

# Volume V

## Appendix E

### Kearl Module Transportation Project Environmental Assessment

# Kearl Module Transportation Project Environmental Assessment

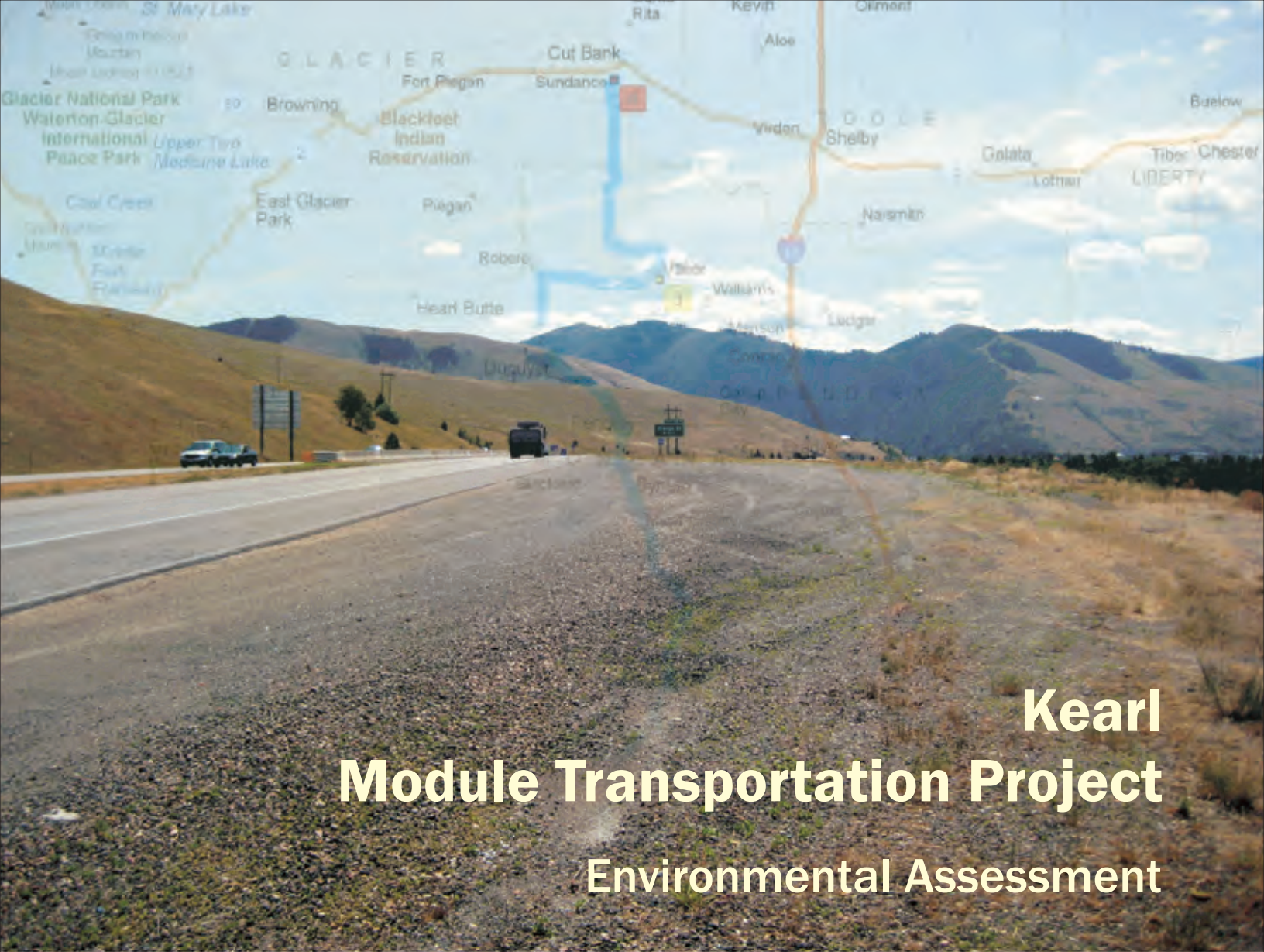
## Proposed Module Transport and Required Utility and Road Modifications



February 2011



MDT attempts to provide accommodation for any known disability that may interfere with a person participating in any service, program or activity of the Department. Alternative accessible formats of this information will be provided upon request. For further information, call 406.444.7228 or TTY (800.335.7592) or Montana Relay at 711.



# Kearl Module Transportation Project Environmental Assessment

## Proposed Module Transport and Required Utility and Road Modifications



April 2010



MDT attempts to provide accommodation for any known disability that may interfere with a person participating in any service, program or activity of the Department. Alternative accessible formats of this information will be provided upon request. For further information, call 406.444.7228 or TTY (800.335.7592) or Montana Relay at 711.

# **Kearl Module Transportation Project Environmental Assessment**

**FOR**

**THE PROPOSED KEARL MODULE TRANSPORT AND  
REQUIRED UTILITY AND ROAD MODIFICATIONS  
WITHIN EXISTING RIGHTS-OF-WAY OR EASEMENTS**

*Prepared for:*

## **Montana Department of Transportation**

*2701 Prospect Avenue*

*PO Box 201001*

*Helena, MT 59620-1001*

*(406) 444-6200*

*Prepared by:*

## **Tetra Tech**

*2525 Palmer Street, Suite 2*

*Missoula, MT 59808*

*(406) 543-3045*

*Fax (406) 543-3088*

*Tetra Tech Project No. 114-570218*

April 2010




# Environmental Assessment

## The Proposed Kearsarge Module Transport Project and Required Utility and Road Modifications within Existing Rights-of-Way or Easements

The proposed Kearsarge Module Transport route will travel through Missoula, Powell, Lewis and Clark, Teton, Pondera, Glacier and Toole Counties, Montana. The trailer return route will travel through Toole, Pondera, Teton, Cascade, Lewis and Clark, Jefferson, Silver Bow, Deer Lodge, Powell, Granite, and Missoula Counties.

This document is prepared in conformance with the Montana Environmental Policy Act (MEPA, 75-1-201 MCA) requirements and contains the information required for an Environmental Assessment (EA) under the provision of Administrative Rules of Montana (ARM) 18.2.237 (2) and 18.2.239.

Reviewed and Approved for Distribution:		Date	4/8/10
---	---	------	--------

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

Dwane Kailey, P.E.  
Chief Engineer  
Montana Department of Transportation  
2701 Prospect Avenue  
PO Box 201001  
Helena, MT 59620-1001  
406.444.7228

### Abstract

The purpose of the proposed project is for Imperial Oil to improve Montana infrastructure to facilitate a safe and efficient movement of over-dimension loads (height, widths, and weight) through Montana to the Canadian border and return trailers through Montana to the Idaho border. Imperial Oil is proposing to construct new turnouts; modify some existing turnouts; slightly modify the roadway at several locations, conduct some surface repairs; relocate existing utility lines, conduct some tree trimming, and modify some overhead signs and traffic signals before hauling their over-dimension loads. MDT would need to issue certain permits to allow Imperial Oil to carry out those activities. The proposed project is needed to transport specialized processing equipment through Montana to Alberta, Canada. In addition, the proposed project must adhere to a 10-minute maximum traffic delay rule and minimize potential for adverse impacts to the built and natural environment, the public, local businesses, and current uses.

Comments on this EA are due MAY 14, 2010, and should be sent to Dwane Kailey, Montana Department of Transportation at the address above. This document and the supporting Montana Transportation Plan (MTP) may be viewed on the MDT website at [www.mdt.mt.gov/publinvlve/eis\\_ea.shtml](http://www.mdt.mt.gov/publinvlve/eis_ea.shtml).





**Table of Contents**

Summary ..... S-1

1.0 Purpose and Need ..... 1

    1.1 Background ..... 1

    1.2 Purpose of the Project ..... 1

    1.3 Need for the Project ..... 1

    1.4 Brief Description of the Proposed Action ..... 1

    1.5 Applicable Laws and Regulations ..... 2

    1.6 Permits ..... 3

        1.6.1 Construction Permits ..... 3

        1.6.2 Transportation Permits ..... 4

2.0 Alternatives ..... 5

    2.1 Development of Alternatives ..... 5

        2.1.1 Scoping ..... 5

        2.1.2 Issues ..... 5

    2.2 Alternatives Considered in Detail ..... 5

        2.2.1 Proposed Action ..... 5

            2.2.1.1 Location ..... 5

            2.2.1.2 Financial Responsibility ..... 6

            2.2.1.3 Turnout Construction and Road Modifications ..... 6

            2.2.1.4 Utility Relocations ..... 9

            2.2.1.5 Traffic Structures and Road Sign Modifications ..... 10

            2.2.1.6 Tree Trimming ..... 11

            2.2.1.7 Module Transportation ..... 11

            2.2.1.8 Schedule ..... 14

        2.2.2 No Action Alternative ..... 14

    2.3 Alternatives Considered but Eliminated ..... 14

        2.3.1 Transportation Route from the West Coast of Canada to Alberta ..... 14

        2.3.2 US Interstate Highway System Transportation Route ..... 14

        2.3.3 Daytime Hauling ..... 15

    2.4 Preferred Alternative ..... 15

3.0 Environmental Impacts ..... 16

    3.1 Analysis Methods ..... 16

    3.2 Past, Present and Reasonably Foreseeable Actions ..... 16

    3.3 Historical and Archaeological Sites ..... 16

        3.3.1 No Action Alternative ..... 17

        3.3.2 Proposed Action ..... 17

            3.3.2.1 Turnout Construction and Road Modifications ..... 17

            3.3.2.2 Utility Relocations ..... 18

            3.3.2.3 Traffic Structures ..... 19

            3.3.2.4 Tree Trimming ..... 19

            3.3.2.5 Module Transportation ..... 19

            3.3.2.6 Conclusion ..... 19

            3.3.2.7 Cumulative Impacts ..... 20

    3.4 Publicly Owned Parklands, Recreation Areas, Wildlife or Waterfowl Refuges ..... 20

        3.4.1 No Action Alternative ..... 20

        3.4.2 Proposed Action ..... 20

            3.4.2.1 Turnout Construction and Road Modifications ..... 20

            3.4.2.2 Utility Relocations ..... 20

3.4.2.3	Traffic Structures.....	20
3.4.2.4	Tree Trimming .....	20
3.4.2.5	Module Transportation.....	20
3.4.2.6	Conclusion.....	20
3.4.2.7	Cumulative Impacts.....	21
3.5	Transportation System.....	21
3.5.1	No Action Alternative.....	21
3.5.2	Proposed Action.....	21
3.5.2.1	Turnout Construction and Road Modifications.....	21
3.5.2.2	Utility Relocations.....	22
3.5.2.3	Traffic Structures.....	22
3.5.2.4	Tree Trimming .....	22
3.5.2.5	Module Transportation.....	22
3.5.2.6	Conclusion.....	23
3.5.2.7	Cumulative Impacts.....	24
3.6	Economic and Community Impacts .....	24
3.6.1	No Action Alternative.....	25
3.6.2	Proposed Action.....	25
3.6.2.1	Environmental Permitting .....	27
3.6.2.2	Turnout Construction and Road Modifications.....	28
3.6.2.3	Utility Relocations.....	28
3.6.2.4	Traffic Structures.....	31
3.6.2.5	Tree Trimming .....	31
3.6.2.6	Module Transportation.....	32
3.6.2.7	Conclusion.....	34
3.6.2.8	Cumulative Impacts.....	34
3.7	Air Quality and Noise.....	34
3.7.1	No Action Alternative.....	35
3.7.2	Proposed Action.....	35
3.7.2.1	Turnout Construction and Road Modifications.....	35
3.7.2.2	Utility Relocations.....	35
3.7.2.3	Traffic Structures.....	35
3.7.2.4	Tree Trimming .....	35
3.7.2.5	Module Transportation.....	35
3.7.2.6	Conclusion.....	36
3.7.2.7	Cumulative Impacts.....	36
3.8	Contaminated Sites/Hazardous Materials.....	36
3.8.1	No Action Alternative.....	36
3.8.2	Proposed Action.....	36
3.8.2.1	Turnout Construction and Road Modifications.....	36
3.8.2.2	Utility Relocations.....	37
3.8.2.3	Traffic Structures.....	37
3.8.2.4	Tree Trimming .....	37
3.8.2.5	Module Transportation.....	37
3.8.2.6	Conclusion.....	38
3.8.2.7	Cumulative Impacts.....	38
3.9	Water Resources.....	38
3.9.1	No Action Alternative.....	39
3.9.2	Proposed Action.....	39
3.9.2.1	Turnout Construction and Road Modifications.....	39
3.9.2.2	Utility Relocations.....	41

- 3.9.2.3 Traffic Structures .....42
- 3.9.2.4 Tree Trimming .....42
- 3.9.2.5 Module Transportation .....42
- 3.9.2.6 Conclusion .....42
- 3.9.2.7 Cumulative Impacts .....42
- 3.10 Threatened or Endangered Species .....43
  - 3.10.1 No Action Alternative .....43
  - 3.10.2 Proposed Action .....43
    - 3.10.2.1 Turnout Construction and Road Modifications .....43
    - 3.10.2.2 Utility Relocations .....43
    - 3.10.2.3 Traffic Structures .....44
    - 3.10.2.4 Tree Trimming .....44
    - 3.10.2.5 Module Transportation .....44
    - 3.10.2.6 Conclusion .....44
    - 3.10.2.7 Cumulative Impacts .....46
- 3.11 Wildlife and Fisheries .....47
  - 3.11.1 No Action Alternative .....47
  - 3.11.2 Proposed Action .....47
    - 3.11.2.1 Turnout Construction and Road Modifications .....47
    - 3.11.2.2 Utility Relocations .....48
    - 3.11.2.3 Tree Trimming .....49
    - 3.11.2.4 Module Transportation .....49
    - 3.11.2.5 Conclusion .....49
    - 3.11.2.6 Cumulative Impacts .....49
- 3.12 Prime Farmlands .....49
  - 3.12.1 No Action Alternative .....49
  - 3.12.2 Proposed Action .....49
    - 3.12.2.1 Turnout Construction and Road Modifications .....49
    - 3.12.2.2 Utility Relocations .....50
    - 3.12.2.3 Traffic Structures .....50
    - 3.12.2.4 Tree Trimming .....50
    - 3.12.2.5 Module Transportation .....50
    - 3.12.2.6 Conclusion .....50
    - 3.12.2.7 Cumulative Impacts .....50
- 3.13 Mitigation to Avoid Impacts .....50
- 4.0 Consultation.....55
  - 4.1 Consultation Process.....55
    - 4.1.1 State and Federal Agencies Contacted .....61
      - 4.1.1.1 MT Department of Environmental Quality.....61
      - 4.1.1.2 Montana SHPO .....61
      - 4.1.1.3 US Army Corps of Engineers .....61
      - 4.1.1.4 US Fish and Wildlife Service .....62
      - 4.1.1.5 USDA Forest Service.....62
    - 4.1.2 Consultation with Blackfeet THPO.....62
    - 4.1.3 Consultation with Counties .....62
    - 4.1.4 Agreements.....64
  - 4.2 Consultation Findings .....65
    - 4.2.1 Notification.....65
    - 4.2.2 Response to Emergency Situations .....65
    - 4.2.3 Local Community Information.....66

4.2.4 School and School Bus Information .....	66
4.2.5 Residual Benefits .....	66
4.3 On Going Consultation Efforts.....	66
5.0 References.....	67
6.0 List of Preparers and Reviewers .....	69

