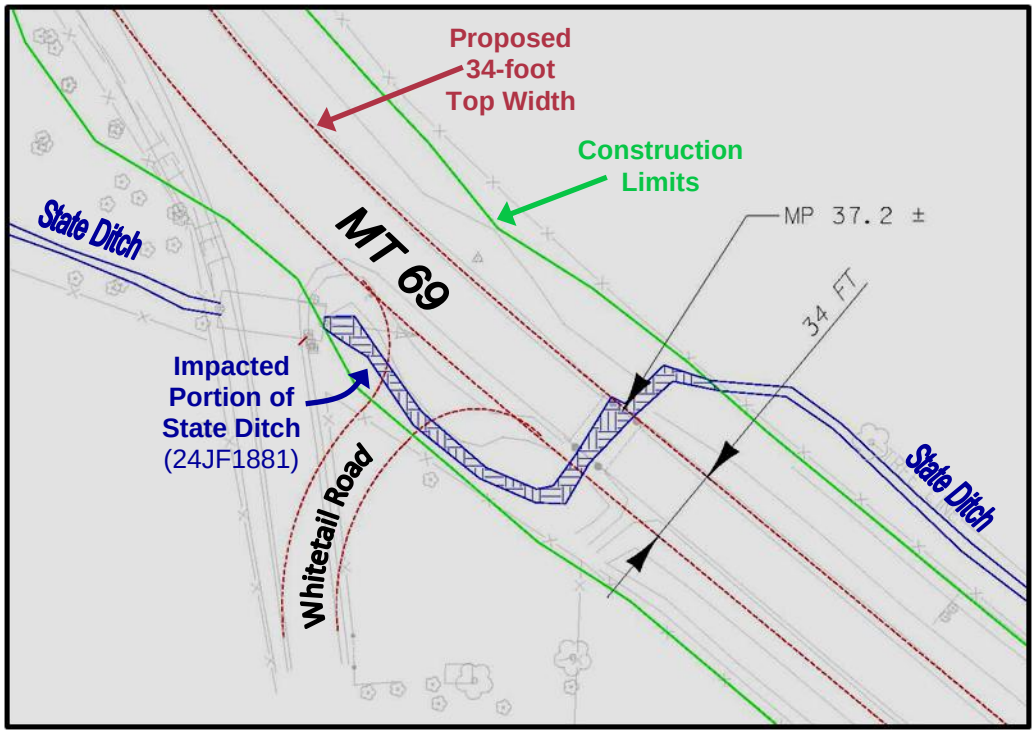
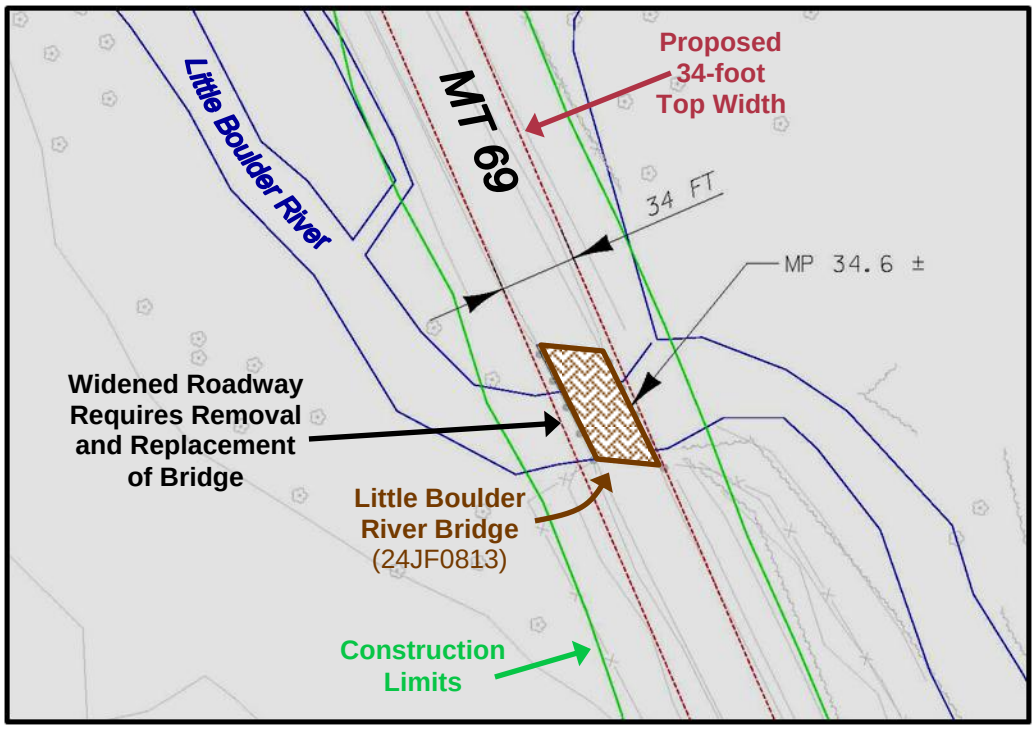


