



# Finding of No Significant Impact

Arthur Avenue

CM 7-2(36)94

CN 4611

in

City of Missoula

Missoula County

Submitted Pursuant to

42USC 4332(2)(c) 49 U.S.C. 303

and Sections 2-3-104, 75-1-201 M.C.A.

by the

Montana Department of Transportation

and

U.S. Department of Transportation

Federal Highway Administration

March 2011

FEDERAL HIGHWAY ADMINISTRATION  
**FINDING OF NO SIGNIFICANT IMPACT**

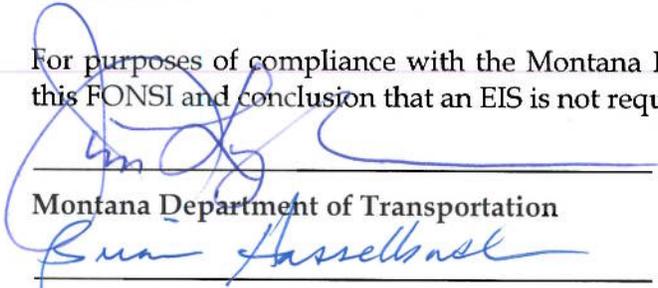
For

Project Number: CM 7-2(36)94  
Project Name: Arthur Avenue  
Control Number: 4611

in  
City of Missoula  
Missoula County

The Montana Department of Transportation (MDT) and the US Department of Transportation Federal Highway Administration (FHWA) have selected the 'No-Build' Alternative, as described in the Environmental Assessment (EA) approved for distribution on March 29, 2006, and have determined it will have no significant impacts on the human environment. While MDT and FHWA also determined that the preferred build alternative described on pages 2-19 to 2-32 of the EA will have no significant impacts, due to public opposition and concerns regarding lack of continuity with neighborhood character, the preferred build alternative was not selected. Additional rationale for this decision is provided in the attached analysis. This Finding of No Significant Impact (FONSI) is based on the attached EA which has been independently evaluated by the FHWA and determined to adequately and accurately discuss the need, environmental issues, and impacts of the proposed project and 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 EA.

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

  
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Montana Department of Transportation

Federal Highway Administration

3/15/2011  
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Date

3/18/11  
\_\_\_\_\_  
Date

**Project Abstract and Location:**

This project includes roadways between the Madison Street Bridge and 6<sup>th</sup> Street, and Arthur Avenue and Maurice Avenue. The project was proposed for purposes of improving traffic flow, reducing out-of-direction travel, and improving safety. The project is needed to meet the demands of a mixed variety of motor vehicles, bicycles, and pedestrians and provide an aesthetic and efficient entrance into the University, while maintaining adequate capacity for highway traffic. (Please see the attached EA (specifically page 1-1) for additional details.)

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## **1.0 Introduction**

This document summarizes the final coordination activities undertaken by the Montana Department of Transportation (MDT) and the US Department of Transportation Federal Highway Administration (FHWA) to complete the Arthur Avenue Environmental Assessment (EA). This document has been developed in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended; Council on Environmental Quality (CEQ) regulations, Parts 1500-1508; the Montana Environmental Policy Act (MEPA); and other applicable laws and regulations. The EA, which is attached as Appendix C, describes the potential social, economic, and environmental effects of reconstructing Arthur Avenue from 6<sup>th</sup> Street to 5<sup>th</sup> Street, including the intersections; realignment of the US Highway 12 eastbound couplet between Madison Street bridge and the 6<sup>th</sup> Street/Maurice Avenue intersection; and realignment of the US Highway 12 westbound couplet between the Madison Street bridge and the Arthur Avenue/5<sup>th</sup> Street intersection.

## **2.0 Selected Alternative**

Due to public opposition of the project, MDT and the FHWA have decided to designate the “No-Build” Alternative as the selected Alternative. This decision does not preclude further action by the City of Missoula or the University of Montana. However, as this route is a state highway, any future consideration of this proposed project would require additional MDT and public involvement.

At this time, the City of Missoula and the University of Montana are working to develop a locally funded project in order to provide interim improvements to address basic safety issues associated with the high volume of pedestrians, bicycles and motor vehicles entering the University of Montana campus and passing through onto US Highway 12. The primary focus is to improve safety, especially for pedestrians and bicyclists. The proposed local project improves traffic flow to the extent necessary to address safety issues. A different number of lanes on Arthur Ave, as well as pedestrian crossing widths would be provided. MDT has committed to assisting with the cost of the project using state funds. Additional environmental review in accordance with MEPA will be conducted.

### **2.1 Basis for Decision**

As described in the EA, the Arthur Avenue project was proposed for purposes of improving traffic flow, reducing out-of-direction travel, and improving safety. The project is needed to meet demands of a mixed variety of motor vehicles, bicycles, and pedestrians, while maintaining adequate capacity for highway traffic. Approximately 25 alternatives were evaluated that included minimal, moderate and extensive improvements. Minimal improvements included alternatives such as new pavement markings, signal changes, and advance signing. Moderate improvements included alternatives for realignment and roundabouts, while extensive improvements included fly over and new overpass structures. Section 2 of the EA provides a detailed description of the alternatives evaluated.

The preferred build alternative, generated cooperatively between MDT, FHWA, the City of Missoula, and the University of Montana proposes to reconstruct Arthur Avenue from 6<sup>th</sup> to 5<sup>th</sup> Street, including intersections. The proposed project would also include realignment of the US Highway 12 east bound couplet (traffic flowing north from Madison Street bridge) between the Madison Street bridge and 6<sup>th</sup> Street/Maurice Avenue intersection; and realignment of the U.S.

Highway 12 west bound couplet (traffic flowing south from Madison Street bridge) between the Madison Street bridge and Arthur Avenue/5<sup>th</sup> Street intersection. A detailed analysis of the preferred build alternative is provided in the EA. Additionally, this alternative would result in the 'use' of a significant publicly owned park and historic site protected under Section 4(f) of the US Department of Transportation Act. As such, a Draft Section 4(f) Evaluation prepared by the FHWA was included in the EA.

Even though the preferred build alternative provides a safe and efficient system that meets the project's purpose and needs, this alternative was opposed by the majority of the people who attended the public meeting and/or provided written comments on the project. Much of the public opinion voiced favored a re-designation/redirection of US Highway 12 or a small roundabout alternative, and/or expressed concern about the lack of continuity with neighborhood character provided by the preferred build alternative.

There were approximately 224 comments received during the public comment period. The following descriptions generally outline the comments made during the Public Hearing on April 25, 2006, as well as written comments received during the comment period. Comments fell into some general categories and the percentage of comments falling into these categories is shown as well.

- 40% favored a re-route of several local roads, particularly a re-designation and/or redirection of Highway 12 for heavy vehicle traffic.
- The same percentage expressed concern about a possible increase in traffic volume and vehicle speeds.
- 20% expressed concern over the accessibility and safety resulting from increased road dimensions.
- 20% supported or suggested the use of roundabouts to facilitate intersection traffic.
- 20% opposed the removal of Jeannette Rankin Park, historic homes, and/or local trees.
- 15% expressed concern about increased air and noise pollution resulting from stop-and-go traffic patterns.
- 5% commented on the special event capacity of the proposed design.
- 5% expressed concern about the local cultural impacts of the proposed design.
- 120 signatories on a comment postcard expressed concern over the proposed design's effect on local air pollution and driving patterns resulting from increased traffic volumes, as well as concerns about utilizing public parkland for transportation projects.

The proposal to re-designate and/or redirect Highway 12 was not within the scope of the EA and therefore, was not evaluated as a possible alternative. A more detailed discussion of the process to re-designate a highway is provided in Section 4.1 below. In evaluating the comments received, MDT and FHWA determined that the preferred build alternative would not result in any significant impacts to the human environment. The preferred build alternative would not result in added capacity to the overall system. Traffic stop time would be expected to decrease resulting in decreased emissions. As such, air quality benefits are expected to occur with the preferred build alternative. Although unavoidable, negative impacts to park and historic properties would occur with the preferred alternative, these impacts are not considered significant. All possible means to avoid and/or minimize impacts would be provided.

The lack of support for the proposed project is the sole determinate for reaching a ‘No Build’ decision. The evaluation of the proposed project, including the Preferred Build Alternative, provided sufficient evidence and analysis for determining that an Environmental Impact Statement (EIS) is not required. As a result of the “No-Build” selected alternative, there will be no use of land from a significant publicly owned public park, recreation area, or wildlife or waterfowl refuge, or any significant historic site. Therefore, a Final Section 4(f) Evaluation is unnecessary.

## 2.2 Summary of Impacts and Mitigation

Based on the analysis provided in the EA, impacts associated with both the preferred build alternative and the selected ‘No Build’ alternative, were not found to be individually or cumulatively significant. Because the selected “No-Build” alternative does not meet the proposed project’s purpose and need, traffic flow would not be improved, and conflicts between pedestrians, cyclists, and vehicles in this relatively high-volume, high-speed motorized corridor is expected to continue. Options to address these issues will continue to be explored. The impacts and mitigation measures associated with these alternatives are summarized in the table below:

<b>Resource Category</b>	<b>Potential Impacts of No Action/ Selected “No Build” Alternative</b>	<b>Mitigation Measures for No Action/ Selected “No Build” Alternative</b>	<b>Potential Impacts of Preferred Build Alternative</b>	<b>Mitigation Measures for Preferred Build Alternative</b>
Land Forms, Geology, and Soils	None	None	Minimal from small cut and fills	Erosion control and slope stabilization
Important Farmland	Resource not present within or adjacent to project area			
Water Resources and Quality	Minimal from maintenance and transport	Continued implementation of Storm Water Management Program	Limited to hazardous materials, spills and sediment transport	Control spills, refueling, and containment and implement erosion controls
Floodplains	None	None	None	None
Air Quality	Continued degradation due to poor traffic flow	None - Oxygenated fuel use, as well as change in vehicle fleet may negate some of these impacts	Temporary dust, long-term positive	Dust control as needed
Vegetation	None	None	Loss of few individual trees and some grass	Replant with stable sod, bushes, trees, and other vegetation

<b>Resource Category</b>	<b>Potential Impacts of No Action/ Selected “No Build” Alternative</b>	<b>Mitigation Measures for No Action/ Selected “No Build” Alternative</b>	<b>Potential Impacts of Preferred Build Alternative</b>	<b>Mitigation Measures for Preferred Build Alternative</b>
Wetlands	None	None	Not measurable	None
Threatened and Endangered Wildlife	None	None	Sediment transport to Clark Fork River can impact bull trout	Erosion control and re-vegetation
Other Wildlife Resources and Fisheries	None	None	Not measureable	Erosion control and re-vegetation
Land Ownership, Right-of-Way, and Use	None	None	In addition to MOU, +/- 5 m <sup>2</sup> (+/- 54 ft <sup>2</sup> ) of right of way required sidewalk connections	Comply with the Uniform Relocation Assistance and Real Property Acquisition Act of 1970 (P.L. 91-646 as amended), and the Uniform Relocation Act Amendments of 1987 (P.L. 100-17)
Social/Environmental Justice	None	None	None	None
Economic	None	None	Positive, due to increased safety, short-term job increase. Negligible loss of tax revenue from right-of-way acquisition	None
Noise	Continued increase	None	Short term construction equipment noise	Construction related noise and operation hours will maintain compliance with the Missoula City Noise Ordinance

<b>Resource Category</b>	<b>Potential Impacts of No Action/ Selected “No Build” Alternative</b>	<b>Mitigation Measures for No Action/ Selected “No Build” Alternative</b>	<b>Potential Impacts of Preferred Build Alternative</b>	<b>Mitigation Measures for Preferred Build Alternative</b>
Hazardous Material/Substances	None	None	Limited to construction – related activities	Control spills, refueling, and containment
Archeological and Historical	No impact on historic properties	None	Two historic properties would be impacted (610 S. 6 <sup>th</sup> St. E)	Historic American Buildings Survey (HABS) of the home, new owners and home relocation
Parkland	Park use is currently limited due in part to access; however, there would be no loss of park property	None	Loss of 0.25 ac of Jeanette Rankin Park (grass and possibly some mature trees)	Improve park access, landscaping, weed control, add green space in other areas
Section 6(f) Lands	Resource not present within or adjacent to project area			
Pedestrian and Bicycle Facilities	Continued poor conditions for pedestrians and bicycles	None	Positive, due to improved safety and flow of pedestrians and bicycles	Bicycle lane and pedestrian facilities are incorporated into the project
Visual Resources	None	None	Positive due to additional green space and landscaping	Additional green space and landscaping incorporated into project

### 3.0 Comments and Coordination

The proposed project described in the attached EA has been coordinated with the appropriate federal, state, and local agencies in compliance with the requirements of NEPA, MEPA, and guidelines provided by the Council on Environmental Quality and the US Department of Transportation Federal Highway Administration (FHWA Technical Advisory T6640.8A).

#### 3.1 EA Distribution

MDT and FHWA approved the EA for distribution in March 2006, and a Notice of Availability was published in the following area newspapers:

- The Missoulian

- The Missoula Independent
- The Montana Kaimin

A mailer was also sent to agencies and individuals who had 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:

- Missoula City Library
- ASUM Offices – Student Union Building
- Mansfield Library
- Montana Department of Transportation, Missoula Office
- City of Missoula, Public Works Department

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/eis\\_ea.shtml](http://www.mdt.mt.gov/pubinvolve/eis_ea.shtml).

The EA was mailed to all agencies on the Distribution List included in Appendix F of the EA. Copies of the EA were mailed out and delivered to private individuals upon request. The public review and comment period began on April 10, 2006, and ended on June 2, 2006.

### **3.2 Public Hearings**

A formal Public Hearing was held on April 25, 2006, in Rooms 331-332 of the University Center at the University of Montana - Missoula to present the Preferred Alternate and take comments on the EA. Thirty-one verbal comments were received during the Hearing, and 102 people were in attendance. A transcript of the Hearing is included in Appendix A.

### **3.3 Comments Received**

In addition to the verbal comments that were received at the Public Hearing, 193 written comments were submitted during the comment period. The comments and the official responses from MDT and FHWA are contained in Appendix B of this FONSI.

### **4.0 Clarifications to the EA**

The purpose of this section is to provide clarifying information, as well as corrections to errors and/or omissions, to the EA approved for distribution on March 29, 2006.

#### **4.1 Process to Change Highway Designation**

Upon review of the comments received, there appears to be general confusion regarding the process for rerouting a highway and the scope of this EA. The streets in the project area are functionally classified as urban principal arterials and are on the Primary Highway System and US Highway 12. Primary Highways are designated by the Montana Transportation Commission, US Highways are designated by the American Association of State Highway and Transportation Officials (AASHTO), and functional classifications are approved by the FHWA.

The US Highway 12 designation has no direct relationship to design standards, truck regulations, or eligibility for Federal or State transportation funding. However, the US Highway 12 designation is consistent with this route's regional importance as an urban principal arterial on the Primary Highway system. Although it is possible to request changes in

US Highway 12 and Primary Highway designations for this route, MDT would not pursue these changes without extensive analysis and public input, in cooperation with the Missoula Metropolitan Planning Organization (MPO) to identify and consider all potential impacts of these changes. These real or perceived impacts could include increased congestion on alternative routes, reductions in potential customers for neighboring businesses, elimination of eligibility for Federal or State funding, additional signing costs, and potential confusion for the traveling public. Because of the need to assess these impacts outside the project limits, this analysis and public input effort is not within the scope of the EA and would most appropriately be addressed in an update of the Missoula Urban Transportation Plan.

Any change in designation of this route as a US Highway or Primary Highway would not necessarily result in a change in design standards for the proposed project because MDT's highway design standards for developed areas are most often tied to functional classification rather than system designation. As long as MDT retains ownership and maintenance responsibility, and the route continues to function as a principal arterial, MDT would apply arterial design standards to any improvements to this route.

#### **4.2 Roundabout Use**

Several comments received suggested roundabouts be considered for use on this project. As discussed in the EA (Section 2.4 and pages 3 and 4 of Appendix D), roundabouts were considered. However, capacity and impacts to the historic district resulted in the rejection of roundabouts as a feasible alternative. A brief list of reasons roundabouts were not included in the Preferred Build Alternative is included below.

- The traffic volumes at the intersections of Arthur Avenue at 5<sup>th</sup> Street and 6<sup>th</sup> Street would exceed the capacity of a single lane roundabout.
- The geometric layout of the existing streets (the skew of the Madison Street Bridge approach) does not conform to a standard roundabout; therefore, some movements would prohibit trucks (right turn from 5<sup>th</sup> Street to Arthur Avenue northbound). Also, a single lane roundabout would require the two entry lanes on 6<sup>th</sup> Street to be reduced to one lane, resulting in severe backups through existing intersections to the west of 6<sup>th</sup> Street at Arthur Avenue. This same problem could occur for the Madison Street bridge entry lanes at 5<sup>th</sup> Street and Arthur Avenue.
- A single lane roundabout at either location would have greater delays and increased emissions when compared to the preferred alternative (new traffic signals and turning lanes).
- A double lane roundabout would require more right-of-way than the preferred alternative, including the demolition of at least 4 homes in the historic district on the west side of Arthur Avenue.
- Pedestrians in double roundabouts would face the “double hazard” of a vehicle in the first approach (or exit) lane yielding while a vehicle in the second lane fails to yield. Furthermore, vehicles approaching in the leftmost lane would not be looking towards the pedestrian crosswalk; instead, they would be focused on traffic circling the roundabout.
- Bicyclists at a double lane roundabout would compete with vehicles in two approach lanes and two exit lanes.
- The impacts to Jeanette Rankin Park would be larger with a double lane roundabout when compared to the preferred alternative.

### 4.3 Additional Clarifications and Corrections

The following text edits are part of the official EA prepared for this project and are intended to provide further clarification on the scope and intent of the project by MDT and the FHWA. The edits are indicated by their location in the EA, the type of edit made, and a description of the edit made to the text.

<u>Location</u>	<u>Action</u>	<u>Edit</u>
Page 3-4, Section 3.6.1, Last Line on Page 3-4	Text Clarification	Replace the sentence " <i>A maintenance plan showing that Missoula would not violate the standards must be developed by the MCCHD.</i> " with " <i>On April 14, 2005, the MCCHD submitted a complete CO redesignation request to the Montana Department of Environmental Quality (DEQ). This redesignation request included the required maintenance plan. The CO redesignation request has been submitted to the EPA and Missoula expects to be redesignated as an attainment or maintenance area for CO in 2006.</i> " (Note: The CO non-attainment area was officially re-designated attainment in August 2007, subsequent to the issuance of the EA.)
Page 3-5, Section 3.6.1, Last Line in Subsection	Text Correction	Replace the sentence " <i>Missoula is currently a maintenance area for PM<sub>10</sub>.</i> " with " <i>Missoula is currently a non-attainment area for PM<sub>10</sub> due to past violations of the daily standard</i> "
Page 5-2, Section 5, Row 12, Attendance Column	Text Correction	<del>CDM, MDT</del> , Missoula Historic Preservation District

### 4.4 Response to Comments

The EA Public Hearing and comment period yielded approximately 224 comments. Most of the comments (120) were standard-form, signed postcards, as discussed in Appendix D of the EA. Thirty-one comments were received orally at the Public Hearing, while the remainder were written comments submitted during the comment period. Due to the volume of comments and consistent themes within these comments, the associated general responses are listed below.

**General Comment A:** Reroute Highway 12.

**Response A:** Please see the discussion about the procedure for highway designation provided in Section 4.1 above. This alternative was not part of the scope of the EA.

**General Comment B:** Include roundabouts in the final design.

**Response B:** Roundabouts can be an effective intersection improvement alternative when properly designed and warranted. However, capacity and right-of-way constraints make

roundabouts infeasible in the context of this design. Please see Section 4.2 above for additional discussion.

**General Comment C:** The crosswalk is too long and pedestrian safety will be impaired.

**Response C:** The Preferred Build Alternative includes bump-outs, new pavement markings, and pedestrian signals at various locations. The bump-outs allow for shorter crossing distances and increased visibility of vehicles and pedestrians. The required crossing times would be calculated in accordance with the Manual on Uniform Traffic Control Devices, using a conservative average walking speed, to make sure all users have adequate time to cross. Due to the lack of community support, however, the 'No Build' decision was selected.

**General Comment D:** Portions of the park should not be used for the project.

**Response D:** Federal regulations allow the use of public parks for transportation projects if there is no prudent and feasible alternative to using that land. The EA included a draft Section 4(f) evaluation of the park and historic properties and found that there were no feasible or prudent alternatives to using 17 percent of Jeanette Rankin Park to improve pedestrian and traffic conditions at the site. As a result of the selected "No-Build" alternative, however, a Final Section 4(f) Evaluation is unnecessary and has not been conducted.

**General Comment E:** Road improvements will create additional traffic.

**Response E:** The Preferred Build Alternative will not add capacity to the overall system. The number of traffic lanes entering and exiting the system will remain the same. Due to the lack of community support, however, the 'No Build' decision was selected.

**General Comment F:** The project will increase emissions due to idling at traffic lights.

**Response F:** The Preferred Build Alternative would decrease traffic stop time on 6<sup>th</sup> Street and on Maurice Avenue by making the intersections more efficient, thereby decreasing emissions. The improvements at 5<sup>th</sup> and 6<sup>th</sup> Streets would be equal to or better than the existing conditions. Due to the lack of community support, however, the 'No Build' decision was selected.

**General Comment G:** Historic homes and trees will potentially be impacted by the Preferred Build Alternative.

**Response G:** Although existing trees would need to be removed, these trees would be replaced with a healthier, younger variety. Many of the trees in the area have been described as past their prime. In addition, the homes to be removed are University owned property, and they would be made available by the University to move to another location. Due to the lack of community support, however, the 'No Build' decision was selected.

**General Comment H:** Lack of continuity with neighborhood character.

**Response H:** As described in the EA, this project was designed to be "context sensitive". As a result of a collaborative effort with stakeholders, the preferred alternative addressed critical issues such as pedestrian and bicycle safety, air quality, and the aesthetic value of the University gateway. Mitigation measures were included in the design in order to minimize the impacts of the preferred build alternative. Due to the lack of community support, however, the 'No Build' decision was selected.

**Appendix A:  
Public Hearing Transcript**

**ARTHUR AVENUE EA (CN 4611)  
PUBLIC HEARING**

**April 25, 2006**

**University of Montana – University Center, Rooms 331-332  
Missoula, MT**

**OPENING**

**Welcome: (Charity Watt Levis)** I'd like to take the opportunity to welcome you all here tonight to share your comments with us. This is the Public Hearing for the Environmental Assessment for Arthur Avenue. We have a lot of housekeeping details to go through so you have some idea of what to expect tonight. First of all I would like to apologize for any inconvenience caused from the confusion about an alleged Open House. Not really sure where that came from, it wasn't planned, but none-the-less we apologize for any inconvenience for those of you who showed up for that.

We are here tonight to gather information about the Environmental Assessment that has been prepared, we are here to present what is in the Environmental Assessment, we are here to go over the history of the project, and we are here to get public comment from you because the way we deliver a project from the Department of Transportation is to meet the needs of the community. The only way we can do that is to hear how this is going to work for you.

Let me start with some introductions: my name is Charity Watt Levis, I'm the Public Information Officer for the Department of Transportation. We have Dwane Kailey who is the Missoula District Administrator, Shane Stack from the Missoula District, Susan Kilcrease from the Missoula District. Mark Studt, Daniel Boland, Ivan Ulberg, Greg Teberg, and Lorelle Demont from Helena. Greg Genzlinger from Federal Highways. Our CDM Team, who is our consultant for this project, we have Randy Huffsmith, Darryl Stordahl, Larry Murphy, and Amber Convoy. We also have Jameal Shondry, and Steve King, from Missoula.

There are sign-in sheets at the front as you came in and we encourage everyone to sign up so that we have it on public record that you were here. We also have sign up sheets if you are interesting in commenting tonight, those are at the back table if you want to sign up

We are going to go over the project and tell you what is in the EA, and then we will open things up for public comment. During that time it is really not a question and answer period, it is an opportunity for you to let us know what you think about what's in the Environmental Assessment. If you haven't had an opportunity review that assessment, or if you are not prepared to give comment tonight, the comment period is open until June 2<sup>nd</sup>. You can submit your comments in writing either by mail or we have forms here tonight that you can fill out, or also on the internet. All of that information is at the bottom of the comment sheets that are out on the tables in the Lobby. Just so you know we are recording this public meeting, everything that happens here is a matter of record, we have a stenographer that will start as soon as the

public comment period begins. We ask that you state your name clearly for her to make her life a little bit easier. I also want to let you know that there were some green information sheets that were passed out as you came in. Just so there is no confusion; that is not information that was prepared by the Department of Transportation. If you have any questions on that, just let us know. At this point I would like to turn things over to Jameal who has a few things to say on behalf of the University.

### **Jameal Shondry – University of Montana**

Thank you everyone for taking the time out of your busy evening to come over here. We appreciate all of the comments that you will provide. From the University's side I would just like to say that we've been following this particular project trying to get something done since 1990. So it has been a dragged out project and we've taken a rather keener interest from our perspective since three years ago when a faculty member was hit by a car and passed away right there on Maurice Street which is part of this particular project. So from our perspective trying to get Highway 12 traffic from coming into campus and then moving back out over Madison Street Bridge is of vital interest and importance to us. So we are particularly interested, the University and the City, in Option One but we do want to get all of the comments we can about all of the other options and ideas you have out there. Thank you very much.

### **Steve King – City of Missoula**

Thank you. I'm Steve King, of City Public Works. I just wanted to introduce myself to you to let you know that the City is in partnership with the Department of Transportation and the University. We have a vested interest in the safety and operation of the roadways in our local communities. The character of the community was very important to look to the eye of what is being proposed as far as the comparison of other features in town – Stevens Avenue is a likely comparison for width, landscaping features, possibility for lighting, and those types of amenities that could fit into a neighborhood. So start to think about that type of a corridor as a gateway to the north end of campus. Also I want to echo what Jameal said about safety. Routing highway traffic around the north end of campus has demonstrated to be a fatal combination. We have a responsibility in City Public Works to look for safety enhancements and that is why we are very happy to be working with the Department tonight on enhancement for the corridor for both Highway 12 traffic and most particularly the City of Missoula traffic as well. Thank you.

### **PRESENTATION – Shane Stack, MDT**

Can you all see that in the back? Ok I'm seeing some thumbs up. Thank you. I'm Shane Stack with the Department of Transportation and I work out of the Missoula District. I live in Missoula and I'm familiar with the area. So I'm just going to give you a brief overview. For the presentation, we're going to start off with the project background; how it started and where it came from and the history and milestones of the project, the goals and the scope of work of the project; and what we're trying to strive for. Alternatives Analysis and Preliminary Designs – we'll go over some of the alternatives and how they were analyzed. Then finally we will open it up for public comment and if you don't want to come up and speak, we'll tell you how to give us your comments after that.

**Project Location:** This is the existing configuration the way it is now (referring to graphic). This is Sixth Street as you are headed east into the campus area. This is the big parking lot for the field house. This is Campus Drive. This is the parking lot over here by Mountain Water. This is your northern route for Highway 12 out and then onto the Madison Street Bridge. This would be off of the Madison Street Bridge onto either Fifth Street towards the west or south on Arthur Avenue. That is all of Highway 12; all these roads that I'm showing you right now are all Highway 12.

Highway 12 basically, in the City of Missoula, starts at the intersection of Reserve Street and Brooks and for those of you who live here that is out by K-Mart or the Village Six or Big Lots – any of those stores on the west end of town. That is basically where this roadway starts; where Highway 12 starts through the City of Missoula. It runs down Brooks Street and a short distance along Higgins and then connects up to Sixth Street where you see it here (referring to graphic), then back up to Broadway and then basically follows Fifth down to Higgins and then follows itself back out. So that is the route. I know there are a lot of questions about why it's in town and how can we get it out and I'm just going to give you a brief description. This is not part of this project; this has nothing to do with this project. I'm just going to try and give you some information just because I've received some comments on how we can get Highway 12 off of or out of the city or that designation out of the city.

Basically you would have to come up with a government entity and I'm just going to randomly throw out the City, and the City hasn't stepped up to the plate and said they want that roadway, but you are going to basically find somebody, a government agency, who is willing to take over the maintenance, ownership, and liability of that roadway and send their request to the Department of Transportation. They will basically send that request to the Transportation Commission. The Transportation Commission then would either vote whether to take that route off and give it to the City or keep it with the State of Montana. I think they would look at what's best for the City of Missoula, what's best for the traveling public, if they made that decision. I just wanted to give you a brief explanation on how that would happen. To reiterate, the City would have to take over maintenance and ownership of that roadway. The Transportation Commission would have to approve it. Basically that is the steps to go that route.

**Project Limits:** Madison Street Bridge is not part of this project; it is just off the project limits. Your project limits are basically where you are seeing my laser pointer (referring to graphic). Basically the area that is shown on the picture up there are the project limits. We are not going to do anything on the other side of the bridge. We are not doing anything on campus. It is just that area that you see there.

**Project Purpose:** We want to improve automobile, bicycle, pedestrian flow on U.S. Highway 12 and allow for safe and efficient movement of traffic. That is basically straight out of the EA and that is our goal and what we want to do.

**Project Goals:** We want to maintain uniform volume capacity. What we don't want to do is put in some intersection devices that reduce capacity or constrict flow and add to congestion and poor air quality. We want to be able to keep that same capacity, keep the same amount of traffic

being able to go through there; we don't want a decrease. Increase safety, comfort, and convenience of the traveling public; that is something we want to do on all projects. Promote a more direct route for Highway 12 traffic. So, as you can see this guy here, (referring to graphic) right now that Highway 12 traffic goes along Maurice Avenue and if we could get that and that was one of our goals to get that out of there that might improve things around the Campus. A more efficient, user friendly entrance to the University; we want to improve the entrance and the exit to the University and I'm sure most of you have been to a Grizzly football game and you know what it is like to get out of here and we want to improve that and get out and into the University area. Again, decrease impacts to University special events. Increase safety, efficiency for the traveling public. Positive effect on air quality – Missoula is an MPO (Metropolitan Planning Organization) because of the air quality. Anything we do when we are spending federal dollars on roadways has got to show that it is going to improve the air quality or at least maintain. Upgrade the existing facility – the way you see it now was basically constructed in 1957. We can do some context sensitive design that possibly wasn't around in 1957; offer up some pedestrian bike enhancements that possibly weren't around in 1957 and improve the intersection overall since it was constructed. Finally we want to comply with the MOU and I'll touch on that in a second but basically that was an agreement or an understanding between the City, the University of Montana, and MDT.

**Project Funding:** Funding for the project – MACI (Montana Air and Congestion Initiative) basically that is an offshoot of CMAQ (Congestion Mitigation Air Quality). It is federal dollars and we use that money to improve air quality and reduce congestion. That is basically the goal with MACI. As far as the State of Montana is concerned we like to spend that MACI fund on improving air quality or reducing congestion. We've got some Urban Improvement Pilot Program funding. That was some funding that was federal dollars that we intended to spend in a short period of time and doesn't exist anymore. This is probably the last remaining bit that was designated for this project. Once this is spent then it is ultimately done with. Finally STPP (Surface Transportation Program Primary Funds), which is going to be a majority of the funding for this project because Highway 12 is a primary route and is fundable through the primary system funding which is the STPP. With all that federal funding comes federal regulations and we need to spend that money in a certain way otherwise FHWA will not participate and not reimburse us. The University is going to provide the necessary right-of-way or almost all of the necessary right-of-way required for this project. We will go into that later.

**Signing Parties of the MOU:** The signers are MDT, City of Missoula, and the University of Montana. It was basically signed in May of 2001 allowing for a realignment of Highway 12. The big concern was how we can get traffic off of this section of Maurice Avenue and possibly potentially get it over here (referring to graphic). With that would come the elimination of Highway 12 traffic here, here, and here (referring to graphic) on Fifth and Sixth.

**Land Acquisition:** The land acquisition that I talked about earlier, this is the property right here (referring to graphic) that the University would donate to the project. Then beyond that we would need, according to the EA, approximately five square meters or 54 square feet for some sidewalk improvements, which isn't a whole lot.

**Right-of-Way Acquisition Process:** Then I guess I'll just touch on the right-of-way acquisition for that five square meters. What would normally happen on any highway project when we go to acquire right-of-way or land to build or reconstruct a roadway is we get in touch with the landowner who can be involved with the appraisal process, which is a process of valuing that land. Then after that they go into negotiations and hopefully at that point we would acquire the property. That is the simple end of it. Generally you are contacted if you are a landowner approximately a year before construction, so we give ourselves about a year for negotiation time.

**Project History and Milestones to Date:**

Preliminary Design Report – we do that on all projects. That was done early on.

Traffic Data Collection – supporting documentation, basically what is in the Traffic Data Collection that is used in the Environmental Assessment. We looked at access, traffic volumes, what's going to be there in the future, what's there now, and what changes can be made to improve on capacity, or how can we accommodate all that traffic that is potentially coming down the pipe.

Cultural Resources and Historic Report – basically looked at the historical buildings or structures in the area to see if we are going to impact those and what mitigation we would have to do on that. You look at your parks; are there parks we are going to impact, or 4(f) properties. Those are examples of what lies in Missoula that we would have to consider.

Public Meetings – we've had several public and stakeholder group meetings throughout this project to get public input. We've had a lot of public comment on this project. It's had a lot of public involvement.

Detailed Alternative Review Process – We are going to review all the alternatives in detail and the preliminary alternative especially and find out if we are going wrong somewhere and where are we going wrong if we are to find out the best way to do this project.

The Environmental Assessment – we've got a document out for review to the public and that is where we are right now.

With that I'll turn it over to Larry Murphy with CDM and he will discuss the EA.

**EA – Larry Murphy, CDM**

If you can't hear me in the back please start waiving. CDM is the name of our company; it used to be called Camp, Dresser, and McGee. As Shane said, we put together the Environmental Assessment (EA) and a lot of work has gone into the development of the preferred alternative. The Preferred Alternative is not something that we just come up with – we looked at a lot of different alternatives. We look at the impacts of these alternatives and we come up with what we feel is the best alternative; the one that has the least amount of impacts. What I'm going to go

through is kind of like a little discussion on the process that we went through and then some information on the preferred alternative we have.

As you see there is an evolution to the design process, as I was discussing (referring to graphic). There are several alternatives that were considered and evaluated for the project and implementation is based on the ability of the alternative to meet the purpose and need of the project in a reasonable and prudent manner. This is outlined in the EA. If you would look at the EA, all this information is in it.

**Alternatives Considered.** In the process of looking at the alternatives, we looked at a variety of different types of solutions to making this project the best project. One of them was a roundabout and there has been a lot of tough public information on the use of the roundabouts and use of those on this project. Flyovers which would be one leg of the roadway going over the other one. A more standard type of improvement which would basically be curbing and signals. Then there is the realignment option.

**Flyovers.** When we looked at the Flyovers, the expense of it kind of washed them out. They are really expensive and there is a cost of construction feasibility component. You know as you come of the Madison Street Bridge, if you look to your right when you are going over the bridge, there is a deep cut down there and a lot of work would be required to put a flyover underneath that to make it work and the cost of a flyover is very expensive. In addition to that, a flyover is difficult for pedestrian and bicycle movements.

**Standard Improvements.** This is what I was referring to, basically trying to come up with some kind of improvements. Maybe look at the existing roadway system as it is and ask what we can do – look at signal timing. We can make some improvements to the signal to see if that would work, add some pavement markings, maybe add some more signings to try and make it safe through there. When we evaluated those types of improvements and compared it to the need for the project we found that this type of improvement did not meet the project goals.

**Realignment.** So then we came up with the realignment type of approach. On the realignment we looked at almost 2,000 different alignments. If you look at the EA, you will see those alternatives that we looked at within there. Nineteen of the ones that we looked at are in the EA.

**Roundabouts.** They are a popular thing and we use them a lot. CDM has designed a lot of them and I'm involved in several projects using them. So that is one of the things we looked at. We looked at basically two types for this project: a single and a double lane. We tried to make it work as we did with all the alternatives to see how they worked. In general, as you can see (referring to graphic), a roundabout is a very good tool for improving traffic flow around it and there is a federal design criteria. The Federal Highway Administration (FHWA) has a design guide that is used nationwide for the design of roundabouts. As we put together the alternatives for this project, we used that design criteria. The EA also evaluates the use of roundabouts as an improvement. We looked at three types. We looked at an Urban Compact Roundabout, which basically if you look at the roundabouts here (referring to the graphic) this small circle in the middle, if you have an Urban Compact Roundabout that small circle is very small. We looked at a Single Lane Roundabout which is the one here (referring to graphic). We also looked at a

Double Lane Roundabout which is over there. All these are documented in the EA. The outcome for the analysis for the roundabout – we found we had some issues with each of those types that kind of knocked that out of the preferred alternatives. Some of those related to capacity or the level of service. There were right-of-way impacts with either of the roundabouts that we looked at. There were also sight distance issues that came into play. Also there is consideration nationwide on how people who are mobility challenged can use that roundabout properly.

Single Lane Roundabout. When we looked at it we took traffic counts that Shane talked about and we modeled it through some software. It was a first task to see if the single lane roundabout had the capacity to process the traffic going through that and we found that it did not and the EA explains that. I have a slide that shows how that model actually works.

Inadequate sight distance. As you come over the Madison Street Bridge, you are coming over a curve and around a corner. When you are coming over the curve and around the corner even now you can't see that intersection very good as it is coming up there. Right now there is not a stop condition. As you go through there you are just kind of driving right through. So when you put a roundabout in there or even a traffic signal in there, it doesn't have the capacity and it has inadequate sight distance. Also it required the taking of right of way that is not included in the MOU that is the Memorandum of Understanding with the University. As a result of the design of the roundabout it ended up impacting properties that were outside of that. As I said it impacts the properties that were owned by the U of M and the properties were also historical.

Mobility Challenge. This really deals with the blind people. As I said, there is a nationwide investigation going on right now on how to handle the blind people at these intersections because they are difficult for them to see. At a normal intersection they can hit a pedestrian button and there is either an audible sound or they can actually hear the cars stopping but in a roundabout they don't have that opportunity. This slide kind of highlights the issues that I was talking about for the single lane roundabout, the poor sight distance as you are coming over the Madison Street Bridge. The safety issues related to the mobility challenged pedestrians and the additional right-of-way that is required. This house here (referring to graphic) is impacted and this house also.

Capacity. I talked about why the single lane roundabout didn't work and it really boils down to the capacity. We modeled this roundabout based on 2006 traffic of today. This model shows the peak traffic being modeled through a single lane roundabout (referring to graphic). As you know right now on the Madison Street Bridge you've got two lanes coming across there, and when you funnel that down into a single lane, it tends to back up. The model showed that. If you can see the cars in the graphic, it is backing up onto the bridge. They also backed up on Sixth Street; it backed up past the first intersection which is Helena Avenue. This gives us an unacceptable level of service. One of the criteria we use when we evaluate different alternatives.

Double Lane Roundabout. This is the next step you would do if the single lane roundabout wouldn't work then you try and get a double lane to go in there. We found with the double lane as far as the capacity goes, the double lane was able to pretty much handle the flow of the traffic however in the later years of design it did kick out to Level of Service E. The diameter of 197 feet that is required and you achieve that by developing an approach coming into the roundabout and we used software that actually tracks a vehicle going around it, and we looked at a truck because there are a lot of trucks using this road. So we sized that based on that so a truck won't go over into the other lane and won't cross over, and it ends up driving the size of the roundabout. When we looked at the design as you see (referring to graphic), it impacts a lot of the properties around and you end up having to demolish four additional houses that weren't considered in the MOU and all those were historic houses.

Bike and Pedestrian. We also had some concerns related to bike movement and pedestrian movement particularly the bikes. When you get trucks in the double lane roundabout they tend to stray over the lines and if you've got a bike that is trying to use the roundabout as a car that wants to be in the lane, if he wants to go south it ends up being on the inside lane to get across and if you get a truck in the outside lane and the bicycle on the inside lane it brings a really unsafe interaction between the bike and the truck. You can also get it with cars too.

Sight Distance. As I alluded to you also have some sight distance concerns coming in. When you've got a roundabout it is important to be able to see the roundabout as you are coming up there. Most recommendations require that you have the roundabout lighted so if you are approaching at night you can see it ok. This slide highlights some of the things I was talking about. In addition to the geometry of it, when you've got this tree here (referring to graphic) there is a movement that comes across right in here. We tried to make the geometry of this roundabout work but this is really kind of un-standard and what happens and why it doesn't work is ... the beauty of a roundabout is that it slows people down and you need people to go slow. As you approach a roundabout the cars yield to the cars that are on the inside. That is how they function. What happens is that when you get a movement like this which we call a free movement, (referring to graphic) these guys don't yield like they are supposed to so it ends up bringing a conflict point here. Studies have shown that these are unsafe. In the EA I talk about the complexity of the biker in a double lane roundabout and how the trucks will stray and the additional right-of-way and the houses are historic houses that would have to be demolished as a result of that.

So we went through the analysis of the Flyovers, the Standard Improvements, and the Roundabouts and it ended up boiling down to what our Preferred Alternative was. We really feel that this is the best alternative for the project because it has the least impacts on the things we looked at. We looked at impacts on right-of-way, the goals of the project, does it comply with the MOU, wetlands impacts, and a lot of other things that are spelled out in the EA. You can see there is a matrix (referring to graphic) that has been developed and we analysis all of the alternatives based on that matrix.

**The Preferred Alternative.** As you can see, we have improvements to traffic. We provided significant amount of bike lanes as you can see on the outsides here, we think we have improved pedestrian access because right now there is going to be a signal at the intersection which is going to provide solid pedestrian safety. Right now if you go to cross the intersection, there is nothing protecting you. The cars are free to move through. This alternative will be designed with signalizing the intersection. The intersections will be synchronized so that they basically talk to each other so the traffic moves through well. Each one is going to have a pedestrian button there and we designed the timing there so that if we look at how long it is that someone has to go across and we design that so it goes for a specific amount of time based on the distance they travel so that they have time to get across the intersection. This is one of the things that we've done to help not only the cars get through but the pedestrians and the bikes.

We've provided shoulders and sidewalks. One of the things that is going to look nice eventually is the boulevard that we are putting in here that is similar to Stevens Street and this is actually a little bit wider than the boulevard on Stevens Street. It is going to be planted and there are some renderings of what we think it will look like.

*Safety and Operational Improvements.* These are paramount obviously in the project. The design as we proposed will do a good job of conveying the Route 12 traffic away from there and moving it up and across the Madison Street Bridge.

*Improved and Advanced Signing.* Another part of the project would be improved advanced signing for Route 12 so the people will know where they are driving as they go through.

*Pedestrian Sidewalks.* Pedestrian sidewalks are going to be built in compliance with the ADA requirements.

*Storm Water System.* Another part of the project will be to improve the storm water system in the area.

Within the preferred alternative we have two options that you can see up here (referring to graphic). Here is one option and here is the other option.

Preferred Alternative Option One. Basically if you are coming up Arthur Avenue under the new proposed Route 12 you won't be allowed to take a left onto Fifth Street. There is a potential that this is in conflict with the MOU but we don't think this is a problem. There will also be some loss of parking on Fifth Street and that is to accommodate the large trucks that we see coming in there. If you can look at this drawing right here (referring to graphic), you've got a truck that comes down Sixth Street and up Maurice and takes a left. To make that movement there is a couple of parking spots that we would have to use as a result of that.

One of the other significant changes that the Preferred Alternative is going to provide is that Maurice Street is going to be two-way where as now it is one direction. So it is going to be two-directional traffic.

Preferred Alternative Option Two. Option Two provides a left-hand turn lane. Again these documents are in the EA. Option Two provides a left-turn lane, so if you are going north on Arthur Avenue you can take a left onto Fifth Street. So you wouldn't be required to go around the block.

We looked a lot into the pedestrian movements that were the difference between Option One and Option Two. In our mind that was one of the big differences between the two options so we looked pretty closely at the impacts to pedestrians. In Option One the curb distance which would be the outside of the curb to the outside of the curb over here (referring to graphic) is 95 feet. What we've got for what we call an "exposure to motor vehicles" is because there is a big median in here (that planted boulevard) is that this area in here where there is not going to be any vehicles, so we are calling this exposure to vehicles 62 feet. In reality it is just going to be two 12-foot lanes on each side 40 feet and there is also the additional feet is because of the bike lanes to make 62 feet which are included in the exposure to motor vehicles.

Compared to Option Two, the curb-to-curb is about 105 feet and exposure to vehicles is about 89 feet. If you look at an average person ... when we do the design of the pedestrian signal we look for these distances and use a formula that says the average person walks at 3.5 feet per second and we will time the signal so that people have the adequate time to get across safely. If you look at the difference there is a 10-foot difference and it is only about 10 seconds.

*Stevens Avenue* – we looked at some of the other areas in town so people can kind of compare what we are looking at. We went out to Stevens Avenue at Aspen Street and we measured the curb-to-curb distance and out at Stevens Avenue interestingly they've got more pavement out there because they've got parking lanes but as you approach intersections they bulb out the intersection and you can see one right here (referring to graphic). So they narrowed up the pedestrian distance there. There was also a small island in the middle of Stevens Street which is about five feet so we equated the exposure to vehicles at Stevens at about 70 feet.

*Broadway.* We also looked at Broadway at Mullen Road. That is a pretty broad area out there. The distance at curb-to-curb is about 125 feet and there are no islands or anything out there, so the exposure is 125 feet out there. So you can see that our exposure of 62 feet is actually less than the other areas in town that are similar to it.

**Summary of Preferred Alternative.** This comes back to making sure that we looked at the goals we were trying to achieve, the primary one is that we maintain a uniform line and capacity through the intersection and that we are providing a more direct route for Route 12, that we improve the access to the university, that we accommodate trucks, cars, pedestrians and bikes, that we have a positive effect on air quality, and how we are able to achieve that is because we are going to be synchronizing the signals as you go through there and there will be less delay for vehicles going through there. It does comply with the MOU. And of alternatives we looked at, all 19 alternatives, this alternative has the least impact to the park. We are looking at about ¼ of an acre of impact. There is going to be two University of Montana owned historical properties that are going to be impacted by this project. To mitigate that there is going to be a record of that taken. They will document the condition of the house and there will be opportunities to move the house to a different location. There is also going to be some trees that are going to be impacted

by the project and obviously we are going through this area in here (referring to graphic) and there are going to be some trees affected but there are also going to be some trees planted and we are going to have an overall increase of the number of trees and landscaping in the area. So at the end of the day you are going to end up with more. There is going to be some minimum right-of-way required which is about 54 square feet which is a pretty small area that we anticipate we are going to see primarily for getting into some of the sidewalks.

*Pedestrian and Bike.* Another issue that we wanted to look at and bring to your attention is how this pedestrian and bike combination is going to be fitting into this project. As you probably know there is a new bridge that goes underneath the Madison Street for a bike and pedestrian underpass. It is going to be connecting to this whole system so we are providing, we think, a good system of additional bike lanes onto the existing road but also we are working with the University to get an improved access and a separation of the bikes and the pedestrians. Right now there is a schedule to finish that loop during the upcoming summer. That was a picture of the underpass (referring to graphic). So now I'll turn this over to Mark.

## **PRESENTATION – Mark Studt, MDT**

My name is Mark Studt and I'm with the Montana Department of Transportation. I'm the Project Manager for the Department of Transportation that manages the consultant firm CDM. I appreciate your input as the public that we've had to date. To get to this document that we have, it was through your input that we've been able to address some of your concerns and get them incorporated into the document. So I definitely want to thank you for that.

**Timeline.** Looking at the timeline, obviously when you saw the Notice of Availability that you hopefully saw in the paper, there is a lot of background that went in before that April 10th date. That included following an extensive State and Federal requirement to prepare the environmental document itself, i.e., public involvement meetings and things like that and taking your comments and getting those incorporated in there. With that we had to go through legal sufficiency review, get cooperating agency review that both the City and the University were part of our review team to make sure we had those items taken care of in the document itself. Then once approved by the Department of Transportation and Federal Highways, we released the document to you which as you can see by the timeline here, started the public comment period, and here we are today at the public hearing itself. We are here to gather your comments specifically on the document. This is not your only opportunity. As you can see on the timeline here; you've got until June 2<sup>nd</sup>, which is actually 54-day comment period if you are counting calendar days. That gives more than ample opportunity and exceeds the federal requirements. We definitely want to get your input from that. After that comment period closes and we gather those comments, we will try and incorporate those comments and respond to those. The next step is the environmental document phase. We will be preparing a request for Finding of No Significant Impact (FONSI) is what we call it. That request depends on the outcome of what we see for comments from the public and try and incorporate that into the document. We want to just make sure that we haven't forgotten anything in our analysis and make sure that we've got everything addressed. With that request, if that's the way that portion of it goes, that FONSI would be released to the public and you would get to see what the specific responses were. That would close the environmental process if that is the preferred route.

Another option, of course, as a baseline that is outlined in the Environmental Assessment, is the “no build” option. That is always an alternative. We don’t technically have a “no build” board up here but that is always an option, in which case the project goes away.

The last avenue that this particular environmental document could go down is to an Environmental Impact Statement. If we’ve discovered enough information from the public, we would elevate that level of documentation to an Environmental Impact Statement level which is an EIS, which has additional public hearings and ultimately a thicker document.

So with that we will try and finalize that environmental document. It kind of depends on the input we receive from you as the city and the community here, and we would try and finalize that in the fall of 2006, at least that is what we anticipate. From that after we would close that environmental document process, we would go onto what we call the Scope of Work Phase and then into Final Design and ultimately trying to get you a project that, based on available funding and timelines and things like that, we would have proposed construction in 2009. With that I’m going to turn it over to Charity and she is going to summarize some of the ground rules for commenting on this document.

## **PUBLIC COMMENT PERIOD**

**Charity Watt Levis.** Did everybody who intends to speak tonight have a chance to sign up on the sign-up sheets? So not too many other people are going to speak. We want everybody to have an opportunity to speak. It looks like we have about 25 people who want to speak. Some of you will talk longer and some will talk shorter, but if you could limit your comments to about three minutes and then at the end if there is time to go ahead and continue, you can get up and again and speak. You also have the opportunity to furnish your comments in writing. The reason for the limit on the time is so that everybody who is here who wants to comment gets the opportunity to do so. We did mention that there are other opportunities to comment if you are not prepared to speak to tonight and something comes up that you think of when you go home or when you look at the EA at another opportunity, we encourage you to get your comments into us in writing by June 2<sup>nd</sup>.

I’ll just read off some of the spots where the EA is available. It is available on line at our website. It is also available at the MDT on Broadway. It is available at the City in the Public Works Department. It is also available at the City Library, at the ASUM Office, and the Mansfield Library. There are a couple of copies outside for you to look at here and we ask you not to take those with you tonight.

The sign up sheets were at the front door, but I’ll just pass this around and you can sign up on it. We do have a microphone set up here and we ask that when you start to make your comments that you state your name clearly for the record. With that I think we are ready to begin.

Com: (Kenneth Willett) I'm with the Office of Public Safety at the University of Montana. The first thing I would like to say is at least from my standpoint and hopefully the rest of the University, the Preferred Alternative Option One, which has the no left turn would probably be the best option for the comings and goings and activities that we have. I do have a concern, with twenty plus years of experience in dealing with traffic flow to the ball games, football, basketball, concerts, drama performances, and other shows that appear at the Adams Center, that we are going to end up with a problem with the one block funneling down to one lane there between Arthur and Maurice. We've talked about making it a super-wide which would give us the ability to move emergency vehicles. My concern is Monday to Friday from about 7 in the morning to 9:30 and then Saturday on games days for people coming in and the same thing with other performances, that traffic will back up when you go from two down to one in a one-block span. If you could maybe take a look at that I would appreciate it.

I was also wondering, I noticed they talk about the new under-bridge project and where we connect with that at Lot M-1, how we will address that crossing since it's right on the edge or contiguous to this project. We will be trying to get that started hopefully this summer in July and finish it, and that will be a critical point where we have foot traffic and bicycle traffic. It is already there without the bridge or anything.

The only other thing I would say is I think that this project is going to interconnect with other projects within the community and the one I'm thinking of is the proposed intersection at Higgins and Beckwith and either Hill or Mount. As you move traffic down Arthur, it's got only so many directions it can head so at that point both of these are going to impact each other. So I hope the design takes that into consideration. I think it is important that we do that. Thank you.

Com: (Charity Watt Levis) Just so it's clear, the comments that are being taken tonight will be addressed in the environmental document. If you are wondering what happens and how these questions are addressed, they are all addressed in that document. I want to reiterate that our staff will be around after the comment period so that you can ask questions.

Com: (Bob Giardano) My name is Bob Giardano. I'm a citizen and I also run The Missoula Institute for Sustainable Transportation and I'm going to speak for both. We feel that this project is basically out of character with what we have right here in the University area. I think we can just do a much better job at working with all modes of transportation. I applaud the thick Environmental Assessment but I feel strongly that it is based on other places or highway models or things that are not appropriate right next to campus where we have so many people walking and biking and driving. But the irony is that I don't think that this will be a good plan for the driving part of all of this because a lot of us do all modes of transportation at different times.

With the no left turn option that seems to be gaining some momentum, I want to point three big challenges that I don't think are going to work well with that. (1) Even though it is not a big turning movement, people will either go around the block, they will cut through the neighborhood, or a big concern is that there will be a "no left turn" box on

the light pole is what I'm guessing. We see this on Higgins and on lots of roads. It says "no left turn" but people make that left turn all the time. Now it is a basically a dangerous maneuver but when coming down that bridge and making the cross over maneuver like you have, I think it is going to be a huge safety issue. With the Professor that was killed there, I don't think what you are planning is going to make this area much safer. You talk about Stevens, but that was a very huge road and it got a little better by becoming narrower. This is proposing to be a big expansion and there are people who were hit on Stevens. The Broadway example you used, that is a real big issue. Five pedestrians have died in the last seven years. Last year was a record year; five pedestrians were killed in Missoula. I think we need to make a turn here and let's do transportation that works for everyone and does not have motor vehicle speed and capacity as the number one thing.

So the impacts are too negative. I would ask that you stop this project, maybe reroute Highway 12, let's have a more locally based project. The Madison under-bridge is a great piece but it is a trail piece and it is probably going to bring more bikes and peds to that area and the way that you have aligned it I don't think it is going to solve the huge safety issue we have there.

There are some flaws that I see in the EA with single lane roundabouts. The size does not have to be so big. There are ways to improve the capacity, but capacity should not be the number one thing, capacity for vehicles. It's all of us and how we move around in this community.

Com: (Kim Pappas) My name is Kim Pappas. I'm a student at the University of Montana and an active citizen in Missoula and the State. As the child of an Air Force Engineer and then in business I've spent a lot of my life moving and as a result I've spent a lot of time in many towns and cities across the U.S. At age 18 I moved to Missoula and I've been here ever since for the past four years. Missoula has an interesting and exciting culture filled with diversity, creativity, and art. Three characteristics that are unique to Missoula and this State which is why I support roundabouts to be presented in the Citizen's Plan presented Bob Giardino. There are essential examples of create innovations that come to Missoula before other towns in this state. As I mentioned earlier in my history of moving, I've spent a significant amount of time in three other cities that use roundabouts – Forest Grove, Oregon, Bend, Oregon, and Olympia, Washington. Both Bend, Oregon and Olympia, Washington have populations pretty similar to Missoula, people coming in daily into town and a lot of traffic. Bend, Oregon, has a climate that is similar to Missoula as well, cold winters, lots of snow, and lots of wind. I actually have no complaints for roundabouts whatsoever. As a matter of fact I love them and they could be incorporated into the Missoula Transportation System and incorporated into the Missoula culture. Another benefit to roundabouts and how they could fit into Missoula's atmosphere is the one used in Bend, Oregon. In the center of many of the roundabouts in Bend, Oregon, there area sculptures and other pieces of art from local artists.

Although I fully believe roundabouts are the safest and most efficient idea for this project, I'm not going to talk about those because you are going to hear about them from

everybody. So instead I'm focusing more on the artistic and aesthetic value of them. So I want MDT and the people of Missoula to understand at the culture of Missoula when researching the different alternatives for this project – the ... (inaudible) ... of the issues, the diversity and the aesthetic quality when considering all of the options. Thank you.

Com: (Mary Ellen Carter) I'm a student here at the University and my name is Mary Ellen Carter. I also live in the neighborhood. I would just like to say that I appreciate the plan's concern for safety. That road is pretty dangerous. I knew the Professor that was killed there and I'm glad to see people trying to fix that problem and I see that you put a lot of work into the plan but I don't think it addresses well enough the character of the neighborhood and the quiet residential aspect of this neighborhood. I would hate to see it changed by a road like this and I think this road would significantly change the character of this neighborhood. So I would just urge you to go ahead and go back to the drawing board and see if you can come up with a plan that addresses the safety issue, of course, but also the quiet nature of this neighborhood. Thank you.

Com: (Nancy Wilson) Hi, I'm Nancy Wilson, and I'm with the Associated Students of the University of Montana, Office of Transportation. This is ironically bike, walk, bus week in Missoula and on campus we run a giant raffle and we have a lot of people come to our table and we talk to a lot of people. I talked to hundreds maybe thousands of people today and it was exhausting so I don't know if my brain is fully attached. I did not hear anyone excited about this project. When I would show them this project, they would be mortified that this is the size of the project that someone is considering in the University District right here at our front door. We need to do better than this. We need to build a beautiful project. We don't need to take an intersection from anywhere Montana and plop it in the University District. We can be more creative; it can be a beautiful safe project. This is not it. We have made many comments, we are concerned that we are not seeing any action coming from the comments we are making and we really want to know how many comments does it take? Give us a number. What good does it do when we make these comments – are we going to see changes in this project or does somebody just file our comments in the back of a giant report which is what happened in the EIS? We want to see some action changed.

A few other comments – I'm mortified if there really were three dozen public meetings because ASUM was not invited. That is 13,000 students. We are directly affected and we were never invited to three dozen meetings, I can promise you that. I'm also concerned that someone is using Stevens as a good pedestrian facility because there is nowhere near the amount of pedestrian/bicycle traffic there ... that is not the same kind of corridor. There is nothing about that project that is the same as Arthur. So we really need to look at that. That is not an example. Mullen Road on Broadway is not an example. I would not cross Broadway at Mullen Road. You would have to be crazy to walk across that street right there. So I'm sorry that is not a good example.

We just really want you to go back to the drawing board. Start over. If you look at the eleven projects that this project surfaced from as the best project, it was the best project of those eleven but those eleven projects were really not good. In fact I've been showing

them to people. I was kind of embarrassed because there is one that shows a roundabout at the bottom of Rose Park. We are not quite sure why that is there. It would be kind of fun to drive around it but I don't see it as really good traffic movement. So I don't know, we just want you to start over. Later you will have a Resolution read to you from ASUM. It was passed by the student body that does not support this project. Thank you.

Com: (Ron Erickson) My name is Ron Erickson. I taught at the University for a long time. I've also been in the Legislature. When I was in the Legislature it turned out that I was on the Oversight Committee for the Department of Transportation and I particularly recall with the Director where I said something about pedestrians particularly along Reserve Street. He said, "that was a mistake and we'll never make that mistake again." That's always good to hear but what I fear in terms of, not the passengers in cars but pedestrians and bicyclists, that this isn't the best plan. If one does have to go toward this plan, I certainly hope that we don't allow vehicles to turn left off on Arthur because that is one of the places where you have to have a much wider street.

I'm also very concerned about stop lights there (referring to graphic). I think that's basically kind of crazy and that if we are going to do something at all, get rid of that part of the street. I don't know that we've got a good project in front of us. I certainly hope that Bob Giardino is listened to well and all the folks that are thinking about roundabouts because that might be the best solution. I don't know the best solution but I'm pretty sure we don't have it yet. Thank you.

Com: (David Wanzenreid) I'm Dave Wanzenreid and I have the privilege of representing the area just immediately to the west of this proposed project from Arthur West and the Legislature. Just recently I've gone door-to-door in that area and not one person thinks this is a good plan. You look at the time table, the last time we did some work in this area was 1957. It is going to be 52 years before we get this done with any improvements and a lot has changed in those intervening years about the nature of transportation. I've already sent a letter to the Department so I'm not going to go through that. But just think about this proposed change right here (referring to graphic), it doesn't tell you on there but those trees on that street are going to be removed. How long did it take those trees to grow? Do we want to sacrifice that area and the house immediately adjacent to this proposed change? Or we can be thinking about 50 years from now. The roundabouts are being dismissed because some traffic can't use it – commercial traffic. I happen to work in that industry and I don't think anybody would object to a redesignation of the traffic from U.S. 12 where it currently is onto Reserve Street except those of us who drive on Reserve Street. But we've got to do something. Fifty years from now the traffic cannot flow; commercial traffic cannot flow through this city. And part of the argument now if we make changes down the way on the pipeline, malfunction junction and other places, we've got federal money there and we can't redesignate that now because if we do it is going to jeopardize the continued maintenance of that area. So we are necessarily precluded from making changes that we need to make to represent all the modes of transportation. The flow of traffic coming over the bridge now, with this proposal, pedestrians beware and cyclists watch out! It is going to compound the problem.

I lived in this neighborhood when I was in graduate school some 30 plus years ago, and it hasn't changed that much. The neighborhood hasn't changed but the traffic has. The traffic is not just cars, it is people on bicycles and on foot, and this proposed change here and this proposed construction project does not recognize that. We can do better than this. Fifty years from now we won't be here to look at the work we've left those that go behind us. But let's get it right. Let's slow down the process, listen to all the other groups that have some interest in doing something besides automobile traffic and do it right, and do it right now. Let's not proceed with this project. Let's get it right by involving people and taking a look at the redesignation of U.S. 12 route and do it right holistically. Thank you very much.

Com: (Charity Watt Levis) I do see some of you leaving. Please make sure you are on the sign-in sheets before you leave. We would appreciate that.

Com: (Christy Dodson) Hello. Thank you for all your hard work. I'm here for many reasons but mainly because I was called at the last minute. I drove to Missoula. I'm five generations, I've been away from home for 10 years and I've come home. People called and told me they were going to pave Jeanette Rankin Peace Park. I'm a singer and I was part of the dedication for that park. So I showed up at 4:00 and due to a bunch of miscommunication, there was supposed to be a 4:00 to 6:30 Open House where I thought I was going to get updated, so I don't know what is going on. But I think I have the solution. I think people should watch more old movies like me. Because in the old movies you will see wonderful, romantic, public transportation, so you don't have all these cars on Highway 12 and all over Missoula. After coming home there are cars everywhere, you can't walk, you can't ride your bike, and you can't drive without almost getting killed every day. So seriously in these old movies they have these wonderful trains and busses and street cars, and you meet your true love and you love community. Cars are so isolating – it is just you and your car or you and your spouse fighting. Just think how you are shooting yourself in the foot especially single Engineers, you could really meet somebody great on a train. I'm just asking everybody to work every day for more public transportation. Thank you and I love you all.

Com: (Benjamin Corteau) I've been on the ASUM Office of Transportation Board for four years. I was a student and now Alum of the University. I'm going to follow up on what Nancy Wilson had to say. I'm going to read quickly the Resolution that was passed through the ASUM Senate (Associated Students of the University of Montana). It is the representative body that represents all the 13,000 plus students of the University.

Whereas the ASUM Resolution which was passed last Spring called for a public meeting in order for the Student Body and the general public to comment on this project.

Whereas the meeting held in response to the above mentioned Resolution was held in early April 2005.

Whereas there was considerable student and public opposition to the Montana Department of Transportation Preferred Alternative design of the Arthur Avenue project specifically to the large size of the proposed road expansion.

Whereas the road width proposed for Arthur Avenue between Fifth and Sixth Streets and the MDT Preferred Alternative design is about 100 feet, which is wider than Reserve Street.

Whereas the current Preferred Alternative for the project will cause significant disruption of pedestrian and bicycle safety and create an environment conducive to increase motor vehicle speeds.

Whereas the ASUM Office of Transportation Board, after reviewing the Draft Environmental Assessment submitted by MDT, has concluded that the Draft Environmental Assessment has failed to adequately address the concerns of the Student body and the general public and has failed to meet all the specified goals of the project.

Therefore let it be resolved that ASUM does not support either option proposed in the Draft.

Basically this sums up our dissatisfaction with the public process. Last year we called for a meeting because there hadn't been one since 2003. For two years there hadn't been any meeting that ASUM had been invited to. So we called for a meeting, we invited people to it, we submitted our comments, and one year later we have an identical project in the EA. I feel that that is unacceptable. Our Board felt that and the representative body of the students agreed. I have copies of the resolution if anybody would like one.

Com: (Clint Stiffler) Well I'm totally unprepared for this so I'll keep it short and pass it on to the next person. Bob Giardano pointed out a lot of things that I guess I wanted to say to start with but it looks like, from what you hear around campus, you guys lack of involvement with the ASUM, you are not representing the people who will be mostly affected by this intersection, the student body, which is just weird. The other thing being it seems like the model is going to increase traffic flow down Sixth Street if I'm interpreting this right. Today actually my roommate pulled out and got T-boned by a Chevy truck which demolished her car. She survived the accident but shoved it directly into my car and three cars were wrecked. So I supposed anything that is going to increase the traffic on the road – I just hope you guys take safety as number one. Thanks guys.

Com: (Joe Broach) My name is Joe Broach. I always have a lot to say but tonight I actually speak on behalf of my wife who couldn't be here. My wife, Rachael, probably more than anyone else in this town has experience using the current configuration of Madison as a cyclist and a pedestrian. She works downtown and commutes from our apartment in the University district everyday and she is also involved with the Missoula Children's

Theatre where she is tonight rehearsing for a production. So she uses that a lot and I think she would be concerned with the characterization of the proposed plan as being better for cyclists and pedestrians. I wonder if these cyclists and pedestrians who are being referred to and including at intersections like this (referring to graphic), I can't really imagine one and neither can my wife who could look at that and think it looks a lot better to me and it looks like a place I would want to ride or walk. So her concern and I feel it as well, were these real cyclists and pedestrians that you were thinking of or were these just computer models? To finish, Rachael says "this project – not in her name as a pedestrian and a cyclists." Thank you.

Com: (Madeline Shapiro) I'll pass.

Com: (Alexandria Volkertz) I live in the University area very near the area that is going to be redesigned. I've also lived in a number of major metropolitan areas in the United States and abroad. I've lived with roundabouts in London and I've lived with roundabouts in Berkley, California. I know they work. The biggest problem with this proposal is that it's being designed to handle trucks. The major obstacle for keeping these roundabouts safe, if they are a double-lane roundabout, is that trucks can't manage them. If anything should be a red flag that trucks do not belong in a residential area, that alone should be an indication of it. Highway 12 goes right through a residential area. I've spoken with several City Council members and they agree that perhaps this needs to be looked at again to see whether or not Highway 12 should be re-routed out of a residential area. I would ask this project be put on hold until people have the opportunity to develop local political action to see if we can find a way to get trucks out of residential areas.

The second comment I wanted to make. Another objection to roundabout is that the visibility from the Madison Street Bridge is inadequate to provide warning that you are coming upon a roundabout. There are a number of ways to deal with that. Europe uses signs. This is not a unique concept. You can warn people that a roundabout is coming up with a large sign on Madison Street. Most people can read and if they can't read they can understand symbols.

The one thing I do want to commend the Department on is that they have taken considerable effort or at least they state they have taken considerable effort to make these intersections handicap accessible. I'm a disability rights attorney, handicap accessibility is of considerable importance to me and to the people I represent. I don't see a 100-foot wide street as being negotiated by the people I work with with physical disabilities in any reasonable amount of time and if they start late on a light as many people do, they would find themselves stranded in the middle of this massive intersection. While I commend the Department for making this a priority, I do not see how this plan in fact protects the people that I represent. Thank you.

Com: (Vicki Watson) My name is Vicki Watson and I've lived for 23 years just a couple of blocks from this proposed project. I wish I had a nickel every time I've gone around the rectangle on foot, on a bike, or in a car, so I think I know this area pretty well. I do agree that it needs some work but I'm going to agree with most of the speakers up to this point

that the plan that has been proposed would make the situation worse rather than better. I want to call on these designers and I think these are some smart designers and they can solve any sort of problem that they are all given the right set of constraints. I realize that one of the constraints they are working with here is that they believe that the rerouting of Highway 12 is an impossibility because it would require the City of Missoula to take on the cost of maintaining those roads. But I do think that if you included the rerouting of Highway 12 as an alternative and seriously studied it and showed how much traffic volume would be reduced and the wide range of additional options that become viable alternatives at that lower traffic volume, I think it would really make Missoula think that might be worthwhile to take that on. They are not going to take on a big new cost when all you say is all those alternatives are viable and this is the only thing that can be done. But if you say move the Highway 12 traffic and all of this range of alternatives becomes viable, then the City of Missoula, while I know that I and a few other people are going to be after the City Council to make that decision. So if you would do that in an EA or an EIS, add in that rerouting of Highway 12 alternative, then apply your considerable creativity to solving the disability access issue ... one thing that occurs to me is a beautiful arching pedestrian overpass over these intersections. I remember once seeing some sort of plan of the University of Montana to have an archway that was the entrance of the University of Montana with a big Grizzly on it. Well, that archway could be a pedestrian overpass over the intersections there.

The other idea, game day, people worry about game day. Why aren't we bussing from remote parking lots instead of trying to park them all on campus during the game days? As soon as just a lower traffic volume alternative is taken seriously I think all of the concerns that solutions are available to those things. So take it as seriously as you've taken solving of problems of the Preferred Alternative and you smart guys will come up with a solution.

Com: (Garth Teaberry) No one responded.

Com: (Elliott Reed) My name is Elliott Reed and I'm a student here at the University of Montana. Last year I used to live in this house right here right on the corner. During that time I used to live there I would bike to school every day and walk to school. I had several close calls with cars not yielding to pedestrians and eighteen wheelers coming by and making their wide turns and cutting the corners of curbs. So I'm in favor of a roundabout and the rerouting of Highway 12. I think that, in this area, it takes away the character of it. When the 18 wheelers would come by they would be so loud they would rattle the windows of our house and my neighbors who had kids wouldn't play with them in the front yard at all because it was dangerous. My roommates, we had dogs, we would never take them out in the front yard for fear they would get hit. So I think that these proposed plans do not accommodate the people at all, they just accommodate the commercial traffic. So I think we should reroute Highway 12.

Com: (Phil Condon) I'm Phil Condon. I teach here at the University and I've lived in Missoula for 20 years. I'm also the Chair of the City Advisory Board for Pedestrian/Bicycle Issues. I've been looking at the EA hurriedly here tonight so I don't know everything to say

about it and I'm not as organized as my written comments will be later. But the first thing that is in the EA that I find flawed and somebody spoke to it already but I want to reiterate, is the public process. I think it is a mischaracterization to say that there have been three dozen meetings over a five-year period. A lot of these meetings were between U of M, the City of Missoula, and MDT. They may have been public and somebody may have known about them, but I know as part of the Bike/Ped Board, I've been following this and the only large scale meeting that I know of at all was the one last spring. At that time too, the Bicycle/Pedestrian Advisory Board sent a letter to MDT, passed unanimously by the Board, objecting to basically this very option that has come back a year later and urging them to explore alternatives which perhaps they've done. But I will note in the correspondence appendices that letter from the City Board wasn't included. I just feel like, and I don't sense any bad purpose here, but I think the public process has been mischaracterized as wide open when, for people that follow this, I don't really feel it has been. Here now we are presented, as I understand it, with the kind of classic case of two alternatives you get to pick. Well, from what I'm hearing, I don't think either alternative is very good or will solve long-range needs and be in character of this district. And what are our options beyond that? Well, it sounds like either no plan or a thicker document. I really do think we need to take a look at how this has developed, for whatever good intentions, I don't think it's gotten the kind of public participation that it really needs for a project of this scope in this area.

I also just want to speak to the fact that what I sense is that MDT is in a tough position here. It is a difficult intersection geographically and if I'm reading things right and people have spoken to this, but the constraints, the box we're in is this Highway 12 problem. So I do think we need to talk to our city about this – long-range does this Highway 12 belong here and what options would this open up for the University to get it out of the neighborhood?

Also the Memorandum of Understanding, which I haven't read the whole thing, but it is signed by Vice President Durringer. I think that the University has had dozens of meetings with MDT about this and they've created this Memorandum of Understanding and it's also adding to the box that's smaller and smaller and results in this plan.

I will also note one other thing I just saw in the EA. There is a big discussion about roundabouts. The only aerial picture somebody mentioned is a roundabout at the base of Grant and Park, not like these drawings are or like some other drawings in the plan. But where it discusses roundabouts it says they were rejected basically because of capacity and impact to the historic district and again I don't think capacity should be the driving force. If I understand everything that I understand about the citizen plan that has been put forward, I don't think it has as much impact on the historic district in terms of land taken, houses taken, the amount of Jeannette Rankin Park taken, and apparently there is a disagreement between what MDT is analyzing and the citizen plan that the Bike/Ped Board looked at last year. So I guess I would just add my voice. I can't speak for the Board yet but we'll be considering this I'm sure and looking at it again. I know that as of last year, our voice was for you to get creative and to really consider where this is being located, to do everything we can to find out what it would take to relocate Highway 12

and to come up with something. This strikes me as an old fashioned solution – a 20<sup>th</sup> century solution to something that we can ... there's more alternatives and we can do more.

Com: (Colin Sherill) No response.

Com: (Rick Gold) My name is Rick Gold. I'm a resident of Missoula for about 10 years. I do a lot of biking and walking. I'm glad you all came to this meeting tonight because I have to admit that I'm a recovering oilaholic. Right now we're in Iraq because we don't have enough oil in America. Seventy percent of the oil that we use daily comes from outside the United States. Our children are dying in the mid-east right now because we can't figure out how to drive less. I'd like to know where these people got their transportation modeling ... how many people are going to be on this road when gas hits \$6.00 per year. It is \$2.80 right now and how many people are driving less.

Com: (Charity Watt Levis) Sir, can I ask you to limit your comments to the Environmental Assessment?

Com: (Rick Gold) This is. Where is this addressed in your Environmental Assessment? Peak Oil it's called. We can't pump any more out of the earth. We can't! So where is this in the EIS? We need to start thinking about using alternative means of transportation. Oil is not going to last that much longer. Let's all start thinking creatively; we are in the 21st Century. Thank you.