## List of Tables

Table 1 Conclusion and Summary of Effects.....	S-7
Table 2 State, Federal, and Tribal Permits .....	3
Table 3 Legal Load and Over Dimensional Criteria for Montana.....	4
Table 4 Turnout Definitions .....	6
Table 5 Turnout Construction .....	7
Table 6 Road Modifications .....	9
Table 7 Utility Work Summary.....	10
Table 8 Montana Stages of Travel.....	11
Table 9 Truck and Trailer Maximum and Minimum Configurations.....	12
Table 10 Preliminary Overall Schedule of Activities.....	14
Table 11 Estimated Dump Truck Loads of Gravel and Asphalt Needed for Turnout Work.....	21
Table 12 2008 Average Annual Daily Traffic .....	22
Table 13 Population of Towns Along the Module Transportation Route .....	24
Table 14 Population of Towns Along the Trailer Return Route .....	25
Table 15 Estimated Montana Economic Impact Summary .....	26
Table 16 Estimated Direct Tax Revenue to Montana.....	26
Table 17 Population and Density Characteristics of the Region, 2008 Estimates.....	27
Table 18 Estimated Value of Environmental Permitting to Montana .....	28
Table 19 Estimated Value of Turnout and Road Modifications to Montana .....	28
Table 20 Utility Crossing Summary and Outages.....	29
Table 21 Estimated Value of Utility Relocation Work to Montana .....	31
Table 22 Value of Traffic Structure Work to Montana .....	31
Table 23 Estimated Value of Module Transportation to Montana.....	34
Table 24 Streams Crossed by Module Transportation Route.....	38
Table 25 Floodplain Zones Crossed by the Analysis Area.....	39
Table 26 Turnout Construction Distance to Streams.....	40
Table 27 Road Modification Distance to Streams.....	41
Table 28 Threatened and Endangered Species Identified to Potentially Occur within the Project Area .....	45
Table 29 Bald Eagle Nests within 1/2 Mile of a Utility Crossing.....	48
Table 30 Consultation Meetings.....	55
Table 31 Agreements.....	64

## List of Figures

Figure 1. Transportation Route Map .....	S-2
Figure 2. Front View of Typical Module in Transport.....	13

## Appendices

- Appendix A Maps of Turnouts and Road Modifications
- Appendix B Maps of Utility Locations
- Appendix C Maps of Traffic Structure and Sign Modifications
- Appendix D Bear and Aquatic Resources Special Provisions
- Appendix E Plan Sheets of Turnouts
- Appendix F Montana Species of Concern



## Acronyms

ALPO-90A	Aquatic Lands Protection Ordinance No. 90-A
APLIC	Avian Powerline Interaction Committee
ARM	Administrative Rules of Montana
BMP	Best Management Practice
dB(A)	A-weighted Decibels
DNRC	Department of Natural Resources and Conservation
EA	Environmental Assessment
EPA	Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
GIS	Geographic Information System
I-15	Interstate 15
I-90	Interstate 90
KMTP	Kearl Module Transport Project
MCA	Montana Code Annotated
MCS	Motor Carriers Services Division
MDEQ	Montana Department of Environmental Quality
MDT	Montana Department of Transportation
MEC	Missoula Electric Cooperative
MEPA	Montana Environmental Policy Act
MNHP	Montana Natural Heritage Program
MP	Mile Post
MPDES	Montana Pollution Discharge Elimination System
MS4	Small Municipal Separate Storm Sewer System
MTP	Montana Transportation Plan
NAIP	National Agricultural Imagery Program
NHD	National Hydrography Dataset
NPDES	National Pollution Discharge Elimination System
NPS	National Park Service
NRHP	National Register of Historic Places
NWI	National Wetlands Inventory
ROW	Right-of-way
PM <sub>10</sub>	Particulate Matter less than 10 microns in diameter
SAM	Social Accounting Matrix
SHPO	State Historic Preservation Office
SWPPP	Storm Water Pollution Prevention Plan
T & E	Threatened and Endangered Species
THPO	Tribal Historic Preservation Office
TVM	Test Validation Module
US	United States
USACE	United States Army Corps of Engineers
USD	United States Dollar
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
WB-67	Tractor and single trailer combination with approximately 67 feet from the front axle to the rear-most axle.





## SUMMARY

The Kearn Module Transportation Project (KMTP) is being proposed by Imperial Oil<sup>1</sup> for the transport of modules (pre-assembled process units that are manufactured in Korea) to the Fort McMurray area of north-eastern Alberta, Canada. The overall Kearn Project involves the application of advanced technology, specialized manufacturing capability and global execution strategies that require sourcing of various pieces of equipment including modules that are manufactured in Korea.

Imperial Oil proposes to transport these modules from Korea to the United States (US) where they will be off-loaded and then transported to the Fort McMurray area of Canada. Imperial Oil has investigated several transportation routes through Canada and the US. The only identified feasible route is from the Port of Vancouver, Washington, up the Columbia / Snake River Inland Waterway System to the Port of Lewiston, Idaho. From the Port of Lewiston, the modules would be transported by specialized load moving equipment through Idaho on US Highway 12 to Lolo Pass. The transport route through Montana begins at the Lolo Pass and follows several highways through Montana before exiting at Sweetgrass, Montana at the US / Canada border. The return trailer route enters at Sweetgrass and follows mostly the interstate transportation system before exiting at Lolo Pass (Montana/Idaho border). **Figure 1** presents both the module and return trailer routes. Imperial Oil selected the proposed module transportation route because it avoids height restrictions with existing railway and road overpasses, truss bridges, and tunnels that exist on other investigated routes through Canada and the United States. Since the returning haul trailers do not have the same height restrictions and can travel at speeds up to 50 miles per hour, the interstate return trailer route was selected to minimize public impacts and for efficiency.

The volume of modules planned to be transported through Montana is currently forecasted at about 200. The module movement is planned to occur from the fall of 2010 to the fall 2011. The peak transportation volume will be no more than two modules per day through any particular location.

To avoid peak hourly traffic volumes and to minimize adverse impact to the public, local businesses and commercial traffic, the modules will be transported at night from Lolo Pass to just north of Valier. Since traffic volumes north of Valier are low, day travel would be used from north of Valier to Sweetgrass.

A transportation plan has been developed that adheres to the 10-minute maximum traffic delay rule imposed by the Montana Department of Transportation (MDT) and includes Emergency Response Plans with emphasis on emergency vehicle clearance. This transportation plan is available for public review on the MDT website.

In order to facilitate the safe and efficient movement of the over-dimension loads with a minimum of disruption to current uses, the following infrastructure improvements are required:

- Permanently raising or burying utility lines at approximately 572 locations;
- Modifying, or installing 33 traffic structures (traffic signals, signs, or street lights);
- Permanently modifying 22 existing highway turnouts;
- Building 53 new highway turnouts;
- Adding minor amounts of gravel infill to permanently modify the roadway in 5 locations to allow adequate turning radius of the load and other long vehicles;
- Road surface repairs to a approximately 8.5 mile section of Santa Rita Road and S-214 maintained by Glacier County; and
- Minor amounts of tree trimming in along Highway 200 in Bonner and Highways 287 and 89 in Choteau.

---

<sup>1</sup> Imperial Oil is one of Canada's largest corporations and a leading member of Canada's petroleum industry. ExxonMobil is the majority shareholder of Imperial Oil controlling 69.9 percent of the common shares.



- Towns
- Module Transportation Route
- Return Route for Empty Trailers
- - - Return Route for Trailers less than 10 feet wide
- ➡ Route Direction
- Interstate
- ▭ County Boundary
- ▭ State Boundary



**Figure 1**  
**Location Map**  
**Transportation Route**  
**Kearl Project**

The infrastructure improvements described above will occur in existing rights-of-way or easements in areas previously disturbed during road construction and utility placement. The route does not require construction of any new highways, bridges, or other major construction.

No infrastructure improvements are required for the return trailer route.

An environmental review was conducted of all sites where physical construction activity is planned. Some of the initially proposed sites were relocated to avoid environmental concerns. Through analyses conducted for this environmental assessment (EA), no significant social, economic, or environmental effects have been identified at any of the sites, or from the project as a whole. The project (including module transportation) would create temporary employment and business opportunities and the traffic structure, utility, and turnout work would contribute a lasting benefit to Montana.

The analysis methods and effects are described in more detail in Section 3.0. Effects are summarized in **Table 1**. The effects include the following mitigation measures to avoid impacts.

### **Planned Mitigation to Avoid Impacts**

Imperial Oil will ensure that the following measures will be used where appropriate to minimize impacts from the proposed activities.

#### **Turnout Construction and Road Modifications**

Turnout and road modifications include construction of new turnouts, upgrades to existing turnouts, road surface repairs, and minor amounts of gravel infill at five corners or curves to allow adequate turning radius for the load and other long vehicles.

- Turnouts were located to avoid impacts on historical resources.
- Blackfeet cultural monitors will be invited to observe ground disturbing work occurring on the Blackfeet Reservation.
- Traffic control will be used to maintain worker and traveler safety when working near the road way as required.
- Most construction activities would occur during daylight hours to maintain worker and traffic safety.
- Equipment used will be required to meet EPA emission standards and county noise ordinances.
- New turnouts will be located a minimum of approximately 100 feet away from streams, irrigation canals, or wetlands (potential presence of wetlands will be determined by a field review prior to construction).
- New turnouts will be visited during the growing season prior to any ground disturbing activity to determine if wetlands are located within or near a proposed construction site.
- If wetlands are determined to be near a construction site, all practicable means will be used to avoid adverse impacts to those wetlands. If a wetland is determined to be within a proposed construction site, the site location will be moved to entirely avoid the wetland.
- A Storm Water Pollution Prevention Plan (SWPPP) will be prepared and used during all activities which require Montana Pollutant Discharge Elimination System (MPDES) or National Pollutant Discharge Elimination System (NPDES) permits such as road modification construction. The SWPPP structures will be maintained and monitored until all site re-vegetation goals have been met.
- Best management practices (BMPs) to control erosion and sediment will be used to prevent potential impacts on water quality and air quality.
- Construction sites will be graded to maintain existing drainage patterns.
- Topsoil will be salvaged and replaced at construction locations.
- To reduce the spread and establishment of noxious weeds and to re-establish permanent vegetation, Imperial Oil will ensure disturbed areas will be seeded with desirable plant species as soon as practicable after construction

- Seed mix will be certified weed free to limit the spread of noxious weeds.
- The contract provision “Environmental Mitigation and Coordination Measure for Aquatic Resources” (**Appendix D**) will be attached to construction contracts.
- The contract provision “Environmental Mitigation and Coordination Measure for Bears” (**Appendix D**) will be attached to construction contracts.
- In the unlikely event of an accident that may directly or indirectly impact a bull trout inhabited stream or bull trout Critical Habitat, the US Fish and Wildlife Service and MDT would be contacted immediately.
- If historic or cultural material or human remains are discovered during ground disturbing activities, construction will cease immediately and a qualified archaeologist or historian will be consulted to evaluate the significance of the artifacts. As appropriate, the State Historic Preservation Office (SHPO), or Tribal Historic Preservation Office (THPO) and the MDT will be consulted. In the case of discovery of human remains, the first contact will be the local county coroner’s office.
- If contaminated soils/sites are unexpectedly encountered during construction, construction will cease immediately and a qualified hazardous material professional will be consulted to ensure compliance with applicable laws, rules, and regulations. As appropriate, the Montana Department of Environmental Quality (MDEQ), EPA, Blackfeet Environmental Office, and the MDT will be contacted and consulted.
- Imperial Oil will ensure that all contractors have a spill prevention and clean-up plan to minimize potential for effects.
- Construction materials will be provided from State approved existing gravel sources and no new resource exploration is required.
- Lighting to conduct night time activities will be controlled and directed to minimize impacts on the public and wildlife where ever possible as long as it does not compromise safety of the workers and traffic.
- Necessary concurrence and/or approval will be secured from the USFS prior to constructing or modifying turnouts within USFS Land.
- To avoid impacts on eagles, construction will not be allowed after January 1 and prior to August 1 at turnout locations with active nests within ½ mile.

#### **Utility Relocations**

- Imperial Oil will ensure proper and full notice to all affected customers.
- Imperial Oil will be responsible for coordinating the utility relocations to minimize disruption to affected customers and the traveling public and where practicable coordinate the timing of the utility relocations to facilitate combined efforts between individual utility companies.
- A traffic control plan will be instituted to provide for safety of workers and the public.
- Blackfeet cultural monitors will be invited to observe ground disturbing work occurring on the Blackfeet Reservation.
- Near the Lolo Trail along Highway 12, no excavation will occur beyond the original pole location on all utilities requiring pole replacements.
- Imperial Oil will ensure that the Missoula Electric Cooperative (MEC) will prepare a Revegetation Plan for submittal to and approval by the Missoula County Weed District, see the County webpage (<http://missoulaeduplace.org/>).
- Each site will be visited during the growing season, prior to any ground disturbing activities to determine wetlands are located on or near proposed utility work.
- If wetlands are determined to be on or near a utility work site, all practicable means will be used to avoid adverse impacts to those wetlands,

- The contract provision “Environmental Mitigation and Coordination Measures for Aquatic Resources” (**Appendix D**) will be attached to construction contracts.
- The contract provision “Environmental Mitigation and Coordination Measure for Bears” (**Appendix D**) will be attached to construction contracts.
- Equipment used will be required to meet EPA emission standards and county noise ordinances.
- All overhead utility structures will be constructed in compliance with raptor safe guidelines (APLIC 1996).
- In the event of an accident that may directly or indirectly impact a bull trout inhabited stream or bull trout Critical Habitat, the US Fish and Wildlife Service would be contacted immediately.
- If historic or cultural material or human remains are discovered during ground disturbing activities, construction will cease immediately and a qualified archaeologist or historian will be consulted to evaluate the significance of the artifacts. As appropriate, SHPO, THPO, and the MDT will be consulted. In the case of discovery of human remains, the first contact will be the local county coroner’s office.
- Imperial Oil will ensure that all contractors have a spill prevention and clean-up plan to minimize potential for effects.
- If contaminated soils / sites are unexpectedly encountered during construction, construction will cease immediately and a qualified hazardous material professional will be consulted to ensure compliance with applicable laws, rules, and regulations. As appropriate, the MDEQ, EPA, Blackfeet Environmental Office, and the MDT will be contacted and consulted.
- Lighting to conduct night time activities will be controlled and directed to minimize impacts on the public and wildlife where ever possible as long as it does not compromise safety of the workers and traffic.
- To avoid impacts on eagles, construction will not be allowed after January 1 and prior to August 1 at utility locations with active nests within 1/2 mile.
- Necessary concurrence and/or approval will be secured from the USFS prior to conducting any utility relocations within USFS Land.

### **Traffic Structures**

- A traffic control plan will be instituted to provide for safety of workers and the public.
- Equipment used will be required to meet EPA emission standards and county noise ordinances.
- Lighting to conduct night time activities will be controlled and directed to minimize impacts on the public and wildlife where ever possible as long as it does not compromise safety of the workers and traffic.

### **Tree Trimming**

- Equipment will be required to meet EPA emission standards.
- Tree trimming conducted between April 30<sup>th</sup> and August 16<sup>th</sup> will be inspected for nesting migratory birds. If occupied nests are found, branches will not be removed until after the nest is vacated.

### **Module Transport**

- To minimize traffic delays and to meet the 10-minute rule, Imperial Oil will ensure module transportation activities conform to the Montana Transportation Plan (MTP), which is available for public review on the MDT website.
- To minimize traffic delays and meet the 10-minute rule, additional turnouts will be constructed and some existing turnouts will be modified.
- To minimize traffic delays and to ensure compliance with the 10-minute rule, peak traffic volumes were considered in potential delay calculations.