Figure 4-2 Proposed Impacts to Little Boulder River Bridge



State Ditch

Impacts to the State Ditch are limited to right-of-way encroachments necessary for the installation of wider shoulders. The encroachment will require rechanneling up to 300 feet of the State Ditch. The ditch would continue to function in its historic capacity and there would be no change in the existing alignment of the ditch, its dimensions, setting, use, or appearance as a result of the project. Accordingly, no mitigation would be required for the State Ditch.

MDT has coordinated the proposed impacts to this property with SHPO (see correspondence in Appendix A).

Little Boulder River Bridge

The Little Boulder River Bridge does not meet current standards and has a low design load, and will therefore need to be replaced in accordance with the Historic Roads and Bridges Programmatic Agreement contained in Appendix C. Because this structure cannot remain in its current location, removal of the bridge constitutes a "use" of this Section 4(f) property. A Programmatic Section 4(f) Evaluation for the Little Boulder River Bridge is included in Appendix B.

MDT has coordinated the proposed impacts to this property with SHPO, ACHP, and NPS (see correspondence in Appendix A and Programmatic Agreement in Appendix C).

5.0 PERMITS AND AUTHORIZATIONS

The proposed action would be in compliance with both the water quality provisions of 75-5-318 MCA for Section 318 authorizations and stream protection under Sections 87-5-501 through 509 MCA, inclusive. An on-site review of the proposed project area would be conducted with representatives from regulatory agencies if necessary. Comments, suggestions, and/or conditions resulting from review of existing data and/or on-site inspections would be documented, included in the proposed project's files, and taken into account in the final design specifications.

The proposed action would require the following permits or authorizations under the CWA (33 U.S.C. 1251-1376, as amended):

- A Section 402/Montana Pollutant Discharge Elimination System (MPDES) authorization from the DEQ's Permitting & Compliance Division. The Build Alternative would require new right-of-way and require an MPDES construction phase permit, which is issued in response to the 1987 re-authorization of the CWA. The CWA requires EPA to institute a National Pollutant Discharge Elimination System (NPDES) permitting program for storm drainage systems or to approve the state's programs. EPA approved Montana's program in 1987.

  Obtaining the MPDES permit requires development of a SWPPP that includes a temporary erosion and sediment control plan. The erosion and sediment control plan identifies BMPs as well as site-specific measures to minimize erosion and prevent eroded sediment from leaving the work zone.

- Section 404 Permit and SPA 124 notification. The project may affect the Boulder River, a Water of the U.S., as well as wetlands. A 404 permit from the USACE would be required for wetland fill in addition to fill into the Boulder and Little Boulder rivers, ephemeral and intermittent drainages, and some affected irrigation ditches. A SPA 124 Notification to FWP would be required for impacts to the Boulder and Little Boulder rivers and affected ephemeral and intermittent drainages. BMPs would be followed to prevent dirt and debris from entering the stream where adjacent to construction activities. Necessary permits and notifications would be required prior to the commencement of disturbance to jurisdictional waters.