Com: (Angie Lipski) I'm Angie Lipski. I actually own the little house right on this corner, the little yellow bungalow, and the cutest of the historic structures I'll have you know. I'm not against change and I'm not against the big alumni center here and a whole big entry statement into the University of Montana, but as other folks have said here tonight, I think that what's proposed is against the character of the neighborhood. The root of it is Highway 12 and getting Highway 12 out. You know if it comes in at Reserve and Brooks, we've got to connect it up to I-90, it does seem like Reserve is the likeliest thoroughfare to getting the stuff up there as opposed to putting all those trucks in a historic neighborhood. Once this historic neighborhood starts being degraded and those structures go away and width of the streets and the trees and that sort of thing, then we can't get it back.

Contrary to a lot of people though, I do not believe the roundabout is the right solution. I lived there for about three years of the five years I've owned it, and anyone who thinks they could cruise off over a ridge; I just think the roundabout will even be more fun to be had truthfully. So I don't agree with it. I also think it is fairly pointless to try and deal with the backups of traffic for game days. Seven whole days of the basketball schedule, who cares? It is the geography issue of the University being up against the mountain and it bottlenecks coming and going out and unless we have more access points in and out, there is going to be bottlenecks. So who cares? I lived on the corner and I lived through it. That's about it. I just think there is a lot to be said about the bigger vision, about a

gorgeous entry statement, about this not needing to be 100 feet, even though I'm not against change. Thank you.

Com: (Celeste River) My name is Celeste River. I do have a couple of questions. I haven't quite caught what it is that would make the city have to take over responsibility of Highway 12 if it were moved from the route that it's been in since Missoula was a small little walking town? I'm not sure why it can't be moved and still have it be a state highway responsibility? I wonder about the sort of set mentality about these preferred plans if they don't fit in best with some plan the University has that we're just not being told about? Which would make it make more sense if we were told why these are the set ideas. These are just thoughts while I'm listening to all of this. Also it strikes me that the ASUM and the Transportation Director and the Bike/Ped Chair and the City's Bike/Pedestrian Committee all say that the statements they sent over a year ago they feel were not honored or responded to. That is another thought coming to me.

But my main thought is not pro or con, it is just that for the past 24 hours I've been working on a Resolution for our community from of neighborhood councils to send forward a Resolution in support of a large number of neighbors from the Grant Creek area who have been spending much of their own personal volunteer time to figure out and plan how to improve and beautify and assure maintenance of the interchange at I-90, North Reserve, and Grant Creek. One thing I've heard about the problem there is that after the Department of Transportation built that interchange and it is the city's responsibility not the state's to maintain that interchange. But something was done wrong in the filling of the medians where plantings were going to occur and it is bad gravel and rock underneath there. And these citizens are having to figure out how to drum up the money to get that junk out of there and replace it with good planting bedding because the trees are dead that were planted there. So that is my comment, as a citizen taking time to trying to help those citizens of the Grant Creek area improve and beautify that prominent major gateway of Missoula that we've been left with that was done improperly, I'm concerned that this beautification of this area be done properly so the citizens are not left with something five or ten years later that they have to try and redo. Thank you.

Com: (Regina Stavack) I'm Regina Stavack. I'm a student here at the U of M and I'm a huge biker, pedestrian. I came from Billings where it is petrifying to try to bike in that town. One of the main reasons I came here was to enjoy the outdoors and to be able to go out biking without feeling like there is going to be a death wish from cars. I really don't like this new idea because they are going to speed up the limit to 45 mph. It is bad enough going 25 mph or 30 mph on a bike trail with cars coming and sometimes they are not going the speed limit. These roundabouts, I don't even know what to say about them – they are petrifying. If they are going to do a two lane, how in the heck do they get around to the point for bikers to not get hit because there are two lanes and trucks ... I have a little car and I haven't driven it because it is in Billings but it's bad enough in a little car to be next to a semi, but on a bike or walking is another story. I've got a little sister and walking across even a small area to get across with a little girl. My Mom works with a lot of disability people and it is just ridiculous that they are going to try and make this

span of 100 feet, there is no possible way. I don't know if this has anything to do with the law but someone in Chicago got a ticket for walking too slow. I'm not sure where it was anymore but that would be ridiculous. But I don't feel this is going to work unless they take it back to the drawing board. There is no way this is going to work for pedestrians; this is for cars or for big trucks. I believe they need to reroute the big trucks somewhere else. Thank you.

Com: (Jim Sayer) I'm Jim Sayer and I live in the neighborhood. I just think this process is kind of a joke. Who is the decision maker on this project? When are they actually going to communicate in person with the people who are going to be affected by this project in Missoula? This is a joke because we are speaking to the consultants who are being paid a fairly good sum to do this. We are talking to employees who are being paid by the state. When are we going to talk to the actual decision-makers who will actually understand the consequences of what is going on? I was laughing because I read the EA and it says "context sensitive design". For those of you who don't know that is the latest buzz word in transportation about how you are actually make a transportation project work with the adjacent neighborhood or surrounding community. Well, as everybody here has said, this doesn't work at all with the existing community. In fact it will probably rip a gaping hole in the community because I've been to many university towns and one of the coolest things about Missoula is it is a complete woven fabric between the campus and the existing neighborhood. That is why people can walk across in comfort across dozens of streets, not just one and not an overpass with a beautiful arch to separate people from the natural landscape.

I think the other big problem with it is that it is totally traffic inducing. If you do that design, what you are doing is first of all you are going to jam more cars into the neighborhood. I'd really like to see the capacity because I couldn't see it in the EA when I flipped through it, and I looked at it earlier too. I would like to know the actual amount of cars, the volume that could be through jamming these cars into the neighborhood. I think the lights will encourage a drag racing mentality during non peak hours and during peak hours it will encourage the bottleneck that was mentioned earlier when you are taking four lanes and cramming them into two. Worse, and this is really ironic, it is going to create a complete dead zone. Some of you may not know this, but do you know Jane Jacobs a famous urban planning? Well she died today and she was the person responsible for writing *The Death and Life of Great American Cities*. And you know what she said? She said the worst thing you can do to an urban fabric is tear a big hole in it. Well that is exactly what this is all about – tearing a big hole in an urban fabric. And once, as Angie said, you tear one hole and you degrade an area, people will avoid it and won't walk there. I was just talking with Jeff Fadden who lives on Fifth Street and you know what, I don't see that many people walking on Fifth or Sixth for the very reason a couple of people mentioned, they are concerned by the noise, the potential for getting hit, their kids, their pets, etc. So you are going to tear a big hole in an area that is not known for big holes in its urban fabric. It's an absolutely stupid idea. We should look at rerouting Highway 12 and we should go back to the drawing board and let the community do this because having the state do it is an absolute mistake.

Com: (Don Mickelson) I'm Don Mickelson and I am not a student, not since 1956 anyway. I'm a resident of Missoula from 1934 on so I lived in this neighborhood so I've been here a long time. I'm here to listen because I am on the City Council and I am one of the decision makers that someone asked about a bit ago. I take very seriously my job as Chairman of the Transportation Committee and a communication link to the City Council. The main reason I'm here is to listen and to try and accurately report back the consensus of the comments that have been made here tonight. I do want to point out what I think are some disconnects. One of which is the University is being given credit for contributing right-of-way. This Memorandum of Agreement was signed in May of 2001 with Shore Tennison, Mike Kadis, and someone from the Highway Department. But there is a trade envisioned there wherein the land here is traded for land in Lake County. I think, and there is an appraisal involved in it, so I think it is a dollar-for-dollar appraisal trade. So it isn't something the University is doing other than acquiring the property, which they did do. The other thing that was talked about and was mentioned was the improved environment. Now I don't know how many times I took a lecture on malfunction junction that the environment was bad because the stop lights were there and everybody was idling waiting to get through there so carbon monoxide and the particulates were going up and up and up. You would improve things greatly if you would time lights and get them to go through. Well here we've got two more stop lights with two more groups of cars idling and putting up carbon monoxide and particulates. I can't tell whether Option One or Option Two of this proposal is a good deal. It is pretty clear that none of the options are interested in roundabouts, however, there are a lot of people in this room interested in roundabouts. So back to the drawing board seems to be pretty clear.

The idea of redesignating Highway 12, that's a pure money deal. We the city get quite a bit of money for maintaining those streets so we try pretty hard to have 93 here and 10 there and 990 here and U.S. 12 there, so we get different streets with different amounts of money from the state. I agree with that. That's a good way to fund the main streets in town but there are some problems here. And I guess what I'm hearing is, and I want to look at my notes and I'm about the last on the list to speak. One of the options is "no build" and it looks to me pretty clearly that there is some work to be done. This looks a lot like the proposal that I looked at in 2003 when I came down and asked for it. I'd be interested in a list of changes that have been made from the 2003 list to the 2006 list. I don't think there's many because it looks a lot like it was before.

The last thing is we are having a devil of a time getting a stop light installed on West Broadway. The traffic out there is 23,000 vehicles. I'd like to see the traffic count on Maurice here that justifies stop lights and it needs to be north of 23,000. Thank you very much.

Com: (Naomi Deal) My name is Naomi Deal. I was a student at the University for an undisclosed amount of years. I now work for the county and would like to talk about my change in location in this town. I lived on campus and in this neighborhood for six years.

and I didn't own a car. I didn't have a car. I lived in this town without a car for six years and was perfectly capable of getting around and that is why I stayed here. Then I moved to the other side of Reserve Street. It is funny how this hearing is taking place during bike, walk, and bus week as we have discussed because I don't have that option and maybe that is based on my fear but I will not cross Reserve on foot or on a bike. I won't do it. It is scary and it is dangerous and that is exactly what this looks like. Reserve Street is 75 feet across and this is obviously bigger than that and that is ridiculous. I've also heard people around here saying that is why I moved to Missoula. I was accepted to Medical School in Los Angeles, this is the reason why I stayed in Missoula because I can get around. I don't have to fear walking out of my house everyday. This takes away the security of being a resident in a small town and being alright with not having to have every resident of this town own a vehicle to get around. It's very disconcerting. That is the reason why I'd stayed here.

Also one small note, the woman that was killed was a very sad thing. I was standing right there. She was killed by a drunk driver. If we want to talk about game day, let's talk about how much alcohol is sold out of this place and how many of those people are driving? What do we need to focus on? Those people shouldn't be driving in the first place. We shouldn't be dealing with their traffic problem.

Com: (Jocelyn Siller) I am a teacher at the University of Montana and I've been living in the University area for 29 years and I run through this area every morning at the high traffic time so I do know it very well. I love the University area because it is a walk-able, run-able, bike-able area. If you actually look at this big intersection here, it is a half block wide. I mean watch this – it is half of that lot wide (referring to graphic) and that is massive. It doesn't fit into the University area at all. It is just obscenely large. Other people had a lot of cool things to say. One thing I do want to say is that one of the premises and one of the purposes is absolutely wrong and that is the idea that this is going to improve access to the University. It is going to improve vehicle access to the University and we have just about as much vehicle access as we can deal with. Thanks a lot guys.

Com: (Isaac Grenfell) I just found out about this two hours ago and I've only had that long to think about it and I've come up with a whole list of problems and a lot of you guys have already mentioned most of them. This just seems like the height of foolishness to me. I spent a little bit of time as an economics major here and one of the first things you learn is that people respond to incentives. So if you widen the road, more people are going to use it so you will just be back to where you started with the big traffic snarls with four lanes of traffic. So that won't solve anything. I guess what I'm saying is that there probably is a better arrangement for all of this but your first principle in all of this should be to do no harm. Don't make it worse. If you can't think of anything better then just don't touch it. So that is about all I have to say.

Com: (Charity Watt Levis) Is there anybody on the list who I missed or changed their mind and has something to say again?

Com: (Lee Clemmenson) My name is Lee Clemmenson and I live on the corner of McLeod and Arthur. So obviously this is of greatest importance to us in our house. I'm a native Missoulian and have come back here to retire. Now obviously the issue is capacity and you've got to cut the capacity in order to improve the situation. The way you cut the capacity is to take Highway 12 out of the mix. Once you get Highway 12 out and get rid of the commercial trucks and the ability to zoom across and cut up Brooks to 93, you will improve the situation quite a bit. Then you can get by with a single roundabout or a much simpler arrangement. But until you cut the capacity or do some kind of intellectual change of this issue, you are still going to be dealing with a lot of traffic.

Another issue is that I ran for Ward Three and didn't quite make it on the City Council but I did find that in walking the Ward twice it was very, very informative. Walking Fifth and Sixth and Brooks, I was appalled by the amount of traffic which is being funneled and zooming through a residential area including logging trucks and everything else. It seems only rational to get those trucks and that capacity out of there; to run through the big trucks. People on Fifth and Sixth also park on the street because many of them do not have alleys so they can't park behind it. So they are constantly battling with this heavy flow coming through their neighborhood. Secondly, if you put this through how long will it be before the rest of Arthur and South are extended to four-lane traffic to handle additional commercial traffic? Several of our trees have been clipped by commercial trucks and damaged. It would be very nice if we went back to making this a residential area for University and residential traffic and making it so it is really a compact, correct situation. The traffic right now is growing exponentially each year, don't make it worse. Thank you.

Com: (Betsy Mulligan Dague) My name is Betsy Mulligan Dague. I'm the Director of the Jeannette Rankin Peace Center. I would like to just say that this intersection is definitely a challenge. The best thing to do with a challenge is to have healthy informed dialogue with people that are interested in the issue. I would urge you to take the advice of the people in this room. There are a lot of folks that live in this neighborhood and live in this community who are passionate about what it looks like and what the character of Missoula contributes to their neighborhoods. There has been a wonderful wealth of ideas presented tonight and I hope that you will engage those ideas.

I also would like to say that I am regretful of any cutting into Jeannette Rankin Park. We have few enough memorials to this wonderful Congresswoman that did so much for Montana and for the Country and I don't want to see any less grass and any more concrete. That would not be a good memorial. We can't replant those trees. Even if you put in medians and put in new trees, we can't replace those trees; they will be lost. So even though there is a net gain, there is still a loss. That and the park areas in the city are hard to come by as it is. So I would like to echo and ask you to consider not cutting into that.

Com: (Tom Roy) My name is Tom Roy and I'm semi-retired from the University. More importantly I'm a resident of the University area. I live at 541 Evans which is on the corner of Arthur and Evans. I was at a previous meeting and didn't get here until about

7:30 and I had not intended to speak. I want to make two observations. In making these observations I think I'm really reinforcing not only what some other speakers have said but I think probably does reflect very much the conversation that has been taking place in my immediate neighborhood.

The first observation that I'd like to make is this notion that somehow any of these plans protects the historic nature of the neighborhood is on its face absolutely preposterous. We just heard from the woman who mentioned Jeannette Rankin Park – take a park out that has been a historic part of our neighborhood? It is a little hard to imagine how that protects the historic nature of the neighborhood. When we bought our home a fellow by the name of Jim Garlington lived across the street. He was a long-time resident of Missoula, and a very distinguished attorney here and a member of the Constitutional Convention in the 1970's. When we were looking at the house Jim said “you know, you should buy this house on Evans” the one we currently live in and have lived in for 31 plus years, “it is absolutely delightful. Our kids grew across the street and they were able to play on Arthur Avenue.” Then he started telling about football games and so forth and so on. The truth is when we moved to Missoula it was possible for kids to actually play on Arthur Avenue. Now you had to be somewhat careful at certain points of time. We used to park our car on Arthur. We have an entrance to our home either off of Evans or off of Arthur. Historically the Arthur entrance was the entrance to our home. It hasn't been for years and the reason is exactly what was said, increasing traffic. My concern with any of these plans, and I will acknowledge that I haven't had a chance to look at these in any detail whatsoever, but it seems to me that any of these plans create that gap, that opening. I know that there is concern further south on Arthur is that this is just the beginning. That's worse to us and certainly would destroy the historic character of the neighborhood.

Quickly the second point I'd like to make is I believe this process has not been as inclusive as it should be. I happen to serve on certain University planning committees. I'm not fearful that the University's interests will be represented in this process, but I can say as a resident my interests and the interests of my neighbors have not in any way been represented. As I've listened tonight again, I didn't intend to speak, but as I listened I thought “isn't this interesting, they are concerned about protecting the historic character of the neighborhood but what seems to be driving this is commercial traffic and the interests of the University.” What about those of us who live in the neighborhood? Thank you.

Com: (Ross Prospero) My name is Ross Prospero. I also just want to draw attention to the irony of us having an energy symposium on the other side of the UC right now and also the irony of it being bike, walk, and bus week, and we're having the roundabout plan scrapped because of lack of the ability for it to provide for the capacity of cars that we have. I just think it really needs to be addressed that you don't want to perpetuate the increasing number of cars. As an individual said earlier if we create the incentive by expanding the road, we are going to see an increase of cars on that road. So it is going to be kind of a self-perpetuating reconstruction or reconfiguration. I think it is obvious most people agree that we need to reroute Highway 12 and that seems to be the reason we need to bring this back to the drawing board – to take that amount of capacity that

Highway 12 supplies and just that out of the University District. I would just like to see the Department of Transportation try and address these issues of reconfigurations with the idea that we want to lessen the amount of cars on the road and reduce the amount of personal automobile usage so that we can see actual increases and improvements in environmental qualities as far as air conditions and accessibility to our communities. Thank you so much.

Com: (Charity Watt Levis) Is there anybody else who wants to speak? As I see everybody leaving, I just want to thank you for coming and for your input. It was well thought out and we really do appreciate that. If you do have additional comments, please take a comment form. The information on how to submit those is on the bottom of the form and we encourage you to do so.

Com: (Vicky Watson) I wanted to emphasize the need to provide the same level of analysis for the pedestrian and bike traffic that has been provided in terms of modeling the flow of the vehicular traffic. Admittedly I just picked up the EA for the first time and was flipping through it trying to find it, and I may have just not found it yet. I think it is really important to analyze the flow bike and pedestrian traffic underneath the new bridge and analyze where that traffic goes. What's the best way to bring that traffic safely on into the University campus and how does that mesh with this project? There is the bike and pedestrian traffic that takes place on the old Van Buren Bridge that comes into the area and moves through. So do the modeling or counting of pedestrians and bicyclists and where they are going and how they are moving and how they are using their alternative routes. I think for the most part, not only is it wise to get the Highway 12 traffic out of here, but to provide alternative routes away from these intersections for bicycles to use and things like pedestrian overpasses and so on. So don't just think about accommodating everybody at street level and trying to put them all through the same intersections. Maybe it is better to send some of them to completely different places.

Com: (Bob Giardano) I just want to mention on thing. There is a story I wanted to tell before. I've heard in talking to people there is an older gentleman who told me about Rose Park. You know where Brooks Street comes in, it's four lanes, and it's hectic. You get into Rose Park and things are a lot calmer. Well then that meets Higgins and its two lanes. He told me that a long time ago there was a proposal to make it a four or five lanes like Orange Street and that the neighbors said "no we don't want to loose our trees." That was a big part of that. They were told "you're going to be faced with gridlock; you're not going to meet the capacity." But if you go out and look at it, it works and it's a beautiful road. We create the future we want to see and if we want a great walk-able, bike-able transit community that drivers fit in but are not speeding through and staring at the lights and try to make it all work, we can do that. I just wanted to tell that story.

I know there is a lot of confusion about what a roundabout is. Here is a simple picture. It is not an east coast rotary that is giant and high speed and multi lane, it's not the little neighborhood calming circles, it is a size that is getting perfected. Everyday there are new roundabout designs that are happening. There was another picture in the Missoulian today that talks about a citizen's plan which has been talked about a little bit. It is a very

simple thing, it utilizes single lane roundabouts and it actually turns this part of the road into a greenway which connects the Peace Park into the River Front Trail System. There are a lot of other changes that would have to happen, but let's get creative, let's open up the process, let's figure out what other ideas are out there and it does connect to trains and busses. I got doored on Higgins riding my bike two days ago because I had to move over and I hit a car door opening and flew over it. I rolled and brush myself off and I'm thinking "we could have five times the amount of bicyclists if we made it safe to do so." People want to choose that. Maybe Missoula is a little different than these other places, we are perfectly suited for other modes – we are flat and its dry and people come here to be outdoors and appreciate that. So I just thank you for letting me add that in there.

Com: (Unidentified) I live right across the bridge, I'm a pedestrian, a driver, and I do this all the time. I've heard an awful lot about open meetings. I have an apology for you because I can't tell you when the Historical Preservation Commission is meeting – it meets twice between now and early June. I'm on that Commission and you're invited. Please call the Department of Planning to get the schedule. If you have strong feelings about this, please come.

## **CLOSING**

(Charity Watt Levis) Thank you again for coming and for sharing your well thought out comments and for being part of this process and for enduring the very long meeting. I want to reiterate that staff will be here if you have questions that you want to address to them directly. Also if you decide you want to submit comments in writing, please do so. The deadline is June 2<sup>nd</sup>.

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Transcription prepared by Annell Fillinger, AM Tech Services Inc., Helena MT  
May 2, 2006

**Appendix B:  
Comments and Responses**

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The following pages contain the comments (on the left side of the page), and the MDT/FHWA response (on the right side of the page). The general comments and responses provided in Section 4.4 of this document are referenced in many of these responses. For ease in review, these general comments and responses are repeated below:

**General Comment A:** Reroute Highway 12.

**Response A:** Please see the discussion about the procedure for highway designation provided in Section 4.1 above. This alternative was not part of the scope of the EA.

**General Comment B:** Include roundabouts in the final design.

**Response B:** Roundabouts can be an effective intersection improvement alternative when properly designed and warranted. However, capacity and right-of-way constraints make roundabouts infeasible in the context of this design. Please see Section 4.2 above for additional discussion.

**General Comment C:** The crosswalk is too long and pedestrian safety will be impaired.

**Response C:** The Preferred Build Alternative includes bump-outs, new pavement markings, and pedestrian signals at various locations. The bump-outs allow for shorter crossing distances and increased visibility of vehicles and pedestrians. The required crossing times would be calculated in accordance with the Manual on Uniform Traffic Control Devices, using a conservative average walking speed, to make sure all users have adequate time to cross. Due to the lack of community support, however, the 'No Build' decision was selected.

**General Comment D:** Portions of the park should not be used for the project.

**Response D:** Federal regulations allow the use of public parks for transportation projects if there is no prudent and feasible alternative to using that land. The EA included a draft Section 4(f) evaluation of the park and historic properties and found that there were no feasible or prudent alternatives to using 17 percent of Jeanette Rankin Park to improve pedestrian and traffic conditions at the site. As a result of the selected "No-Build" alternative, however, a Final Section 4(f) Evaluation is unnecessary and has not been conducted.

**General Comment E:** Road improvements will create additional traffic.

**Response E:** The Preferred Build Alternative will not add capacity to the overall system. The number of traffic lanes entering and exiting the system will remain the same. Due to the lack of community support, however, the 'No Build' decision was selected.

**General Comment F:** The project will increase emissions due to idling at traffic lights.

**Response F:** The Preferred Build Alternative would decrease traffic stop time on 6<sup>th</sup> Street and on Maurice Avenue by making the intersections more efficient, thereby decreasing emissions. The improvements at 5<sup>th</sup> and 6<sup>th</sup> Streets would be equal to or better than the existing conditions. Due to the lack of community support, however, the 'No Build' decision was selected.

**General Comment G:** Historic homes and trees will potentially be impacted by the Preferred Build Alternative.

**Response G:** Although existing trees would need to be removed, these trees would be replaced with a healthier, younger variety. Many of the trees in the area have been described as past their prime. In addition, the homes to be removed are University owned property, and they would be made available by the University to move to another location. Due to the lack of community support, however, the 'No Build' decision was selected.

**General Comment H:** Lack of continuity with neighborhood character.

**Response H:** As described in the EA, this project was designed to be "context sensitive". As a result of a collaborative effort with stakeholders, the preferred alternative addressed critical issues such as pedestrian and bicycle safety, air quality, and the aesthetic value of the University gateway. Mitigation measures were included in the design in order to minimize the impacts of the preferred build alternative. Due to the lack of community support, however, the 'No Build' decision was selected.

*Comments 1 to 120 were received by MDT via postcard in March 2005.*

**Comments # 1-120**

Dear Jean Riley,

The Arthur/5<sup>th</sup>/6<sup>th</sup> project and its draft Environmental Assessment (EA) are both deeply flawed and should be rejected.

- 120 A • The EA fails to account for more air pollution resulting from more stop lights and stop-and-start traffic.
- 120 B • It ignores the way the design will encourage higher traffic volumes, as well as more drivers to race through the university neighborhood.
- 120 C • It likely violates federal requirements that a project of this sort NOT destroy public parkland.

The EA is not an acceptable review – and this is not an acceptable project.

Sincerely,  
Various signatories

**Responses # 1-120**

120 A - Please see General Comment F in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

120 B - Please see General Comment E in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

120 C - Please see General Comment D in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

*The following comments have been transcribed from the Public Hearing held on the EA on April 25, 2006.*

**Comment # 121**

Ken Willett, Office of Public Safety, University of Montana.

The first thing I'd like to say is, at least from my standpoint and hopefully the rest of the University, the preferred alternative, Option 1, which has the no-left-turn, would probably be the best option for the comings and goings and activities that we have.

I do have a concern -- with 20-plus years of experience in dealing with traffic flow to the ball games, football, basketball, concerts, drama performances, and other shows that appear at the Adams Center -- that we're going to end up with a problem with the one-block funneling down to one lane there between Arthur and Maurice. We've talked about making it a super-wide, which would give us the ability to move emergency vehicles. But my concern is Monday to Friday from about 7 in the morning to 9:30, and then Saturday on game days for people coming in, and the same thing with other performances. That traffic will back up when you go from two down to one in a one-block span. If they could maybe take a look at that, I would appreciate it.

And I was also wondering -- I notice they talked about the new underbridge project and where we connect with that at Lot M1, how we will address that crossing, since it's right on the edge or contiguous to this project. We'll be trying to get that started hopefully this summer in July and finish it. And that will be a critical point where we have foot traffic and bicycle traffic. It's already there without the bridge or anything.

**Response # 121**

121 A Under the preferred build alternative, the road was widened from the preliminary design per comments from Mr. Willett to allow for emergency traffic to pass vehicles by utilizing the north side of 6<sup>th</sup> Street. The No-Build Alternative has been selected. If any future projects are proposed, these issues will be reviewed and incorporated into the environmental document as appropriate.

121 A

121 B

The only other thing I would say is, I think that this project is going to interconnect with other projects within the community, and the one I'm thinking of is the proposed intersection at Higgins, Beckwith, and I think it's Hill or Mount. As you move traffic down Arthur, it's got only so many directions it can hit, and so at that point, both of these are going to impact each other. So as long as the design takes that into consideration, I think it's important that we do that.

**Comment # 122**

Bob Giordano – Missoula.

MR. GIORDANO: I want to turn this around (referring to the microphone). I feel like we're interacting with each other as much as talking to MDT and CDM.

122 A

My name is Bob Giordano, and I'm a citizen and I also run Missoula Institute for Sustainable Transportation, and I'm going to speak for both. We feel, and I feel, that this project is basically out of character with what we have right here in the university area. I think we can just do much better job at working with all modes of transportation.

I applaud the thick environmental assessment you have put together, but I feel strongly that it's based on other places or highway models or things that are not appropriate right next to campus where we have so many people walking and biking, and driving is not the only thing. But the irony is, I don't think this will be a good plan for the driving part of all this. Because a lot of us do all modes of transportation at different times. With the no-left-turn option that seems to be gaining some momentum, I want to point out three big challenges that I

121 B - The No-Build Alternative has been selected. If any future projects are proposed, these issues will be reviewed and incorporated into the environmental document as appropriate.

**Response # 122**

122 A – Please see General Comment H in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

122 B

don't think is going to work well with that. One is, even though it's not a big turning movement, people will either go around the block, they'll cut through the neighborhood, or a big concern is we'll see -- There will be a no-left-turn box on the light pole, is what I'm guessing. And we see this on Higgins and on lots of roads; it says "no left turn," but people make that left turn all the time. And now it's a dangerous bicycle maneuver, but coming down that bridge and making the crossover maneuver like you have, I think it's going to be a huge safety issue.

With the professor that was killed there, I don't think what you're planning is going to make this area much safer. You talk about Stephens, but that was a very huge road, and it got a little better by becoming narrow. This is proposing to be a big expansion. And there are people that are hit on Stephens. The Broadway example you used, that's a real big issue. Five pedestrians have died in the last seven years. Last year was a record year; five pedestrians were killed in Missoula. I think we need to make a turn here and let's do transportation that works for everyone and does not have motor vehicle speeds and capacity as the number-one thing.

122 C

So the impacts are too negative. I'd ask that you stop this project, maybe reroute Highway 12. Let's have a more locally based project. The Madison underbridge, that's a great piece, but it's a trail piece; it's going to probably bring more bikes and peds to that area. And the way that you have aligned, I don't think is going to solve the huge safety issue we have there.

122 D

There's some flaws that I see in the EA with single-lane roundabouts. The size does not have to be so big, and there's ways to improve the capacity. But capacity should not be the

122 B -The proposed no-left-turn lane will have a median and signs to discourage a left turn. Option B of the preferred build alternative included a turn lane and any turn would be regulated with a turn only light. The No-Build Alternative has been selected. If any future projects are proposed, these issues will be reviewed and incorporated into the environmental document as appropriate.

122 C - Please see General Comment A in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

122 D - Please see General Comment B in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

number-one thing, capacity of motor vehicles. It's all of us and how we move around in this community.

Thank you.

**Comment # 123**

**Response # 123**

Kim Pappas – 310½ Benton, Missoula

Hi, my name is Kim Pappas. I'm a student at University of Montana and an active citizen in Missoula and the state. As the child of an Air Force engineer and then gone business, I've spent a lot of my life moving and, as a result, I have spent a lot of time in many towns and cities across the U.S. At age 18, I moved to Missoula, and I've been here ever since for the past four years.

Missoula has an interesting and exiting culture of diversity and creativity and art, three characteristics that are unique to Missoula and this state, which is why I support roundabouts as used in the citizen plan presented by Bob Giordano. They are essential examples -- they are essential examples of creative innovations that come to Missoula before other towns in the state.

As I mentioned earlier, because my history of moving, I've spent a significant amount of time in three other cities that use roundabouts: Forest Grove, Oregon, Bend, Oregon, and Olympia, Washington. Both Bend, Oregon, and Olympia, Washington, have populations pretty similar to Missoula, people coming in daily into town, and a lot of traffic. Bend has a climate that is similar to Missoula, as well, with cold winters, lots of snow, lots of wind.

And I actually have no complaints for roundabouts whatsoever. As a matter of fact, I love them, and they could be incorporated into the Missoula transportation system and incorporated into the Missoula culture.

Another benefit to roundabouts and how they can fit into Missoula's atmosphere is that -- is the one used in Bend, Oregon. In the center of many of the roundabouts in Bend, there are sculptures and other pieces of art from local artists.

Although I fully believe roundabouts are the safest and most efficient ideas for this project, I'm not going to talk about those. You're going to hear about them from everybody, so I'm focusing more on the artistic and aesthetic value of them. So I want the MDT and the people of Missoula to understand the culture of Missoula when researching the different alternatives to this project, the new innovations, the diversity, and the aesthetic quality when considering all of these options.

123 A

Thank you.

123 A – Please see General Comment H in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

**Comment # 124**

Mary Ellen Carter, 101 Keith Ave., Missoula

I'm a student here at the university -- my name is Mary Ellen Carter -- and I also live in the neighborhood.

I'd just like to say I appreciate the plan's concern for safety. That road is pretty dangerous, and I knew the professor that was killed there, and I'm glad to see people trying to fix that problem. And I see that you've put a lot of work into the plan, but I don't think it addresses well enough the character of the neighborhood and the quiet residential aspect of this neighborhood. I would hate to see it change by a road like this, and I think this road would significantly change the character of this neighborhood. So I would just urge you to go ahead and go back to the drawing board and see if you could come up with a plan that addresses the safety issue, of course, but also the quiet nature of this neighborhood.

124 A

Thank you.

**Response # 124**

124 A - Please see General Comment H in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

**Comment # 125**

Nancy Wilson, ASUM

Hi, I'm Nancy Wilson. I'm with the Associated Students of the University of Montana Office of Transportation.

This is, ironically, Bike, Walk, Bus Week in Missoula, and on campus, we run a giant raffle and we have a lot of people come to our table and we talk to a lot of people.

I talked to hundreds, maybe thousands of people today. It was exhausting, so I don't know if my brain is fully attached. But I did not hear anyone excited about this project. When I would show them this project, they would be mortified that this is the size of the project that someone is considering in the University District, right here at our front door.

125 A

We need to do better than this. We need to build a beautiful project. We don't need to take an intersection from Anywhere, Montana, and plop it in the University District. We can be more creative. It can be a beautiful, safe project. This is not it.

We have made many comments. We're concerned that we're not seeing any action coming from the comments that we're making, and we really want to know, how many comments does it take? Give us a number. What does it do when we make these comments? Are we going to see changes in this project, or does somebody just file our comments in the back of a giant report? Which is what happened in the EIS. We want to see some action changed.

A few other comments. I'm mortified if there really were -- How many did I see? Were there really three dozen

**Response # 125**

125 A - Please see General Comment H in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

public meetings? Because ASUM was not invited. That's 15 -- excuse me, 13,000 students. We are directly affected. We were never invited to three dozen meetings, I can promise you that.

I'm also concerned that someone is using Stephens -- or that Stephens is being used as a good pedestrian facility, because there is nowhere near the amount of pedestrian, bicycle -- That is not the same kind of corridor. There is nothing about that project that is the same as Arthur. So we really need to look that. That's not an example. Mullan Road on Broadway is not an example. I would not cross Broadway on Mullan Road. You would have to be crazy to walk across that street right there. I'm sorry, that is not a good example.

Anyway, we just really want you to go back to the drawing board. You know, start over. If you look at the 11 projects that this project surfaced from as the best project, it was the best project of those 11. But those 11 projects were really not good. So -- In fact, I've been showing them to people. I was kind of embarrassed.

There's one that shows a roundabout at the bottom of Rose Park. We're not quite sure why that's there. It would be kind of fun to drive around it, but I don't see it, really, as good traffic movement. So, I don't know, we just want you to start over. Later, you will have a resolution read to you from ASUM. It was passed by the student body. It does not support this project.

Thank you.

**Comment # 126**

Ron Erickson, Missoula

I'm Ron Erickson. I taught at the university for a long time, also in the Legislature. When I was in the Legislature, it turned out that I was on the oversight committee for the Department of Transportation, and I particularly recall a time with the deputy director where I said something about pedestrians, and particularly along Reserve Street, and what he said was, "That was a mistake. We'll never make that mistake again." And that's always good to hear.

But what I fear in terms of passengers -- or not the passengers in cars, but the people walking, pedestrians and bicyclists, that this isn't the best plan. If one does have to go toward this plan, I certainly hope that we don't allow vehicles to turn left off of Arthur, because that's one of the places where you have to have a much wider street. I'm also very concerned -- And I'm going to leave the microphone for this. I'm very concerned about a stoplight there (indicating). I think that that's basically kind of crazy and that it would -- If we're going to do something at all, get rid of that part of the street (indicating).

126 A

So I don't know that we've got a good project in front of us. I certainly hope that Bob Giordano is listened to well, and all of the folks who are thinking about roundabouts, because that might be the best solution. I don't know the best solution, but I'm pretty sure we don't have it yet.

Thank you.

**Response # 126**

126 A - See Response 122B.

**Comment # 127**

Rep. Dave Wanzenried, 903 Sky Dr., Missoula

I'm Dave Wanzenried. I have the privilege of representing the area just immediately to the west of this proposed project, from Arthur west, in the Legislature. Just recently, I've gone door to door in that area, and not one person thinks this is a good plan. No one.

127 A

If you look at the timetable, the last time we did some work in this area was 1957. It's going to be 52 years before we get this thing done, with any improvements. And a lot has changed in those intervening years about the nature of transportation. I've already sent a letter to the Department, so I'm not going to go through that. But just think about this proposed change right here (indicating). It doesn't tell you on there, but those trees on that street are going to be removed. How long did it take those trees to grow? Do we want to sacrifice that area and the houses immediately adjacent to this proposed change? What are we going to be thinking about 50 years from now?

127 B

The roundabouts are being dismissed because some traffic can't use them, commercial traffic. I happen to work in that industry. I don't think anybody would object to redesignation of the traffic from U.S. 12 where it currently is on Reserve Street except those of us that drive on Reserve Street, right? But we've got to do something. Fifty years from now, the traffic cannot flow -- commercial traffic cannot flow through this city.

127 C

And part of the argument now, if we make changes down the way on the pipeline, Malfunction Junction and the other

**Response # 127**

127 A - Please see General Comment H in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

127 B - Please see General Comment G in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

127 C - Please see General Comment A in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

places, we've got federal money there and we can't redesignate that now because if we do, it's going to jeopardize the continued maintenance of that area. So we're necessarily precluded from making changes that we need to make to represent all the modes of transportation.

The flow of traffic coming over the bridge now, with this proposal, pedestrians, beware; and cyclists, watch out. It's going to compound the problem. I lived in this neighborhood when I was in graduate school thirty-some-odd years ago. The neighborhood hasn't changed that much, but the traffic has. The traffic is not just cars; it's people on bicycles and afoot. And this proposed change here and this proposed construction project does not recognize that.

We can do better than this. Fifty years from now, we won't be here to look at the work that we've left those that go ahead of us. But let's get it right. Let's slow down the process, listen to all the other groups that do have some interest in doing something besides automobile traffic, and do it right, and do it right now. Let's not proceed with this project. Let's get it right by involving people and taking a look at the redesignation of the U.S. 12 route and do it right holistically.

Thank you very much for this opportunity.

**Comment # 128**

Christy Dodson, 645 S. 1<sup>st</sup> W., Apt. 3, Missoula

Hello. Thank you for all your hard work. Don't mean to be rude about the acronyms; it's just that I'm a dunce and I don't read the newspaper.

I'm here for many reasons, but mainly because I was called at the last minute. I grew up in Missoula. I'm five generations. I've been away from home for 10 years and I've come home. People called and said, "They're going to pave Jeannette Rankin Peace Park." I was part of the dedication for that park. So I showed up at 4 o'clock, and due to a bunch of miscommunications -- There was supposed to be a 4-to-6:30 open house where I thought I was going to get updated, so I don't know what's going on. But I think I have the solution.

I think people should watch more old movies, like me. Because in the old movies, you will see wonderful, romantic public transportation, so you don't have all these cars on Highway 12 and all over Missoula. I'm a nervous wreck. I've always been one, but after coming home, there are cars everywhere. You can't walk, you can't ride your bike, you can't drive without almost getting killed every day. But in those old movies, seriously, they have wonderful trains and buses and streetcars and trolleys, and you meet your true love and you have community. You know, cars are so isolating; it's just you and your car or you and your spouse fighting or something. But just think how you're shooting yourself in the foot, especially single engineers. I mean, you could really meet somebody great on a train. So I'm just asking everybody, work every day for more public transportation.

Thank you, and I love you all.

**Response # 128**

Comment noted. No response necessary.

**Comment # 129**

Benjamin Courteau, ASUM

Hi, my name is Benjamin Courteau. I've been on the ASUM Office of Transportation Board for four years. I was a student, now alum of the university. I'm going to follow up on what Nancy Wilson had to say. I'm going to go ahead and read quickly the resolution that was passed through the ASUM Senate, which stands for the Associated Students of the University of Montana, for those of you who don't know. It is the representative body that represents all the 13,000-plus students of the university.

I'll just go ahead and read it now: "Whereas, the ASUM Resolution" which was passed last spring "called for a public meeting in order for the student body and the general public to comment on this project;

"Whereas, the meeting held in response to the above mentioned resolution was held in early April 2005;

"Whereas, there was considerable student and public opposition to the Montana Department of Transportation preferred alternative design of the Arthur Avenue project, specifically to the large size of the proposed road expansion;

"Whereas, the road width proposed for Arthur Avenue between 5th and 6th Streets in the MDT preferred alternative design is 100 ft, which is wider than Reserve Street...

**Response # 129**

"Whereas, the current preferred alternative for the project will cause significant disruption of pedestrian and bicycle safety ... and create an environment conducive to increased motor vehicle speeds;

129 A

"Whereas, the ASUM Office of Transportation Board, after reviewing the draft environmental assessment submitted by MDT, has concluded that the draft environmental assessment has failed to adequately address the concerns of the student body and the general public and has failed to meet all the specified goals of the project;

129 A – Due to the lack of community support, the 'No Build' Alternative was selected.

"Therefore, Let It Be Resolved that" ASUM does "not support either option proposed in the draft..."

Basically, this sums up our dissatisfaction with the public process. Last year, we called for a meeting because there hadn't been one since 2003. For two years, there hadn't been any meeting that ASUM had been invited to. So we called for a meeting, we invited people to it, we submitted our comments. And one year later, we have an identical project in the EA. And I feel that that's unacceptable, our board felt that, and the representative body of the students agreed. There it is. I have copies of the resolution if anybody would like one.

**Comment # 130**

Clint Stiffler

I think I signed the wrong sheet, but now is my chance. Hi, guys. Let's see, my name is Clint Stiffler. I'm totally unprepared for this, so I'll keep it short and pass it on to the next person.

Bob Giordano pointed out a lot of things that I guess I wanted to say to start with, but it looks like, from what you hear around campus, you guys's lack of involvement with ASUM, you're not representing the people that will be mostly affected by this intersection, the student body. Which is just weird. Why? I don't understand the money in that.

130 A

Other thing being it seems like the model is going to increase traffic flow hard down Sixth Street, if I'm interpreting that right. Yesterday, actually, my roommate pulled out and got t-boned by a Chevy truck, which demolished her car. She survived the accident, but shoved it directly into my car. Three cars were wrecked. So I suppose anything that's going to increase the traffic on the road, I just hope you guys think safety is number one.

Bob, thanks for taking care of all my questions for me.

**Response # 130**

130 A - Please see General Comment E in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

**Comment # 131**

Joe Broach, 435 Hastings, Missoula

Hi, my name is Joe Broach. And I always have a lot to say anyway, but tonight, I'm actually speaking on behalf of my wife, who couldn't be here.

My wife Rachel, probably more than anyone else in this town, has experience using the current configuration of Madison as a cyclist and a pedestrian. She works downtown and commutes from our apartment in the University District every day. And she's also involved with the Missoula Children's Theater, where she is tonight rehearsing for a production. So she uses that a lot. And I think that she would be concerned with the characterization of the proposed plan as being better for cyclists and pedestrians.

I wonder if these cyclists and pedestrians who are being referred to -- I mean, looking at intersections like this (indicating), I can't really imagine one, and neither can my wife, that would look at that and think that looks a lot better to me, it looks like a place I want to ride and walk. And her concern, and I feel it as well, is, were these real cyclists and pedestrians that you were thinking of or were these just computer models?

And to finish, Rachel says this project is not in her name as a cyclist and pedestrian.

Thank you.

**Response # 131**

Comment noted. No response necessary.

**Comment # 132**

Alexandra Volkerts, 339 S. 5<sup>th</sup> E., Missoula

My name is Alexandra Volkerts, and I live in the university area, very near the area that's going to be redesigned. I've also lived in a number of major metropolitan areas in the United States and abroad. I've lived with roundabouts in London, I've lived with roundabouts in Berkeley, California. I know they work.

The biggest problem with this proposal is that it's being designed to handle trucks. The major obstacle for keeping these roundabouts safe, if they were a double-lane roundabout, is that trucks can't manage them. If anything should be a red flag that trucks do not belong in a residential area, that alone should be an indication of it. Highway 12 goes right through a residential area.

132 A

I've spoken with several city council members, and they agree that perhaps this needs to be looked at again to see whether or not Highway 12 should be rerouted out of a residential area. I would ask this project be put on hold until people have the opportunity to develop local political action to see if we can find a way to get trucks out of residential areas.

The second thing -- comment I wanted to make is that another objection to roundabouts is that the visibility from the Madison Street Bridge is inadequate to provide a warning that you're coming up on a roundabout. There are a number of ways to deal with that. Europe uses signs. This is not a unique concept.

**Response # 132**

132 A - Please see General Comment A in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

You can warn people that a roundabout is coming up with a large sign on Madison Street. Most people can read, and if they can't read, they can understand symbols.

The one thing I do want to commend the Department on is that they have taken considerable effort, or at least they state they've taken considerable effort to make these intersections handicap accessible. I am a disability rights attorney. Handicap accessibility is of considerable importance to me and to the people that I represent. I don't see a 100-foot-wide street as being negotiated by the people that I work with with physical disabilities in any reasonable amount of time. And if they start late on a light, as many people do, they would find themselves stranded in the middle of this massive intersection.

132 B

While I commend the Department for making this a priority, I do not see how this plan, in fact, protects the people that I represent.

Thank you.

132 B - Please see General Comment C in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

**Comment # 133**

Vicki Watson, 509 Daly, Missoula

Hi, I'm Vicki Watson, and I've lived for 23 years just a couple of blocks from this proposed project. And I wish I had a nickel for every time I've gone around that rectangle on foot, on a bike, or in a car. So I think I know this area pretty well, and I do agree that it needs some work, but I'm going to agree with most of the speakers up to this point that the plan that's been proposed would make the situation worse rather than better.

I want to call on these -- I think these are some smart designers here and they can solve any sort of problem as long as they are given the right set of constraints. And I realize that one of the constraints that they're working with here is that they believe that the rerouting of Highway 12 is an impossibility because it would require the City of Missoula to take on the cost of maintaining those roads. But I do think that if you included the rerouting of Highway 12 as an alternative and seriously studied it and showed how much traffic would be reduced -- how much the traffic volume would be reduced, and the wide range of additional alternatives that become viable alternatives at that point, at that lower traffic volume, I think it would really make Missoula think that might be worthwhile to take that on. You know, they're not going to take on a big, new cost when all you say is all those alternatives aren't viable, this is the only thing that can be done. But if you say, yep, move the Highway 12 traffic and all of this range of alternatives becomes the viable, then the City of Missoula -- well, I know that I and a few other people here are going to be after the city council to make that decision.

133 A

**Response # 133**

133 A - Please see General Comment A in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

133 B

So if you would do that in an EA or EIS, add in that rerouting Highway 12 alternative, then apply your considerable creativity to solving the disability access issue. One thing that occurs to me is a beautiful, arching pedestrian overpass over these intersections. I remember once seeing some sort of plan of the University of Montana to have an archway that was the entrance to the University of Montana with a grizzly on it and so on.

Well, that archway could be a pedestrian overpass over the intersections there. I guess the other idea, game day, people worry a lot about game day. Why aren't we busing people from remote parking lots instead of trying to park them all on campus during game day?

As soon as, you know, just a lower traffic volume alternative is taken seriously, I think all the concerns, that solutions are available to those things. So take it as seriously as you've taken solving the problems of the preferred alternative, and you smart guys will come up with a solution.

133 B - Please see General Comment C in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

**Comment # 134**

Elliot Reed, 3345 Hollis, Missoula

Hi, my name is Elliott Reed, and I'm a student here at the University of Montana.

Last year, I used to live in this house right here, right on the corner of Fifth and Arthur (indicating). In that time I used to live there, I would bike to school every day and walk to school, and I had several close calls with cars not yielding to pedestrians and 18-wheelers coming by and making their wide turns and cutting the corners of curbs. **And so I'm in favor of a roundabout and the rerouting of Highway 12.** I think that in this area, you can't -- it takes away the character of it. And the 18-wheelers, when they would come by, they would be so loud they would rattle the windows of our house. And my neighbor, they had kids, and they wouldn't play with them in the front yard at all because it was dangerous. My roommates, we had a few dogs, too; we would never take them out in the front yard for fear they'd get hit.

134 A

So I think that these proposed plans do not accommodate the people at all, they just accommodate the commercial traffic. And so I think we should reroute Highway 12.

Thank you.

**Response # 134**

134 A - Please see General Comments A and B in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

**Comment # 135**

Phil Condon, Missoula

I'm Phil Condon. I teach here at the university, and I've lived in Missoula for 20 years. And I'm also the chair of the city advisory board for pedestrian/bicycle issues.

I've been looking at the EA hurriedly here tonight, so I don't know everything to say about it, and I'm not as organized as my written comments will be later. But the first thing that's in the EA that I find flawed in this -- and somebody spoke to it already, but I want to reiterate -- is the public process. I think it is a mischaracterization to say that there's three dozen meetings over a five-year period. A lot of these meetings were between UM, the City, and MDT. And they may have been public and somebody may have known about them, but I know as part of the bike/ped board, I've been following this, and the only large-scale meeting I know of at all was the one last spring. At that time, too, the bicycle/pedestrian advisory board sent a letter to MDT, passed unanimously by the board, objecting to basically this very option that's come back a year later and urging them to explore alternatives, which perhaps they've done. But I will note that in the correspondence appendices, that letter from the city board wasn't included.

I just feel like it's -- I don't sense any bad purpose here, but I think the public process has been mischaracterized as wide open when, for people who follow this, I don't really feel it has been. Here now we're presented, if I understand it, with the kind of classic case of here's two alternatives, you get to pick.

135 A

**Response # 135**

135 A – Please see Section 3.0 of this document, which summarizes the public involvement process. The meetings/events summarized in Section 5 of the EA includes both public and agency coordination. Not all of the meetings/events listed involved public participation. The meetings were included, however, to illustrate the level of inter-agency cooperation utilized for this project.

135 B

Well, from what I'm hearing, I don't think either alternative is very good and will solve long-range needs and be in character with this district.

And what are our options beyond that? Well, it sounds like either no plan or a thicker document. I mean, I really do think we need to take a look at how this has developed, despite all -- or whatever good intentions. I don't think it's gotten the kind of public participation that it really needs, a project of this scope in this area.

And I also just want to speak to the fact that what I sense is that MDT is in a tough position here. It is a difficult intersection geographically. And if I'm reading this thing right -- people have spoken to this, but the constraints, the boxes we're in are this Highway 12 problem, and so I do think that we need to talk to our city about this. Long range, does Highway 12 belong here, and what options would this open up for the university to get it out of the neighborhood?

135 C

And also, the memo of understanding, which I haven't read the whole thing, but it's signed by Vice President Durringer. I think that the University has had dozens of meetings with MDT about this, and they've created this memo of understanding. And it's also adding to the box that is smaller and smaller and results in this plan.

And I will also note one other thing I just saw in the EA. There is a big discussion about roundabouts. The only aerial picture somebody mentioned is a roundabout at the base of Rankin Park, not like these drawings are or like some other drawings in the plan. But where it says -- discusses roundabouts, it says they were rejected basically because of capacity and impact to the historic district. That's when it first brings up roundabouts.

135 B - Please see General Comment H in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

135 C - Please see General Comment A in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

And again, I don't think capacity should be the driving force. And if I understand everything I understand about the citizen plan that's been put forward, I don't think it has as much impact on the historic district in terms of land taken, houses taken, the amount of Jeannette Rankin Park taken. And apparently, there's a disagreement between what MDT is analyzing and the citizen plan that the bike/ped board looked at last year.

So I guess I would just add my voice. And I can't speak for the board yet. We'll be considering this, I'm sure, looking at it again. But I know as of last year, our voice was for -- to get creative, to really consider where this is being located, to do everything we can to find out what it would take to relocate Highway 12, and to come up with something -- This strikes me as an old-fashioned solution, a 20th Century solution to something that -- There's more alternatives and we can do more.

Thank you.

**Comment # 136**

Rick Gold, 3200 Brooks, Missoula

Hello, my name is Rick Gold. I'm a resident of Missoula now about 10 years, and I do a lot of biking and walking. And I'm glad you all came to this meeting tonight, because I have to admit, I'm a recovering oilaholic.

Right now, we're in Iraq because we don't have enough oil in America. Seventy percent of the oil that we use daily comes from outside the United States. Our children are dying in the Mideast right now because we can't figure out how to drive less. I'd like to know where these people got their transportation modeling trips or, you know, how many people are going to be on this road when gas hits \$6 next year. It's 2.80 right now. How many people are driving less?

Where is this addressed in your environmental assessment? Peak oil, it's called. We can't pump anymore out of the earth. We can't. So where is this in the federal EIS? We need to start thinking about using alternative means of transportation. Oil is not going to last that much longer. Let's all start thinking creatively. We're in the 21st Century.

Thank you.

**Response # 136**

Comment noted. No response necessary.

**Comment # 137**

Angie Lipski, 426 McLeod, Missoula

Hi, I'm Angie Lipski, and I actually own the little, cute house right on this corner, the little yellow bungalow (indicating); the cutest of the historic structures, I'll have you know.

You know, I'm not against change, and I'm not against what the vision could be of a big alumni center here (indicating), a whole, grand entry statement into the University of Montana. But as other folks have said here tonight, I think that what's proposed is against the character of the neighborhood. And the root of it is Highway 12 and getting Highway 12 out. You know, if it comes in at Reserve and Brooks, we've got it connected up to I-90, it does seem that Reserve is the likely solace thoroughfare to get the stuff up there, as opposed to, you know, putting all those trucks in a historic neighborhood.

Once the historic neighborhood starts being degraded and those structures go away, and the width of the streets and the trees and that sort of thing, we can't get it back.

You know, contrary to a lot of people here, though, I do not believe the roundabout is the right solution, living there three years of the five years I've owned it.

And you want to see kids cruise off a bridge. I just think a roundabout will be just even more fun to be had, truthfully. So I don't agree with it.

137 A

**Response # 137**

137 A - Please see General Comments A and H in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

137 B

And I also think it's fairly pointless to try to deal with the backups of traffic for game days. Seven whole days and then the basketball schedule, who cares? It's a geography issue of the university being up against the mountain and it bottlenecks coming in and coming out. And unless we have more access points in and out, there's going to be bottlenecks. So, I mean, who cares? And I've lived on the corner and I've lived through it.

I guess that's about it. I mean, I just think that there's a lot to be said about the bigger vision, about a gorgeous entry statement, about this not needing to be 100 feet, even though I'm not against change.

Thank you.

**Comment # 138**

Celeste River, 304 Westview Drive, Missoula.

138 A

Hello, my name is Celeste River, and I do have a couple of questions. I wonder, I haven't quite caught it, what it is that would make the City have to take over responsibility of Highway 12 if it were moved from the route that it's been in since Missoula was a little -- small, little logging town. I'm not quite sure why it can't be moved and still have it be a state highway responsibility. And I wonder about the sort of set mentality about these preferred plans, if it isn't that they fit in best with some plan the University has that we're just not being told about; which would make it make more sense, then, if we were told why these are the set ideas. These are just thoughts I've had while I'm listening to all of this.

137 B - Although the function of the design during Special Events is considered, the design of the project was not based on Special Event capacity. For additional discussion, please see Sections 1 and 2 of the EA, as well as the Revised Preliminary Traffic Report.

**Response # 138**

138 A - Please see General Comment A in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

Also, it strikes me that the ASUM and the transportation director and the bike/ped -- chair of the city's bicycle/pedestrian committee both say that the statements they sent in one year ago, they feel, were not honored or responded to. It's just another thought that's come to me.

But my main thought is not pro or con. It's just that for the past 24 hours, I've been working on a resolution for our community forum of neighborhood councils to send forward a resolution in support of a large number of neighbors from the Grant Creek area who have been spending much of their own personal volunteer time to figure out and plan how to improve and beautify and assure maintenance of the interchange at I-90 and North Reserve and Grant Creek. And one thing I've heard about the problem there is that after the Department of Transportation built that interchange, and it wasn't -- And the City, it's the City's responsibility, not the State's, to maintain that interchange. But something was done wrong in the filling of the medians where plantings were going to occur, and it's bad gravel and rock underneath there. And these citizens are having to figure out how to drum up the money to get that junk out of there -- that's what they call it, junk -- and replace it with good planting bedding. Because the trees are dead now that were planted there.

And so that's just my comment as a citizen who is taking time to try to help those citizens of the Grant Creek area improve and beautify that prominent, major gateway of Missoula that we've been left with that was done improperly. I'm concerned that this beautifying -- or the beautification of this area be done properly so the citizens are not left with something five or 10 years later that they have to redo.

138 B

Thank you.

138 B - Under the preferred build alternative, trees would be replaced with a healthier, younger variety. MDT would be responsible for sod, seed, and irrigation of areas disturbed during construction. Also, after final design, MDT and the City of Missoula would enter into an arrangement for landscaping and maintenance. Due to lack of community support, however, the 'No Build' decision was selected.

**Comment # 139**

Regina Staszak, Missoula

Hi, I'm Regina Staszak. I'm a student here at the U of M, and I am a huge biker/pedestrian. I came from Billings. It's petrifying to try to bike in this town. One of the main reasons I came here was to enjoy the outdoors and to be able to go out biking without feeling like there's going to be a death wish from cars.

139 A

I really don't like this new idea, because they're going to speed up the limit to 45 miles per hour. It's bad enough going 25 or 30 -- on a bike trail with cars coming, and sometimes they're not always going the speed limit. These roundabouts, I don't even know what to say about them. You know, they're petrifying that, you know, if they're going to do a two-lane, how the heck they get around to the point for bikers to not be able to get hit.

Because the two-lane and trucks -- I have a little car, and I haven't drove it because it's in Billings, but it's bad enough in a little car to be next to a semi, but a bike or walking is another story.

Hopping -- you know, I've got a little sister, and walking across even a small area to get across is a nutcase just with a little girl. And my mom has worked with a lot of disability people, and it just is ridiculous that they're going to try and make this span to 100 feet.

139 B

There's no possible way. And after -- I don't know if there's anything to do with the law that someone in Chicago got a ticket for walking too slow -- I'm not sure where it was

**Response # 139**

139 A – Speed limits would not be changed from the current limits unless requested by the City of Missoula. Proposed additional stop lights and stop control devices would also help regulate traffic speed. Due to the lack of community support, however, the ‘No Build’ alternative was selected.

139 B - Please see General Comment C in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

anymore. But that would be ridiculous. I don't feel that this is going to work unless they take it back to the drawing board. There's no way this is going to work for pedestrians. This is for cars or for big trucks. And I believe that they need to reroute the trucks somewhere else.

Thank you.

**Comment # 140**

Jim Sayer, Missoula

My name is Jim Sayer. I live in the neighborhood. I just think this process is kind of a joke. I mean, who is the decision-maker on this project, and when are they actually going to communicate in person with the people who are going to be affected by this project in Missoula? This is a joke because we're speaking to the consultants who are being paid a fairly good sum to do this. We're talking to employees who are being paid by the State. But when are we going to talk to actual decision-makers who will actually understand the consequences of what's going on?

I was laughing because I read the EA and it says context sensitive design. And for those of you who don't know, that's the latest buzz word in transportation, about how you actually make your transportation projects work with the adjacent neighborhood or surrounding community. Well, as everybody here has said, this doesn't work at all with the existing community. In fact, it will probably rip a gaping hole in the community. Because I've been to many university towns, and one of the coolest things about Missoula is it's a complete woven fabric between the campus and the existing neighborhood. That's why people can walk across -- in

140 A

**Response # 140**

140 A - Please see General Comment H in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

comfort across dozens of streets, not just one and not an overpass with a beautiful arch to separate people from the actual landscape.

140 B

I think the other big problem is that it's totally traffic inducing. I mean, if you look at that design, what you're doing is, first of all, you're going to jam more cars in the neighborhood. I'd really like to see the capacity, because I couldn't see it in the EA when I flipped through it. And I looked at it earlier, too. I'd like to know the actual number of cars, the volume that could be achieved through jamming these cars into the neighborhood. I think the lights will encourage drag-racing mentality during non-peak hours, and during peak hours, it will encourage the bottleneck that was mentioned earlier when you're taking four lanes and cramming them into two.

Worse -- and this is really ironic -- it's going to create a complete dead zone. Some of you may not know this, but do you know Jane Jacobs, the famous urban planner? Well, she died today. She was the person responsible for writing "The Death and Life of Great American Cities." And you know what she said? She said that the worst thing that you can do to an urban fabric is tear a big hole in it. Well, that's exactly what this is all about, tearing a big hole in an urban fabric. And once, as Angie said, you tear one hole and you degrade an area, people will avoid it, they won't walk there.

I was just talking to Geoff Badenoch, who lives on Fifth Street. And you know what? I don't see that many people walking on Fifth or Sixth for the very reason that a couple of people mentioned; they're concerned by the noise, by the potential for getting hit, their kids, their pets. So, you know, you're going to tear a big hole in an area that's not known for big holes in its urban fabric.

140 B - Please see General Comment E in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

140 C

It's an absolutely stupid idea. We should look at rerouting Highway 12, and we should go back to the drawing board and let the community do this, because I think having the State do it is an absolute mistake.

**Comment # 141**

Don Nicholson, 7464 Highline Court, Missoula.

I'm Don Nicholson, and I am not a student. Not since '56 anyway. I've been a resident of Missoula from 1934 on, and I've lived in this neighborhood, so I've been here a long time. And I'm here to listen because I am on the city council and I am one of the decision-makers that someone asked about a bit ago. I take very seriously my job as being chairman of the transportation committee and the communication link to the city council.

The main reason I'm here is to listen and to try to accurately report back the consensus of the comments that have been made here tonight.

But I do want to point out some, what I think are disconnects; one of which is the University is sort of -- or they're given credit for contributing right-of-way.

This memorandum agreement was signed in May of 2001 with George Dennison and Mike Caddis and someone from the Highway Department. But there's a trade envisioned there, wherein the land here is traded for land in Lake County, I think, and there's an appraisal involved in it, so I think it's a dollar-for-dollar appraisal trade. So it isn't something that the University is doing other than acquiring the property, which they did do.

140 C - Please see General Comment A in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

**Response # 141**

141 A

The other thing that was mentioned is that we're going to improve the environment. Now, I don't know how many times I took a lecture on the Malfunction Junction, that the environment was bad because the stoplights were there and everybody was idling waiting to get through there, and so the carbon monoxide and particulate goes up and up and up and we would improve things greatly if we would time the lights and get them to go through. Well, here, we've got two more stoplights with two more groups of cars idling and putting out more carbon monoxide and particulate.

I think -- And I can't tell whether this proposed settlement that's a good deal is Option 1 or Option 2. It's pretty clear there's none of the proposals that are interested in roundabouts.

However, there's a lot of people in this room interested in roundabouts. And so back to the drawing board seems to be pretty clear.

And the idea of redesignating Highway 12, that's a pure money deal. We, the City, get quite a bit of money for maintaining those streets, and so we try pretty hard to have 93 here and 10 there and I-90 here and U.S. 12 there. So we get on different streets to get different amounts of money from the State. I agree with that. That's a good way to fund an awful lot of the main streets in town. But there are some problems here. And what I guess I'm hearing is -- And I want to look at my notes just a minute, because I get one chance at this and I'm about the last on the list.

One of the options is no build, and it looks to me to be pretty clear that there's some work to be done. I mentioned the -- Oh,

141 A - Please see General Comment F in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

141 B

this looks a lot like the proposal that I looked at in 2003 when I went down and asked for it. I'd be interested in the list of changes that have been made from the 2003 list to the 2001 list -- or 6 list, whatever it is. I don't think there's many, because it looks a lot like it was before.

141 C

And the last thing is, we're having a devil of a time getting a stoplight installed on West Broadway. Traffic count there is 23,000 vehicles. I'd like to see the traffic count on Maurice here that justifies stoplights, and it needs to be north of 23,000.

Thank you very much.

141 B - A more detailed roundabout analysis was conducted, no left turn and left turn alternatives from Arthur Avenue to 5<sup>th</sup> Street were added, an analysis was conducted to evaluate methods to reduce property utilized from Jeanette Rankin Park, boulevard parking and other modifications and changes were made at the request of the City of Missoula and MDT.

141 C - The determination of the need for traffic control devices is site-specific. The Revised Preliminary Traffic Report includes both traffic counts and a signal warrant analysis for the intersection of Arthur Avenue and 5<sup>th</sup> Street.

**Comment # 142**

Naomi Biehl, Missoula

Hello, my name is Naomi Biehl, and I was a student at the university for an undisclosed amount of years, thanks to my parents. But I now work for the County, and I would like to talk about my change in location in this town.

I lived on campus and in this neighborhood for six years -- okay, there it is -- and I didn't own a car. I didn't have a car. I lived in this town without a car for six years and was perfectly capable of getting around, and that's why I stayed here. Then I moved to the other side of Reserve Street. And it's funny how this hearing is taking place during Bike, Walk, Bus Week, as we have discussed, because I don't have that option. And maybe that's based on my fear. But I will not cross Reserve on foot or on bike. I won't do it. It is scary, it's dangerous. And that is exactly what this (indicating) looks like, except bigger. Reserve Street is 75 feet across, I guess. This is obviously bigger than that, and that's ridiculous.

And then I've also heard people around here saying, "That's the reason why I moved to Missoula." I was accepted to med school in Los Angeles. This is the reason why I stayed in Missoula, because I can get around. I don't have to fear walking out of my house every day. And this -- I mean, this takes away that security that you have being a resident in a small town and being all right with not having to have every resident of this town own a vehicle to get around. It's -- it's very disconcerting to somebody -- I mean, that's the reason why I stayed here.

**Response # 142**

Comment noted. No response necessary.

Also, one quick note, which don't kick out me, please. That woman that was killed, it was a very sad thing. I was standing right there. She was killed by a drunk driver. If we want to talk about game day, let's talk about the fact of how much alcohol is sold out of this place and how many of those people are driving. What do we need to focus on? Those people shouldn't be driving in the first place. We shouldn't be dealing with their traffic problems.

Thank you.

**Comment # 143**

Jocelyn Siler, Missoula

I'll be quick. Everybody else has been brilliant. Thank you so much. I am a teacher at the University of Montana, and I've been living in the university area for 29 years. I run through this area (indicating) every morning at the high traffic time, so I do know it very well. I love the university area because it's a walkable, runnable, bikeable area. And if you actually look at this big intersection here, it's a half a block wide. And I mean, watch (indicating). It is half of that block wide, and that is massive. That is not in the environmental – you know what I mean. It doesn't fit into the university area at all. It's just obscenely large. And other people had a lot of really cool things to say. One thing that I do want to say is that I do think that one of the premises, one of the purposes is absolutely wrong, and that is the idea that this is going to improve access to the university. It's going to improve vehicle access to the university. And we have just about as much vehicle access as we can deal with.

That's all. Thanks a lot, guys.

**Response # 143**

Comment noted. No response necessary.

**Comment # 144**

Isaac Glenfell, Missoula

Well, I've only had -- I found out about this like two hours ago, and I have only had that long to think about it, and I've come up with a whole list of problems, and a lot of you guys have already mentioned most of them. But this just seems like the height of foolishness, to me.

I've spent a little bit of time as an economics major here, and one of the first things you learn is that people respond to incentives. So if you widen the road, more people are going to use it, so you'll just be back to where you started, with a big traffic snarl with four lanes of traffic. So that won't solve anything.

144 A

So I guess what I'm saying is that there might be -- there probably is a better arrangement for all this, but your first principle in all of this should be to do no harm. Don't make it worse. If you can't think of anything better, then just don't touch it.

That's about all I have to say.

**Response # 144**

144 A - Please see General Comment E in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

**Comment # 145**

Lee Clemmensen, 541 McLeod, Missoula

Hello, my name is Lee Clemmensen, and I live on the corner of McLeod and Arthur, so obviously, this is of great import for us and our house. I'm a native Missoulian and have come back here to retire.

Now, obviously, the issue is capacity, and you've got to cut the capacity in order to improve the situation. **And the way you cut the capacity is take Highway 12 out of the mix.** Once you get Highway 12 out and get rid of the commercial trucks and the ability to zoom across and then cut up Brooks to 93, you will improve the situation quite a bit. Then you can get by with a single roundabout or a much simpler arrangement. But until you cut the capacity and do some kind of intellectual change of this issue, you're still going to be dealing with a lot of traffic.

Another issue is, I ran for Ward 3 and didn't quite make it in the city council, but I did find that in walking the ward twice, it was very, very informative. Walking Fifth and Sixth and Brooks, I was appalled by the amount of traffic which is being funneled through, zooming through a residential area, including logging trucks and everything else. And it seems only rational to get those trucks and that capacity out of there to run through the big trucks. People on Fifth and Sixth also park on the street because many of them do not have alleys, so they can't park behind it. So they are battling constantly with this heavy flow coming through their neighborhood.

145 A

**Response # 145**

145 A - Please see General Comment A in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

145 B

Secondly, if you put this through, how long will it be before the rest of Arthur and south are extended to four-lane traffic to handle additional commercial traffic? Several of our trees have been clipped by commercial trucks and damaged. And it would be very nice if we went back to making this a residential area for university and residential traffic and making it so it's really a compact, correct situation. The traffic right now is growing exponentially each year. Don't make it worse.

Thank you.

**Comment # 146**

Betsy Mulligan-Daque, 519 S. Higgins, Missoula

My name is Betsy Mulligan-Daque. I'm the director of the Jeannette Rankin Peace Center.

I would like to just say that this intersection is definitely a challenge. What is the best thing to deal with the challenge is a healthy, informed dialogue with people that are interested in the issue. And I would urge you to take the advice of the people in this room.

There's a lot of folks that live in this neighborhood and live in this community that are passionate about what it looks like and what the character of Missoula contributes to their neighborhoods. And there's been a wonderful wealth of ideas presented tonight, and I hope that you'll engage those ideas.

I also would like to say that I am regretful of any cutting into Jeannette Rankin Park. We have few enough memorials to this wonderful congresswoman that did so much for Montana and

145 B - Please see General Comment E in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

**Response # 146**

146 A

for the country, and I don't want to see any less grass and any more concrete. That would not be a good memorial. We can't replant those trees. Even if you put medians and put new trees in, we can't replace those trees that will be lost. So even though there's a net gain, there's still a loss. That, and park areas in the city are hard to come by as it is. So I would like to echo and ask you to consider not cutting into that.

Thank you.

**Comment # 147**

Tom Roy, 541 Evans, Missoula

My name is Tom Roy. I'm semiretired from the university. More importantly, I'm a resident of the university area. I live at 541 Evans, which is on the corner of Arthur and Evans.

I was at a previous meeting and didn't get here until about 7:30 or quarter to 8 and had not intended to speak, but did want to make two observations. And in making these observations, I think I'm really reinforcing not only what some other speakers have said, but I think probably reflect very much the conversation that's been taking place in my immediate neighborhood.

147 A

The first observation I'd like to make is this notion that somehow any of these plans protects the historic nature of the neighborhood is, on its face, absolutely preposterous. We just heard from -- and I apologize, I don't remember her name, from the woman who mentioned Jeannette Rankin Park. Take a park out that's been a historic part of our neighborhood? It's a little hard to imagine how that protects the historic nature of the neighborhood.

146 A - Please see General Comment G in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

**Response # 147**

147 A – Please see General Comments D, G, and H in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

When we bought our home, a fellow by the name of Jim Garlington lived across the street. He was a longtime resident of Missoula, a very distinguished attorney here, a member of the Constitutional Convention in the early 1970s. And when we were looking at the house, Jim said, "You know, you should buy this house on Evans," the one we currently live in. We've lived in it for 31-plus years. He said, "It's absolutely delightful. Our kids grew up across the street and they were able to play on Arthur Avenue." And he started telling me about football games they played and so forth and so on. Truth is when we moved to Missoula, it was possible for kids to actually play on Arthur Avenue. You had to be somewhat careful at certain points of time. We used to park our car on Arthur. We have an entrance to our home either off of Evans or off of Arthur.

Historically, the Arthur entrance was the entrance to our home. It hasn't been for years, and the reason is exactly what Jim Sayer says: Increasing traffic. And my concern with any of these plans -- and I will acknowledge that I haven't had a chance to look at these in any detail whatsoever. And Lee Clemmensen just brought this up, too.

It seems to me any of these plans create that gap, that opening. And I know the concern further south on Arthur is this is but probably the beginning. And that's worsened us, and it certainly would destroy the character of the neighborhood.

Quickly, the second point I'd like to make is, I believe that this process has not been as inclusive as it should be. I happen to serve on certain university planning committees. I'm not fearful that the University's interests have been represented in this process. But I can say as a resident, my interests and the

interests of my neighbors have not in any way been represented. And as I've listened tonight -- and again, I didn't intend to speak, but as I listened, I thought, isn't this interesting; we're concerned about protecting the historic neighborhood, but what seems to be driving this is commercial traffic and the interests of the University. Well, what about those of us who live in the neighborhood?

Thank you.

**Comment #148**

Ross Prospero, 116 Lambros Dr., Missoula

Hi, my name is Ross Prospero. I also just want to draw attention to the irony of us having an energy symposium on the other side of the UC right now, and also the irony of it being Bike, Walk, Bus Week and we're having the roundabout plan scrapped because of the lack of ability for it to provide the capacity of cars that we have. And I just think it really needs to be addressed that, you know, we don't want to perpetuate the increased number of cars. As an individual said earlier, we create the incentive by expanding the roads. We're going to see an increase of cars on that road. And so it's going to be kind of a self-perpetuating reconstruction or reconfiguration. And I think it's obvious that, you know, most people agree that we need to reroute Highway 12. And that seems to be the reason we need to bring this back to the drawing board, to take that amount of capacity that Highway 12 supplies and just take that out of the University District.

148 A

148 B

But I just would like to see the Montana Department of Transportation try and address these issues of, you know, reconfigurations with the idea that we want to lessen the amount of cars on the road and reduce the amount of personal automobile usage so that we can see actual increases and improvements of environmental quality as far as air conditions and accessibility to our communities.

Thank you so much.

**Response # 148**

148 A - Please see General Comment E in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

148 B - Please see General Comment A in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

**Comment # 149**

Vicki Watson, Missoula

Vicki Watson again. I wanted to emphasize the need to provide the same level of analysis of the pedestrian and bike traffic that has been provided, you know, in terms of modeling the flow of the vehicular traffic. Admittedly, I just picked up the EA for the first time and was flipping through it trying to find this, and I may just have not found it yet, but I think it's really important to analyze the flow of bike and pedestrian traffic underneath the bridge, the new bridge for bike and pedestrian traffic that's there underneath the road bridge, and analyze where that traffic goes; you know, what's the best way to bring that traffic safely on into the university campus and how does that mesh with this project. And there's the bike and pedestrian traffic that takes place on the Old Van Buren Bridge. That comes into the area, moves through. So the modeling of -- you know, counting pedestrians and bicyclists and where they're going and how they're moving and how they're using their alternative routes. I think for the most part, not only is it wise to get the Highway 12 traffic out of here, but to provide alternate routes away from these intersections for bicyclists to use and things like pedestrian overpasses and so on.