- To minimize traffic delays in towns and cities, traffic control plans with detours have been developed.
- Movement from Lolo Pass to just north of Valier will be done at night to minimize impacts on the public.
- Hauling will not occur on weekends or Federal or State holidays. The hauling schedule will consider other uses of the route, avoiding periods that coincide with commuters, school buses, and planned community events.
- Specific traffic management strategies were developed to address other oversized loads using the route at the same time, including farming equipment.
- The escort vehicle will ensure that turnouts are not occupied before the module moves from a parking turnout, in order to ensure that the movement is not relying on an occupied turnout to meet the 10-minute rule.
- Night / extended parking turnouts will have signage or be controlled to ensure they are not occupied by unattended vehicles when they are needed for parking.
- Trucks used for hauling will be required to meet EPA emission standards.
- Transport vehicles will be escorted by law enforcement to advise of approaching emergency vehicles.
- 2-way communication systems will be used.
- An emergency response plan has been developed.
- Lighting to conduct night time activities will be controlled and directed to minimize impacts on the public and wildlife where ever possible as long as it does not compromise safety of the workers and traffic.
- Imperial Oil will ensure that all contractors have a spill prevention and clean-up plan to minimize potential for effects.
- Imperial Oil will ensure that automotive petroleum product land spills greater than 25 gallons or spills of any volume to an aquatic resource would be reported to the appropriate state, federal, and/or tribal authority, and MDT. A qualified hazardous material consultant will be consulted to ensure compliance with applicable laws, rules, and regulations regarding clean-up of the spill.
- Imperial Oil will establish a website available to the public with an updated module transportation schedule.
- Imperial Oil will coordinate with MDT to ensure module movements are scheduled to minimize interference with planned construction projects along the route.
- The transporter will access a notification database on the internet that contains information on other oversized loads the may be encountered during transport.

## Summary of Effects

**Table 1** summarizes potential social, economic, and environmental impacts of the proposed project, which will incorporate the mitigation measures listed above. Section 3.0 provides more detailed discussion of resources, potential impacts, and proposed mitigation measures.

**Table 1  
Conclusion and Summary of Effects**

	<b>Road Modifications</b>	<b>Utility Relocations</b>	<b>Traffic Structures</b>	<b>Tree Trimming</b>	<b>Module Transport</b>	<b>Overall</b>
<b>Historical and Archaeological Sites</b>	No impact	No impact anticipated	No impact	No impact	No impact	No impact anticipated
<b>Parklands</b>	No impact	No impact	No impact	No impact	No impact	No impact
<b>Transportation System</b>	Occasional traffic delays occurring at work locations. Some additional traffic due to turnout construction equipment.	Occasional traffic delays occurring at work locations.	Occasional traffic delays occurring at work locations.	Occasional traffic delays occurring at work locations.	Occasional delays, none exceeding 10 minutes.	Some traffic delays during construction. Occasional traffic delays during module hauling, non exceeding 10 minutes.
<b>Economic and Community Impacts</b>	\$11.4 million in total economic activity in Montana.	\$21.6 million in total economic activity in Montana.	\$1.5 million in total economic activity in Montana.	\$15,000 in total economic activity in Montana.	\$32.0 million in total economic activity in Montana.	\$67.8 million in total economic activity in Montana (including \$1.6 million in permitting).
<b>Air Quality</b>	Exhaust from trucks and equipment, localized dust from construction.	Minimal emissions from trucks and equipment.	Minimal emissions from trucks and equipment.	Minimal emissions from trucks and equipment.	Exhaust from trucks.	Slight increase in emissions and dust. No long-term or significant impacts.
<b>Noise</b>	Low level noise from equipment.	Low level noise from equipment.	Low level noise from equipment.	Short duration noise from equipment.	Low level noise from equipment.	Minor noise impacts during construction activities and module transport.
<b>Contaminated Sites/Hazardous Waste</b>	Slight risk of spill, minimal impacts.	Slight risk of spill, minimal impacts.	Slight risk of spill, minimal impacts.	Slight risk of spill, minimal impacts.	Slight risk of spill, minimal impacts.	Slight risk of spill, minimal impacts.
<b>Water Resources</b>	no impact expected	No impact expected	No impact expected	No impact expected	No impact expected	Negligible impact
<b>T&amp;E Species</b>	No effect	No effect	No effect	No effect	No Impact for all except grizzly bears, May effect, not likely to adversely effect.	No Impact
<b>Wildlife and Fisheries</b>	No impact expected	No impact expected	No impact expected	No impact expected	No impact expected	No impact expected





# 1.0 PURPOSE AND NEED

## 1.1 Background

The KMTP is being proposed by Imperial Oil<sup>2</sup> for the transport of modules (pre-assembled process units that are manufactured in Korea) to the Fort McMurray area of north-eastern Alberta, Canada. The overall Kearn Project involves the application of advanced technology, specialized manufacturing capability and global execution strategies that require world-wide sourcing of various pieces of equipment including modules that are manufactured in Korea.

Imperial Oil has investigated numerous world-wide locations that have the specialized manufacturing capability required for the overall Kearn Project. Japan and Korea are examples of large industrial bases that supply modules to the oil and gas industry around the world. Following an evaluation of manufacturing and transportation costs, Imperial Oil selected Korea as its preferred supplier of the modules.

Imperial Oil investigated several transportation routes through Canada and the United States (US). Since all other investigated routes (See Section 2.3 for more details on the other routes investigated) through Canada and the US have height restrictions with existing overpasses (road and railway), truss bridges and tunnels, Imperial Oil's proposed route is from the Port of Vancouver, Washington, up the Columbia / Snake River Inland Waterway System to the Port of Lewiston, Idaho. From the Port of Lewiston, the modules are transported by specialized load-moving equipment through Idaho on US Highway 12 to Lolo Pass in Montana. The module transport route and return trailer route through Montana is shown in **Figure 1**. Routes begin and end at Lolo Pass and follow numerous highways through Montana before exiting / entering at Sweetgrass, Montana at the US / Canada border.

This environmental assessment (EA) document was produced to fulfill the environmental review requirements of the Montana Environmental Policy Act (MEPA) for the state actions associated with the Montana Department of Transportation's (MDT's) permitting of the proposed transportation of the modules, road and utility modifications, and tree trimming.

## 1.2 Purpose of the Project

The purpose of the proposed project is for Imperial Oil to improve Montana infrastructure to facilitate a safe and efficient movement of over-dimension loads through Montana to the Canadian border and return trailers through Montana to the Idaho border. Imperial Oil is proposing to haul over-dimension (height, widths, and weight) loads; construct new turnouts; modify some existing turnouts; slightly modify the roadway at several locations, conduct some surface repairs; relocate existing utility lines, conduct some tree trimming, and modify some overhead signs and traffic signals. MDT would need to issue certain permits to allow Imperial Oil to carry out those activities.

## 1.3 Need for the Project

The proposed project is needed to transport specialized processing equipment through Montana to Alberta, Canada. In addition, the proposed project must adhere to a 10-minute maximum traffic delay rule and minimize potential for adverse impacts to the built and natural environment, the public, local businesses, and current uses.

## 1.4 Brief Description of the Proposed Action

A map of the proposed module route and return route is shown in **Figure 1**. The module transport route crosses into Montana at Lolo Pass on US Highway 12. The modules would proceed east on US Highway 12 to the junction with US Highway 93 in Lolo, Montana. On US Highway 93, the modules would progress

---

<sup>2</sup> Imperial Oil is one of Canada's largest corporations and a leading member of Canada's petroleum industry. ExxonMobil is the majority shareholder of Imperial Oil controlling 69.9 percent of the common shares.

north and east through Missoula, following Reserve Street to Interstate 90 (I-90). Once on I-90, the modules would move east to the exit at Bonner for MT Highway 200. On MT Highway 200, the module transport would proceed east to the junction with US Highway 287 at Bowman's Corner, then north to US Highway 89 in Choteau. The route would then be east on MT Highway 44, north on S-358, east on US Highway 2 through Cut Bank, north on S-213, then north and east on Santa Rita Road, and east on S-214 to Sweetgrass and the Canadian border.

The return route for 16-foot wide trailers would be south on Interstate 15 (I-15), west on I-90, south on Highway 93, then west on US Highway 12 to the Montana/Idaho border. An alternative route for the 10-foot wide trailers would be south on I-15 to Helena, then travel west on US Highway 12 from I-15 in Helena, to I-90 at Garrison then west on I-90, south on US Highway 93, then west on US Highway 12 to the Idaho/Montana border.

More details on both the module and return trailer route are included in The Montana Transportation Plan (MTP) (available on the MDT website at [http://www.mdt.mt.gov/pubinvolve/eis\\_ea.shtml](http://www.mdt.mt.gov/pubinvolve/eis_ea.shtml)). The MTP has been developed to adhere to the 10-minute maximum traffic delay rule from the MDT.

The volume of modules planned to be transported through Montana is currently forecasted at about 200 and is forecasted to occur from the fall of 2010 to the fall 2011. Peak transportation volume will be no more than 2 modules per day through any particular location.

To avoid peak hourly traffic volumes and to minimize adverse impact to the public, local businesses and commercial traffic, the modules will be transported at night from Lolo Pass to just north of Valier. Day travel would be used from north of Valier to Sweetgrass due to the low traffic volume on this section of the route.

An Emergency Response Plan with emphasis on emergency vehicle clearance is included in the MTP.

MDT, in their permits, will dictate the axle/allowable weight on the modules transport vehicles based on the road and bridge conditions along the route.

A more detailed description of the project activities appears as the Proposed Action in Section 2.2.1. Briefly, the project consists of the following:

- Permanently raising or burying utility lines at approximately 572 locations;
- Modifying, or installing 33 traffic structures (traffic signals, signs, or street lights);
- Permanently modifying 22 existing highway turnouts;
- Building 53 new highway turnouts;
- Adding minor amounts of gravel infill to permanently modify the roadway in 5 locations to allow adequate turning radius of the load and other long vehicles;
- Road surface repairs to an approximately 8.5 mile section of Santa Rita Road and S-214 maintained by Glacier County;
- Minor amounts of tree trimming in along Highway 200 in Bonner and along Highway 287 and 89 in Choteau
- Moving up to two modules per day through Montana for approximately 12 months.

No infrastructure improvements are required for the return trailer route.

## 1.5 Applicable Laws and Regulations

Under the provisions of ARM 18.2.261, utility installations, installation of traffic signals, and modernization of an existing highway for parking or turning are categorically excluded and do not require the preparation of an EA. In this case, due to the volume of proposed modifications, the need for analysis to determine if the actions could cumulatively adversely impact the natural or human environment and the desire to ensure appropriate public involvement, MDT concluded that the preparation of an EA was the appropriate means to

demonstrate compliance with MEPA. This EA is intended to identify, disclose, and analyze potential impacts associated with a proposed action. Other applicable laws include:

- Clean Water Act
- Clean Air Act
- Bald and Golden Eagle Protection Act
- Endangered Species Act
- Migratory Bird Treaty Act
- Montana Antiquities Act
- Montana Stream Protection Act

## 1.6 Permits

### 1.6.1 Construction Permits

**Table 2** indicates the known permits that are required for the project. Additional permits may be identified as the project analysis or work continues.

**Table 2**  
**State, Federal, and Tribal Permits**

Agency	Permit
MDT	Utility Occupancy and Location Agreements are needed for each of the utility relocations.
MDT	Encroachment Permits are needed for surveying, each turnout construction and modification, each of the communication line relocations, each traffic structure, and tree trimming.
MDEQ	MPDES for activities disturbing more than 1 acre or having the potential to discharge to a water of the state for turnouts and one utility location.
EPA	NPDES for activities disturbing more than 1 acre of Tribal Land or having the potential to discharge for turnouts on tribal lands.
USDA Forest Service	Special Use Permit for utility occupation and highway modifications.
Blackfeet Nation Environmental Office	Aquatic Lands Protection Ordinance No. 90-A (ALPO 90-A) is needed for activities that occur in wetlands, riparian areas and streams on the Blackfeet Indian Reservation. During early stages of project planning, an ALPO 90-A permit was sought and secured by Tetra Tech for geotechnical studies on Highway 358.
Pondera County Conservation District	310 Permit for work in or near a stream. During early stages of project planning, a 310 permit was sought and secured by Tetra Tech for geotechnical studies on Highway 358.

The MDEQ has a general permit known as the Small Municipal Separate Storm Sewer System (MS4) permit. This permit is required for urban areas within the state of Montana that serve a population of at least 10,000 people. Any and all stormwater discharge issues associated with the proposed action would be addressed through the General Permit and would not impact MS4 permits for the Missoula area.

## 1.6.2 Transportation Permits

Table 3 presents Montana criteria for legal, over dimensional and 32-J loads.

**Table 3**  
**Legal Load and Over Dimensional Criteria for Montana**

<b>Permit Type</b>	<b>Length (Feet)</b>	<b>Width (Feet)</b>	<b>Height (Feet)</b>	<b>Weight</b>
Legal Load	75 or less	8.5 or less	14 or less	80,000 pounds or less
Over Dimensional Permit	75 to 150	8.5 to 18	14 to 17	Requires Bridge Bureau Approval
32-J Permit	More than 150	More than 18	More than 17	Requires Bridge Bureau Approval

## 2.0 ALTERNATIVES

### 2.1 Development of Alternatives

#### 2.1.1 Scoping

Details of the consultation conducted during the environmental review are included in Section 4.0, including dates, agencies, and results. Briefly, consultation was conducted with a variety of stakeholders, including; community, city, and county representatives and commissioners on the module route and the return route; state agencies; federal agencies; the Blackfeet Tribe; the Montana Highway Patrol; and the US Air Force (Malmstrom Air Force Base).

#### 2.1.2 Issues

Potential resources that might be affected and public concerns were identified during consultations with municipalities and various local, state, federal, and tribal agencies. Issues were used to determine alternatives to be considered in this EA, as well as analysis to be conducted. Below is a list of the main issues identified through these consultations.

- Notification;
- Emergency response situations;
- Local community events;
- School bus routes and schedules;
- Residual benefits;
- Economic impacts on taxpayers and businesses;
- Traffic safety;
- Traffic impedance;
- Historical and cultural resources; and
- Alternate routes.

### 2.2 Alternatives Considered in Detail

Alternative module transportation routes suggested during consultation have been considered and determined to be infeasible. Those infeasible alternatives are addressed in Section 2.3. The other issues identified above are addressed through project design, avoidance, and mitigation (Section 3.13). As required by MEPA, the No Action Alternative is also considered in detail in Section 3.0.

#### 2.2.1 Proposed Action

##### 2.2.1.1 Location

A map of the proposed module route and return route is shown in **Figure 1**. The module transport route crosses into Montana at Lolo Pass on US Highway 12. The modules would proceed east on US Highway 12 to the junction with US Highway 93 in Lolo, Montana. On US Highway 93, the modules would progress north and east through Missoula, following Reserve Street to I-90. Once on I-90, the modules would move east to the exit at Bonner for MT Highway 200. On MT Highway 200, the module transport would proceed east to the junction with US Highway 287 at Bowman's Corner, then north to US Highway 89 in Choteau. The route would then be east on MT Highway 44, north on S-358, east on US Highway 2 through Cut Bank, north on S-213, then north and east on Santa Rita Road, and east on S-214 to Sweetgrass and the Canadian border.

The return route for 16-foot wide trailers would be south on I-15, west on I-90, south on Highway 93, then west on US Highway 12 to the Montana/Idaho border. An alternative route for the 10-foot wide trailers would

be south on I-15 to Helena, then travel west on US Highway 12 from I-15 in Helena, to I-90 at Garrison then west on I-90, south on US Highway 93, then west on US Highway 12 to the Idaho/Montana border.

No additional right of way (ROW) would be needed for any of the proposed activities.

### 2.2.1.2 Financial Responsibility

Imperial Oil and the MDT are currently in the process of negotiating Memorandums of Agreement regarding the responsibilities of each party should the decision be made to proceed with the project. It is anticipated that the responsibilities will be as described as follows; however, until the memorandums are completed and signed, it is possible that some responsibilities will change.