- Floodplain Development Permit within a designated 100-year floodplain. A floodplain development permit would be required because work would be conducted in the floodplain.

All work would also be in accordance with the Water Quality Act of 1987 (P.L. 100-4), as amended.

6.0 COMMENTS AND COORDINATION

6.1 Agency Coordination

State and federal regulatory agencies were asked to participate in the EA process in order to foster communication, identify and resolve issues, and provide timely and constructive comments on draft work products. Letters were sent to the following regional, state, and federal resource agencies as a notification that FHWA, in cooperation with MDT, propose to reconstruct a portion of MT 69.

- Department of Natural Resources and Conservation (DNRC)
- BLM
- USACE
- USFWS
- DEQ
- Montana Fish, Wildlife & Parks (FWP)
- EPA
- USFS
- Jefferson County Board of Commissioners
- City of Boulder

Through these letters, MDT requested each agency's participation in identifying concerns that would need to be addressed through the environmental review process. Copies of interagency correspondence are included in Appendix F of the Alternatives Analysis document and are incorporated by reference.

An initial Agency Coordination Meeting was scheduled with the regulatory agencies with jurisdiction, interest, or expertise on issues within the study corridor. This meeting was held on July 30, 2008 and consisted of a presentation of the Purpose and Need for the proposed project, the alternatives to be considered, and the proposed methodologies to be used for the environmental analyses. Representatives were present from DEQ, FWP, USACE, USFWS, EPA, BLM, and Jefferson County. DNRC and the City of Boulder declined to participate in the project.

A second Agency Coordination Meeting was held on December 17, 2008. The intent of this meeting was to discuss agency concerns regarding the Alternatives Analysis and the BRR documents. Representatives from DEQ, FWP, USFWS, EPA, BLM, and Jefferson County attended the meeting. Written comments received from agencies regarding these technical documents and other matters are included in Appendix F of the Alternatives Analysis document and are incorporated by reference.

A third Agency Coordination Meeting was held on November 20, 2009 to discuss the revised Alternatives Analysis document. Representatives from USFWS, USACE, FWP, and DEQ attended the meeting. Written comments received from agencies following this meeting are included in Appendix F of this EA.

6.2 Public Involvement

Public Meetings

A public scoping meeting was conducted under the NEPA/MEPA process for this proposed project and held at the Jefferson High School on June 1, 2005 at 6:30 p.m. The meeting format included a formal presentation and a question/comment period. The purpose of the meeting was to introduce the project and gather public opinion regarding issues and concerns related to transportation in the MT 69 corridor. The southern (MP 22.3 to MP 31.8±) and northern (MP 31.8± to MP 37.5±) portions of the proposed project and two alignment alternatives for the northern portion were presented at the public meeting. One alignment option involved reconstruction of the existing MT 69 alignment, and one involved construction of a new alignment on the east side of the Boulder River following an existing Jefferson County road as much as practicable. Aerial photographs illustrating the proposed centerline of the existing alignment and the alternate alignment alternatives were displayed around the room. Approximately 100 people attended the meeting and the majority of those in attendance expressed their disapproval of any new alignment east of the river. A transcript of the meeting is included in Appendix B of the Alternatives Analysis document and is incorporated by reference.

The meeting location was accessible under the Americans with Disabilities Act (ADA). Contact information was obtained from attendees by having a dedicated greeter who welcomed citizens to the event, ensured sign-in, distributed a project newsletter, and provided a brief project overview. Participants were encouraged to provide written comments via a comment sheet. Comments received at and following the meeting are included in Appendix C of the Alternatives Analysis document and are incorporated by reference.

Members of the public were invited to comment on the Purpose and Need for the project. A newspaper advertisement was published in the Boulder Monitor announcing the availability of the Purpose and Need statement on the project web site and inviting public comments. No written public comments were received during the public comment period from September 10, 2008 to October 10, 2008 with regard to the project Purpose and Need.