149 A

149 B

So don't just think about accommodating everybody at street level and try to put them all through the same intersections. Maybe it's better to send some of them to completely different places, avoiding each other as much as possible.

**Response # 149**

149 A - Bicycle and pedestrian traffic counts were obtained for a typical weekday during the morning and afternoon, as well as special events. The data was utilized in the design process.

149 B - Please see General Comment A in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

**Comment # 150**

Bob Giordano

Bob Giordano again. I just wanted to mention one thing. There's a story I wanted to tell before, and that was -- I've heard -- In talking to people, there was an older gentleman that told me about Rose Park. And you know how Brooks Street comes in. It's four lanes, it's hectic. You get into Rose Park and things are a lot calmer. Well, then that meets Higgins and it's two lanes. He told me that a long time ago, there was a proposal to make it a four-or-five-lane like Orange Street and that the neighbors said no. "We don't want to lose our trees" was a big part of that. And they were told, "Well, you're going to be faced with gridlock, you're not going to meet the capacity." But if you go out there, it works; it's a beautiful road.

We create the future we want to see. And if we want a great walkable, bikeable transit community and drivers fit in, but they're not speeding through and staring at the lights and trying to make it all work, we can do that.

So I just wanted to tell that story. And I know there's a lot of confusion about what a roundabout is. Here's just a simple picture (indicating). It's not an East Coast rotary that's giant and high speed and multi-lane, it's not a little neighborhood calming circle. **It's a size that's getting perfected.** And every day, there are new roundabout designs that are happening. One other picture. This was a picture in the "Missoulian" today (indicating). This is the citizen plan that's been referred to a little bit. It's a very simple thing. It utilizes single-lane roundabouts and it actually turns this part of the road into

150 A

**Response # 150**

150 A - Please see General Comment B in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

a greenway which connects the Peace Park into the Riverfront Trail System. There's a lot of other changes that would have to happen.

But let's get creative. Let's open up the process. Let's figure out what other ideas are out there. And it does connect to trains and buses. I got doored on Higgins riding my bike two days ago because I had to move over, and I hit a car door opening. I fly over and I roll and brush myself off; and I'm thinking, you know, we could have five times the amount of bicyclists in this community if we made it safe to do so. People want to choose that.

So maybe Missoula is a little different than these other places. We're perfectly suited for other modes. We're flat and it's dry and people come here to be outdoors and appreciate that.

So thank you for letting me add that in there.

**Comment # 151**

Darrell Armstrong, 537 E. Pine, #3, Missoula

If it's not too late, I'm Darrell Armstrong, a student. I live right across the bridge, and I'm a pedestrian, I'm a driver, and I deal with this all the time. I've heard an awful lot about open meetings. I have an apology for you because I can't tell you when the Historical Preservation Commission is meeting. It meets twice between now and early June. I'm on that commission, and you're invited. But please call the Department of Planning and Grants to get the schedule.

But if you have strong feelings about this, please come.

**Response # 151**

Comment noted. No response necessary.

*The following comments were submitted in writing to MDT during the public comment period on the EA.*

**Comment # 152**

**From:** Laura Arvidson [laura.arvidson@gmail.com]  
**Sent:** Wednesday, May 03, 2006 3:09 PM  
**To:** mdteiscommentsarthur@mt.gov; Kirkpatrick, David;  
r\_huffsmith@msn.com  
**Subject:** Comment on Arthur Ave EA

Your public comment system is not working. I had to copy and paste your addresses and subject into my personal e-mail system because when I'd push send it would say errors had occurred. This also happened to my friend. I am lucky that I had copied and pasted out of word or my entire comment would have been lost.

My name is Laura Arvidson and I am a student at The University of Montana. I attended the hearing on April 25th. Every day I ride my bike to and from school across Arthur avenue, it is easy to get across, and traffic is slow, I love riding my bike around town and it is my primary means of transportation. I have also often had to ride my bike on Reserve Street. While I feel relatively safe due to the large shoulder I always feel uncomfortable and unhappy while riding on Reserve and avoid it whenever possible. If Arthur were expanded and large commercial trucks were whizzing past me at 45 miles per hour while I rode along Arthur Street, it would be an extremely upsetting experience, just like Reserve. Not only do I believe that your plans would decrease the amount of bikers in Missoula, I feel it would also decrease safety and destroy the community of Missoula and everything

152 A

**Response # 152**

152 A – Please see General Comment H in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above. The design of the project includes safety and operation improvements such as revised intersection configurations and multimodal considerations, intersection treatments such as traffic control signals and increased signage to reduce driver confusion, all designed to contribute to fewer accidents. Pedestrian safety would be increased by a greater number of protected crossings.

152 B

it stands for. PLEASE come up with another plan. It may be difficult, but I feel redesignating Highway 12 to somewhere else, possibly Reserve Street, is the only way that will work without a lot of public resistance. After this has been accomplished look for ways to change Arthur if still necessary. If you follow through with your outlined plan I personally will organize a coalition to protest and resist it.

Laura Arvidson  
Knowles Hall  
Missoula, MT 59801  
laura.arvidson@gmail.com  
(406) 243-3751

**Comment # 153**

**From:** Rod Austin [mailto:Rod.Austin@sterlingsavings.com]  
**Sent:** Friday, June 02, 2006 11:11 AM  
**To:** Stack, Shane  
**Subject:** Arthur, 5th, 6th project

Shane,

As a follow up to my phone message a couple of days ago I want to let you know that believe that the MDOT did a great job with it EA given the constraints of the job. The biggest of which would be Highway 12. I wonder how much traffic is truly attributable to Highway 12 traffic as one of my biggest concerns is moving that traffic to another street in Missoula. A by-pass would be preferred but we both know that that isn't happening anytime soon! I certainly do not any additional traffic pushed on to Reserve Street and I don't think the truck traffic should be moved to Orange.

153 A

152 B - Please see General Comment A in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

**Response # 153**

153 A - Please see General Comment A in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

Some of the oppositions arguments don't hold water for me. I think the best thing for the large amount of pedestrian that is near the campus would to have traffic lights. Roundabouts are not necessarily the best for foot traffic. This argument has come up in other "hotspots" in Missoula, namely Broadway. Also roundabouts can't be made large enough to function properly although they would offer a nice feel to the University's entrance if Highway 12 was moved.

Madison Street bridge should remain four lanes of traffic and the entrance on the east side should remain as in your proposal. With the foot/bike bridge underneath it should be safer on top going forward.

Please don't let the one-sided meeting at the University sway common sense in this case. I would love to find an alternative to oil and cars but for now they are what pays for all this and that is what we have.

Let me know if you need my help going forward. Thanks for the work that you do for us. You have a tough job!

Rod Austin

Branch Manager

Missoula - Reserve Br. 066

**Comment # 154**

**From:** Sally Brown [posie@bigsky.net]  
**Sent:** Monday, May 01, 2006 7:34 PM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David; r\_huffsmith@msn.com  
**Subject:** Comment on Arthur Ave EA

Dear Friends,

Thank you for giving me a chance to let you know what I'm thinking about the Arthur Ave EA. I live on Daly Ave, 1 ½ blocks from campus, and I use the Madison Street bridge for my way to most errands. I have lived here 27 years and am familiar with the area.

Some people are saying that this is being done so that the University can have a grand entrance. Maybe, but they could still do that with roundabouts.

Another rumor is that the city wants to make this route part of Highway 12 so that snow removal and street repairs need to be paid for by the state, not the city. This would be a shame, as all the people who bought houses in the area affected did not realize when they moved in that they would be on a highway in the future.

154 A

From my point of view, it doesn't make sense to route a highway through a residential area especially when there are other very acceptable ways to get to Highway 12 south that don't involve yet another truck route through town.

**Response # 154**

154 A - Please see General Comment A in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

Has anyone talked with truckers? It seems to me that there are fewer and fewer truckers taking the Madison St. bridge. Wouldn't Orange Street of Reserve be preferable?

All in all, I prefer roundabouts. I lived in Europe for 10 years and they worked fine there in high traffic areas. They just take a bit of getting use to.

Thanks for you time.  
Sally Brown  
429 Daly Ave  
Missoula MT 59801  
406.543.7576

**Comment # 155**

**From:** Carlson, Sean A. [Sean.Carlson@mso.umt.edu]  
**Sent:** Thursday, May 18, 2006 1:05 PM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David; r\_huffsmith@msn.com  
**Subject:** Comment on Arthur Ave EA

I am writing to encourage the 'NO-BUILD' option discussed in the EA. Minor improvements such as better lighting at intersections, improving markers for bike lanes and adding bicycle sensitive loop detectors at the existing light should be more than sufficient. I am also concerned that there is not any mention in the EA of increased traffic through this area as a result of improving this intersection (induced demand). I suspect that many large commercial truck drivers avoid this area because it is awkward to maneuver a double trailer semi truck through this area. Therefore the best feature of the current intersection may be its 'poor' design that discourages large truck traffic.

-Sean Carlson

155 A

**Response # 155**

155 A - Please see General Comment E in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

**Comment # 156**

**From:** Brian Casman [bcasman@gmail.com]  
**Sent:** Wednesday, April 26, 2006 8:30 AM  
**To:** mdteiscommentsarthur@mt.gov; Kirkpatrick, David;  
r\_huffsmith@msn.com  
**Subject:** Comment on Arthur Ave EA

Please do not consider the voice of the student body to be accurate for the many of us that use the area around the stadiums at the UM. While my fiancée is a student at the UM, she does not have time to attend the one sided meetings that are being held. The traffic is the problem, and some of us think this town bends over backwards to accommodate cyclists and pedestrians to a level that exceeds what the real need is. There are bike lanes all over town, some of which are used, but many more that rarely if ever see bike traffic. I have personally witnessed traffic accidents that have happened because people are driving in the bike lanes and other cars and pedestrians are not expecting anything but bikes, at least if it were a turn lane people wouldn't take for granted the fact that a car may be coming.

While the voice of the student group is loud, I don't agree they are the majority. Try taking the poll during a concert or a griz game, or any of the other events held there. They say they don't want trucks in the area, how exactly do they propose to stock the events and the everyday needs of the campus?

While it is admirable that the student group doesn't feel they need cars, it doesn't mean nobody does. I'd be happy to have them all ride bikes out to my house for dinner sometime to discuss this, its only 40 miles one way.

Brian Casman

**Response # 156**

Comment noted. No response necessary.

**Comment # 157**

**From:** stuart [stuart@scrook.name]  
**Sent:** Wednesday, April 26, 2006 9:49 AM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David; r\_huffsmith@msn.com  
**Subject:** Comment on Arthur Ave EA

Reserve street and, to a lesser extent, Broadway, are arterials serving to route traffic away from residential areas. They also have become very effective barriers to crossing, dividing the city.

I believe it wrong to develop a similar barrier by widening Arthur in an established residential area next to the U of M campus and the emerging Clark Fork River park and trail system.

I urge only minor widening to allow northbound traffic directly onto the Madison Street bridge. There are really only two traffic lanes feeding this flow and therefore a single lane bridge access should be sufficient. Pedestrian access and crossing should remain paramount.

157 A

Stuart Crook

Missoula  
(406)542-2379  
stuartcrookmt@yahoo.com

**Response # 157**

157 A - Currently Madison Street Bridge has 4 travel lanes, 2 northbound and 2 southbound, and 2 lanes approaching the bridge in a northbound direction. The Preferred Build alternative does not modify the number of lanes approaching or existing on the bridge. Due to the lack of community support, however, the 'No Build' alternative was selected.

**Comment # 158**

**From:** Steve Cummings [cummings@mtwi.net]  
**Sent:** Sunday, May 28, 2006 9:35 PM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David; r\_huffsmith@msn.com  
**Subject:** Comment on Arthur Ave EA

In regards to the proposed changes to Arther Ave between 5th and 6th streets, in Missoula - I walk, drive, and in general used this area for many years. I don't see the logic. **It doesn't fit with the neighborhood; truely dislike the area of altering Jeannette Rankin Park, 100 foot wide street ! ?** If the area is such a problem ( which I'm not so sure of) there should be a better way of dealing with it. Thank you for considering my concerns.

158 A

Sincerely,  
Steve Cummings  
116 East Sussex  
Missoula, Mt.  
cummings@mtwi.net

**Response # 158**

158 A - Please see General Comments D and H in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

**Comment # 159**

From: christine wilson [c.wilson@umontana.edu]  
Sent: Wednesday, April 26, 2006 4:49 PM  
To: mdteiscommentsarthur@mt.gov  
Cc: Kirkpatrick, David; r\_huffsmith@msn.com  
Subject: Comment on Arthur Ave EA

I commute to the University of Montana daily. I approach the U from Madison street bridge. I know the difference between arriving at 7:30am and right before 8:00am, in which the latter experiences much more congestion.

In my observation, the traffic backup in the morning is due to the pedestrians crossing the street from the large parking lot at the university. Specifically, the corner of Maurice and 6th, as well as the crosswalk to PAR-TV building (half a block further into campus). They will cross in varying distance from each other. ie-maybe 2 cross, then one trails behind 10 feet, then another 5 feet, then maybe 20 feet (allowing one car to get through), etc. It creates a constant need for cars to stop or remain stopped. To further justify my reasoning, I have also observed that the traffic flows easily at any time, even just before 8am when the presence of pedestrians is minimal.

In larger cities in which a busy street runs near a campus, there is a stoplight for the pedestrians (or perhaps a walkover/under). We need to consider how solving the flow of pedestrians may effect traffic before assuming much larger and expensive construction solutions. **No matter how the streets are renovated, the pedestrians will continue to hinder traffic flow unless addressed.** I urge CDM to study this relationship.

159 A

**Response # 159**

159 A - The design incorporates protected pedestrian crossings at marked locations, increasing safety by reducing the number of unprotected crossings. Due to the lack of community support, however, the 'No Build' alternative was selected.

Hopefully I've submitted these comments to the appropriate personnel.

Thanks for your consideration.

Christine Wilson

4813 Storehouse Way

Missoula, MT 59808

(406) 207-9011

University of Montana Staff employee

(406) 243-4540

**Comment # 160**

From: mary ann davies [mabikes@hotmail.com]

Sent: Wednesday, May 24, 2006 11:33 AM

To: mdteiscommentsarthur@mt.gov

Cc: Kirkpatrick, David; r\_huffsmith@msn.com

Subject: Comment on Arthur Ave EA

I oppose both the options presented for the 5th/6th/ Arthur design. They do nothing to help or encourage for safe use of bikes or walking to the university or the neighborhood. **Larger lanes, higher speeds and idling cars at stoplights will increase emissions. There is no basis for your decision to reject roundabouts.** These are the ultimate structure for flowing vehicles at lower speeds while allowing safe and efficient movement for bikes and pedestrians.

160 A

160 B

With the options you've presented - no option is the best.

**Response # 160**

160 A - Please see General Comment F in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

160 B - Please see General Comment B in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

Sincerely,  
Mary Ann Davies  
825 Elm  
Missoula, MT 59802  
721-7895

**Comment # 161**

From: John DiBari [jndibari@yahoo.com]  
Sent: Tuesday, May 23, 2006 8:42 AM  
To: mdteiscommentsarthur@mt.gov  
Cc: Kirkpatrick, David; r\_huffsmith@msn.com  
Subject: Comment on Arthur Ave EA

Like many people who attended the April 25th meeting, I am opposed to the preferred redesigns contained in the EA. This would industrialize what is now a residential area, more-or-less operating at a human scale.

Until a better solution can be devised, the best option is to reduce the number of vehicles going across the Madison St. bridge and interacting at the 5th and 6th Street/ Arthur St. intersections. A re-designation of Highway 12 to a more appropriate location also seems like it would help -- at least it would get some non-local commercial traffic out of the area.

161 A

Also, I ask that you consider a redesign of the traffic flow (and perhaps reconstruction) so that university-bound traffic would be directly channeled to the south and east towards the Maurice - Campus Drive intersection.

161 B

**Response # 161**

161 A - Please see General Comment A in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

161 B - Multiple alignment alternatives were considered in the EA analysis and traffic modeling. Please see Section 2 of the EA and the Section 4(f) Evaluation also included in the EA.

My preference, in lieu of other creative ideas, is to leave the intersection as it is rather than construct any of the proposed alternatives. They are simply not appropriate.

Thanks for the opportunity to comment.

Sincerely,

John DiBari,  
Missoula MT 59801

**Comment # 162**

**From:** SUSAN DIETSCHE [rictouchette@msn.com]  
**Sent:** Tuesday, May 09, 2006 11:08 AM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David  
**Subject:** Comment on Arthur Ave EA

I drive on Arthur at least once daily, as I go to care for an elderly friend who lives a block off Arthur. I have never witnessed a problem with the current street layout, the traffic flows freely, the wait at the intersection with 6th St. is never more than a minute or two, even at 5:00 p.m. or before an event at the University, the traffic is not a problem. It is currently very safe for pedestrians, as most people courteously stop for pedestrians crossing Arthur, the speed limit is observed more than in most other parts of the City. I see nothing but problems with widening this street. People would no doubt drive faster, pedestrians would have a much harder time crossing the street, it would ruin the beauty of this part of the University neighborhood, the quiet and tranquil nature of this area. With one lane in each direction, people are forced by

162 A

**Response # 162**

162 A - Please see Response 159 A.

other drivers to obey the speed limit. Move off Arthur a block or two and you will see young drivers speeding through the "calming circles" and the unmarked intersections with abandon. This will happen on Arthur if these ridiculous changes are approved. A main consideration should be the pedestrian and bicycle traffic, more than anywhere else in the City, because the University students walk and bike more here than anywhere else.

Please abandon any changes to Arthur. If it ain't broke, don't fix it!

Sincerely,

Susan Dietsche  
2413 Murray St.  
Missoula, MT 59802  
721-7708

**Comment # 163**

**From:** www@mdt.mt.gov  
**Sent:** Tuesday, April 25, 2006 8:20 AM  
**To:** MDT Comments - Project  
**Subject:** Comment on a Project Submitted

A question, comment or request has been submitted via the "Contact Us" web page.

Action Item: Comment on a Project  
Submitted: 04/25/2006 09:19:59  
Project Commenting On: US Highway 12 and Arthur Ave. expansion  
Thressa Dunn  
1900 S. 3rd W. Apt 1  
Missoula, MT 59801  
dthressa@hotmail.com  
406-239-6345

**Comment or Question:**

163 A

My comment on this expansion is that you folks that thought up this plan should keep the semis and logging trucks that go through Missoula on Highway 12 and divert them to Reserve St. where there are four lanes already. To me, there is no need to destroy the Jeanette Rankin Park and demolish several houses in that area just to widen Arthur Ave. If you do widen Arthur, what about those of us citizens that are handicapped and are not able to get across a 100 ft wide street? Did you all ever take the time to think about that and what problems us disabled folks already have? By widening Arthur, you are just creating a bigger problem than there needs to be, so

163 B

**Response # 163**

163 A - Please see General Comment A in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

163 B - Please see General Comment C in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

just keep the big rigs on Highway 12 just a little longer and then divert them to Reserve St. where there is more room for those trucks, not down a street where the neighborhood and the University co-exist and don't take away some one's home and peace just so you folks can use state money to expand a street that doesn't need it.

Reference Number = picomment\_9859619140625

**Comment # 164**

**From:** Beverly [beverlydupree@yahoo.com]  
**Sent:** Monday, May 29, 2006 9:52 AM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David; r\_huffsmith@msn.com  
**Subject:** Comment on Arthur EA

Dear Jean Riley,

Please accept the following comments on the Arthur EA.

164 A

Expanding Arthur Ave. from 40' to over 100' creates a pedestrian crossing that is too long and hazardous. Young children and elders will be especially vulnerable as they try to cross the street in a typical crossing time of 30 seconds or less. In addition, increased motor vehicle speed and increased complexity of turning movements will create an unsafe situation for drivers and cyclists.

164 B

Adding two stop lights (one on the bridge) creates a 'stop and go' lurching of traffic that results in extra delay, pollution, noise and frustration.

164 C

**Response # 164**

164 A - Please see General Comment C in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

164 B - The Preferred Build Alternative includes advanced signage to reduce driver confusion. Due to the lack of community support, however, the 'No Build' alternative was selected.

164 C - Please see General Comment F in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

164 D

I understand that in order to widen the road to more than 100', six houses would be demolished and a large part of Jeannette Rankin Park would be paved over. This is unacceptable.

Please end the Arthur expansion project. It will devastate a safe, walkable, quiet and peaceful neighborhood which is used extensively by bicyclists and pedestrians.

164 E

Please also re-designate Highway 12 along the more appropriate Reserve Street and I-90 corridors.

Please make this comment part of the official record.

Thank you for the opportunity.

Beverly Dupree  
639 N 4th  
Missoula, MT 59802

164 D - Please see General Comments D and G in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

164 E - Please see General Comment A in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

**Comment # 165**

**From:** wayne [eells1@msn.com]  
**Sent:** Friday, June 02, 2006 7:40 PM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David  
**Subject:** Comment on Arthur Ave EA  
Jean Ridley -

Jean, I live at 805 Hilda Ave (corner of 6th and Hilda) which is route 12.

We live in a family neighborhood, where it is already very busy and scary with all the traffic going by our house. I am especially worried for my grandsons, with all the traffic going by one side of our house.

I think your proposal does not help the current situation. You are not increasing the lanes going over the bridge, so you will at best only create a bottleneck near the bridge. I also think its really wrong to take away part of the park and to remove wonderful old historic homes.

165 A

165 B

I am very opposed to this project.

165 C

In the longer term, I think you folks have to plan a major artery running on the west side of Missoula, connecting Route 12 south of Missoula coming from Lolo, over to I90, without directing this traffic thru neighborhoods.

Thanks for your consideration,

**Response # 165**

165 A - Under the preferred build alternative, traffic northbound onto the Madison Street Bridge will be controlled through the installation of a traffic light, controlling the flow of vehicles from Maurice Avenue and Arthur Avenue. The traffic pattern for southbound traffic exiting Madison Street Bridge will not change. Due to the lack of community support, however, the 'No Build' alternative was selected.

165 B - Please see General Comments D and G in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

165 C - Please see General Comment A in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

Wayne and Susan Eells  
805 Hilda Ave (apt #3)  
Missoula, MT 59801  
406-721-3771

**Comment # 166**

**From:** KEvans@apshealthcare.com  
**Sent:** Wednesday, April 26, 2006 1:24 PM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David; r\_huffsmith@msn.com  
**Subject:** Comment on Arthur Ave EA

I understand that part of the issue is city of Missoula wanting to retain maintenance funds, but there is a huge quality of life issue here. It seems to me to make MORE sense to use Reserve as the highway 12 route through Missoula (as it is already a wide, fast moving street, pick it up at I-90 at the Reserve street exits rather than at the Van Buren street exit.

166 A

I will also forward this to the city, but it seems the advantages are numerous:

- no destruction of neighborhood
- fewer large trucks through neighborhood routes -less wear and tear on streets that Missoula will need to maintain themselves.
- greater density of use on a street ALREADY engineered to carry that kind of use and volume.
- no disruption to traffic while construction would be underway

**Response # 166**

166 A - Please see General Comment A in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

- maintenance of outdoor spaces in areas frequented by people, which, in turn, PROMOTES interdependent urban planning and DECREASES risk to bicycles and pedestrians.
- allows state funds to become available for other projects for which there are no acceptable alternatives such as Reserve street.

Kathleen Evans MD  
118 Apple House Lane  
Missoula, MT 59802  
(406) 542-3864

**Comment # 167**

**From:** From: John J. Ewan [jjewan@yahoo.com]  
**Sent:** Monday, April 24, 2006 7:43 AM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David; r\_huffsmith@msn.com  
**Subject:** Comment on Arthur Ave EA

I work at the University and use this intersection every day. I support the changes proposed in Option 2, the one that includes the left-turn lane.

Not having a left-turn lane would force northbound Arthur Ave traffic over to Maurice and 5th if they didn't want to cross the river. This is the heart of the problem; non-University traffic being routed into the University. A left-turn lane eliminates this need.

In addition, having a left turn lane will decrease anger and frustration among motorists who aren't familiar with the area. A person travelling north on Arthur may not know they

**Response # 167**

Comment noted. No response necessary.

are being railroaded across the Madison street bridge until it is too late. A left turn lane at 5th gives them the option to correct their mistake.

**Comment # 168**

**From:** sr computers [srcomputers@montana.com]  
**Sent:** Wednesday, April 26, 2006 11:31 AM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David; r\_huffsmith@msn.com; abcxyzwf@hotmail.com  
**Subject:** Comment on Arthur Ave EA  
**Attachments:** "AVG certification"  
Will Farrington  
520 W. Spruce Street, A-306  
Missoula, MT 59802

abcxyzwf@hotmail.com

Community stakeholder response seems to be very much in favor of rerouting #12 to solve problems associated with volume, traffic congestion, and commercial use. How can this be achieved? Could Route #12 end somewhere in downtown Missoula or merge with another traffic flow, for example, **Reserve Street**? Is it possible for the city and the state to transfer existing land and maintenance responsibilities?

168 A

The MDT "preferred alternative plan" not only promotes and encourages oversized vehicles, commercial trucks and busses, but also oversized SUVs, RVs, and Monster pick-ups. How

168 B

**Response # 168**

168 A - Please see General Comment A in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

168 B -The Preferred Build Alternative has been designed to meet the current traffic demands serving all modes of travel and roadway function in accordance with MDT's Design Standards. Due to the lack of community support, however, the 'No Build' alternative was selected.

about a special lane reserved for these gas and space hogs? Then the compact vehicles including SmartCars, motorcycles, and bicycles would be in the fast lane.

I have considerable respect for the talented people in the MDT, architects, designers, engineers, consultants, etc. The presentation was professional and first rate. A public relations shortcoming seems to be one of attitude lacking consideration and the importance of historical and heritage preservation values in the community.

Thanks for your attention in this. =Will Farrington

**Comment # 169**

**From:** Kathleen Foley [claybody@mtwi.net]  
**Sent:** Wednesday, April 26, 2006 8:04 AM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David; r\_huffsmith@msn.com  
**Subject:** Comment on Arthur Ave EA

169 A

Highway 12 should be re-routed so that the traffic flow on Arthur will not worsen. It is preposterous and dangerously wrong-headed to be considering tearing down historic houses and trees to widen these roads so that trucks can get through and to accommodate increased traffic. No one minds wending their way around these roads to get where they are going on campus, and the area is fairly bike and pedestrian-friendly. All this will change radically if this ill-advised plan is implemented, and I fear will lead to deaths and lawsuits. I add my voice to those already expressing their concerns, and add my question to theirs: is this a "done deal" or is there truly a democratic process in place that will allow the opinions of residents (none of whom want this proposed change) to hold sway?

Kathleen Foley

**Response # 169**

169 A - Please see General Comment A in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

**Comment # 170**

**From:** Laura Fox [mailto:lfox@umtbookstore.com]  
**Sent:** Friday, April 28, 2006 1:45 PM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** kirkpatrickdj@cdm.com; r\_huffsmith@msn.com; Wilson, Nancy  
**Subject:** Comment on Arthur Ave EA

To Whom It May Concern:

I'd like to see the transportation money spent on improving Van Buren Street. There are only two streets that serve the entire Rattlesnake: Van Buren and Greenough Drive. Currently, the traffic on Van Buren makes it very difficult for people in the lower Rattlesnake to pull onto Van Buren. But most importantly, biking/walking is incredibly dangerous due to lack of sidewalks and a bike lane that is wide enough to be considered safe. The "merging to the middle" bike lane that starts under the I90 underpass on Van Buren is an-accident-waiting-to-happen. Many people take this route to cross the Clark Fork river foot bridge. It is important we spend tax dollars on encouraging alternative transportation by making biking/walking more user-friendly.

I'd appreciate your consideration.  
Laura Fox  
The Bookstore at the University of Montana  
lfox@umtbookstore.com  
406-243-1234 ext. 629  
406-546-5544 cell

**Response # 170**

Comment noted. No response necessary.

**Comment # 171**

**From:** Doug Frandsen [dougfrandsen@yahoo.com]  
**Sent:** Wednesday, April 26, 2006 8:03 AM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David; r\_huffsmith@msn.com  
**Subject:** Comment on Arthur Ave EA

I know this is one of those government projects that are created not because of some need for improvement but because the money is available from a source that is not 'costing' a taxpayer directly so everyone wants to spend the money. **171 A** First off it is obvious that Highway 12 should not even be there, it should be on Reserve or on Stephens and Orange to I90. Any 3rd grader could explain it to you. **171 B** Secondly, if there are more lights than exist now, there will be more pollution and delays in traffic. Third, as it is now it works great and is very functional when the U of M has a high influx of traffic in or out which happens almost daily. There are about 13,000 students and several thousand employees at the U and they come and go daily. The flow of traffic now is very good considering everything, and I have used that area almost daily for 30 years, including games and high traffic times. Why can't you do what is right for a change and leave it alone? Save the taxpayer millions and keep the area bike and pedestrian friendly. **171 C** Also, are you going to replace the much needed housing that will be destroyed so close (walking distance) to campus? The extra car traffic and pollution created by students driving from newly created housing 5-10 miles away that would have lived next to campus is also a big negative. This is also punitive to the poorest students that cannot afford a car. Housing is one of the biggest problems in Missoula.

**Response # 171**

171 A - Please see General Comment A in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

171 B - Please see General Comment F in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

171 C - Please see General Comment G in Section 4.4 above. For ease in review, the general comments and responses are also repeated above.

In summary, it is hard for me to understand why we have to fight the state transportation department to stop something so totally illogical and counter productive with the possible gain of one lane of traffic in one direction eliminating 2 blocks of driving while possibly adding another traffic signal to the flow of traffic.

**Comment # 172**

**From:** Benjamin Schmidt  
[mailto:SchmidtB@ho.missoula.mt.us]  
**Sent:** Wednesday, April 19, 2006 10:21 AM  
**To:** Habeck, Bob  
**Cc:** Jan Scher; Shannon Therriault  
**Subject:** Arthur Avenue EA comments

Hi Bob,

I have some comments for the February 2006 Arthur Avenue EA that was prepared for MDT.

**Response # 172**

172 A - Thank you. This change has been noted in Section 4 of this document.

172 A

1. The bottom of page 3-4 in Section 3.6 Air Quality states that Missoula is eligible to apply for redesignation as an attainment area for carbon monoxide and that a CO maintenance plan must be developed by the MCCHD. On April 14, 2005, the MCCHD submitted a complete CO redesignation request to Montana DEQ. This redesignation request included the required maintenance plan. The CO redesignation request has been submitted to the EPA and Missoula expects to be redesignated as an attainment or maintenance area for CO in 2006.

172 B

2. The last line in the first paragraph on page 3-5 (Section 3.6.1) states that Missoula is currently a maintenance area for PM<sub>10</sub>. **Missoula is currently a non-attainment area for PM<sub>10</sub>. MCCHD and DEQ have been preparing a Missoula PM<sub>10</sub> redesignation request, but since the proposed particulate national ambient air quality standards do away with the PM<sub>10</sub> standards for Missoula, the future of the PM<sub>10</sub> redesignation request is questionable. The attached file gives a history of particulate air pollution for Missoula.**

172 B - Thank you. This change has been noted in Section 4 of this document.

Please contact me if you have any questions.

Sincerely,

Benjamin Schmidt, Air Quality Specialist  
Missoula City-County Health Department  
301 W. Alder  
Missoula, MT 59802  
Direct Phone : 406-258-3369  
email: schmidt@ho.missoula.mt.us

### PM10 HISTORY IN MISSOULA

November 2, 1969	State Board of Health Approved MCCAPCP
<hr/>	
1970	Clean Air Act Amendments of 1970 required establishment of NAAQS
April 30, 1971	Primary and secondary NAAQS established for PM (36 CFR 8186)

November 19, 1976	State Board of Health approved amendments/revisions to MCCAPCP
1977	CAAA of 1977 authorized each state to publish list of all geographic areas designating each area's status as attainment, unclassifiable, or non-attainment
March 3, 1978	EPA published the original list of all area designations, making Missoula non-attainment for both the primary and secondary TSP standard (43 FR 8964; 40 CFR 81.305) (city for primary; area for secondary). Missoula's violation was based on annual mean of 77.4 ug/m <sup>3</sup> and six days above the 24-hour standard.
May 12, 1978	Memorandum of agreement between Missoula City-County Board of Health and MDHES to prepare the nonattainment plan for submittal to EPA by January 1, 1979
May 17, 1978	State Board of Health approved amendments/revisions to MCCAPCP
April 6, 1979	Montana SIP, PM, Missoula
April 23, 1979	Montana governor submitted revised SIP to EPA for approval—

SIP addressed NSR, PSD, and nonattainment area plans

1979	Missoula Air Quality Attainment Plan, MDHES
<hr/>	
November 16, 1983	Revisions to MCCAPCP residential wood burning program initiated
1986	Revisions to MCCAPCP; limited types of wood stoves that could be installed in MASZ
1986	Missoula exceeded the annual average PM10 standard
1986-1987	Missoula conducted wintertime PM10 CMB study at Rose Park
1987-1989	Missoula exceeded 24-hour PM10 standard several times
July 1, 1987	EPA revised NAAQS for PM due to reevaluation of scientific data— new standards for PM10 replaced TSP standards (52 FR 24634)
July 31, 1987	Revised NAAQS took effect 24-hour standard of 150 ug/m <sup>3</sup> and annual standard of 50 ug/m <sup>3</sup>
August 7, 1987	EPA designated Missoula as a Group I area for PM10 (greater than 95% probability of exceeding the new PM10 NAAQS and requiring substantial SIP revision.

Subsequent air monitoring data substantiated noncompliance status.

1989	Revisions to MCCAPCP; additional restrictions on wood stoves that could be installed in MASZ
<hr/>	
June 28, 1990	MCCHD and MDEHS submitted SIP for Missoula to EPA
November 15, 1990	CAA of 1990 took effect. Missoula area designated "moderate" PM-10 non-attainment area
March 13, 1991	EPA determined Missoula SIP submittal was administratively and technically incomplete and returned to state
March 15, 1991	List of non-attainment areas published (56 FR 11101)
April 24, 1991	Revisions of MCAPCP/SIP approved by air board
June 28, 1991	Revisions of MCAPCP/SIP approved by Board of Health and Environmental Sciences
August 20, 1991	Revisions of MCAPCP submitted to EPA as modification to SIP
August 1991	MCCHD completed 1986-87 EI

- |                   |   |
|-------------------|---|
| November 6, 1991  | Formal codification of non-attainment areas in 40 CFR Part 81 (56 FR 56694)—required Missoula City-County Air Pollution Control Board to develop emission control plan for Missoula |
| January 24, 1992  | Board of Health and Environmental Sciences approved Missoula PM10 SIP   |
| March 20, 1992    | Board of Health and Environmental Sciences approved amendments to MCCAPCP—PM10 control plan and other minor amendments  |
| June 1992         | MDHES submitted Missoula PM10 SIP to EPA, along with commitments from department to correct additional tasks and deficiencies identified by the EPA                                 |
| November 30, 1992 | Governor submitted PM10 SIP commitments to EPA (due dates 11/30/92-6/30/93)   |

1994	Revisions to MCCAPCP; only pellet stoves with emission rates less than 1 g/hr could be installed in MASZ (reflected EPA's New Source Performance Standards for new residential heaters established in 1988); many high particulate emitting stoves must be removed upon sale of property
April 12, 1995	DEQ published <i>Milestone Report Missoula PM10 Non-attainment Area</i> , which reported PM10 reductions in excess of original program objectives
1995-1996	Missoula conducted wintertime PM10 and PM2.5 CMB study at Boyd Park
July 18, 1997	EPA promulgated NAAQS for PM2.5
November 1, 1997	Revisions to MCCAPCP
January 1999	Missoula began monitoring PM2.5
<hr/>	
November 17, 2000	Revisions to MCCAPCP
May 2001	MCCHD asked DEQ to conduct a PM10 EI for the CY 2000 for the greater Missoula urban area (Missoula Air Stagnation Zone), to be part of redesignation request in future

November 18, 2001    EPA approved Missoula's revised  
general transportation conformity  
regulations

**Re: Comment #172**

**From:** Habeck, Bob  
**Sent:** Wednesday, April 19, 2006 2:01 PM  
**To:** Riley, Jean  
**Cc:** Studt, Mark; Ben Schmidt (Ben Schmidt)  
**Subject:** FW: Arthur Avenue EA comments

Jean - After reviewing the air quality section of the Arthur Avenue EA (CM 7-2(36)94 CN 4611), Ben and I noticed some misinformation. Ben's response accurately addresses those concerns. Thanks for considering these revisions.

**From:** Studt, Mark [mstudt@mt.gov]  
**Sent:** Tuesday, June 13, 2006 5:43 PM  
**To:** Kirkpatrick, David; Huffsmith, Randal; Kilcrease, Susan; Stack, Shane  
**Subject:** FW: Arthur Avenue EA comments  
**Attachments:** PM10-Particulate History Summary.doc

**Response #172**

Comment noted. No response necessary.

**Comment # 173**

**Response # 173**

**From:** Bob Giordano [mist@strans.org]  
**Sent:** Thursday, May 25, 2006 11:22 AM  
**To:** mdteiscommentsarthur@mt.gov; Kirkpatrick, David;  
r\_huffsmith@msn.com  
**Cc:** Bob Jaffe; Stacey Rye; John Engen; willettk@mso.umt.edu  
**Subject:** Comment on Arthur Ave EA

**Attachments:** MIST comment on Arthur EA.doc

Please find pasted below and attached the MIST comment on the Arthur EA.

thanks, -Bob Giordano

--

Bob Giordano  
Missoula Institute for Sustainable Transportation  
91 Campus Dr. #1412, Missoula, MT, 59801 www.strans.org,  
mist@strans.org, 406-880-6834

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**Missoula Institute for Sustainable Transportation comment on Arthur Ave.**

**EA 5/06:**

173 A

-the no-left turn option would create 60' of exposure to motor vehicles and 90' of crossing distance for an east or west bound pedestrian on the south side of the Arthur/5th intersection. Currently at that location the exposure distance is about 40' and the crossing distance is about 40'. Thus, a 50% increase in pedestrian exposure distance to motor vehicles over today's exposure distance at Arthur/5th is not consistent with Missoula's Long Range Transportation Plan that calls for prioritizing cycling and walking in our community. Increasing the exposure distance by such a large amount puts pedestrians in a seriously compromised safety situation.

173 B

-speeds are very likely to increase for many of the cars that either have the green light, or get a yellow light. Cars and trucks coming down off the bridge will often be speeding up to go west on 5th and at the same time the drivers will be looking up at the light and at the same time a cyclist may be merging over to go south on Arthur and the end result would be a terribly unsafe situation for drivers and cyclists.

173 C

-north bound cars will still take the west bound left turn onto Arthur even though 'NO LEFT TURN' will be lit up, and this will put drivers, pedestrians and cyclists at great risk. At the exact time a car might be trying to 'shoot the gap' to make the left turn, a south bound cyclist may be coming straight through the intersection and may be not very visible by the nature of being much smaller than a motor vehicle. The risk is greater here than other 'no left turn' places in town because of the curve and hill involved, which increases speeds when coupled with a signal. A cyclist can be too easily T-boned in this situation, resulting in serious injury or death.

173 A - Please see General Comment C in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

173 B - Based on our investigation, there is no significant research available to indicate that the installation of traffic signals will arbitrarily increase vehicular speeds.

173 C - The roadway designer cannot practically provide a design that would adequately support any potential illegal motor vehicle operation. It is presumed that largely, people will comply with traffic regulations and provide appropriate design accordingly. Pertaining specifically to the inferred illegal left-turn, the island layout in Option 1 was developed with small radius corners to deter the illegal left turn. Under the proposed build (Option 2 - Left Turn Lane) condition, the intersection of Arthur Avenue and 5<sup>th</sup> Street would be signalized. In addition, the northbound left-turn approach would receive a red left-turn arrow indication for the northbound left turn movement the entire time the southbound approach is allowed to proceed. Due to the lack of community support, however, the 'No Build' alternative was selected.

173 D

-it is well-known that signals are not safety devices. The signals should be replaced with single lane roundabouts that have an inscribed circle diameter of no more than 110'. WB-67 (truck with a wheel base of 67', like the giant Wal-Mart trucks) should be rerouted to Reserve St. and I-90 and the design vehicle for this project should be a WB-50 (wheel base of 50') instead. The University has stated that a WB-50 is their preferred design vehicle.

173 E

-signals greatly increase idling in many cases which will likely worsen Missoula's air quality.

173 F

-the large size of the Arthur/6th intersection will impede bike/ped flow and safety

173 G

-pedestrians being prohibited from crossing east or west bound on the north side of the arthur/6th intersection is unjust and discriminatory.

173 H

-the multi-lane nature of this project will be an impediment to walking and biking. Why would the City and State change Broadway from 2 lanes in each direction to one lane in each direction, for pedestrian safety, and then say it is OK to expand to 2 lanes in each direction on Arthur, right where there is a huge concentration of pedestrians and cyclists (including many children and elders)? The City and State seem to respond to this question by saying that the median and the stop lights are the difference and that Stephens Ave. is the model being replicated. MIST has two responses to this line of thinking: 1- The situations and context is very different and does not apply to Arthur/5th/6th. Stephens was already very wide and the retrofitted road was a reduction in width from the original

173 D – Highway 12 is a state numbered route. Therefore, Highway 12 is required to accommodate WB-67 vehicles in accordance with Montana Department of Transportation standards. Please see General Comment B in Section 4.4 of this document for additional discussion regarding the use of roundabouts. For ease in review, the general comments and responses are also repeated above.

173 E - Please see General Comment F in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

173 F - Please see General Comment C in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

173 G - The crossing was designed under the Preferred Build Alternative without a crossing on the north side of the Arthur Avenue/6<sup>th</sup> Street intersection to aid in traffic flow and to provide for the safety of pedestrians. Due to the lack of community support, however, the 'No Build' alternative was selected.

173 H - Please see General Comment C in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

size. Arthur is already at a more human scale, yet the proposal is to super size the road and intersections. 2- Stephens is not as safe as it should be. Pedestrians have been hit when one lane stops and the second does not. The speeds are too high on Stephens because of the multi-lane nature of the road. Cycling is not comfortable. Noise is too high.

173 I

-large tractor trailers and motor vehicle predictions for the future are guiding this project, not the safety and flow of all modes. Thus, MDT has failed to meet the project purpose.

173 J

-large logging trucks do not belong in this area.

173 K

-the scale of this project is too big. It does not fit the character of the neighborhood.

-rising gas prices will likely reduce future motor vehicle use.

-Missoula will likely be in violation of new EPA air regulations for PM 2.5 when the new regulations come out later this year. Missoula will need to rethink the way we are designing and building transportation systems. Missoula will likely be in the position of having to better encourage and allow non-motorized transportation to exist and flourish.

-as Missoula completes its bike/walk/transit systems over the next 10 years- as outlined in the Long Range Plan, the Non-Motorized Plan, the Capital Improvement Program, the Transportation Improvement Program, and the Transit Development Plan- motor vehicle use will decline. There will be at least 10% less vehicle miles traveled (vmt) in 2016 as there is today (2006). This reduction accounts for thousands of new residents to the area and growth in the outlying areas. It is

173 I - The design capacity is determined by both current as well as future capacity needs. The Preferred Build Alternative was designed for the capacity of the roadway and its functional classification as an urban principal arterial. Due to the lack of community support, however, the 'No Build' alternative was selected.

173 J - Please see General Comment A in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

173 K - Please see General Comment H in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

well-documented that building excellent bike, walk and transit facilities attract many more cyclists, walkers and transit users.

-the proposed project does not meet the City of Missoula Vision, which states, 'We are a professional, proactive and responsive local government, working cooperatively in mutual respect and trust with dedicated, well-informed and responsive citizens, to seek the highest quality of life for our community'. The proposed project will likely degrade the quality of life for our community and will not result in the 'highest quality of life for our community.'

173 L

-taking park land and open space is not legal when a viable alternative exists that does not have the same negative impact. Single lane roundabouts can easily handle today's traffic volumes, and can easily handle the adjusted projected traffic volumes for 2026 (today's traffic volume minus 10%).

173 M

-single lane roundabouts typically reduce severe and fatal crashes 95% to 100% when compared to traffic signals.

173 N

-special events at The University of Montana should be accommodated but should not be the driving force of this project. Many more people are likely to walk, bike and take transit to special events in the future.

173 O

For the biggest events- like Griz football games- it is in everyone's best interest to reduce the amount of drunk driving by providing viable alternatives in the form of walking, cycling, transit and rideshare.

MIST contact: Bob Giordano, Director, 91 Campus Dr. #1412, Missoula, MT, 59801, mist@strans.org, 406.880.6834

173 L - Please see General Comment H in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

173 M - Please see General Comments B and D in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

173 N - Please see General Comment B in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

173 O - Please see Response 137 B.

**Comment # 174**

**From:** Rick Gold [caring\_for\_creation@yahoo.com]  
**Sent:** Wednesday, April 26, 2006 8:22 AM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David; r\_huffsmith@msn.com  
**Subject:** Comment on Arthur Ave EA

Last evening (Tues. April 25) I attended the public comment forum for the EA of the (proposed) restructuring of US public highway 12, Arthur Ave. at 5th and 6th streets by the University of MT. The current EA proposes two preferred alternatives each requiring a 100' roadbed (28 feet wider than Reserve street).

I imagine that in the MOA signed by the University, City and Montana Department of Transportation (MDT) in 2001 to initiate the EA process, President Dennison jokingly stated that he wanted a place to park his lear jet during home football games, but in all seriousness, this 100' monstrous throwback from the age of cheap gas and fast hot (gas guzzling) cars, does NOT fit the unique character of this neighborhood.

174 A

And while the State traffic engineer and the EA specialist did their darn best trying to defend the 20th century, same old "one size fits all" mentality of their preferred alternatives, against the likes of Bicycle Bob and his wonderful alternative round about ways for roadways, it was a tough crowd. With peak oil (the world's gas consumption outstripping the earth's capacity to relinquish oil), the wars in Iraq & Afganistan, and ever increasing gas prices at the pumps, people are waking up and using alternative modes of transportation more and more.

**Response # 174**

174 A – Please see General Comment H in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

Maybe if MDT and the Fed Transportation people climbed out of their SUV's long enough to run around the preverbial block and do some deep breathing for a minute, they'd clear out all those 20th century cobwebs and realize, that we really are FED UP with their "one size fits all" mentality. It's well past their time to WAKE UP and smell the roses of a new transportation millenium.

Rick Gold  
3200 Brooks St  
Missoula, MT 59801  
541-0016

**Comment # 175**

**From:** derek goldman [derekmgold@hotmail.com]  
**Sent:** Tuesday, May 16, 2006 4:52 PM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David; r\_huffsmith@msn.com;  
dstrohmaier@ci.missoula.mt.us; hkendall@ci.missoula.mt.us  
**Subject:** Comment on Arthur Ave EA

**Attachments:** Arthur EA.doc

Please see attached comment on Arthur EA in Missoula County. Thank you.

--Derek Goldman

2411 Rattlesnake Dr  
Missoula, MT 59802  
May 16, 2006

**Response # 175**

Jean Riley  
MDT Environmental Services  
2701 Prospect Ave/ PO Box 201001  
Helena, MT 59620-1001

Re: Arthur Avenue EA comment

I am writing to comment on the Arthur Avenue Environmental Assessment in Missoula County, and to **express strong support for the “no action” alternative.**

For the last five years, I have been commuting to and from work and school through the 5<sup>th</sup>/6<sup>th</sup>/Arthur complex practically every day. About 50 percent of the time I drive a car to my destination, and the other half of the time I ride a bike. My commute corresponds to standard “rush hour” times. Thus, I feel that I have an accurate assessment of this series of intersections, both as a cyclist and as a motorist.

From my experience navigating this intersection, the 5<sup>th</sup>/6<sup>th</sup>/Arthur complex functions remarkably well in its current form. Lights are well-timed; rarely is there a backup at the intersections. In fact, the 2-lane, uni-directional flow of traffic around the complex functions like a giant roundabout, and maintains an even flow of traffic, rather than start-stop and traffic light buildup. In fact, the 5<sup>th</sup>/6<sup>th</sup>/Arthur complex is actually one of our better traffic areas in Missoula. The recent construction of the Madison Street bike-ped underpass will greatly reduce the need for bikes and pedestrians to navigate the 5<sup>th</sup>/6<sup>th</sup>/Arthur complex.

Thus, it was quite a surprise to me that the current preferred alternative was chosen over the no action alternative. Pardon the cliché, but this is a classic case of a solution in search of a

problem. Scarce MDT dollars could, and should, be expended in a more needy location, of which there must be many around the state.

175 A

Furthermore, I question the validity of the EA and its stated zero cumulative impact on air quality. The PA calls for the addition of multiple traffic lights to the 5<sup>th</sup>/6<sup>th</sup>/ Arthur complex, which will result in increased vehicle idling. It is common knowledge that idling cars and trucks produce higher amounts of ambient air toxins (including criteria pollutants CO2 and PM2.5) than do non-idling vehicles. In fact, according to the Missoula City-County Air Quality Advisory Council, “emissions from idling vehicles can be as much as 20 times greater than those from one traveling at 32 mph.” (<http://www.co.missoula.mt.us/envhealth/AirQ/Documents/Idling%20Fact%20Sheet%2012-17-04.doc>).

175 B

Additionally, I question the conclusion of the EA that the preferred alternative actually meets the purpose and need of the project of improving traffic flow. To the contrary, it is the existing two-lane, one-way flow of traffic around the complex that maintains an even flow of traffic, rather than start-stop and traffic light buildup. It is unclear and unlikely how the PA – with its additional stoplights and bi-directional traffic – will improve upon the current situation. It seems likely that the PA will create traffic flow problems.

Finally, the following statement on page S-4, and again on S-8 of the EA that characterizes public opinion of the project is probably false:

Through state and community meetings, public hearings, and neighborhood workshops, it is clear that the project is needed and is

175 A – Please see General Comment F in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

175 B – The proposed build alternative re-aligns U.S. Highway 12 to Arthur Avenue and removes a significant amount of traffic from Maurice Avenue, providing for safer bicycle and pedestrian access. The proposed build alternative shows significant operational improvements with decreased in delay for all intersections within the project area. Traffic flow is described in detail in the Revised Preliminary Traffic Report as referenced in Section 2 of the EA. Due to lack of community support, however, the ‘No Build’ decision was selected.

overwhelmingly supported by MDT, the City, the University, local residents and interest groups. A majority see the positive benefits of this project....

In fact, based upon the comments I've heard at these meetings, there appears to be little support for the project. After reviewing public comments from recent meetings and letters, I am sure the MDT will also realize the inaccuracy of the above statement.

Therefore, I recommend that the planning team reconsider the preferred alternative in favor of the no-action alternative, and instead spend Department resources in areas of true need. Thank you for the opportunity to comment on this proposal.

Sincerely,

Derek Goldman

Cc: Randy Huffsmith, Dave Kirkpatrick,  
Heidi Kendall, Missoula City Council, Dave  
Strohmaier, Missoula City Council

## Idling Fact Sheet

Compiled by the Missoula City-County Air Quality Advisory Council

**Reducing idling reduces air pollution.** Vehicle exhaust contains at least 21 air toxics which, by definition, are hazardous to human health. Major pollutants from automobiles include hydrocarbons, nitrogen oxides, carbon monoxide, and particulate matter, all of which have significant health and environmental impacts. Emissions from idling vehicles can be as much as 20 times greater than those from one traveling at 32 mph. Many communities in the United States and Canada have or are considering ordinances that restrict excessive vehicle idling in order to improve air quality and protect citizens' health.

**Use the 30-second rule to save gas and reduce emissions.** Contrary to the commonly held misconception, frequent restarting has little impact on engine components such as the battery and starter motor. Your savings in fuel will easily offset the cost of what little wear does result. Remember, when you are idling, you are getting zero miles per gallon. The U.S. EPA's website states, "You will save gas by turning the engine off and restarting it again if you expect to idle for more than 30 seconds. You will also prevent pollution by preventing long idles. Try parking your car and going into restaurants, banks, and the like instead of idling in drive-up lanes." When you must wait in a drive thru, turn your engine off.

**The best way to warm up your vehicle is to drive it.** It's a common misconception that idling for several minutes is the best way to warm up a vehicle. Not only is extended idling

unnecessary, but many parts of the vehicle – including wheel bearings, tires, and the suspension system – only warm up once the vehicle is moving. You only need to idle long enough to get the oil circulating – about 30 seconds – before driving away, and it’s a good idea to avoid high speeds and fast acceleration until the engine temperature rises. Modern diesel engines also need only a short engine warm up times. To keep windows from fogging up, clear snow from the air intake on top of your hood (before you start the engine) and open a window slightly as soon as you get in the car. When temperatures are in the teens or colder, use an engine block heater for 2-4 hours to help your car start more easily, get your defroster working faster, improve your winter gas mileage as well as reduce air pollution (see Engine Block Heater Fact Sheet for more details).

**Reducing idling reduces wear and tear on your engine and saves money.** Idling creates wear and tear on your engine because fuel doesn’t combust completely, and some fuel residue can condense on cylinder walls. Also, excessive idling can cause condensation to form in the exhaust, which may result in corrosion and reduced lifespan of the exhaust system. Idling for 10 minutes a day uses an average of 26 gallons of gas a year. At \$2 a gallon, a driver could save over \$50 a year in gasoline costs just by turning off the engine.

**Unattended idling vehicles are unsafe, illegal, and vulnerable to theft.** Not only does common sense tell us that leaving a running vehicle unattended can be dangerous, but it is also illegal to do so. Specifically, Missoula’s Municipal Code on Unattended Motor Vehicles (10.14.050) states that, “No

person driving or in charge of any motor vehicle except a licensed delivery truck or other delivery vehicle, shall permit it to stand unattended without first stopping the engine, locking the ignition and removing the key.” Unattended idling vehicles are not only unsafe and illegal, they are an open invitation to easy theft!

**Some other things you can do to improve air quality:** (1) Plan ahead to combine errands or avoid the trip altogether; (2) bike, walk, ride the bus, or carpool; (3) maintain your car regularly; (4) drive smoothly and avoid sudden throttling.

**For more information, visit the following websites or call the Health Department at 258-4755.**

Missoula County Environmental Health Division –

<http://www.co.missoula.mt.us/EnvHealth>

Missoula Municipal Code –

[http://www.ci.missoula.mt.us/cityclerk/city\\_code.htm](http://www.ci.missoula.mt.us/cityclerk/city_code.htm)

“Idling and climate change go hand in hand,” Natural

Resources Canada, Office of Energy Efficiency –

<http://oee.nrcan.gc.ca/transportation/idling/issues/why-idling-problem.cfm?attr=8>

US EPA – <http://www.epa.gov>

“Your car and clean air: What YOU can do to reduce pollution” (idling info on p.3) –

<http://www.epa.gov/otaq/consumer/18-youdo.pdf>

Mobile source emissions: Past, present, and future (Pollutants):

<http://www.epa.gov/otaq/invntory/overview/pollutants/index.htm>

Mobile source air toxics:

<http://www.epa.gov/otaq/toxics.htm>

National Safety Council, Environmental Health Center,

“Environmentally friendly maintenance and repair” –

<http://www.nsc.org/ehc/mobile/mainrepa.htm>

**Comment # 176**

**From:** Angela Goodhope [agoodhope@hotmail.com]  
**Sent:** Thursday, May 25, 2006 2:26 PM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David; r\_huffsmith@msn.com  
**Subject:** Comment on Arthur Ave EA

I strongly believe that Arthur Street, Madison Street and the Jeanette Rankin Peace Park should be left alone. I have often wondered when traffic to Hwy 93 would be diverted to Reserve Street as the means to get to Hwy 93 (Lolo)- one would think a change in street signs would suffice. Missoulians will be sick at heart if the state rips into this piece of land to make a road wider-

176 A

Thanks for your time-  
Angela Goodhope- 9 year resident of Missoula, Montana

**Response # 176**

176 A - Please see General Comment A in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

**Comment # 177**

**From:** Leigh Greenwood [leigh\_greenwood@yahoo.com]  
**Sent:** Tuesday, April 25, 2006 4:30 PM  
**To:** Kirkpatrick, David; r\_huffsmith@msn.com;  
mdteiscommentsarthur@mt.gov  
**Subject:** Comment on Arthur Ave EA

I live in Missoula, work at the university, and frequently drive and bike across the Madison River Bridge. I think the current plan to expand and divide the intersection to over 100ft wide and 3 separated lanes of southbound traffic is really flawed. **By doing this, the turning lane confusion will increase, pedestrians will in more danger due to the greater road width and traffic speed, and bikers will have to make very challenging lane crossings to navigate the area.**

177 A

I think that the road could use a few changes- perhaps a stoplight, maybe a roundabout, and some bumped-out pedestrian areas. It has some traffic backup early in the morning, and is a little confusing at the base of the bridge. I do not think that making this one of the biggest intersections in town is a good idea, nor do I believe it will solve these relatively minor problems!

I hope more alternatives that involve less speed, width, neighborhood demolition, and confusion are explored in depth.

Thank you.

Leigh Greenwood

**Response # 177**

177 A - Please see General Comment C in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

Leigh Greenwood  
536 Speedway Ave  
Missoula MT 59802

(406) 381-0771  
[leigh\\_greenwood@yahoo.com](mailto:leigh_greenwood@yahoo.com)

**Comment # 178**

**From:** Stephen Grimm [sgrimm@nd.edu]  
**Sent:** Wednesday, April 26, 2006 5:53 AM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** r\_huffsmith@msn.com; Kirkpatrick, David  
**Subject:** Comment on Arthur Ave EA

Re. the Arthur Avenue widening proposal

I wanted to voice my strong opposition to the plan to widen Arthur Avenue.

As the father of a family who will be moving to Missoula on July 1st of this year, and who chose Missoula as a place to relocate in large part because of its pedestrian friendly culture, the widening sounds frankly revolting. Walking around the university district in particular was what attracted me to the city; if you were to threaten that, you should be ashamed of yourself!

Sincerely,  
Stephen R. Grimm  
South Bend, Indiana

**Response # 178**

Comment noted. No response necessary.

**Comment # 179**

**From:** www@mdt.mt.gov  
**Sent:** Wednesday, April 26, 2006 10:40 AM  
**To:** MDT Comments - Project  
**Subject:** Comment on a Project Submitted

A question, comment or request has been submitted via the "Contact Us" web page.

Action Item: Comment on a Project  
Submitted: 04/26/2006 11:40:29  
Project Commenting On: HWY 12 Authur Ave, Missoula, MT  
Dan Grogan  
c/o PO Box 774  
Lolo, MT 59847

Comment or Question:

As a CDL holder, I suggest routing HYW 12 traffic onto Reserve St to Interstate 90, thus avoiding Brooks (commercial-residential), Higgins to 5th & 6th St E. (residential-school zone), Maurice Ave. (residential-school zone), across the Madison St. bridge to E. Broadway, Van Buren St. to I-90. Reserve St volume is already taxing, but the four lanes without turning intersections thru mostly commercial zones would be more appropriate for all inter-city, and inter-state multi-unit vehicles.

The Arthur St. Project of HYW 12 appears to be a misguided expense at the detriment to the neighborhoods it passes through and the pedestrians, bicyclists, and buses that travel there.

Thank you.

Reference Number = picomment\_406646728515625

**Response # 179**

179 A - Please see General Comment A in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

179 A

**Comment # 180**

**From:** www@mdt.mt.gov  
**Sent:** Tuesday, April 25, 2006 10:55 AM  
**To:** MDT Comments - Project  
**Subject:** Comment on a Project Submitted

A question, comment or request has been submitted via the "Contact Us" web page.

Action Item: Comment on a Project

Submitted: 04/25/2006 11:54:42

Project Commenting On: Arthur avenue, Missoula

Steve Hackney

HAC/32 Campus Drive

Missoula, Mt 59812

hackneysh@mso.umt.edu

Phone: 406-243-4351

Fax: 406-243-5799

Comment or Question:

I would like information on the proposed changes to Authur Ave. in Missoula at the entrance to the University of Montana

Reference Number = picomment\_18768310546875

**Response # 180**

No response necessary.

**Comment # 181**

**From:** Aiyana Hart-McArthur [xxxxxxxxxxx@xxxxxxxx.com]  
**Sent:** Wednesday, April 26, 2006 12:51 AM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David; r\_huffsmith@msn.com  
**Subject:** Arthur Avenue changes

Hello,

I am very concerned about the proposed changes to Arthur Avenue near the Madison Street bridge. While I agree that traffic patterns must be changed, I believe that the MDOT and and City of Missoula proposals pose grave risks to pedestrians, bicyclists and other non-motorized users, as well as changing the character of the neighborhood.

181 A

It seems absolutely necessary to me to reroute Highway 12 out of a residential neighborhood, and away from the university, even if it means increased truck traffic elsewhere and the loss of state maintenance funds to the city. Commercial traffic belongs in commercial areas and highway-like roadways, such as along Reserve. High traffic volumes on Reserve are a separate issue worth addressing, but must come after concern for safety.

Another option would be to send Hwy 12 traffic across the Higgins Street bridge to Broadway, which is already wide.

Regardless of whether Highway 12 is rerouted, we must put the safety of those passing through the Arthur area ahead of the convenience to trucks and large vehicles. I urge you to find a way to keep the streets narrow, low speed and tree-lined.

181 B

Though roundabouts are not perfect, I see a single lane roundabout as the best solution. If it is well designed, a roundabout will provide smoother traffic flow,

**Response # 181**

181 A - Please see General Comment A in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

181 B - Please see General Comment B in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

free access to all cross streets, easy pedestrian crossing, and room for bicycles.

Please encourage walking and bicycling in central Missoula, and put safety above expediency.

Thank you,  
Aiyana Hart-McArthur  
560 Colorado  
Missoula, MT 59802  
(406) 728-4617

(Please do not publish my email address as part of the public record. Thank you)

**Comment # 182**

**Response # 182**

**From:** Catherine Ipsen [ipsen@ruralinstitute.umt.edu]  
**Sent:** Tuesday, April 25, 2006 1:36 PM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David; r\_huffsmith@msn.com  
**Subject:** Comment on Arthur Ave EA

My name is Catherine Ipsen and I have lived in the University area the past nine years. In addition, I have attended or worked at the University of Montana since 1991. My husband has a daily commute to Express Way, so he travels on Arthur and Madison Avenues to access the freeway during heavier traffic periods.

We are disappointed with the proposed changes to Arthur Avenue and question the need for such significant alterations to the University neighborhood transportation area. We have

not noticed significant traffic problems in the area with the exception of University of Montana football games, some 8 Saturdays during the year. Aside from these few Saturdays, the traffic has remained stable throughout our time in the University community. Further, University community members, including several thousand students, are very dependent on bike and walking options to get around the campus, to and from their homes, and to surrounding businesses. Many people gravitate to this neighborhood for these very transportation options. I question the logic of any transportation plan that would diminish these alternatives, or reduce the safety of pedestrians. The University neighborhood is an asset to the Missoula community and should not be squandered.

182 A

182 A - Please see General Comment C in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

Defense for the proposed transportation option (including better access for trucks) does not fit within the residential neighborhood environment that makes the University such as attractive place. A four-five lane throughway is unnecessary and ill-conceived. I urge city planners to explore more feasible options to addressing transportation issues within the University.

Sincerely,

Catherine Ipsen  
502 Connell  
Missoula, MT 59801

**Comment # 183**

**From:** Sarah Jefferson [boobyruby@gmail.com]  
**Sent:** Tuesday, April 25, 2006 1:41 PM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David; r\_huffsmith@msn.com  
**Subject:** Comment on Arthur Ave EA

I am a freshman at the University. I am originally from Alaska, and I must say, what convinced me to travel over twenty-five hundred miles to attend this University is Missoula's friendliness to pedestrians, and the small town feel. There is one part of town where I do not feel this way- and that is on Reserve street. If the proposed Arthur expansion goes through, Arthur will be just like Reserve, and I'm not going to feel comfortable very close to campus. So where's my incentive to continue my education in a place that I'm uncomfortable and is ugly? No one can argue that a 100 foot wide street is pedestrian friendly or attractive. I would much rather have grass and six houses than pavement. Crossing Arthur right now is relatively easy- two cars have to stop because there are only two lanes. If many more lanes are put in, the pedestrian's safety is at risk because six cars might not all see a person crossing at the same time. Please- I beg of you- find a better solution. In fact- find something that's a solution to begin with- because this sure isn't.

Sincerely,  
Sarah Jefferson

183 A

**Response # 183**

183 A - Please see General Comment C in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

**Comment # 184**

**From:** Jeremy Smith [jeremynsmith@jeremynsmith.com]  
**Sent:** Thursday, April 27, 2006 1:48 PM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David; r\_huffsmith@msn.com  
**Subject:** Comment on Arthur Ave EA

I write to ask the state first to reconsider adding traffic lanes to Arthur Avenue and second to consider seriously the citizen's plan for the street.

I live six blocks north of the proposed reconstruction and cross the area by car, bike, and foot to reach the University of Montana, its surrounding neighborhoods, and the Missoula downtown. The state's plan to widen considerably the street will make driving unsafe and unpleasant. It will make biking and walking all but impossible. I understand the need for trucks to traverse Missoula, but need they do so at the expense of eliminating access for thousands of other daily users?

184 A

184 B

What I like about the citizen's plan are roundabouts that calm traffic without stopping it and allow clear, safe crossing for all users. The proposed layout better fits the surrounding neighborhood and the university, surely Montana's highest concentration of cyclists. Traffic management that paves a park and hinders access for all but long-distance drivers is no management at all. Our roads and highways exist to benefit our quality of life, not destroy it.

Please table the state Arthur Avenue plan and give the citizen's plan developed by MIST the consideration it deserves.

**Response # 184**

184 A - Please see General Comment C in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

184 B - Please see General Comment B in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

Thank you for your consideration. I look forward to hearing from you.

All the best,

Jeremy N. Smith  
1131 Jackson Street  
Missoula, MT 59802  
406.721.1664  
[jeremynsmith@jeremynsmith.com](mailto:jeremynsmith@jeremynsmith.com)

**Comment # 185**

**From:** www@mdt.mt.gov  
**Sent:** Friday, April 28, 2006 10:53 AM  
**To:** MDT Comments - Project  
**Subject:** Comment on a Project Submitted

A question, comment or request has been submitted via the "Contact Us" web page.

Action Item: Comment on a Project  
Submitted: 04/28/2006 11:53:02  
Project Commenting On: Arthur 5th and 6th project  
Rachel Kaufman

Comment or Question:

Thank you for all the hard work and consideration that has been put into the planning of this project. I commend your hard work. Now I am asking you to work harder. I think that the current plan to add two traffic signals and widen Arthur meets only the needs of transient Highway 12 traffic and not the needs of the permanent residents and students. Please re-designate Highway 12 to go along Reserve Street and consider the citizen's plan by Bob Giordano that incorporates traffic circles that cater to the needs of the people who frequent the area the most.

185 A

Traffic circles are very safe and accessible, they keep the driver's attention at street level, provide for short, safe passage for pedestrians, calm traffic, lower emissions by eliminating idling, use no electricity, have low maintenance costs and finally enhances and expands Rankin Park. It would be absolutely TRAGIC to have a street so wide, cold and in-personable splitting into the heart of our attempts to form a

**Response # 185**

185 A - Please see General Comments A and B in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

strong tightly knit community in this big fragmented world.

Sincerely,

Rachel Kaufman  
UM Student and  
Native Missoulian

Reference Number = picomment\_640350341796875

**Comment # 186**

**From:** Tory Kendrick [tkendrick@fs.fed.us]  
**Sent:** Wednesday, April 26, 2006 11:14 AM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** kirkpatrickdj  
**Subject:** Comment on Arthur Ave EA

To MDT:

I am a home owner in the Historic Eastside neighborhood in Missoula and I would like to express my opposition to widening streets in the Arthur Ave area. I firmly support the use of roundabouts and believe that this would provide better traffic flow and safer streets. This is in line with the Missoula community. We do not want larger, gridlocked streets. Keep them small and functional.

186 A

Thank you for your time,  
Tory Kendrick  
424 Jefferson St  
Missoula, MT 59802

**Response # 186**

186 A – Please see General Comment B in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

**Comment # 187**

**From:** Kerns, Brian P. [Brian.Kerns@mso.umt.edu]  
**Sent:** Friday, April 28, 2006 8:44 AM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David; r\_huffsmith@msn.com; Bob Giordano  
**Subject:** Comment on Arthur Ave EA

Hello,

I attended a public meeting on the Arthur Avenue project in Missoula on 4/26 but was unable to stay for the public comments. My family of 5 live on McLeod Avenue in the University area, just a few blocks away from the proposed project site. All my family members have occasion to utilize the subject street system multiple times a day as a motorists, runners, pedestrians and bicyclists. We have all been alarmed by its awkwardness and potential danger and believe that an improvement is required.

However, the proposal put forth by the state is deficient. **Instead, I would like to strongly endorse the option proposed by the Missoula Institute of Sustainable Transportation. This appears to be a thoughtful approach that preserves the integrity of the neighborhood, increases the safety of all potential users, and provides much-needed pedestrian/bicyclist access & tie-in to existing park and trail elements.** Please carefully consider this suggestion.

187 A

Sincerely,  
Brian P. Kerns  
235 McLeod  
Missoula, MT 59801

**Response # 187**

187 A – Please see General Comments B and H in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

**Comment # 188**

**From:** Peter Kolb [peter.kolb@cfc.umt.edu]  
**Sent:** Tuesday, April 25, 2006 9:13 AM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David; r\_huffsmith@msn.com  
**Subject:** Comment on Arthur Ave EA

Dear Planning team,

I am a faculty that works on the U of M campus and commutes 20 miles every day and have done so for almost 10 years. The Arthur avenue access to campus is a serious problem area as there are too many vehicles trying to access campus through a very tortuous street system. Traffic is often backed across the bridge and to some extent there is a cascading effect all the way to the East bound Van Buren Exit from I-90. I have reviewed your preferred alternatives with great hope that the gridlock might be solved to some extent by increasing the flow of traffic onto campus. Much to my disappointment the preferred alternative appears to provide a more scenic vista, however, in my opinion, would make the congestion worse. Currently the left turn from southbound traffic onto campus is sometimes confusing as the left turn onto campus requires that traffic cross two lanes immediately. This sometimes causes conflict with northbound traffic turning right onto campus. However, the same lack of traffic routing also allows drivers to effectively use limited space and increase traffic flow because a left turn on red is allowed, and when traffic is back up too much a driver has the option of merging right and accessing campus by driving south around it. **The current proposed plan limits driver choices, and forces drivers to make turn decisions before seeing where the choices lead.** This is particularly

188 A

**Response # 188**

188 A – The Preferred Build Alternative would include advanced signage to inform drivers and reduce driver confusion. Due to lack of community support, however, the ‘No Build’ decision was selected.

detrimental since there are often people driving to campus in swarms who are unfamiliar with the convoluted access. I very strongly urge you to reconsider your preferred alternatives and choose one that actually helps traffic access the U of M campus, as well as leave it in a fluid and self explanatory fashion. Limiting traffic flow will be extremely counter productive. The current plan looks like it will cost a lot of money and accomplish very little other than increase congestion. Getting traffic onto and off campus as quickly as possible will limit noise and air pollution in a highly residential area as well.

Sincerely,

Peter Kolb  
MSU Extension Forestry Specialist  
College of Forestry and Conservation

**Comment # 189**

**Response # 189**

**From:** Laakso, Jace [Jorma.Laakso@mso.umt.edu]  
**Sent:** Tuesday, April 25, 2006 3:06 PM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David; r\_huffsmith@msn.com  
**Subject:** Comment on Arthur Ave EA

I would like to add a couple of things to this design. The traffic lights proposed could be programmed for maximum efficient exodus from UM after major events. Currently there is a huge bottleneck at Arthur and 5th whenever an event gets out. This could be mitigated with controlled and synchronized lights that could be activated by

the Police Department. The Police currently are called upon to direct traffic at those events.

189 A

Also, please include bicycle lanes where possible. I believe, since Missoula is so committed to more bicycle usage, it is important to keep that in mind. You will have less opposition to the proposal. There are no bicycle lanes on Arthur in either alternative plan. The bicycle lanes could be linked to the new footbridge below the Madison Street bridge for even more safety.

189 B

Also, routing Highway 12 through the University neighborhood is not in the best interest of Missoula's citizens nor the University of Montana. Rather than routing east on 6th, it should continue north on Higgins Avenue to Broadway and east to I-90. I applaud the rest of the project since it appears to include some major pedestrian crossing improvements to a couple of dangerous intersections: Maurice and 6th, and Maurice and 5th.

Please move forward but remember to be flexible enough to address concerns that arise among the users of the proposed project.

Thanks,

Jace Laakso  
IT Central/Presentation & Technology Services  
University of Montana  
Missoula, MT 59812  
406-243-2858  
Jace.laakso@umontana.edu

189 A Under the preferred build alternative, bicycle lanes have been included in the design along Arthur Avenue, along a section of Maurice Avenue, and through the Arthur Avenue/5<sup>th</sup> Street intersection. Due to the lack of community support, however, the 'No Build' decision was selected.

189 B - Please see General Comment A in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

**Comment # 190**

**From:** Jim Lemcke [jrlemcke@hotmail.com]  
**Sent:** Friday, April 28, 2006 7:40 AM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David; r\_huffsmith@msn.com  
**Subject:** Comment on Arthur Ave EA

I am in support of the Arthur, 5th Street project as written with one minor exception.

I do not believe there needs to be a cross walk across Arthur on the north side of 5th street. There are no houses or businesses on the north side (Rankin Park) of the street nor are there any university buildings on that side further to the east. This crosswalk is not used much and will add confusion. The intersection is dangerous now with traffic coming off of the bridge and I don't see it improving with the greater distance to travel and the need to cross in three steps, land to island, island to island, island to land. The crossing is best made south and then east. It is not a good crossing either but it is flat and speeds are slower.

Thank you

Jim Lemcke  
8704 Fescue Court  
Missoula, MT 59808  
(406) 721-3691

**Response # 190**

Comment noted. No response necessary.

**Comment # 191**

**From:** Laakso, Lou [LLaakso@mso.umt.edu]  
**Sent:** Tuesday, April 25, 2006 9:54 AM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David; r\_huffsmith@msn.com  
**Subject:** Comment on Arthur Ave EA

Hello,

I feel that this is a very bad plan - the proposed width of Arthur Ave (larger than Reserve Street) is a huge safety concern. As a bike commuter to campus, I can't imagine trying to navigate this street.