Generally, Imperial Oil will cover the cost of the planning, permitting, construction, and operation of the project in Montana. Imperial Oil will hire and pay for consultants to manage project design, engineering (including utility relocations through the utility companies), permit application preparation, environmental investigation and review, document preparation, and public consultation. Should permits be approved, Imperial Oil will hire and pay for construction activities (turnouts, utilities, traffic structures, and tree trimming), construction compliance inspections, and costs associated with module transport including public notification of module movements via newspaper and internet, highway patrol escort vehicles and traffic control. Imperial Oil will reimburse MDT for snow-removal efforts in excess of normal snow removal efforts. Once hauling is complete, Imperial Oil will pay for any needed repairs to roadways and bridges due to their activities and removal of any improvements deemed unneeded by the MDT.

The MDT will cover the cost of MDT's review of permit applications, review of the EA, construction oversight, as needed, and normal obligations for road maintenance, including normal snow removal efforts. Following completion of the project, MDT will assume the responsibility for maintenance of any improvements they decide should remain for the benefit of the public.

### 2.2.1.3 Turnout Construction and Road Modifications

In order to comply with the State of Montana's 10-minute rule, new turnouts will be constructed and existing turnouts will be modified between Lolo Pass (Idaho / Montana border) and Sweetgrass, Montana (USA / Canada border). **Table 4** summarizes the general dimensions of the turnouts. Appendix E includes typical turnout drawings. Locations of turnout construction are provided in maps in **Appendix A** and listed in **Table 5**. MDT must review and approve the encroachment permits associated with each proposed turnout modification, turnout construction, and MDT road modification.

**Table 4**  
**Turnout Definitions**

Turnout Type	Width (from edge of driving lane)	Length (along side of roadway)	Approximate Area per Turnout	Purpose
Clear	10 Feet	210 feet plus entrance and exit	2,520 square feet	Clear module from one lane to allow oncoming, then following traffic to pass stopped module.
Park	28 feet	213 feet plus entrance and exit	5,964 square feet	Clear two lanes so both oncoming and following traffic can pass stopped module. Also to allow passage by oncoming or following oversized loads.
Night/ Extended Park	36 feet	213 feet plus entrance and exit	7,668 square feet	Allow 8 feet between side of module and edge of driving lane for the module to park at the end of each stage of transportation until next transport period (one to three days)

Typical turnout drawings are included in **Appendix E**.

Five locations will need minor amounts of gravel infill to permanently modify the roadway to allow adequate turning radius of the load and other long vehicles around corners or signs. One location will need road surface repairs. Locations of road modifications are provided on maps in **Appendix A** and listed in **Table 6**.

All turnouts and minor road modifications will be designed in accordance with MDT Design Specifications, Codes and Standards, including sediment control, drainage, traffic safety, material handling, weed control, waste disposal and revegetation and constructed by a qualified contractor. All construction will be performed under the supervision of construction personnel experienced in this type of work.

**Table 5  
Turnout Construction**

Highway	Mile Post	Status	Turnout Type	Work to be Completed
12	1.0	Existing	Park	Place additional aggregate, grade and pave
12	1.75	Existing	Night/extended	Place additional aggregate, grade and pave
12	6.9	New	Park	Construct new turnout and pave
12	8.4	Existing	Park	Scarify exist asphalt or concrete, place aggregate base coarse, grade, and pave
12	15.4	Existing	Park	Place additional aggregate, grade and pave
12	19.1	Existing	Park	Scarify exist asphalt or concrete, place aggregate, grade and pave
12	20.3	Existing	Park	Scarify exist asphalt or concrete, place aggregate, grade and pave
12	21.8	Existing	Clear	Place additional aggregate base coarse, grade and pave
I-90	103.5	Existing	Park	Place additional aggregate, grade and pave
200	12.1	New	Park	Construct new turnout and pave
200	22.1	New	Park	Construct new turnout and pave
200	35.2	Existing	Clear	Place additional aggregate, grade and pave
200	36.8	New	Clear	Construct new turnout and pave
200	40.2	Existing	Night/extended	Place additional aggregate, grade and pave
200	43.0	New	Clear	Construct new turnout and pave
200	47.2	New	Clear	Construct new turnout and pave
200	52.3	New	Clear	Construct new turnout and pave
200	55.2	Existing	Park	Place additional aggregate, grade and pave - also relocate sign
200	57.7	Existing	Park	Place additional aggregate, grade and pave
200	62.9	Existing	Night/extended	Scarify exist asphalt or concrete, place aggregate, grade and pave
200	67.5	Existing	Night/extended	Place additional aggregate, grade and pave
200	70.1	New	Clear	Construct new turnout and pave
200	75.0	Existing	Night/extended	Place additional aggregate, grade and pave
200	77.9	New	Clear	Construct new turnout and pave
200	85.0	Existing	Park	Place additional aggregate, grade and pave
200	92.1	Existing	Park	Place additional aggregate, grade and pave
200	96.0	New	Clear	Construct new turnout and pave
200	101.5	New	Clear	Construct new turnout and pave
200	102.6	New	Clear	Construct new turnout and pave
200	104.0	New	Clear	Construct new turnout and pave
200	106.5	Existing	Night/extended	Scarify exist asphalt or concrete, place aggregate, grade and pave
Jct. 200/287	109.8	Existing	Park	Remove exist barrier, place aggregate, grade and pave
287	24.1	New	Clear	Construct new turnout and pave
287	28.1	New	Park	Construct new turnout and pave
287	32.4	New	Clear	Construct new turnout and pave
287	36.1	New	Clear	Construct new turnout and pave
287	38.1	New	Night/extended	Construct new turnout and pave

**Table 5  
Turnout Construction**

Highway	Mile Post	Status	Turnout Type	Work to be Completed
287	40.5	Existing	Park	Place additional aggregate, grade and pave
287	44.7	New	Clear	Construct new turnout and pave
287	50.3	New	Park	Construct new turnout and pave
287	54.7	New	Clear	Construct new turnout and pave
287	57.5	New	Clear	Construct new turnout and pave
287	61.4	New	Clear	Construct new turnout and pave
287	63.6	New	Night/extended	Construct new turnout and pave
89	50.6	New	Clear	Construct new turnout and pave
89	54.8	New	Park	Construct new turnout and pave
89	59.2	New	Clear	Construct new turnout and pave
89	62.5	Existing	Park	Place additional aggregate, grade and pave
89	64.9	New	Clear	Construct new turnout and pave
89	66.1	New	Clear	Construct new turnout and pave
89	68.3	New	Clear	Place additional aggregate, grade and pave - also relocate sign
89	70.0	New	Clear	Construct new turnout and pave
89	71.2	New	Night/extended	Construct new turnout and pave
89	73.6	New	Clear	Construct new turnout and pave
89	79.5	New	Night/extended	Construct new turnout and pave
44	6.6	New	Park	Construct new turnout and pave
44	10.4	New	Clear	Construct new turnout and pave
44	13.2	New	Night/extended	Construct new turnout and pave
358	6.4	New	Clear	Construct new turnout and pave
358	8.4	New	Clear	Construct new turnout and pave
358	11.8	New	Park	Construct new turnout and pave
358	15.2	New	Clear	Construct new turnout and pave
358	17.7	Existing	Park	Place additional aggregate, grade and pave
358	19.9	New	Clear	Construct new turnout and pave
358	22.5	New	Clear	Construct new turnout and pave
358	25	New	Night/extended	Construct new turnout and pave
213	2.5	New	Clear	Construct new turnout and pave
213	5.0	New	Clear	Construct new turnout and pave
214	0.3	New	Clear	Construct new turnout and pave
214	2.9	New	Clear	Construct new turnout and pave
214	4.6	New	Park	Construct new turnout and pave
214	8.3	New	Clear	Construct new turnout and pave
214	11.9	New	Clear	Construct new turnout and pave
214	14.7	New	Clear	Construct new turnout and pave
214	21.6	New	Park	Construct new turnout and pave
Total		New	53	
Total		Modified	22	
Total		New and Modified	75	



**Table 6  
Road Modifications**

Highway or Route	Mile Post	Status	Type	Work to be Completed
93	87.1	Existing	Storage Area	Extend culvert, place aggregate fill, grade, and pave to provide an adequate turning radius for the modules to exit the storage area. The culvert to be extended is an 18-inch pipe to drain runoff that collects between the highway and the old weigh station. The culvert would be extended into the collection area. The flow contained in the pipe is not considered a water of the State or a water of the US. As such, the culvert extension will not require a Clean Water Act Section 404 permit.
200	I-90 exit and Highway 200	New	Corner	Place aggregate fill, grade and pave (stripe if necessary) to provide surface for module transport to navigate around overhead sign. Approximately 1,278 square feet of surface area will be paved.
214	21.5	New	Curve	Widen an approximately 100 linear feet length of roadway by 3 feet to allow module transport to negotiate the corner.
214 / Santa Rita Road	Approx 20.5 miles north of Cut Bank	Existing	Road surface	Road surface repairs to an approximately 8.5 mile section of this highway maintained by Glacier County.
358	3.0	Existing	Corner	Place aggregate fill and grade to provide surface at a corner to allow adequate turning radius for a grain truck (WB-67). Approximately 1,012 square feet at two locations for a total of 2,024 square feet of surface area will be graveled.
Santa Rita Road	Junction of Losing Road and Santa Rita Road	Existing	Corner	Place aggregate fill and grade to provide surface at a corner to allow adequate turning radius for a grain truck (WB-67). Approximately 1,012 square feet of surface area will be graveled.

#### 2.2.1.4 Utility Relocations

Overhead utility lines crossing the route on state roads need to be permanently raised or buried to provide clearance for module transport at 572 locations within MDT ROW. Locations of the proposed crossings within MDT ROW are shown on maps attached in **Appendix B**. Approximately 25 additional utility modifications will be required on rights-of-way other than MDT. Imperial Oil will ensure proper coordination between the utility companies and the officials with jurisdiction over the other rights-of-way and incorporation of appropriate measures to avoid adverse social, economic, and environmental impacts associated with those utility modifications.

The dimensions of the largest module loaded on a trailer have been provided to each utility company having crossings on the route. Based on design specifications and line voltage, the utility companies have designed the appropriate line clearance for all overhead line relocations. The proposed work has been determined by the responsible utility company as either a modified above-ground crossing raising the line high enough to allow the modules to safely pass beneath, or a new underground crossing. Approximately one third of the identified locations will be modified to underground and two-thirds above ground. All modifications will be permanent (**Table 7**).

**Table 7  
Utility Work Summary**

Utility Company	Type	Crossings on MDT ROW		Crossings not on MDT ROW		Total
		A/G	U/G	A/G	U/G	A & U /G
Missoula Electric Coop (Lolo Pass to Lolo)	Electricity	36	22			<b>58</b>
Missoula Electric Coop (HWY 200)	Electricity	42	33			<b>75</b>
North Western Energy Missoula	Electricity	49	12			<b>61</b>
North Western Energy Transmission	Electricity	14				<b>14</b>
North Western Energy Great Falls	Electricity	62				<b>62</b>
North Western Energy Helena	Electricity	28	32			<b>60</b>
Sun River Electric	Electricity	54	22			<b>76</b>
Glacier Electric	Electricity	33	35	12	6	<b>86</b>
Qwest South	Communications	9	10			<b>19</b>
Qwest North	Communications			5		<b>5</b>
Bresnan Communications (South)	Communications	9	20			<b>29</b>
Bresnan Communications (North)	Communications	4	4	1		<b>9</b>
Blackfoot	Electricity		2			<b>2</b>
3 Rivers Communication	Communications		12			<b>12</b>
Bonneville Power	Electricity			1		<b>1</b>
Marias River	Electricity			1	1	<b>2</b>
Northern Telephone	Electricity				1	<b>1</b>
<b>Total</b>		<b>340</b>	<b>204</b>	<b>20</b>	<b>8</b>	<b>572</b>

\*Note: A/G indicates above ground, U/G indicates underground.

The utility work will be done by the utility companies in accordance with applicable Montana regulatory requirements. All construction will be performed under the supervision of construction personnel experienced in this type of work. MDT must review and approve the permits associated with each proposed utility modification within MDT ROW.

### 2.2.1.5 Traffic Structures and Road Sign Modifications

Modifications to existing traffic structures and road signs are required between Lolo Pass (Idaho / Montana border) and Sweetgrass, Montana (USA / Canada border) to ensure adequate clearances are provided for the oversized loads along the proposed module transportation route (**Figure 1**).

The intended modifications include the following:

- Installation of rotator bases (retrofit) and associated electrical work on 25 traffic signals in Missoula and Lolo, 1 in Lincoln, 1 in Choteau, 1 in Valier, and 2 in Cut Bank;
- Removing 2 sign bridges on Interstate 90 and replacing with roadside signs; and
- Installation of 1 railroad crossing signal on rotator base in Bonner.

All work associated with traffic structure and road sign modifications will be done by qualified contractors and in accordance with MDT Design Specifications, Codes and Standards, including sediment control, drainage, traffic safety, material handling, weed control, revegetation, and waste disposal. All work would be performed under the supervision of construction personnel experienced in this type of work.

Traffic structure modifications in Missoula will occur at night to minimize traffic disruption.

### 2.2.1.6 Tree Trimming

Low hanging branches on trees will need to be removed to allow passage of the modules. Proposed areas of trimming are:

- Bonner - approximately 7 trees.
- Choteau - approximately 21 trees.

All work will occur behind appropriate traffic control signage in accordance with Manual on Uniform Traffic Control Devices standards. All trimming debris are chipped and hauled off-site. The trees will be trimmed under the supervision of an experienced contractor, approved by the local municipality. It is expected that the amount of trimming that will occur will be consistent with routine tree maintenance and that the visual impact will be minor to negligible.

### 2.2.1.7 Module Transportation

The MTP, which is available on the MDT website, was developed to adhere to the 10-minute maximum traffic delay rule imposed by MDT and includes Emergency Response Plans with emphasis on Emergency Vehicle Clearance. The maximum speed the modules would travel is 30 miles per hour. Climbing or descending hills will require slower travel, about 6 miles per hour, as would crossing bridges at 5 miles per hour.

The MTP discusses the logistics of the module movement, including the overall transportation strategy, traffic clearing procedures, major stages of travel, emergency response, and empty trailer return routes. There are a total of 123 traffic clearing locations that would be utilized (48 existing turnouts, 22 modified, 53 new) (see **Appendix A**).

- Night/Extended Park Turnouts: 55
- Clear Turnouts: 46
- Shoulder Clears: 8
- Three Lane Clears: 3
- Four Lane Parks: 8
- Traffic Detours: 3

**Table 8** shows the planned stages of travel.

**Table 8  
Montana Stages of Travel**

Starting Point	Ending Point	Start Time	End Time	Total Miles	Hauling Period
Highway 12 - MP 0.0	Lolo (Highway 12/US 93)	2:30 am	5:00 am	32.5	Night time
Lolo (Highway 12/US 93)	MP 1.9 Highway 200	12:00am	4:00 am	22.8	Night time
MP 1.9 Highway 200	MP 75.0 Highway 200	12:00 am	5:00 am	73.1	Night time
MP 75.0 Highway 200	MP 63.6 Highway 287	11:00 pm	5:30 am	75.8	Night time
MP 63.6 Highway 287	MP 3.0 Highway 358	11:00 pm	5:30 am	62.2	Night time
MP 3.0 Highway 358	Sweetgrass border	9:00 am	4:00 pm	66.2	Daytime

Transportation from Lolo Pass to just north of Valier, Montana would occur at night. Night operations will provide transport crews adequate clearance to work safely with virtually no impact on commuter traffic. From Valier north, transportation would be during the day.

For all night operations at all turnouts and traffic control locations, auxiliary lighting will be used to illuminate the workers, transport equipment, and support vehicles to ensure the safety of the workers and the public. Lights will be located either in support trucks or on the side of the road. The brightness of the lights will be based on requirements for safety. Shields will be used to direct the lighting in the appropriate directions and to minimize impacts on the public and wildlife as long as safety can be maintained.