A Public Information Meeting was held on March 23, 2010 at the Jefferson High School in Boulder. The meeting location was accessible under ADA. The meeting format included a presentation with questions and comments provided throughout the presentation. The purpose of the meeting was to discuss the status of the project, present the alternatives eliminated during the Alternatives Analysis process completed in 2009, provide an update on the EA, and gather public input. Sixty-five members of the public signed in for the meeting. Numerous written comments were received during the comment period.

Additional Public Involvement Events

A Public Hearing will be conducted to obtain comments on this Environmental Assessment during the public review and comment period. Notice of availability of this document and notice for the Public Hearing have been published in the *Boulder Monitor*. Public Hearing notices have been sent to the project mailing list, and the notice has been posted on the project website at www.mdt.mt.gov/pubinvolve/boulder/

Comments on this EA may be submitted electronically on MDT's website at www.mdt.mt.gov/pubinvolve/boulder/ or at the Public Hearing, or by writing to MDT at:

Tom S. Martin, P.E.
Environmental Services Bureau Chief
Montana Department of Transportation
2701 Prospect Avenue
P.O. Box 201001
Helena, MT 59620-1001
Email address: tomartin@mt.gov

Written comments are due by the date indicated in the Distribution Letter attached to this EA. A formal Public Hearing will also be conducted in Boulder during the 30-day public review period. A project overview will be provided and attendees will be invited to provide formal comments for the public record.

7.0 LIST OF PREPARERS

Reviewer/Affiliation	Role	Education and Experience
Lloyd H. Rue, P.E., P.T.O.E. Program Development Engineer FHWA	Lead Agency	B.S. Civil Engineering, M.S. Civil Engineering. 24 years experience in geometric design, traffic engineering, and safety.
Brian Hasselbach Right-of-Way and Environmental Specialist FHWA	Lead Agency	B.S. Civil Engineering, B.S. Biology, M.S. Environmental Studies. 11 years of experience with highway engineering, environmental engineering, and program/project management.
Jeff Patten Operations Engineer FHWA	Lead Agency	B.S. Construction Engineering Technology – Over 15 years of professional experience in highway engineering, construction and program/project management.
Joe Olsen, P.E. Butte District Engineering Services Engineer MDT	Lead Agency	B.S., Geological Engineering. Over 23 years experience in highway planning, engineering and design; construction; and both project and program management/development.
Gabe Priebe, P.E. Consultant Project Engineer MDT	Lead Agency	B.S., Civil Engineering, B.A., Mathematics. 10 years experience in construction, highway engineering, planning-level safety analysis and project management.
Tom S. Martin, P.E. Bureau Chief, Environmental Services MDT	Lead Agency	B.S. Civil Engineering - Over 17 years experience in design and management of transportation facilities.
Heidy Bruner, P.E. Engineering Section Supervisor MDT	Lead Agency	B.S. Environmental Engineering, approximately 13 years environmental engineering design and management.

Preparer/Affiliation	Role	Education and Experience
Sarah Nicolai DOWL HKM	Project Management, Document Preparation	B.A., Civil Engineering. Over six years of environmental and planning-related documentation experience.
David Stoner DOWL HKM	Document Preparation	M.S., Urban and Regional Planning; B.A., Communication Studies. Over three years of planning and technical writing experience.
Jamie Jespersen DOWL HKM	Document Preparation	B.A., Civil Engineering. Over three years of environmental and planning-related documentation experience.
Darryl L. James, AICP Gallatin Public Affairs	Environmental Compliance	M.P.A., with an Environmental Concentration; B.A., Public Affairs and Political Science. Senior consultant with over 18 years of professional experience in transportation planning, NEPA analysis, and technical report writing.