191A

Lou Laakso  
339 Edith  
Missoula, MT 59801

**Comment # 192**

**From:** Steve Lodmell [stephen.lodmell@umontana.edu]  
**Sent:** Tuesday, May 16, 2006 10:24 AM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David; r\_huffsmith@msn.com  
**Subject:** Comment on Arthur Ave EA

Dear Sir, Madam:

I am writing concerning the proposed reconstruction of the north end of Arthur Avenue in Missoula. As a resident of the immediate neighborhood and as an employee of the University, I feel I know well the area, traffic patterns, and

**Response # 191**

191A- Please see General Comment C in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

**Response # 192**

potential impacts of the proposed work. I would like to urge you not to proceed with the plan as it has been proposed.

My family and I use this intersection daily, on foot, bike, and by car. There is no compelling need for major reconstruction.

The only time there is the slightest backup in either direction is when there is a major sporting or community event at the University. Even then, the backup is neither extraordinary nor long lived. It is also easy to avoid crossing this intersection at more hazardous spots. Some simple signing could point people who are unaccustomed to the area to safe crossing zones.

Additionally, the potential damage to the residential area would be immeasurable. Increasing the flow pattern of this intersection would have no impact on traffic flow most of the time, and ultimately would increase the volume of high speed transitory traffic through our residential neighborhood.

192 A

Traffic through Missoula to points south should be routed through existing high volume corridors, most obvious choices being Reserve and Orange Streets.

192 B

Thank you for considering my comments.

Stephen Lodmell  
440 Connell Ave.  
Missoula, MT 59801

192 A - Please see General Comment E in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

192 B - Please see General Comment A in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

**Comment # 193**

**From:** karen louis [karenelouis@yahoo.com]  
**Sent:** Friday, June 02, 2006 11:55 AM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David; r\_huffsmith@msn.com  
**Subject:** Comment on Arthur Ave EA

To Whom it May Concern,

I am opposed to the Arthur expansion. Widening this road in the University district would change the quiet, pleasant, and bike-friendly neighborhood into a noisy, busy, unplesant and unsafe mess. Destroying 6 houses and widening an already busy road seems like a poor solution for a small problem. Stop lights would create stop and go traffic, causing more pollution. A better solution would be to re-designate highway 12 to reserve street and I-90, which are already equipped for the volume of traffic that would be introduced to Arthur. It wouldn't cost as much, and it would preserve an area that needs preservation.

193 A

193 B

Sincerely,  
Karen Louis

**Response # 193**

193 A - Please see General Comment F in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

193 B - Please see General Comment A in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

**Comment # 194**

**From:** Gary Mac [garymac@bresnan.net]  
**Sent:** Tuesday, April 25, 2006 11:46 AM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David; r\_huffsmith@msn.com  
**Subject:** Comment on Arthur Ave EA

To Whom It May Concern;

I will be unable to attend the public comment hearing on Tuesday but would like to voice my opinion. PLEASE NO NOT listen to the small, vocal minority that are opposed to this project. I am a native Missoulian who is very much in favor of the widening of Arthur Avenue at the University of Montana. The small vocal minority think that we should all ride our bikes to Home Depot for a load of plywood, and/or walk or bike to work in all weather conditions. Missoula will continue to grow and this widening is a perfect solution for the traffic bottleneck on this stretch of road. As a native Missoulian is frustrating to see this fine city grow, while our City Engineer draws up plans to reduce traffic lanes. If this small minority had it their way, all or our main thoroughfares would have bike lanes larger than the traffic lanes. PLEASE proceed with this project as drawn. Thank you for your time.

Gary McLaughlin

**Response # 194**

Comment noted. No response necessary.

**Comment # 195**

**From:** Philip Maechling [pmaechli@co.missoula.mt.us]  
**Sent:** Thursday, May 04, 2006 2:24 PM  
**To:** James McDonald; Steve Adler; Alison Shuler; Ellie Boldman Hill; Theodore Jacobs; Kristi Hager; Philip Perszyk; mdteiscommentsarthur@mt.gov; Mike Monsos; Darrel Armstrong  
**Cc:** Kirkpatrick, David; Cynthia Manning; r\_huffsmith@msn.com  
**Subject:** Comment on Arthur Ave EA

Attachments: 2005-02-03 HPC.doc

195 A

Your Public Involvement chart lists the Missoula Historic Preservation Commission (HPC) as a public meeting 2-3-05. Please let the record show, and the minutes also show, that this event did not include MDT or CDM. In addition, the HPC is not a signatory to the MOA on this project. The signature line is left blank, and the HPC took no action on this proposal, which at the time was four land=es and 80.6 feet wide.

Philip Maechling,  
Missoula Historic Preservation Office  
435 Ryman, Missoula, Montana 59802  
email: pmaechli@co.missoula.mt.us  
phone: 406-258-4706; fax: 406-258-4903

**Response # 195**

195 A – Thank you. This change has been noted in Section 4 of this document.

**Comment # 196**

**From:** Marilyn Marler [marler@bigsky.net]  
**Sent:** Friday, May 19, 2006 6:06 AM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David; r\_huffsmith@msn.com  
**Subject:** Comment on Arthur Ave EA

Hello,

I am a UM employee and a frequent driver/biker/pedestrian in the area of the proposed Arthur/5th/6th project. I think that the proposed option without a left turn lane from Arthur onto 5th is a great choice. I support the project.

I know that the project has been getting criticized by some alternative transportation folks in Missoula, but I really believe that the proposed project will be positive for all. I look forward to seeing it built.

Marilyn Marler  
1750 South 8th St West  
Missoula, MT 59801

**Response # 196**

Comment noted. No response necessary.

**Comment # 197**

**From:** Magdalen Marmon [maggie@montana.com]  
**Sent:** Tuesday, April 25, 2006 4:49 PM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David; r\_huffsmith@msn.com  
**Subject:** Comment on Arthur Ave EA

To whom it may concern,

There has long been a debate in Missoula about whether road designs should favor automobiles or bicycles and pedestrians. In many areas of the city, there are arguments for both sides. But directly adjacent to the University is not one of these places.

A University has to be a pedestrian-friendly place. The road designs have to be made with pedestrians first in mind. This city has spent many dollars and much time promoting alternative transportation to and from the University and now they wish to completely undermine the effort by making the major road too dangerous for bicycles or pedestrians to travel.

197 A

There is no viable car-centered argument on Arthur Ave. Any design here needs to be made with pedestrian traffic as the primary concern.

Clearly, this is not being done now, as the two primary ideas are 5-lane speed traffic and roundabouts, neither of which make pedestrian crossing easy.

**Response # 197**

197 A - Please see General Comments C and H in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

Please do not make any decisions without first realizing that of all the places in Missoula, this is the one that truly is (and should be) for pedestrians.

Thank you,  
Magdalen Marmon  
maggie@montana.com

**Comment # 198**

**From:** Jack Minnich [j\_minnich@yahoo.com]  
**Sent:** Friday, June 02, 2006 12:21 PM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** r\_huffsmith@msn.com; Kirkpatrick, David  
**Subject:** Comment on Arthur Ave EA

To whom it may concern,

I feel that the expansion of Aurthur Ave is not necessary or wanted. The MDT plan is a monster project which will turn Aurthur Ave. into a larger road, like Reserve St. These roads have no place in the heart of Missoula. The university district is defined by it's quiet neighborhoods. A road expansion of this scale will remove houses, expand the roads, reduce the access for bicycles and pedestrians. Other proposals like the citizen plan should be give more consideration. If the entire road design is dependent on the Highway 12 designation, then consider moving highway 12 to Orange St. or Reserve St. which can handle more traffic.

198 A

198 B

198 C

We as citizens have seen how the expansion of roads brings with it a higher amount of traffic. Reserve st is a primary example of what happens when a road is expanded to 5 lanes.

**Response # 198**

198 A - Please see General Comment B in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

198 B - Please see General Comment A in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

198 C - Please see General Comment E in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

A road that size is not pedestrian friendly, 100 ft. cross walk is unacceptable.

Please consider an alternative to the current plan, and try working more with the community which is directly effected by this expansion.

Sincerely,  
-Jack Minnich

**Comment # 199**

**From:** Jennifer Anne Moe [jennifer.anne.moe@gmail.com]  
**Sent:** Wednesday, May 31, 2006 8:28 PM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David; r\_huffsmith@msn.com  
**Subject:** Comment on Arthur Ave EA

I love the University area and live three blocks from campus right between 5th and 6th Street. I agree with MIST's proposal to prioritize non-vehicular traffic in the University area making the area more safe for pedestrians and bicyclists. I oppose the plan to widen Highway 12 and Arthur to facilitate more direct traffic flow through the area and agree with MIST that Highway 12 should be re-designated to run along existing heavy use roadways, i.e. Reserve Street. Adding traffic lights, widening the Arthur, and reducing the size of Jeanette Rakin Park will not improve the area. Instead it will bring more polluting freight trucks through the residential area on 6th.

199 A

199 B

Thanks for considering this input

**Response # 199**

199 A - Please see General Comment A in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

199 B - Under the preferred build alternative, the proposed project is designed to meet the requirements of the roadways' designation under the functional classification system, and does not increase the capacity of the route. Please see General Comment F in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above. Due to the lack of community support, however, the 'No Build' alternative was selected.

Jennifer Anne Moe; MBA  
Missoula, Montana  
jennifer.anne.moe@gmail.com

**Comment # 200**

**From:** Gerald Mueller [gmueller@montana.com]  
**Sent:** Thursday, April 27, 2006 3:55 PM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David; r\_huffsmith@msn.com  
**Subject:** Comment on Arthur Ave EA

My wife and I live two blocks from the University of Montana and regularly walk through the area in question. We are opposed to MDT's preferred option of widening Arthur Avenue as it comes off of the Madison Street Bridge from 40 feet to 105 feet. We prefer the option of maintaining the existing road widths and building roundabouts. This rebuild should not be based on maintaining large truck traffic through a residential neighborhood. Trucks can be routed on I-90 either to Reserve or Orange Street to reach Highway 12.

200 A

200 B

We agree with the editorial writer of the Missoulian who today pointed out that the money for this project should be diverted to fixing West Broadway.

If MDT insists on defining the problem and the solutions so that maintaining heavy truck traffic through a residential neighborhood is a requirement, then your EA and public involvement is a fraud.

Gerald and Caralee Mueller

**Response # 200**

200 A - Please see General Comment B in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

200 B - Please see General Comment A in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

**Comment # 201**

**From:** Wilson, Nancy [nancy.wilson@mso.umt.edu]  
**Sent:** Tuesday, April 18, 2006 8:53 AM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David; r\_huffsmith@msn.com  
**Subject:** Comment on Arthur Ave EA

This project has failed to meet its intent - to be a context sensitive design - and to improve automobile, bicycle, and pedestrian flow on US Highway 12.

Neither of the preferred alternatives would improve the current situation - in fact I believe both would make the situation worse. With increased speeds (due to the huge wide expanse) auto crashes would be more severe, bikes would be fatal, and pedestrians are crossing a Reserve Street size road project which will not only discourage pedestrians but will make them unsafe - particularly if they have any mobility issues.

201 A

Nancy Wilson  
1402 Phillips  
Missoula, MT 59802

**Response # 201**

201 A - Please see Response 139A above and General Comment C in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

**Comment # 202**

**From:** Tirk, Jennifer [Jennifer.Tirk@mpi.com]  
**Sent:** Wednesday, May 24, 2006 9:51 AM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David; r\_huffsmith@msn.com  
**Subject:** Comment on Arthur Ave EA

I am writing to protest the state-proposed reconstruction of the north end of Arthur Avenue, off the Madison Street Bridge. As a University area home owner (1106 Ronald Ave), I am wholeheartedly opposed to the state-designed plan, as I believe that it will only make this area more dangerous to pedestrians and drivers and will be a demise to this beautiful area. I believe that the proposed high-speed, 5-lane road will lead to severe crashes, there will be an increase in speeding vehicles due to approaching drivers speeding to make traffic signal (and run red light), a 90-ft crossing distance is not safe passage for pedestrians, traffic signals will lead to stop-and-go traffic and also substantial vehicle idling time at the traffic signals, also the taxpayer cost to maintain these unnecessary traffic signals will be substantial.

202 A

The proposed expansion takes away ¼ of Jeannette Rankin Park, which contributes to the open space in this area and also calls for the demolition of six University area homes. This is unacceptable.

202 B

I am in favor of a safer and more feasible alternative- one which will preserve the quaintness of this area and doesn't contribute to the demise of this historic area.

**Response # 202**

202 A - Please see Responses 173B above and General Comments C and F in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

202 B - Please see General Comments D and G in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

Regards,  
Martin Oakland  
1106 Ronald Ave  
Missoula, MT 59801  
531-8189

**Comment # 203**

**From:** Pam Peterson [centerforjointcare@hotmail.com]  
**Sent:** Thursday, May 25, 2006 12:07 PM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David; r\_huffsmith@msn.com

I am writing on behalf of my husband and myself to comment on the expansion plan for Arthur Ave in Missoula. I believe such an expansion in a residential and university neighborhood would be dangerous for pedestrians trying to cross. It would also be dangerous for cyclists. I drive this section of road frequently and even at rush hour traffic time do not find it overly crowded. There are many people who cross this road going to and from the University and this more than anything is what slows traffic. On a larger road cars are likely to go faster and not see or stop for pedestrians. Expanding the road here is really not something that traffic warrants at this time. Nor it expansion a safe option for pedestrians in a residential neighborhood. I am solidly opposed to this plan.

203 A

Pamela and Robert Peterson, 433 McLeod Missoula

**Response # 203**

203 A - Please see General Comment C in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

**Comment # 204**

**From:** Duane "Pete" Pettersen [petegolf@myyellowstone.net]  
**Sent:** Friday, May 26, 2006 9:53 AM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David; r\_huffsmith@msn.com  
**Subject:** Comment on Arthur Ave EA

I believe that it is very important that Arthur, 5th and 6th maintain it's Hwy#12 label and that in all or no changes, a couple of important factors are accounted for:

- 1) There are over 5000 residents up the Rattlesnake, a good percentage that travel the Broadway, Madison and 5th going and 6th returning. I am one of those that travel to my office on Brooks every day from the mid-Rattlesnake. When we add the people of E. Missoula and other areas East of Missoula, it becomes an important vehicle transportation route. Of course we could also add all the high school students traveling to Hellgate HS, and the University students traveling to U of M.
- 2) Other events require sufficient lanes of traffic and safety: football, basketball, major musical and drama events on campus as well as frequent national and international lecturers in the evening.
- 3) I believe that "SAFETY" is a critical issue – for vehicular, bus, bike and walkers. But to reduce any of the streets to one-lane traffic on 5th or 6th would be just short of ridiculous. We are experiencing the frustrations, delays and economic losses as a result of our "Broadway diet" one-lane street each way.

**Response # 204**

Comment noted. No response necessary.

- 4) Is it possible to develop a “flex plan” that would allow 2- or 3-lanes going West and South during a 7 to 9 a.m. period and than a 2- or 3-lane traffic going East and North from 4 – 6 p.m. This flex model would also have to exist during major football and basketball games also.
  
- 5) I am concerned about how much input and influence the bike supporters may have in this project as well as the many other projects in Missoula, like the Broadway Diet road. Perhaps if bike riders were required a bike license and passing a test for driving/riding on a bike, I would be more sympathetic. At this point in Missoula, it appears to be a one-way street with vehicular traffic becoming more and more limited with less influence and bikers becoming more and more privileged and “free-wheeling”. We need to get back to some “fair balance” in our multimodal travel.

Thanks for working on this project and coming to a fair and safe solution(s).

Duane “Pete” Pettersen  
1208 Ponderosa Dr.  
Missoula, MT 59802

Comment # 205

**From:** Preston, Christopher J.  
[christopher.preston@mso.umt.edu]  
**Sent:** Friday, June 02, 2006 12:33 PM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David; r\_huffsmith@msn.com  
**Subject:** Comments on Arthur

I work at the university and commute by bicycle there every day.

205 A

It would be very helpful to bike commuters if there were trail access from Arthur street straight down to the new bridge under Madison. Trying to get ourselves separated from traffic is a priority.

205 B

On the occasions that we cannot be separated, clearly marked and wide bike lanes are essential as well as clearly marked areas for crossing such a busy street. Manually operated flashing yellow caution lights would be very helpful to make crossings safer.

205 C

Whatever your budget for landscaping, please triple it. Shrubs not only hide the ugliness of roads and traffic, they also mitigate the horrendous noise, the dust, and the pollution.

I hope and trust that you are going to put all the efforts you can into reducing the impact of the traffic that the actions of myself and others like who bike and walk in that area already are mitigating far better.

Thank you for your attention.  
Christopher Preston

Response # 205

205 A – Some trails in Appendix D of the EA have been completed by the City of Missoula.

205 B – Under the preferred build alternative, bicycle lanes would be provided as shown in Figures 2-3 and 2-4 of the EA, as well as pedestrian and bicycle actuated crossings. Bicycle riders also have the option of entering traffic lanes and follow traffic signals. Due to lack of community support, however, the ‘No Build’ decision was selected.

205 C - Please see Response 138 B.

**Comment # 206**

**From:** DaveRowley@andersbusiness.com  
**Sent:** Wednesday, April 26, 2006 7:11 AM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David; r\_huffsmith@msn.com  
**Subject:** Comment on Arthur Ave EA

I feel the 5 lane would be the best to resolve the traffic problem. Bob Giordano has proposed some other ideas that will make traffic worse than it is now. And his options are very misleading. I see places for the pedestrians to cross with no problem; he makes it sound like you are crossing 5 lanes at once when I see places in the center for the pedestrian to stop. We need to remember that this is to improve traffic on a highway at the same time keeping is safe for the pedestrians. We do not need another Broadway Street mess because a few people who don't drive the roads feel they know what is best for traffic. I can see that this plan will improve traffic. We should also try to get the views of Missoulians who drive the roads, instead of just the ones who don't. Or put it up to vote, I bet you will see that most of Missoula wants to improve traffic.

Thank you

Dave

P.S. Can you help with making Broadway a five lane road with street and stop lights to improve traffic and pedestrian crossing?

**Response # 206**

Comment noted. No response necessary.

Comment # 207

**From:** Stacy Rye [biam@biamt.org]  
**Sent:** Friday, June 02, 2006 8:51 AM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David; r\_huffsmith@msn.com  
**Subject:** Comment on Arthur Ave EA

This expansion on Arthur and 5th/6th is unnecessary, unwanted and a waste of public money. It saves one block of homes while sacrificing other blocks of residences. **Special events that occur maybe 30 days a year should not dictate a Reserve St. type road.** There are plenty of ways to get to the University, especially for football games, why would we build a huge road to just encourage people to drive?

207 A

207 B

207 C

**The huge intersection will create more pollution and noise than moving traffic slowly but keeping them going. This type of road is completely inappropriate to the area in which it is. It is far more appropriate on North Reserve.** Why do we continue to just build bigger and bigger roads? They just get overcrowded and are totally not worth the exorbitant amounts of money. Spend more money on transit and on making roads more to human scale and not JUST for huge trucks.

207 D

**The park cannot be sacrificed. This has got to be a rule someplace.**

I understand why the University would WANT this. They don't NEED it. Put this money somewhere else that is a problem.

Stacy Rye

Response # 207

207 A - Please see Response 137 B.

207 B - Please see General Comment F in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

207 C - Please see General Comment A in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

207 D - Please see General Comment D in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

**Comment # 208**

**From:** mark sembach [msembach@micro-mania.net]  
**Sent:** Sunday, May 21, 2006 1:14 PM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David; r\_huffsmith@msn.com  
**Subject:** Comment on Arthur Ave EA

I strongly feel the state's plan is ill-conceived is just another example of poor planning. I have lived in Missoula for many years and have seen our community grow and change. This change does require well thought out, and planned, projects.

The Arthur Ave project is another example of poorly designed and costly planning projects imposed upon the people of Missoula by officials outside of the community. A far better plan would be to completely remove Hwy 12 from the University area neighborhoods by routing north and south bound Hwy. 12 traffic to Reserve Street. Reserve Street is the only road in Missoula which is currently designed to handle large numbers of cars effectively. Granted the road was severely under designed by STATE OFFICIALS, but, some minor improvements could greatly increase the efficiency of this road to accommodate the increased traffic from HWY 12. One of these improvements would be synchronize all traffic lights to favor north/south travel. Doing so would help improve air quality since fewer cars would be sitting and waiting for each light to change. Second, ticket the people who travel at 35 mph on this road which reduces overall traffic flow efficiency. Third, make changes turn lanes to increase the number of cars which can be accommodated which will also help to increase traffic flow. All of these changes would be far less expensive than tearing up an entire establish, and

208 A

**Response # 208**

208 A - Please see General Comment A in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

historic neighborhood. Additionally, Janet Rankin Park, and the deer which winter there, would be saved. Also, home values along South 5 and South 6th Streets would benefit from the decrease in traffic.

The monies saved could go to solving Missoula's traffic problems by purchasing land for a Hwy 93/12 bypass which would connect at Hwy 93/12 at the intersection of Hwy 90 west of the Missoula airport. Additionally, with just local traffic on Reserve Street and University area no drastic changes would need to be made.

Mark Sembach  
718 South Garfield Street  
Missoula, MT 59801-2260  
406-542-0864

**Comment # 209**

**From:** Ryan Yarbrough [ryan.yarbrough@umontana.edu]  
**Sent:** Thursday, June 01, 2006 11:43 AM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David; r\_huffsmith@msn.com  
**Subject:** Comment on Arthur Ave EA

June 1, 2006

Natalie Shapiro  
509 Daly St  
Missoula, MT 59801  
bloomingtrillium@yahoo.com

These are my comments on the proposed Arthur Ave project. I am opposed to the project as detailed in the EA. I think it would encourage more traffic and make it dangerous for pedestrians, bicyclists and residents. I support the idea of roundabouts instead of traffic lights, and diverting heavy truck traffic elsewhere. I would like a proposal that considers diverting heavy truck traffic through other roads instead of Arthur street. This appears to be the issue against roundabouts, that they are not so good for heavy truck traffic. Otherwise, the roundabouts should work. So, please reconsider the project and take a more detailed look at possible roundabout options and diverting truck traffic. I also would like the public to be alerted to future activities on the project development, and to involve the student populations by clearly advertising proposed hearings.

thanks,  
natalie shapiro

209 A

**Response # 209**

209 A - Please see General Comments A and B in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

**Comment # 210**

**From:** Christina Shields [christyshields@bresnan.net]  
**Sent:** Friday, April 28, 2006 2:12 PM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David; r\_huffsmith@msn.com  
**Subject:** Comment on Arthur Ave EA

Hi. I live in the University neighborhood, precisely on University Ave. 2 blocks off campus. I grew up in Missoula and have watched the growth. I have lived in the University area for 15 years. I am very troubled by this proposed change.

In my opinion the Madison Bridge exit to Aurthur and or onto Fifth Ave. works very well and has good flow, even during rush hour traffic. After sporting events at the University there are temporary traffic problems, but that is what you will experience in any city after a game, even Seattle or San Diego! This proposed change will solve nothing and cost tax paying citizens a lot of money that could be spent in other ways to improve roads.

The Broadway Diet is a good example of fixing something that was not broken. The four lane Broadway worked fine before the State got involved and messed it up! If the State had just spent the money on a traffic light or two, there would be less congestion, pollution, frustration and confusion. Not to mention accidents.

In my opinion, the State should spend the money slated for this project on traffic lights for Broadway, rather than buying 6 over priced homes to demolish and widen an intersection that works just fine the way it is. Not to mention destroying a beautiful park to put down more asphalt!

**Response # 210**

Comment noted. No response necessary.

Please listen to the citizens who live in Missoula and the University Area, we ultimately know best about these issues. We will be opposing this change.

Sincerely-

Christina Shields  
333 University Ave.  
Missoula, MT 59801  
(406) 543-7945

**Comment # 211**

**From:** Tim Skufca [tskufca@kibogroup.com]  
**Sent:** Tuesday, May 09, 2006 6:44 AM  
**To:** ArthurAve (Arthur Avenue Reconstruction Project); mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David; r\_huffsmith@msn.com; Amber Blake  
**Subject:** Comment on Arthur Ave EA

**Response # 211**

Comments on the presentation given at the University:

211 A

- Design in general needs to encompass as much of the affected area as possible. It was stressed that the area of study was only that which is shown in the "Preferred Option" plan. All outlying areas need to be addressed, most importantly the incoming and outgoing streets. Did any consideration go into changing the one-way streets to two-way?

211 A – Traffic conditions outside of project limits were evaluated, and are discussed in the Revised Preliminary Traffic Report as referenced in Section 2 of the EA.

211 B

A completely unfair comparison was done in respects to the round-about plan. Much emphasis was made about the need to eliminate two historic homes. This aspect of the two roundabouts shown could easily be mitigated by merely shoving the whole intersection to the east. There is a significantly less amount of space needed for the round-about concepts than the "Preferred Options." If the round-about option was truly an option up for consideration, why wasn't the plan presented by M.I.S.T. (Bob Giordano) used for the comparison?

211 C

- Since most of the design was dictated by the amount of traffic expected, some aspect of how these traffic levels could be reduced should have been addressed. What is the procedure needed to follow to get the highway routed to Orange or Reserve instead of through residential neighborhoods?

Tim Skufca  
107 North Avenue West  
Missoula, MT 59801  
tskufca@kibogroup.com

211 B - Please see General Comment B in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

211 C - Please see General Comment A in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

**Comment # 212**

**From:** Larry Stahl [larry@thestahls.org]  
**Sent:** Tuesday, April 25, 2006 10:37 AM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David; r\_huffsmith@msn.com  
**Subject:** Comment on Arthur Ave EA

Dean Sir:

As Missoula experiences its inevitable growth it is important that the State helps the city where it can. A case in point is the Widening of Arthur. This is a street that for most of its length runs between the University and the University neighborhood comprised of very classic Victorian style homes on fairly low density lots. Arthur itself is 2 to 4 lanes but as it generally only carries local traffic it is fairly slow and light traffic.

Some time in the past Arthur was made a US highway (12). But that does not represent the character nor use of the current street. The State would solve many problems, maintain the uncrowded and University atmosphere and still preserve the US highway system by realigning US highway 12 to Reserve St. rather than Arthur.

Sometimes we have to recognize when history made a mistake and naming aligning US highway 12 along Arthur is just such a mistake.

The State can do something to help Missoula manage its inevitable growth.

**Response # 212**

212 A - Please see General Comment A in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

212 A

**Arthur Avenue – Missoula, MT**

**CM 7-2(36)94 CN 4611  
FoNSI**

Sincerely,  
Larry Stahl  
1401 Cedar St. #21  
Missoula, MT 59802  
(406) 493-6190

**Comment # 213**

**From:** Michael Sweet [mds@bigsky.net]  
**Sent:** Tuesday, May 30, 2006 6:52 PM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David; r\_huffsmith@msn.com  
**Subject:** Comment on Arthur Ave EA

I was encouraged to review at the Arthur Avenue EA by my neighbors. I was appalled when I read the opening summary of the EA. I did not need to read further. I don't see that the conclusions are warranted or justified. I have been a Missoula resident for over 35 years and lived most all of in the University District. I'm very familiar with this area and this intersection. The EA makes a case for a problem that does not exist particularly when compared to other sections of Highway 12 through Missoula, as well as other traffic concerns in Missoula. This project appears to be driven by political fortitude rather than rational analysis. I find the treatment of this project by the Montana Department of Transportation and its contractors to be offensive both in its analysis and in its prioritization of highway improvement funds. This project appears to have produced an EA to justify an end rather than systematically determine whether or not a problem exists in the first place.

No way. No how.

Michael Sweet  
534 Woodworth  
Missoula

**Response # 213**

Comment noted. No response necessary.

**Comment # 214**

**From:** Anna Taft [annataft@msn.com]  
**Sent:** Thursday, April 20, 2006 1:33 PM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David  
**Subject:** Comment on Arthur Ave EA

Dear Sirs:

I would like to comment that the widening of Arthur St to 100 feet is not at all desirable for the University area, where there are homes on small lots and neighborhoods, not just a road with businesses on it. Please do not proceed with widening Arthur.

Thanks you,  
Anna R. Taft  
439 Connell St  
Missoula, MT 59801

**Response # 214**

Comment noted. No response necessary.

**Comment # 215**

**From:** Alex Taft [alextaft9@msn.com]  
**Sent:** Tuesday, April 11, 2006 2:59 PM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David; r\_huffsmith@msn.com  
**Subject:** Comment on Arthur Ave EA

This is a Reserve Street type project in a residential neighborhood next to a university where most walk, bike and ride transit. Widening a residential street from ~40 feet to over ~100 feet is unacceptable.

215 A

I oppose this project, and request you re-designate state highway 12 from 5th/ 6th/Brooks streets to Reserve Street.

Alex Taft  
439 Connell Ave.  
Missoula, MT 59801  
406-549-2805

**Response # 215**

215 A - Please see General Comment A in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

**Comment # 216**

**From:** Alex Taft [alextaft9@msn.com]  
**Sent:** Thursday, May 18, 2006 10:12 AM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David; r\_huffsmith@msn.com; John Engen;  
Bob Jaffe; Stacey Rye; Jack Minnich; Bob Giordano; Ray Aten;  
Benjamin Courteau; Jim Sayer; Nick Domitrovich; Nancy  
Wilson; WillettK@mso.umt.edu  
**Subject:** Comment on Arthur Ave EA

I have read the EA and 4(f) assessment and believe that no mitigation is adequate for the taking of 1/4 acre of the Janet Rankin Park for transportation purposes. It is my understanding of the federal 4(f) requirements that park land must be avoided, rather than taken and mitigated. Therefore the EA is inadequate and must be revised to avoid taking any part of Janet Rankin Park.

216 A

Alex Taft  
439 Connell Ave.  
Missoula, MT 59801  
406-549-2805

**Response # 216**

216 A - Please see General Comment D in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

**Comment # 217**

**From:** Richard Taylor [hetchins@montanadsl.net]  
**Sent:** Thursday, April 20, 2006 12:08 PM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David; r\_huffsmith@msn.com;  
mayor@ci.missoula.mt.us  
**Subject:** Comment on Arthur Ave EA

217 A

I am unable to understand why Highway 12 is still being routed through the heart of Missoula and the University District. **Can't the designation be moved to I-90 and Reserve Street?** That seems like a much more sensible way to deal with the Highway 12 traffic congestion, rather than widening the roadway at Arthur Avenue.

Richard Taylor (Arthur Avenue daily-driver)  
Missoula

**Response # 217**

217 A - Please see General Comment A in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

**Comment # 218**

**From:** michelle tholt [michelletholt@hotmail.com]  
**Sent:** Tuesday, April 25, 2006 11:18 AM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David; r\_huffsmith@msn.com  
**Subject:** Comment on Arthur Ave EA

I would like to make a comment on the Arthur Avenue Proposal.

I am a current resident of Missoula. I do not currently live in the University area, so I have no vested interest other than wanting what is best for Missoula community. I did, however live at the corner of 6th and Arthur for a year while I was a college student, and I did also walk to the University every day during my four years as a student at the University of Montana.

The idea you have to widen Arthur Avenue is ridiculous. This area sees an incredible amount of bicycle and foot traffic.

Putting in, what looks to me, to be a highway is dangerous and irresponsible. Has any thought been put into how the thousands of students who cross this street every day will continue to do so, not to mention disabled people or anyone who needs a little extra time crossing? I feel this proposal is not only out of touch with Missoula, but out of touch with reality.

218 A

The goal should be to divert traffic from this area full of pedestrians and bikers, not attract it! I'd love to see a plan that includes roundabouts and pedestrian and bike friendly streets.

218 B

**Response # 218**

218 A - Please see General Comment C in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

218 B - Please see General Comments B and H in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

Missoula, as a community, is working towards a more bike friendly town, not against it!

Thank you for taking my comments into consideration.

Michelle Schultz  
1010 Vine St  
Missoula, MT

**Comment # 219**

**From:** Tirk, Jennifer [Jennifer.Tirk@mpi.com]  
**Sent:** Wednesday, May 24, 2006 9:51 AM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David; r\_huffsmith@msn.com  
**Subject:** Comment on Arthur Ave EA

I am writing to protest the state-proposed reconstruction of the north end of Arthur Avenue, off the Madison Street Bridge. As a University area home owner (1106 Ronald Ave), I am wholeheartedly opposed to the state-designed plan, as I believe that it will only make this area more dangerous to pedestrians and drivers and will be a demise to this beautiful area. I believe that the proposed high-speed, 5-lane road will lead to severe crashes, there will be an increase in speeding vehicles due to approaching drivers speeding to make traffic signal (and run red light), a 90-ft crossing distance is not safe passage for pedestrians, traffic signals will lead to stop-and-go traffic and also substantial vehicle idling time at the traffic signals, also the taxpayer cost to maintain these unnecessary traffic signals will be substantial.

219 A

**Response # 219**

219 A - Please see Responses 173B above and General Comments C and F in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

219 B

The proposed expansion takes away ¼ of Jeannette Rankin Park, which contributes to the open space in this area and also calls for the demolition of six University area homes. This is unacceptable.

I am in favor of a safer and more feasible alternative- one which will preserve the quaintness of this area and doesn't contribute to the demise of this historic area.

Best Regards,

Jennifer Tirk  
Mobile: 617.921.6116

**Comment # 220**

**From:** Michael Vetter [mevetter@msn.com]  
**Sent:** Friday, June 02, 2006 9:07 PM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David  
**Subject:** Comment on Arthur Ave EA

Dear Jean Riley,

I am writing in response the proposed changes to Arthur Avenue. I am strongly opposed to the project for a number of reasons. The primary reason is that the project will not accomplish it's goals and objectives and a lot of money will be spent on paving more of the city and removing residences.

One of the goals of the project is to "maintain a uniform volume capacity across the project that will be consistent with surrounding U.S. Highway 12 roadways". The existing

220 A

219 B - Please see General Comments D and G in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

**Response # 220**

220 A - Please see General Comment E in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

roadway is two lanes and the proposed roadway is two lanes. The proposed project adds a traffic light. This does not make any sense to me there's no way that this goal is being met by this project.

Another goal is to provide a more direct route for Highway 12. Does shaving off the length of one block really warrant all of the changes, I do not believe it does.

220 B

Another goal is to have a positive effect on air quality. There is no way that adding a stop light will have a positive effect on air quality.

Some other issues are that the project does not seem like it should be very high on the priority list as far as traffic issues are concerned. Hundreds of vehicles are sitting on Russell Street all day long. The Reserve Street/Mullan Road intersection needs to be improved. How about a route around the city connecting the Bitterroot to I-90 through the less densely populated western side of the valley. How about the Broadway diet project. There seems like there are many other projects that should be put ahead of this one.

The MOU issue. Why should this project go forward because the MDT, the City and U of M signed an agreement ?

I've seen some plans in the Missoulian regarding U of M's plans to make a grand entrance to the U within the proposed project area and that they have been purchasing houses around this project. The only feasible reason for doing this project is to facilitate U of M's plans for the area. While I am very supportive of U of M and all of what it does for Montana and Missoula, I'm not supportive of this project. It sort of leaves a bad taste in my mouth, kind of like the old end around.

220 B - Please see General Comment F in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

Thanks for giving me an opportunity to respond. I'd like to know the results of the latest round of public opinion. Is that possible ?

Sincerely,

Michael Vetter  
805 Hilda Ave  
Missoula, MT. 59801

**Comment # 221**

**From:** Dr Vicki Watson [vicki.watson@umontana.edu]  
**Sent:** Thursday, June 01, 2006 12:20 PM  
**To:** mdteiscommentsarthur@mt.gov  
**Cc:** Kirkpatrick, David; r\_huffsmith@msn.com  
**Subject:** Comment on Arthur Ave EA

Concerning the proposal to widen Arthur Avenue --

The 'preferred alternative' would be very harmful to the local community, and I do not feel would address safety concerns. In fact, it would likely produce more traffic and injuries to pedestrians & bicyclists. **Wider roads are harder to cross safely.** And the proposal to add a traffic signal behind a hill and around a curve is particularly ill advised.

Instead of disrupting the neighborhood & spending a lot of resources to accommodate more traffic, we should work to reduce traffic through the area.

221 A

**Response # 221**

221 A - Please see General Comment C in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

221 B

I feel that HWY 12 should be rerouted either to Reserve Street or to Stephens-Orange street. These streets are already wider and have much more direct access to I-90.

221 B - Please see General Comment A in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

221 C

In addition, University game traffic could be reduced by making use of remote parking lots & shuttles. It makes no sense to ruin a residential neighborhood to accommodate a few game days anyway.

221 C - Please see Response 137 B.

By reducing traffic, it should be possible to accommodate the remaining traffic with one lane round-abouts. These can fit into the current infrastructure with much less cost. More consideration should be given to the alternative proposed by Missoula Institute for Sustainable Transportation.

Or leave the current traffic flow pattern as it is, but improve signage & provide pedestrian overpasses for problematic intersections.

221 E

Pedestrian & bike traffic need more study. And there's needs to be more consideration of how to reduce traffic through the area. The proposed alternative is quite unacceptable to those of us living near this intersection.