In most cases, a module will take six travel days or eight total days (includes weekends when travel is not permitted). Except for weekends, holiday and delays associated with inclement weather, modules are expected to remain at an extended park area for only one day.

Module movements will be tracked and module schedule and location information will be posted on a website maintained by Imperial Oil so that public has real time information on the location of the modules and the shipping schedule. A communication protocol will be developed to meet the requirements of cities, counties, and state authorities.

The volume of modules planned to be transported through Montana is currently forecasted at about 200 and is forecasted to occur from the fall of 2010 to the fall 2011. The peak transportation volume will be no more than 2 modules per day at any particular location. This volume would not result in significant effects on current vehicle noise and air emissions.

The transportation plan was developed based on the largest/heaviest module intended to be transported. The truck and trailers minimum and maximum configurations are shown in **Table 9**. See **Figure 2** for a front view of a typical module in transport.

**Table 9**  
**Truck and Trailer Maximum and Minimum Configurations**

Trailer Type	Percent of Loads	Module Weight (pounds)		Length (feet)		Width (feet)		Height (feet)	
		Min	Max	Min	Max	Min	Max	Min	Max
10 feet wide	22 %	73,753	179,400	170	210	20	24	18	30
16 feet wide	78 %	133,206	334,568	170	210	13	24	14	30

Source: Mammoet Canada Ltd.

Some narrow loads are heavy and will be placed on wider trailers to spread out the weight.

All loads over 180,000 pounds will require a push tractor for additional power climbing and braking. In case of a breakdown, the push tractor can provide power, while the pull tractor can provide steering assistance into the nearest emergency parking area.

Returning empty trailers are over-width, but not over-height, generally up to 10 feet wide and up to 175 feet long or up to 16 feet wide and up to 175 feet long.

US Department of Transportation-approved factory exhaust systems that are professionally maintained will be used to limit noise. Furthermore, engine retarding brakes will not be used near communities, campgrounds, or anywhere ordinances prohibit their use.

**Figure 2. Front View of Typical Module in Transport**

### **Hazardous Components**

No hazardous materials or ancillary petroleum products will be transported in the modules. The pull / push trucks, after being disconnected from the module trailers at a pullout area, will travel to the nearest truck service center to be fuelled.

### **Emergency Response**

Police escorts will increase the safety of the module transport and provide a means for the module transport crew to coordinate with authorities in the event of an emergency. The motoring public is more inclined to yield to blue/red flashing lights than conventional amber lights. Police embedded with the module transport entourage will provide added visibility for approaching traffic, increasing the public safety.

Police communication with local agencies will be a means of keeping the module transport crew informed on local conditions. The convoy will also be traveling with a satellite phone to ensure communication in areas with limited wireless coverage.

Turnouts (55 night/extended parking or parking) have been identified where the module can be pulled completely off the road. Emergency stopping areas are identified along each stage of the route, providing flexibility for dealing with any contingencies.

## Traffic Control

Effective traffic management will be accomplished using the following:

- 3 pilot vehicles (2 in front, 1 behind) escorted by two Montana State Highway Patrol cars (1 in front, 1 behind) to provide safe control of following and on-coming traffic.
- A ‘leapfrog’ approach where the two forward pilot vehicles will hold oncoming traffic in five mile segments, with the Montana State Patrol escort at the forward-most holding position.
- The rear pilot vehicle will monitor and control rear-approaching traffic along with a Montana State Patrol escort.

### 2.2.1.8 Schedule

**Table 10** shows the preliminary overall duration of activities. Construction associated with utilities, traffic structures, and turnouts will begin as soon as permits are issued and would take approximately 6 months to complete depending on the weather and availability of labor, equipment, and materials. Module transportation will begin as soon as construction work is completed and continue until completion, anticipated to be approximately fourth quarter 2011.

**Table 10**  
**Preliminary Overall Schedule of Activities**

Activity	Duration
Utility Line Relocations	6 months
Traffic Structure Modification	4 months
Turnout Construction	4 months
Module Transport	12 months

Imperial Oil and their contractors will coordinate with and schedule the module movements around construction activities planned by MDT and local community events.

### 2.2.2 No Action Alternative

The No Action alternative is that MDT would not approve any of the permits requested as part of the project. No modifications or improvements would be made to traffic structures or turnouts, no overhead utilities would be relocated or buried along state highways, and no oversized loads would be transported through Montana. The No-Action alternative would not meet the purpose and need of the project and is provided as a means for a baseline comparison.

## 2.3 Alternatives Considered but Eliminated

### 2.3.1 Transportation Route from the West Coast of Canada to Alberta

Alternate routes from Vancouver and Prince Rupert, British Columbia to Alberta were investigated and have numerous restrictions with no possible detours and therefore found to be infeasible.

The first restriction encountered on the northern route from Prince Rupert is a height restriction of a truss bridge located about 35 miles east of Prince Rupert on Highway 16. There are no possible detours available around this bridge.

The southern route from Vancouver has three alternate routes: Highway 1, Highway 5, and Highway 3. The first restriction encountered on Highway 1 is a height restriction of a road overpass located about 90 miles east of Vancouver at the entrance to Hope. The first restriction encountered on Highway 5 is a height restriction of a avalanche tunnel about 25 miles north of Hope. The first restriction encountered on Highway 3 is a height restriction of a train overpass about 390 miles east of Hope. There are no possible detours available around all of these restrictions.

### 2.3.2 US Interstate Highway System Transportation Route

This alternative would have followed the interstate highway system as much as practicable. This alternative was suggested by many during the consultation process because of the four-lane configuration, which would not impede oncoming traffic and have minimum or no impact on following traffic. This alternative route was

investigated and rejected since about 25 existing overpasses are too low and do not have by-pass ramps or feasible detours to allow passage of the modules.

### **2.3.3 Daytime Hauling**

When initially investigated, most of the haul route was planned to occur primarily during daytime hours. The exception was the stretch from Lolo to Bonner, which was always identified for night-time haul due to traffic and business activities. The potential delay times were originally calculated on average daily traffic, the distance between turnouts, and speed of the module trailers. However, at MDT's request, Imperial Oil recalculated the impact on traffic based on peak hour traffic volumes for all segments of the route. This subsequent analysis indicated that a daytime haul would meet the 10 minute rule in most cases, but would result in many vehicles waiting for the module to pull into a turnout to clear traffic.

In order to minimize potential inconvenience to other users of the highways, Imperial Oil modified their plan to allow for a night-time haul from Lolo Pass to just north of Valier. The change to night travel greatly reduces the potential for delays that could affect traffic safety, commercial business, and inconvenience to local residents, commuters, and other travelers. As a result, the preferred alternative was modified to incorporate night-time travel from Lolo Pass to just north of Valier.

## **2.4 Preferred Alternative**

The proposed action is the preferred alternative.

## 3.0 ENVIRONMENTAL IMPACTS

### 3.1 Analysis Methods

All of the proposed activities (construction and transportation) on highways in Montana would occur within the existing right-of-ways. The analysis areas and methods for direct, indirect, secondary, and cumulative effects analysis are described in each resource section below.

### 3.2 Past, Present and Reasonably Foreseeable Actions

The cumulative impacts analysis addressed in each resource considers the past, present and reasonably foreseeable actions. Cumulative impacts are defined as “the collective impacts on the human environment of the proposed action when considered in conjunction with other past, present, and future actions related to the proposed action by location or generic type” (section 75-1-220(3), MCA).

Below is a list of MDT construction projects and their locations that were considered in the cumulative impacts analysis for the KMTP and tentative dates for construction that are on the proposed route. The dates for construction are subject to change. Imperial Oil and their contractors will coordinate with and schedule the module transportation in consideration of these construction activities. Since most, if not all, of construction work identified below would not occur at night when the majority of the module transportation would occur, there would be little to no cumulative impact.

Past Activities by MDT and utility companies:

- Road construction
- Utility installation

Present and Reasonably Foreseeable Activities by MDT:

- Highway 89 southeast of Dupuyer road reconstruction, approximately mile post 64.5-70.5 in 2012-2013
- Highway 358 asphalt overlay, approximate mile post 7.5-17.5, summer 2010
- Highway 287 northeast of Augusta road reconstruction and rehabilitation at approximate mile post 38.5-39.8 during summer 2010
- Highway 200 at Roger’s Pass culvert replacement at approximate mile post 99.5, 2010 or 2011
- Highway 358 slide, summer and/or fall 2010.
- Highway 89, Bynum Bridge repair, currently active.
- Cut Bank Rail Road Overpass, 2011.

Present and Reasonably Foreseeable Activities by Others:

- Future 32-J permit loads using any portion of the proposed route similar to this project. These types of loads would be governed under same applicable regulations and laws as the proposed KMTP.
- Other oversized loads (agricultural equipment, houses, wind turbine blades, etc.) using any portion of the proposed route.
- Montana Alberta Tie Ltd. transmission line construction, summer 2010.
- Recreational traffic.
- Tree trimming for utility clearance.

### 3.3 Historical and Archaeological Sites

The route location has historic, prehistoric, archaeological, and cultural sites. Types of sites near the project analysis area include historic buildings, bridges, roads, trails, forts, irrigation ditches, commercial buildings,



lodges, farms, mines, historic matter scatters, grain elevators, railroads, transmission lines, prehistoric trails, lithic scatters, scarred trees, fossils, and buffalo jumps.

Legal descriptions were provided to the Montana SHPO for all locations of ground disturbing activities. SHPO searched the records for sites considered for listing or listed on the National Register of Historic Places (NRHP). If historical sites were located near where ground disturbing activities would occur, the site form was requested from the history repository at the University of Montana and reviewed to evaluate if the project would affect the historical site. The MDT was notified of locations of historical resources located near work areas. If the proposed ground disturbing activity was very near an historical or archaeological site, MDT and Tetra Tech conferred on the likely impacts, including a field review in some instances. Additionally, the Blackfeet Tribal Historic Preservation Officer (THPO) was consulted about potential impacts from project activities (see Section 4.0).

Maps and drawings were provided to the Lolo and Helena National Forests adjacent to Highway 12 and Highway 200 to aid in discussions regarding potential impacts on historical resources within the National Forests identified through the record searches through SHPO. The Lolo National Forest Archaeologist is scheduled to meet with the Nez Perce and Confederated Salish/Kootenai Tribes to discuss the project.

Consultation with the National Park Service and Bureau of Land Management regarding potential impacts on trails that are national historic landmarks are ongoing and will be completed prior to MDT's decision on the project. Consultation may result in additional mitigation to minimize or avoid potential impacts.

### **3.3.1 No Action Alternative**

The no action alternative would have no impacts (direct, indirect, secondary, or cumulative) on historical or archaeological resources.

### **3.3.2 Proposed Action**

The proposed action includes measures to protect historical resources that are inadvertently discovered during any of the operations associated with the project. If historic or cultural material or human remains are discovered during ground-disturbing activities, construction will cease immediately, and a qualified archaeologist or historian will be consulted to evaluate the significance of the artifacts. As appropriate, SHPO, THPO, and MDT will be consulted. In the case of discovery of human remains, the first contact will be the local county coroner's office.

#### **3.3.2.1 Turnout Construction and Road Modifications**

Tetra Tech requested a record search from October 2009 through December 2009 from Montana SHPO for 80 legal sections within 100 feet of new highway turnouts or where modifications to existing highway turnouts that are planned. Existing turnouts with no modifications will not affect historical resources so no searches were performed for those turnouts. The record search indicated 140 historical or archaeological sites are located in the sections near where construction activities would occur.

Of the 140 sites, 101 sites are historic buildings, residences, farmsteads, lodges, a building foundation, a dam, a grain elevator, and bridges. These site types will not be affected by construction activities due to the nature of the work (paving or constructing turnouts adjacent to existing highways). These types of sites would not be disturbed because they are outside the area of any potential disturbance, and the turnout work would not change the historical setting.

The remaining 39 sites are trails, historic roads, railroads, a fossil, a prehistoric burial, a buffalo jump, lithic scatters, stone rings, scarred trees, historic matter scatters, a sheep ranch, a sawmill, mine, mining districts, a transmission line and irrigation ditches. These sites were evaluated individually, including the distance from ground disturbing activities, potential for inadvertent impacts, and changes in setting. Thirty-two of these sites are more than 100 feet from ground disturbing activities, which was considered sufficient to protect sites from construction disturbance.

To avoid affecting two of the remaining historical sites (the Old Lincoln Road (site 24LC1089) and the Cokahlarishkit Trail (site 24LC1211)), a proposed new turnout has been relocated 100 feet to the east of its original location to avoid both historical sites. The new location of the proposed new turnout is shown on Sheet 10 (at MP 77.9) in **Appendix A**.

Modifications to the existing turnout on Highway 200 at MP 40.2 will consist of laying another layer of gravel and paving the current turnout. The existing turnout will not be expanded. The railroad bed of the Big Blackfoot Railway (24PW380) is located 60 feet from this proposed turnout so construction activities will not affect the railway.

A new turnout on Highway 200 at MP 67.5 is located within the site boundary of the Big Blackfoot Mine (24LC828). The site form indicates that most of the mine features and structures have either been removed or collapsed; only the cement walls at the mill remain. The site sketch indicates the mill is over 1,000 feet north of the turnout, so turnout construction activities will not affect the Big Blackfoot Mine.

The existing turnout at MP 75 on Highway 200 is within the site boundary of 24LC1191, the Lincoln Historic Mining District. The district lies within drainages of Lincoln Gulch, Beaver Creek, Stonewall Creek, Liverpool Creek and Keep Cool Creek, northern tributaries of the Blackfoot River. The turnout is located near the eastern boundary of the district and no mining features appear in the turnout vicinity. Additionally, construction activities will not extend beyond the existing turnout. Guardrails will be removed and additional aggregate will be added to the existing turnout before it is graded and paved. Site 24LC1191 will not be affected by turnout construction activities.

A new turnout on Highway 89 at MP 50.6 is located 20 feet from an irrigation ditch (site 24TT260). Although the proposed turnout is close to the ditch, all construction activities will be confined to the terrace above the ditch, so site 24TT260 will not be affected. This turnout is also located next to the Great Northern Railroad (24TT556). In this area, the rails have been removed and farming activities have destroyed the railroad bed so construction activities will not cause any additional impacts to this historic site.

No turnout improvement or construction within the Helena or Lolo National Forests would affect historical resources.

### **3.3.2.2 Utility Relocations**

A record search was requested from the Montana SHPO in October, November, and December 2009 for all utility crossing work. The search involved legal sections where utilities or communications lines would be buried or poles will be replaced to facilitate equipment transport. The record search indicated approximately 360 historical sites are located in the legal sections where work is proposed. All but five historical sites are located far enough from the proposed utility and communications work that the historical site would not be affected. Additional analysis and field investigation was conducted due to the proximity to these five historical sites. That work is summarized below.

1. One site on Highway 200 (about 11 miles east of Bonner) was investigated because utility work was planned in the same location as a lithic scatter 24MO282. The utility company has since confirmed that no work needs to be done at this crossing because the crossing is high enough already to allow safe passage of the modules.
2. The following historic site is associated with two utility crossings which were reviewed in the field by the MDT archaeologists and the consultant cultural specialist.

On Highway 200 at MP 68+2587 approximately 2 miles west of Lincoln, Montana an overhead crossing will be retired and the line will be buried under the highway. The proposed boring location is within the existing disturbed highway prism adjacent to site 24LC235. The utility move will have no effect on this site.

On Highway 200 at MP 68+3696, an overhead line would require replacing a 3-pole H-frame transmission line support structure with a taller one in the same location. The site occurs near

the outer boundary of the prehistoric lithic scatter site 24LC235. No new area would be disturbed and replacing the 3-pole H-frame would have no effect on this site.