8.0 DISTRIBUTION LIST

Federal Agencies

U.S. Environmental Protection Agency
Region VIII, Montana Office
Federal Building, 10 W 15th Street, Suite 3200
Helena, MT 59626
Attn: Stephen Potts, Environmental Scientist

U.S. Army Corps of Engineers
Helena Regulatory Office
10 West 15th Street, Suite 2200
Helena, MT 59626
Attn: Todd Tillinger, Montana Program Manager
Deborah Blank, Project Manager

U.S. Department of the Interior
Fish & Wildlife Service
Montana Field Office
585 Shepherd Way
Helena, MT 59601
Attn: R. Mark Wilson, Field Supervisor
Anne Vandehey, Wildlife Biologist

U.S. Forest Service
Deer Lodge National Forest
Hebgen Lake District Office
P.O. Box 520
331 Hwy 191 N.
West Yellowstone, MT 59758
Attn: Dick Judge, Forest Engineer

U.S. Bureau of Land Management
106 N. Parkmont
Butte, MT 59701
Attn: Rick Hotaling, Field Manager
Kelly Acree, Realty Specialist
Mike Wyatt, Realty Specialist
Scot Franklin, Wildlife Biologist

State Agencies

Montana Fish, Wildlife & Parks
1420 East Sixth Avenue
P.O. Box 200701
Helena, MT 59620-0701
Attn: James Darling, Habitat Section Supervisor
Stephen Knapp, Habitat Section Supervisor

Montana Fish, Wildlife & Parks
P.O. Box 1137
Townsend, MT 59644
Attn: Thomas Carlsen, Wildlife Biologist
Ronald Spoon, Fisheries Biologist

Montana Department of Natural Resources & Conservation
Central Land Office
8001 N. Montana Avenue
Helena, MT 59602
Attn: Garry Williams, Area Manager

Montana Department of Environmental Quality
1520 East 6th Avenue, P. O. Box 200901
Helena, MT 59620-0901
Attn: Tom Ellerhoff, Administrative Officer, Director's Office
Jeff Ryan, Environmental Science Specialist
Mark Kelley, Research Specialist
Chris Romankiewicz, Compliance Inspector

Montana Environmental Quality Council
Office of the Director
Capitol Post Office
P. O. Box 215
Helena, MT 59620

Office of the Governor
Montana State Capitol Bldg.
P.O. Box 200801
Helena, MT 59620-0801
Attn: Brian D. Schweitzer, Governor

State Agencies, continued

Montana State Historic Preservation Office
1410 8th Avenue
P.O. Box 201202
Helena, MT 59620-1202
Attn: Dr. Mark Baumler, Historian

Montana State Library
1515 East 6th Avenue, P.O. Box 201800
Helena, MT 59620-1800
Attn: Roberta Gebhardt, Collections Management Librarian

Montana Transportation Commission
P.O. Box 201001
Helena, MT 59620-1001
Attn: Chairwoman

Local Agencies

Jefferson County Board of Commissioners
201 Centennial
P.O. Box H
Boulder, MT 59632-0249
Attn: Thomas Lythgoe, Chair

City of Boulder
304 N. Main
Boulder, MT 59632
Attn: Gary Craft, Mayor

9.0 LIST OF SOURCES/DOCUMENTS

Big Sky Acoustics, LLC. *Traffic Noise Analysis*. 2008.

Frontier Historical Consultants. *Cultural Resource Inventory and Assessment, Boulder South, Jefferson County, STPP 69-1(9)22, Control No. 2019*. 2007.

Garcia and Associates. *Biological Resources Report for the Boulder South, Highway 69 Project, Project # STPP 69-1(9)22, Control # 2019, Work Type 140*. 2008.

DOWL HKM. *Alternatives Analysis for STPP 69-1(9)22, Boulder-South, (CN 2019), in Jefferson County, Montana*. 2009.

Copies of these reports are available at:

Montana Department of Transportation
2701 Prospect Avenue
P.O. Box 201001
Helena, MT 59620 - 1001
Phone: (406) 444-6200 / TTY: (800) 335-7592

"MDT attempts to provide accommodations for any known disability that may interfere with a person participating in any service, program, or activity of the Department. Alternative accessible formats of this information will be provided upon request. For further information call (406) 444-7228 or TTY (800)335-7592, or Montana Relay at 711."

This document may be obtained electronically from the Montana Department of Transportation Website at:
http://www.mdt.mt.gov/pubinvolve/eis_ea_finalized.shtml

MONTANA MDT DEPARTMENT OF TRANSPORTATION

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