221 E - Please see Response 149 A.

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Dr. Vicki Watson,  
509 Daly, Missoula, MT 59801

~~~~~

**Comment # 222**

**From:** Tim Winger [mailto:twinger@shopsouthgate.com]  
**Sent:** Wednesday, May 10, 2006 11:51 AM  
**To:** Stack, Shane  
**Cc:** Trisha Piedalue  
**Subject:** 5th/6th Arthur Project/Hwy 12

Mr. Stack,

My name is Tim Winger and I am General Manager of Southgate Mall. I am receipt of the 3 options regarding the 5th/6th Artur Project impacting Hwy 12. As I understand Option 3 could have Hwy 12 by-pass Southgate Mall, if Reserve was chosen as the new route.

Obviously, we would be in favor of Option 1 or 2 that would keep Hwy 12 on its current route, as I am sure the other businesses, including the fairgrounds along this corridor would agree. Southgate is a regional mall that is supported, in part, by seasonal and tourist traffic, the Hwy 12 designation makes it much easier for tourists to find us, which is good for business today and tomorrow. As the area continues to gain poularity Southgate will continue to prosper as others will that are solely on Hwy 12.

I believe, it's highly beneficial for 93 and 12 to continue to split in Missoula so the businesses solely located on Hwy 12 will keep that distinction. If Hwy 12 and 93 were merged all the way through Missoula, overtime that lost designation would negatively impact the performance and value of the businesses that "were" on Hwy 12.

**Response # 222**

Comment noted. No response necessary.

I do appreciate the chance to voice our view and would be happy to discuss further if you see a need.

Highest Regards,

Tim Winger  
Southgate Mall  
General Manager  
2901 Brooks Street  
Missoula, MT 59801  
406-721-5140, ext. 15 (phone)  
406-721-3602 (fax)  
twinger@shopsouthgate.com

**Comment # 223**

**From:** www@mdt.mt.gov  
**Sent:** Thursday, May 04, 2006 10:13 PM  
**To:** MDT Comments - Project  
**Subject:** Comment on a Project Submitted

A question, comment or request has been submitted via the "Contact Us" web page.

Action Item: Comment on a Project  
Submitted: 05/04/2006 23:12:43  
Project Commenting On: Arthur Avenue  
Prairie Wolfe  
500 Daly Ave  
Missoula, MT 59801  
Phone: 721-4852  
Comment or Question:

The plan that you guys have planned for Arthur Ave is a mistake. It is unsafe for drivers, bikers and walkers as well as being extremely ugly, ruining the aesthetic value of Missoula and the University district. It is an extremely costly plan that will not reduce traffic or the emmissions produced by traffic. This plan needs to be revised and as a citizen of Missoula, a 3<sup>rd</sup> generation Montana, and a student of the University of Montana, I call on the MDT to rethink and revise this plan.

223 A

223 B

Prairie Wolfe  
Reference Number = picomment\_73272705078125

**Response # 223**

223 A - Please see General Comments C and H in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

223 B - Please see General Comment F in Section 4.4 of this document. For ease in review, the general comments and responses are also repeated above.

### Comment # 224

The University of Montana Response to Arthur Avenue Environmental Assessment  
Report CN 4611  
June 1, 2006

To MDT/FHWA:

The University of Montana supports the Preferred Alternative Option 1 (no left turn) as shown in the Environmental Assessment report because it meets the University's commitments, design and operational requirements. They are:

- Meet the intent of the MOU between the Montana Department of Transportation, City of Missoula and the University of Montana
- Moves Highway 12 west one block out of the University acquisition zone.
- Provide for safe transit of pedestrian and non motorized transportation.
- Provide a road system that meets the traffic flows of The University & City.
- Provide a design which reduces vehicular pollution.
- Requires no right of way acquisition from private citizens.
- Architecturally enhances the Campus entryway.
- Maintains access to existing residents of Arthur/5<sup>th</sup> & 6<sup>th</sup> street block.

Most of the public comments at the EA's public hearing on April 25, 2006 were in reference to truck traffic along the Arthur Avenue section of Highway 12. Some comments were made requesting the re-designation of Highway 12 to some other street, like Reserve Street. Other comments pointed to the wide pedestrian crossing at Arthur and 5<sup>th</sup> St. Most though, objected to this perceived "Reserve Street-like" widening of a quiet residential neighborhood avenue.

The University's thoughts on these issues are:

1. The re-designation of State Highway 12 to some other route is a matter for the Montana Department of Transportation and City Council to discuss. If this were to succeed, the relocation of Highway 12 would not eliminate truck & other vehicular through-traffic from using the current route over Madison Street Bridge because it would remain as the shortest route for many drivers and is one of the four crossings of the Clark Fork.
2. If truck access to Highway 12 route along Arthur Avenue was not permitted, The University would still demand and require continued truck access to campus for special events, concerts, shows, fire fighting, maintenance, moving, construction, dining services, etc. Campus neighborhood residents would also require truck access for their own moving, construction and maintenance needs. As such, the roadways for Arthur Avenue would still have to be designed for trucks.
3. The Preferred Alternative is designed to accommodate existing motorized and non-motorized traffic. It is not being widened for increased future traffic capacity.
4. The perceived pedestrian crossing distance at Arthur and 5<sup>th</sup> Street junction is similar in nature to Stephens Avenue, i.e. two road lanes and a bike lane crossing distance to a boulevard, then another two lanes and bike lane to the other curbside. The center boulevard would be landscaped and accommodate street lighting enhancing the aesthetics of the campus entry point.

### Response # 224

Comment noted. No response necessary.

5. Comparing the Arthur Avenue project to the Reserve Street project is not equivalent. The Arthur Avenue project keeps the same number of road lanes in the couplet as currently exists, i.e. two lanes southbound and two lanes northbound in the Highway 12 route. The addition is that of bike lanes.
6. Missoula has four bridges across the Clark Fork River. Madison Street Bridge is one of them. We cannot foresee a scenario where motorized traffic across the Madison Street Bridge would be eliminated or even drastically reduced. This project would maintain the current flow of traffic along Highway 12 corridor across Madison Street Bridge.
7. Finally, let us not forget one of the main reasons for proposing this project in the first place i.e. to move Highway 12 traffic one block further west of campus, thus eliminating city traffic from entering campus.

The University of Montana thanks the Montana Department of Transportation and the City of Missoula for their efforts in this project and representatives of The University are available to discuss issues on this project. If you have any questions, please contact me.

Hugh A. Jesse  
Director of Facilities Services  
The University of Montana

**Appendix C:  
Environmental Assessment**

# Environmental Assessment and Nationwide Section 4(f) Evaluation



Montana Department of Transportation



Arthur Avenue

CM 7-2(36)94 CN 4611

Missoula, Montana

February 2006

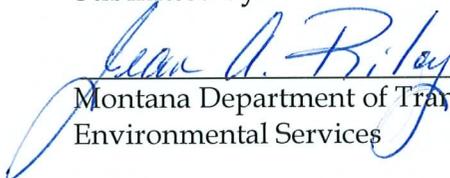
Prepared for: Montana Department of Transportation

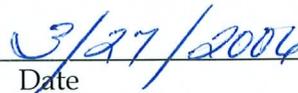
**Environmental Assessment**  
**For**  
**Arthur Avenue**  
**CM 7-2(36)94**  
**Control No. 4611**

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 the National Environmental Policy Act (NEPA) requirements for an Environmental Assessment under 23 CFR 771.119.

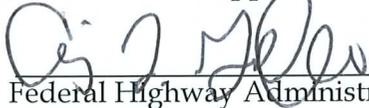
Submitted Pursuant to 42 USC 4332(2)(c) 49 U.S.C. 303  
and Sections 2-3-104, 75-1-201 M.C.A  
By the  
U.S. Department of Transportation  
Federal Highway Administration  
and the  
Montana Department of Transportation

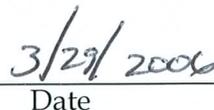
**Submitted by:**

  
Montana Department of Transportation  
Environmental Services

  
Date

**Reviewed and Approved for Distribution:**

  
Federal Highway Administration

  
Date

Contact the following people for additional information regarding this document:

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Federal Highway Administration  
2880 Skyway Drive  
Helena, Montana 59602

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# Glossary of Terms

24-Hour 10 Microns (PM<sub>10</sub>) Standard - National Ambient Air Quality Standards for respirable particulate matter of 10 microns or less (PM<sub>10</sub>). Under NAASQ Standards, particulate matter of 10 microns or less shall not exceed 150 µg/m<sup>3</sup> on more than three days over three years with daily sampling.

8-Hour Average CO - NAAQS standard for Carbon monoxide. Carbon monoxide shall not to be at or above 9 ppm more than once per calendar year.

BLM Special Status Species - The status of species on Bureau of Lands Management Land is defined by BLM 6840 manual and designated by the Montana State Office of the BLM in 1996. Sensitive species are proven to be imperiled in at least part of its range and documented to occur on BLM lands. Watch species either known to be imperiled and suspected to occur on BLM lands suspected to be imperiled and documented on BLM lands, or needing further study for other reasons.

CAA - The original Clean Air Act was passed in 1963, but our national air pollution control program is actually based on the 1970 version of the law. The 1990 Clean Air Act Amendments are the most far-reaching revisions of the 1970 law. In this summary, we refer to the 1990 amendments as the 1990 Clean Air Act.

CAAAAs - In 1997 the EPA reviewed the air quality standards for ground-level ozone (commonly know as smog) and particulate matter (or PM). Revisions were made to both standards based on scientific evidence. At the same time, EPA developed a new program to control regional haze, which is largely caused by particulate matter. These revisions were included in the Clean Air Act Amendments.

Circulating Flow - The vehicle flow rate in all lanes of the roundabout in front of a roundabout entry lane.

Couplet - A section of roadway where two opposing one-way roadways converge into a two way section of roadway.

Deficiencies - In relation to traffic control devices, deficiencies are associated with the lack of appropriate control and/or insufficiencies that may affect the roadway's ability to move traffic in an adequate manner.

Fault - A fracture in the bedrock along which there has been movement of the sides relative to one another.

Flyover - An overpass structure where one, or multiple lanes, cross over top of intersections, lanes or other features. Flyovers are usually above ground structures that bridge across objects.

Gaining River – A river that receives or “gains” water from the saturated zone.

Gateway Affect – As part of the design, the University would like to make the entrance into the campus more inviting and accentuate the entrance.

Geometric – The special characteristics of a facility, including approach grade, the number and width of lanes, lane use, and parking lanes.

Level of Service – A quantitative measure describing operational conditions within a traffic stream, based on service measures such as speed, and travel time, freedom to maneuver, traffic interruptions, comfort, and convenience.

Losing River – A river that loses water to the saturated zone.

Moiese Gravelly Loam – A soil unit named after Moiese, Montana consisting of a mixture of gravel and sand, silt, and clay in approximately equal proportions.

Multimodal – Refers to the use of more than one mode of transportation. Modes of transportation may include but are not limited to cars, bikes, pedestrians, buses, and trucks. Multimodal traffic is a composition of the different modes of transportation. However, for this document, multimodal does not include rail and transit systems.

No Added Capacity – CDM, with MDT’s approval, has defined “no added capacity” for this project to mean that the design will look at current capacity and levels of service during standard operation and compare it to adjacent intersections to determine if there are significant impacts or stress added to the existing transportation system.

Platoon – A group of vehicles or pedestrians traveling together, either voluntarily or involuntarily, because of signal control, geometrics, or other features.

Pleistocene – An epoch or subcategory of the quaternary time period representing 10,000 to 1.8 million years ago.

PM<sub>10</sub> NAAQS – PM<sub>10</sub> is one of the seven air pollutants the Environmental Protection Agency (EPA) regulates under the National Ambient Air Quality Standards (NAAQS). PM<sub>10</sub> is defined as particulate matter (PM) with a mass median aerodynamic diameter less than 10 micrometers (um) - PM<sub>10</sub>. In other words, these are the (smaller) particles that make it through some type of pre-separator (removes large particles) and are collected on a sampling medium (filter).

Precambrian – A geologic eon representing the time period greater than 4.5 billion years ago.

Quaternary Age – A geologic time period representing the period from 1.8 million years ago to the present.

Roundabout – A circular intersection with yield control of all entering traffic, channelized approaches, counter-clockwise circulation, and approach geometric curvature to ensure that travel speeds on the circulatory roadway are typically less than 50 kph (30 mph).

Rotaries – Rotaries are sometimes referred to as traffic circles. These intersection treatments are similar to roundabouts except for the access into a rotary is regulated by a signal or a stop sign, as compared to a roundabout, which is yield controlled. With rotaries, the right-of-way is to the vehicles entering the system while roundabouts are for the vehicle within the system. Often rotaries have large center islands and straight approach, similar to spokes in a bicycle wheel where several streets approach from different directions.

Slip Lane – A lane that is used to bypass an intersection. This is often seen as a right turn lane that is allowed to enter an intersecting roadway down stream of the intersection under yield control.

Thrust Fault – A fault in which the hanging wall has been pushed or thrust on top of the footwall. The dip, or angle between the fault and the horizontal is less than 45 degrees.

Traffic Queue – A line of vehicles, bicycles, or persons waiting to be served by the system in which the flow rate from the front of the queue determines the average speed within the queue. Slowly moving vehicles or people joining the rear of the queue are usually considered part of the queue. The internal queue dynamics can involve starts and stops. A faster-moving line of vehicles is often referred to as a moving queue or a platoon.

Traffic Responsive Signals – Traffic signals that are able to interact with fluctuations in traffic volumes. Traffic responsive signals often work as a network of signals to allow for smoother traffic flow through a designated corridor.

Transmissive – A geologic unit capable of transmitting water.

Transverse Fault – A fault that trends at an angle to the structural trend of the region.

Unconfined Alluvial Aquifer – A body of sediment that is sufficiently permeable to yield economically significant quantities of water that is not confined under pressure beneath relatively impermeable rocks or soils.

USFS Sensitive Species – The status of species on Forest Service lands as defined by the U.S. Forest Service manual (2670.22). These species are listed as such by the

Regional Forester (Northern Region) on National Forests in Montana. Species are listed as sensitive species, subspecies or variety for which the Regional Forester has determined there is a concern for population viability range wide or in the region.

USFWS Threatened and Endangered Species – The status of species on Forest Service lands as defined by the U.S. Forest Service manual (2670.22). These taxa are listed as such by the Regional Forester (Northern Region) on National Forests in Montana. Species are listed as threatened and endangered under the endangered species act or proposed for listing, and known or suspected to occur on national forests.

Vehicle Accident Rate – a ratio of the number of accidents per million vehicle miles traveled.

Vehicle Severity Index – percentage of accidents associated with bodily injury.

Vehicle Severity Rate – a ratio of accident severity weighted crashes per million miles traveled.

Volume to Capacity (v/c) Ratio – The ratio of volume to capacity is an approximate indicator of the overall sufficiency of intersections geometrics. A v/c ratio of 1.0 shows an intersection is over capacity.

WB-50 – AASHTO Classification for a truck with a 50 foot wheel base. This is a truck trailer combination that is also referred to as a WB-15.

WB-67 – AASHTO Classification for a truck with a 67 foot wheel base. This is a truck trailer combination that is also referred to as a WB-20.

# List of Acronyms

AAQS	Ambient Air Quality Standards
ADA	Americans with Disabilities Act
ASTs	above-ground storage tanks
BLM	Bureau of Land Management
BRR	Biological Resources Report
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CDM	Camp Dresser & McKee Inc.
CERCLA	Comprehensive Emergency Response, Compensation, and Liability Act
CMAQ	Congestion Mitigation & Air Quality Improvement Program
CO	carbon monoxide
dBA	decibels A-weight
DEQ	Department of Environmental Quality
DOT	U.S. Department of Transportation
EA	Environmental Assessment
EPA	U.S. Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
ha	hectares
HABS	Historic American Building Survey
HCM	Highway Capacity Manual
Leq	Equivalent noise level
LOS	Level of Service
LUST	leaking underground storage tanks
MAAQS	Montana Ambient Air Quality Standards
MCCHD	Missoula City/County Health Department
MDFWP	Montana Department of Fish Wildlife and Parks
MDT	Montana Department of Transportation
MNHP	Montana Natural Heritage Program
MOU	Memorandum of Understanding
MPDES	Montana Pollutant Discharge Elimination System
MPO	Metropolitan Planning Organization
MUTCD	Manual on Uniform Traffic Control Devices
NAAQS	National Ambient Air Quality Standards
NAC	Noise Abatement Criteria
NPL	National Priority List
NO <sub>x</sub>	nitrogen oxides
NRHP	National Register of Historic Places
O <sub>3</sub>	ozone
PM <sub>10</sub>	particulate matter less than 10 microns
RCRA	Resource Conservation and Recovery Act

SHPO	State Historic Preservation Office
SIP	State Implementation Plan
SO <sub>2</sub>	sulfur dioxide
TIP	transportation improvement program
UHPIP	Urban Highway Pilot Improvement Program
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
USTs	underground storage tanks
v/c	volume to capacity
veh/h	vehicle per hour
VOCs	volatile organic compounds

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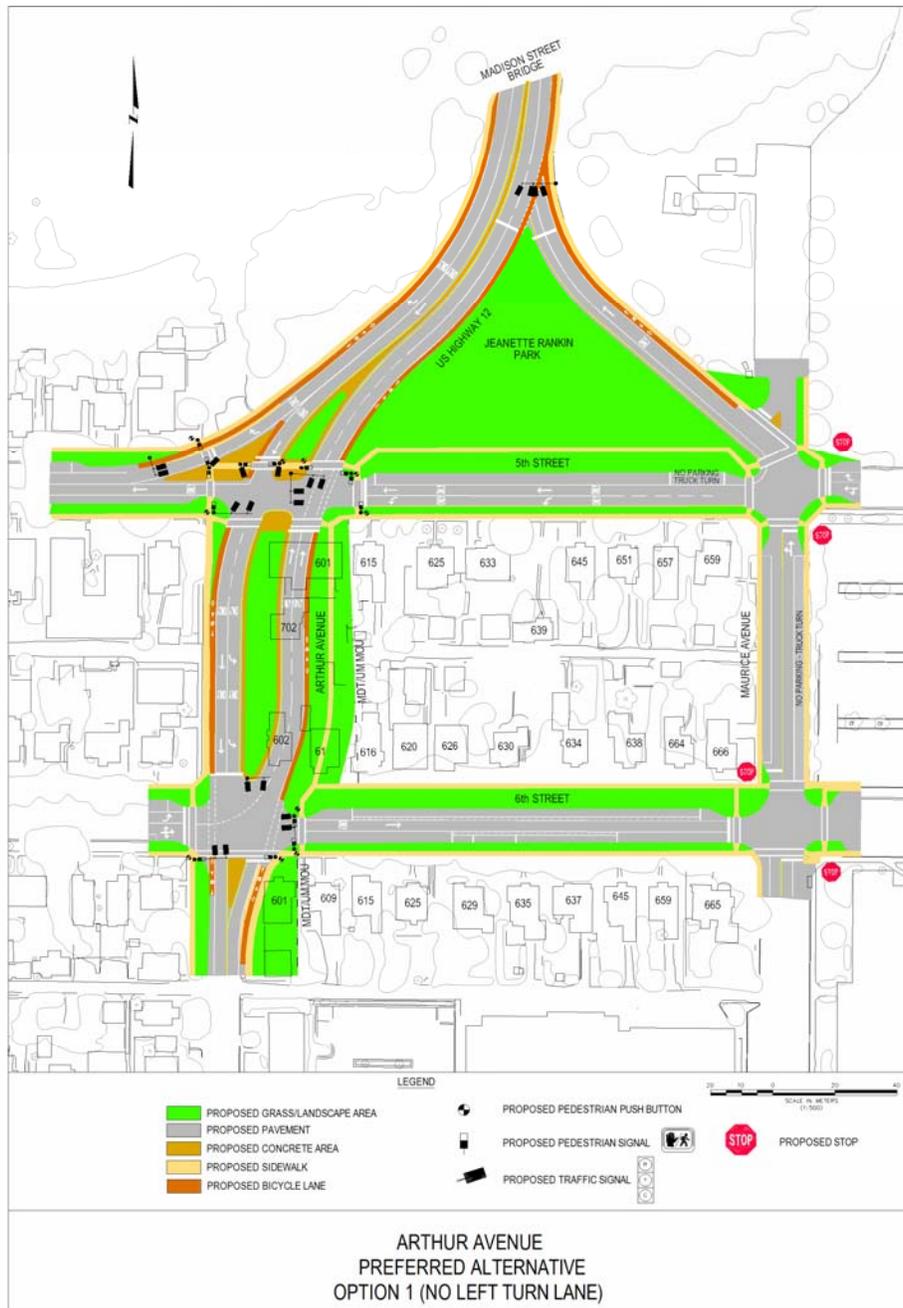
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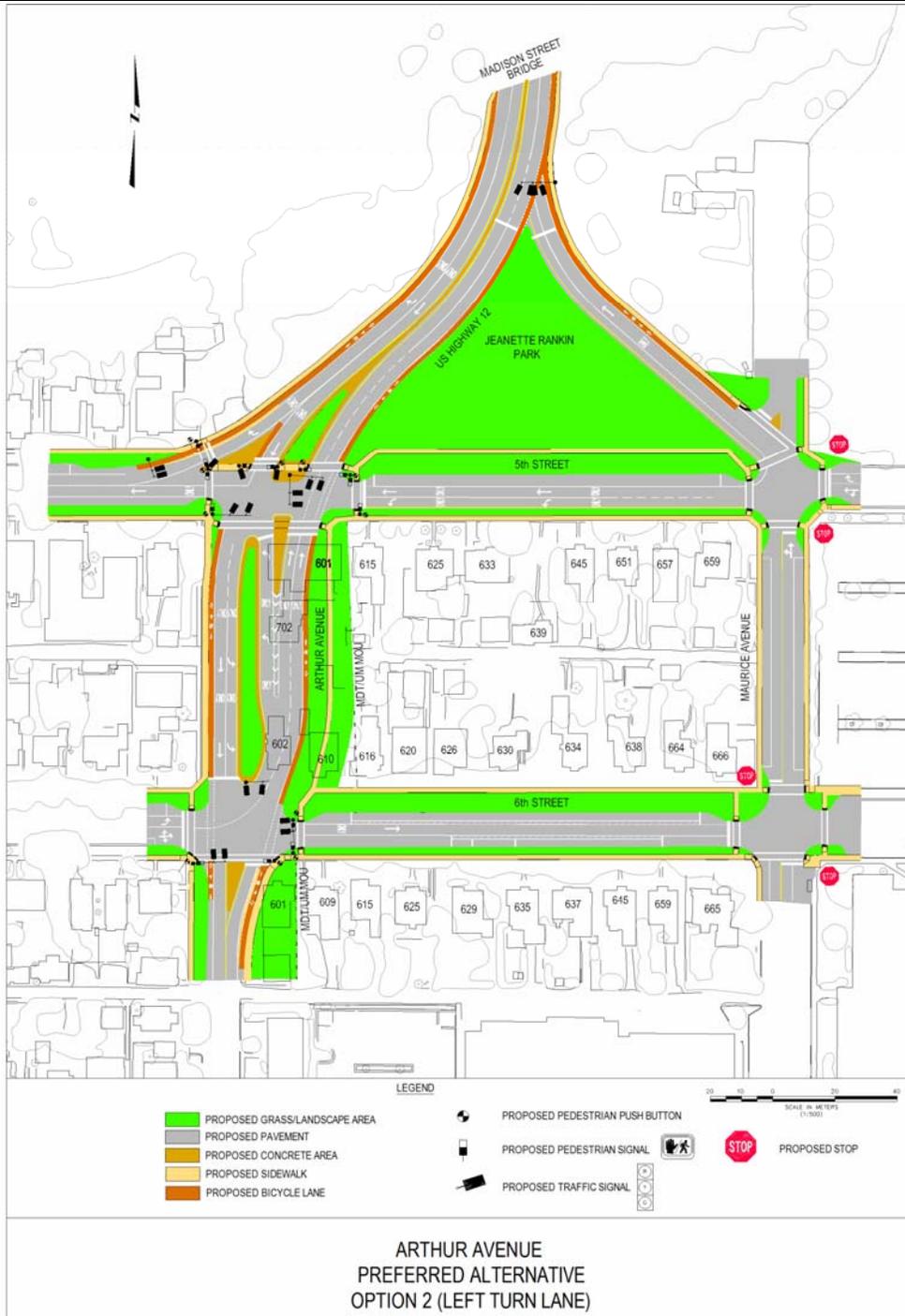
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# Summary

## Introduction

The purpose of the Arthur Avenue project is to improve automobile, bicycle, and pedestrian flow on U.S. Highway 12 near the University of Montana - Missoula Campus (University) allowing the safe and efficient movement of traffic. The proposed improvements would accomplish this by installing pedestrian and bicycle facilities, traffic actuated signals, and realignment of the existing roadways to establish a more direct route for U.S. Highway 12. This would reduce the traffic on 6th Street and Maurice Avenue, increasing the safety around the University.





The project is located adjacent to the University and the Clark Fork River at the southern end of the Madison Street Bridge in the City of Missoula (the City). The bridge is not included in the project; however, design consideration would be given to the bridge access and egress (couplets) on the south side of the river. The study area begins south of the Madison Bridge and includes the intersections of Arthur Avenue at 6th Street, 6th Street at Maurice Avenue, Maurice Avenue at 5th Street, and Arthur Avenue at 5th Street.

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Goals of the project include the following:

- To maintain a uniform volume capacity across the project that will be consistent with the surrounding U.S. Highway 12 roadways.
- To incorporate physical changes to the roadway and its adjoining environment to increase the safety, comfort, and convenience of the traveling public.
- To provide a more direct route for U.S. Highway 12 traffic without impacting the capacity of adjacent or connecting roadways.
- To provide a more efficient and user-friendly entrance to the University.
- To accommodate the multimodal travel of trucks, cars, bicycles, and pedestrians.
- To decrease the impacts of University special events on U.S. Highway 12 traffic and increase the efficiency and safety for the public traveling to and from the special events.
- To have a positive effect on air quality.
- To update existing roadway facilities.
- To recognize, evaluate, and comply with, if feasible, the requirements of the Memorandum of Understanding (MOU) between the City, the Montana Department of Transportation (MDT), and the University regarding property available for the project and other issues.

The project was nominated to reconstruct Arthur Avenue from 6th Street to 5th Street, including the intersections. The proposed work would also include realignment of the U.S. Highway 12 eastbound couplet between the Madison Street Bridge and the 6th Street/Maurice Avenue intersection; and realignment of the U.S. Highway 12 westbound couplet between the bridge and the Arthur Avenue/5th Street intersection. The proposed work would include: alignment modification, intersection improvements, grading, installing gravel, storm drains, curbs and gutters, and surfacing, signing, striping, lighting, landscaping, signals, and other miscellaneous items. Some right-of-way acquisition and utility relocation would be required; however the University plans to donate right-of-way to the project based upon a MOU signed May 22, 2001. In addition to the MOU right-of-way, a small ( $\pm 5$  m<sup>2</sup>) of private right-of-way may be required for sidewalk placement.

The MDT signed a MOU with the City and the University. As described in the MOU, the project consists of “ . . . realigning the eastbound leg of U.S. Highway 12 from 6th Street along Arthur Avenue to more directly connect to the Madison Street Bridge. Through traffic will no longer be required to loop along 5th Street and Maurice Avenue by the Adams Center.” The MOU prescribes that MDT is responsible for all normal project activities, up to and including contract letting and construction. The City and University will actively participate in the project development process. The University will provide (subject to Board of Regents approval) necessary right-of-way and clear the ground needed for the project, in accordance with the MOU. Additional

right-of-way from adjacent private land owners may be needed. A copy of the MOU can be found in Appendix A of this document.

The project is being funded jointly among MDT, the City, and the University. Project funding from the University is based upon the donation of right-of-way in the project area. Most of the funding for this project is Federal funding (with State matching funding) from MDT's Montana Air and Congestion Initiative (MACI) and the Urban Highway Pilot Improvement Program (UHPIP).

The project is context sensitive and would greatly enhance the aging infrastructure while incorporating important safety features into a multi modal environment. Context Sensitive Solutions, or CSS, as defined by the Federal Highway Administration (FHWA), "is a collaborative, interdisciplinary approach to involve all stakeholders in the development of a transportation project. This involvement ensures that the project fits its physical setting and preserves scenic, aesthetic, historic, and environmental resources, while maintaining safety and mobility." The development of this project has been the collaborative effort of the stakeholders, as evidenced by the extensive public involvement and careful attention paid to stakeholder interests. As a result, the project has addressed critical issues such as pedestrian and bicycle safety, air quality, and the aesthetic value of the University gateway. Obvious concerns about this project include the impacts to the historic district and Jeanette Rankin Park, and through the evaluation of numerous alternatives, proposed impacts have been kept to a minimum.

Without implementation of the project, the 1957 roadway layout, outdated non-compliant safety measures, increased traffic in Missoula, and the University will increasingly negatively impact the neighborhoods and the efficiency of traffic flow on U.S. Highway 12. The effects are already being seen by the long delays at each intersection and other difficulties for all modes of traffic including bikes and pedestrians.

Through state and community meetings, public hearings, and neighborhood workshops, it is clear that the project is needed and is overwhelmingly supported by MDT, the City, the University, local residents, and interests groups. A majority see the positive benefits of this project by: removing U.S. Highway 12 traffic from the local streets and to the University; improving traffic flow including traffic from special events at the University; and accommodating pedestrians and bicyclists with new facilities while increasing safety.

Several alternatives were considered for implementation of this project, including the No Action alternative. Multiple criteria are used to select the Preferred Alternative from the initial list of potential alternatives. Candidates for the Preferred Alternative are limited to those that meet project objectives. The Preferred Alternative is the alternative that best meets all project objectives. Potential impacts that may result from implementation of the Preferred Alternative are summarized on the following pages. Also included in this discussion are the potential cumulative impacts that may result from implementation of this and other related projects, impacts of not

implementing this project (the No Action alternative), and mitigation measures associated with the potential impacts.

## Summary of Resources and Impacts

As part of this project, an evaluation of potential impacts (both direct and indirect) on the affected environment is required. Important resource categories or components of the potentially affected environment requiring evaluations of impacts include the following:

- Land Forms, Geology, and Soils
- Important Farmland
- Water Resources and Quality
- Floodplains
- Air Quality
- Vegetation
- Wetlands
- Threatened and Endangered Wildlife
- Other Wildlife Resources and Fisheries
- Land Ownership, Right-of-Way, and Use
- Social/Environmental Justice
- Economic
- Noise
- Hazardous Material/Substances
- Archeological and Historical
- Parkland
- Section 6(f) Lands
- Pedestrian and Bicycle Facilities
- Visual Resources

The following are evaluated for each of the resource categories identified:

- Impacts of the Preferred Alternative
- Cumulative Impacts
- Impacts of the No Action Alternative

Potential impacts to the resource categories are summarized in the table below.

Resource Category	Potential Impacts of Preferred Alternative	Potential Cumulative Impacts	Potential Impacts of No Action
Land Forms, Geology, and Soils	Small cut and fills	None	None
Important Farmland	Resource not present within or adjacent to project area		
Water Resources and Quality	Limited to hazardous materials spills	None	Minimal from maintenance and transport
Floodplains	None	None	None
Air Quality	Temporary dust, long-term positive	None	Continued degradation due to poor traffic flow
Vegetation	Loss of few individual trees and some grass	None	None
Wetlands	None	None	None
Threatened and Endangered Wildlife	Sediment transport to Clark Fork River can impact bull trout	None	None
Other Wildlife Resources and Fisheries	Not measurable	None	None
Land Ownership, Right-of-Way, and Use	In addition to MOU, $\pm 5 \text{ m}^2$ ( $\pm 54 \text{ ft}^2$ ) of right of way required sidewalk connections	None	None
Social/Environmental Justice	None	None	None
Economic	Positive, due to increased safety, short-term job increase. Negligible loss of tax revenue from right-of-way acquisition	Minor positive, due to potential increased demand for local goods	None
Noise	Short term construction noise	None	Continued increase
Hazardous Material/Substances	Limited to construction-related activities	Negligible	None
Archeological and Historical	2 historic properties would be impacted (610 S. 6 <sup>th</sup> St. E.)	None	No impact on historic properties
Parkland	Loss of 0.25 ac of Jeanette Rankin Park (grass and possibly some mature trees)	None	Park use is currently limited due in part to access; however, there would be no loss of park property
Section 6(f) Lands	Resource not present within or adjacent to project area		
Pedestrian and Bicycle Facilities	Positive, due to improved safety and flow of pedestrians and bicycles	None	Continued poor conditions for pedestrians and bicycles
Visual Resources	Positive due to additional green space and landscaping	None	None

In summary, no significant adverse impacts from the preferred alternative or due to cumulative impacts including those associated with this project are identified for the potentially affected environment. The preferred alternative is expected to have

measurable positive impacts on certain resource categories and neither positive nor negative impacts on other categories.

## Summary of Mitigation Measures

Mitigation measures are incorporated into the proposed project to eliminate or minimize any potential impacts identified. These mitigation measures are summarized below for those resource categories for which potential impacts have been identified.

Resource Category	Potential Impacts of Preferred Alternative	Potential Cumulative Impacts	Potential Impacts of No Action	Mitigation Measures
Land Forms, Geology, and Soils	Minimal	None	None	Erosion control and slope stabilization
Water Resources and Quality	Limited to hazardous materials spills	None	Small probability from maintenance and transport	Control spills, refueling, and containment
Air Quality	Temporary dust, long-term positive	None	Continued degradation due to poor traffic flow	Dust control as needed
Wetlands	Not measurable	None	None	None
Other Wildlife Resources and Fisheries	Not measurable	None	None	Erosion control and re-vegetation
Noise	Short term construction equipment noise	None	Continued increase	Construction related noise and operation hours will maintain compliance with the Missoula City Noise Ordinance (MMC 9.30. MP)
Hazardous Material/Substances	Limited to construction-related activities	Negligible	None	Control spills, refueling, and containment
Archeological and Historical	2 historic properties would be impacted (610 S. 6 <sup>th</sup> Street E.)	None	No impact on historic properties	Historic American Buildings Survey (HABS) of the home, new owners and home relocation
Parkland	Loss of 0.25 ac of Jeanette Rankin Park (grass and possibly some mature trees)	None	Minimal due to limited use of park; however, there would be no loss of park property	Improve park access, landscaping, weed control, add green space in other areas
Pedestrian and Bicycle Facilities	Positive, due to improved safety and flow of pedestrians and bicycles	None	Continued poor conditions for pedestrians and bicycles	Bicycle lane and pedestrian facilities are incorporated into project
Visual Resources	Positive due to additional green space and landscaping	None	None	Additional green space and landscaping incorporated into project

## Overall Conclusions on Need

This project is context sensitive and would enhance the aging infrastructure while incorporating important safety features into a multimodal environment. Without this project, increasing impacts to the neighborhoods and the use of U.S. Highway 12 would continue due to the 1957 roadway layout, outdated non-compliant safety measures, and increased traffic in Missoula and the University. The effects of increased traffic are already being seen by the long delays at each intersection and safety concerns as described in the section above.

Through state and community meetings, public hearings, and “neighborhood” workshops, it is clear that this project is needed and overwhelmingly supported by the MDT, the City, the University, local residents, and interests groups. The majority sees the positive benefits of this project by: removing U.S. Highway 12 traffic from the local streets and the University; improving traffic flow including traffic from special events at the University; and accommodating pedestrians and bicyclists with new facilities while increasing their safety.

# Section 1

## Introduction

### 1.1 Project Location, Length, and Termini

The Arthur Avenue project includes roadways between the Madison Street Bridge and 6th Street, and Arthur Avenue and Maurice Avenue. The project was developed by MDT in association with the Federal Highway Administration (FHWA), University, and the City to evaluate and resolve traffic and safety issues in the project area. Figure 1-1 depicts the existing roadway configurations.

### 1.2 Purpose and Need

The project was nominated to reconstruct Arthur Avenue from 6th Street to 5th Street, including the intersections. The work would also include realignment of the U.S. Highway 12 eastbound couplet between the Madison Street Bridge and the 6th Street/Maurice Avenue intersection; and realignment of the U.S. Highway 12 westbound couplet between the bridge and the Arthur Avenue/5th Street intersection. The purpose of the project is to improve traffic flow, reduce out-of-direction travel, and to improve safety. The project is needed to meet demands of a mixed variety of motor vehicles, bicycles, and pedestrians and provide an aesthetic and efficient entrance into the University, while maintaining adequate capacity for highway traffic.

The work may include realignment, intersection improvements, grading, installing gravel, storm drains, curbs and gutters, and surfacing, signing, striping, lighting, landscaping, signals, and other miscellaneous items. Some right-of-way acquisition and utility relocation would be required; however, most of the right-of-way acquisition that would be needed was included in a Memorandum of Understanding (MOU) described below. An additional  $\pm 5 \text{ m}^2$  ( $\pm 54 \text{ ft}^2$ ) of private right-of-way may be required for sidewalk placement. Both State and Federal funds will be required for this project.

The MDT signed a MOU on May 22, 2001 with the City and the University. As described in the MOU the project consists of “. . . realigning the eastbound leg of U.S. Highway 12 from 6th Street along Arthur Avenue to more directly connect to the Madison Street Bridge. Through traffic would no longer be required to loop along 5th Street and Maurice Avenue by the Adams Center.”

Briefly, the MOU prescribes that MDT is responsible for all normal project activities, up to and including contract letting and construction. The City and University will actively participate in the project development process. The University would provide (subject to Board of Regents approval) necessary right-of-way, as bare ground free of structures, anticipated to be needed for the project in accordance with the MOU. The MOU is included in Appendix A. A small amount of additional right-of-way from adjacent private land owners may be needed.



FIGURE 1-1

The purpose of the project is to improve automobile, bicycle, and pedestrian flow on U.S. Highway 12 near the University allowing the safe and efficient movement of traffic. Roadways included in the project are Arthur Avenue, 5th Street, 6th Street, Maurice Avenue and the southern approach, and departure legs from the Madison Street Bridge. The goals of the proposed action should be:

- To maintain a uniform volume capacity across the project that will be consistent with the surrounding U.S. Highway 12 roadways.
- To incorporate physical changes to the roadway and its adjoining environment to increase the safety, comfort, and convenience of the traveling public.
- To provide a more direct route for U.S. Highway 12 traffic without impacting the capacity of adjacent or connecting roadways.
- To provide a more efficient and user-friendly entrance to the University.
- To accommodate the multimodal travel of trucks, cars, bicycles, and pedestrians.
- To decrease the impacts of University special events on U.S. Highway 12 traffic and increase the efficiency and safety for the public traveling to and from the special events.
- To have a positive effect on air quality.
- To update existing roadway facilities.
- To recognize, evaluate, and comply, if feasible, with the requirements of the MOU between the City, MDT, and the University regarding property available for the project and other issues.

### **1.3 Project Funding**

The project is being funded by the City of Missoula, the State of Montana, the University, and federal funding sources. Project funding from the University is based upon the donation of right-of-way in the project area. Most of the funding for this project is Federal funding (with State matching funding) from MDT's Montana Air and Congestion Initiative (MACI) and the Urban Highway Pilot Improvement Program (UHPIP).

Camp Dresser & McKee Inc. (CDM) was tasked to define "no added capacity" for the Arthur Avenue Reconstruction project. CDM, with MDT's approval, has defined "no added capacity" for this project to mean that the design will look at current capacity and levels of service during standard operation and compare it to adjacent intersections to determine if there are significant impacts or stress added to the existing transportation system. MDT determined that it did not want to create more traffic in a residential area and therefore, did not add capacity to the existing system. It is understood by both CDM and MDT that this definition does not include special

events from the University. Designing for special events is not feasible. Instead, CDM will analyze the special events and make reasonable recommendations to mitigate these impacts within the project area. In addition, MDT has stated that the “no added capacity” definition is for the current year, and does not need to meet future conditions; however, CDM shall take growth projections into account for the preferred alternative and analyze the future at 10-years and 20-years out. Current year denotes the year when the project began data collection and the design process. For this project the current year is considered to be 2002.

## 1.4 Jurisdiction

U.S. Highway 12, on the Primary Highway System, is functionally classified as a principal arterial. Arthur Avenue, at its intersection with Sixth Street is a minor arterial on the Urban Highway System. The local and through traffic on these roadways are heavily mingled with often conflicting results. The network accommodates not only “normal” traffic but also traffic from special events (such as football games, basketball games, and concerts) that occur nearly every week at the University. Street maintenance and snow removal is performed by the City. The area is police patrolled by the Montana Highway Patrol, the County Sheriff, and the City police. Streets east of Maurice Avenue are the jurisdiction of the University police.

## 1.5 Current and Projected Road Use

### 1.5.1 Current Road Use

The current roadway use within the project area is multifaceted. There is a mix of commuters, commercial trucks, and University traffic traveling on Arthur Avenue, Maurice Avenue, 5th Street, and 6th Street. In addition, there is also pedestrian and bicycle traffic.

In general, referring to Figure 1-1, the U.S. Highway 12 eastbound traffic (traffic flowing north from Madison Street Bridge) follows 6th Street to Maurice Avenue to the Madison Street Bridge. U.S. Highway 12 westbound traffic (traffic flowing south from Madison Street Bridge) goes down 5th Street. Any vehicle accessing the University must continue southbound and turn east onto 6th Street. Within the project area, Arthur Avenue is one-way southbound, Maurice Avenue is one-way northbound, 5th Street is one-way westbound and 6th Street is one-way eastbound.



*Arthur Avenue South of 6th Street (North)*

### 1.5.2 Projected Road Use

The purpose of the Arthur Avenue project is to improve vehicle, bicycle, and pedestrian flow on U.S. Highway 12 near the University of Montana - Missoula Campus (University) allowing the safe and efficient movement of traffic. The proposed improvements would accomplish this by installing pedestrian and bicycle

facilities, traffic actuated signals, and realignment of the existing roadways to establish a more direct route for U.S. Highway 12. This would reduce the traffic on 6th Street and Maurice Avenue, increasing the safety around the University.

The improvements would not alter or hinder the existing road use, as the current circulation patterns within the project area would be maintained except Arthur Avenue. This would ensure the same access to buildings and locations as the existing road use while improving flow and safety.

## 1.6 Accidents

The MDT performed an accident analysis and engineering study evaluation for the Arthur Avenue Project (CN 4611) in October of 2002. Refer to “Accident Studies and Dominant Trends – Act.122 (406)” in Appendix D in the Revised Preliminary Traffic Report. The accident data were collected for a three-year period between July 1, 1999 and June 30, 2002 and compared to other Urban Principal Arterials.

In summary, the analysis identified 75-recorded accidents. During the study period, there were no fatalities due to vehicular incidents; however, on December 13, 2002, a pedestrian was struck and killed at 6th Street and Maurice Avenue.

Within the study area and time period analyzed, the Vehicle Accident Rate is 8.62, the Vehicle Severity Index is 1.48, and the Vehicle Severity Rate is 12.76. The Vehicle Accident Rate is 40 percent higher in the project area than the statewide average; the Vehicle Severity Index is 18 percent higher than the statewide average.

Existing pedestrian facilities are cumbersome and do not allow easy access to many areas of the project. Current conditions do not provide a marked access to the northwest corner of the Arthur Avenue and 5th Street intersection. Similarly the northwest side of the intersection at Maurice Avenue and 6th Street does not have marked access. At the intersection of Maurice Avenue and 5th Street there is no marked access to either the northwest or southwest side of the intersection. Although unmarked crossings are common in Missoula, these access restrictions are required for the existing alignment as un-signalized intersections and the volume of traffic generated by U.S. Highway 12 and the University do not allow for protected pedestrian crossings at these locations.

The existing bicycle facilities necessitate the intermixing of bicycles and vehicles for most of the project. The main safety concern involving bicycles occurs from the Madison Street Bridge to the intersection of Arthur Avenue and 5th Street. At this location the bicycle lane crosses two travel lanes where motorists are negotiating both a horizontal and vertical curve. If the bicycle chooses to follow the sidewalk located on the northwest side of the couplet, they are unable to cross at the intersection of 5th Street and Arthur Avenue because of the lack of cross walks. Due to the existing lane configurations at the intersection of Arthur Avenue and 5th Street, it is often difficult for bicycles and pedestrians to determine a motorist’s path entering and exiting the intersection.

## **Section 2**

# **Alternatives for the Arthur Avenue Project**

## **2.1 Preferred Alternative Selection Process**

This section describes the alternatives considered to address the transportation needs, safety improvements, and traffic control/geometric deficiencies identified in the “Preliminary Field Review Report” dated September 12, 2001 provided by MDT. The process of selecting the preferred alternative is identified and includes several conceptual alternatives that were rejected for various reasons. It also includes conceptual alternatives that were refined a number of times until a preliminary plan was developed for presentation at a Public Meeting. A preferred alternative was developed based on the University, City, and community’s support and comments.

The preferred alternative is the improvement that MDT, the City, and the University believe would best meet the reasons for undertaking the project, giving consideration to economic, environmental, technical, public opinion, “no added capacity,” the MOU and other factors. The preferred alternative is detailed in Section 2.5.

## **2.2 Methodology**

A process of developing conceptual alternatives was conducted in collaboration with the stakeholders, community, and general public. The alternative development process included the following:

- Identify the purpose and need.
- Evaluate issues in the MOU.
- Brainstorm and conceptualize ideas to address the project needs.
- Refine ideas into alternatives by levels of impact.
- Evaluate and compare alternatives.
- Eliminate alternatives from further consideration based on the evaluation.
- Forward Preferred Alternative to the Environmental Assessment document.

### **2.2.1 Preliminary Alternative Development**

The objective of the preliminary alternative development session was to develop alternatives that would optimize the area with regard to the Purpose and Need. Around 25 ideas for improvements were developed and separated into the following groups of alternatives.

#### **2.2.1.1 No-Build Alternative**

The No-Build Alternative was evaluated as a baseline for design comparison and a viable option.

### **2.2.1.2 Minimal Improvements**

Minimal impacts such as traffic signal improvements, new pavement markings, and advanced University signing (trailblazing) were evaluated because of their low overall cost and minimal impact to the project. These improvements were removed from consideration because implementation would not improve operation and safety at these intersections. Therefore, this group of improvements was not advanced through the preferred alternative selection process.

### **2.2.1.3 Moderate Improvements**

Moderate impacts such as roadway realignments and “non-standard” improvements such as roundabouts appeared to be a cost effective and viable option to address traffic conditions. As a basis, the roadway realignment and roundabout alternatives were carried forward to the next step of the alternative selection process.

### **2.2.1.4 Extensive Improvements**

Overpass structures and interchanges were evaluated in an effort to streamline access to the U.S. Highway 12 and the University. These alternatives were not considered further due to costs well beyond the budget, safety issues and improvements that may be required outside of the project area.

## **2.3 Alternatives Considered but Rejected**

The following are alternatives considered but rejected for the reasons described below in each of the figures. Some of the reasons for rejection include: 1) cost, 2) the alternative is not safe or does not effectively allow traffic movement, or 3) the alternative is not safe or does not provide adequate facilities for other modes of traffic such as bikes and pedestrians. More detailed discussions of the alternative evaluation process are described in Appendix B – Conceptual Alternatives.

## **2.4 Roundabout Alternatives (more alternatives considered but rejected)**

The roundabout alternative has been considered in great length for this project. Capacity and impacts to the historic district have resulted in the rejection of roundabouts as a feasible alternative. It is the opinion of CDM that modern roundabouts can be an effective intersection improvement alternative where properly designed and warranted. Ongoing research in the United States and Europe is indicative of an alleviation of certain types of collisions, as well as an overall improvement to traffic flow under the “slow and go” versus “stop and go” scenarios.

However, roundabouts are not a panacea for all roadway intersection problems. Similar to traffic signals, roundabouts are used to provide improved traffic control at an intersection. Yet, roundabouts have certain geometric design criteria, static capacity and pedestrian and bicycle accommodation limitations that must be accounted for when selecting an intersection improvement alternative.

Section 2.4.1 through 2.4.8 present a detailed evaluation of roundabout versus traffic signal control at the study area intersections.

**Alternatives Considered but Rejected**

*Roundabout South of Madison Street Bridge*



- Park would be removed.
- Wetlands impact ±1 acre.
- Alternative does not adequately handle traffic flow.
- Pedestrian and bike use problems.
- Right-of-way acquisition required.

*Intersection South of Madison Street Bridge*



- Turning movements would slow traffic and cause congestion.
- Park would be removed.
- Traffic flow is not smooth.
- Wetlands impact ±1 acre.
- Right-of-way acquisition required.

*U.S. Highway 12 Shift to Arthur*



- Horizontal and vertical curves causes impact to sight distance.
- Traffic merging sight problem.
- Right-of-way acquisition required.
- Wetlands impacts over 1 acre.

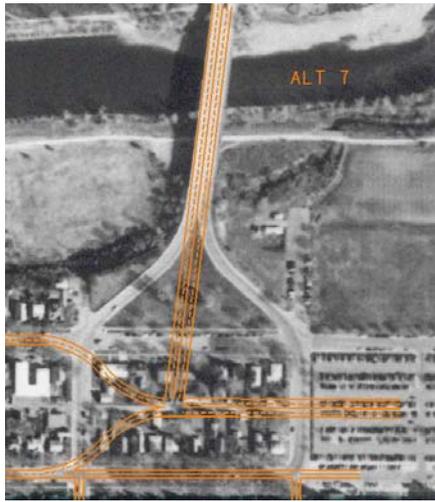
*New Intersection at 5<sup>th</sup> and 6<sup>th</sup>*



- Right-of-way acquisition required.
- One-way to two-way street connection issues causing difficult traffic patterns.
- Park would be removed.
- Does not meet University land use plan.

Alternatives Considered but Rejected Continued...

*New Roadway Between 5<sup>th</sup> and 6<sup>th</sup>*



- Does not meet University land use plans.
- Right-of-way acquisition required.
- Difficult pedestrian and bike access.
- Residential access issues.

*Flyovers Separating University and U.S. Highway 12*



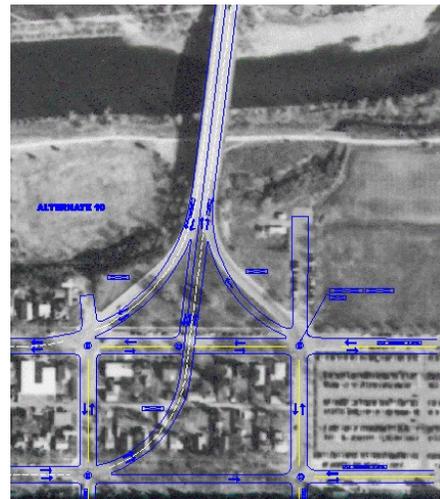
- Alignment would require steep slopes.
- Sight distance problematic.
- Flyovers are more costly than other alternatives that accomplish the same objectives.
- Right-of-way acquisition required.
- Park would be removed.

*Split Bridge 2-Lane 2-Way Flyovers*



- Motorist confusion problems.
- Poor alignment with existing bridge.
- Reduces park size significantly.
- Flyovers are very costly and objectives can be achieved with less cost.

*Flyover from the Madison Street Bridge*



- Bicycle and pedestrian access limited.
- Traffic congestion at University.
- Costly overpass and objectives can be achieved with less cost.
- Does not meet University land use plans.
- Park would be removed.
- Right-of-way acquisition required.



## 2.4.1 Site Specific Roundabout History

WGM Group prepared the “Madison/ Arthur Roundabout Feasibility Analysis” dated 1999 for the University of Montana Facilities Services, Missoula, Montana. This document provided a “general review of the feasibility of locating modern roundabouts at the intersection of Madison Street and Arthur Avenue with 5<sup>th</sup> Street and 6<sup>th</sup> Street.”<sup>1</sup>

Eight years ago, WGM Group had the engineering insight to recommend that a single lane roundabout may not have sufficient capacity for future traffic volumes in the area. Their recommendation included “a roundabout with a minimum 140 foot inscribed diameter with lane designations as a single lane roundabout. This diameter is large enough to be converted to a two lane roundabout if future traffic volumes warrant additional lanes.”

The document was prepared as a broad evaluation of roundabouts and did offer two conceptual plans illustrating potential roundabout installations at the intersections of Madison Street and Arthur Avenue with 5<sup>th</sup> Street and 6<sup>th</sup> Street. However, the document was prepared prior to “Roundabouts: An Informational Guide (RIG)” FHWA-RD-00-67, a Federal Highway Administration publication released in June 2000<sup>2</sup>, which provides specific details regarding roundabout capacity and geometric design.

CDM prepared Activity 112 Revised Preliminary Traffic, a comprehensive traffic study for the Arthur Avenue Reconstruction Project in Missoula (CN 4611) dated January 30, 2004<sup>3</sup>. This document included a Preferred Alternative Selection Process, which incorporated an overview of roundabout alternatives at the study locations. Based on capacity analysis and right-of-way constraints, roundabouts were not selected as the preferred alternative for the intersections of Arthur Avenue at 6<sup>th</sup> Street and Arthur Avenue at 5<sup>th</sup> Street. Instead, a state-of-the-art coordinated and closed-loop traffic signal system was proposed for the two intersections. This traffic signal system would include adjustable phasing and timing to accommodate large fluctuations in traffic during special events at the University.

In 2005, the Missoula Institute for Sustainable Transportation (MIST) developed a “Citizen Plan for Arthur/5<sup>th</sup>/6<sup>th</sup>” that called for a single-lane roundabout at both intersections of Madison Street and Arthur Avenue at 5<sup>th</sup> Street and 6<sup>th</sup> Street. The Citizen Plan calls for single lane roundabouts at each intersection with an inscribed diameter of 98 feet.

The following documentation illustrates in detail, the general characteristics associated with roundabouts per the RIG (capacity, geometry, non-motorized users), the expected impacts associated with a roundabout (both single lane and double lane)

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<sup>1</sup> WGM Group, March 8, 1999. Madison/Arthur Roundabout Feasibility Analysis. University of Montana Facilities Services Missoula, Montana.

<sup>2</sup> Roundabouts: An Informational Guide, FHWA-RD-00-67, Washington D.C., June 2000

<sup>3</sup> Activity 112 Revised Preliminary Traffic, CDM, Helena, MT, January 2004.

at these two intersections designed per the RIG, as well as a comparison between the roundabout alternatives and the preferred alternative selected in the Activity 112 Revised Traffic Study.

## **2.4.2 Roundabout Evaluation Methodology**

### **2.4.2.1 Geometric Guidelines**

#### **2.4.2.1.1 Inscribed Diameter**

According to the RIG, the inscribed diameter is the “basic parameter used to define the size of a roundabout. It is measured between the outer edges of the circulatory roadway.” While there are six categories of roundabouts, there are three categories of interest for the Arthur Avenue Reconstruction Project with corresponding inscribed diameters as follows:

- Urban Compact 80-100ft (98-foot inscribed diameter illustrated by MIST).
- Urban Single Lane 100-130ft (somewhat consistent with WGM Group recommendation of 140 foot inscribed diameter).
- Urban Double Lane 150-180ft (somewhat consistent with WGM Group recommendation of 140 foot inscribed diameter).

In addition to inscribed diameter dimensions, a roundabout’s circular path should be designed to accommodate the classification of traffic that will be using the roundabout. In other words, the roundabout’s geometry should be based on an appropriate design vehicle. While compact roundabouts may be designed to accommodate passenger cars, buses and emergency vehicles in a local neighborhood, a roundabout designed for a major route must be able to accommodate larger vehicles, such as tractor-trailers.

#### **2.4.2.1.2 Truck Accommodation**

Highway 12 is a state numbered route and one of the major truck routes through Missoula. Therefore, any improvements provided along Highway 12 must accommodate WB-20m (WB-67) in accordance with MDOT standards.

According to RIG (page 146) Exhibit 6-19, an urban single lane WB-50 design vehicle warrants a 100-130 foot inscribed circle with typical entry widths of 14 to 16 feet. In order to accommodate a WB-67, the inscribed circle would have to be even larger. Furthermore, while a truck apron can be provided to help accommodate larger vehicles, a completely mountable center island is not recommended. This would defeat the purpose of the circulating roadway and is not applicable for a state numbered route with high volume.

### **2.4.2.2 Capacity Analysis**

Capacity analysis at a roundabout is typically evaluated as the volume to capacity ratio. This is an indication of how many vehicles a roundabout can process, given the geometry (single lane or double lane). In general, according to RIG, an urban compact

roundabout can process 15,000 vehicles per day (vpd), while a single lane roundabout can process 20,000 vpd.

Translated to hourly volumes, based on Exhibit 4-6 in RIG, a single lane roundabout can accommodate approximately 1,200 vehicles per hour (veh/h) entering and a circulating flow of 1,800 veh/h. Circulating flow is the vehicle flow rate in all lanes of the roundabout in front of a roundabout entry lane. [“Exiting vehicles exceeding 1,200 veh/h may indicate a need for a double lane roundabout.”] A double lane roundabout can accommodate slightly less than 2,500 veh/h entering flow and 3,000 veh/h circulating flow.

Capacity analysis is typically performed on roundabouts using a nationally accepted software package. A software package recognized by RIG as an appropriate methodology – aaSidra – has been used to analyze roundabout capacity for this project. The Site Specific evaluation below illustrates the results of the capacity analysis performed on the proposed roundabout alternatives.

### **2.4.2.3 Non-motorized Users**

In addition to vehicular accommodation, intersection improvements must accommodate non-motorized modes of transportation. Given the close proximity of the intersections to the University, accommodation of bicyclists and pedestrians is paramount.

#### **2.4.2.3.1 Pedestrians**

Pedestrian accommodation at a single lane roundabout is typically provided along each leg of the roundabout. If splitter islands are provided, a pedestrian refuge area should be a minimum width of 6 feet to accommodate persons pushing a stroller or walking a bicycle. However, increasing the width of the splitter islands generally requires increasing the inscribed circle diameter.

According to RIG, the risk of being involved in a severe collision is lower at [single lane] roundabouts than other forms of intersections, due to the slower vehicle speeds. Likewise, the number of conflict points for pedestrians is lower at roundabouts than at other intersections, which can lower the frequency of collisions. These facts are dependent on the location of the pedestrian crossing, which is critical. The RIG recommends that crosswalks be located approximately one car length away from the circulating roadway to avoid vehicles queued across the crosswalk. However, for a double lane roundabout, “the pedestrian crossing should be located one, two or three car lengths away from the yield line.”

At double lane roundabouts, pedestrians face the dilemma of attempting to cross two approach lanes (or two exit lanes) at the same time without pedestrian refuge between each lane. Pedestrians end up trapped in a double-hazard zone, whereby a vehicle in the first lane may yield to a pedestrian, but the vehicle in the second lane may not, leading to a potentially severe collision. Unlike a signalized intersection, where the vehicles are controlled by traffic signal indications such that a pedestrian may cross an entire street, a double lane roundabout does not provide a “pedestrian walk time.”

#### **2.4.2.3.2 Bicyclists**

In Missoula, bicycle accommodation through intersections is vital.

Bicycle accommodation at a single lane roundabout typically takes three forms. First, the bicyclist acts as a motor vehicle and joins the traffic stream. Second, the bicyclist can dismount the bicycle and act as a pedestrian, crossing the crosswalks. And third, if provided, the bicyclist could join a shared path to traverse the roundabout and then return to a dedicated bicycle lane. While these options function well at a single lane roundabout, a double lane roundabout presents the same hazards to bicyclists as they do to pedestrians.

According to RIG, at double lane roundabouts, bicyclists are less visible and therefore more vulnerable to the merging and exiting conflicts that happen at double lane roundabouts (page 110). Per a British study quoted in RIG (Exhibit 5-17) bicyclists "... fare worse in terms of crashes at roundabouts than at signalized intersections."

A signalized intersection, with today's technology, can not only include a dedicated bicycle lane along the roadway, but can also include bicycle sensitive loop detectors, to activate the traffic signal for the bicyclist.

Pedestrians, bicyclists, and motor vehicles use the intersections on a daily basis. However, during special events at the University, the number of vehicles and pedestrians increases exponentially. Therefore, it is critical that the intersection improvement alternatives be capable of accommodating the influx of traffic during special events.

#### **2.4.2.4 Special Events**

WGM Group prepared a "Special Events Transportation Study" dated March 5, 1998 for the University of Montana Facilities Services Missoula, Montana<sup>4</sup>. This document identified that the University of Montana is:

"a major center for entertainment and cultural events in Western Montana. Events are held each week of the school year, including athletic contests, concerts, theater productions, and lecture series. University events bring thousands of visitors to Missoula each year. Missoula derives a great deal of economic benefit from the events. Parking and transportation to and from events are critical issues in serving as an excellent host to visitors."

The roadways and intersections providing access to the University for these Special Events must be capable of handling the tremendous influx of motor vehicles and pedestrians that occur prior to the event as well as the mass exodus at the completion of the event. According to the WGM study, "easy and convenient access to events affects attendance. In addition, patrons that arrive early can generate increased revenue from concessions and souvenirs."

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<sup>4</sup> Special Events Transportation Study, WGM Group, Missoula, MT March 5, 1998.

Events at the University range from weekend football games to outdoor concerts, Field House events (basketball games) and even the Home and Garden Show. While many of these events occur at different times of the year, there are still some events that overlap. Therefore, the overall intersection operation should be flexible, such that an infiltration of traffic on one approach can be accommodated at certain times throughout the year. Roundabouts pose a potential “grid-lock” during special events when U.S. Highway 12 traffic is introduced from the south or west sides. This grid-lock condition may occur because roundabouts provide equal vehicular right-of-way under any condition for all approaches. Traffic signals can be controlled to limit one or more movements when an approach reaches capacity or grid-lock. This is an advantage of conventional signals over roundabouts when it comes to controlling special events such as University football games.

According to the WGM study:

“special traffic handling procedures are used after football games and near capacity basketball games to facilitate the movement of traffic. These operations have been tested and refined over many years and appear to move traffic very efficiently. The phasing of the traffic signals in the University area based on typical daily traffic operations that are directly opposite of special event traffic characteristics.”

The City of Missoula has upgraded the traffic signals surrounding the University to provide closed-loop or centralized communications and programming capabilities to accommodate these special traffic handling procedures. Therefore, traffic signal phasing and timing for a special event can be programmed into the main controller with specific dates and times. Providing this type of equipment at the intersections of Arthur Avenue at 5<sup>th</sup> Street and 6<sup>th</sup> Street would integrate these intersections into the City’s system and allow for specific timing and phasing handling an influx of traffic to the University as well as an exodus of traffic leaving the University once the event is completed.

While one may consider providing traffic signals at a roundabout as a hybrid solution the RIG states “roundabouts should never be planned for metering or signalization.” Installing traffic signals at a roundabout defeats the purpose of installing a roundabout.

## **2.4.3 A Comparison Between Traffic Signals and Roundabouts**

### **2.4.3.1 Capacity**

Traffic signals offer the distinct advantage of providing increased capacity for a particular approach based on demand. This is especially critical during special events at the University, as a traffic signal can increase capacity (to a certain extent) using its own traffic demand logic and/or via pre-programmed phasing/timing plans established for event days.

In fact, the WGM study prepared in 1999 indicated that “Inappropriate Sites” for Roundabouts include:

- Where a satisfactory geometric design cannot be provided.
- Where a signal interconnect system would provide a better level of service.
- Where it is desirable to be able to modify traffic via signal timings.
- Where peak period reversible lanes may be employed.
- Where the roundabout is close to existing signals and queuing from the signal could be a problem.”

The locations along Arthur Avenue under consideration for a proposed roundabout meet the first three criteria listed above as being inappropriate sites for a roundabout. As illustrated in the following figures (Fig. 2-1 and Fig. 2-2) the geometric configuration of the skewed approach from the Madison Street Bridge does not lend itself to the efficient operation of a roundabout. Furthermore, the level of service of a roundabout, compared to that of a signal interconnects system, provides a less efficient operating intersection from a level of service standpoint. And as previously mentioned, modifications to traffic signal timing will be critical to handling of traffic during special events.

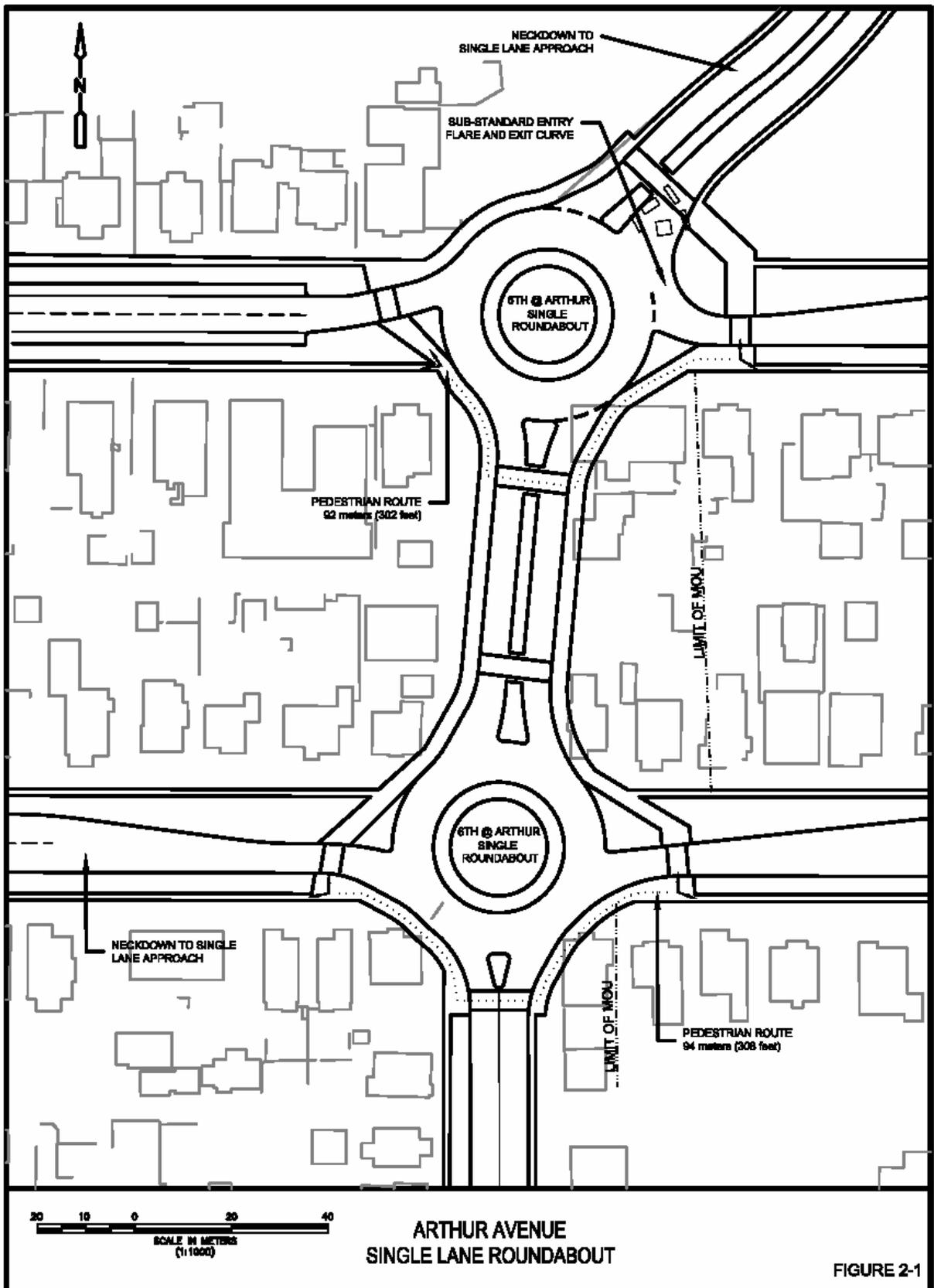
For a site specific evaluation of the locations considered for roundabouts please refer to Section 2.4.4 of this document.

#### **2.4.3.2 Power and Maintenance**

All traffic signal installations require power and maintenance. New technologies, including the use of Light Emitting Diodes (LED) have reduced the costs of operating traffic signals significantly. According to the RIG, “for general purposes, an annual cost of \$3,000 for providing power to a signalized intersection is a reasonable approximation.”

A roundabout, whether single lane or double lane, requires power and maintenance as well. According to RIG:

Roundabouts typically have a slightly higher illumination power and maintenance costs compared to signalized or sign-controlled intersections due to a larger number of illumination poles. Roundabouts have slightly higher signing and pavement marking maintenance costs due to a higher number of signs and pavement markings.



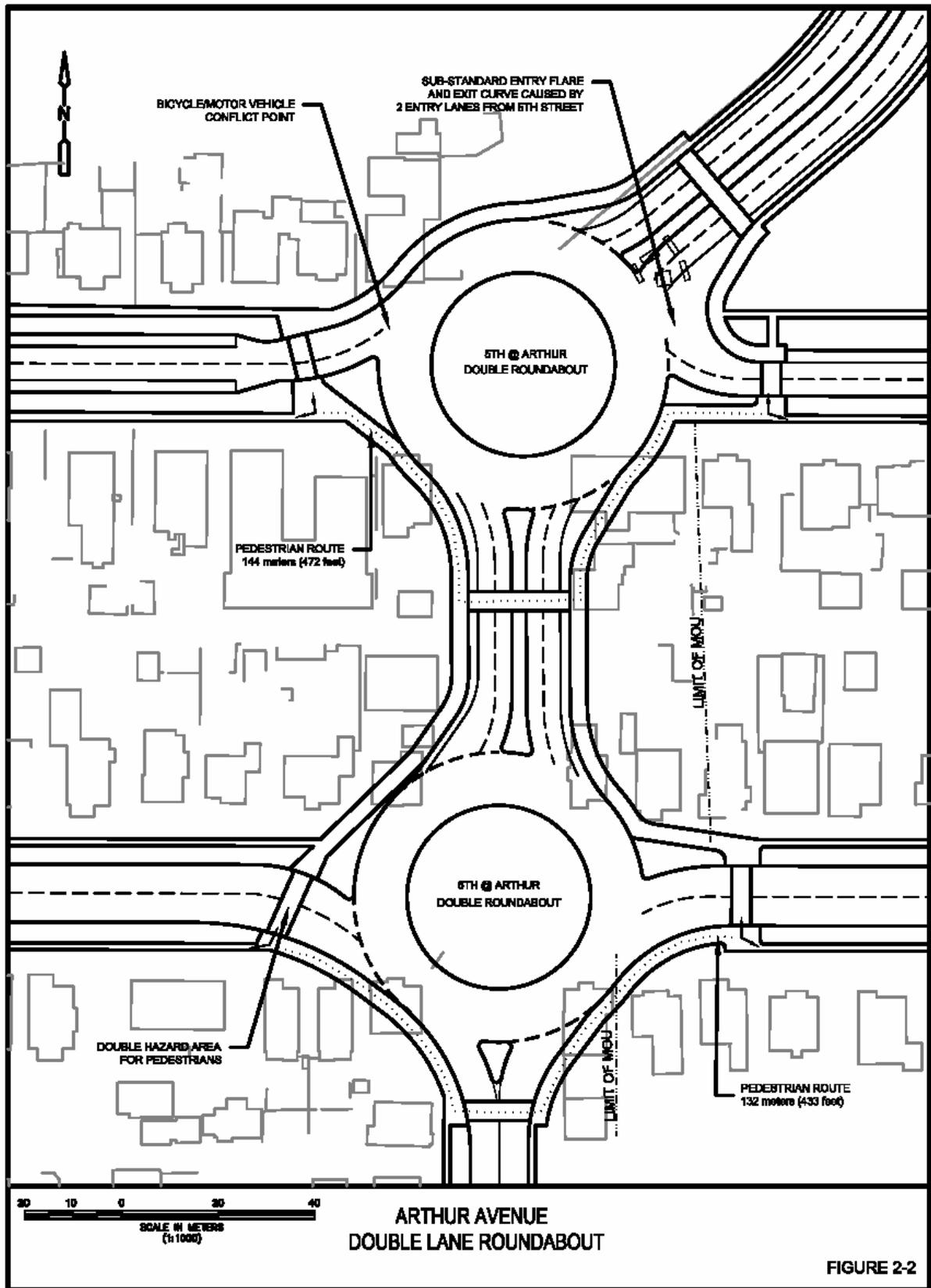


FIGURE 2-2

A recent article in the ISMA Journal<sup>5</sup> indicates that “Lighting should be provided for all roundabouts. The geometry of a roundabout makes headlamps ineffective in the detection of people or objects in the vehicle’s path.” The committee that authored the article is considering a recommendation that “a roundabout may have continuous lighting on the approach roads. This lighting will help a driver adapt to the roundabout lighting. Where there is no lighting on the approach roads lighting should be added on the approach roads for a distance of approximately 80m from the start of the roundabout.” The RIG recommends that all roundabouts be illuminated. The existing lighting structures surrounding the intersections along Arthur Avenue are insufficient for a roundabout installation and would require additional poles.

Roadway maintenance presents a unique challenge at a roundabout, especially a single lane roundabout. The circulatory flow of a roundabout can be seriously hindered by roadway maintenance, especially if one segment of the entire circulating area must be closed for roadway maintenance. Yet the paved area of a standard signalized intersection can usually accommodate traffic flow even with one lane closed to traffic.

Special procedures are also required to accommodate snow removal in a roundabout.

#### **2.4.3.3 Collisions**

Numerous studies have shown that single lane roundabouts can help alleviate the occurrence of cross-movement or angle collisions at an intersection. Properly timed traffic signals, with protected turn phases, can also help alleviate the occurrence of cross-movement or angle collisions at an intersection.

However, according to RIG, “due to the presence of additional entry lanes and the accompanying need to provide wider circulatory and exit roadways, double lane roundabouts introduce additional conflicts not present in single lane roundabouts.”

In addition, “the proportion of single-vehicle crashes at roundabouts is high compared to other intersection types because of an increased amount of side friction – because of the relatively high number of out-of-control vehicles, it is desirable to have adequate amounts of clear zone where there are no roadside hazards on each side of the roadway. “

#### **2.4.3.4 Traffic Management During Construction**

According to RIG “It is highly desirable to detour traffic for construction of a roundabout” because an unfinished layout means traffic priority may not be obvious. On the contrary, existing traffic signal controls can be maintained or temporary traffic signal controls installed while the permanent installation is being constructed with less disruption to traffic.

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<sup>5</sup> IMSA Journal, “Roundabout Lighting” Ananthanarayanan and Lutkevich, September 2005.

## **2.4.4 Site Specific Evaluation**

### **2.4.4.1 Arthur Avenue at 6th Street**

#### **2.4.4.1.1 Capacity Analysis results**

##### **2.4.4.1.1.1 Single Lane Analysis**

Based on 2002 traffic data, at the intersection of Arthur Avenue at 6<sup>th</sup> Street, the volume of traffic that would hypothetically enter the roundabout are approximately 1,354 veh/h and 1,804 veh/h during the morning and evening peak hours, respectively. This exceeds the recommendations of RIG, which mention that a single lane roundabout can typically process 1,200veh/h.

A roundabout is considered an “equal opportunity” intersection improvement, which does not allow priority to be given to any one approach. Thus roundabouts tend to work well at intersections where the approach volumes are balanced. However, at the intersection of Arthur Avenue at 6<sup>th</sup> Street, the volume of traffic approaching the intersection along 6<sup>th</sup> Street eastbound and Arthur Avenue southbound is close to 60 percent higher than the approaching volume along Arthur Avenue northbound during the evening peak hour. During the morning peak hour, the Arthur Avenue southbound approach is three times higher than the volume along the Arthur Avenue northbound approach.

Therefore, based on traffic volumes alone, a single lane roundabout is not an appropriate intersection improvement alternative at the intersection of Arthur Avenue at 6<sup>th</sup> Street. While a double lane roundabout would be able to provide the required capacity, a double lane roundabout has impacts associated with right-of-way and non-motorized users as illustrated below.

##### **2.4.4.1.1.2 Double Lane Analysis**

According to RIG the volume of traffic that can typically be handled by a double lane roundabout is 2500 veh/h. According to this data, a double-lane roundabout would be capable of handling the expected traffic volumes at the intersection of Arthur Avenue at 6<sup>th</sup> Street. The intersection was evaluated using aaSIDRA and the results of the analysis suggest that a double lane roundabout has adequate capacity to handle 2002 peak morning (1471 veh/h) and evening (1961 veh/h) traffic. The results of the model using 2012 estimated traffic volumes were an undesirable level of service (D) at the evening (2174 veh/h) peak hour.

#### **2.4.4.1.2 Geometric Impacts**

##### **2.4.4.1.2.1 Single Lane Roundabout**

While it is known that a single lane roundabout will not be able to process the traffic volumes at the intersection of Arthur Avenue at 6<sup>th</sup> Street, a single lane roundabout has been designed to illustrate the expected impacts. As illustrated in Figure 2-1, the roundabout has an inscribed diameter of 44 meters (144 feet). While this is slightly higher than the typical inscribed diameter for a single lane roundabout as illustrated in the RIG, this diameter is required to accommodate WB-67 vehicles with a truck apron along the center island.

This roundabout design will result in additional right-of-way requirements on the west side of Arthur Avenue, including the demolition of one home on the west side of Arthur Avenue that is not included in the MOU, and three homes on the east side of Arthur Avenue

#### **2.4.4.1.2.2 Double Lane Roundabout**

Since a single lane roundabout cannot process the traffic volumes at the intersection of Arthur Avenue at 6<sup>th</sup> Street, a double lane roundabout has been designed for the intersection and is illustrated in Figure 2-2. The double lane roundabout has an inscribed diameter of 60 meters (197 feet) and the inner circle diameter is 36 meters (118 feet). While this is slightly larger than that typically implemented for double lane roundabouts per the RIG, this roundabout design can accommodate WB-67 vehicles circulating next to a passenger vehicle.

This roundabout design will result in additional right-of-way requirements on the west side of Arthur Avenue, including the demolition of at least four homes that are not part of the MOU. Right-of-way requirements on east side of Arthur Avenue would also include the demolition of at least four homes.

#### **2.4.4.1.2.3 Non-Motorized Users**

The pedestrian crossings for the single lane roundabout have been located approximately one vehicle length back from the roundabout yield line (entry point) as recommended by the RIG. As illustrated in Figure 2.1, the pedestrian crossing distance for pedestrians traveling along the south side of 6<sup>th</sup> Street is measured at 94 meters (308 feet). This is almost three times longer than the pedestrian walking distance for the preferred alternative. Given the location of the crosswalk along Arthur Avenue, it is likely that pedestrians may risk entering the roundabout area at an unmarked location to shorten their walking distance, a scenario that could lead to a potentially severe collision.

Pedestrian crossings for the double lane roundabout have been located two vehicle lengths back from the roundabout entry lane in accordance with the recommendations of RIG. As illustrated in Figure 2.2, the pedestrian crossing distance for pedestrians traveling along the south side of 6<sup>th</sup> Street is measured at 132 meters (433 feet). Given the location of the crosswalk along Arthur Avenue, it is highly likely that pedestrians will risk entering the roundabout area at an unmarked location to shorten their walking distance, a scenario that could lead to a potentially severe collision.

### **2.4.5 Site Specific Evaluation**

#### **2.4.5.1 Arthur Avenue at 5th Street**

##### *2.4.5.1.1 Capacity Analysis results*

##### **2.4.5.1.1.1 Single Lane Analysis**

At the intersection of Arthur Avenue at 5<sup>th</sup> Street, based on 2002 traffic figures the volume of traffic that would hypothetically enter the roundabout would be 1,033 vehicles entering per hour (veh/h) and 1,899 veh/h during the morning and evening

peak hours, respectively. This exceeds the recommendations of RIG during the evening peak hour, which mentions that a single lane roundabout typically processes 1,200 veh/h. Furthermore, the volumes illustrated above do not include the Madison Street southbound right-turns. Including these volumes in the proposed roundabout would result in 1,494 veh/h and 2,360 veh/h entering the roundabout during the morning and evening peak hours, respectively.

Again, roundabouts tend to work well at intersections where the approach volumes are balanced. However, at the intersection of Arthur Avenue at 5<sup>th</sup> Street, the volume of traffic approaching the intersection along Madison Street southbound is almost twice as high as the volume approaching along Arthur Avenue northbound and 13 times higher than the volume approaching along 5<sup>th</sup> Street during the morning peak hour. During the evening peak hour, the volume of traffic approaching along Arthur Avenue northbound is 60 percent higher than the volume approaching along Madison Street southbound and 200 percent times higher than the volume approaching on 5<sup>th</sup> Street west. These calculations do not include the Madison Street southbound right-turns.

Therefore, based on traffic volumes alone, a single lane roundabout is not an appropriate intersection improvement alternative at the intersection of Arthur Avenue at 5<sup>th</sup> Street. While a double lane roundabout would be able to provide the required capacity, a double lane roundabout has impacts associated with right-of-way and non-motorized users as illustrated in the next section.

#### **2.4.5.1.1.2 Double Lane Analysis**

According to the data illustrated in RIG, a double lane roundabout would be capable of handling the expected traffic volumes at the intersection of Arthur Avenue at 5<sup>th</sup> Street. The intersection was evaluated using aaSIDRA and the results of the analysis suggest that a double lane roundabout has adequate capacity to handle 2002 peak morning and evening traffic. The results of the model using 2012 estimated traffic volumes were an unacceptable level of service (E) at the evening peak hour.

#### **2.4.5.1.2 Geometric Impacts**

While it is known that a single lane roundabout will not be able to process the traffic volumes at the intersection of Arthur Avenue at 5<sup>th</sup> Street, a single lane roundabout has been designed to illustrate the expected impacts. As illustrated in Figure 2-1, the roundabout has an inscribed diameter of 44 meters (144 feet). While this is slightly higher than the typical inscribed diameter for a single lane roundabout as illustrated in the RIG, this diameter is required to accommodate WB-67 vehicles with a truck apron along the center island.

The approach lanes for the single lane roundabout, specifically the Madison Street bridge southbound approach and the Arthur Avenue northbound approach, will need to be reduced to a single lane to enter the roundabout in order to achieve the proper deflection angles. The neck down to a single lane may have a “bottleneck” effect and cause back-ups to the upstream intersections. The geometric constraints of

the bridge make the 5<sup>th</sup> Street westbound approach practically a free-flowing movement.

As outlined earlier in this section, the right-of-way requirements for a single lane roundabout design will require additional take on the west side of Arthur Avenue as well as the anticipated right-of-way requirements on the east side of Arthur Avenue