3. Another historic site was reviewed in the field by the MDT archaeologist and the consultant cultural specialist. Site 24LC1210 is located in the proximity of a crossing on Highway 200 at MP 78+0264. An overhead line would also require replacing a 3-pole H-frame transmission line support structure with a taller one in the same location. This utility move will take place within the disturbed existing highway prism. There will be no effect to site 24LC1210.
4. On I-90 at MP 109+2112 a Northwestern Energy transmission line would require replacing an H-frame support structure with a taller one in the same location. The historical site (24MO1399), which is not the line being modified, is the Bonneville Power Administration (BPA) transmission line located approximately 120 feet from the NorthWestern Energy transmission line, which is being modified. The historic site would not be affected by the new pole installation because it is a replacement of an existing structures in the NorthWestern Energy transmission line, there would be no impacts to site 24MO1399.
5. Site 24MO104, the Lolo Trail/Nez Perce Historical Trail, which is a National Historic Landmark, wanders along Highway 12 through Missoula County. As the trail is clearly visible in some locations and cannot be defined in other locations, it was difficult to determine the distances to the nearest utility crossings. Because construction activities closest to the trail are limited to the removal and replacement of poles, with no digging beyond the original hole, construction activities should not cause an impact to eligible sites.

### **3.3.2.3 Traffic Structures**

Traffic structure modifications (i.e., traffic signals, sign bridges) occur within developed areas of Lolo, Missoula, Lincoln, Choteau, Valier, and Cut Bank. There will be no effects on historical sites from placing traffic signals on rotator bases, changing hanging stop lights to rotating overhead lights, or raising sign bridges in their current locations.

### **3.3.2.4 Tree Trimming**

The town of Bonner has an historic district (Bonner Dam and Mill (24MO938)) that was recently submitted for admission to the National Register of Historic Places. The district consists of the mill and historic residences along Highway 200. Proposed tree trimming will consist of cutting the lower, overhanging branches of approximately seven trees along the highway, similar to tree trimming that is regularly conducted along public streets. Although the trimming will likely be noticeable, the visual effect will be minor and would not impact the Bonner historic district.

Along the proposed route (Hwy 287/89) through the town of Choteau, there are four historic properties that are eligible or have undetermined eligibility for the National Register of Historic Places. These sites include the Teton County Courthouse, a segment of the Great Northern Railroad, a historic residence and a historic commercial development. Tree trimming will consist of cutting the lower, overhanging branches of approximately 21 trees along the highway, similar to tree trimming that is regularly conducted along public streets. Although the trimming will likely be noticeable, the visual effect will be minor and would not impact historic properties in Choteau.

### **3.3.2.5 Module Transportation**

Transporting the modules and empty trailer return will not affect any historical sites due to the nature of the activity.

### **3.3.2.6 Conclusion**

One proposed turnout was relocated to avoid impact to 24LC1210. As currently proposed, the project would not affect known historical or archaeological resources.

### **3.3.2.7 Cumulative Impacts**

There would be no impacts on historical or archaeological resources from any of the activities associated with the KMTP; therefore, when considered in conjunction with other past, present, and future actions, there would be no cumulative impacts.

## **3.4 Publicly Owned Parklands, Recreation Areas, Wildlife or Waterfowl Refuges**

The proposed project route is adjacent to a variety of public lands including: Lolo and Helena National Forests, Montana Department of Natural Resources and Conservation, Montana Department of Fish, Wildlife and Parks, and the US Fish and Wildlife Service. Ground disturbing activities would only occur in the MDT ROW or existing easements within the Lolo and Helena National Forests. Consultation with the National Forests is ongoing. See Section 4.0 for additional information.

### **3.4.1 No Action Alternative**

The no action alternative would have no impacts (direct, indirect, secondary, or cumulative) on public parklands, recreation areas, wildlife refuges, or waterfowl refuges.

### **3.4.2 Proposed Action**

The project will not affect areas where Land and Water Conservation Funds were used to acquire or improve lands because the project will not require acquisition of additional ROW.

#### **3.4.2.1 Turnout Construction and Road Modifications**

The locations of proposed turnout modifications and the construction of new turnouts were reviewed relative to municipal (city) parks, county parks, state parks, wildlife management areas, recreational areas, National Parks, and federal recreation areas. None of the turnouts are within 100 feet of these locations. Disturbance associated with expansion and development of turnouts would occur within the current ROWs and would not directly affect lands adjacent to the route.

Indirectly, modifying existing turnouts and increasing the number of turnouts near these areas could provide easier access and parking, but these effects would be minor. Any indirect or secondary impacts on publicly owned parklands, recreation areas, wildlife, or waterfowl refuges would be negligible. The turnout modification and construction of new turnouts would not affect any of the lands adjacent to the proposed route as there would be no acquisition of lands.

#### **3.4.2.2 Utility Relocations**

None of the utility work would occur near public parklands, although some of the utility work would occur on easements within Lolo or Helena National Forest.

#### **3.4.2.3 Traffic Structures**

Work on modifying traffic structures and signs will occur where existing structures are located within Lolo, Missoula, Lincoln, Valier, Choteau, and Cut Bank. None of these locations are within publicly owned parklands, recreation areas, or wildlife or waterfowl refuges. Relocation or alteration of traffic signs and lights would not impact lands adjacent to the proposed route.

#### **3.4.2.4 Tree Trimming**

None of the tree trimming work would occur near public parklands.

#### **3.4.2.5 Module Transportation**

Transportation of the modules and empty trailer return would not affect public parklands.

#### **3.4.2.6 Conclusion**

The proposed action would have no impacts on publicly owned parklands, recreation areas, or wildlife or waterfowl refuges.

### 3.4.2.7 Cumulative Impacts

There would be no impacts on parklands, recreation areas, or wildlife or waterfowl refuges from any of the activities associated with the KMTP. Therefore, when considered in conjunction with other past, present, and future actions, there would be no cumulative impacts.

## 3.5 Transportation System

The discussion of the transportation system includes traffic, safety, and access. Most of the proposed module transportation route is two-lane highway; however, there is some four-lane controlled access (Interstate 90) and a county gravel road. Highways that would be used for module transport include US 12, US 93, Interstate 90, MT 200, US 287, MT 44, US 89, S-213, S-214, and Santa Rita Road. The return trailer route would include Interstate 15, Interstate 90, US 93, and US 12 (see **Figure 1**).

### 3.5.1 No Action Alternative

There would be no direct impact on the transportation system from the no action alternative. Plans to construct new turnouts and modify existing turnouts that might have had a beneficial impact on traffic safety would not have been implemented. There would be no secondary or cumulative effects on the transportation system.

### 3.5.2 Proposed Action

#### 3.5.2.1 Turnout Construction and Road Modifications

For turnout construction, a traffic control plan will be developed by the contractor for traffic safety and to maintain a safe work area.

Turnout work areas occur more frequently on the northern portion of the route due to the limited number of existing turnouts. While traffic would be slowed or stopped in several places, the effects would not be frequent for most travelers. The turnout work would be completed over approximately four months.

Turnout construction and modification would require gravel and asphalt (**Table 11**). These loads would be spread out among the 75 turnouts along the 335-mile haul route and not concentrated in one area, so additional truck traffic in one location would be minor. Gravel pits tentatively identified for use are located in the Missoula (2 pits), Clearwater Junction, Choteau, Cut Bank, and Shelby areas. The average travel distance from the gravel pit to the turnout is about 30 miles. Construction materials will be provided from State approved existing gravel sources and no new resource exploration is required. Heavy truck traffic due to hauling gravel and asphalt would increase somewhat, but the effects would be short-term.

**Table 11**  
**Estimated Dump Truck Loads of Gravel and Asphalt Needed for Turnout Work**

Type	New or Modify	Average Dump Truck Loads of Gravel per Turnout	Average Dump Truck Loads of Asphalt per Turnout	Number of Turnouts	Total Loads
Night/extended parking	New	60	12	6	432
Parking	New	60	8	10	680
Clearing	New	30	4	37	1,258
Clear/Park/Storage	Modify	20	4	22	528
<b>Total</b>				75	2,898

Turnouts constructed or improved at the expense of Imperial Oil will provide a lasting benefit to the safety and convenience of the traveling public.

### 3.5.2.2 Utility Relocations

A traffic control plan will be instituted to provide for safety of the workers and the public. Impacts on traffic from modifications on traffic structures would be minimal and short-term.

### 3.5.2.3 Traffic Structures

A traffic control plan will be instituted to provide for safety of the workers and the public and maintain the flow of traffic. Impacts on traffic from modifications on traffic structures would be minimal and short-term.

### 3.5.2.4 Tree Trimming

A traffic control plan will be instituted to provide for safety of the workers and the public. Tree trimming would require traffic to be stopped or diverted along the roadways where it occurs (Bonner and Choteau) to maintain safety for drivers and workers. In Choteau, the amount of work that needs to be completed would require approximately four days and a traffic control plan for the same duration. Tree trimming in Bonner can be completed in two days.

### 3.5.2.5 Module Transportation

See Sections 1.4 and 2.2.1.7 for a more detailed description of the MTP or view the entire plan on the MDT website. In summary, large modules of specialized processing equipment would be transported along the route shown on **Figure 1**. The returning trailer route is also shown on **Figure 1**.

The transportation plan proposes hauling along the route from Lolo Pass to just north of Valier, Montana during night time to minimize adverse impact to the public and local businesses. Day travel would be used from north of Valier to Sweetgrass. Due to the low traffic volume on this section of the route, there would be no adverse impacts on the traveling public or businesses from the daytime hauling. Contingency plans for adverse weather conditions or emergency situations are included in Appendix 2 of the MTP (available for public review on the MDT website).

The volume of modules planned to be transported through Montana is currently forecasted at about 200 and to occur from the fall of 2010 to the fall 2011. The peak transportation volume will be no more than two modules per day through any particular location.

**Table 12** shows the average annual daily traffic volume along the proposed module route as provided by MDT. On an average daily basis, the module transport and support vehicles would contribute 6 vehicles, including the module, to the overall daily traffic volume for the one year when module hauling would occur. Based on this minimal additional use and Imperial Oil's adherence to MDT weight restrictions, it is expected that the proposed project would result in minimal impact to Montana roadways and bridges. Return trailers and escorts are not expected to substantially affect the roads or bridges.

**Table 12**  
**2008 Average Annual Daily Traffic**

Location	AADT <sup>1</sup>	Location	AADT <sup>1</sup>
Highway 12 East of Lolo Pass	673	Highway 287 South of Augusta	288
Highway 93 South of Missoula	23,167	Highway 287 South of Choteau	463
Highway 93 on Reserve Street	40,049	Highway 287 South of Highway 44	502
I-90 East of Exit 104	21,597	Highway 44 West of Valier	757
Highway 200 East of Bonner	3,643	Highway 358 South of Cut Bank	302
Highway 200 East of Highway 83	2,207	Highway 213 North of Cut Bank	2,147
Highway 200 East of Highway 141	1,617	Highway 214 North	207
Highway 200 East of Highway 434	1,315	Highway 214 East	61

<sup>1</sup> AADT means Average Annual Daily Traffic.

The transportation plan for the modules was developed to meet the 10-minute rule so that impacts on traffic and the public would be minimized. The distance between turnouts and other clearing areas was established to meet the 10-minute rule, based on:

- Average speed of the module trailer between turnouts;
- Posted speed limits between turnouts; and
- Peak traffic volume (day/night) and associated traffic clearing times (see MTP on MDT website).

The maximum foreseeable delay for any driver would be 10 minutes per module. The planned night hauling on most of the route would minimize most impacts. A driver following the route could encounter multiple modules on the route most of which would be during the night travel.

Imperial Oil will establish a website available to the public with an updated module transportation schedule on daily basis. The proposed regular notification of module movements is a tool the public could use to plan to avoid the modules.

Imperial Oil will coordinate with MDT to ensure module movements are scheduled to minimize interference with planned construction projects along the route. As most MDT construction projects will likely occur during daytime hours, the impact on the construction project of the night module movements would be minimal.

The transporter will access a notification database on the internet that contains information on other oversized loads that may be encountered during transport.

The hauling schedule will exclude weekends and federal holidays and consider other uses of the roadways. The schedule will also avoid periods that coincide with local events, the start of morning commuter traffic, and school bus travel times.

The escort vehicle will ensure that turnouts are not occupied before the module moves from a parking turnout in order to ensure that the movement is not relying on an occupied turnout to meet the 10-minute rule. Night/extended parking turnouts will have signage or be controlled to ensure they are not occupied by unattended vehicles when they are needed for night parking.

The transportation plan has developed specific traffic control plans to address oncoming oversized loads. The traffic control plans ensure that turnouts are clear of parked vehicles so they can be used for other oversized loads or the modules (see Appendix 6 of the MTP, which is available on the MDT website).

The returning empty trailers would also require oversized load permits for width and length, but not height. The route would be slightly different, with the majority on interstate highways (**Figure 1**).

Based on the mitigation designed to minimize and avoid impacts, the transportation of modules would cause some inconvenience to other travelers as described above, however, the MTP complies with the 10-minute rule and would minimize impacts to the public.

### **3.5.2.6 Conclusion**

Traffic safety would not be substantially affected by any of the KMTP activities due to specific traffic control plans.

Effects on traffic from the KMTP turnout construction, utility modifications, and traffic structure modifications would be temporary and minor, consisting of occasional traffic delays.

Movement of the modules would also cause traffic delays; however, most of them would occur at night when the inconvenience to other road users would be minimized.

Access to businesses would not be affected due to the location of construction work and night travel of the modules, along with the short time interval required for the modules to pass any one location.

Extensive mitigation (see Section 3.13) has been developed to minimize impacts on the transportation system.

Turnouts constructed or improved at the expense of Imperial Oil will provide a lasting benefit to the safety and convenience of the traveling public.

### 3.5.2.7 Cumulative Impacts

Cumulative impacts on the transportation system from the KMTP construction activities would include minor traffic delays for other motorists in addition to possible delays from MDT's planned construction activities and other oversized loads and recreational traffic. Construction delays from MDT's construction would occur at different locations than the construction proposed for the KMTP.

Cumulative impacts on the transportation system from the KMTP module movement would include traffic delays for other motorists in addition to possible delays from MDT's planned construction activities and other oversized loads and recreational traffic. However, most delays would occur at night when the inconvenience to other road users would be minimized, whereas delays from MDT's construction project and recreational traffic would occur mostly during the daytime. The actual construction period of MDT's projects may or may not occur during module transportation. Therefore the cumulative impacts would be minor and short-term, limited to the time module transportation occurs. MDT believes it is reasonably foreseeable that additional oversized loads would want to use the route, which would require the same permitting as the module transportation described above.

Beneficial impacts from improved roads created by the KMTP and MDT's construction include additional turnouts and improved highway conditions would be a long-term beneficial cumulative impact on the transportation system. The additional turnouts would add additional long-term maintenance responsibilities, including trash pick-up.

## 3.6 Economic and Community Impacts

Impacts described in this section include public safety, improvements to the roads, effects on businesses from traffic disruption, and benefits to Montana.

The module transportation route would traverse Missoula, Powell, Lewis and Clark, Teton, Pondera, Glacier and Toole Counties. The return trailer route would move through Toole, Pondera, Teton, Cascade, Lewis and Clark, Jefferson, Silver Bow, Deer Lodge, Powell, Granite, and Missoula Counties. Since the return trailers can travel at speeds of 50 miles per hour and travel mostly on four lane highways, they would have minimal impact on other road users. The impact of the module transportation is discussed in detail in Section 3.5.

The proposed transportation route for modules would be through about twelve cities and communities (**Table 13**), as well as a portion of the Blackfeet Indian Reservation in Glacier County. Two of the counties are more urbanized than the others. Missoula County contains the city of Missoula and the surrounding communities. The return trailer route for the wide trailers passes through the cities of Great Falls, Helena, Butte (trailers over 10 feet wide), Missoula, and Lolo. The return trailer route for the narrow trailers would include all of the cities for the wide trailer except Butte but would also include the communities of Fort Harrison, Elliston, Avon, and Garrison (**Table 13** and **Table 14**).