#### **2.4.5.1.2.1 Double Lane Roundabout**

Since a single lane roundabout cannot process the traffic volumes at the intersection of Arthur Avenue at 5<sup>th</sup> Street, a double lane roundabout has been designed for the intersection and is illustrated in Figure 2-2. The double lane roundabout has an inscribed diameter of 60 meters (197 feet) and the inner circle diameter is 36 meters (118 feet). While this is slightly larger than that typically implemented for double lane roundabouts per the RIG, this roundabout design can accommodate circulating WB-67 vehicles next to a passenger vehicle.

As outlined earlier in the section, the right-of-way requirements for a double lane roundabout result in significantly more acquisition than was anticipated for this project and additional impacts to the historic district including demolition of at least four homes on the west side of Arthur Avenue

#### **2.4.5.1.2.2 Non-Motorized Users**

The pedestrian crossings for the single lane roundabout have been located approximately one vehicle length back from the roundabout yield line (entry point) as recommended by the RIG. As illustrated in Figure 2-1, the pedestrian crossing distance for pedestrians traveling along the south side of 5<sup>th</sup> Street is measured at 92 meters (302 feet). This is almost twice as long as the pedestrian walking distance for the preferred alternative. Given the location of the crosswalk along Arthur Avenue, it is likely that pedestrians may risk entering the roundabout area at an unmarked location to shorten their walking distance, a scenario that could lead to a potentially severe collision.

As illustrated in Figure 2-2, pedestrian crossing areas have been located two vehicle lengths back from the double lane roundabout entry lane in accordance with the recommendations of RIG. The pedestrian crossing distance for pedestrians traveling along the south side of 5<sup>th</sup> Street is measured at 144 meters (472 feet). This is almost 3 times longer than the pedestrian walking distance for the preferred alternative. Given the location of the crosswalk along Arthur Avenue, it is highly likely that pedestrians will risk entering the roundabout area at an unmarked location to shorten their walking distance, a scenario that could lead to a potentially severe collision.

### **2.4.6 Maurice Avenue at 6<sup>th</sup> Street**

Maurice Avenue at 6<sup>th</sup> Street, at the University access, provides an ideal location for a roundabout for a “gateway” entrance. However, there is simply not enough right-of-way to provide a single or double lane roundabout at this location.

### **2.4.7 Maurice Avenue at 5<sup>th</sup> Street**

Maurice Avenue at 5<sup>th</sup> Street is another possible “gateway” location for the University. While the morning and evening peak hour entering flows are under the threshold for a single lane roundabout, the approach volumes are heavily unbalanced, with almost 10 times as many vehicles approaching the intersection from 5<sup>th</sup> Street westbound as entering from Maurice Avenue northbound. As with the other locations, the right of way is insufficient for a single or double roundabout.

### **2.4.8 Refined Conceptual Alternative**

Roundabouts have proven to not be a feasible alternative for the Arthur Avenue project and are thus not included in analysis of the preferred alternative. The alternative developed during the conceptual phase of this project includes reconstruction from Arthur Avenue from 6<sup>th</sup> to 5<sup>th</sup> Street, reconstruction of the intersections, and realignment of U.S. Highway 12. This was discussed by MDT in association with the City and the University as the refined conceptual alternative for presentation to the public at a community open house and public meeting. Community comment was taken and incorporated into the production of the Preferred Alternative. Section 2.5 through 2.11 describes the preferred alternative.

## **2.5 Preferred Alternative**

The preferred alternative for the Arthur Avenue Reconstruction Project is presented with two possible options in Figures 2-3 and 2-4. The preferred alternative is recommended for advancement into the design and construction process. The methodologies for selecting this design are discussed below. More information on the Preferred Alternative can be found in the revised preliminary traffic report for the Arthur Avenue Project, entitled “Activity 112 – Revised Preliminary Traffic Report.”

## **2.6 Operational Goals - Preferred Alternative**

MDT has established a certain operational goal for the project, which is to reconstruct Arthur Avenue, Maurice Avenue, 5<sup>th</sup> Street, and 6<sup>th</sup> Street without added capacity. The following are additional operation goals of the project:

- Reconstruction without added capacity – Design would look at current capacity and LOS during standard operation and compare it to adjacent intersections to determine if there are significant impacts or stress added to the existing transportation system as a result of the proposed project.
- The system would function under Special Events flows but design would not be based on Special Event capacity and LOS.
- The system should function with safe access for pedestrians and bikes.
- Special Events conditions would be closely coordinated with the University.

- Current (2002) conditions would be used as design characteristics, i.e. capacity and LOS.
- 10-year and 20-year growth would be evaluated for project functionality.
- Other goals listed in Section 1.2.

## **2.7 Proposed Improvements - Preferred Alternative**

The proposed alternative for design has been discussed with MDT, the City, and University and was accepted as the preferred alternative because it best meets all of the needs for the project.

### **2.7.1 Elements of the Preferred Alternative**

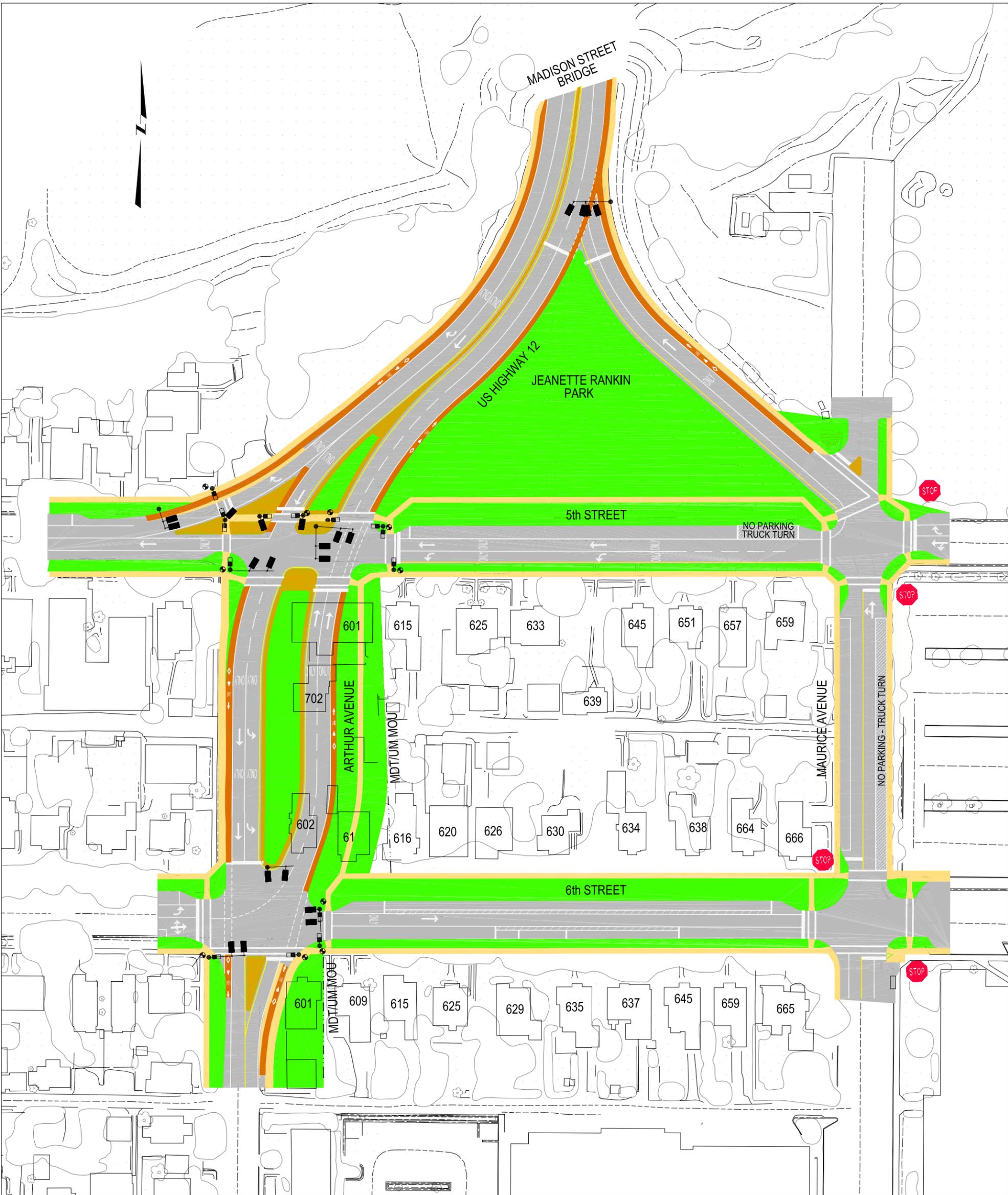
Elements of the preferred alternative are as follows:

- Cross-sectional elements of the Preferred Alternative include, but are not limited to, traffic lanes, parking lanes, bike lanes, shoulders, medians, sidewalks, and vegetated boulevards.
- Intersection treatments including traffic control signals for vehicles, bicycles, and pedestrians.
- Safety and operational improvements including revised geometric conditions, intersection configurations, and multimodal (vehicles, bicycles, and pedestrian) considerations to address concerns with the existing conditions.
- Improved advanced signing for U.S. Highway 12 and the University to reduce driver confusion upon entering the area.
- Non-motorized facilities including pedestrian sidewalks built in conformance to current Americans with Disabilities Act (ADA) accessibility standards and bike lanes to accommodate the large number of non-motorized commuters.
- Additional infrastructure elements such as guardrails, curbs and gutters, and improved storm drainage system and streetscape lighting walls would also be added where necessary to improve safety.

Elements of the Preferred Alternative are shown in Figures 2-3 and 2-4.

### **2.7.2 Roadway, Sidewalk, and Bicycle Improvements - Preferred Alternative**

All of the roadway and sidewalk improvements would meet the requirements of MDT's 2000 Road Design Manual and the ADA accessibility guidelines. Sections 2.7.2.1 through 2.7.3.5 show the approximate preliminary dimensions and configurations of the preferred alternative.



LEGEND

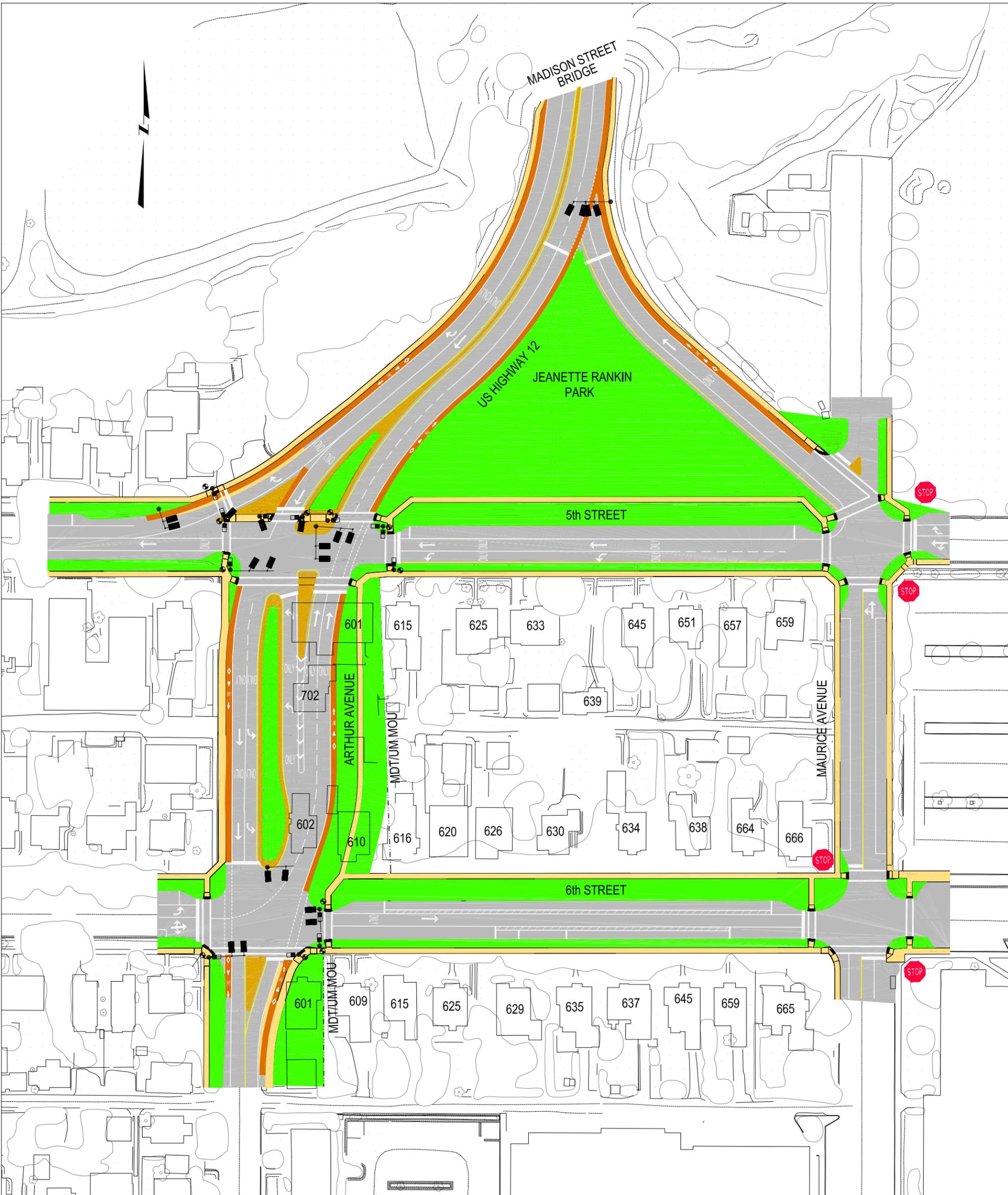
-  PROPOSED GRASS/LANDSCAPE AREA
-  PROPOSED PAVEMENT
-  PROPOSED CONCRETE AREA
-  PROPOSED SIDEWALK
-  PROPOSED BICYCLE LANE

-  PROPOSED PEDESTRIAN PUSH BUTTON
-  PROPOSED PEDESTRIAN SIGNAL
-  PROPOSED TRAFFIC SIGNAL
-  PROPOSED STOP
- 

20 10 0 20 40  
SCALE IN METERS  
(1:500)

ARTHUR AVENUE  
PREFERRED ALTERNATIVE  
OPTION 1 (NO LEFT TURN LANE)

FIGURE 2-3



LEGEND

-  PROPOSED GRASS/LANDSCAPE AREA
-  PROPOSED PAVEMENT
-  PROPOSED CONCRETE AREA
-  PROPOSED SIDEWALK
-  PROPOSED BICYCLE LANE

-  PROPOSED PEDESTRIAN PUSH BUTTON
-  PROPOSED PEDESTRIAN SIGNAL
-  PROPOSED TRAFFIC SIGNAL
-  PROPOSED STOP

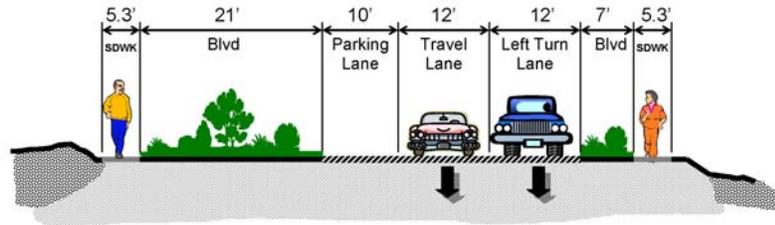
20 10 0 20 40  
SCALE IN METERS  
(1:500)

ARTHUR AVENUE  
PREFERRED ALTERNATIVE  
OPTION 2 (LEFT TURN LANE)

FIGURE 2-4

### 2.7.2.1 5<sup>th</sup> Street

5<sup>th</sup> Street east of Maurice Avenue would continue to serve two-lane westbound traffic with a lane reconfiguration to one left /through lane and one right turn only lane.



5<sup>th</sup> Street between Arthur Avenue & Maurice Avenue

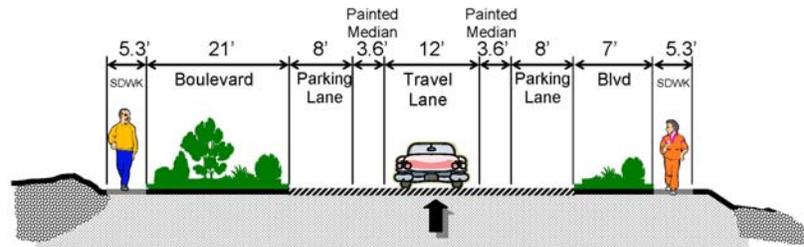
Between Arthur Avenue and Maurice Avenue, 5<sup>th</sup> Street would have two lanes, one exclusive through lane, and one left turn only lane. A parking lane on the north side of the travel lane and a sidewalk on either side would be separated by a boulevard.

On the west side of Arthur Avenue, 5<sup>th</sup> Street would have two travel lanes (westbound) with a parking lane on both sides and sidewalks separated by a boulevard. The combination of the two lanes would occur because of the one through lane of 5<sup>th</sup> Street westbound and the one lane entering from the Madison Street Bridge.

### 2.7.2.2 6<sup>th</sup> Street

Sixth Street west of Arthur Avenue would retain its two-travel lane and two parking lane configuration. The lane markings would be modified such that the northern lane is a left turn only lane and the southern lane would be a left, straight, right turn lane. Boulevards and sidewalks would be carried through to the intersection on the southern side of 6<sup>th</sup> Street.

Between Arthur Avenue and Maurice Avenue, 6<sup>th</sup> Street would consist of one travel lane eastbound with parking lanes on the north and south side. A



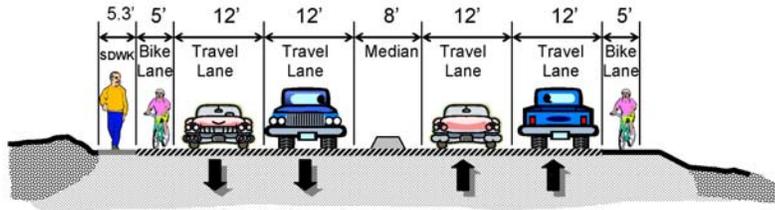
6<sup>th</sup> Street between Arthur Avenue & Maurice Avenue

painting median would separate the parking lanes from the travel lane. This median would allow for emergency access. Sidewalks would be set back from the curb by the existing boulevards. On the north side of this section of roadway the boulevard would be widened because of the removal of the second lane of traffic.

East of Maurice Avenue, 6<sup>th</sup> Street would enter the University as it currently does with two travel lanes angled parking on either side. Sidewalks would sit adjacent to the curb on both sides of the roadway.

### 2.7.2.3 Arthur Avenue

Arthur Avenue southbound would exit the Madison Street Bridge using the existing lane configuration of two travel lanes, a bike lane, and one sidewalk. The new configuration would retain the travel lanes and the bike path on the west side. A

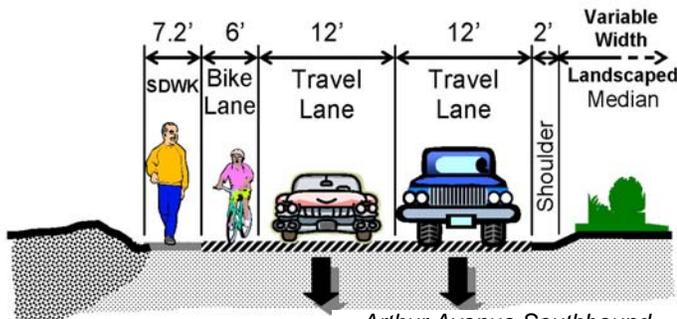


sidewalk would lie west of the bike path. A raised median would separate north and southbound traffic.

Arthur Avenue South of Madison Street Bridge

As Arthur Avenue southbound approaches the 5<sup>th</sup> Street intersection, the western lane, bicycle lane, and sidewalk peel off and connect tangentially with 5<sup>th</sup> Street. Between 5<sup>th</sup> Street and 6<sup>th</sup> Street, Arthur Avenue consists of two southbound travel lanes, one southbound bike lane on the west side, a shoulder on the east side between the turn lane and landscaped median, and a sidewalk on the west side. The travel lanes in this section are configured with the west lane for through traffic and the east lane as a left turn only.

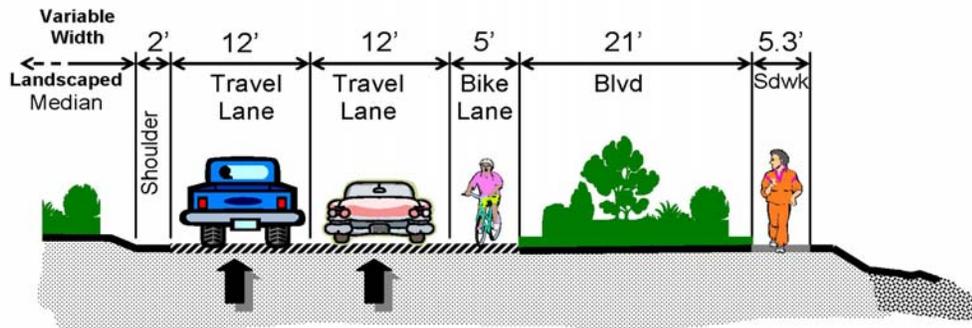
As Arthur Avenue



South of 6<sup>th</sup> Street, Arthur Avenue northbound and southbound recombine into a two lane, two way roadway with a bicycle lane on the outside of the travel lanes and sidewalks on either side.

Arthur Avenue northbound (Option 1), illustrated in

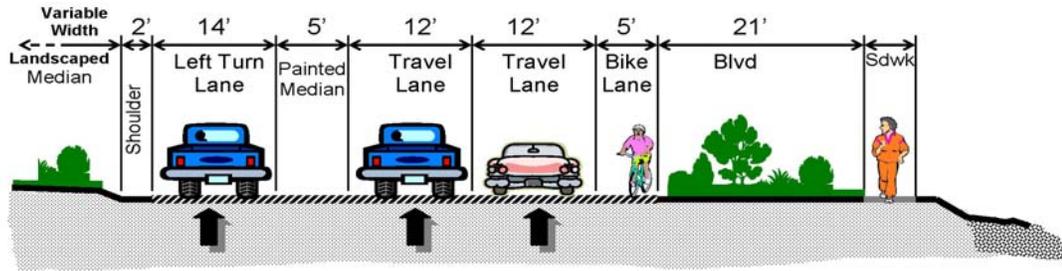
Figure 2-3, between 5<sup>th</sup> Street and 6<sup>th</sup> Street has two travel lanes for thru traffic northbound. This alternative (no left turn) would not allow access to 5<sup>th</sup> Street from Arthur Avenue. Rather, 5<sup>th</sup> Street westbound traffic would be diverted around the block. On the west side, a shoulder would separate the travel lane from a landscaped median. On the right side of the travel lane would be a bike lane and next to the bike lane would be a boulevard and a sidewalk. This option provides a pedestrian



Arthur Avenue Northbound (Option 1)

crossing distance of around 90 feet on the south side of 5<sup>th</sup> Street at Arthur Avenue.

Arthur Avenue northbound (Option 2), illustrated in Figure 2-4, between 5<sup>th</sup> Street and 6<sup>th</sup> Street has two travel lanes for thru traffic northbound and a left turn lane for 5<sup>th</sup> Street westbound traffic. This option also has a bike lane on the east side and a boulevard separating the street and sidewalk. A landscaped median lies on the east side of the street, separated from the travel lane by a shoulder. This option results in a pedestrian crossing distance of around 100 feet.

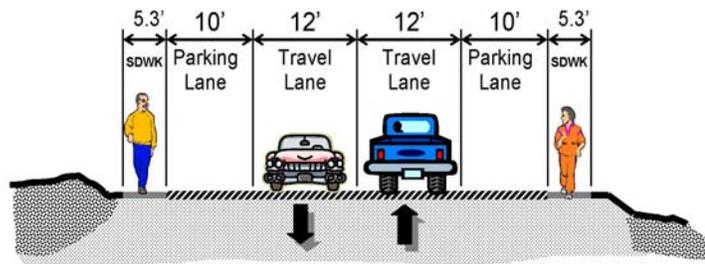


Arthur Avenue Northbound (Option 2)

For each option, between 5<sup>th</sup> Street and the Madison Street Bridge, Arthur Avenue would have two northbound travel lanes with a shoulder on the west side of the travel lanes, a bicycle lane on the east side of the travel lanes, and a sidewalk adjacent to the bicycle lane. This section would connect with the Arthur Avenue Southbound section and create the section shown previously for Arthur Avenue south of Madison Street Bridge.

**2.7.2.4 Maurice Avenue**

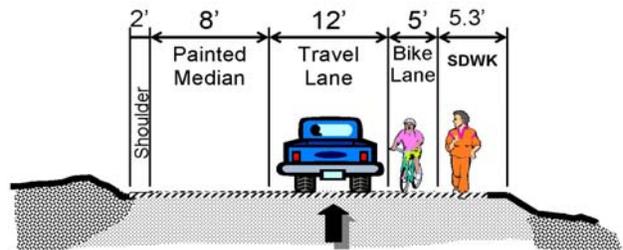
Maurice Avenue, south of 6<sup>th</sup> Street would consist of a two way, two lane roadway with travel lanes, parking lanes on either side of the travel lanes, and sidewalks adjacent to the parking lanes.



Maurice Ave. between 5<sup>th</sup> Street & 6<sup>th</sup> Street

Between 5<sup>th</sup> Street and 6<sup>th</sup> Street, Maurice Ave would consist of a two way, two lane roadway, parking lanes on either side of the travel lanes, and sidewalks adjacent to the parking lanes.

Between 5<sup>th</sup> Street and the Madison Street Bridge connection, Maurice Avenue would have two lanes for northbound traffic. Only the eastern lane would be marked. On the outside of the western lane would be a shoulder and the eastern lane



Maurice Avenue between 5<sup>th</sup> Street & Madison Street Bridge

would about a bicycle lane. A sidewalk would be placed behind the bicycle lane. This section would connect into the existing Madison Street Bridge configuration.

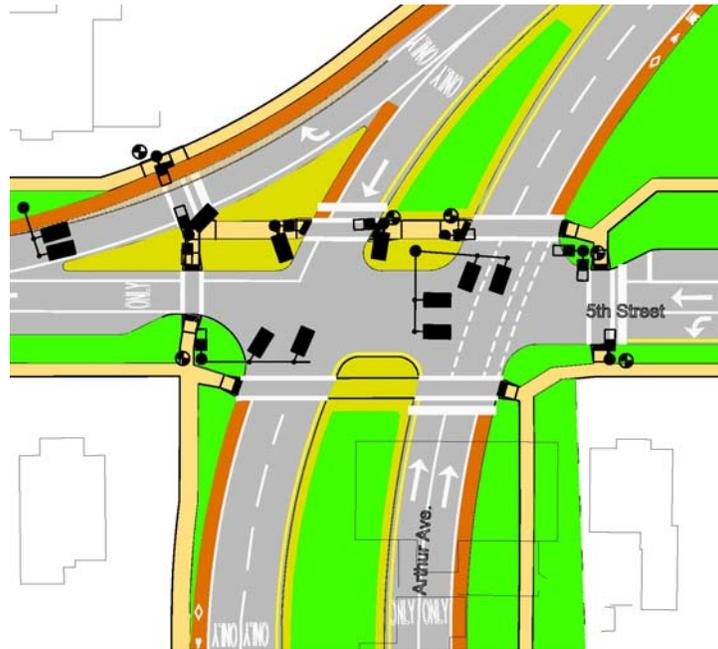
### **2.7.3 Intersection Improvements - Preferred Alternative**

Under the proposed build conditions for Option 1, there would be three new traffic signal controlled intersections and two stop sign controlled intersections. All U.S. Highway 12 turning movements would be designed for a 67 foot (20.42 meter) wheel base tractor-trailer (WB-67). Additionally, under Option 1, turning movements for traffic wishing to head westbound on 5<sup>th</sup> and that is diverted around the block will also be designed for WB-67 tractor-trailer. This will have impacts on street parking illustrated in Figure 2-3.

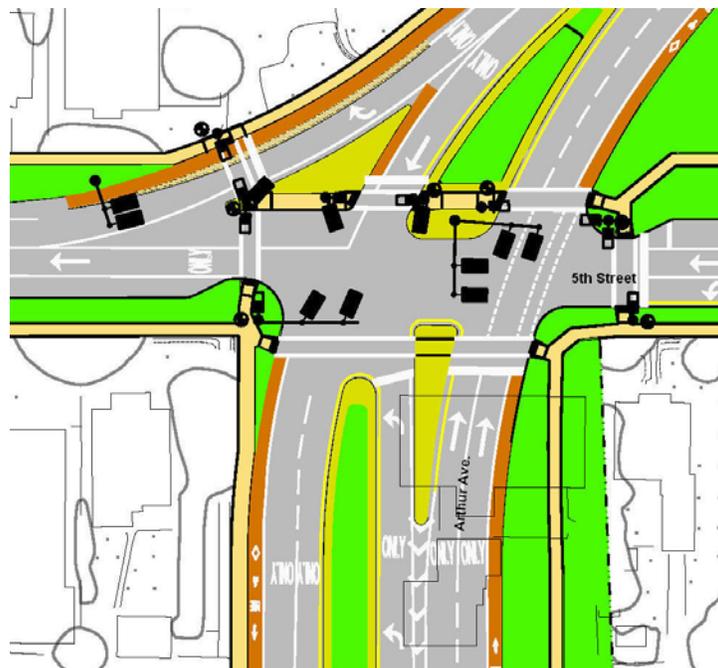
Under the proposed build condition for Option 2, there would also be three new traffic signal controlled intersections and two stop controlled intersections. All U.S. Highway 12 traffic turning movements would be designed for WB-67 tractor-trailer traffic. All non-US Highway 12 turning movements would be designed for 50-foot wheel base tractor-trailer (WB-50). Bump-outs would be incorporated into the intersection to aid in pedestrian crossings. The bump-out narrows the roadway width in the intersections by placing raised islands that protrude out into the intersections. These bump-outs allow for shorter crossing distances for pedestrians and increase visibility of both pedestrians and vehicles.

#### **2.7.3.1 5<sup>th</sup> Street at Arthur Avenue**

The intersection at 5<sup>th</sup> Street and Arthur Avenue would be a new signalized location. Southbound Arthur Avenue traffic would be controlled by the traffic signal and would have the ability to pass through the intersection and continue south on Arthur Avenue. This approach can also avoid the traffic light by taking a free right turn and continue west on 5<sup>th</sup> Street. Arthur Avenue northbound would have two lanes for thru traffic to access the Madison Street Bridge and a left turn bay to access 5<sup>th</sup> Street westbound. Fifth Street would have two lanes entering the intersection from the east. One lane would be a through lane to access 5<sup>th</sup> Street westbound and one would be a left turn lane to access Arthur Avenue southbound. Crosswalks would be incorporated along all four sides of the intersection.



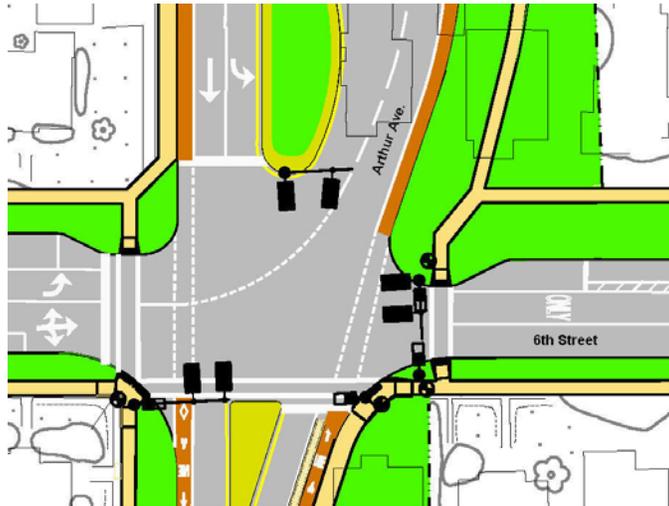
Option 1 – No Turn Lane



Option 2 – Turn Lane

### 2.7.3.2 6<sup>th</sup> Street at Arthur Avenue

The 6<sup>th</sup> Street and Arthur Avenue intersection would also be a signalized intersection. The layout of the intersection and lane configuration would be as depicted in the accompanying figure. There would be crosswalks on the east, west, and south sides of the 6<sup>th</sup> Street/Arthur Avenue intersection.



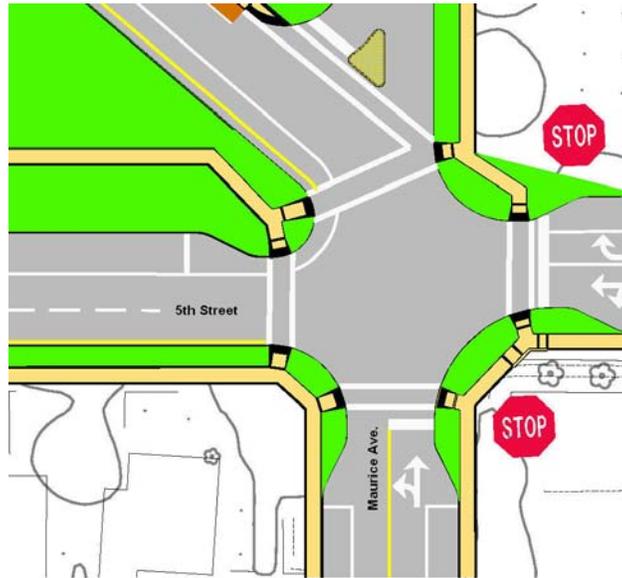
### 2.7.3.3 6<sup>th</sup> Street at Maurice Avenue

The intersection of 6<sup>th</sup> Street and Maurice Avenue would be a stop-controlled intersection. The 6<sup>th</sup> Street movement would be free and the Maurice Avenue movements would be under stop sign control. This intersection would have crosswalks on all four sides that include pedestrian bump-outs to shorten crossing distances.



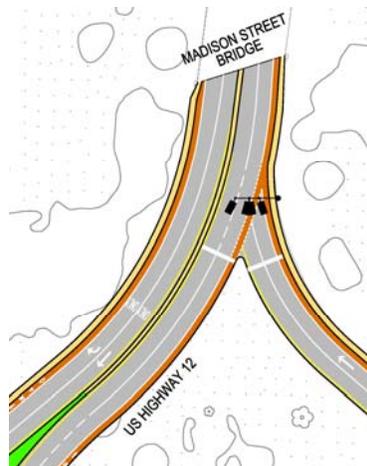
### 2.7.3.4 5<sup>th</sup> Street at Maurice Avenue

The 5<sup>th</sup> Street and Maurice Avenue intersection would also be a stop sign controlled intersection. This intersection would have cross walks on all four sides of the intersection and include pedestrian bump-outs to shorten crossing distances. A bump-out simply extends the sidewalk into the street, making the crossing distance shorter.



### 2.7.3.5 Arthur Avenue near the Madison Street Bridge

The intersection to the south of the Madison Street Bridge would be a new signaled intersection to accommodate the new U.S. Highway 12 traffic east bound on Arthur Avenue and the north bound traffic on Maurice Avenue. The layout of the intersection and land configuration would be as described in the accompanying figure.



## **2.8 Assessment of Preferred Alternative Analysis**

All of the above intersections meet the “no added capacity” definition and show desirable overall LOS for both AM and PM operations. This analysis can be found in the Revised Preliminary Traffic Report and is available from MDT at the request of any interested party. The following is a summary of some of the issues described in the Preliminary Traffic Report. The LOS essentially describes how efficiently traffic flows at each intersection. If traffic flows more efficiently than before the project was instituted, there would be an improvement in air quality for the area, given the same volume of traffic. The volume to capacity (v/c) ratio on all approaches is less than 1.00, indicating all movements are operating under capacity. When compared to the No-Build results, the proposed project shows significant operational improvements with decreases in delay and better LOS for all of the intersections within the project area. The proposed project layout also provides for safer bicycle and pedestrian access through the system, particularly near the University. This is a direct result of the preferred alternative that re-aligns U.S. Highway 12 to Arthur Avenue and removes a significant amount of volume from Maurice Avenue.

## **2.9 Special Events and University Access/Egress**

Special Events and the University Access/Egress issues have been analyzed under both existing and proposed conditions. A summary of results can be found in the Revised Preliminary Traffic Report which is available to the public from MDT. Below is a brief synopsis of the information provided in the Revised Preliminary Traffic Report.

### **2.9.1 Special Events**

Special events traffic data (turning movement counts) were collected on Saturday, September 14, 2002, after a University football game at all four existing intersection locations. Under existing conditions, special events traffic conflicts with U.S. Highway 12 traffic causing long delays and over capacity conditions at all of the unsignalized intersection locations. The preferred alternative, build condition analysis shows significant operational improvements at 5<sup>th</sup> Street/ Arthur Avenue, 5<sup>th</sup> Street/Maurice Avenue, and 6<sup>th</sup> Street/Maurice Avenue. All of the approaches have a v/c less than 1.0 and the LOS is improved from the No-Build Alternative.

### **2.9.2 University Access and Egress on 5th Street and 6th Street - Preferred Alternative**

Under existing conditions, 5<sup>th</sup> Street and 6<sup>th</sup> Street between Arthur Avenue and Maurice Avenue consist of one-way, two-lane traffic. Traffic flows west bound on 5<sup>th</sup> Street and east bound on 6<sup>th</sup> Street. The single lane entrance to the University is located at the intersection of 6<sup>th</sup> Street and Maurice Avenue. Traffic exits the University by a two-lane roadway at the intersection of 5<sup>th</sup> Street and Maurice Avenue.

The proposed project analyzed one-lane and two-lane configurations on 5<sup>th</sup> Street and 6<sup>th</sup> Street for the AM and PM peak hours. The results showed that there would be no

significant difference in operations between the two options; all intersections have acceptable LOS and minimal delays.

The preferred alternative should consist of the two-lane configuration on 5<sup>th</sup> Street with the southern lane designated left turn only. Sixth Street should be modified from a two-lane east bound traffic pattern to one-lane traffic eastbound, and 6<sup>th</sup> Street should also include an oversize bicycle lane. The bike lane is oversized to accommodate emergency vehicles. The revised configuration on 6<sup>th</sup> Street would align with the existing one-lane access to the University.

## **2.10 Assessment of Traffic Conditions Outside of Project Limits - Preferred Alternative**

As part of the operation goals described in Section 2.6 above, three signalized intersections outside of the project area were analyzed to confirm that the proposed Arthur Avenue project improvements do not cause impacts to the adjacent intersections and that there is “no added capacity.” The intersections include Madison Street at Broadway, 5<sup>th</sup> Street at Higgins Avenue, and 6<sup>th</sup> Street at Higgins Avenue.

A complete operational analysis and assessment of these intersections compared to the Project locations is included in the Revised Preliminary Traffic Report. In general, the 5<sup>th</sup> Street at Arthur and 6<sup>th</sup> Street at Arthur intersections operate at similar LOS to those at 5<sup>th</sup> Street/Higgins Avenue and 6<sup>th</sup> Street/Higgins Avenue. The Arthur Avenue intersections show better operation than the intersection of Madison/Broadway. The analysis shows that the Arthur Avenue project would improve existing functional levels at the intersections within the project area and preserve the functionality of U.S. Highway 12 without causing any reduction in the level of service at adjacent intersections.

## **2.11 Advantages and Disadvantages of Option 1 and Option 2 in the Preferred Alternative**

Section 2.5 through 2.11 describe the preferred alternative for the Arthur Avenue project. The preferred alternative has two sub-options with the advantages and disadvantages described below:

Advantages of Preferred Alternative Option 1 (no turn lane)

- Not including a turn lane will reduce the crossing length by approximately 3 meters (10 feet) and reduce pedestrian crossing times.
- The reduction in overall width of Arthur Avenue may fit better with the character of the streets in the existing neighborhoods.

Disadvantages of Preferred Alternative Option 1 (no turn lane)

- Traffic approaching 5<sup>th</sup> Street from the south would have to turn right on 6<sup>th</sup>, left on Maurice, and left on 5<sup>th</sup> to travel west on 5<sup>th</sup> Street. More traffic would travel on the proposed University interior streets (Maurice).
- Turning movements required to go from Arthur northbound to 5<sup>th</sup> Street westbound have less visibility compared to a single permissive left turn at Arthur and 5<sup>th</sup>. Total travel time is increased for this movement which will have a negative impact on air quality.
- A necessary reduction in street parking along 6<sup>th</sup>, Maurice, and 5<sup>th</sup> due to the added width necessary for WB-67 truck traffic.

# **Section 3**

## **Affected Environment, Impacts, and Mitigation Measures**

### **3.1 Introduction**

This section describes the environment that may be affected by the proposed reconstruction of U.S. Highway 12 at Arthur Avenue and 5<sup>th</sup> and 6<sup>th</sup> Streets in Missoula. Descriptions of potentially affected environment were obtained through site visits and field surveys/research, contacts with governmental agencies, literature reviews, and numerous public involvement activities.

This section discusses the potential environmental impacts of the Preferred Alternative and those associated with the No Action alternative. If an action has a potential impact, either alone or cumulative with other projects, appropriate measures to mitigate the impacts are discussed. If the Preferred Alternative is advanced, MDT will implement the mitigation measures identified.

### **3.2 Landforms, Geology, and Soils**

#### **3.2.1 Affected Environment**

The project area is located in the Missoula Valley adjacent to the University, and directly south of the Clark Fork River. The project area is generally flat with a gentle slope from the south to the north toward the Clark Fork River, which is located outside of the project area. Foothills surrounding the Missoula Valley rise from the valley floor beginning approximately one-half mile (0.8 km) to the east. No designated wetlands, floodplains, or other surface water bodies are present in the project area. One irrigation ditch bisects the northern boundary of the project area. Storm drains have been identified in the project area and runoff from the project area is likely to flow to these storm drains. Storm water from the east side of the project drains into the irrigation ditch to the north of the project via the underground storm drain lines. Storm water from the west side of the project enters the storm drain system along Arthur Avenue. Once the water enters the storm drain system on the west side of the project area, it is conveyed west in the City's storm drain system.

The Missoula Valley is bordered by the Clark Fork Fault to the northeast, the Ninemile Fault and the Albert Creek Thrust to the southwest, and a transverse fault to the east (McMurtrey, et al. 1965). The geology of the Missoula Valley is identified in the "Sole Source Aquifer Petition for the Missoula Valley Aquifer" as follows:

"The Missoula Valley is covered by alluvial and lacustrine sediments of Quaternary age, 1.6 million years ago to the present. The low rolling foothills surrounding the valley floor are principally composed of fine-grained sediments internally drained during the Tertiary period, 43 to 53 million years ago. The prominent Mount Jumbo and Mount Sentinel to the east and the mountain ranges surrounding the valley are composed of Precambrian metasediments of the Belt Supergroup, 0.8 to 1.6 billion years in age (Missoula City/County Health Department (MCCHD) no date)."

Pleistocene (11,000 to 1.8 million years ago) glacial activity in the Missoula Valley resulted in blockage of the mouth of the Missoula Valley on the northwest, backing up the drainages, and forming glacial Lake Missoula. The dam was breached and reformed multiple times. Sediment deposition resulting from this intermittent lake consists of thin layers of fine-grained silts and sands interbedded with coarse-grained stream deposits (Envirocon 1998a).

Soil in the project area consists of the Moiese gravelly loam that is a deep, excessively-drained soil formed in alluvium on alluvial fans and streams terraces. The permeability is moderate, approximately 0.6 to 2.0-inches (1.52 to 5 cm) per hour (Soil Conservation Service, no date). Observations of other locations in Missoula indicated that the area is underlain primarily by non-cohesive, coarse-grained sands and gravels with some silts and cobbles to a depth of approximately 150-feet (45.72 m) (Envirocon 1998a).

The Missoula Aquifer as found throughout the Missoula Valley is an unconfined alluvial aquifer composed predominantly of Quaternary-age (1.8 million years ago to the present) coarse-grained sand and gravel. The majority of the recharge to the Missoula Aquifer is from infiltration from the Clark Fork River. Additional recharge is derived from infiltration of small streams and irrigation ditches and from precipitation. The Clark Fork River, located approximately 328 feet (100 meters) north of the site, is a losing river where it enters the Missoula Valley but becomes a gaining river as it flows through the valley. Regional groundwater flow direction in the Missoula Aquifer generally follows the Clark Fork River; however, local flow direction varies with the orientation of the fine-grained layers within the aquifer material (Envirocon 1998a).

### **3.2.2 Impacts of the Preferred Alternative**

The proposed reconstruction of Arthur Avenue would have little or no impact to land forms, geology or soils. It is anticipated that some limited cut and/or fill would be necessary to create a smooth transition from the bridge down to 5<sup>th</sup> Street. However, because the project must connect to existing bridges and streets, earth work must tie into the existing structures.

### **3.2.3 Mitigation Measures**

Because there are no impacts to landforms and geologic conditions, no mitigation efforts are necessary. The final roadway and project area would be very similar to what is currently present and it would be replanted with stable sod, bushes, trees and other vegetation.

## **3.3 Important Farmland**

The project is located entirely in an urban residential setting. No farmland is present at or adjacent to the site.

## **3.4 Water Resources and Quality**

### **3.4.1 Affected Environment**

The project is located adjacent to the Clark Fork River. In addition, a Mountain Water Company public water supply well is present on the east side of the Madison Street Bridge couplet. Storm water from the site discharges to the Clark Fork River.

### **3.4.2 Impacts of the Preferred Alternative**

The Missoula aquifer is a highly transmissive gravel aquifer and is designated by the EPA as a Sole Source Aquifer, and is afforded special consideration. Given the proximity of the River and water supply well to the project, any fuel spills, solvent spills, or other hazardous material accidents could have an impact on water quality.

### **3.4.3 Mitigation Measures**

The following mitigation measures would be exercised in the special provisions for the preferred alternative contract.

- Disallow any storage containers [greater than 25 gallons (95 liters)] of fuel, solvents, or other hazardous materials at the project site, specifically in the recharge area of the public water supply well.
- Allow refueling only in a designated containment area.
- Require provisions for immediate spill containment.

## **3.5 Floodplains**

### **3.5.1 Affected Environment**

Executive Order 11988 and FHWA floodplain regulations (23 CFR 650, Subpart A) require an evaluation of the Arthur Avenue project to determine if any of its alternatives encroach on the “base” floodplain. The “base” floodplain is defined as the area covered during water encroachment due to the “100-year” flood. The “100-year” flood represents an event, which has approximately a one percent chance of occurrence in every year.

The Federal Emergency Management Agency (FEMA) has delineated approximate 100-year floodplain boundaries for the following waterways near the project:

- Clark Fork River
- Rattlesnake Creek

Figure 3-1 is FEMA Map Number 30063C1480 D, which has an effective date of August 16, 1988. This map shows floodplain information in relation to the Arthur Avenue project.

The existing alignment crosses the Clark Fork River down stream of the introduction of Rattlesnake Creek via the Madison Street Bridge. The proposed build alternative

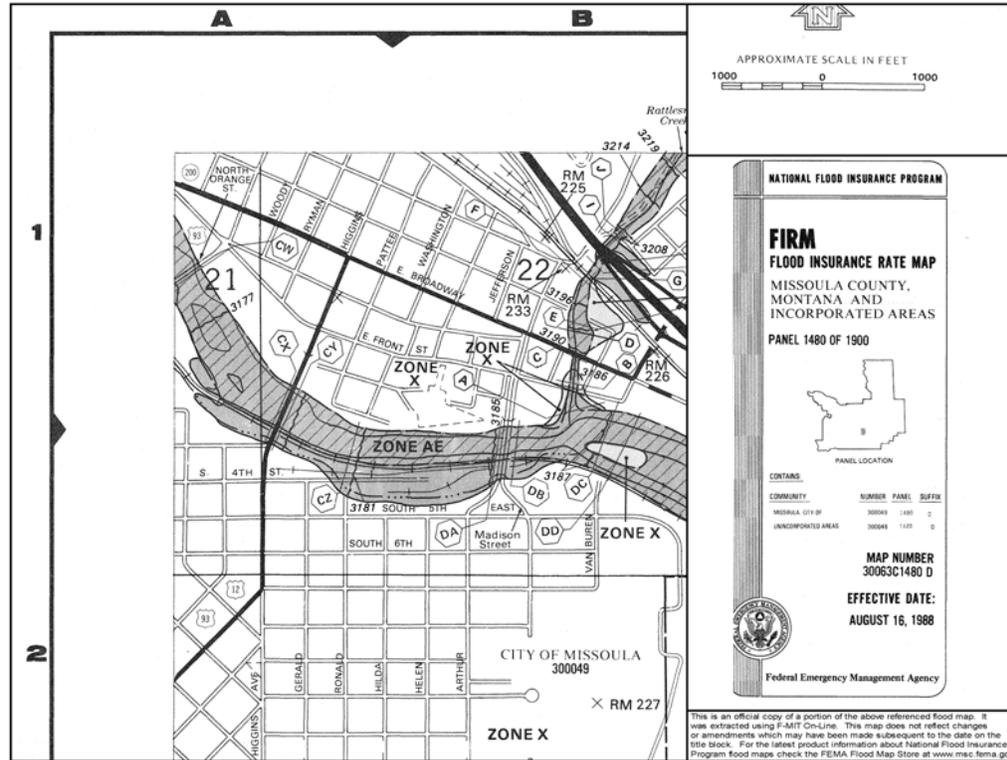


Figure 3-1  
FEMA Map Number 30063C1480D

would not affect the Madison Street Bridge, and only minor modifications would be performed on the southern approach. As such, the project would have no impact on the floodplain.

### 3.6 Air Quality

#### 3.6.1 Affected Environment

The Missoula air quality region is in attainment of the National Ambient Air Quality Standards (NAAQS)/Montana Ambient Air Quality Standards (MAAQS) for nitrogen oxides (NO<sub>x</sub>), sulfur dioxide (SO<sub>2</sub>) and ozone (O<sub>3</sub>), but is nonattainment for carbon monoxide (CO) and particulate matter less than 10-microns (PM<sub>10</sub>). The Missoula area has a history of exceeding the 24-hour average and annual average PM<sub>10</sub> NAAQS and the eight-hour average CO NAAQS. Missoula was designated nonattainment for CO in 1979. The 1990 Clean Air Act Amendment (CAAA) designated CO nonattainment areas as either moderate or serious. Based on monitoring from 1986 through 1988, Missoula was classified as a moderate nonattainment area for CO. However, Missoula has not violated the eight-hour average CO NAAQS since the implementation of the oxygenated fuels program, which began on November 1, 1992. Since Missoula has had more than three years of monitoring with no exceedances of the NAAQS, Missoula is eligible for applying for redesignation as an attainment area for CO. A maintenance plan showing that Missoula would not violate the standards must be developed by the MCCHD.

Missoula exceeded the annual average PM<sub>10</sub> standard in 1986 and exceeded the 24-hour PM<sub>10</sub> standard several times between 1987 and 1989. Because of these exceedances, Missoula was designated a non-attainment area for PM<sub>10</sub>. To reduce PM<sub>10</sub> emissions, the Missoula City/County Air Pollution Control Board adopted regulations on local sources of PM<sub>10</sub>, such as residential wood stoves, outdoor burning, industry, fugitive emissions, street sanding, and street maintenance to reduce PM<sub>10</sub> emissions. As a result of these regulations, Missoula has not violated either the 24-hour average or annual average PM<sub>10</sub> NAAQS since 1989. Missoula is currently a maintenance area for PM<sub>10</sub>.

### **3.6.2 National Ambient Air Quality Standards**

One of the primary purposes of the Clean Air Act (CAA) is to protect and enhance the quality of our nation's air resources. To accomplish this goal, the CAA requires the U.S. Environmental Protection Agency (EPA) to promulgate primary and secondary NAAQS. Primary NAAQS are those that allow for an adequate margin of safety to protect the public health. Secondary NAAQS are those required to protect the public welfare.

The CAA delegates to state environmental agencies, such as the Department of Environmental Quality (DEQ), the responsibility for attaining and maintaining these NAAQS by requiring that they adopt a plan that provides for the implementation, maintenance, and enforcement of the NAAQS. Within Missoula County, the Missoula City-County Health Department is responsible for attaining and maintaining NAAQS. The EPA must review and approve each State Implementation Plan (SIP) consistent with the requirements of the CAA. States may also establish their own Ambient Air Quality Standards (AAQS). DEQ has adopted AAQS for several criteria air pollutants.

Criteria pollutants are those for which NAAQS have been established. The "criteria" air pollutants CO, particulate matter with an aerodynamic diameter of 10 microns or less, volatile organic compounds (VOCs), and NO<sub>x</sub> are contained in motor vehicle exhaust. VOCs and NO<sub>x</sub> are known precursors to ozone (smog) formation. Table 3-1 lists the NAAQS for NO<sub>x</sub>, CO, O<sub>3</sub>, and PM<sub>10</sub>.

### **3.6.3 EPA/DOT Conformity Requirements**

EPA's final conformity regulations provide the criteria and procedures required by the CAA. The regulations appear in two forms: 1) under 40 CFR 51 - State Implementation Planning, and 2) 40 CFR 93 - Determining Conformity of Federal Alternatives to state or Federal Implementation Plans. The transportation conformity regulations were effective November 24, 1993 and apply to EPA-designated air quality nonattainment and maintenance areas. The regulations also apply to all "regionally significant" highway and transit projects, not just those that trigger a federal action, or receive federal funds.

**Table 3-1  
Ambient Air Quality Standards (ppm)**

Pollutant	Averaging Time	NAAQS <sup>1</sup>	MAAQS <sup>2</sup>	Primary/Secondary <sup>3</sup>
Nitrogen oxides (NO <sub>x</sub> )	1-hour	--	0.30	--
	Annual	0.053	0.053	Primary and Secondary
Carbon Monoxide (CO)	1-hour	35	23	Primary
	8-hour	9	9	Primary
Ozone (O <sub>3</sub> )	1-hour	0.12	0.10	Primary and Secondary
	8-hour	0.08	--	Primary and Secondary
PM <sub>10</sub>	24-hour	150 ug/m <sup>3</sup>	150 ug/m <sup>3</sup>	Primary and Secondary
	Annual	50 ug/m <sup>3</sup>	50 ug/m <sup>3</sup>	Primary and Secondary

<sup>1</sup> National Ambient Air Quality Standards

<sup>2</sup> Montana Ambient Air Quality Standards

<sup>3</sup> Primary standards are not to be exceeded more than once per year.

A "regionally significant" transportation project is a principal arterial or higher functional classification, plus any other facility that serves regional transportation needs, and would normally be included in the SIP emissions modeling for the transportation network. The Metropolitan Planning Organization (MPO) or U.S. Department of Transportation (DOT) responsible for the approval or support of the affected transportation-related plans, programs, or projects must conduct a conformity analysis. The regulations also require a regional emissions modeling analysis of transportation-related plans and programs, and transportation projects. In addition, the conformity regulations under 40 CFR 93.116, requires local CO and PM<sub>10</sub> "hot spot" analyses be required for some projects in nonattainment areas.

The Arthur Avenue Reconstruction Project is located in CO and PM<sub>10</sub> nonattainment areas (See Section 3.6). The local MPO, in consultation with MDT, DEQ, the Missoula City-County Health Department, and EPA, is responsible for air quality conformity for the Missoula urban area. Missoula's conformity determination for the Missoula 2004 Transportation Plan Update was effective June 7, 2004. The MPO has determined that the plan meets the conformity requirements. Therefore, a project-related conformity analysis, which includes a regional emissions and CO/PM<sub>10</sub> hot spot analyses, is not required for this Environmental Assessment.

A general and less technical discussion of the potential air quality impacts of the project is presented below in Section 3.7.

### 3.7 Existing Traffic Conditions

The intersections were analyzed using the methodology of the Highway Capacity Manual (HCM) and its standard LOS rating system. The LOS is defined as a

qualitative measure describing operational conditions within a traffic stream and their perception by motorists and/or passengers. A LOS definition provides an index to quality of traffic flow in terms of such factors as speed, travel time, freedom to maneuver, traffic interruptions, comfort, convenience, and safety. It can also be indirectly used, on a broad basis, to get an understanding of air quality because long queues or delays and more traffic equate to higher emissions than no delays, short queues, and less traffic.

During AM peak traffic volumes, the four intersections within the project limits operate at acceptable Levels of Service that equate to good traffic capacity, and minor delay. The PM peak traffic volumes vary at each intersection and range from an “F” for one or more approaches at Arthur Avenue at 5<sup>th</sup> Street, Maurice Avenue at 6<sup>th</sup> Street and Maurice Avenue at 5<sup>th</sup> Street. The “F” rating is the worst rating based on the Highway Capacity Manual and indicates poor capacity, long delays, and queuing. Only 6<sup>th</sup> Street at Arthur Avenue had an acceptable LOS for all approaches. During non-peak hour operations, all intersections can be described as good.

### **3.7.1 Impacts of the Preferred Alternative**

As stated in Section 2 of this document, the Arthur Avenue Reconstruction Project’s primary objective is to improve traffic, bicycle, and pedestrian flow on U.S. Highway 12 near the University allowing the safe and efficient movement of traffic. For this reason, the preferred alternative would not be expected to result in adverse air quality impacts. With the proposed removal of U.S. Highway 12 traffic from 6<sup>th</sup> Street and Maurice Avenue, the traffic volume decreases approximately 75 percent on 6<sup>th</sup> Street and 95 percent on Maurice Avenue (over an entire day based upon traffic count data). In addition, the proposed U.S. Highway 12 intersection improvements to Arthur Avenue at 5<sup>th</sup> Street and Arthur Avenue at 6<sup>th</sup> Street are equal to or better than the existing condition’s AM/PM peak hour LOS. Because there is a more efficient flow of traffic with less waiting at intersections and a shorter, more direct, route for traffic, air quality would be improved.

Short-term air quality impacts would be anticipated during construction of the proposed project due to disturbance of approximately two to three city blocks and operation of heavy equipment in work zones. These impacts would be minor and limited to the construction period. Dust control would be implemented, on an “as-needed” basis within the project area.

### **3.7.2 Mitigation Measures**

MDT would incorporate dust control into the contract documents to minimize any air quality impacts associated with the construction of the Arthur Avenue Project.

## **3.8 Vegetation**

### **3.8.1 Affected Environment**

Observations regarding vegetation and habitats associated with the project area were made during a site visit conducted on July 22, 2002. The results of the site visit indicate little if any natural habitat remains within the project area. Onsite vegetation

is dominated almost entirely by grass and planted trees and shrubs. The majority of the project area consists of residential housing (with lawns and ornamental plants) and the Jeanette Rankin Park at the northern portion of the project area. Immediately adjacent to the roads forming the eastern and western boundaries of the park are vegetated road shoulders dominated by plant species indicative of disturbed areas such as spotted knapweed (*Centaurea biebersteinii*). Just beyond the project boundaries to the north and south of the Clark Fork River are densely vegetated areas dominated by several species of shrubs and trees. Within the current boundaries of the Jeanette Rankin Park and adjacent residential areas are open (mowed) grass areas with planted shrubs (e.g., roses and other ornamentals) and shade trees such as American elm and maple.

### **3.8.2 Impacts of the Preferred Alternative**

The proposed reconstruction of Arthur Avenue would have minimal impact on vegetation within project boundaries. These impacts would be limited to 1) loss of a very small number of mature deciduous trees that currently exist in Jeanette Rankin Park, and 2) loss of some area within the park currently vegetated with grass, and 3) a loss of some of the mature trees on the South side of 5<sup>th</sup> Street and on the south side of 6<sup>th</sup> Street. These losses are not expected to be ecologically significant because the non-paved portions of the project area would continue to be characterized by mowed grass (both in the park and private residential areas) and a large number of mature deciduous trees within and adjacent to the park.

### **3.8.3 Mitigation Measures**

No mitigation measures are proposed for the loss of grass in the park. However, efforts are proposed to help support the addition of green space in other project areas. MDT will be responsible for sod, seed and irrigation for areas disturbed during construction. In addition, once the final design is completed, a new agreement would be set up between MDT and the City of Missoula for landscaping and maintenance within the impacted area. In this agreement, MDT may provide funding to the City for final landscaping design and tree and shrub replacement. The Missoula Urban Forester suggests that a large number of trees in the area are already well past their normal maturity and likely will begin to die in the next 20 years. This replacement of trees with a limited remaining life span would be a benefit from the project.

## **3.9 Wetlands**

### **3.9.1 Affected Environment**

A site visit conducted on July 22, 2002 revealed no wetlands within the project boundaries.

### **3.9.2 Impacts of the Preferred Alternative**

The proposed reconstruction of Arthur Avenue would have no impact on wetlands.

### **3.9.3 Mitigation Measures**

Mitigation measures are not necessary because the proposed reconstruction of Arthur Avenue would have no impact on wetlands.

## 3.10 Threatened and Endangered Wildlife

### 3.10.1 Affected Environment

The Montana Natural Heritage Program (MNHP) maintains an extensive database on plant and animal species of concern to multiple state and federal agencies. Included in this database are Montana State Species of Special Concern, USFWS Threatened and Endangered Species, U.S. Forest Service (USFS) Sensitive Species, and Bureau of Land Management (BLM) Special Status Species. MNHP was contacted to obtain information on the potential for plant and animal species of special concern to occur within the project area. The search area is defined as a point location within the project area and a one-mile radius surrounding this point location. The project area and the selected point location are in Section 22, Township 13N, and Range 19W.

The result of this search indicates that seven species of concern have been reported within the search area (eight total records), and these are presented below. These records are general and not based on project site occurrence, as indicated in a more detailed discussion provided in the Arthur Avenue Biological Resources Report (BRR). In several cases, the records are historic, and as such do not necessarily indicate that the species currently occurs or has potential to occur within the project area given the current habitat limitations. The potential for the species identified to occur within the project is discussed below. The definitions of the status or rank given by various state and federal agencies are included in the BRR.

#### **Westslope cutthroat trout (*Oncorhynchus clarki lewisi*).**

This species has no potential to occur within the project area because the project area does not provide suitable habitat (coldwater stream). This species could, however, occur near the site in the Clark Fork River.

#### **Bull trout (Columbia River) (*Salvelinus confluentus pop 2*).**

This species has no potential to occur within the project area because the project area does not provide suitable habitat (coldwater stream). However, Montana Department of Fish Wildlife and Parks (MDFWP) has recommended a 100-foot buffer on all streams and lakes/reservoirs that (a) have bull trout present and/or (b) are important for migration or over-wintering, or (c) link occupied stream reaches to major rivers. This species could, therefore, temporarily or intermittently occur near the project area in the Clark Fork River.

#### **Fringed myotis (*Myotis thysanodes*).**

This bat species is reported to have been collected in Missoula in 1964. The location of the collection is within Section 28, to the southwest of the project area. Although this species has potential to occur within the project area, the lack of (1) recent records of occurrence within the county, and (2) occurrence records for Section 22 suggest that the potential is low.

#### **Lynx (*Felis lynx*).**

This species has almost no potential to occur within the project area because the project area does not provide suitable habitat (spruce-fir forests above 3500 feet). The sensitivity of this species to human presence further indicates very little potential for this species to occur within the project area.

**Spotted slug (*Magnipelta mycophaga*).**

This species has little potential to occur within the project area because the project area does not provide significant amounts of natural habitat. This species was last collected in 1957 at 4150 feet elevation, between Deer Creek and a parallel small gravel road near the creek in Section 32. The collection site is on the east side of Mount Sentinel in the Sapphire Mountains. Section 32 is located southwest of Section 22 (project area).

**Missoula mountainsnail (*Oreohelix sp 10*).**

This species has little potential to occur within the project area because the project area does not provide significant amounts of natural habitat. This species was collected at Mount Sentinel, 4900 feet elevation, about one mile southeast of the University. The collection site is in Section 26, southeast of Section 22 (project area).

**Missoula mountainsnail (*Oreohelix sp 10*).**

This observation record is for the same species listed for the previous observation. Based on this specific record, the species was collected at Mount Jumbo, 4600 feet elevation, about one mile northwest of the University. The collection site is in Section 14, northeast of Section 22 (project area).

**Obscure evening-primrose (*Camissonia andina*).**

This species has little potential to occur within the project area because the project area does not provide significant amounts of natural habitat. This species was collected at Mount Sentinel, 3320 feet elevation, on the west side of the mountain. The collection site is in Section 27, immediately south of the project area.

In addition to the aforementioned species identified by the MNHP search, the bald eagle (*Haliaeetus leucocephalus*), currently proposed for delisting from endangered to threatened, has potential to occur onsite or near the site. Potential impacts to this and the other seven species of concern identified by the MNHP are discussed below.

### **3.10.2 Impacts of the Preferred Alternative**

***Westslope Cutthroat Trout and Bull Trout*** - Project-related impacts on these fish species are unexpected but possible considering the 100-foot buffer zone recommendation for Bull Trout and potential impacts that could result from project actions. Such potential impacts can include the input of sediments to the Clark Fork River from project-related activities within the northern portion of the project area.

***Other Threatened and Endangered Species*** - The proposed reconstruction of Arthur Avenue would have no measurable impact on the remaining threatened or endangered species because 1) no threatened or endangered species are known to exist within project boundaries, 2) the site provides no suitable habitat for most of the threatened and endangered species identified by the MNHP for the project area, and 3) the use of onsite or near site habitats by threatened and endangered species (e.g., bald eagles roosting in trees) is unlikely or rare at most, given the habitat preferences of the species of concern and types of habitat available onsite or near the site. Much more suitable habitat for bald eagles (mature trees overlooking the river) exists beyond the project boundaries within the riparian corridor of the Clark Fork River.

### 3.10.3 Mitigation Measures

The minimal reduction in the number of mature deciduous trees and loss of a small amount of grassy areas from the park would be the only habitat-related impacts of project actions. These impacts would not affect threatened and endangered species; therefore, no specific mitigation measures are necessary to protect such species.

## 3.11 Other Wildlife Resources and Fisheries

### 3.11.1 Affected Environment

Observations regarding habitats and species associated with the project area were made during a site visit conducted on July 22, 2002. The results of the site visit indicate little natural habitat remains within the project area. The majority of the project area consists of residential housing and the Jeanette Rankin Park, while immediately adjacent to the roads forming the eastern and western boundaries of the park are vegetated road shoulders dominated by weedy or exotic plants such as spotted knapweed. Just beyond the project boundaries and south of the Clark Fork River are densely vegetated areas dominated by several species of shrubs and trees, and these areas provide suitable habitat for a variety of native plant and animal species. Commonly observed native species known or likely to occur within this well-vegetated area include cottonwood (*Populus sp.*), willow (*Salix sp.*), Douglas fir (*Pseudotsuga menziesii*), ponderosa pine (*Pinus ponderosa*), red squirrel (*Tamiasciurus hudsonicus*), striped skunk (*Mephitis mephitis*), and a wide variety of birds including pine siskin (*Carduelis pinus*), dark-eyed junco (*Junco hyemalis*), several finch species (*Carpodacus sp.*), American robin (*Turdus migratorius*), common or northern flicker (*Colaptes auratus*), red-breasted nuthatch (*Sitta canadensis*), and black-capped chickadee (*Parus atricapallis*), among many others.

The most common forms of other wildlife routinely using the habitats within the project boundaries are those adapted to urban areas. These include the introduced eastern fox squirrel (*Sciurus niger*), which thrives in the University area, especially in association with planted deciduous trees, and both mule deer (*Odocoileus hemionus*) and white-tailed deer (*Odocoileus virginianus*). Also commonly observed in this urban environment are common passerine birds such as American robin and chipping sparrow (*Spizella passerina*), which appear to prefer the short grass habitat of mowed lawns. The project area currently supports a low diversity of native plant and animal species due to the limited amount of cover and foraging areas provided by natural habitat.

### 3.11.2 Impacts of the Preferred Alternative

The proposed reconstruction of Arthur Avenue would have minimal impact on other wildlife resources and no measurable impact on fisheries. The minimal impacts identified for other wildlife are due to loss of small amounts of vegetation within project boundaries that currently provide some degree of cover and potential foraging areas for invertebrates, birds, and small mammals. No fishes, amphibians, or reptiles are believed to currently use these areas. Decreased amounts of vegetated areas would be limited to 1) a slight reduction in the number of mature trees that currently

exist in Jeanette Rankin Park, and 2) a reduction in grassy areas within the park. These reductions in vegetated habitat are not expected to be ecologically significant because the project area would continue to be characterized by extensive areas vegetated by grass (both park and private residential) and a large number of mature deciduous trees within and adjacent to the park.

### **3.11.3 Mitigation Measures**

No mitigation measures would be required for the proposed reconstruction of Arthur Avenue.

## **3.12 Land Ownership, Right-of-Way, and Use**

The preferred alternative would use MDT and the University property as additional right-of-way. This property use is consistent with the University Master Plan for future land use and MOU. A small amount of additional right-of-way from adjacent private land owners may be required (less than a few hundred square feet). There is no significant difference of land ownership between the No Action Alternative and the Preferred Alternative, except the donation of University property for project right-of-way. No residents will be moved with exception of temporary tenants that currently reside in University owned property. Five homes are proposed to be removed in the Preferred Alternative. Each is part of the University MOU and owned by the University.

The acquisition of land or improvements for highway construction is governed by state and federal laws and regulations designed to protect both the landowners and taxpaying public. Affected landowners are entitled to receive fair market value for any land or buildings acquired and any damages, as defined by law, to remaining land due to the effects of highway construction. This action would be in accordance with the Uniform Relocation Assistance and Real Property acquisition Policies Act of 1970 (P.L. 91-646 as amended), (42 U.S.C. § 4651 and 4652, et. seq.) and the Uniform Relocations Act Amendments of 1987 (P.L. 100-17). No property owners are expected to be relocated except University rental tenants. The University of Montana is responsible by MOU to coordinate any rental relocations issues.

## **3.13 Social/Environmental Justice**

### **3.13.1 Affected Environment**

The Arthur Avenue project proposed and no action alternative are located in a University neighborhood, south of the Clark Fork River and directly adjacent to the northwest corner of University of Montana campus. The homes and residents can generally be characterized as private residential and rental properties for the University of Montana.

### **3.13.2 Impacts of the Preferred and No Action Alternatives**

No impacts have been identified for travel and access. The preferred alternative would allow adequate existing services for fire protection, police protection, and ambulance service. Bus stops and services may be slightly modified due to the new traffic patterns, but they will remain functional without impacts. One-way roads

would be sized to allow emergency vehicle passage around backed-up traffic on 5<sup>th</sup> and 6<sup>th</sup> Streets.

Title VI of the U.S. Civil Rights Act, and Executive Order 12898, issued in February 1994, require that no minority or, by extension, low-income persons shall be disproportionately impacted by any project receiving Federal funds. For transportation projects, this means no particular minority may be disproportionately isolated, displaced, or otherwise subjected to adverse effects.

The proposed improvements to Arthur Avenue would not cause any displacement, and would not have any substantive impact on the location, distribution, density, or growth rate of the area's population. This is an urban corridor and the Build Alternative(s) would not affect the cohesion of any communities or divide any neighborhoods. Therefore, this preferred alternative would not adversely impact any ethnic, low income, or other minority groups. Both the No-Build and the proposed Build Alternative(s) 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. The alternative(s) also comply with the provisions of Title VI of the Civil Rights Act of 1964 (42 D.S.C. 2000(d), as amended) under FHWA's regulations (23 CFR 200).

### **3.14 Economic**

#### **3.14.1 Affected Environment**

Missoula is one of 56 counties in Montana. In 2000, Missoula County had a population of 96,760, which was the second highest population of any county in the state. Based on 1990-2000 data provided by the United States Conference of Mayors, Missoula had a 6.7 percent average annual increase in gross metropolitan product. Missoula County anticipates an average population increase of 1,341 people per year.

Today, forest products and service industries remain two mainstays in western Montana's economy. Education, health, and social services make up about 24 percent of the employment while retail trade makes up about 15 percent within Missoula County. The tourist industry also plays an important role in the regional economy.

#### **3.14.2 Impacts of the Preferred Alternative**

The proposed project would improve the quality of travel on an important Highway and travel corridor. Improved safety for all highway users would decrease the potential for serious motor vehicle accidents. The economic costs associated with treating victims of fatal and injury accidents would be decreased accordingly.

Temporary jobs would be created during the construction of the project. Also, the demand for local goods and services (food, lodging, recreation, etc.) would be temporarily increased in Missoula due to the presence of workers temporarily living in the area during the construction of the project. These beneficial economic impacts would be sustained over the time period when the highway project is being constructed. Local spending by workers during road construction activities may

cause a slight increase in the local tax revenues. This impact would likely be small and short-term.

The proposed reconstruction of Arthur Avenue would require new right-of-way that is being provided by the University. Right-of-way acquisition would permanently remove this amount of property from the tax rolls and taxes paid on the land would be lost to Missoula. This loss in property tax revenue would have a negligible effect on revenues for Missoula. Two lots (less than 1 acre) between 5<sup>th</sup> Street and 6<sup>th</sup> Street are being provided by the University of Montana for the right-of-way exchange.

The proposed reconstruction project would not adversely affect or cause notable long-term changes to the economy of Missoula. There would be no commercial relocations or land acquisitions that would affect the viability of agricultural operations or commercial businesses within the corridor.

## **3.15 Noise**

### **3.15.1 Affected Environment**

The preferred alternative involves reconstruction of the roadways with lane reconfigurations and the addition of two lanes on Arthur Avenue between 5<sup>th</sup> Street and 6<sup>th</sup> Street. Due to the realignment of U.S. Highway 12, significant traffic volumes would be removed from Maurice Avenue and 5<sup>th</sup>/6<sup>th</sup> Street, east of Arthur Avenue. These roadways would be reduced to one-lane roadways, which would increase the green space between the roadways and residents along the project. An additional 2 lanes would be added to Arthur Avenue to accommodate U.S. Highway 12 northbound traffic. This would increase the traffic flow through the area, and the offset from the edge of the travel lane to the adjacent remaining residence would be increased. The impacts of the additional lane would be realized on Arthur Avenue between 5<sup>th</sup> and 6<sup>th</sup> Street because much less traffic would travel 6<sup>th</sup> Street and Maurice Avenue with the proposed lane configuration.

### **3.15.2 Impacts of the Preferred Alternative**

Projected peak hour noise levels in 2022 are expected to decrease along Maurice Avenue and 5<sup>th</sup>/6<sup>th</sup> Street east of Arthur Avenue and slightly increase along Arthur Avenue based on projected background growth in traffic volume of one percent per year over the 20 year period. The project is not expected to generate any additional traffic (i.e., additional roadway capacity). Peak hour noise levels are expected to decrease up to 7 decibels A-weight (dBA) over existing conditions along Maurice Avenue and 6<sup>th</sup> Street because of the significant reduction in traffic volumes on both roadways. Traffic volumes are expected to remain unchanged on 5<sup>th</sup> Street; therefore, peak hour noise levels are not expected to increase at this location. Peak hour noise levels along Arthur Avenue are expected to increase by approximately 7dBA due to the increase of traffic volumes, but because the offset from the edge of the travel lane to the adjacent residence would be increased by approximately 90 feet (27.43 m), the noise levels at the nearest receptor to Arthur Avenue would be limited to a noise increase to approximately 2 dBA. This noise level increase is considered barely perceptible based on FHWA criteria. In addition, projected peak hour noise levels would not approach or exceed the FHWA Activity Category B Noise Abatement

Criteria (NAC) defined as 66 dBA at any residential areas. Overall the project would generate a noise benefit for residents within the study area because of the improved traffic flow and the reduced hours of peak traffic conditions. Table 3-2 presents estimated peak hour noise levels for the Preferred Alternative.

### 3.15.3 Mitigation Measures

The Preferred Alternative would generate a slight noise level increase at some locations (less than 3 dBA) or decrease noise levels at other locations in 2022, and projected peak hour noise levels would not approach or exceed the FHWA Activity Category B NAC; therefore, no noise mitigation measures are required.

**Table 3-2**  
**Estimated Peak Hour  $L_{eq}$  Noise Levels (dBA)**

Monitoring Locations	Description	Estimated Peak Hour $L_{eq}$ Noise Levels (dBA)		
		2002 Existing	2022 No Action Alternative	2022 Preferred Alternative
1	Jeanette Rankin Park	62	63	64
2	5th Street	61	62	61
3	Arthur Avenue	60	61	62
4	6th Street	66	67	59
5	Maurice Avenue	61	62	53

$L_{eq}$  - Equivalent Noise Level

### 3.15.4 Construction Noise Impacts and Mitigation Measures

Highway construction is completed in several different phases. These phases are:

- Mobilization - Contractor moves equipment to the project.
- Clearing and grubbing - Contractor removes trees, rocks, obstacles.
- Earthwork - Contractor cuts or fills dirt into area to reach desired grade.
- Foundations - Structural base preparation.
- Base Preparation - Gravel or other material added to road to make a stable base.
- Paving and Cleanup - Final paving and site work such as trees, shrubs, irrigation.

The project area is located in a residential urban area; therefore, the Contractor would be required to implement appropriate construction noise mitigation measures. These measures shall include:

- Implement a Community Relations Program to inform the public of any potential noise impact and any measures that would be employed to reduce these impacts.
- Coordinate early with the MDT construction Project Manager to reduce construction noise levels by sequencing construction activities appropriately.
- Ensure that all construction equipment would be equipped with exhaust mufflers, and would be maintained to minimize engine noise.

- Limit construction activities to maintain compliance with the Missoula City Noise Ordinance (MMC 9.30. MP).

## **3.16 Hazardous Material/Substances**

### **3.16.1 Affected Environment**

Hazardous materials are products or wastes regulated by the EPA or the Montana DEQ. These include substances regulated under the Comprehensive Emergency Response, Compensation, and Liability Act (CERCLA or Superfund), the Resource Conservation and Recovery Act (RCRA), and regulations for solid waste management, above-ground storage tanks (ASTs), and underground storage tanks (USTs).

No National Priority List (NPL) or Superfund sites identified by the EPA are located in or near the Arthur Avenue area. The EPA's current list of the RCRA regulated treatment, storage, and disposal facilities and hazardous waste generators was reviewed to determine if any such facilities exist in the project area.

The proposed project area was reviewed for potential sources of hazardous waste and records of known hazardous waste sites and hazardous waste generators in the Arthur Avenue area. DEQ's current list of UST and leaking underground storage tanks (LUST) facilities was reviewed as part of this evaluation. The project area had no LUST or UST sites south of the Madison Street Bridge within the project area.

The only other known potential sources of hazardous wastes for the proposed project would be associated with the equipment used for construction of the new roadway and its related features. These are the fuels, lubricants, hydraulic fluids, and related items needed for construction vehicles and equipment. A slight risk of the release of these hazardous fluids exists since vehicles and heavy equipment would be operating within the project area throughout the construction period.

### **3.16.2 Mitigation Measures**

The contractor will be required to follow all MDT standard specifications in order to minimize hazardous waste impacts of the proposed project.

## **3.17 Archaeological and Historical Resources**

### **3.17.1 Significant Cultural Resources**

Cultural resources are protected by the National Historic Preservation Act of 1966, as amended. This legislation requires the identification and evaluation of cultural resources that a project may impact. It further requires that resources identified be avoided, if possible, or when avoidance is not possible, that any adverse effects of the project on the resource be mitigated. Coordination is required with the Montana State Historic Preservation Office (SHPO) and the Advisory Council on Historic Preservation if there is an adverse effect on historic properties.

The University Area Historic District (24MO827) (Figure 3-2) was listed on the National Register of Historic Places (NRHP) in 2000 and is located adjacent to the

project area. It should be noted that the *eligible* historic district encompasses the entire *listed* historic district (24MO827) as well as the outlying properties that are believed to contribute to the overall character of the historic district. The district is bounded on the north by the Jeanette Rankin Peace Park (24MO893), on the east by Maurice Avenue, the south by Eddy Avenue, and the west by Helen Avenue.

A cultural resource survey of the project area was conducted in 2002 (see Table 3-3). Thirty new properties were recorded and evaluated as to their contribution or non-contribution to the listed University Area Historic District. Of those, 12 contributing properties are located within the Area of Potential Effect on Arthur Avenue, South 5<sup>th</sup> Street East, and South 6<sup>th</sup> Street East. On South 5<sup>th</sup> Street East, the contributing property is 659. On South 6<sup>th</sup> Street East they are: the Headley Place (610 South 6<sup>th</sup> Street East) as well as 609, 615, 620, 625, 629, 634, 664, 645, 659 and 666. None of these properties are located within the listed University Area Historic District boundaries. Although not located within the listed historic district, because of their proximity, the properties lie within the eligible historic district.

The Headley Place is a single-story Craftsman-style residence that was constructed about 1929. It, too, retains a high degree of architectural integrity and contributes to the historic district.

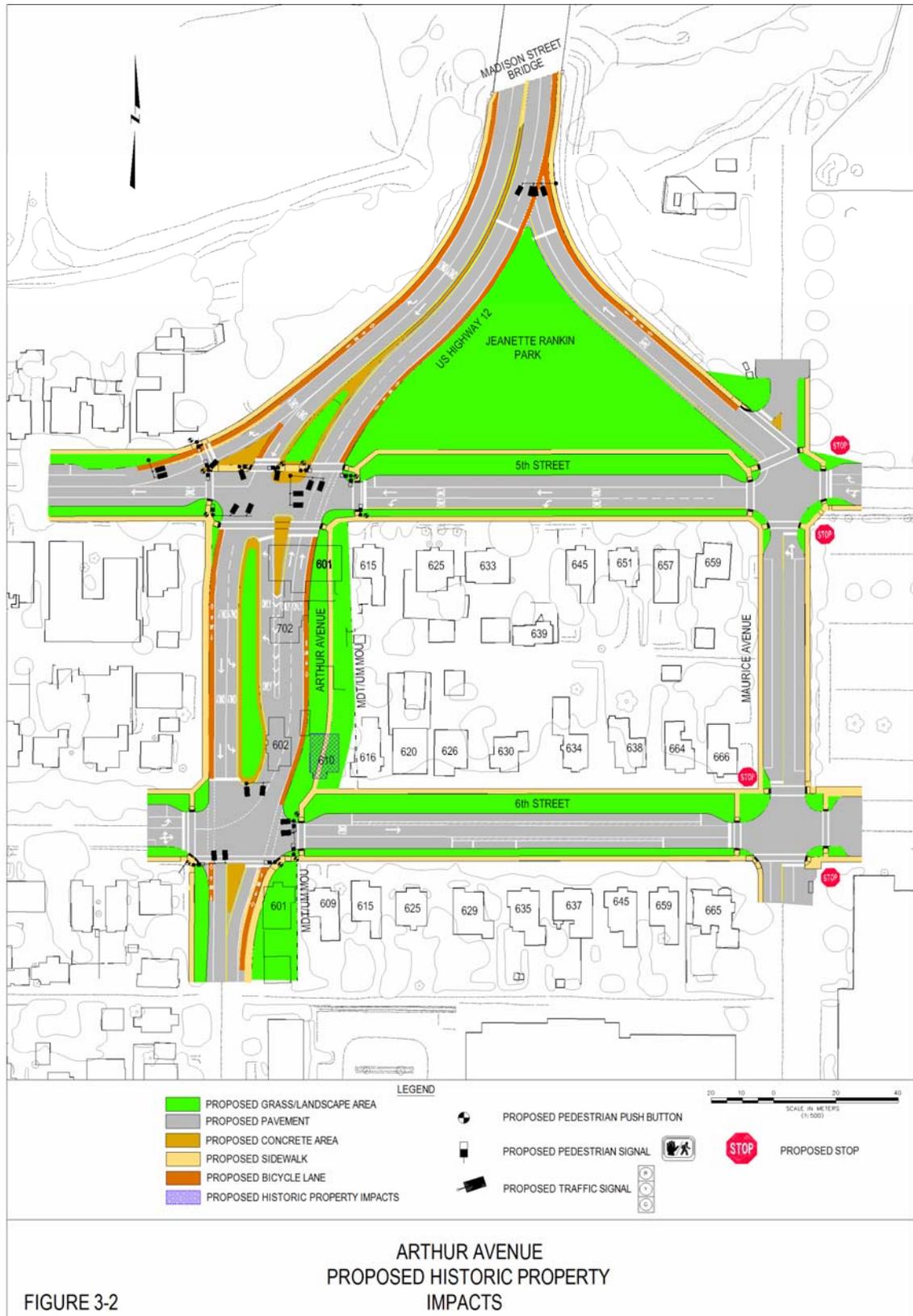
The remaining eleven contributing properties were constructed between 1933 and 1938 and display a wide array of different architectural styles, including Craftsman, Tudor, and Minimalist Tradition. All 11 properties exhibit a high degree of architectural integrity and association with the initial development of this neighborhood adjacent to the University of Montana Campus.

### 3.17.2 Project Impact

A preliminary design of the Arthur Avenue – Missoula project has been completed and a copy of the preliminary plans in the vicinity of the historic sites is attached (Figure 3-2).

It is the intent of the project to widen Arthur Avenue 36 feet from the existing 44 feet to approximately 80 feet in the vicinity of the historic properties between South 5<sup>th</sup> Street East and South 6<sup>th</sup> Street East. Widening would necessitate the removal of one historic property (610 South 6<sup>th</sup> Street East, The Headley Place) at the intersection of Arthur Avenue and South 6<sup>th</sup> Street East. This property was evaluated to contribute to the University Area Historic District.

On South 5<sup>th</sup> Street East the existing 41-foot roadway would be narrowed on the north side approximately six feet to accommodate the new 33-foot roadway. This results in a wider boulevard between the street and sidewalk. For alignment purposes, the roadway would be shifted approximately two feet to the south on the south side of 5<sup>th</sup> Street. This would necessitate the removal of trees on the boulevard on the south side of the street adjacent to a contributing historic property (659 South 5<sup>th</sup> Street East). There would not be, however, encroachment on the property boundaries.



**Table 3-3**  
**Arthur Avenue Project, Resources Inventoried**  
**(The 12 contributing properties within the area of potential effect are highlighted)**

Street Address	Previously recorded for the historic district (Y/N)	NRHP eligibility	Comments
600 Eddy	No	Non-contributing element	Recent construction
500 Eddy	Yes	Contributing element	Revised site form
504 Eddy	Yes	Contributing element	Revised site form
506 Eddy	Yes	Contributing element	
526 Eddy	Yes	Contributing element	
534 Eddy	Yes	Contributing element	
538 Eddy	Yes	Contributing element	
542 Eddy	Yes	Contributing element	
502 S. 6th E.	Yes	Contributing element	Revised site form
503 S. 6th E.	Yes	Contributing element	Revised site form
505 S. 6th E.	Yes	Contributing element	
510 S. 6th E.	Yes	Contributing element	Revised site form
517 S. 6th E.	Yes	Non-contributing element	
517 ½ S. 6th E.	Yes	Non-contributing element	
518 S. 6th E.	Yes	Contributing element	Revised site form
524 S. 6th E.	Yes	Contributing element	
525 S. 6th E.	Yes	Contributing element	
529 S. 6th E.	Yes	Contributing element	Revised site form
532 S. 6th E.	Yes	Contributing element	Revised site form
533 S. 6th E.	Yes	Contributing element	Revised site form
543 S. 6th E.	Yes	Contributing element	
601 S. 6th E.	No	Non-contributing element	Loss of integrity
602 S. 6th E.	No	Non-contributing element	Heavily Remodeled Craftsman Style
609 S. 6th E.	No	Contributing element	Tudor Style
610 S. 6th E. – The Headley Place	No	Contributing element	Craftsman Style
615 S. 6th E.	No	Contributing element	Craftsman Style
616 S. 6th E.	No	Non-contributing element	Minimal Tradition Style
620 S. 6th E.	No	Contributing element	Prairie Style
625 S. 6th E.	No	Contributing element	Minimal Tradition Style
626 S. 6th E.	No	Non-contributing element	Loss of integrity
629 S. 6th E.	No	Contributing element	Minimal Tradition Style
630 S. 6th E.	No	Non-contributing element	Loss of integrity
634/636/636 ½ S. 6th E.	No	Contributing element	Minimal Tradition Style

**Table 3-3 (continued)**  
**Arthur Avenue Project, Resources Inventoried**  
**(The 12 contributing properties within the area of potential effect are highlighted)**

635 S. 6th E.	No	Non-contributing element	Loss of integrity
637 S. 6th E.	No	Non-contributing element	Loss of integrity
638 – 642 – 644 S. 6th E.	No	Non-contributing element	Loss of integrity
645 S. 6th E.	No	Contributing element	Recent construction
659 S. 6th E.	No	Contributing element	Recent construction
664 S. 6th E.	No	Contributing element	Colonial Revival Style
665 S. 6th E.	No	Non-contributing element	Loss of integrity
666 S. 6th E.	No	Contributing element	Greek Classical Revival Style
659 S. 5th E.	No	Contributing element	Arte Moderne
657 S. 5th E.	No	Non-contributing element	Recent construction
651 S. 5th E.	No	Non-contributing element	Recent construction
645 S. 5th E.	No	Non-contributing element	Recent construction
639 S. 5th E.	No	Non-contributing element	Recent construction
633 S. 5th E.	No	Non-contributing element	Recent construction
625 S. 5th E.	No	Non-contributing element	Recent construction
615 S. 5th E.	No	Non-contributing element	Recent construction
601 S. 5th E.	No	Non-contributing element	Recent construction
530 S. 5th E.	Yes	Contributing element	
529 S. 5th E.	Yes	Contributing element	
525 S. 5th E.	Yes	Non-contributing element	Recent apartments
524 S. 5th E.	Yes	Contributing element	
520 S. 5th E.	Yes	Contributing element	
516 S. 5th E.	Yes	Contributing element	Revised site form
510 S. 5th E.	Yes	Contributing element	
509 S. 5th E.	Yes	Contributing element	
505 S. 5th E.	Yes	Contributing element	
503 S. 5th E.	Yes	Contributing element	
500 S. 5th E.	Yes	Contributing element	
702 Arthur Ave	No	Non-contributing element	Craftsman
815 Arthur Ave	Yes	Contributing element	Revised site form
821 Arthur Ave.	Yes	Contributing element	Revised site form
Jeanette Rankin Park	No	Not eligible	

There would be an impact to the existing boulevard between the street and the historic property that would result in the removal of a tree.

On South 6<sup>th</sup> Street East, the existing 41-foot roadway would be narrowed to 33 feet, moving the northside of the roadway approximately eight feet to the south, away from the four historic properties (620, 634, 664, and 666 South 6<sup>th</sup> Street East) on the north side of the street between Arthur Avenue and Maurice Avenue. The four properties were evaluated to contribute to the University Area Historic District. There would, however, be no encroachment on the property boundaries. There would be an impact to the existing boulevard between the street and historic properties. The existing curb line on the south side of the street would be perpetuated and no construction activities would be completed adjacent to 609, 615, 625, 629, 645, and 659 South 6<sup>th</sup> Street East.

### 3.17.3 Project Effect

There would be an Adverse Effect to the Headley Place (610 S. 6<sup>th</sup> Street East/24MO946) as a result of the project. The property is individually eligible for the NHRP and, although it is located outside of the Historic District it would contribute to the University Area Historic District (24MO827) if included within its boundaries. Widening of Arthur Avenue and the installation of bike lanes, sidewalks, new curb and gutter, and shoulders would result in the removal of the property, which is currently owned by the University of Montana. The property is not in the Historic District, but if the district is expanded in the future, the property would be a contributing element.

There would be No Adverse Effect to 659 South 5<sup>th</sup> Street East as a result of the proposed project. Although the roadway would be widened in the direction of the residence, the widening would impact the existing boulevard and a tree currently standing there. There would be no encroachment on the site boundary and no physical impacts to the residence itself. There would, however, be an impact to the setting of the site because of the wider roadway and the loss of the tree. The MDT proposes to mitigate the effect by planting new semi-mature trees on the reconstructed boulevard in the approximate location of the older trees.

There would be No Effect to the six historic properties (609, 615, 625, 629, 645, and 659) located on the south side of South 6<sup>th</sup> Street East between Arthur and Maurice avenues. The existing curb line would be perpetuated. There would be no change in the existing boulevard and the existing trees would remain intact. Construction activities would not encroach on any of the six properties and the setting would remain intact. The qualities that would make the properties contributors to the historic district would remain intact.

The proposed project would have No Effect to the University Area Historic District (24MO827). The block bounded by Arthur and Maurice avenues is not currently included in the historic district. There would be no alteration of or change in the setting of the existing historic district as a result of the project. It would retain the characteristics that made it eligible for listing on the National Register of Historic Places.

### 3.17.4 Alternatives

Because of the increasing traffic demands placed on Arthur Avenue in the vicinity of the University of Montana campus, only the two options of the preferred alternative (other than the No-Build) were considered for this proposed project.

### 3.17.5 Mitigation

To mitigate the loss of the Headley Place (610 South 6<sup>th</sup> Street East/24MO946), MDT proposes to document the home to Historic American Building Survey (HABS) standards before it is demolished or relocated. The documentation would include an extensive site history, large-format photographs, and drawings of the property. The information would be provided to the Missoula Historic Preservation Commission, the Montana SHPO, and the National Park Service. The NPS has accepted the site for HABS recordation. The HABS recordation would also include streetscape photographs of Arthur Avenue between South 5<sup>th</sup> Street East and South 6<sup>th</sup> Street East prior to the initiation of construction activities.

In addition to recordation and in consultation with the Missoula Historic Preservation Commission and the Montana SHPO, the University of Montana will make the house available to be moved intact to another location.

## 3.18 Jeanette Rankin Park

### 3.18.1 Affected Environment

**Jeanette Rankin Park (Site 24MO893)** is located to the south of the Madison Street Bridge, which carries U.S. Highway 12 and crosses the Clark Fork River in Missoula, Montana. From the bridge the U.S. Highway 12 eastbound and westbound travel lanes diverge to form a couplet that turns U.S. Highway 12 into two separate one-way roadways. This couplet bounds the northeast and northwest sides of Jeanette Rankin Park. The south side of the park is bounded by 5<sup>th</sup> Street. The park is approximately 1.5 acres and is bowl shaped because of vertical curves for the approach and departure couplet, gaining elevation from south to north to connect to the Madison Street Bridge north of the park. The park is owned by MDT and recorded as right-of-way for U.S. Highway 12. Park maintenance is completed by the City of Missoula under a maintenance agreement with MDT.

The original park was built when the Madison Street Bridge was constructed in the mid 1950s. The park was renamed in honor of Jeanette Rankin in 1982 and is primarily a treed and grassed area with a memorial to Jeanette Rankin, which is surrounded by trees and located in the middle of the park. There is no known association with Jeanette Rankin's life that can be related to this park. The



*West Corner of Jeanette Rankin Park (looking northeast)*

park does not meet the standards to be placed in the National Historic Register. However, it is frequently used by the public as a place for a picnic, or by students as a spot to sit and read a book. Because the park contains the Jeanette Rankin Memorial, there are visitors who admire the memorial and the area which is landscaped and planted with flowers and shrubs. Given the size and shape of the park, and the amount of traffic that passes by the park on the east and west, the park is not often used for physical recreation such as a football game or Frisbee. Because the area is used by the public (there are benches and a memorial), and because it has 24-hour access by the public and is used as a public resource, MDT has determined that the park is a significant resource.

### **3.18.2 Impacts of the Preferred Alternative**

If the preferred alternative is implemented, approximately 40 feet (12 meters) of the west side of the park (0.1 ha or 0.25 acres) would be required to use for roadway, curb, and gutter. This would have a minor impact on park use because the majority of the green space would remain intact and contiguous. Some sod and potentially some mature trees would be removed.

The area used would not impact the memorial of Jeanette Rankin. Use of approximately 40 feet (12 meters) of the west side of the park would remove valuable green space within a high vehicle travel area. Section 4 of this report includes the 4(f) evaluation for the park and describes in detail the impacts and mitigation efforts for the park.

## **3.19 Section 6(f) Lands**

No National Land and Water Conservation Fund properties have been identified within the vicinity of the project. Therefore, there is no impact from the preferred alternative.

## **3.20 Pedestrian and Bicycle Facilities**

### **3.20.1 Affected Environment**

The project area receives high levels of pedestrian and bicycle traffic. This is due in part to the vicinity of the University. Pedestrian and bicycle facilities are currently present along streets within the Arthur Avenue project area. The existing bicycle facilities consist of bicycle lanes on both sides of the Madison Street Bridge that allow access to both Arthur Avenue and Maurice Avenue. The Maurice Avenue bike lane ends at 5<sup>th</sup> Street. The bike lane from the Madison Street Bridge to the Arthur Avenue/5<sup>th</sup> Street intersection transitions across the two southbound travel lanes to the south of the bridge, crossing from the west to the east side of the roadway along a sharp horizontal curve to the left which is impacted by a vertical crest curve. On Arthur Avenue between 5<sup>th</sup> and 6<sup>th</sup> Streets, there are bicycle lanes on both sides of the roadway that allow for the southbound movement of bicycles along the corridor. Arthur Avenue on the south side of 6<sup>th</sup> changes to two-way traffic with one bike lane for north and one bike lane for south movement.

Existing pedestrian facilities allow minimal marked crossings to the park and the

block encompassed by Arthur Avenue, Maurice Avenue, 5<sup>th</sup> Street, and 6<sup>th</sup> Street. Sidewalks do run on both sides of all of the roadways except for the couplets connecting the Madison Street Bridge to 5<sup>th</sup> Street, which only have sidewalks adjacent to the outside lane. At the intersection of Arthur Avenue and 5<sup>th</sup> Street there are marked pedestrian crossings on the south and east side of the intersection. At the intersection of Arthur Avenue and 6<sup>th</sup> Street there are designated crossings on the north, west, and south sides of the intersection. Along the east side of the intersection pedestrian crossing is prohibited and signs have been installed.

This is the only signal assisted facility currently within the project. The intersection of Maurice Avenue and 5<sup>th</sup> Street has a designated crossing on the north and east sides of the intersection. At the intersection of Maurice Avenue and 6<sup>th</sup> Street there are marked pedestrian facilities along the eastern and southern sides of the intersection.

### **3.20.2 Impacts of the Preferred Alternative**

In addition to improving vehicular facilities, the preferred alternative would improve the safety and flow of pedestrians and bicycles through the corridor. Many of the bicycle facilities would remain in their current form with the addition of improvements to reduce possible vehicle/bicycle conflicts. The major area of current conflict occurs with southbound traffic on the south of the Madison Street Bridge where bicyclists cross the two traffic lanes. To alleviate this problem the bike lane has been extended down the northwest side of the roadway to the intersection where they can cross with a protected signal or cross to a pocket located in the new southbound Arthur Avenue configuration. A new northbound bicycle lane would be added on Arthur Avenue from 6<sup>th</sup> Street to the Madison Street Bridge to accommodate the northbound bicycle movement. Preliminary alternatives showed a bike lane on the south side of 6<sup>th</sup> street. At the request of the City and the University the bike lane was replaced with a parking lane. The City had also requested a left turn lane, from Arthur Avenue to 6<sup>th</sup> Street, for bicyclists. After careful consideration it was determined by MDT that the left turn lane was not a viable option at this location. In part, there are safety concerns associated with the potential over-run condition between a large truck and a bicycle.

Pedestrian facilities would be greatly improved with the preferred alternative with more access to the park and the block encompassed by Arthur Avenue, Maurice Avenue, 5<sup>th</sup> Street, and 6<sup>th</sup> Street. Sidewalk configurations would remain similar to existing conditions, but additional crosswalks would be added for increased functionality. The intersection of Arthur Avenue and 5<sup>th</sup> Street would become much more complex with the addition of new signals and additional lanes, and pedestrian facilities would be incorporated to assist with pedestrian mobility. This intersection would have signal assisted crossings on all four sides. The intersection at 6<sup>th</sup> Street and Arthur Avenue would have signal assisted crossings on the east, south, and west sides of the intersection. There would not be a crossing on the north side of the intersection because it would expose pedestrians to left-turning motor vehicle traffic coming from 6<sup>th</sup> and heading over the bridge two lanes abreast on a large radius. At the intersection of Maurice Avenue and 5<sup>th</sup> Street the intersection control would be a three-way stop with marked crossings on the east, south, and west sides of the

intersection. In addition, there would be a marked crossing along the parking lot along the north side of the intersection. At the intersection of Maurice Avenue and 6<sup>th</sup> Street the intersection control would be a two-way stop with marked crossings on all four sides of the intersection.

### **3.21 Visual Resources**

No negative impacts to visual resources have been determined.

### **3.22 Construction Impacts**

#### **3.22.1 Affected Environment**

Construction activities from the proposed project would cause temporary inconveniences to the traveling public. These would occasionally result in longer travel times, detours, temporary complete closure, and noise and dust due to the heavy equipment and machinery. These disruptions would occur intermittently for the duration of the construction period.

#### **3.22.2 Mitigation Measures**

This proposed project's contractor would be subject to all state and local laws to minimize construction noise by having mufflers on all equipment. Dust mitigation would also be required by using either water or another approved dust suppressant. All advance warning and detour signing would be in accordance with the Manual on Uniform Traffic Control Devices (MUTCD) and would be used to mitigate potential traffic congestion with the use of detours and/or alternate routes. In addition, the proposed project will make efforts to complete construction during the summer months to minimize impacts to the University travel during the fall and spring semesters. The contractor would be under an incentive program to maintain the short construction timeframe and minimize impacts to the University and residences along the project. Performance specifications would be used for detour construction maintenance to maximize the efficiency of the contractor while specifying general guidelines for construction access to the residences and the University.

### **3.23 Permits Required**

The proposed project would be in compliance with both the Water Quality provisions of 75-5-308 M.C.A. for Section 3 (a) authorizations, and Stream Protection under 87-5-501 through 509 M.C.A., inclusive. In addition, MDFWP stated that since this proposed project would not impact the banks of the Clark Fork River, or the River itself, the 124 SPA Stream Protection Permit would not be needed for this project.

However, prior to and during any relevant disturbances, the proposed project's preferred alternative would require the following under the Clean Water Act (33 U.S.C. 1251-1376, as amended):

- A Section 402/Montana Pollutant Discharge Elimination System (MPDES) authorization from the DEQ's Permitting and Compliance Division.

- Comply with the City-County Health Department for fugitive dust, paving, and the State Conformity process.

### **3.24 Secondary and Cumulative Impacts**

MDT does not foresee any construction projects in the vicinity of the Arthur Avenue project other than an overlay of Arthur Avenue from 6<sup>th</sup> Street to South Avenue and the Van Buren Street pedestrian bridge.

The University has two potential construction projects that would be ongoing during the proposed construction of this project. The first project would be the construction of a new journalism building, which would be located to the north of Jeanette Rankin hall. This project is located approximately 0.25 miles to the southwest of the Arthur Avenue project area. The second project would be the expansion of the Pharmacy building. This project is approximately 0.5 miles to the southeast of the Arthur Avenue project. Both of these projects have estimated construction timeframes of 2005 to 2007. These projects would have minor impacts on the Arthur Avenue project. Material deliveries may add traffic impacts to the detour area. In addition, the University is planning a trail project from the near the intersection of 5<sup>th</sup> and Maurice to connect to the riverfront trail system and the new pedestrian bridge.

It is possible that as the project construction date draws closer smaller city projects may emerge near the Arthur Avenue project area.

Minor, but beneficial, economic impacts to Missoula would likely result as the Arthur Avenue project and others in Missoula are successively implemented over the next decade. The road reconstruction projects in the area may increase the demand for local goods and services (food, lodging, fuel, and recreation) in communities within the Missoula area during the construction period for each roadway project.

Because these projects would not adjoin one another in some instances, and would be implemented in different years, businesses in Missoula communities would likely be able to meet such demands for goods and services. In addition, it is anticipated that construction for the Arthur Avenue project would occur during the summer student break to help minimize the University impacts. Therefore, the cumulative economic effects of implementing the Arthur Avenue project and others known or proposed in the area would be minor.

No other secondary or cumulative impacts are anticipated that would affect stormwater runoff or increased impervious surfaces. In addition, there are no anticipated changes to vehicle, pedestrian, and bicycle routes, other than the realignment of U.S. Highway 12, that could adversely affect the Arthur Avenue project.

# DRAFT SECTION 4(f) EVALUATION

Arthur Avenue – Missoula  
CM 7-2(36)94: CN 4611

## MISSOULA COUNTY, MONTANA

This document contains the information required for a *Section 4(f)* Evaluation as required by *Section 4(f)* of the *U.S. DEPARTMENT OF TRANSPORTATION Act* under 23 CFR 771.135.

Submitted pursuant to:

**49 U.S.C. 303**

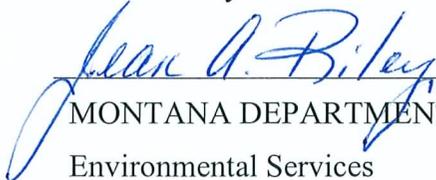
by the

**U.S. DEPARTMENT OF TRANSPORTATION**  
Federal Highway Administration

and the

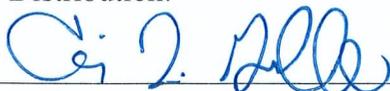
**MONTANA DEPARTMENT OF TRANSPORTATION**

Submitted by:

  
MONTANA DEPARTMENT OF TRANSPORTATION  
Environmental Services

Date: 3/27/2006

Reviewed & Approved for  
Distribution:



Date: 3/29/2006

FEDERAL HIGHWAY ADMINISTRATION

# Section 4

## Section 4(f) Evaluation

Section 4(f) of the Department of Transportation Act of 1966 (49 U.S.C. 303 Section 4(f)) declared that “it 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) properties are publicly owned parks, recreation areas, or wildlife and waterfowl refuges of national, state, or local significance, and historic resources eligible for listing on the National Register of Historic Places or are locally significant. Section 4(f) specifies that:

“the Secretary [of Transportation] may approve a transportation program or project requiring the use of a public park, recreation area, or wildlife and waterfowl refuge or 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) only if there is no prudent and feasible alternative to using that land; and 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.”

In general, a Section 4(f) “use” occurs when:

- Section 4(f) land is permanently acquired for a transportation facility;
- There is a temporary occupancy of Section 4(f) land that is adverse in terms of the Section 4(f) preservationist purposes; or,
- Section 4(f) land is not incorporated into the transportation project, but the project’s proximity impacts are so severe that the purposes for which the Section 4(f) site exists are substantially impaired. (This use is also known as “constructive use.”)

This Section 4(f) evaluation has been prepared pursuant to the finding that the preferred alternative of Arthur Avenue from 6th Street to 5th Street, including the intersections, would affect or “use” publicly owned land of a public park (0.25 acres of Jeanette Rankin Park). In addition, the preferred alternative would have adverse affects on one historic property, removing the entire property. While this property is not located within the boundaries of the **University Area Historic District (24MO827)** (see Figure 4-3), it does lie within the eligible historic district, and it was determined to be a property that is individually eligible for NHRP and would contribute to the listed historic district. The evaluation describes the proposed action and how it might affect the Section 4(f) properties, discusses alternatives that would avoid the use of the Section 4(f) properties, and describes measures undertaken to minimize harm to the properties where avoidance is not feasible or is not prudent.

## 4.1 Description of Proposed Action

The MDT, in cooperation with the University of Montana (University) and the City of Missoula, proposes to reconstruct Arthur Avenue from 6<sup>th</sup> Street to 5<sup>th</sup> Street, including the intersections. The work would also include realignment of the U.S. Highway 12 eastbound couplet (traffic flowing north from Madison Street Bridge) between the Madison Street Bridge and the 6<sup>th</sup> Street/Maurice Avenue intersection; and realignment of the U.S. Highway 12 westbound couplet (traffic flowing south from Madison Street Bridge) between the bridge and the Arthur Avenue/5<sup>th</sup> Street intersection. Figure 4-1 shows the existing alignment and 4(f) resources, and Figure 4-2 shows the preferred alternative and proposed 4(f) impacts.

### 4.1.1 Purpose and Need

The purpose of the Arthur Avenue project is to improve vehicle, bicycle, and pedestrian flow on U.S. Highway 12 near the University of Montana - Missoula Campus (University) allowing the safe and efficient movement of traffic. The proposed improvements would accomplish this by installing pedestrian and bicycle facilities, traffic actuated signals, and realignment of the existing roadways to establish a more direct route for U.S. Highway 12. This would reduce the traffic on 6<sup>th</sup> Street and Maurice Avenue, increasing the safety around the University.

The Purpose and Need segment of Section 1 in the Environmental Assessment (EA) identified nine needs that would be addressed by the Arthur Avenue reconstruction:

- To maintain a uniform volume capacity across the project that will be consistent with the surrounding U.S. Highway 12 roadways.
- To incorporate physical changes to the roadway and its adjoining environment to increase the safety, comfort, and convenience of the traveling public.
- To provide a more direct route for U.S. Highway 12 traffic without impacting the capacity of adjacent or connecting roadways.
- To provide a more efficient and user-friendly entrance to the University.
- To accommodate the multimodal travel of trucks, cars, bicycles, and pedestrians.
- To decrease the impacts of University special events on U.S. Highway 12 traffic and increase the efficiency and safety for the public traveling to and from the special events.
- To have a positive effect on air quality.
- To update existing roadway facilities.
- To recognize, evaluate, and comply, if feasible, with the requirements of the MOU between the City of Missoula, MDT, and the University regarding property available for the project and other issues.



FIGURE 4-1

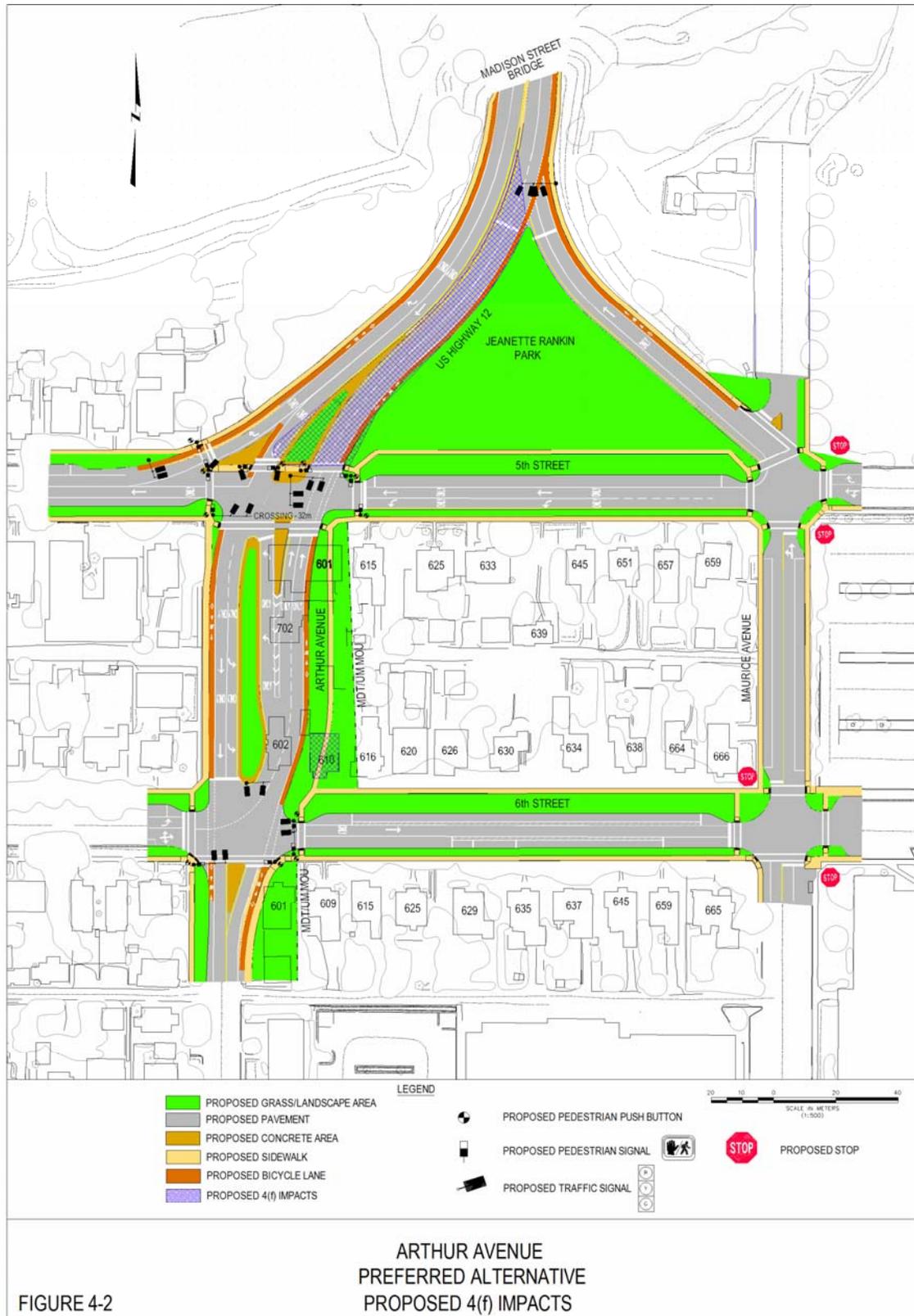


FIGURE 4-2

## 4.1.2 Alternatives Analyzed in the Environmental Assessment

MDT and the FHWA considered many alternatives to address the transportation needs, safety improvements, and traffic control/geometric deficiencies identified for the Arthur Avenue project. The process of selecting the preferred alternative is identified in Section 2 of the EA and includes several conceptual alternatives that were rejected for various reasons. These conceptual alternatives can be categorized and placed into the following four groups:

- Alternative Group 1 – No-Build (no road reconstruction).
- Alternative Group 2 – Minimal Improvements (traffic signal improvements, new pavement markings, and advanced University signing).
- Alternative Group 3 – Moderate Improvements (roadway realignments and roundabouts).
- Alternative Group 4 – Extensive Improvements (overpass structures and interchanges).

From the refinement of these conceptual alternatives, a preferred alternative (chosen from Group 3) was developed based on the University, City, and community's support and comments. The MDT, the City of Missoula, and the University support the preferred alternative because the improvements best meet the needs of the project, giving consideration to economic and environmental effects, technical aspects, public opinion, "no added capacity" objective, and the MOU. The preferred alternative is detailed further in Section 2.8 of the EA and shown at the end of Table 4-2.

## 4.2 Description of Section 4(f) Resources

### 4.2.1 Recreation Areas

**Jeanette Rankin Park (Site 24MO893)** is located to the south of the Madison Street Bridge, which carries U.S. Highway 12 and crosses the Clark Fork River in Missoula, Montana. From the bridge the U.S. Highway 12 eastbound and westbound travel lanes diverge to form a couplet that turns U.S. Highway 12 into two separate one-way roadways. This couplet bounds the northeast and northwest sides of Jeanette Rankin Park. The south side of the park is bounded by 5<sup>th</sup> Street. The park is approximately 1.5 acres and is bowl shaped because of vertical curves for the approach and departure couplet, gaining elevation from south to north to connect to the Madison Street Bridge north of the park. The



*West Corner of Jeanette Rankin Park (looking northeast)*

park is owned by MDT and recorded as right-of-way for U.S. Highway 12. Park maintenance is completed by the City of Missoula under a maintenance agreement with MDT.

The original park was built when the Madison Street Bridge was constructed in the mid 1950s. The park was renamed in honor of Jeanette Rankin in 1982 and is primarily a treed and grassed area with a memorial to Jeanette Rankin, which is surrounded by trees and located in the middle of the park. There is no known association with Jeanette Rankin's life that can be related to this park. The park does not meet the standards to be placed in the National Historic Register. However, it is frequently used by the public as a place for a picnic, or by students as a spot to sit and read a book. Because the park contains the Jeanette Rankin Memorial, there are visitors who admire the memorial and the area which is landscaped and planted with flowers and shrubs. Given the size and shape of the park, and the amount of traffic that passes by the park on the east and west, the park is not often used for physical recreation such as a football game or Frisbee. Because the area is used by the public (there are benches and a memorial), and because it has 24-hour access by the public and is used as a public resource, MDT has determined that the park is a significant resource. The focus of this 4(f) is to evaluate alternatives that allow the park to be used as it is now – an area to relax, picnic, read a book, visit the memorial, etc.

#### 4.2.2 Significant Historic Properties

Cultural resources and historic properties are protected by the National Historic Preservation Act of 1966, as amended. This legislation requires the identification and evaluation of all cultural and historic resources that a project may impact. It further requires that resources identified be considered for avoidance if possible or, when avoidance is not possible, that any adverse effects of the project on the resource be mitigated. Coordination is required with the Montana SHPO and the Advisory Council on Historic Preservation if there is an adverse effect on historic properties. For the purpose of the Arthur Avenue Project, no cultural resources were identified. Therefore, an evaluation was completed only for impacts to historic properties.

The **University Area Historic District (24MO827)** was listed on the NRHP in 2000. The district includes 33 contributing and two non-contributing historic properties within its boundaries. The district is bounded by South 4<sup>th</sup> Street East on the north, by Higgins Avenue on the west, by Arthur Avenue on the east, and by Beckwith Avenue on the south. It should be noted that the *eligible* historic district encompasses the entire *listed* historic district (24MO827) as well as the outlying properties that are believed to contribute to the overall character of the historic district. The historic district, both listed and eligible, is within the Area of Potential Effect by the project. However, after analysis, MDT and SHPO agreed that the project would have no effect on the listed district. However, one home in the eligible historic district and deemed to contribute to the listed historic district would be impacted by the project (610 South 6<sup>th</sup> Street East). Figure 4-3 shows the existing University Historic District boundary in relation to the potential 4(f) impacts of the proposed Arthur Avenue project.

The historic nature of the area properties was determined by a cultural resource survey of the project area, which was conducted in 2002 (See Table 4-1 below). Thirty

historic properties were recorded and evaluated as to their contribution or non-contribution to the University Area Historic District. In total, the eligible historic district includes 63 contributing properties, and 12 of these contributing properties are located outside of the listed historic district boundary and within the Area of Potential Effect on Arthur Avenue, South 5<sup>th</sup> Street East, and South 6<sup>th</sup> Street East (See Figure 4-3). On South 5<sup>th</sup> Street East, the contributing property is 659. On South 6<sup>th</sup> Street East the properties are the Headley Place (610 South 6<sup>th</sup> Street East) as well as 609, 615, 620, 625, 629, 634, 645, 659, 664, and 666 South 6<sup>th</sup> Street East.



**Table 4-1**  
**Arthur Avenue Project Resources Inventoried**

Street Address	Previously recorded for the historic district (Y/N)	NRHP eligibility	Comments
600 Eddy	No	Non-contributing element	Recent construction
500 Eddy	Yes	Contributing element	Revised site form
504 Eddy	Yes	Contributing element	Revised site form
506 Eddy	Yes	Contributing element	
526 Eddy	Yes	Contributing element	
534 Eddy	Yes	Contributing element	
538 Eddy	Yes	Contributing element	
542 Eddy	Yes	Contributing element	
502 S. 6th E.	Yes	Contributing element	Revised site form
503 S. 6th E.	Yes	Contributing element	Revised site form
505 S. 6th E.	Yes	Contributing element	
510 S. 6th E.	Yes	Contributing element	Revised site form
517 S. 6th E.	Yes	Non-contributing element	
517 ½ S. 6th E.	Yes	Non-contributing element	
518 S. 6th E.	Yes	Contributing element	Revised site form
524 S. 6th E.	Yes	Contributing element	
525 S. 6th E.	Yes	Contributing element	
529 S. 6th E.	Yes	Contributing element	Revised site form
532 S. 6th E.	Yes	Contributing element	Revised site form
533 S. 6th E.	Yes	Contributing element	Revised site form
543 S. 6th E.	Yes	Contributing element	
601 S. 6th E.	No	Non-contributing element	Loss of integrity
602 S. 6th E.	No	Non-contributing element	Heavily remodeled Craftsman Style
609 S. 6th E.	No	Contributing element	Tudor Style
610 S. 6th E. The Headley Place	No	Contributing element	Craftsman Style
615 S. 6th E.	No	Contributing element	Craftsman Style
616 S. 6th E.	No	Non-contributing element	Minimal Tradition Style
620 S. 6th E.	No	Contributing element	Prairie Style
625 S. 6th E.	No	Contributing element	Minimal Tradition Style
626 S. 6th E.	No	Non-contributing element	Loss of integrity
629 S. 6th E.	No	Contributing element	Minimal Tradition Style
630 S. 6th E.	No	Non-contributing element	Loss of integrity
634/636/636 ½ S. 6th E.	No	Contributing element	Minimal Tradition Style
635 S. 6th E.	No	Non-contributing element	Loss of integrity
637 S. 6th E.	No	Non-contributing element	Loss of integrity
638, 642, 644 S. 6th E.	No	Non-contributing element	Loss of integrity
645 S. 6th E.	No	Contributing element	Recent construction
659 S. 6th E.	No	Contributing element	Recent construction
664 S. 6th E.	No	Contributing element	Colonial Revival Style
665 S. 6th E.	No	Non-contributing element	Loss of integrity
666 S. 6th E.	No	Contributing element	Greek Classical Revival Style
659 S. 5th E.	No	Contributing element	Arte Moderne
657 S. 5th E.	No	Non-contributing element	Recent construction
651 S. 5th E.	No	Non-contributing element	Recent construction
645 S. 5th E.	No	Non-contributing element	Recent construction
639 S. 5th E.	No	Non-contributing element	Recent construction
633 S. 5th E.	No	Non-contributing element	Recent construction
625 S. 5th E.	No	Non-contributing element	Recent construction
615 S. 5th E.	No	Non-contributing element	Recent construction
601 S. 5th E.	No	Non-contributing element	Recent construction
530 S. 5th E.	Yes	Contributing element	
529 S. 5th E.	Yes	Contributing element	
525 S. 5th E.	Yes	Non-contributing element	Recent apartments

**Table 4-1 (continued)**  
**Arthur Avenue Project Resources Inventoried**

524 S. 5th E.	Yes	Contributing element	
520 S. 5th E.	Yes	Contributing element	
516 S. 5th E.	Yes	Contributing element	Revised site form
510 S. 5th E.	Yes	Contributing element	
509 S. 5th E.	Yes	Contributing element	
505 S. 5th E.	Yes	Contributing element	
503 S. 5th E.	Yes	Contributing element	
500 S. 5th E.	Yes	Contributing element	
702 Arthur Ave.	No	Non-contributing element	Craftsman Style
815 Arthur Ave	Yes	Contributing element	Revised site form
821 Arthur Ave.	Yes	Contributing element	Revised site form
Jeanette Rankin Park	No	Not eligible	

- Part of Inventory but not adjacent to any proposed construction
- Part of Inventory, Adjacent to proposed construction
- Part of Inventory, Adjacent to proposed construction, Contributing to District
- Part of Inventory, Contributing to District, Adversely Impacted by Proposed Alternative



*Headley Place (Right) at 610 South 6th Street East.*

The Headley Place (610 South 6<sup>th</sup> Street East), a single-story Craftsman-style residence that was constructed in 1929, retains a high degree of architectural integrity. The Headley Place is not in the Historic District, but is individually eligible for NHRP. If the Historic District is expanded, the Headley Place would be a contributing element.

The remaining 11 of the 12 properties located within the Project Area of Potential Effect were constructed between 1933 and 1938 and display a wide array of different architectural styles, including Craftsman, Tudor, and Minimalist Tradition. All 12 properties exhibit a high degree of architectural integrity and association with the initial development of this neighborhood adjacent to the University of Montana campus.

All of the Project 4(f) Resources in the Arthur Avenue – Missoula project area are shown in Figure 4-1.

## **4.3 Description of 4(f) Uses**

### **4.3.1 4(f) Uses of the Preferred Alternative**

The preferred alternative for the Arthur Avenue project and the Proposed 4(f) uses resulting from this alternative are presented in Figure 4-2 and discussed in the following sections. The preferred alternative includes two options, one without a left turn lane and one with a turn lane.

#### **4.3.1.1 Preferred Alternative Uses of Recreation Areas**

Jeanette Rankin Park is a publicly owned park which contains a statue and memorial of Jeanette Rankin. The park has been observed to be a picnic area, a study area, and a resting area for students. The park has limited value for sporting activities due to the small size and its triangular shape. The Jeanette Rankin Memorial offers visitors and students a visually appealing landmark. The preferred alternative will require acquisition of approximately 40 feet (12.2 meters) of the west side of the park and would remove approximately 0.25 acres of green space (area of visually appealing vegetation) within a high vehicle travel area for permanent use as a transportation facility. While some sod and potentially some mature trees would be removed, the area used would not impact the Jeanette Rankin Memorial or adversely affect the existing intent of the park as a “green space” with visual appeal.

#### **4.3.1.2 Preferred Alternative Uses of Historic Properties**

The preferred alternative proposes to widen Arthur Avenue from the existing 44 feet to approximately 80 feet in the vicinity of the historic properties between South 5<sup>th</sup> Street East and South 6<sup>th</sup> Street East. Widening would require removing one historic property (610 South 6<sup>th</sup> Street East -The Headley Place) at the intersection of Arthur Avenue and South 6<sup>th</sup> Street East. This property is outside of the listed historic district boundary but was determined to contribute to the University Area Historic District.

On South 5<sup>th</sup> Street East, the roadway would be shifted to the south to accommodate an approximate 41-foot roadway. This would require removing trees on the boulevard on the south side of the street adjacent to a contributing historic property (659 South 5<sup>th</sup> Street East). There would be no encroachment on the property boundaries. The necessary roadway width required for the preferred alternative would come from the existing boulevard between the street and the historic property, and would require the removal of one tree.

On South 6<sup>th</sup> Street East, the roadway would be narrowed, moving the north side of the roadway to the south, away from the four historic properties (620, 634, 664, and 666 South 6<sup>th</sup> Street East) on the north side of the street between Arthur Avenue and Maurice Avenue. These four properties contribute to the University Area Historic District. There would be no encroachment on the property boundaries. However, there would be an impact to the historic setting of the existing boulevard between the street and historic properties due to the proximity of the roadway improvements. Although the existing curb line on the south side of the street would be shifted

approximately 2 feet to the south, the sidewalk would remain in its existing location. There would be no encroachment on the property boundaries; however, due to the proximity of the roadway improvements there would be an impact to historic setting adjacent to 609, 615, 625, 629, 645, and 659 South 6th Street East.

There would be an Adverse Effect to the Headley Place (610 South 6th Street East) as a result of the proposed project. This property lies within the eligible Historic District and was determined to contribute to the **University Area Historic District (24MO827)** if the district is expanded. Widening Arthur Avenue and installing bike lanes, sidewalks, new curb and gutter, and shoulders would result in the removal of Headley Place, which is currently owned by the University of Montana. The preferred alternative would completely use all of the property requiring the structure to be moved.

There would be No Adverse Effect to 659 South 5th Street East as a result of the proposed project. Although the roadway would be widened in the direction of the residence, the widening would only impact the existing boulevard and one tree. There would be no encroachment on the property boundary and no physical impacts to the residence itself. There would, however, be an impact to the historic setting of the site because of the wider roadway and the loss of one tree. MDT proposes to mitigate the effect by working with the City to plant new trees on the reconstructed boulevard in the approximate location of the older trees.

There would be No Adverse Effect to the four contributing historic properties (620, 634, 664, 666 South 6th Street East) on the north side of South 6th Street East between Arthur Avenue and Maurice Avenue. The roadway would be narrowed away from residences and the existing boulevard reconstructed to accommodate the new boulevard. There would be no encroachment on the historic property boundaries and the work would be confined to the existing right-of-way.

There would be No Effect to the six historic properties (609, 615, 625, 629, 645, and 659 South 6th Street East) located on the south side of South 6th Street East between Arthur Avenue and Maurice Avenue. The existing curb line would be shifted approximately 2 feet to the south and the boulevard width would be reduced to maintain the existing sidewalk location. MDT will work with the City to plant new trees in the reconstructed boulevard. Construction activities would not encroach on any of the six properties and the setting would remain intact.

The proposed project would have No Effect to the **University Area Historic District (24MO827)**. The block bounded by Arthur Avenue and Maurice Avenue is not currently included in the listed historic district. However, one property on this block, 610 South 6th Street, does lie within the eligible historic district and would be adversely impacted by the preferred alternative. There would be no alteration of or change in the setting of the existing listed historic district as a result of the project. Overall, the historic district would retain the characteristics that made it eligible for listing on the National Register of Historic Places.

### 4.3.2 Alternatives that Avoid all 4(f) Resources

No alternative was identified that completely avoided all of the historic properties or Jeanette Rankin Park except the no-build alternative.

### 4.3.3 Description of Impacts

Numerous alternatives were considered for the Arthur Avenue Project, and the figures that follow this discussion in Table 4-2 briefly describe the impacts of each of the 14 conceptual alternatives on the Project 4(f) Resources. Also, Table 4-3 provides a comparison of Section 4(f) Impacts for each alternative. Of the 14 alternatives shown in Table 4-3, only the no-build alternative would have no impacts to 4(f) properties. Each of the alternatives created impacts to the park, impacts to historic properties, or both. A more detailed description of alternatives and their impacts is provided following the tables.

**Table 4-2: Alternatives Considered for the Arthur Avenue Project**

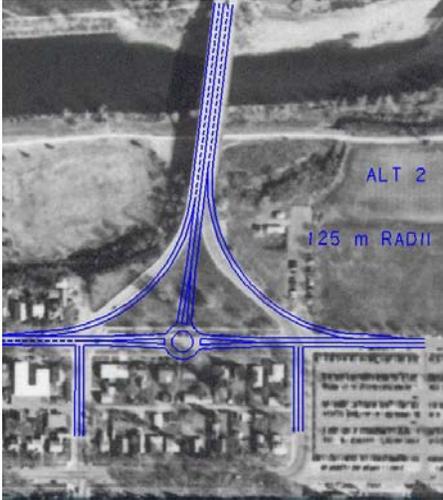
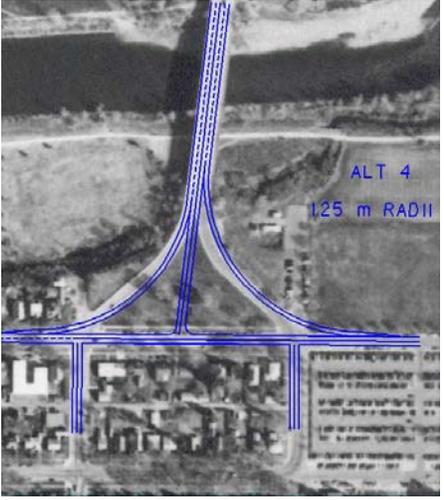
<i>Roundabout South of Madison Street Bridge</i>	<i>Intersection South of Madison Street Bridge</i>
	
<ul style="list-style-type: none"> <li>■ Park would be split down the middle, and approximately 50 percent of it would be removed.</li> <li>■ Rankin Memorial would need to be relocated.</li> <li>■ Loss of recreation, small possibility of green space remaining.</li> <li>■ No impacts to historic homes.</li> </ul>	<ul style="list-style-type: none"> <li>■ Park would be split down the middle, and approximately 50 percent of it would be removed.</li> <li>■ Rankin Memorial would need to be relocated.</li> <li>■ Loss of recreation, small possibility of green space remaining.</li> <li>■ No impacts to historic homes.</li> </ul>

Table 4-2 continued: Alternatives Considered for the Arthur Avenue Project

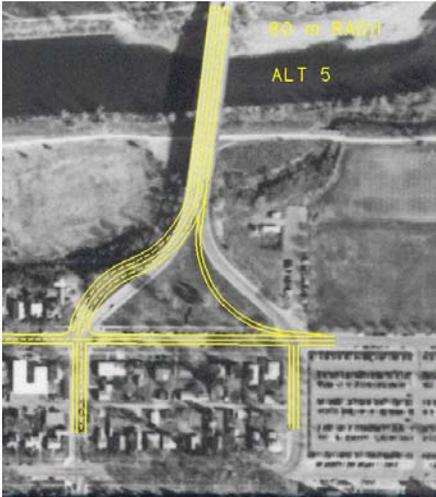
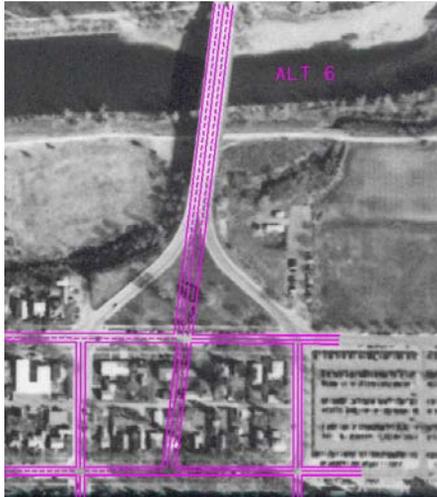
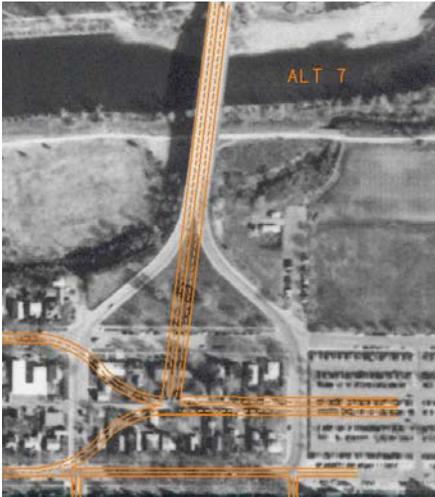
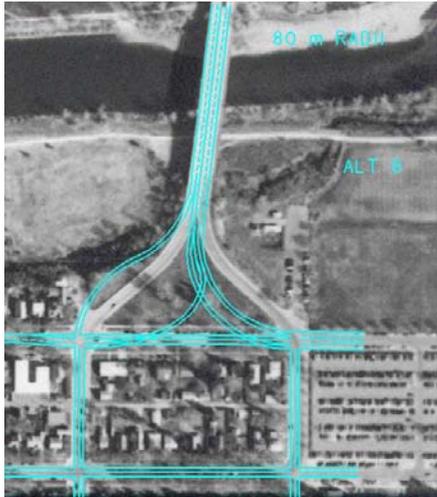
<i>U.S. Highway 12 Shift to Arthur</i>	<i>New Intersection at 5th and 6th</i>
	
<ul style="list-style-type: none"> <li>■ Approximately 20 percent of the park will be removed (might have possible addition on left side).</li> <li>■ Rankin Memorial may be able to remain in place.</li> <li>■ Impact to one historic home.</li> </ul>	<ul style="list-style-type: none"> <li>■ Park would be split down the middle, and approximately 30 percent of it would be removed.</li> <li>■ Rankin Memorial would need to be relocated.</li> <li>■ Loss of recreation, small possibility of green space remaining.</li> <li>■ Impact to historic home at 620 6th street (will affect non-historic homes).</li> </ul>
<i>New Roadway Between 5th and 6th</i>	<i>Flyovers Separating University and U.S. Highway 12</i>
	
<ul style="list-style-type: none"> <li>■ Park would be split down the middle, and approximately 30 percent of it would be removed.</li> <li>■ Rankin Memorial would need to be relocated.</li> <li>■ Loss of recreation, small possibility of green space remaining.</li> <li>■ 2 historic homes and a total of 5 historic properties would be impacted.</li> </ul>	<ul style="list-style-type: none"> <li>■ Park would be split multiple times, and 80-100 percent of it would be removed.</li> <li>■ Rankin Memorial would need to be relocated.</li> <li>■ Loss of recreation, small possibility of green space remaining.</li> <li>■ One historic property would be impacted.</li> </ul>

Table 4-2 continued: Alternatives Considered for the Arthur Avenue Project

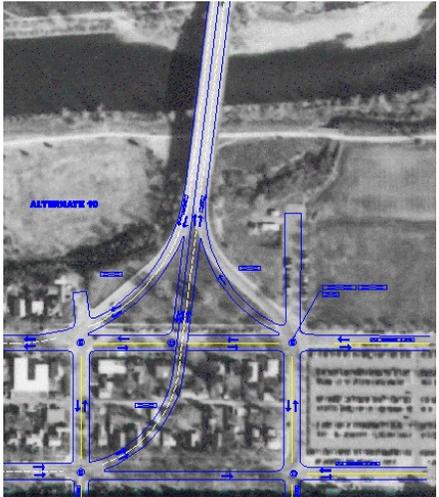
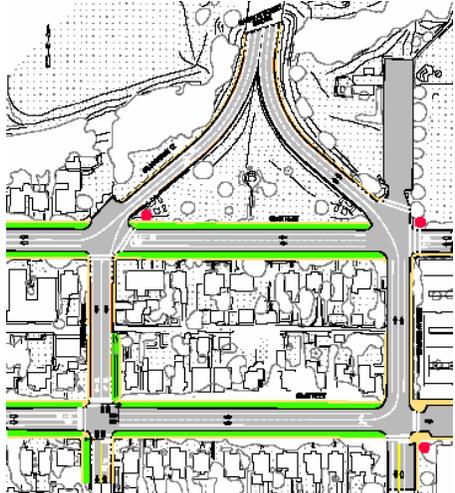
<i>Split Bridge 2-Lane 2-Way Flyovers</i>	<i>Flyover from the Madison Street Bridge</i>
	
<ul style="list-style-type: none"> <li>■ Approximately 20 percent of the park will be removed (might have possible addition on left side).</li> <li>■ Rankin Memorial would need to be relocated.</li> <li>■ One historic property would be impacted.</li> </ul>	<ul style="list-style-type: none"> <li>■ Park would be split down the middle, and approximately 50 percent of it would be removed.</li> <li>■ Rankin Memorial would need to be relocated.</li> <li>■ Loss of recreation, small possibility of green space remaining.</li> <li>■ Two historic homes and two historic properties would be impacted.</li> </ul>
<i>Adding a New Intersection at 5th Street</i>	<i>Realignment of 5th Street</i>
	
<ul style="list-style-type: none"> <li>■ Park would be split down the middle, and approximately 50 percent of it would be removed.</li> <li>■ Rankin Memorial would need to be relocated.</li> <li>■ Loss of recreation, but small possibility of green space remaining.</li> <li>■ One historic home/property would be impacted.</li> </ul>	<ul style="list-style-type: none"> <li>■ Approximately 17 percent of the park will be removed.</li> <li>■ Rankin Memorial can remain in place.</li> <li>■ One historic home/property would be impacted.</li> </ul>

Table 4-2 continued: Alternatives Considered for the Arthur Avenue Project

<i>Flyover Overpass to University</i>	<i>U.S. Highway 12 NB &amp; SB Adjacent</i>
	
<ul style="list-style-type: none"> <li>■ Park would be split multiple times, and 80-100 percent of it would be removed.</li> <li>■ Rankin Memorial would need to be relocated.</li> <li>■ No impacts to historic homes (will affect non-historic homes).</li> </ul>	<ul style="list-style-type: none"> <li>■ Less than 20 percent of park removed.</li> <li>■ Rankin Memorial remain in place.</li> <li>■ No impacts to historic homes (will affect non-historic homes).</li> </ul>
<i>No-Action Alternative</i>	
	
<ul style="list-style-type: none"> <li>■ None of the park will be removed.</li> <li>■ Rankin Memorial can remain in place.</li> <li>■ No historic homes or properties would be impacted.</li> </ul>	

(Note: A historic property is a property that contains a residence or structure that is considered historic.)

The following alternatives would completely eliminate park uses such as picnicking, resting in the park, using park benches, light physical recreation, visiting the memorial: A roundabout south of the Madison Street Bridge; an intersection south of

the Madison Street Bridge; a new intersection at 5th and 6th; a new roadway between 5th and 6th; a flyover separating University and U.S. Highway 12; a flyover from the Madison Street Bridge; adding a new intersection at 5th Street; a flyover pass to University.

The following alternatives would allow some continued use of the park for its current recreation activities: U.S. Highway 12 shift to Arthur; split bridge two-lane flyovers; realigning 5th Street; U.S. Highway 12 NB; SB adjacent; no-action alternatives; preferred alternative.

### **Summary of Alternatives Considered**

The following provides a brief summary of the alternatives considered for the Arthur Avenue Project, as well as the impacts and feasible and prudent nature of each alternative.

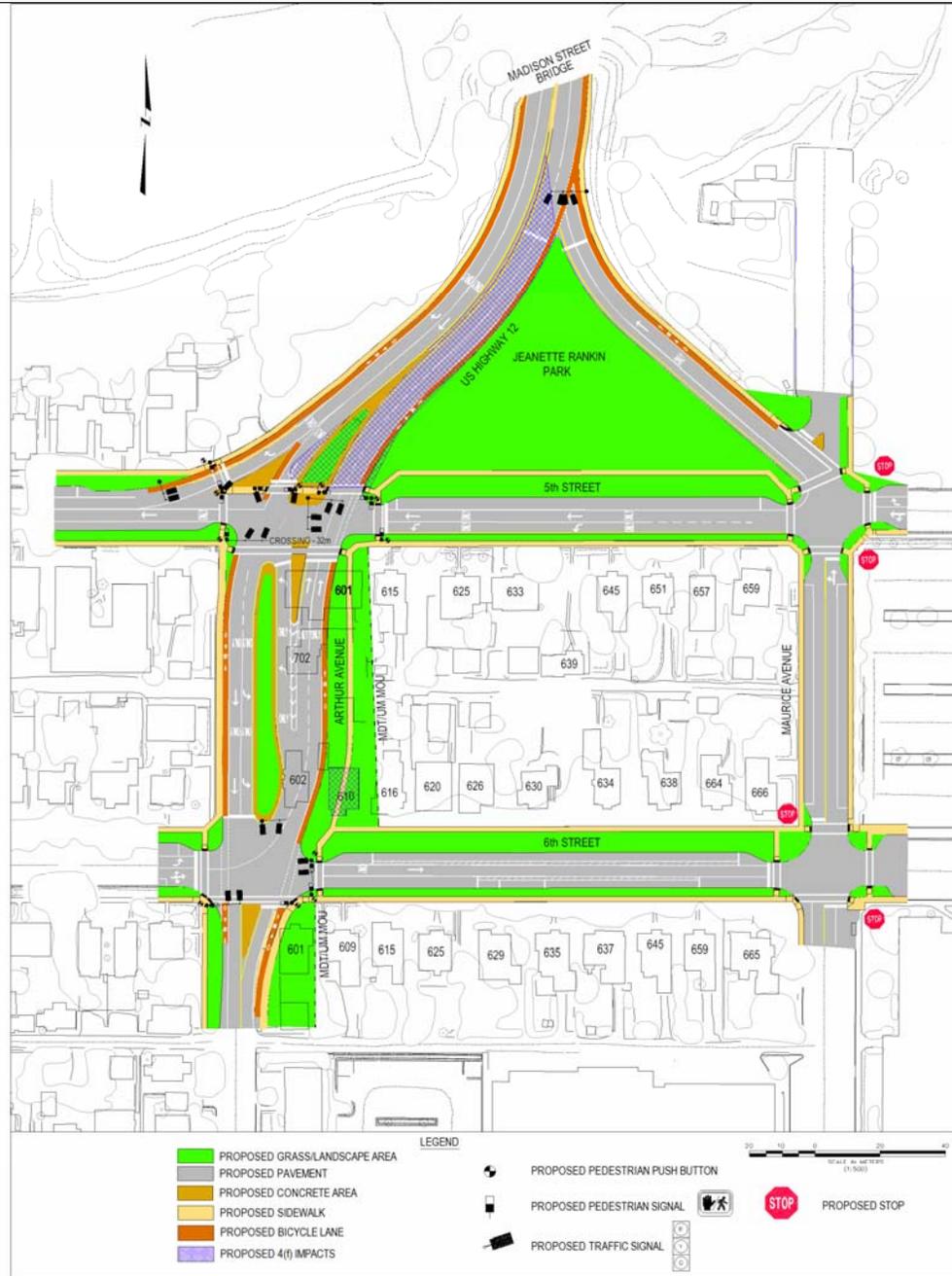
*Roundabout South of Madison Street Bridge* – This alternative (shown in Table 4-2) would implement a single lane roundabout on 5<sup>th</sup> Street between Arthur Avenue and Maurice Avenue.

After a thorough analysis, this option was considered inappropriate for a variety of reasons. First, a single lane roundabout cannot efficiently handle the large volumes of traffic from eastbound U.S. Highway 12 traffic, University/residential traffic from the north, and University traffic from the east. The volume of traffic that would enter the roundabout could impair its ability to cycle vehicles through in a reasonable manner. This alternative also has serious considerations regarding pedestrian and bicycle use. Since the University is directly to the east of the roundabout location, there is a large volume of bicycle and pedestrian traffic. The impact of pedestrians on a roundabout will dramatically reduce the volume of vehicles that will be able to pass through the structure, due to crossing times. Roundabouts are also difficult for pedestrians and bicyclists to negotiate and often require a signalized crossing near the roundabout. With the introduction of a signal, the platoon flow causes the roundabouts performance to suffer. Finally, while this alternative would have no impact to historic properties, it would remove at least 50 percent of Jeanette Rankin Park, impair park use, and would require relocation of the Jeanette Rankin Memorial. This alternative is feasible but not prudent because:

- Potential wetlands impacts.
- Safety issues with pedestrians and bicyclists.
- Operational concerns under existing and future traffic demands.
- Traffic will reach grid-lock from special events.
- The park would lose too much area to remain a valuable recreation space.

Table 4-2 continued: Alternatives Considered for the Arthur Avenue Project

Preferred Action Alternative – Option 2



- Approximately 17 percent of the park will be removed.
- Rankin Memorial can remain in place.
- One historic home and one historic property would be impacted.
- 4(f) Impacts are the same for Option 1 and Option 2

*Intersection South of Madison Street Bridge* - This alternative (shown in Table 4-2) is similar to the roundabout alternative except that the roundabout is replaced with a conventional signalized intersection. This alternative assisted in the movement of U.S. Highway 12 westbound traffic as well as traffic leaving the University.

The disadvantages of this option are similar to the Roundabout South of Madison Street Bridge. Traffic traveling on 6<sup>th</sup> Street, eastbound on U.S. Highway 12, would be required to make a left turn onto Arthur Avenue followed by a right turn onto 5<sup>th</sup> Street. Once on 5<sup>th</sup> Street, the vehicles would have to take a left at the new intersection before accessing the Madison Street Bridge. Again, this alternative would not be able to efficiently handle the traffic volume, pedestrian and bike crossings would reduce the volume of vehicles that would be able to pass through, it would remove at least 50 percent of Jeanette Rankin Park, impair park use, and require relocation of the Jeanette Rankin Memorial. This alternative is feasible but not prudent because:

- Traffic will reach grid-lock from special events.
- The park would lose too much area to remain a valuable recreation space.
- Unacceptable level of service.

*U.S. Highway 12 Shift to Arthur* - This alternative (shown in Table 4-2) would bring all four traffic lanes off the Madison Street Bridge and down into the intersection of Arthur Avenue and 5<sup>th</sup> Street. At the intersection, westbound U.S. Highway 12 traffic would turn onto 5<sup>th</sup> Street and proceed west. Eastbound U.S. Highway 12 traffic would come from 6<sup>th</sup> Street eastbound turning north on Arthur Avenue, which then would continue over the Madison Street Bridge. Traffic leaving the University would take the ramp to access the Madison Street Bridge. Roadways to the west of Arthur Avenue would remain one-way, but roadways east of and including Arthur Avenue would be two-way.

This alternative would remove approximately 20 percent of the park and would impact a home in the Historic District. The alternative was removed from consideration due to problems with both the horizontal and vertical curves required to access the Arthur Avenue/5<sup>th</sup> Street intersection from the north. Both of these curves have significant impacts on sight distance and by combining the two curves, the problem would be magnified. An additional concern involves the merging of traffic from the University onto U.S. Highway 12 from the ramp. Due to the angle of the merge, there would be sight and safety problems. This alternative is not feasible and not prudent because:

- Geometric design concerns (sight angles, curve combination), making it an un-safe design.
- Sight distance issues, making it an un-safe design.

*New Intersection at 5<sup>th</sup> and 6<sup>th</sup>* - This alternative (shown in Table 4-2) would remove the existing couplets and bring the traffic from the Madison Street Bridge south until

it intersects 5<sup>th</sup> Street. At the intersection at 5<sup>th</sup> Street, the westbound U.S. Highway 12 traffic turns west and proceeds down 5<sup>th</sup> Street. Additionally at this intersection, traffic heading south could turn and enter the University. Traffic exiting the University can either go west or north at the 5<sup>th</sup> Street intersection. The remaining southbound traffic will continue south to the intersection of 6<sup>th</sup> Street where eastbound U.S. Highway 12 traffic will be intercepted and diverted north. 5<sup>th</sup> and 6<sup>th</sup> Streets west of the intersections will be one-way. The remaining roadways will be reconfigured to two-way.

This alternative would remove approximately 30 percent of Jeanette Rankin Park and split it down the middle, the memorial would need to be relocated, there would be a complete loss of recreation, and the alternative would impact 1 historic home and 5 non-historic properties. This alternative is not reasonable and prudent because of the 4(f) impacts, additional right-of-way requirements, and congestion problems that would occur at the intersection of 5<sup>th</sup> Street and the Madison Street Bridge. This alternative is not feasible and not prudent because:

- Traffic will reach grid-lock from special events.
- Impacts to historic homes and properties (100 percent removal historic home and its property).
- Excessive right-of-way requirements.
- Unacceptable level of service.

*New Roadway Between 5<sup>th</sup> and 6<sup>th</sup>* - This alternative (shown in Table 4-2) is similar to the New Intersection at 5<sup>th</sup> and 6<sup>th</sup> alternative, but it would remove the 5<sup>th</sup> Street and 6<sup>th</sup> Street intersections and creates a new intersection between 5<sup>th</sup> and 6<sup>th</sup> Street. This intersection would form a couplet, similar to the Madison Street Bridge, to access 5<sup>th</sup> and 6<sup>th</sup> Streets. With this alternative all of the traffic for U.S. Highway 12, the University, and the residential community would pass through the new intersection between 5<sup>th</sup> and 6<sup>th</sup> Street. From this point, U.S. Highway 12 traffic would enter and exit to the west side of the intersection while University traffic and residential traffic would enter and exit from the east.

This alternative was rejected for multiple reasons: there would be an excessive right-of-way take required for the realignment; the couplet design and the introduction of broken back curves could cause driver confusion without proper signing; pedestrian and bicycle accessibility would be difficult in association with the couplet; there would no longer be access to residential property along Arthur Avenue and 5<sup>th</sup> Street; Jeanette Rankin Park would be split down the middle and approximately 30 percent of the park would be removed; the memorial would need to be relocated; there would be a complete loss of recreation to the park; and finally, the alternative would impact two historic homes and five historic properties. This alternative is feasible but not prudent because:

- Excessive right-of-way requirements.

- Impacts to historic homes and properties (100 percent home removal, 30 percent property removal).
- Removal of residential access.
- Pedestrian and bicycle access difficulties.

*Flyovers Separating University and U.S. Highway 12* – This alternative (Shown in Table 4-2) would add overpasses to the project in an attempt to streamline traffic flow both for U.S. Highway 12 and for the University.

This alternative was removed from the viable options primarily because of cost and the feasibility of constructing the flyovers. There would need to be steep approaches to the flyovers because of the close proximity of the structures to the existing bridge. The slopes required for such an overpass would compromise stopping sight distances. In addition, the excessive slope could present serious problems during poor weather conditions. Also, this alternative would split Jeanette Rankin Park multiple times (80-100 percent removal), the memorial would need to be relocated, the park would lose all recreation, and one historic property would be impacted. This alternative is neither feasible nor prudent because:

- Traffic will reach grid-lock from special events.
- The park would lose too much area to remain a valuable recreation space.
- Geometric design concerns (steep approaches) make this alternative un-safe.
- Cost.

*Split Bridge 2-Lane 2-Way Flyovers* – This alternative (Shown in Table 4-2) was developed as an attempt to split the U.S. Highway 12 and residential traffic from the University traffic and thus minimize the number of flyovers required by the previous alternative.

This option was not logistically viable because of the lane configurations over the Madison Street Bridge. Extensive work, if feasible at all, would be required north of the bridge to bring the University and U.S. Highway 12 traffic into the correct lanes. In addition, the lane drop and lane addition to the U.S. Highway 12 traffic lanes, on the south side of the bridge, would be very confusing for motorists. This alternative would remove approximately 20 percent of Jeanette Rankin Park, the memorial would need to be relocated, and one historic property would be impacted. This alternative is neither feasible nor prudent because:

- Geometric design concerns (lane drop/addition).
- Cost.
- Motorist confusion (lane drop/addition).

*Flyover from the Madison Street Bridge* - This alternative (Shown in Table 4-2) is a variation to the New Intersection at 5<sup>th</sup> and 6<sup>th</sup> alternative. This alternative shifts the southern intersection to 6<sup>th</sup> Street and uses an overpass configuration to cross over the top of the intersection at 5<sup>th</sup> Street. This alternative has good traffic flow and the level of service at all of the intersections is above minimum designs.

This option was removed for many reasons including: the cost of an overpass structure over an intersection is very high and project funding may not allow for such costs; bicycle and pedestrian access via the overpass is very limited; merging traffic from the University would become backed up and possibly encounter gridlock in high flow conditions; there would be right-of-way issues associated with the connection between 5<sup>th</sup> and 6<sup>th</sup> Streets; Jeanette Rankin Park would be split down the middle and approximately 50 percent of the park would be removed; the memorial would need to be relocated; there would be a complete loss of recreation; and the alternative would impact two historic homes and two historic properties. This alternative is neither feasible nor prudent because:

- Traffic will reach grid-lock from special events.
- The park would lose too much area to remain a valuable recreation space.
- Cost.
- Excessive right-of-way.
- Impacts to historic homes and properties (100 percent property use, 100 percent home use).
- Bicycle and pedestrian access issues.

*Adding a New Intersection at 5<sup>th</sup> Street* - This alternative (Shown in Table 4-2) is identical to the Flyover from the Madison Street Bridge Alternative except that the existing couplet alignment is kept intact. This option allows for traffic to precede south on Arthur Avenue at the intersection of 5<sup>th</sup> Street and Arthur Avenue. By keeping the eastern couplet leg there is also the possibility of using the existing second lane as overflow during special events.

This alternative was removed from consideration for the same traffic reasons as the Flyover from the Madison Street Bridge. Additionally, this alternative may cause traffic conflicts at the 5<sup>th</sup> Street/ Arthur Avenue intersection. Jeanette Rankin Park would be split down the middle and approximately 50 percent of the park would be removed; the memorial would need to be relocated; there would be a complete loss of recreation; and the alternative would impact one historic home and one historic property. This alternative is neither feasible nor prudent because:

- The park would lose too much area to remain a valuable recreation space.
- Operational concerns related to signal timing and queue length.
- Excessive right-of-way requirements.

*Realignment of 5<sup>th</sup> Street* - This alternative (Shown in Table 4-2) maintains the existing couplets but reconfigures them in a manner such that southbound traffic can continue through to the intersection of Arthur Avenue and 5<sup>th</sup> Street.

This alternative was removed from consideration for several reasons; the first of which was traffic flow. The traffic simulation model revealed that the alignment could not handle the traffic volumes under an appropriate level of service. Second, the only way to access 5<sup>th</sup> Street from the University would be to exit via 6<sup>th</sup> Street and then merge across lanes on Arthur Avenue to access 5<sup>th</sup> Street. The merging lane would require significant signal timing issues to ensure that traffic from 6<sup>th</sup> Street westbound could access 5<sup>th</sup> Street westbound. The third reason for removal of this alternative dealt with turning radii at the new intersection within the eastern couplet. Truck traffic would have problems negotiating the turn to the north and turn to the south would require a separate left turn lane. Jeanette Rankin Park would be split down the middle and approximately 17 percent of the park would be removed and the alternative would impact one historic home and property. This alternative is feasible but not prudent because:

- Traffic will reach grid-lock from special events.
- Truck turning problems.
- Signal timing problems.
- Access problems.
- Unacceptable level of service.

*Flyover Overpass to University* - For this alternative (Shown in Table 4-2) the University would have ramps leading from the Madison Street Bridge to and from the campus. The southbound ramp would require an overpass structure to bring it up over the top of eastbound U.S. Highway 12. The westbound U.S. Highway 12 traffic would pass on the existing couplet alignment to 5<sup>th</sup> Street while the eastbound U.S. Highway 12 traffic would turn left on a modified Arthur Avenue alignment, which would run along the east side of the existing west couplet. The alternative removes 5<sup>th</sup> Street between Arthur and Maurice as well as Maurice between 5<sup>th</sup> and 6<sup>th</sup> Streets.

This alternative was removed from possible implementation for multiple reasons: the overpass structure would have significant construction costs and, to achieve adequate clearances, the approach slopes would have to be very steep; the realignment would introduce a complex broken back curve for the eastbound U.S. Highway 12 traffic and would require additional right-of-way acquisition to the east of Arthur Avenue; there would be no access to the block south of the park from the Madison Street Bridge; Jeanette Rankin Park would be split multiple times and approximately 80-100 percent of the park would be removed; the memorial would need to be relocated; there would be a complete loss of recreation; and while the alternative would not impact any historic properties, three non-historic properties would be affected. This alternative is neither feasible nor prudent because:

- Geometric design concerns (steep approaches, broken back curve).
- Access problems.
- The park would lose too much area to remain a valuable recreation space.
- Cost.

**U.S. Highway 12 NB & SB Adjacent** – This Alternative manipulates the U.S. Highway 12 northbound movement to mirror the southbound movement while minimizing impacts to the University’s property and the park. This Alternative moves U.S. Highway 12 northbound and southbound movements adjacent to each other as the transition from Arthur Avenue to the Madison Street Bridge. With this option, 5<sup>th</sup> and 6<sup>th</sup> Streets east of Arthur Avenue are switched to two way traffic and Maurice Avenue is removed. Traffic would be congested with this option and it does not offer any improvement over the no-build (see Traffic Report). This alternative is feasible but not prudent because:

- Unacceptable level of service.
- Congestion will result in safety problems.
- Congestion will reduce project funding.

**No-Action Alternative** – This alternative (Shown in Table 4-2) will have no impacts to the project area or 4(f) resources. It is the only avoidance alternative, and will be discussed further in Section 4.4

**Preferred Action Alternative** – This alternative (Shown in Table 4-2 and Figure 4-2) was found to be the most feasible, reasonable, and prudent alternative. Refer back to Section 4.1 for a description. The impacts of the preferred alternative are discussed further in the following section.

## 4.4 Avoidance and Minimization

Many alternatives were evaluated for the project area as shown previously in Section 4.3, as well as in Section 2, Section 3, and Appendix B of the Environmental Assessment. With the exception of the No-Build Alternative, no feasible or prudent alternatives were identified that would avoid all of the 4(f) properties. Table 4-3 shows the impacts to 4(f) resources. Of the alternatives, six had no impacts to historic homes. However, none of the six alternatives were considered feasible and prudent. In addition five of the six alternatives that had no impact to historic homes, had an impact to the park (no build alternative had no impact). Three alternatives out of the 13, (U.S. Highway 12 – Shift to Arthur, Split Bridge 2 lane 2 way Flyovers, Realignment of 5<sup>th</sup> Street) had similar impacts to 4(f) resources as the Preferred Alternative. However, none of these three alternatives were considered feasible and prudent.

- The No-Build Alternative would have no impact on 4(f) resources at this time. However, the University of Montana master plan proposes to use all of the block between 5<sup>th</sup> Street, 6<sup>th</sup> Street, Arthur Avenue, and Maurice Avenue in the future for new facilities. If the No-Build Alternative is selected, based upon University

**Table 4-3  
Comparison of Section 4(f) Impacts for Each Alternative**

Name of Alternative	Approximate % Park Impacted	Impair Use of Park? (yes or no)	Proximity Impacts? ** (+/-)	Remove or Relocate Memorial? (yes or no)	# of Historic Homes Impacted	# of Historic Properties Impacted	Addresses all Purpose and Need? (yes or no)
Roundabout S. of Madison St. Bridge	50%	yes	-	yes	0	0	no
Intersection S. of Madison St. Bridge	50%	yes	-	yes	0	0	no
U.S. Highway 12 Shift to Arthur	20%	no	+	no	1	1	no
New Intersection at 5th and 6th	30%	yes	+/-	yes	1	1	no
New Roadway Between 5th and 6th	30%	yes	+/-	yes	2	5	no
Flyovers Separating U of M and Hwy12	80-100%	yes	-	yes	0	1	no
Split Bridge 2-Lane 2-Way Flyovers	20%	no	-	yes	0	1	no
Flyover from the Madison St. Bridge	50%	yes	+/-	yes	2	2	no
Adding a New Intersection at 5th Street	50%	yes	+/-	yes	1	2	no
Realignment of 5th Street	17%	no	+	no	1	1	no
Flyover Overpass to University	80-100%	yes	-	yes	0	0	no
No-Build (No Action) Alternative	0%	no	Base	no	0	0	no
Preferred Action Alternative	17%	no	+	no	1	1	yes
U.S. Highway 12 NB & SB Adjacent	20%	no	+/-	no	0	0	no

Are there any positive or negative proximity impacts which would impair the use of the 4(f) land for their intended purpose? (Based on no-build alternative as baseline). For example, a positive proximity impact could be sidewalk improvement for easier access to the park. A negative proximity impact could be decreased trees in the boulevards adjacent to the park that might decrease visual appeal when looking from the park.

planning, 602 and 610 South 6<sup>th</sup> Street East may ultimately be removed in an unrelated project.

Although the No-Build Alternative has the least impact to 4(f) resources, it also does not address the project purpose and needs objectives. Traffic safety, providing a more direct and efficient roadway, accommodation of special event traffic and air quality improvement would not be effectively resolved if the No-Build Alternative was selected.

Finally, the preferred alternative (as discussed in the previous sections) would impact 17 percent of the park, which would have the smallest impact of all of the evaluated alternatives with the exception of the no-build alternative. Also, impacts to one historic property would be necessary to carry out the preferred alternative and to fulfill all purpose and needs associated with the project in a reasonable and prudent manner. All efforts have been made to minimize impacts to 4(f) resources with this preferred alternative.

## 4.5 Mitigation

The following sections describe mitigation efforts proposed with the Preferred Alternative for recreation areas and historic properties.

### 4.5.1 Mitigation Efforts for Recreation Areas

*Vegetation* – MDT will be responsible for sod, seed, and irrigation for areas disturbed during construction. In addition, once the final design is completed, a new agreement would be set up between MDT and the City of Missoula for landscaping and maintenance within the impacted area. In this agreement, MDT would provide a specified monetary amount to the City for final landscaping design and tree and shrub replacement. The Urban Forester for the City of Missoula suggests that a large number of trees in the area are already well past their normal maturity and likely will begin to die in the next 20 years. The replacement of trees with a limited remaining life span would be a benefit from the project.

*Noise* – The Preferred Alternative would either generate a slight noise level increase (less than 3 dBA) or decrease noise levels in 2022. The projected peak hour noise levels would not approach or exceed the FHWA Activity Category B NAC; therefore, no noise mitigation measures would be required.

*Facilities* – The proposed project would enhance existing facilities within Jeanette Rankin Park. Improvements would be made to street lighting and sidewalks, and park access would be improved. Some special design features would minimize harm to Jeanette Rankin Park and could include improved curbs to reduce the potential for errant vehicles to enter the park. During final design, other amenities and features will be addressed for implementation and could include improvements such as additional park benches and picnic tables.

Throughout the project area, new trees will be incorporated into the boulevards according to the City of Missoula's final design, and new sod will be placed in any

disturbed areas. Landscaped medians would also be integrated into the proposed project for the incorporation of low water consumption landscaped boulevards.

In summary, the following are mitigation efforts for the 4(f) recreation areas that will be addressed for implementation during the final design:

- The contractor for the project will be required to plan for and implement containment procedures in response to any accidental spills of fuel or other hazardous materials.
- Improved park pedestrian access by providing a marked crosswalk across Arthur Avenue to the park on South 5<sup>th</sup> Street East.
- Improved pedestrian accesses from the University by providing a marked cross walk across Maurice Avenue to South 5<sup>th</sup> Street East and across South 5<sup>th</sup> Street East to the park.
- Providing a landscaped median and green space between the northbound and southbound Arthur Avenue traffic, both on the north and south side of the South 5<sup>th</sup> Street East intersection.
- Install a fence or landscaped barrier on the east side of Arthur such that park users are separated from traffic.

#### **4.5.2 Mitigation Efforts for Historic Properties**

To mitigate the loss of 610 South 6<sup>th</sup> Street East, the project will be implemented in accordance with the following:

- Conduct HABS-level documentation of the Headley Place (610 South 6<sup>th</sup> Street East/24MO946). The documentation would include extensive site histories, large-format photographs, and drawings of the properties. The information will be provided to the Missoula Historic Preservation Commission, the Montana SHPO, and the National Park Service. The HABS recordation would also include streetscape photographs of Arthur Avenue between East 5<sup>th</sup> and East 6<sup>th</sup> streets south prior to the initiation of construction activities.
- In addition to recordation and in consultation with the Missoula Historic Preservation Commission and the Montana SHPO, the University of Montana will make the house available to be moved intact to another location.

#### **4.6 Coordination**

The FHWA is taking the federal financial lead and assisting the MDT in funding this project. The FHWA has consulted with the Montana State Historic Preservation Office and the Advisory Council on Historic Preservation to coordinate efforts with MDT, the City of Missoula, the University of Montana – Missoula, and the Missoula Historic Preservation Commission for evaluating and supporting the Section 4(f) Resources involved in this project. The following documents are attached in support of these project coordination efforts:

- Memorandum of Understanding – 5<sup>th</sup>, 6<sup>th</sup>, Arthur, Madison Realignment; Montana Department of Transportation, City of Missoula, University of Montana; May 8, 2001 (See Appendix A).
- Memorandum of Agreement; STTP-CM-STPU7-2(36)94; Federal Highway Administration, Montana State Historic Preservation Office (SHPO), Montana Department of Transportation, University of Montana, and SHPO correspondence (See Appendix A).

## Section 5

# Agency & Public Involvement & Coordination

A public involvement process has occurred throughout all stages of the project. The public involvement coordination effort included an open house, a public meeting, and meetings with various stakeholders such as University staff and local officials. The following table summarizes the major meetings, events, and significant correspondence that have occurred since the project inception.

Date	Meeting/Event/Correspondence	Attendance
11-05-01	Preliminary Scoping Meeting	MDT, CDM, City of Missoula
12-10-01	Follow-up Scoping Meeting	MDT, City of Missoula, UM, CDM
7-22-02	Kickoff Meeting for updating all major stakeholders on the status of the project	MDT, UM, CDM, City of Missoula
2002	Special Needs Meeting	Coordinators: Visually Impaired, Handicapped, CDM
2002	Bikes and Pedestrian Interest Meeting	Public/Group Members, CDM
9-2002	Initiation of the MDT Project Website	MDT, CDM, UM, City
9-24-02	Letters were mailed to solicit requests for public involvement in the project.	City Clerk, Missoula City Fire Department, Neighborhood Liaison, City of Missoula, Missoula Parking Commission, Missoula City Council, Mayor's Office, Missoula Parks & Recreation Department, Missoula Downtown Association, Beach Transportation, Mountain Water Company, Missoula Chamber of Commerce, Mountain Line, Missoula Bicycle and Pedestrian Advisory Board, UAHA
9-30-02	Emails were sent to solicit requests for public involvement in the project.	CDM, MDT, University Administration: VP for Administration; Campus Public Safety Director, Facilities Service Director, ASUM Student Union: Vice President; Transportation Director, Faculty Senate, Staff Senate: President, Vice President, ADA Committee & DSS Department.
10-2002	Individual meetings were held with all Homeowner/Renters in the project area.	All Homeowners and Renters in area for Cultural Resources
2003	Meetings to gain local input and knowledge during the Traffic Study/Traffic Counts	Meetings with Multiple Residents
1-13-03	Meeting with UM to discuss conceptual alignment alternatives	UM, CDM

Date	Meeting/Event/Correspondence	Attendance
2-10-03	Update the core group on alignment alternatives and the status of the project	MDT, City of Missoula, UM, CDM
4-25-03	Teleconference meeting to discuss the city's bicycle and pedestrian issues prior to the public meeting.	MDT, City of Missoula, CDM
4-30-03	Public Meeting – reconstruction of the portion of Highway 12 near the University corridor through the University of Montana	MDT, City of Missoula, UM, CDM
5-01-03	Following the April public meeting, this meeting was held to present conceptual alternatives and request comments.	University Neighborhood Council, CDM
5-07-03	Attendance at the Missoula Bicycle and Pedestrian Advisory Board Meeting to present the conceptual alternative to the board and request suggestions for improvements to both bicycle and pedestrian facilities.	Missoula Bicycle and Pedestrian Advisory Board, CDM
4-06-04	Meeting for the Alignment and Grade Review	City, University, MDT, CDM, ASHMOT
5-3-04	Post Alignment and Grade Review Meeting	MDT, CDM, City, UM
8-17-04	Meeting to discuss 4(f) evaluation actions for the 2 historic homes that would be impacted on 6th Street.	MDT, UM, City of Missoula, CDM
9-7-04	Sent letter to the University of Montana requesting input on future approach needs for the University properties along the project.	UM, CDM
10-1-04	A letter was sent to the City of Missoula requesting input on the impacts to the storm drain systems within the project.	City of Missoula, CDM
12-2-04	CDM provided an email response to the Neighborhood Council with a project update.	CDM, Neighborhood Council
2-3-05	Historic Preservation Meeting	CDM, MDT, Missoula Historic Preservation District
4-4-05	Informational Public/MDT Meeting at the University Student Union Building	University, All interested Public, (Flyers Posted) - University Students, neighborhood homeowners, University and City of Missoula staff, MDT staff and consulting engineers
4-22-05	Preliminary Scoping and Discussion of EA and upcoming May 10, 2005 meeting - Polycom Helena and Missoula	MDT, City, University
5-10-05	Agency, City and University Planning Meeting at UM Facility Services	MDT, City, University
7-20-05	Agency, City and University Planning Meeting at UM Facility Services	MDT, City, University

Date	Meeting/Event/Correspondence	Attendance
10-05	Multiple EA preparation meetings	MDT, FHWA
11-05	Multiple EA preparation meetings	MDT, FHWA

In order to maintain effective communication with concerned citizens, a mailing list has been generated for people who have expressed interest in the project. Notification of availability of the EA, instructions for requesting a copy of the EA, information on how and where to comment, and public hearing information will be sent to each individual on the mailing list. In addition, Appendix D shows a detailed analysis of the unsolicited comments received by MDT via post cards.

## 5.1 Agency Coordination

The Arthur Avenue Project has required close coordination between the City of Missoula, University of Montana, and MDT. Dozens of meetings have occurred between these agencies via telephone, teleconference, email, and direct appearance. The following agencies have been involved with the planning of the project and have contributed input to the project development:

- Montana Department of Transportation
- Montana Department of Environmental Quality
- Montana Fish, Wildlife, & Parks
- City of Missoula
- Federal Highway Administration
- University of Montana
- State Historic Preservation Office
- U.S. Fish and Wildlife Service
- Missoula City Fire Department
- Missoula Parking Commission
- Missoula City Council
- Missoula Mayor's Office
- Missoula Parks and Recreation Department
- Missoula Chamber of Commerce
- Missoula Bicycle and Pedestrian Advisory Board
- Associated Students of the University of Montana
- Missoula Irrigation District

## **5.2 Public Involvement**

Public involvement has been ongoing since inception of the Arthur Avenue Project. A public meeting and open house was conducted for the project in April of 2003 after unsolicited comments were received. The open house included booths where members of the public could ask questions and make comments in a private setting. The public meeting allowed individuals to make comments on the record in a public setting. Numerous other meetings have also occurred throughout the length of the project as shown previously in the table. In April of 2005, an informational public meeting was held at the University of Montana Student Union Building. Comments and other proposed alternatives were then provided to MDT. The alternatives and comments were reviewed, analyzed, and included in this EA.

## **5.3 Document Availability**

A Notice of Availability (NOA) of the EA and the planned date for the public hearing will be announced in the local newspaper at least fifteen days in advance of the hearing. The EA will be made available for public viewing at several locations in the project area, which are in the NOA.

At the public hearing, the general public will be given the opportunity to provide comment on the project. There will be a 45 comment period on the EA.

**Appendix A**  
**Memorandum of Understanding**  
**Memorandum of Agreement**

COPY

MEMORANDUM OF UNDERSTANDING  
5<sup>TH</sup>, 6<sup>TH</sup>, ARTHUR, MADISON REALIGNMENT

by

Montana Department of Transportation  
City of Missoula  
University of Montana

In recognition of the need to improve traffic, bicycle and pedestrian flow on U.S. Highway 12 near the entrance to the University of Montana, the undersigned parties, the City of Missoula (City), Montana Department of Transportation (MDT), and the University of Montana (UM) agree that:

1. This Memorandum of Understanding (MOU) establishes the various funding, design, construction, and maintenance responsibilities necessary to advance the project through construction.
2. The Project consists of realigning the eastbound leg of U.S. Highway 12 from 6<sup>th</sup> Street along Arthur Avenue to more directly connect to the Madison Street Bridge. Through traffic will no longer be required to loop along 5<sup>th</sup> Street and Maurice Avenue by the Adams Center.

General Considerations

The undersigned parties agree that:

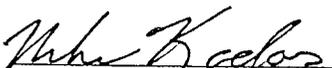
- A. MDT is responsible for:
  1. National Environmental Policy Act (NEPA) and Montana Environmental Protection Act (MEPA) compliance.
  2. Project Design, development and Public involvement.