**Table 13**  
**Population of Towns Along the Module Transportation Route**

Town	County where Located	Population (2000)	Town	County where Located	Population (2000)
Lolo	Missoula	3,388	Choteau	Teton	1,781
Missoula	Missoula	57,053	Bynum	Teton	N/A
Milltown/Bonner	Missoula	1,693	Dupuyer	Pondera	N/A
Ovando	Powell	71	Valier	Pondera	498
Lincoln	Lewis and Clark	1,100	Cut Bank	Glacier	3,105
Augusta	Lewis and Clark	284	Sweetgrass	Toole	N/A

N/A: The population of these communities was not available from the U.S. Bureau of the Census. (USCB 2000)..



**Table 14**  
**Population of Towns Along the Trailer Return Route**

Trailers Greater Than 10 Feet Wide			Trailers 10 feet or Less Wide		
Town	County where Located	Population (2000)	Town	County where Located	Population (2000)
Great Falls	Cascade	56,690	Great Falls	Cascade	56,690
Helena	Lewis and Clark	25,780	Helena	Lewis and Clark	25,780
Butte	Silver Bow	33,892	Fort Harrison	Lewis and Clark	N/A
Missoula	Missoula	57,053	Elliston	Powell	225
Lolo	Missoula	3,388	Avon	Powell	124
			Garrison	Powell	112
			Missoula	Missoula	57,053
			Lolo	Missoula	3,388

N/A: The population of these communities was not available from the U.S. Bureau of the Census.

Source: USCB 2000

Due to the population density along the transportation route between Lolo and Valier, the module transportation would be done at night when the traffic volume is considerably less than daytime volumes. The traffic volume shown in **Table 12** reflects the population of the communities adjacent to the route. There would be minimal to no impact on commuters and travelers during the module movements due to the night time hauling.

**Table 13** and **Table 14** present the population, based on the 2008 US Census data, of the cities and towns along the module and return trailer transportation routes.

### 3.6.1 No Action Alternative

The no action alternative would have no direct impacts on the human environment. However, there would be a loss of economic benefit provided by the increased temporary employments and sale of goods and services during the construction and hauling effort. As the project has been under discussion with utilities for over a year, some have indicated that they added or kept on staff to complete the utility modifications and the selection of the no action alternative may result in layoffs of utility workers for some utilities. Selection of the no action alternative would also eliminate the additional turnouts that might have provided a benefit to other users of the highways, including other haulers and recreational users. There would be no cumulative effects from the no action alternative.

### 3.6.2 Proposed Action

The economic impact analysis of the entire project is summarized below in **Table 15**. The majority of the impact would occur during the permitting and construction phases (September 1, 2009 through December 30, 2010), and the operational impacts would occur from September 2010 to fourth quarter 2011 (**Table 15**).

The economic multiplier used is an indication of the secondary impacts from payments made by Imperial Oil to contractors for completion of the work in Montana. For every direct dollar Imperial Oil pays its contractors and their suppliers working and residing in Montana, there is a secondary impact (see **Table 15**). This multiplier effect occurs as a result of contractors and suppliers spending money earned by working on the project as the money spreads out into the economy for food, services, rentals, fuel, taxes, daycare, etc.

**Table 15**  
**Estimated Montana Economic Impact Summary**

	<b>Worker Hours</b>	<b>Direct Value<sup>1</sup> (\$ million)</b>	<b>Economic Multiplier</b>	<b>Total Economic Activity Generated (\$ million)</b>	<b>Average Annual Economic Activity<sup>2</sup> (\$ million)</b>
Environmental Permitting <sup>3</sup>	5,500	\$1.1	1.2 <sup>4</sup>	\$1.3	\$0.6
Value of Turnouts and Road Modifications	24,100	\$7.1	1.6 <sup>5</sup>	\$11.4	\$5.0
Value of Utility Relocation	102,000	\$13.5	1.6 <sup>5</sup>	\$21.6	\$9.6
Value of Traffic Structures	7,500	\$1.5	1.6	\$1.5	\$0.7
Module Transportation <sup>6</sup>	170,000	\$17.5	Various	\$32.0	\$14.2
<b>Total</b>	<b>308,900</b>	<b>\$40.7</b>		<b>\$67.8</b>	<b>\$30.5</b>

Values in this table were based on estimates provided by contractors working on this project for utility line relocations, road modifications, tree trimming, traffic structure modifications and module transportation.

1/ Direct value includes supplies, benefits, equipment usage, office expenses, overhead, etc.

2/ Annual Average calculated by dividing the total over the 2.25 year life of the project (September 2009 to December 2011).

3/ Value of contracts for engineering and environmental consultant for environmental permitting.

4/ Minnesota IMPLAN Group 2001. SAM Multiplier for the State of Montana. Environmental and other technical consulting (445)

5/ Minnesota IMPLAN Group 2001. SAM Multiplier for the State of Montana. Highway, street, bridge, and tunnel construction (39)

6/ Module transport addressed in more detail in **Table 23**, includes income to Montana only, not transportation workers from other areas who would not be taxed by Montana.

Most of the contractor personnel needed for permitting, construction, and monitoring already reside in Montana. Approximately eight people have moved to Montana temporarily (for approximately 6 months to 2.25 years) to work on this project; one relocated a family. The remaining work effort in Montana would be absorbed by approximately 40 existing Montana residents. This results in additional working hours during the period of September 1, 2009 through June 2010 or prevented a reduction in hours for some workers. Most likely, it increased production of these Montana offices during that period. Work effort related solely to the module transportation is discussed in Section 3.6.2.6.

The income to Montana residents (approximately \$40.7 million, including module transportation) is subject to a Montana income tax and an indirect impact would be the revenue the state would gain on the income earned over the construction life (**Table 16**). Additional taxes would be collected on fuel (\$0.53 per gallon for diesel and \$0.27 for gasoline) and a "bed tax" on motel rooms (4%).

**Table 16**  
**Estimated Direct Tax Revenue to Montana**

<b>Tax</b>	<b>Revenue</b>
Fuel Tax Paid in Montana	\$62,000
Income Tax Paid to Montana <sup>1</sup>	\$2,849,000
Bed tax on hotel rooms	\$16,000
<b>Total direct tax paid</b>	<b>\$2,232,000</b>

<sup>1</sup> Montana income tax varies from 2 to 11% depending on income, this analysis assumes an average 7% state income tax rate of the approximately \$40.7 million income to Montana residents (see Table 13, total direct value).

Income tax does not consider secondary effects from merchants/hoteliers paying income tax.

As nearly all of the work will occur within the 7-county region that the loaded trailers will travel on their way to Alberta, the anticipated revenue is compared to 2008 estimates for total income in those counties (**Table 17**).

**Table 17**  
**Population and Density Characteristics of the**  
**Region, 2008 Estimates**

	<b>Population</b>	<b>Total Income<sup>1</sup></b>
Missoula County	107,320	\$1,853,860,632
Powell County	7,041	\$74,918,744
Lewis and Clark County	60,925	\$1,274,636,761
Teton County	6,445	\$52,154,557
Pondera County	5,852	\$47,936,174
Glacier County	13,297	\$138,034,036
Toole County	5,141	\$72,598,740
<b>Total Counties</b>	<b>206,021</b>	<b>\$3,514,139,644</b>
<b>State of Montana</b>	<b>967,440</b>	<b>\$14,574,257,450</b>
<b>County as Percent of State</b>	<b>21.3%</b>	<b>24.1%</b>

Source: USCB 2000

<sup>1</sup> Montana Department of Labor and Industry Employment and Earnings Databbles (ES-202/QCEW)

To estimate the economic impact of the project in the regional context, the total average annual economic activity the project to Montana from **Table 15** is compared to the region and the state below:

- The average annual economic activity of \$30.5 million would be 0.8 percent of the annual regional wages of \$3.5 billion.
- The average annual economic activity of \$30.5 million would be 0.2 percent of the annual Montana wages of \$14.6 billion.

Because the total annual wages in the less populated counties of Toole, Pondera, Teton, and Powell Counties are smaller due to the population, the impact of the revenue generated in (sales, resident workers) is likely to be more important to the individual county than reflected in the percentages above, but can not be calculated for the individual counties.

There would not be an influx of temporary or permanent workers for any aspect of the project, therefore, no impacts were identified on social structures and attitudes, cultural uniqueness and diversity, local services (hospitals, schools, etc.), or distribution and density of population and housing.

Project planning and coordination conducted with state, county, local, and tribal governments, would minimize adverse impacts on state employees, local city and county employees, and local residents expected as a result of the reviews, planning meetings, modifications to turnouts, intersections, and traffic structures. The route preparation would result in small, short-term beneficial impacts to the state and local economies from the jobs this effort would create.

### **3.6.2.1 Environmental Permitting**

Permit application submission is in progress. Producing the permit application requires engineering, design, drawings, site visits, surveys (**Table 18**), and in most cases, environmental review. The value of permits required for hauling oversized loads is included under Module Transportation (Section 3.6.2.6).

**Table 18**  
**Estimated Value of Environmental Permitting to Montana**

	<b>Worker Hours</b>	<b>Direct Value<sup>1</sup> (\$ million)</b>
Design/Engineer	1,500	\$0.4
Environmental Review and Production	4,000	\$0.7
<b>Total</b>	<b>5,500</b>	<b>\$1.1</b>

Based on actual contract values.

### 3.6.2.2 Turnout Construction and Road Modifications

Impacts on traffic from construction of turnouts and road modifications are described in Section 3.5.2.1. Construction of turnouts would provide employment opportunities for construction workers, traffic control personnel, and truck drivers. Local suppliers of gravel, asphalt, fuel, hotels, and restaurants would provide for the construction workers. These economic impacts are included in the calculations in Table 15.

Additionally, once the turnouts are completed, they would be available for use by all travelers when not in use during module transport and following completion of the project. These turnouts would be beneficial in providing additional safe stopping areas, and would provide additional recreational parking along Highway 200. At MDT's discretion, Imperial Oil will remove turnouts that do not provide a public benefit.

For turnout construction, a traffic control plan will be developed by the contractor for traffic safety and to maintain a safe work area.

While most of the construction inspection will be completed by a third party contractor, the road modifications would have some impact on the demand for government services, because the MDT would need to inspect to ensure that permit requirements are being met, in addition to the initial permit application review and EA review.

The total direct value of turnout construction and road modifications identified in **Table 15** is estimated to be \$7.1 million (**Table 19**). The cost of the turnout construction and road modifications will be paid totally by Imperial Oil with no cost to the State of Montana (see Section 2.2.1.2). Additionally, Imperial Oil will pay for removal of turnouts that MDT concludes do not provide a public benefit.

**Table 19**  
**Estimated Value of Turnout and Road Modifications to Montana**

	<b>Worker Hours</b>	<b>Direct Value<sup>1</sup> (\$ million)</b>
Design/Engineer	4,600	\$0.7
Construction	19,600	\$5.1
Supervision	2,500	\$1.3
<b>Total</b>	<b>26,700</b>	<b>\$7.1</b>

### 3.6.2.3 Utility Relocations

Impacts on traffic from utility relocations are described in Section 3.5.2.2. The utility relocations required for this proposed project include relocation of power and communication lines. Imperial Oil has contacted the power and communications providers to determine the potential impact to the customers and the traveling public associated with these relocations. Imperial Oil's communications with those service providers is summarized in **Table 20**.

**Table 20  
Utility Crossing Summary and Outages**

<b>Utility</b>	<b>Type</b>	<b>No.</b>	<b>Expected Impact</b>	<b>Means to Avoid, Minimize, and/or Mitigate Impacts</b>
MEC (Highway 12)	Electric	58	A total of eight hours of outages for the customers west of Lolo Hot Springs. These will be in four two-hour outages.	Where feasible, lines will remain energized to minimize outages. At least four crews will be used concurrently working at multiple locations to effectively use outage time.
MEC (Highway 200)	Electric	75	The average outage would be 15 to 20 minutes. No customer should be out of power for more than two hours.	Where feasible, MEC will feed the feeder line from both ends, which will allow outages to be minimized.
North-Western Energy	Electric	197	No outages expected for transmission line relocations.  No or minimal outages are expected for distribution line relocations.	Alternate transmission lines are available to supply substations while work is completed.  For distribution line relocations, the line will remain energized.
Glacier Electric Coop	Electric	86	Less than an hour of outage per underground crossing.  For above ground, most will remain energized with minimal outages. At locations where lines can not remain energized, outages will be 1 to 2 hours. This would affect 50 to 100 customers per outage.	Outages would be coordinated with customers to avoid irrigation needs.
BPA	Electric	1	No outage	Alternate transmission available
Marias River	Electric	2	Maximum of 1 hour per crossing	None needed
Sun River Electric	Electric	76	Approximately 20 three-phase crossings - 4 to 5 hour outage range per crossing - only one outage per customer. Maximum number of customers fed by one three phase crossing is approximately 200.  Approximately 31 single phase crossings - 2 to 3 hour outage range per crossing - maximum number of customers fed by one single phase crossing approximately 125 - only one outage per customer.  3 transmission crossings completed with two outages: <ul style="list-style-type: none"> <li>• 1<sup>st</sup> outage pertaining to work at two locations - resulting in 4 to 5 hour outage - 2 substations will be disconnected impacting 850 customers and the town of Augusta.</li> <li>• 2nd outage - 4 to 5 hour disconnecting one substation - impacting approx 375 customers.</li> </ul> 22 U/G crossings - minimal outage.	Work will be completed at off-peak hours          While working on the first outage, work will be completed to reduce the number of customers affected by the second outage.
<b>Sub-Total</b>	<b>Electric</b>	<b>495</b>		
Blackfoot	Comm.	2	Approximately 10 customers would	None needed

**Table 20**  
**Utility Crossing Summary and Outages**

Utility	Type	No.	Expected Impact	Means to Avoid, Minimize, and/or Mitigate Impacts
			experience minimal outage of less than 10 minutes when switching to the new facilities.	
Qwest	Comm.	24	Qwest indicated that there would be minimal outages associated with their work.	None needed
Bresnan Communications	Comm.	38	Seven fiber optic line relocations will cause outages of 1 to 5 hours. 31 non-fiber optic lines relocations (mostly television) will cause outages of less than 30 minutes each.	They will all be done at night between 1:00 am to 4:00 am  None needed
3 Rivers Communication	Comm.	12	Non-fiber optic - Estimated 10 to 15 minute outages at each crossing (11 crossings), impacting 30 to 70 customers maximum per crossing.  One fiber optic - 2-3 hours of outages impacting Valier.	Work will be done during off-peak hours to minimize impact.  Fiber optic work will be done overnight to limit interruptions during working hours.
Northern Telephone	Comm.	1	Minimal outages	
<b>Sub-Total Communications</b>		<b>77</b>		
<b>Total</b>		<b>572</b>		

Imperial Oil will ensure proper and full notice to all affected customers regarding outage timing and duration prior to outages.

Imperial Oil will be responsible for coordinating the above utility relocation to minimize disruption to the affected customers and the traveling public and where practicable coordinate the timing of the utility relocations to facilitate combined efforts between individual utility companies.

Utility relocations would provide employment opportunities for workers and traffic control personnel. Utility work would be done by the individual utilities, who indicated they will hire a few additional employees or contractors to complete the engineering and construction work. When possible, local suppliers of drill rigs, conduit, conductors, and utility poles would provide supplies.

A traffic control plan will be instituted to provide for safety of the workers and the public. Impacts on traffic from modifications of utility relocations would be minimal and short-term.

Once the work is completed, some people may notice improved visual quality from approximately 1/3 of the overhead utilities being removed from view and buried. Permanent modification of the utility lines along the route would benefit farmers and ranchers in the area who occasionally impact the overhead lines with their oversized farming equipment on the northern part of the route. Permanent underground relocation will ensure improved long term service as it prevents downtime due to adverse weather conditions.