  3. Right-of-way plan development and acquisitions.
  4. Relocating all conflicting utilities.
  5. Contract letting and award.
  6. Construction Contract administration.
- B. UM and the City will participate in the project development and NEPA/MEPA process. UM agrees that the proposed traffic realignment is beneficial to the City and UM's long-range traffic flow and operation plan and will provide, as contribution to the project and subject to Board of Regents' approval, all necessary right-of-way to implement the project. Subject to Montana Board of Regents approval, this right-of-way will be provided as bare ground clear of all improvements. It is anticipated that this right-of-way will consist of the properties currently occupied by 601 S. 6<sup>th</sup> East, 610 S. 6<sup>th</sup> East, 601 S. 5<sup>th</sup> East, 602 S. 6<sup>th</sup> East and 702 Arthur. The right-of-way provided by UM shall be appraised for value. MDT and UM may exchange property to satisfy right-of-way needs for this project subject to compliance with all state law and regulations of each agency. If

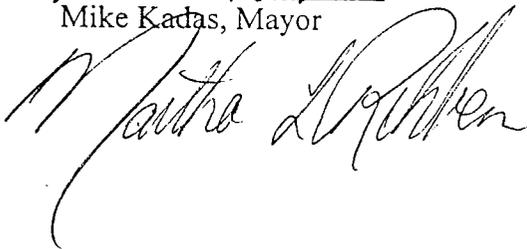
the parties determine that an exchange of property is appropriate, a separate agreement setting forth the terms of the exchange will be executed and attached to this memorandum and incorporated as part of this agreement following approval by the parties (to be marked as Exhibit A).

- C. As part of the NEPA/MEPA process, all reasonable alternatives must be considered, including one with "roundabouts" for the 5<sup>th</sup> and 6<sup>th</sup> Street intersections with Arthur Avenue.
- D. All activities related to the Project will comply with American with Disabilities Act (ADA), Title VI and VII of the Civil Rights Act, and Title 49 MCA.
- E. The parties involved in the MOU may enter into separate agreements during the development of the Project. These agreements will not supersede this MOU.
- F. All project development costs, including preliminary engineering, utility relocation, construction, and construction engineering shall be shared between Urban Pilot Improvement Program funds up to a maximum of \$600,000 for construction and construction engineering, and MDT's Discretionary Air Quality program (PE, I/C, CN, CE). MDT will provide all matching funds required of these federal funds. The estimated project development costs are \$1,386,000 not including additional right-of-way. If total costs exceed this amount the project shall be put on hold until additional project funding is secured.
- G. MDT will provide the City and UM with periodic status reports during the development of the project.
- H. Upon completion of the project, MDT will be responsible for maintaining the roadways and through lanes designed at U. S. Highway 12 with the following conditions:
  - MDT may contract with the City for maintenance.
  - The City will maintain or cause to maintain sidewalks and separate bicycle/pedestrian facilities.
  - The U of M will maintain all landscaping installed as part of the project.
- I. Those street portions of S. 6<sup>th</sup> East and Maurice Avenue no longer used for through traffic and U. S. Highway 12 will remain in public ownership and will be maintained by the City.
- J. After the project has been completed the routes involved will be re-evaluated for possible system and functional classification revisions.

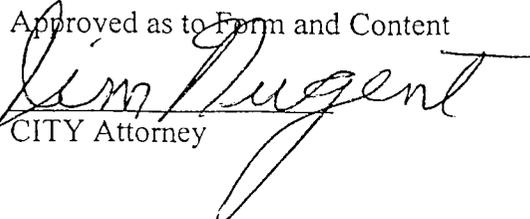
Dated this 8 day of May, 2001.

City of Missoula

  
Mike Kadas, Mayor



Approved as to Form and Content

  
CITY Attorney

I, Martha L. Fisher, Clerk of the CITY of MISSOULA, do hereby certify that the above mentioned agreement was regularly adopted the CITY COUNCIL at a meeting thereof held on the 7 day of May, 2001, and the COUNCIL authorized the MAYOR to sign this agreement on behalf of said COUNCIL.

[Official seal]

Martha L. Fisher  
CITY Clerk

University of Montana  
George M. Dennison  
George M. Dennison, President

Approved for Legal Content  
[Signature]  
Attorney

Montana Department of Transportation  
Dave Galt  
Dave Galt, Director

Approved for Legal Content  
Tim Reardon  
Tim Reardon, Chief Attorney

Approved for Civil Rights Content  
[Signature]  
MDT Civil Rights Bureau

AGREEMENT TO EXCHANGE REAL ESTATE

BETWEEN

MONTANA DEPARTMENT OF TRANSPORTATION

AND

THE UNIVERSITY OF MONTANA

THIS AGREEMENT is entered into this 22 day of May, 2000, between the Montana Department of Transportation, hereinafter referred to MDT, and The University of Montana, hereinafter referred to UM.

It is the purpose and intent of this Agreement to define the steps and obligations of both parties in the exchange of the following described properties.

PARCEL 1, MDT PROPERTY:

A portion of Government Lot 6, Section 33, Township 25 North, Range 19 West, P.M.M., Lake County, Montana. AKA Tracts 4 & 5 of COS H-592.

PARCEL 2, UM PROPERTY

Lots 1 thru 3, Block 25, of Montana Addition to the City of Missoula, Missoula County, Mt., a.k.a. 601 South 5<sup>th</sup> Avenue East & 702 Authur Avenue, Missoula, Mt.

Lot 34 and the West 8 feet of Lot 33, in Block 25, supplementary plat of a portion of said Montana Addition, Now on file and of record in the office of the Clerk & Recorder of Missoula County, Mt., a.k.a. 602 South 6<sup>th</sup> Street, Missoula, Mt.

Lot 1 and the West 8 feet of Lot 2, Block 36, Montana Addition to the County of Missoula, Missoula County, Mt., a.k.a. 601 South 6<sup>th</sup> Street East, Missoula, Mt.

Lot 32 and the East 22 feet of Lot 33, Block 25 of Supplementary Plat of a portion of Montana Addition, City of Missoula, Missoula County, Mt., a.k.a. 610 South 6<sup>th</sup> East, Missoula, Mt.

The parties recognize and agree that state law allows MDT to exchange property for highway purposes. MDT desires to acquire right-of-way for reconstruction of a project in City of Missoula to benefit MDT, the City of Missoula and the University of Montana, therefore, the parties agree as follow:

1. MDT hereby agrees to transfer and convey Parcel 1 to UM in consideration of and in exchange for UM transferring and conveying of Parcel 2 to MDT, all in accordance with the terms of this Agreement.

2. MDT will appraise both parcels for fair market value. Said appraisals will be sent to UM for review and acceptance. If UM does not accept the appraisals, UM can obtain a second appraisal and submit it to MDT for review and acceptance. Both parties must agree upon the appraised values before an exchange can be consummated.
3. After MDT transfers title to Parcel #1 to UM, UM will provide, as contribution, all remaining necessary right-of-way to implement the project that consists of realigning the eastbound leg of U.S. Highway 12 from 6<sup>th</sup> Street along Arthur Avenue in Missoula, Mt.
4. Each party shall furnish a title commitment for an ALTA Owner's Policy of Title Insurance insuring title to the relevant property subject only to those encumbrances acceptable to the other party. Each party shall have 20 days after receipt of a title insurance commitment to object, in writing, to any exceptions described therein. If no objection is made within the time allowed, each party shall be deemed to have accepted the title commitment. If either party objects to any exception, the other party shall have 60 days to remove the exception. If they are unable to remove the exception or make it otherwise acceptable, either party may withdraw from this Agreement, in which case it shall be of no further force and effect. Title Commitments and/or Title Insurance may be waived upon mutual agreement.
5. If required by the County for recording, each party, at their own expense, will provide a survey, for their respective parcel, prepared by a registered land surveyor licensed to practice in the State of Montana. MDT must review all surveys before recording.
6. The parties agree that it is expressly intended and agreed that all existing easements, burdens, and restrictive covenants shall run with the land and shall forever bind the Grantees', their successors, and assigns.
7. To the best knowledge of both parties, there are no toxic or hazardous substances, wastes, pollutants or contaminants on the parcels involved in this land exchange. Further, there are no substances or conditions that may support a claim or cause of action under RCRA, CERCLA or any other federal, state or local environmental statutes, regulations, ordinances or other environmental regulatory requirements.
8. MDT will prepare and record the deeds and relative documents and pay for all recording costs.
9. The parties understand, that this agreement is in conjunction with a Memorandum of Understanding by MDT, UM and the City of Missoula. Said MOU establishes the various funding, design, construction, and maintenance responsibilities necessary to advance a project through construction. The project consists of realigning the eastbound leg of U.S. Highway 12 from 6<sup>th</sup> Street along Arthur Avenue. The terms and conditions of this agreement may not be changed, altered, waived or modified in any way except as may mutually be agreed in writing.
10. This agreement is to be interpreted and construed according to the laws of the State of Montana. In the event of disagreement over any of the terms contained herein which results in litigation, the parties agree that venue shall be in the First Judicial District, Lewis

and Clark County, Montana. The parties further agree that in the event of litigation, each party shall bear its own costs and attorney fees.

11. The parties recognize, agree and intend that this agreement shall be binding on MU and MDT and the respective successors in office for the life of this agreement and to that end each party hereto agree that the persons executing this agreement are fully and completely empowered to bind the State, MDT and UM. Any notices, requests, inquiries, demands or other communication or information required, permitted or essential to this agreement shall be in writing by certified mail to the respective parties.

13. The closing of this exchange shall occur no later than December 31, 2001 unless extended as mutually agreed upon by both parties.

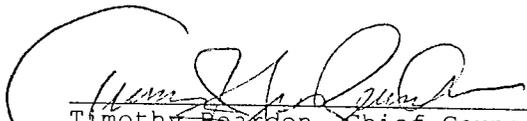
14. If the project subject to the MOU referred to herein does not proceed and become finalized, UM and MDT have no obligation to proceed with the exchange subject to this Agreement.

Subject to the above conditions, MDT and UM agree to proceed with the exchange of the above mentioned parcels.

MONTANA DEPARTMENT OF TRANSPORTATION

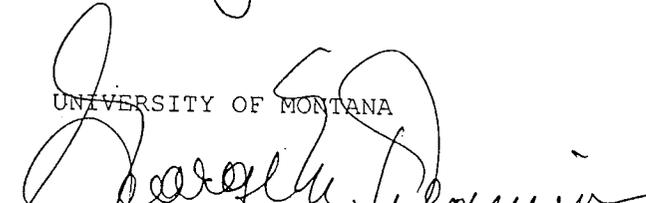
  
\_\_\_\_\_  
David A. Galt, Director

May 22, 2001  
Date

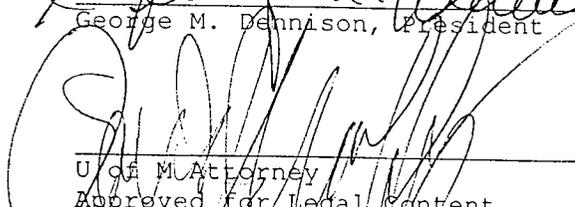
  
\_\_\_\_\_  
Timothy Reardon, Chief Counsel  
Approved for Legal Content

May 21, 2001  
Date

UNIVERSITY OF MONTANA

  
\_\_\_\_\_  
George M. Dennison, President

4-28-01  
Date

  
\_\_\_\_\_  
U of M Attorney  
Approved for Legal Content

4-26-01  
Date

**RECEIVED**  
MAY 25 2005  
**ENVIRONMENTAL**

**MEMORANDUM OF AGREEMENT**  
**STPP-CM-STPU 7-2(36)94**  
**ARTHUR AVENUE - MISSOULA**  
**MISSOULA COUNTY, MONTANA**  
**Control No. 4611**

WHEREAS the Federal Highway Administration (FHWA) proposes to assist the Montana Department of Transportation (MDT) in funding the Arthur Avenue - Missoula highway reconstruction project.

WHEREAS FHWA has determined that the undertaking will have an effect on two historic properties that would contribute to the University Area Historic District (24MO827): Strawn Place (602 South 6<sup>th</sup> Street East) and the Headley Place (610 S. 6<sup>th</sup> Street East). The FHWA has consulted with the Montana State Historic Preservation Office (SHPO) and the Advisory Council on Historic Preservation (Council) pursuant to Section 106 of the National Historic Preservation Act (16 USC 470) and its implementing regulations, "Protection of Historic Properties" (36 CFR 800);

WHEREAS MDT, the University of Montana – Missoula (UM), and Missoula Historic Preservation Commission participated in the consultation and have been invited to concur in this Memorandum of Agreement;

NOW, THEREFORE; FHWA and the Montana SHPO agree that the undertaking will be implemented in accordance with the following stipulations in order to take into account the effect of the undertaking on historic properties.

**Stipulations**

MDT will ensure that the following stipulations are carried out:

- 1) Conduct Historic American Building Survey (HABS)-level documentation of the Strawn Place (602 South 6<sup>th</sup> Street East) and the Headley Place (610 S. 6<sup>th</sup> Street East). The documentation would include extensive site histories, large-format photographs, and drawings of the properties. The information will be provided to the Missoula Historic Preservation Commission, the Montana SHPO, and the National Park Service if deemed appropriate. The HABS recordation would also include streetscape photographs of Arthur Avenue between East 5<sup>th</sup> and East 6<sup>th</sup> streets south prior to the initiation of construction activities.
- 2) The University of Montana will attempt to find new owners for the Strawn Place and the Headley Place. The UM will advertise in local newspapers that the historic properties are available for relocation. The UM will offer the properties free of charge to anyone willing to bear the cost of relocation. The new owners will have to relocate the buildings off-site.

- 3) If a dispute arises regarding the implementation of Agreement, FHWA shall consult with the objecting party to resolve the dispute. If any consulting party determines that the dispute cannot be resolved, FHWA shall request the further comments of the Advisory Council on Historic Preservation pursuant to the Council's regulations.

EXECUTION OF THIS MEMORANDUM OF AGREEMENT and implementation of its terms evidences that FHWA has afforded the Council an opportunity to comment on the Arthur Street – Missoula highway reconstruction project and its affects on historic properties, and that FHWA has taken into account the effect of the Undertaking on historic properties.

Theodore H Burch  
Federal Highway Administration

05/23/05  
Date

Mark F. Faumler  
Montana State Historic Preservation Office

5/9/2005  
Date

Concurring Parties:

[Signature]  
[Signature]  
Montana Department of Transportation

4/15/05  
Date

[Signature]  
The University of Montana – Missoula

3 MAY 05  
Date

\_\_\_\_\_  
Missoula Historic Preservation Commission

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Date

# **Appendix B**

## **Conceptual Alternatives**

# Appendix B

## Conceptual Alternatives

The two groups of alternatives identified for advancement in the brainstorming session, Moderate and Extensive Improvements, were developed into conceptual alternatives to determine if they meet the purpose and need of this project. The conceptual alternative development process was a collaborative effort between MDT, the City, the University, and CDM. The alternatives discussed below were a result of this effort.

Originally nine alternatives were discussed in a meeting with MDT to determine each alternative's viability. From this meeting most of the alternatives were dismissed due to capacity, safety, or cost factors. Two additional alternatives were created as a result of the comments generated during this meeting. A third additional alternative was created in an attempt to minimize impacts to adjacent landowners.

A second meeting between MDT and CDM was held to discuss the alternatives developed during the earlier meeting. During the second meeting an additional alternative was discussed. The new alternative was broken into four separate options in an attempt to determine which alignment would work best for the existing traffic conditions.

The four different options for the new alternative were taken to the University for review and comment. During this meeting, the University expressed right-of-way concerns and the possibility of a gateway effect. CDM then generated three additional alternatives to address the University's input and concerns.

Following the meeting with the University and the creation of the three additional alternatives, CDM met with MDT to discuss the University's desires. From this meeting another alternative was generated in an attempt to address alignment and right-of-way concerns. The final conceptual alternative was refined and presented at a Public Meeting on April 30, 2003. Following the public meeting, both the City and the University had additional comments. The comments have been discussed at numerous meetings and via email, and have been carefully considered for the development of the preferred alternative provided in this report.

### Roundabout Alternatives

In addition to the numerous conceptual alternatives developed on the basis of alignment reconfigurations, roundabouts were also considered at each of the four intersections within the project limits.

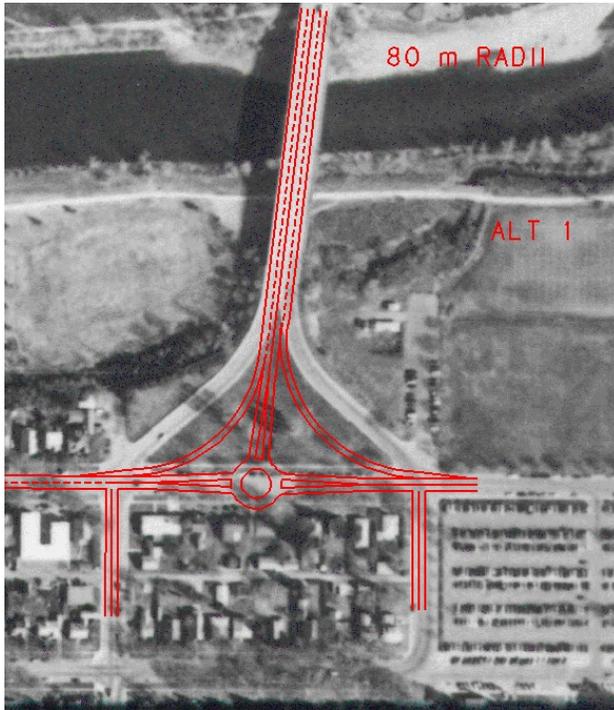
The "Madison/Arthur Roundabout Feasibility Analysis" by WGM Group dated March 8, 1999, was used as a background reference for the location of the roundabouts. That report can be found in the Revised Preliminary Traffic Report. The document looked at installing one or two-lane roundabouts at the Arthur Avenue/5th Street and Arthur Avenue/6th Street intersections.

## Roundabout Methodology

For a full explanation of the roundabout methodology and a site specific analysis of each intersection please refer to Section 2.4 of this document.

### Alternative 1

Alternative 1 consists of reconstruction of the northbound and southbound couplets using an 80 meter radius. This alternative also implements a single lane roundabout that is placed on 5th Street between Arthur Avenue and Maurice Avenue. The roundabout is connected to the Madison Street Bridge by extending the tangent roadway section south from the bridge. With this option, 5th and 6th Streets would



be one-way on the west side of Arthur Ave and the remaining roadways would be two-way roadways.

This option was considered inappropriate because of several reasons. The first reason for removing this alternative is that a roundabout cannot efficiently handle the large volumes of traffic from northbound U.S. Highway 12, University/residential traffic from the north, and University traffic from the east. The volume of traffic that would enter the roundabout could impair its ability to cycle vehicles through in a reasonable manner. The second reason for removing this alternative is due to

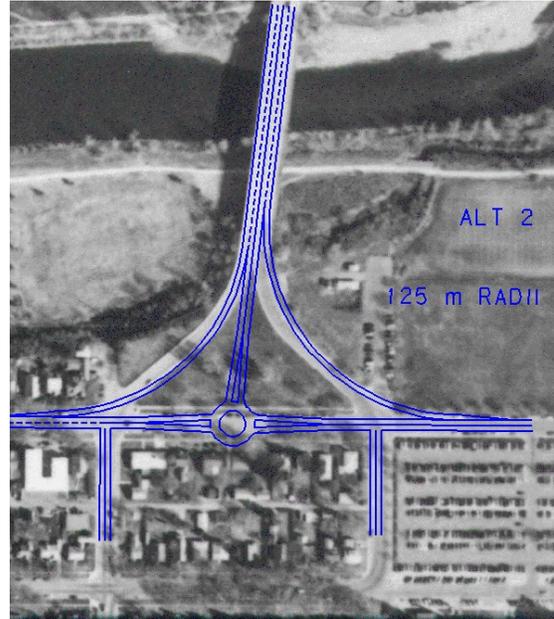
pedestrian and bicycle use. Since the University is directly to the east of the roundabout location, there is a large volume of bicycle and pedestrian traffic. The impact of pedestrians on a roundabout will dramatically reduce the volume of vehicles that will be able to pass through the structure, due to crossing times. Roundabouts are also difficult for pedestrians and bicyclist to negotiate and often require signalized crossing near the roundabout. With the introduction of a signal the platoon flow causes the roundabouts performance to suffer. This alternative would also remove a majority of the park.

## Alternative 2

The second alternative uses the same configuration as alternative one except that the couplet radii are increased to 125 m. By lengthening the radii on the couplets it was possible to dedicate the couplet traffic to vehicles exiting the University and vehicles continuing from the Madison Street Bridge to 5th Street eastbound.

Similar to alternative 1, this option was removed due to the capacity of the roundabout in relation to the elevated volumes of vehicles, pedestrians, and bicycles in the area.

This alternative has potential wetlands impacts on the east and west sides of the existing couplet. In addition, additional right-of-way will be required and a large portion of the park will be removed.



## Alternative 3

The third alternative that was reviewed was similar to alternative one except that the roundabout was removed and replaced with a conventional signal. This combination works much better with the large mixture of multimodal transportation. The signal allows for vehicles to be metered through the area in a more efficient manner while allowing pedestrians protected crossings. The conventional signaling was preferred over the roundabout by the visually impaired students and professors at the University of Montana.

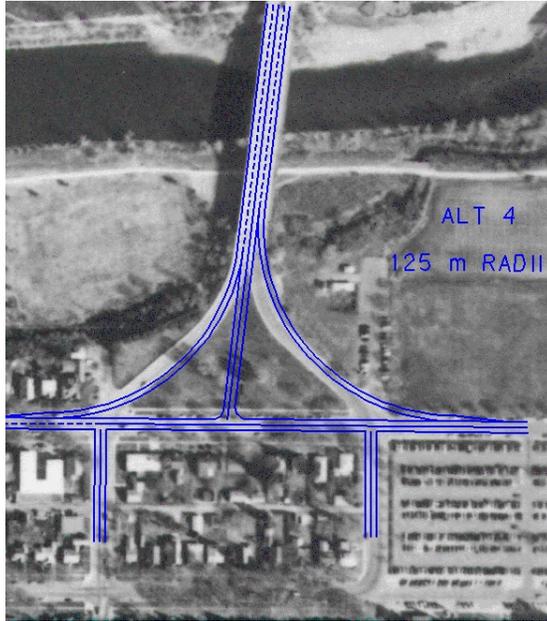
Alternative number three was removed because of the requirements for U.S. Highway 12 traffic, coming from 6th Street, to turn onto Arthur Avenue, then 5th Street and finally onto Madison Avenue. The additional turning movements would slow the traffic and cause congestion.



### Alternative 4

Alternative four is a combination of alternatives two and three. This alternative uses the 125 meter radii that were used in alternative two with the conventional signalized intersection of alternative four. This alternative assisted in the movement of U.S. Highway 12 traffic south and west bound as well as traffic leaving the University

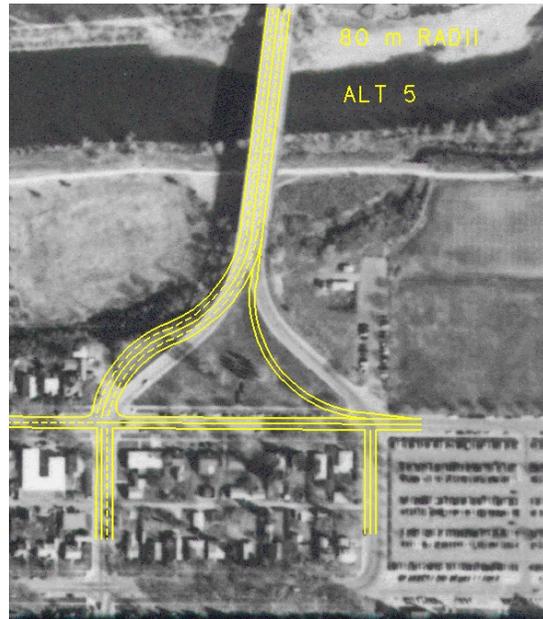
The disadvantages of this option were the same as for alternative three and two. Traffic traveling on 6th Street eastbound is required to make a left turn onto Arthur Avenue followed by a right turn onto 5th Street. Once on 5th Street, the vehicles would have to take a left at the



new intersection before accessing the Madison Street Bridge.

### Alternative 5

Alternative five brings all four lanes off the Madison Street Bridge and down into the intersection of Arthur Avenue and 5th Street. At the intersection, south/westbound traffic turns onto 5th Street and proceeds east. North/eastbound traffic comes from 6th Street eastbound turning north on Arthur Ave which then continues over the Madison Street Bridge. Traffic leaving the University can take the ramp to access the Madison Street Bridge. Roadways to the west of Arthur Avenue will remain one-way but roadways east of, and including, Arthur Avenue will be two-way.



Alternative 5 was removed from consideration due to problems with both the horizontal and vertical curves required to access the Arthur Avenue/ 5th Street intersection from the north. Both of these curves have significant impact on sight distance and by combining the two curves the problem is multiplied. An additional concern involves the merging of traffic from the University onto U.S. Highway 12 from the ramp. Due to the angle of the merge there would be significant sight problems.

## Alternative 6

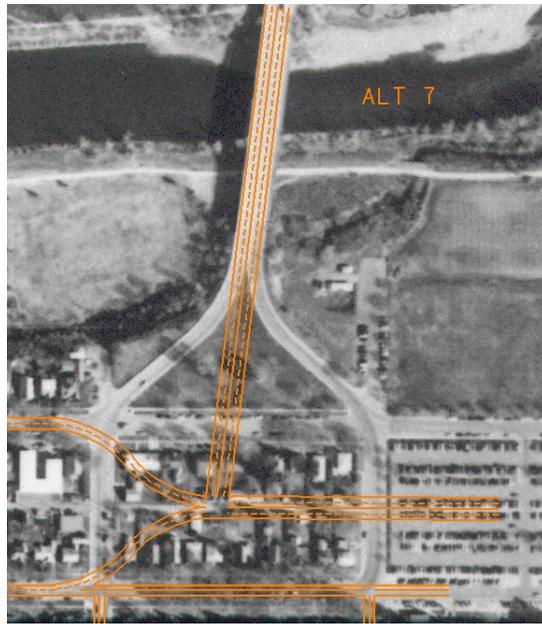
Alternative six removes the existing couplets and brings the traffic from the Madison Street Bridge south until it intersects 5th Street. At the intersection at 5th Street, the west/southbound U.S. Highway 12 traffic turns west and proceeds down 5th Street. Additionally at this intersection, traffic heading south can turn and enter the University. Traffic exiting the University can either go west or north at the 5th Street intersection. The remaining southbound traffic will continue south to the intersection of 6th Street where north/eastbound U.S. Highway 12 traffic will be intercepted and diverted north. 5th and 6th Streets west of the intersections will be one-way. The remaining roadways will be reconfigured to two-way.



This alternative was removed because of the additional right-of-way requirements as well as the congestion problems that would occur at the intersection of 5th Street and the Madison Street Bridge. If this option were implemented, special design requirements would be needed to ensure that traffic did not cross from the one-way roadway sections to the two-way roadway sections in the wrong direction.

## Alternative 7

The seventh alternative uses alternative six as a base but removes the 5th Street and 6th Street intersections and creates a new intersection between 5th and 6th Street. This intersection would form a couplet, similar to the Madison Street Bridge, to access 5th and 6th Streets. By combining the two intersections from alternative 6 into one intersection there will be an increase level of service. This is due in part to minimizing the number of signalized intersections and by reducing the possibility of traffic queues backing into intersections. With this alternative all of the traffic for U.S. Highway 12, the University, and the residential community would pass through the new intersection between 5th

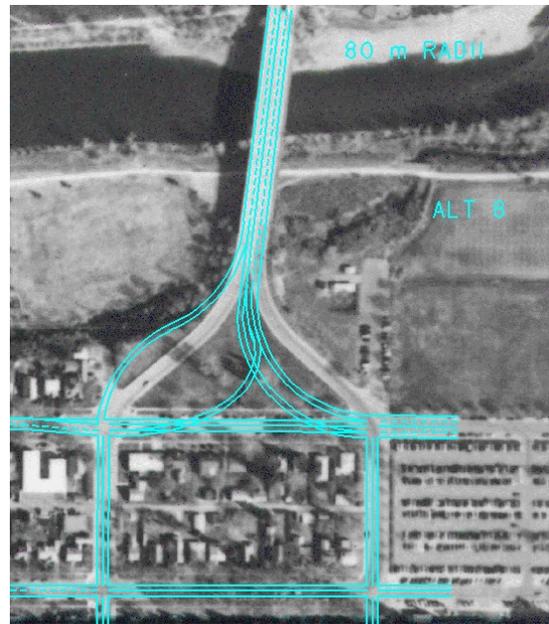


and 6th Street. From this point U.S. Highway 12 traffic would enter and exit to the west side of the intersection while University traffic and residential traffic would enter and exit from the east.

This alternative was removed from consideration because of four reasons. The first reason for removal was the excessive right-of-way take required for the realignment. The second reason revolves around the couplet design and the introduction of broken back curves entering and exiting the intersection. These curves may cause driver confusion without proper signing. The third disadvantage to this option was pedestrian and bicycle accessibility associated with the couplet. The final reason that this option was removed is because there would no longer be access to residential property along Arthur Avenue and 5th Street.

### Alternative 8

Alternative eight adds overpasses to the project in an attempt to streamline traffic flow both for U.S. Highway 12 and for the University. With this option 5th and 6th Streets would be rerouted such that 5th Street would be one-way eastbound and 6th Street would be one-way westbound. Southbound U.S. Highway 12 traffic would proceed on a redesign of the west couplet through the 5th/Arthur intersection and down Arthur to 6th Street where they would head west. Southbound University traffic would traverse the northbound lane of U.S. Highway 12 and 5th Street before meeting existing grade at the 5th/Maurice intersection.



Northbound U.S. Highway 12 traffic would exit 5th Street via a flyover located on the south east corner of the 5th/Arthur intersection. From here the traffic would pass over the top of 5th Street and under the southbound University traffic before continuing north on the Madison Street Bridge. Northbound University traffic would access the modified couplet approach and be directed north on the Madison Street Bridge.

Alternative eight was removed from the viable options primarily because of cost and the feasibility of constructing the flyovers. There would need to be significantly steep approaches to the flyovers because of the close proximity of the structures to the existing bridge. The slopes required for such an overpass would compromise stopping sight distances. In addition, the excessive slope could present serious problems during poor weather conditions.

## Alternative 9

Alternative nine was an attempt to split the U.S. Highway 12 and residential traffic from the University traffic and thus minimize the number of flyovers required in alternative eight. With this alternative, traffic would be split north of the Madison Street Bridge such that the east two lanes would be north/south University traffic. The two western lanes would be dedicated to the U.S. Highway 12 and residential north/south traffic. At the south end of the bridge the four lanes would be split into two lanes directed to the University and two lanes to the intersection of Arthur Avenue and 5th

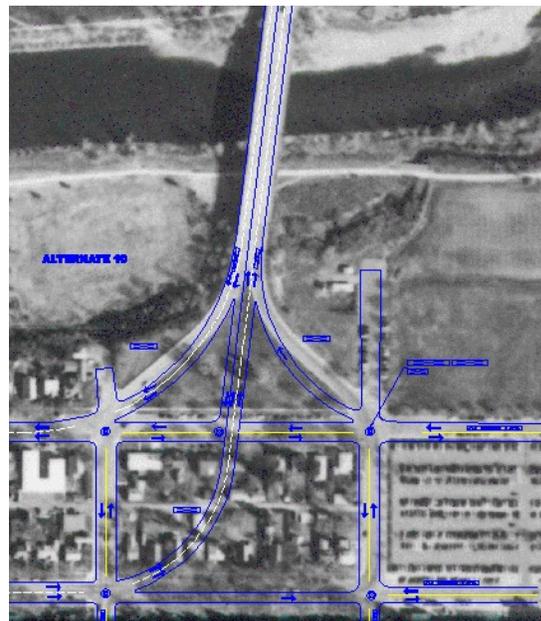


Street. The southernmost southbound University lane would go over the top of 5th Street before entering the intersection of 5th Street and Maurice Avenue at existing grade. The U.S. Highway 12 portion of this alternative will expand from two to four lanes as the alignment enters the intersection of 5th Street and Arthur Avenue.

Logistically this option is not viable because of the lane configurations over the Madison Street Bridge. Extensive work, if feasible, would be required north of the bridge to bring the University and U.S. Highway 12 traffic into the correct lanes. In addition, the lane drop and lane addition to the U.S. Highway 12 traffic lanes, on the south side of the bridge, would be very confusing for motorists.

## Alternative 10

Alternative 10 is a modification of alternative six. This alternative shifts the southern intersection, shown in alternative six, to 6th Street and uses an overpass configuration to cross over the top of the intersection at 5th Street. Under this option the existing couplets will be realigned with radii to allow better traffic flow from the University and down 5th Street. With the couplet realigned, the west couplet traffic would be directed down 5th Street and would no longer be able to turn onto Arthur Avenue. Access to Arthur Avenue and the University

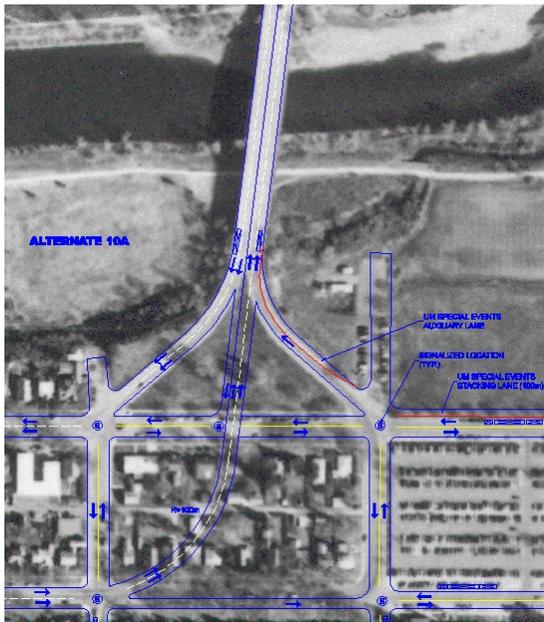


would come from the ramp that runs south from the bridge. This intersection would be at the existing grade and allow traffic to turn left or right. The intersection of 6th Street and Arthur would have an additional approach exiting to the northeast. This approach would be the continuation of U.S. Highway 12 through to the Madison Street Bridge. This alternative has very good traffic flow and the level of service at all of the intersections is above minimum designs.

This alternative was removed because of four primary reasons. The first reason was the cost of an overpass structure over an intersection is very high and project funding may not allow for such costs. The second reason for removal is bicycle and pedestrian access via the overpass is very limited. Due to the free flow nature of this option the third reason for removal involves the merging traffic from the University. This traffic would become backed up and possibly encounter gridlock in high flow conditions. The final reason for removal is due to the right-of-way issues associated with the connection between 5th and 6th Streets. The University's master plan may not allow for this alignment on their property. One other possible problem with this alternative is that 6th Street between Arthur Avenue and Maurice Avenue is one-way to the east.

### Alternative 10A

Alternative 10A is identical to alternative 10 except that the existing couplet alignment is kept intact. This option allows for traffic to proceed south on Arthur Avenue at the



intersection of 5th Street and Arthur Avenue. Alternative 10 does not allow for this movement. By keeping the eastern couplet leg there is also the possibility of using the existing second lane as overflow during special events.

Alternative 10A was removed from consideration for the same reasons as alternative 10. Alternative 10A, like the existing conditions, would allow traffic from the Madison Street Bridge to pass through the intersection of 5th/ Arthur and continue south on Arthur Avenue. This configuration may cause traffic conflicts at the 5th Street/ Arthur Avenue intersection.

### Alternative 11

Alternative 11 is a hybrid of alternatives five and eight. For this alternative the University would have ramps leading from the Madison Street Bridge to and from the campus. The southbound ramp would require an overpass structure to bring it up over the top of northbound U.S. Highway 12. The southbound U.S. Highway 12 traffic would pass on the existing couplet alignment to 5th Street while the northbound U.S. Highway 12 traffic would turn left on a modified Arthur Avenue

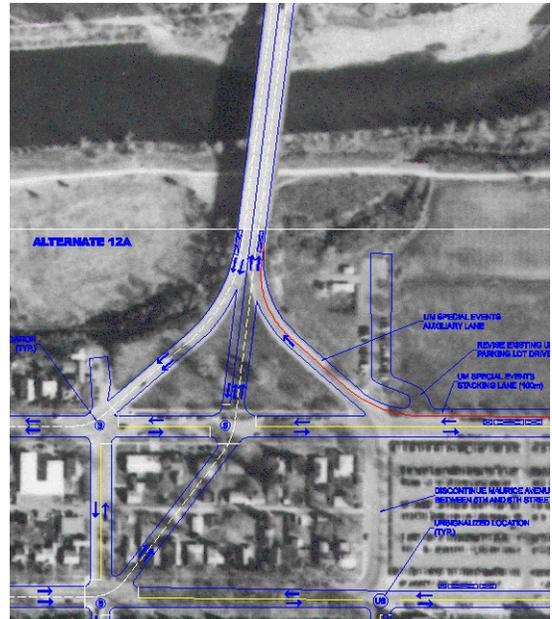
Alignment which would run along the east side of the existing west couplet. The alternative removes 5th Street between Arthur and Maurice as well as Maurice between 5th and 6th Streets.

Alternative 11 was removed from possible implementation due to several reasons. The first reason revolved around the overpass structure. Not only would this structure have a significant construction cost but, to achieve adequate clearances, the approach slopes would have to be very steep. The drawing shows the overpass near the Madison Street Bridge, but to gain adequate clearance the crossing would have to be shifted a minimum of 70 meters to the south. The realignment would introduce a complex broken back curve for the northbound U.S. Highway 12 traffic and would require additional right-of-way acquisition to the east of Arthur Avenue. This alternative provides no access to the block south of the park from the Madison Street Bridge.



### Alternative 12A

Alternative 12A is a variation on alternative 10 and uses a signalized intersection between Arthur Avenue and Maurice Avenue on 5th Street. With this option southbound U.S. Highway 12 traffic over the Madison Street Bridge will take the western couplet that will allow traffic flow to continue westbound on 5th Street. U.S. Highway 12 traffic from 6th Street will leave the intersection of 6th Street and Arthur Avenue in a northeastern direction, in route to the new intersection mid-block of 6th Street between Arthur and Maurice. At this intersection U.S. Highway 12 traffic will continue north to the Madison Street Bridge. University and residential traffic would access the area by taking the roadway from the Madison Street Bridge to the intersection on 5th Street between Arthur and Maurice and then turn east to enter the University or west to enter the residential areas. Traffic exiting the University would follow an alignment similar to the existing eastern couplet. The couplet would be two lane widths across but only be



marked for a single lane. The advantages for this would be that during special events the university would be able to convert the traffic flow exiting the University into two lanes.

Alternative 12A is a very good alternative for traffic flows but significant concerns exist with the right-of-way required for the alignment. An additional concern exists with the queue length between the intersection of Arthur Avenue/5th Street and the intersection of 5th Street/Madison Street. Signals would require a signal network that would specify continuous flow from the new intersection through the 5th Street/Arthur Avenue intersection.

Alternative 12A should be further evaluated alongside other options for possible use as a final alignment.

### Alternative 12B

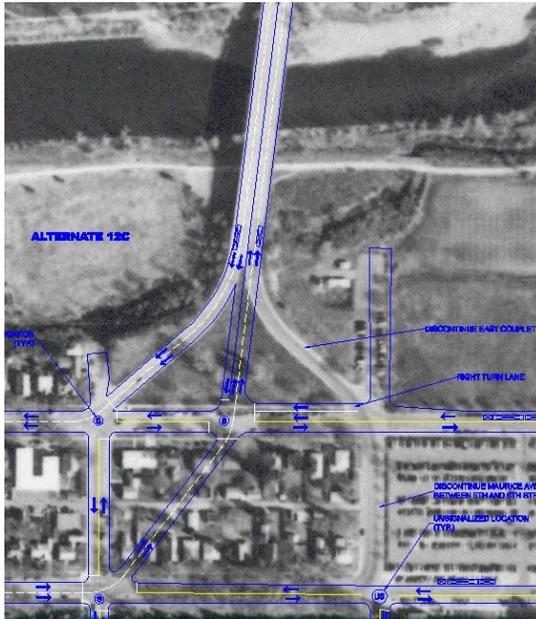
Alternative 12B uses alternative 12A as a base but moves the new intersection to the west. Similar to alternative 12A this option capitalized on the use of the couples for southbound U.S. Highway 12 traffic and traffic exiting the University. However, unlike alternative 12A, this alternative has a large boulevard section between the U.S. Highway 12 northbound and southbound lanes. The boulevard allows for the southbound University/residential lane to swing off of the couplet alignment and enter the intersection of Madison Street and 5th Street. The intersection connecting 6th Street traffic to the Madison Street Bridge has been shifted from alternative 12A and with such a shift there is a small bend in the roadway before it intersects with the Madison Street Bridge.



This option uses a minimal amount of right-of-way and has adequate traffic flows. For these reasons this alternative rates highly as a considered alternative. The drawbacks with this alternative consist of only three major concerns. The first concern is the alignment of the southbound lane from the Madison Street Bridge that enters the intersection at 5th Street and then goes to the University. The horizontal and vertical alignment of this ramp may be confusing for motorists and queues could potentially back up into a blind spot for vehicles exiting the bridge and continuing east. The second concern involves the size of the traffic queue between the new intersection and the intersection of Arthur Avenue and 5th Street. Signal coordination will be required such that there will be no vehicles within the queue during red light conditions. The final concern involves the intersection of 6th Street, Arthur Avenue

and Madison Street. The angles for this intersection would be small for traffic traveling down Arthur Avenue turning onto Madison Street. Because of the above reasons, alternative 12B should not be used unless right-of-way conditions cannot be met by other alignments. Additionally, this alignment should not be used unless special design is implemented to straighten and flatten the southbound approach into the new intersection.

### Alternative 12C



Alternative 12C is based on alternative 12A but the eastern couplet is no longer used. Instead of University traffic using the existing couplet to exit to the Madison Street Bridge, this options brings them down to the new intersection on 5th Street. From this intersection the vehicles can turn to the north and access the Madison Street Bridge. By removing the eastern couplet more of the park can be reclaimed.

The drawbacks to alternative 12A also exist with this option. In addition to the 12A drawbacks, this option causes severe congestion at the new intersection located on 5th Street, between Arthur Avenue and

Maurice Avenue. With the addition of U.S. Highway 12 traffic northbound and both northbound and westbound University traffic, the overall peak hour level of service drops below acceptable levels. For these reasons alternative 12C was removed from the evaluation process.

### Alternative 12D

Alternative 12D is identical to alternative 12A except that instead of a straight section of roadway between the two intersections, 6th Street/ Arthur Avenue and Madison Street/5th Street, there is a curved section. A curved section of roadway would significantly improve the traffic flow for through traffic during un-signalized movements.

This option was removed from consideration for two reasons. The main reason is the same as for alternative 12A except that even more



right-of-way will be required for this alternative. Due to the sweeping curve, the roadway between 6th Street and Madison Street will be intersected on a tangent as compared to the angled intersections of alternative 12A. The second reason that this option was removed is because there is no need for a curve, following the intersection since speeds are not excessive.

### Alternative 13

Alternative 13 maintains the existing couplets but reconfigures them in a manner such that southbound traffic can continue through to the intersection of Arthur Avenue and 5th Street. In addition, one lane of southbound traffic can peel off to the east and enter the University through the eastern couplet. The eastern couplet would have an intersection where the northbound U.S. Highway 12 traffic would mix with the northbound traffic leaving the University. The U.S. Highway 12 vehicles would access the intersection via a new roadway from the 6th Street/ Arthur Avenue intersection which would head north and then turn down 5th Street to intersect with the eastern couplet.



This alternative was removed from consideration for several reasons; the first of which was traffic flow. The traffic simulation model revealed that the alignment could not handle the traffic volumes under an appropriate level of service. The second reason for removing this alternative was that the only way to access 5th Street from the University would be to exit via 6th Street and then merge across lanes on Arthur Avenue to access 5th Street. The merging lane would require significant signal timing issues to ensure that traffic from 6th Street westbound could access 5th Street westbound. The third reason for removal of this alternative dealt with turning radii at the new intersection within the eastern couplet. Truck traffic would have problems negotiating the turn to the north and the turn to the south would require a separate left turn lane.

### Alternative 14A

Alternatives 14A thru 14C manipulate the U.S. Highway 12 northbound movement while minimizing impacts to the University's property and the park. Alternative 14A has the U.S. Highway 12 northbound and southbound movements adjacent to each other as the transition from Arthur Avenue to the Madison Street Bridge. With this option, 5th and 6th Streets east of Arthur Avenue are switched to two way traffic and Maurice Avenue is removed.

### Alternative 14B

Alternative 14B does not have a figure but this alternative is the same as 14A, except that Maurice Avenue is reintroduced in this alternative and it is configured as a two-way roadway with one lane in either direction.

### Alternative 14 C

Alternative 14C does not have a figure. This alternative varies slightly from 14A and 14B because like 14B, Maurice Avenue is reestablished but 5th and 6th Streets are one way between Arthur Avenue and Maurice Avenue.



# Appendix C

## Agency Correspondence



34 North Last Chance Gulch, Suite 104  
Helena, Montana 59601  
tel: 406 449-2121  
fax: 406 449-6768

August 13, 2002

Scott Jackson  
U.S. Fish and Wildlife Service  
100 N. Park Ave.  
Helena, MT 59601

Dear Scott:

As we discussed on the phone recently, the Montana Department of Transportation (MDT) has retained Camp Dresser & McKee (CDM) to provide engineering services for the reconstruction of Arthur Avenue near the University of Montana (U of M) in Missoula, Montana. The project will target the Arthur Avenue portion of Highway 12. Arthur and Maurice Avenues will be the eastern and western project limits. The project will be bounded by 6th Street, to the south, and the Madison Street Bridge, to the north. The entire project area is within an urban environment. The purpose of this project is to improve the traffic flow, reduce out-of-direction travel and improve safety. The project is needed to meet current and future demands of a mixture of motor vehicles, bicycles, and pedestrians. As part of this project, the use of roundabouts and/or conventional signaling in areas will be analyzed to determine overall project feasibility.

Per the requirements of the environmental assessment (EA) for this project, CDM has conducted a search to identify issues of concern to the USFWS. Specifically, CDM has searched for federal threatened and endangered species and wetlands. The results of this search indicate no wetlands within the project boundaries, and no T&E species have been identified within the project area. A summary of these results are presented following the body of this letter.

Based primarily on the information provided below as well as other site-specific information, CDM has come to the preliminary conclusion that this project has no significant potential to adversely impact federal T&E species or wetlands. CDM is seeking any additional information from USFWS that might affect this conclusion. If USFWS is in agreement with this preliminary conclusion, or if no additional information is available, please provide a letter to that effect as soon as possible.



Scott Jackson  
August 13, 2002  
Page 2

All correspondence can be mailed to the following:

Tony Gendusa, Ph.D.  
CDM Inc.  
20200 Wambli Lane  
Huson, MT 59846

If you have any questions I can be reached at 406-626-4166 or [gendusatc@cdm.com](mailto:gendusatc@cdm.com).

Thank you for your assistance,

Sincerely,

Tony Gendusa, Ph.D.



Scott Jackson  
August 13, 2002  
Page 3

## Wetlands Evaluation and Coordination

A site visit conducted on July 22, 2002 revealed no wetlands within the project boundaries. The nearest potential wetlands to the project area are areas presumptively identified as riparian wetlands along the south bank of the Clark Fork River. These limited areas are presumptively identified as riparian wetlands based on hydrological characteristics and the types of plants dominating these areas. These limited riparian wetlands were not delineated or assessed with regard to function and value because they occur substantially beyond the project area. Finally, a search of the NRIS web site for wetlands within the project area confirmed that no wetlands occur within the project area.

## Fish and Wildlife, Habitats, and Special Resources Assessment

### Montana Natural Heritage Program Search Results

The Montana Natural Heritage Program (MNHP) was contacted to obtain information on the potential for plant and animal species of special concern to occur within the project area. The search area is defined as a point location within the project area and a one-mile radius surrounding this point location. The project area and the selected point location is in Section 22, Township 13N, Range 19W.

The results of this search (**Appendix X**) indicate that seven species of concern have been reported within the search area (eight total records). These records are general, as indicated in the survey site names provided below. In several cases, the records are historic, and as such do not necessarily indicate that the species currently occurs or has potential to occur within the project area given the current habitat limitations. The potential for these eight species to occur within the project is discussed below. The definitions of the status or rank given by various state and federal agencies are included in **Appendix X**.

1. Westslope cutthroat trout (*Oncorhynchus clarki lewisi*).

Global rank: G4T3.

State rank S2.

BLM Status: Special Status.

Survey site name: Lower Clark Fork Basin

Discussion: This species has no potential to occur within the project area because the project area does not provide suitable habitat (coldwater stream). Project-related impacts on this species are unexpected.



Scott Jackson  
August 13, 2002  
Page 4

2. Bull trout (Columbial River) (*Salvelinus confluentus* pop 2).

Global rank: G3TQ.

State rank S?

USFWS Endangered Species Act: LT.

Survey site name: West of the continental divide.

Discussion: This species has no potential to occur within the project area because the project area does not provide suitable habitat (coldwater stream). However, MDFWP has recommended a 100 meter buffer on all streams and lakes/reservoirs that (a) have bull trout present and/or (b) are important for migration or over-wintering, or (c) link occupied stream reaches to major rivers. Project-related impacts on this species are unexpected but possible considering the 100 meter buffer zone recommendation. Potential impacts can include the addition of sediments to the Clark Fork River from project-related activities within the northern portion of the project area.

3. Fringed myotis (*Myotis thysanodes*).

Global rank: G4G5.

State rank S3.

Survey site name: Missoula

Discussion: This species is reported to have been collected in Missoula in 1964. The location of the collection is within Section 28, to the southwest of the project area. Although this species has potential to occur within the project area, the lack of (1) recent records of occurrence within the county, and (2) occurrence records for Section 22 suggest that the potential is low.

4. Lynx (*Felis lynx*).

Global rank: G5.

State rank S3.

USFWS Endangered Species Act: (PS:LT).

Survey site name: Statewide



Scott Jackson  
August 13, 2002  
Page 5

Discussion: This species has almost no potential to occur within the project area because the project area does not provide suitable habitat (spruce-fir forests above 3500 feet). The sensitivity of this species to human presence further indicates very little potential for this species to occur within the project area.

5. Spotted slug (*Magnipelta mycophaga*).

Global rank: G2G3.  
State rank S1S3.  
Survey site name: Deer Creek

Discussion: This species has little potential to occur within the project area because the project area does not provide significant amounts of natural habitat. This species was last collected in 1957 at 4150 feet elevation, between Deer Creek and a parallel small gravel road near the creek in Section 32. The collection site is on the east side of Mount Sentinel in the Sapphire Mountains. Section 32 is located southwest of Section 22 (project area).

6. Missoula mountainsnail (*Oreohelix* sp 10).

Global rank: G1G3.  
State rank S1S3.  
Survey site name: Mount Sentinel

Discussion: This species has little potential to occur within the project area because the project area does not provide significant amounts of natural habitat. This species was collected at Mount Sentinel, 4900 feet elevation, about one mile southeast of the University of Montana. The collection site is in Section 26, southeast of Section 22 (project area).

7. Missoula mountainsnail (*Oreohelix* sp 10).

Global rank: G1G3.  
State rank S1S3.  
Survey site name: Mount Jumbo

Discussion: This observation record is for the same species listed for the previous observation (7.) Based on this specific record, the species was collected at Mount Jumbo, 4600 feet



Scott Jackson  
August 13, 2002  
Page 6

elevation, about one mile northwest of the University of Montana. The collection site is in Section 14, northeast of Section 22 (project area).

8. Obscure evening-primrose (*Camissonia andina*).

Global rank: G4.  
State rank S2.  
BLM Status: Sensitive  
Survey site name: Mount Sentinel

Discussion: This species has little potential to occur within the project area because the project area does not provide significant amounts of natural habitat. This species was collected at Mount Sentinel, 3320 feet elevation, on the west side of the mountain. The collection site is in Section 27, immediately south of the project area.

### Field Observations

Observations regarding habitats and species were made during a site visit conducted on July 22, 2002. The results of the site visit indicate little natural habitat remains within the project area. The majority of the project area consists of residential housing and the Jeanette Rankin Park at the northern portion of the project area. Immediately adjacent to the roads forming the eastern and western boundaries of the park are vegetated road shoulders dominated by plant species indicative of disturbed areas (e.g., spotted knapweed). Just beyond the project boundaries and south of the Clark Fork River are densely vegetated areas dominated by several species of shrubs and trees. Within the current boundaries of the Jeanette Rankin Park are open (mowed) grass areas with planted shrubs (e.g., roses) and trees (e.g., American elm, maple). No significant natural habitats occur within the project area, either within the park or the residential area. A field survey for rare and sensitive plants was therefore not performed.



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

MONTANA FIELD OFFICE  
100 N. PARK, SUITE 320  
HELENA, MONTANA 59601  
PHONE (406) 449-5225, FAX (406) 449-5339

M.44 MDT (I)

August 16, 2002

Tony Gendusa  
CDM Inc.  
20200 Wambli Lane  
Huson, Montana 59846

Dear Dr. Gendusa:

This responds to your letter dated August 13, 2002 regarding Montana Department of Transportation's proposal to reconstruct a short section of Arthur Avenue in Missoula, Montana. Your letter indicated that the proposed project would occur within an urban area and that there are no wetlands within the project boundaries. The U.S. Fish and Wildlife Service (Service) has reviewed the proposed project and determined that no federally-listed species or designated critical habitat occurs within the project area. Therefore, the Service agrees with your preliminary conclusion that this project will not affect threatened or endangered species. This concludes consultation on this project and no further review under S.7 of the Endangered Species Act is necessary.

If you have questions regarding this matter, please contact Mr. Scott Jackson, of my staff, at (406)449-5225, ext. 201.

Sincerely,

Brent Esmoil  
Acting Field Supervisor



34 North Last Chance Gulch, Suite 104  
Helena, Montana 59601  
tel: 406 449-2121  
fax: 406 449-6768

SENT

8-13-02

August 13, 2002

FILE COPY

Pat Saffel  
Montana Department of Fish, Wildlife, and Parks  
Regional Office  
3201 Sprugin Road  
Missoula, MT 59804

Dear Pat:

As we discussed on the phone recently, the Montana Department of Transportation (MDT) has retained Camp Dresser & McKee (CDM) to provide engineering services for the reconstruction of Arthur Avenue near the University of Montana (U of M) in Missoula, Montana. The project will target the Arthur Avenue portion of Highway 12. Arthur and Maurice Avenues will be the eastern and western project limits. The project will be bounded by 6th Street, to the south, and the Madison Street Bridge, to the north. The entire project area is within an urban environment. The purpose of this project is to improve the traffic flow, reduce out-of-direction travel and improve safety. The project is needed to meet current and future demands of a mixture of motor vehicles, bicycles, and pedestrians. As part of this project, the use of roundabouts and/or conventional signaling in areas will be analyzed to determine overall project feasibility.

Per the requirements of the environmental assessment (EA) for this project, CDM has conducted a search to identify issues of concern to the MDFWP. Specifically, CDM has searched for state species of special concern. The results of this search indicate no state species of special concern have been identified within the project area. A summary of these results are presented following the body of this letter.

CDM has determined that two species of concern, the bull trout and the westslope cutthroat trout, have potential to be impacted by this project under certain unlikely conditions. Although the project boundaries do not reach the Clark Fork River, the northern boundary of the project area are near the Clark Fork River, and at some point approaches the 100-meter buffer recommended for protection of bull trout. The potential impacts to salmonids in the Clark Fork River are believed limited to uncontrolled sedimentation to the river. Sediment control measures will be implemented at all applicable phases of the project, and sediment inputs to the river are not expected to occur as a result of project activities.



Pat Saffel  
August 13, 2002  
Page 2

Based primarily on the information provided below as well as other site-specific information, CDM has come to the preliminary conclusion that this project has no significant potential to adversely impact state species of concern or their habitats. CDM is seeking any additional information from MDFWP that might affect this conclusion. If MDFWP is in agreement with this preliminary conclusion, or if no additional information is available, please provide a letter to that effect as soon as possible.

All correspondence can be mailed to the following:

Tony Gendusa, Ph.D.  
CDM Inc.  
20200 Wambli Lane  
Huson, MT 59846

If you have any questions I can be reached at 406-626-4166 or [gendusatc@cdm.com](mailto:gendusatc@cdm.com).

Thank you for your assistance,

Sincerely,

A handwritten signature in black ink, appearing to read 'Tony Gendusa' with a stylized flourish at the end.

Tony Gendusa, Ph.D.



Pat Saffel  
August 13, 2002  
Page 3

## Fish and Wildlife, Habitats, and Special Resources Assessment

### Montana Natural Heritage Program Search Results

The Montana Natural Heritage Program (MNHP) was contacted to obtain information on the potential for plant and animal species of special concern to occur within the project area. The search area is defined as a point location within the project area and a one-mile radius surrounding this point location. The project area and the selected point location is in Section 22, Township 13N, Range 19W.

The results of this search (**Appendix X**) indicate that seven species of concern have been reported within the search area (eight total records). These records are general, as indicated in the survey site names provided below. In several cases, the records are historic, and as such do not necessarily indicate that the species currently occurs or has potential to occur within the project area given the current habitat limitations. The potential for these eight species to occur within the project is discussed below. The definitions of the status or rank given by various state and federal agencies are included in **Appendix X**.

1. Westslope cutthroat trout (*Oncorhynchus clarki lewisi*).

Global rank: G4T3.  
State rank S2.  
BLM Status: Special Status.  
Survey site name: Lower Clark Fork Basin

Discussion: This species has no potential to occur within the project area because the project area does not provide suitable habitat (coldwater stream). Project-related impacts on this species are unexpected.

2. Bull trout (Columbial River) (*Salvelinus confluentus* pop 2).

Global rank: G3TQ.  
State rank S?  
USFWS Endangered Species Act: LT.  
Survey site name: West of the continental divide.



Pat Saffel  
August 13, 2002  
Page 4

Discussion: This species has no potential to occur within the project area because the project area does not provide suitable habitat (coldwater stream). However, MDFWP has recommended a 100 meter buffer on all streams and lakes/reservoirs that (a) have bull trout present and/or (b) are important for migration or over-wintering, or (c) link occupied stream reaches to major rivers. Project-related impacts on this species are unexpected but possible considering the 100 meter buffer zone recommendation. Potential impacts can include the addition of sediments to the Clark Fork River from project-related activities within the northern portion of the project area.

3. Fringed myotis (*Myotis thysanodes*).

Global rank: G4G5.  
State rank S3.  
Survey site name: Missoula

Discussion: This species is reported to have been collected in Missoula in 1964. The location of the collection is within Section 28, to the southwest of the project area. Although this species has potential to occur within the project area, the lack of (1) recent records of occurrence within the county, and (2) occurrence records for Section 22 suggest that the potential is low.

4. Lynx (*Felis lynx*).

Global rank: G5.  
State rank S3.  
USFWS Endangered Species Act: (PS:LT).  
Survey site name: Statewide

Discussion: This species has almost no potential to occur within the project area because the project area does not provide suitable habitat (spruce-fir forests above 3500 feet). The sensitivity of this species to human presence further indicates very little potential for this species to occur within the project area.



Pat Saffel  
August 13, 2002  
Page 5

5. Spotted slug (*Magnipelta mycophaga*).

Global rank: G2G3.  
State rank S1S3.  
Survey site name: Deer Creek

Discussion: This species has little potential to occur within the project area because the project area does not provide significant amounts of natural habitat. This species was last collected in 1957 at 4150 feet elevation, between Deer Creek and a parallel small gravel road near the creek in Section 32. The collection site is on the east side of Mount Sentinel in the Sapphire Mountains. Section 32 is located southwest of Section 22 (project area).

6. Missoula mountainsnail (*Oreohelix* sp 10).

Global rank: G1G3.  
State rank S1S3.  
Survey site name: Mount Sentinel

Discussion: This species has little potential to occur within the project area because the project area does not provide significant amounts of natural habitat. This species was collected at Mount Sentinel, 4900 feet elevation, about one mile southeast of the University of Montana. The collection site is in Section 26, southeast of Section 22 (project area).

7. Missoula mountainsnail (*Oreohelix* sp 10).

Global rank: G1G3.  
State rank S1S3.  
Survey site name: Mount Jumbo

Discussion: This observation record is for the same species listed for the previous observation (7.) Based on this specific record, the species was collected at Mount Jumbo, 4600 feet elevation, about one mile northwest of the University of Montana. The collection site is in Section 14, northeast of Section 22 (project area).



Pat Saffel  
August 13, 2002  
Page 6

8. Obscure evening-primrose (*Camissonia andina*).

Global rank: G4.  
State rank S2.  
BLM Status: Sensitive  
Survey site name: Mount Sentinel

Discussion: This species has little potential to occur within the project area because the project area does not provide significant amounts of natural habitat. This species was collected at Mount Sentinel, 3320 feet elevation, on the west side of the mountain. The collection site is in Section 27, immediately south of the project area.

### Field Observations

Observations regarding habitats and species were made during a site visit conducted on July 22, 2002. The results of the site visit indicate little natural habitat remains within the project area. The majority of the project area consists of residential housing and the Jeanette Rankin Park at the northern portion of the project area. Immediately adjacent to the roads forming the eastern and western boundaries of the park are vegetated road shoulders dominated by plant species indicative of disturbed areas (e.g., spotted knapweed). Just beyond the project boundaries and south of the Clark Fork River are densely vegetated areas dominated by several species of shrubs and trees. Within the current boundaries of the Jeanette Rankin Park are open (mowed) grass areas with planted shrubs (e.g., roses) and trees (e.g., American elm, maple). No significant natural habitats occur within the project area, either within the park or the residential area. A field survey for rare and sensitive plants was therefore not performed.

## Gendusa, Tony

---

From: Saffel, Pat [psaffel@state.mt.us]  
Sent: Monday, August 26, 2002 9:31 AM  
To: Gendusa, Tony  
Subject: 13 Aug letter

Your letter and our discussions suggest that the project will be approaching (implying at or near) a 100-foot distance to the Clark Fork River and, at this distance, the project lies within an urban area. You state that sediment inputs to the river are not expected to occur. Therefore, given these preliminary plans, I do not expect issues concerning bull trout or westslope cutthroat trout associated with your project.

Pat Saffel  
Montana Fish, Wildlife & Parks  
Fishery Manager  
Missoula, Montana  
406-542-5507



34 North Last Chance Gulch, Suite 104  
Helena, Montana 59601  
tel: 406 449-2121  
fax: 406 449-6768

SENT

8-1302

August 13, 2002

Tom Ellerhoff  
Montana Department of Environmental Quality  
P.O. Box 200901  
Helena, Montana 59620-0901

FILE COPY

Dear Tom:

As discussed with Denise Martin (DEQ) recently by phone, the Montana Department of Transportation (MDT) has retained Camp Dresser & McKee (CDM) to provide engineering services for the reconstruction of Arthur Avenue near the University of Montana (U of M) in Missoula, Montana. The project will target the Arthur Avenue portion of Highway 12. Arthur and Maurice Avenues will be the eastern and western project limits. The project will be bounded by 6th Street, to the south, and the Madison Street Bridge, to the north. The project is located within Township 13N, Range 19W, Section 22. The entire project area is within an urban environment. The purpose of this project is to improve the traffic flow, reduce out-of-direction travel and improve safety. The project is needed to meet current and future demands of a mixture of motor vehicles, bicycles, and pedestrians. As part of this project, the use of roundabouts and/or conventional signaling in areas will be analyzed to determine overall project feasibility.

Per the requirements of the environmental assessment (EA) for this project, CDM has conducted a preliminary search to identify issues of concern to the DEQ. Specifically relevant to DEQ, CDM has searched for leaking underground storage tanks, hazardous spill sites, MT CECRA sites, EPA CERLIS sites, and EPA toxic release sites.

The results of this search indicate that no hazardous spill sites, EPA toxic release sites, or EPA CERLIS sites occur within one mile of the project area. Four MT CECRA sites have been identified within the one-mile buffer zone surrounding the project area, but all are well north or west of the project boundaries. Several underground storage facilities have been identified within the one-mile buffer zone, and several of these are associated with known leaks (both active and inactive facilities). None are identified within the project boundaries.



Tom Ellerhoff  
August 13, 2002  
Page 2

Based primarily on the information provided below as well as other site-specific information, CDM has come to the preliminary conclusion that this project has no significant potential for association with hazardous spill or release sites, leaking USTs, or other potentially hazardous conditions. CDM is seeking any additional information from DEQ that might affect this conclusion. Alternatively, if DEQ is in agreement with this preliminary conclusion, or if no additional information is available, please provide a letter to that effect as soon as possible.

All correspondence can be mailed to the following:

Tony Gendusa, Ph.D.  
CDM Inc.  
20200 Wambli Lane  
Huson, MT 59846

If you have any questions I can be reached at 406-626-4166 or [gendusatc@cdm.com](mailto:gendusatc@cdm.com).

Thank you for your assistance,

Sincerely,

A handwritten signature in black ink, appearing to read 'Tony Gendusa'. Below the signature, the initials 'FGN' are written in a smaller, cursive hand.

Tony Gendusa, Ph.D.

## Gendusa, Tony

---

**From:** Joe Oliphant [JOliphant@ci.missoula.mt.us]  
**Sent:** Friday, August 02, 2002 10:15 AM  
**To:** Gendusa, Tony  
**Cc:** Steve King; Doug Harby; Bruce Bender; 'Martin, Tom'; 'duwilliams@state.mt.us'; 'frazier@state.mt.us'; 'Jameel Chaudhry (chaudhry@selway.umt.edu)'; 'POdegard@Entranco.com'; Keith Belden  
**Subject:** Arthur Ave (CN 4611) Related Projects

Camp, Dresser, McKey;

As you requested, this email is in response to your request for information on current transportation projects near the University.

City of Missoula is managing two federal-aid transportation projects which are in proximity to 5th/6th Arthur Ave project.

Listed below is some general information about each project:

### **Broadway/California Ped Xing Study CM 8128 (1) CN 4499 City Project #99-070**

Project limits Broadway (Mullan Road to Madison Street)

Scope

- Primary-Ped crossing near California/Broadway/Toole Intersection
- Secondary-Conversion potential for 3 lane system

MDT Consultant Design Contact-Duane Williams

Consultant Entranco

Project Manager Phil Odegard

### **Higgins/Hill/Beckwith CM 8117(3) CN 4498 City Project #00-038**

Scope of Work

- Intersection Improvement Project
  - Signal
  - Signing/Striping
  - Roundabout

MDT Consultant Design Contact-Duane Williams

Consultant-Morrison-Maierle

Project Manager Keith Belden

Let me know if you need further information.

Have a good weekend!

Joe Oliphant

# **Appendix D**

## **Comments and Responses**

# MEMORANDUM

**TO:** File – Arthur Avenue CM 7-2(36)94 CN 4611

**FROM:** CDM/KirK

**DATE:** 9-1-05

**RE:** Comments received on post cards sent to MDT in March 2005 and comments received at a meeting at the University of Montana on April 4, 2005.

MDT requested CDM/KirK conduct a detailed analysis of the options and ideas brought forward in post cards received by MDT in March 2005, and the comments received at a meeting at the University of Montana on April 4, 2005. This memorandum is a summary of the CDM/KirK analysis of those comments.

## Analysis of the Post Cards

MDT received 127 post cards from students and Missoula residents in March 2005. The following are examples of post cards received. *“I request a public meeting on the design of the Madison/5<sup>th</sup>/6<sup>th</sup> project. The design should be one that encourages and is safe for all transportation modes. It should fit the character of the neighborhood and community. The project should be designed to reduce speeds as traffic enters the University District.”* Many of the post cards reflect the above language, and provided other detailed comments. The following table is a summary of the issues obtained from the comment section of the post cards received.

### Post Card Comments Received by MDT

<b>General Concern or Issue Presented</b>	<b>Number of People commenting per issue</b>	<b>% of Total Post Card Comments</b>
Agree with a design that is safe for all modes of transportation, fits the character of the community, and reduces speeds into the University District. No other comments on the post cards.	54	38.0
<b>Additional Issues Presented on Post Card</b>		
Requested that bikes, pedestrians, or both be adequately considered in the design	30	21.1
Requested a public meeting to discuss issues	26	18.3
Thought a roundabout was a good alternative	17	12.0
Did not like any design with four or more lanes	11	7.7
Thought the project is bad	3	2.1
Concerned about the loss of houses	1	0.7
<b>Total Post Card Commenters</b>	<b>142</b>	

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**Post Card Comment #1: *The design should be safe for all modes of transportation, fit the character of the community, and reduce speeds into the University District.***

**Response:** The current Arthur Avenue, Highway 12 system requires out of direction travel, has an uncontrolled intersection at Arthur and 5<sup>th</sup>, and has limited bike and pedestrian accessibility. The proposed project will add controlled intersections with pedestrian actuated crossings, marked crossings, bike lanes, and will eliminate multiple turns in Highway 12 that reduce visibility and increase driver confusion. In addition, installation of a light controlled intersection at Arthur and 5<sup>th</sup> will cause drivers to stop for pedestrian crossing and allow pedestrians controlled access. This intersection will be preceded by signs and warning lights on or near the bridge. The installation of signs and warning lights along with the stop light should slow or stop traffic in the pedestrian conflict area. A more detailed description of pedestrian and bicycle benefits of the proposed action is described in the EA.

**Post Card Comment #2: *The request that bikes, pedestrians or both are adequately considered in the design.***

**Response:** Bikes and pedestrians have been considered in detail during the pre-design process. Numerous enhancements have been included in the proposed alternatives as described in the EA. Some examples include addition of bike lanes on the SB portion of Arthur Ave north of 5<sup>th</sup> Street, signalized pedestrian crossings with push buttons, and ADA compliance on all crosswalks and sidewalks in the project vicinity. In addition, MDT is working in coordination with the City and University on another project; a pedestrian/bike underpass, under the Madison Street Bridge, that will provide a route for bicyclists and pedestrians directly to the University. The attached figure shows the proposed plan and MDT and the City of Missoula can be contacted regarding this project.

**Post Card Comment #3: *Commenters requested a public meeting to discuss issues.***

**Response:** A meeting was scheduled and conducted on April 4, 2005 to specifically hear from students and other residents' issues and concerns. Prior to that, more than 3 dozen meetings have occurred with City officials, University officials, MDT, special interest groups, neighborhood residents and students. In addition, a public meeting was held at the University in 2004, and a list of prior project meetings is included in Section 5 of the EA. Also, another public meeting will be scheduled for November or December of 2005 to discuss and receive additional questions and comments on the project.

**Post Card Comment #4: *Commenters feel a roundabout is a good alternative.***

**Response:** Please see responses to "Citizens Plan" below.

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**Post Card Comment #5: *Commenters do not like any plan that will include four or more driving lanes.***

**Response:** Currently, there are four driving lanes for Highway 12 traffic. These lanes are “split and one way” between Maurice Avenue and Arthur Avenue. The proposed plan will allow Maurice Avenue to become a City/University street, diverting the traffic to Arthur Avenue. In response to the concern presented at the April 4, 2004 meeting, and based upon the resolution presented by the students and presented at that meeting and comments from the City and University, the proposed alternative has been amended to reduce the width of Arthur Avenue by removing the turn lane at Arthur and 5<sup>th</sup>. Further information regarding this issue is provided in the EA in the description of the alternatives.

**Post Card Comment #6: *Commenters think the project is bad.***

**Response:** The no-build alternative was considered and analyzed in the EA, and is being used as the baseline for the project.

**Post Card Comment #7: *Commenters are concerned about the loss of homes in the area.***

**Response:** As part of the EA process, a detailed analysis was conducted to assess the impacts to properties and properties that are considered culturally or historically important. Please see Section 4 of the EA for more information. Homes that will be removed as part of this project currently belong to the University (rental properties for University students) and are part of the University and MDT MOU. This includes one historic property and four non-historic properties. For more information on the historic property please see Section 4. Mitigation measures are also listed in the EA.

## **Analysis of the Citizen Plan**

The following is included regarding the “Citizens Plan” brought forward at the April 4, 2004 meeting and 11 comments received by MDT via post cards in March 2005.

### ***Single Lane Roundabout***

- The traffic volumes at the intersections of Arthur Avenue at 5<sup>th</sup> Street and 6<sup>th</sup> Street exceed the capacity of a single lane roundabout.
- The geometric layout of the existing streets (the skew of the Madison Street Bridge approach) does not conform to a standard roundabout; therefore, some movements would prohibit trucks (right turn from 5<sup>th</sup> to Arthur NB). Also, a single lane roundabout would require the two entry lanes on 6<sup>th</sup> Street to be reduced to one lane. This would cause severe backups through existing intersections to the west of 6<sup>th</sup> Street at Arthur Avenue. This same problem could occur for the Madison Street bridge entry lanes at 5<sup>th</sup> Street and Arthur Avenue.

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- A single lane roundabout at either location would have greater delays and increased emissions than the preferred alternative (new traffic signals and turning lanes).

### ***Double Lane Roundabout***

- A double lane roundabout will have more right-of-way impacts than the preferred alternative. This includes the demolition of at least 4 homes in the historic district on the west side of Arthur Avenue.
- A double lane roundabout will likely require a large retaining wall on the northwest side of Arthur Avenue at 5<sup>th</sup> Street.
- Roundabouts will exceed the limits of the Memorandum of Understanding.
- If a double lane roundabout were installed, it would result in longer crosswalks and would require pedestrians to cross two approach lanes and two exit lanes. In addition, the capacity of double lane roundabout would be reached in 7 to 10 years.
- Pedestrians in double roundabouts will face the “double hazard” of a vehicle in the first approach (or exit) lane yielding while a vehicle in the second lane fails to yield. Furthermore, vehicles approaching in the leftmost lane will not be looking towards the pedestrian crosswalk; they will be focused on traffic circling the roundabout.
- The double lane roundabout increases the pedestrian travel distance for pedestrians traveling along the southern side of 5<sup>th</sup> Street, the northern side of 6<sup>th</sup> Street, and the southern side of 6<sup>th</sup> Street.
- Bicyclists at a double lane roundabout would compete with vehicles in two approach lanes and two exit lanes.
- FHWA recommends that all roundabouts have illumination. The amount of street lighting needed will be equal to or greater than traffic signals with Light Emitting Diode (LED) signal heads. Furthermore, roundabouts will require the same roadway/pavement markings/signing maintenance as a traffic signal installation, if not more due to landscaping on the center islands.
- The Impacts to Jeanette Rankin Park would be larger with a double lane roundabout than the preferred alternative.

### ***Roundabout Summary***

Section 2.4 of the EA provides a more detailed discussion of Roundabouts and the Roundabout analysis.



# Appendix E

## List of Preparers

# Appendix E

## List of Preparers

### CDM, Inc.

Darrel Stordahl  
Project Manager  
B.S. Mining Engineering, Montana Tech  
M.S. Environmental Engineering,  
Montana Tech  
Reg. Professional Engineer  
18 years of experience in environmental  
engineering experience

Jeff Jones  
Project Manager/  
Project Engineer  
B.S. Civil Engineering, Montana State  
University  
Reg. Professional Engineer  
Seven years experience in transportation  
and civil engineering

Wade Salyards  
Project Engineer  
B.S. Mining Engineering, Montana Tech  
Reg. Professional Engineer  
Five years experience in transportation  
engineering

Kevin Johnson  
Transportation Engineer  
Roundabout/Capacity Analysis  
B.S. Civil Engineering, Roger Williams  
College  
Reg. Professional Engineer  
Twelve years experience in traffic  
engineering

Lisa Sherman  
Transportation Engineer  
Roundabout/Capacity Analysis  
B.S. Civil Engineering, Northeastern  
University  
Reg. Professional Engineer  
Ten years experience traffic engineering

Amber Conboy  
Transportation Engineer  
Traffic Engineering  
B.S. Civil Engineering, University of  
Massachusetts  
Engineer In Training Certificate  
Five years experience transportation  
engineering

Dave Kirkpatrick  
EA Preparation  
Technical editor/writer  
B.A. Journalism, University of Montana  
Seventeen years experience writing and  
editing

### KirK Environmental

Randy Huffsmith  
EA Preparation  
M.S. Engineering, University of  
Wyoming  
B.S. Agricultural/Civil Engineering,  
University of Wyoming  
Reg. Professional Engineer  
Seventeen years experience  
environmental consulting, EA report  
preparation

### Western Cultural Resources, Inc.

Dan Hall  
Cultural Resources  
M.A. Interdisciplinary Studies,  
History/Anthropology, University of  
Montana  
B.A. Geology, University of Montana  
Sixteen years of experience in cultural  
resource services

# **Appendix F**

## **Distribution List**

## **Distribution List**

### **FEDERAL HIGHWAY ADMINISTRATION (MONTANA DIVISION)**

2880 Skyway Drive  
Helena, MT 59602

### **CITY OF MISSOULA - DEPARTMENT OF PUBLIC WORKS**

435 Ryman  
Missoula, MT 59802

### **MISSOULA CITY-COUNTY HEALTH DEPARTMENT**

301 West Alder  
Missoula, MT 59802

### **UNIVERSITY OF MONTANA**

Facilities Services  
32 Campus Drive  
Missoula, MT 59812

### **ASSOCIATED STUDENTS OF THE UNIVERSITY OF MONTANA (ASUM)**

32 Campus Drive  
University Center 105  
Missoula, MT 59812

### **RESOURCE AGENCIES**

#### **EPA Montana Operations Office**

Federal Building  
10 West 15th Street, Suite 3200  
Helena, MT 59626

#### **DEQ Main Office**

Lee Metcalf Building  
1520 E. Sixth Avenue  
P.O. Box 200901  
Helena, MT 59620-0901

#### **DEQ Missoula**

Air Quality Office  
Missoula County Health Department  
301 W. Alder  
Missoula, MT 59802

#### **US Fish & Wildlife Service**

USFWS Montana Field Office  
110 North Park, Suite 320  
Helena, MT 59601

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**Montana Fish, Wildlife & Parks**

1420 E 6<sup>th</sup> Ave.

PO Box 200701

Helena, MT 59620-0701

**OTHER RECIPIENTS**

**Bob Giordano (MIST)**

91 Campus Dr. #1412

Missoula, Montana 59801

**VEIWING LOCATIONS**

**Missoula City Library**

301 East Main Street

Missoula, MT 59802

**ASUM Offices - Student Union Building**

University Center 105

Missoula, MT 59812

**Mansfield Library**

University of Montana

32 Campus Drive

Missoula, MT 59812

**Montana Department of Transportation District 1 Office, Missoula**

2100 W. Broadway

P.O. Box 7039

Missoula, MT 59807-7039

**City of Missoula, Public Works Department**

City Hall, Second Floor

435 Ryman

Missoula, MT 59802