The utility relocations would have a minor impact on the demand for government services, because the MDT would need to perform inspections to ensure that permit requirements are being met, in addition to the initial permit application review.

The total direct value of utility line relocations identified in **Table 15** is estimated to be \$13.5 million (**Table 21**). The cost of the utility line relocations will be paid totally by Imperial Oil with no cost to utility customers or the State of Montana (see Section 2.2.1.2).

**Table 21**  
**Estimated Value of Utility Relocation Work to Montana**

	<b>Worker Hours</b>	<b>Direct Value<sup>1</sup> (\$ million)</b>
Design and Construction	2,750	\$11.3
Supervision	4,580	\$2.4
<b>Total</b>	7,330	\$13.5

### 3.6.2.4 Traffic Structures

Impacts on traffic from traffic structure modifications are described in Section 3.5.2.3. A traffic control plan will be instituted to provide for safety of the workers and the public and maintain the flow of traffic. Impacts on traffic from traffic structures modifications would be minimal and short-term. Once the work is completed, there would be no effects on the human environment.

Work on traffic structures would provide minor, temporary additional work for workers and traffic control personnel.

Traffic structure modification would have some impact on the demand for government services, because the MDT would need to perform inspections to ensure that permit requirements are being met, in addition to the initial permit application review.

The total direct value of traffic structure modifications identified in **Table 15** is estimated to be \$1.5 million (**Table 22**). The cost of the traffic structure modifications will be paid totally by Imperial Oil with no cost to local governments or the State of Montana (see Section 2.2.1.2).

**Table 22**  
**Value of Traffic Structure Work to Montana**

	<b>Worker Hours</b>	<b>Direct Value<sup>1</sup> (\$ million)</b>
Design/Engineer	2,800	\$0.4
Construction	3,900	\$0.7
Supervision	800	\$0.4
<b>Total</b>	7,500	\$1.5

### 3.6.2.5 Tree Trimming

Impacts on traffic from tree trimming are described in Section 3.5.2.4 In Choteau, the amount of work that needs to be completed would require approximately four days and a traffic control plan for the same duration. Tree trimming in Bonner can be completed in two days.

Tree trimming will have a negligible effect on the human environment. While a visual difference in the trees may be noticeable, it is expected that the trimming would be similar to trimming conducted for routine tree maintenance. Mitigation has been identified to limit the noise disturbance near residences. The work is very short in duration. Tree branches overhanging roadways are frequently and regularly trimmed. A similar example of this type of work that most have experienced is trimming trees to provide for power line clearance. Work would be accomplished by a qualified arborist and will be closely coordinated with local governments.

The total direct value of tree trimming is estimated to be \$15,000 and 240 worker hours. The cost of the tree trimming will be paid totally by Imperial Oil with no cost to local governments or the State of Montana (see Section 2.2.1.2).

### 3.6.2.6 Module Transportation

Impacts on traffic from module transportation are described in Section 3.5.2.5. The transportation plan for the modules was developed to meet the 10-minute rule so that impacts on traffic would be minimized.

Imperial Oil will comply with Missoula Public Works Department's request to have their engineers inspect the traffic lights to ensure they are repositioned and timed appropriately after use. Imperial Oil would compensate Missoula personnel for this night time work.

During consultation (**Section 4**) some concern was expressed about the potential impacts from the transportation of 200 large modules on businesses and other road users, particularly through cities and towns, effects on school buses, effects on planned events, closure of roads that provide the only access should there be an accident, conflicts with other large loads (such as harvesting equipment, log trucks, and recreation vehicles), and interference with recreational use of certain roads. The MTP has been developed to address these concerns and includes night time travel from Lolo Pass to just north of Valier to minimize public impact (see Section 2.2.1.7 for more details).

To calculate the value of wait times for night-time commercial traffic using the module transportation route, Highway 200 was used to represent maximum night-time commercial traffic because it has the highest volume of night time traffic along a two lane road on the module transportation route. MDT recorded traffic volumes from automatic traffic recorders along Highway 200 were used to determine the volume of commercial traffic between 11 pm and 5 am. A maximum delay of 10 minutes per modules was used in the analysis for both oncoming and following traffic. It was also assumed that commercial traffic would encounter delays from all 200 modules. This indicated that the maximum cost impact on commercial traffic would be less than \$100,000 spread over the duration of the module movements.

Information was gathered on local events and civic activities to determine the timing of these activities in order to minimize conflict between the activity and the module movements. The majority of the civic activities are scheduled to take place on weekends or public holidays, so the conflict with these events will be avoided as the module movement will not take place on these days. Imperial has committed to provide communities information on the schedule of modules across the State of Montana. Events identified during consultation are summarized below. Consultation will be ongoing to ensure similar events scheduled to occur in 2011, will be accommodated.

#### Augusta

- American Legion Rodeo and Parade: 27 June 2010 (parade at 2:00).
- Fall hunting season: Hunters check in/out at a weigh station on Main Street throughout the day.

#### Choteau

- Teton County Fair: 21 to 27 June 2010.
- American Legion Rodeo and Parade: 4 July 2010.
- Grizzly Marathon: 31 July 2010.
- Threshing Bee: September 18 and 19 2010.

#### Cut Bank

- Lewis and Clark Days: Last weekend in July (July 30 to August 1, 2010).
- Cutbank Fun Days: Third weekend in August.
- Parade of Lights: Last two weekends in November with a Saturday parade the first of those weekends.

#### Valier

- Homecoming Days: last weekend June or first weekend July (2-4 July 2010).
- Christmas Stroll: last weekend in November.
- 4 July Fireworks at Lake Frances.



**Ovando**

- Old Christmas Fest and Cowboy Christmas Parade: First Friday and Saturday following Thanksgiving.
- Lincoln Rod Run through Lincoln, Helmville and Ovando: Late September.
- 4 July Celebrations.
- Mid Winter Luau: Saturday in mid February.
- Dog Sled race (Iditarod qualifier): February 13 to 17 2010; Helena to Ovando and surrounding area.

**Lincoln**

- Snowmobilers and four wheelers use the ditches along the highways.
- Snowmobilers use roadside pullouts to unload snowmobiles and park trailers and trucks.

**Missoula**

- The City of Missoula has numerous social, cultural, and sporting events throughout the year; however it is expected that the night moves through the city and wider road surfaces should minimize the conflict with these events.

**Glacier County**

- High school basketball games may increase highway traffic by as much as 200 cars in the late afternoons or evenings on game days.

Section 2.7 (Communications) and Section 4 (Emergency Response Plan) of the MTP (available on the MDT website) address how transportation of the modules would be modified in the case of vehicle accidents, mechanical breakdowns, medical emergencies, fires, spills, extreme weather conditions and getting the module out of the way of emergency vehicles. These requirements reduce the risk of potential hazards caused by the movement of the modules, provide for safe and efficient passage of emergency vehicles, and provide for the quick and thorough clean up of hazardous spills. There would be no higher risk from transport of the modules than is posed by other oversized loads that are currently permitted to travel through the state, and the thorough planning and training of drivers and traffic control personnel incorporated would further reduce the risks.

There would be no hazardous or petroleum products (in addition to those necessary to operate the trucks) transported and the transportation of modules includes a detailed traffic control plan, emergency response plan, and contingency plans to protect public safety, no effects on human health are expected to occur from the transportation of modules. Air quality and noise requirements would be met.

Review of the MTP would have some impact on the demand for government services, because the MDT would need to review the initial 32-J permit applications required for oversized loads. The 32-J permit fees will provide some compensation to MDT for permit processing and road use.

Direct, indirect, and secondary economic impacts from module transportation are shown in **Table 23**. Traffic control workers (flaggers, pilot cars, Montana Highway Patrol escorts) reside in Montana. The transportation company truck drivers of the specialized transport equipment are highly trained and experienced and reside outside of Montana. Effects of the return trailers would be not noticeable and limited to fuel and food. The cost of the module transportation will be paid totally by Imperial Oil with no cost to local governments or the State of Montana (see Section 2.2.1.2).

**Table 23**  
**Estimated Value of Module Transportation to Montana**

	<b>Worker Hours</b>	<b>Direct Value (\$ million)</b>	<b>Economic Multiplier</b>	<b>Total Economic Activity Generated (\$ million)</b>
Permit Fees Paid to MDT <sup>1</sup>	-	\$1.0	1.2 <sup>2</sup>	\$1.2
Transportation Operations Labor benefiting Montana <sup>3</sup>	170,000	\$15.5	1.9 <sup>4</sup>	\$29.5
Fuel	-	\$0.5	1.5 <sup>5</sup>	\$0.8
Food/Lodging		\$0.5	1.1 <sup>6</sup>	\$0.6
<b>Total</b>		\$17.5		\$32.0

1/ Estimated at \$4500 per module trip, \$500 for the returning trailers

2/ Minnesota IMPLAN Group 2001. SAM Multiplier for the State of Montana. State and Local Non-Education (504)

3/ Traffic control, security, Montana Highway Patrol add percentage

4/ Minnesota IMPLAN Group 2001. SAM Multiplier for the State of Montana. Truck Transportation (394)

5/ Minnesota IMPLAN Group 2001. SAM Multiplier for the State of Montana. Gasoline Stations (407)

6/ Minnesota IMPLAN Group 2001. SAM Multiplier for the State of Montana. Food Services and Drinking Places (481)

### 3.6.2.7 Conclusion

Turnout construction, road modification, and utility relocation would not result in additional travel lanes, and would not improve highway conditions to the point that there would be additional use, nor would it increase the speed of travel. Therefore there would be no induced growth from the project.

As discussed above, employment and economic benefit would occur from work required on the roads, utilities, trees, and traffic structures, and the module movement. The estimated total positive economic impact on Montana is \$67.8 million over the period of September 2009 through fourth quarter 2011, including secondary impacts. Additional turnouts would benefit travelers along the route. Visual quality would be improved by the removal of the overhead lines.

There would be minor effects from short-term utility outages as utility work is completed. Minor delays for other commercial traffic during module hauling could result in higher costs for the commercial haulers. There would be some additional demand for government services for permit compliance inspection and permit application review, which would be compensated by Imperial Oil.

### 3.6.2.8 Cumulative Impacts

The contribution to the economy of the KMTP along with the contribution of MDT's road construction would be continued employment for some Montana residents and direct tax revenue from income tax. The planned MDT road construction will not cause utility outages or remove overhead utility lines from view, so there would be no additional cumulative effects on utility service or visual quality.

Following completion of the construction work, additional oversized loads may want to use the route. Depending on the number, future oversized loads would likely have similar types of effects as the module transportation impacts described in Section 3.6.2.6. Future use will be governed by the same laws and permits.

## 3.7 Air Quality and Noise

County and city ordinances and regulations were searched and reviewed along the module transportation route. Missoula County (Missoula City-County 2000) and Missoula City (Missoula City Municipal Code Title 9) have direction and regulations associated with noise. Helena and Missoula County are the only locations on the return route with noise ordinances.

There are no Class I airsheds along either the module or the return trailer haul routes; therefore, no Class I airsheds would be affected. The Blackfeet Indian Reservation is not a Class I airshed.

Equipment used during the project will be required to meet EPA emission and noise standards.

### **3.7.1 No Action Alternative**

There would be no impact (direct, indirect, secondary, or cumulative) on air quality or noise from the no action alternative.

### **3.7.2 Proposed Action**

#### **3.7.2.1 Turnout Construction and Road Modifications**

Hauling of gravel and use of construction equipment to build or modify the turnouts will create emissions, as would the crushing of gravel and production of plant mix surfacing when needed. Emissions would include typical exhaust and fugitive dust. Imperial Oil plans to use existing gravel pits that operate under a MDEQ permit requiring dust abatement to protect air quality from fugitive dust. There would be no impacts on overall air quality.

The short-term construction activities require the use of trucks and heavy equipment which will add noise to the environment. Construction contractors will meet the standards for noise. Because all municipal code standards that apply to noise generation by equipment will be met, noise impacts would be minimal.

Road modifications would not occur within the non-attainment area in Missoula.

#### **3.7.2.2 Utility Relocations**

Trucks and construction equipment used for the utility work will contribute minimally to air emissions.

The short-term construction activities require the use of trucks and heavy equipment which will add noise to the environment. Construction contractors will meet the standards for noise. Because all municipal code standards that apply to noise generation by equipment will be met, noise impacts would be minimal.

#### **3.7.2.3 Traffic Structures**

Trucks and construction equipment used for the utility work would have a minor contribution to current air emissions.

The project would remain within both the Missoula County and City of Missoula noise ordinance limits (described above) during the modification of traffic structures because the majority of the traffic modifications are beyond the area where noise would occur. Construction contractors will meet the standards for noise. Because all municipal code standards that apply to noise generation by equipment will be met, noise impacts would be minimal.

#### **3.7.2.4 Tree Trimming**

Tree trimming would contribute minimal amounts of emissions from the chainsaws and chipping equipment. The limited work associated with tree trimming would not affect overall air quality in any of the areas where it would occur.

Tree trimming would create noise from chainsaws and chipping equipment while trimming occurs, which is expected to take two days in Bonner and four days in Choteau. Short-term noise would occur during daylight hours so as to not unnecessarily disturb surrounding residences at night. Construction contractors will meet the standards for noise. Because all municipal code standards that apply to noise generation by equipment will be met, noise impacts would be minimal.

#### **3.7.2.5 Module Transportation**

Transportation of the modules and empty trailer return would be in compliance with Missoula City and County air quality rules and EPA requirements.

Module transport would emit noise associated to tire roadway interface, engine noise, and exhaust stack noise. Commercial trucks regularly use the proposed route. As a result, the noise contributed by the proposed project would be within the existing long term noise levels. Missoula County and City of Missoula noise ordinance would be met. Trucks hauling return trailers would make the same noise that other commercial trucks would make.

Turnouts within 500 feet of a residence were identified to determine if module storage or long-term parking would affect visual quality or noise for those residences. None of the turnouts within 500 feet of a residence is planned to be used for extended parking, therefore, any impacts on visual quality or noise on residences would be short-term (10 to 20 minutes). Noise impacts on residences would be no greater than normal traffic.

### **3.7.2.6 Conclusion**

There would be minimal, short-term impacts on air quality and noise. The only noise ordinance limits are for the section of the proposed route in Missoula County and through the City of Missoula. Noise would not increase above current levels and would not exceed the Missoula County and City of Missoula ordinance limits during transportation of the modules nor would noise levels increase above current levels from hauling the return trailers through the Missoula areas and the City of Helena. Residences near parking turnouts would not be noticeably affected.

### **3.7.2.7 Cumulative Impacts**

KTMP construction and transportation would contribute minor cumulative impacts on air quality and noise when combined with other related actions listed in Section 3.2 which would also include additional emissions and particulate matter, and noise. The cumulative impacts would be short-term and would not exceed air quality and noise regulations.

## **3.8 Contaminated Sites/Hazardous Materials**

Regulatory records were obtained from the EPA and MDEQ (MDEQ 2009) and reviewed in order to identify any areas where there may be contact with potential petroleum or hazardous waste facilities, including underground storage tanks, leaking underground storage tanks, remediation response sites, or other petroleum or hazardous waste facilities. A mitigation measure has been included on what to do if contaminated sites are inadvertently discovered as part of the project construction. An emergency spill plan has been developed for use during the project.

A total of 132 underground storage tanks, 58 leaking underground storage tanks facilities, 9 remediation response sites and 82 additional areas with a history of contamination were identified to occur within the 100-foot analysis area along the total route.

Imperial Oil will ensure that all contractors have a spill prevention and clean-up plan to minimize potential for effects.

### **3.8.1 No Action Alternative**

There would be no additional risk of worker exposure to contaminated sites or hazardous waste from the no action alternative. There would be no direct, indirect, secondary, or cumulative impacts.

### **3.8.2 Proposed Action**

#### **3.8.2.1 Turnout Construction and Road Modifications**

The records search found no petroleum or hazardous waste facilities located within 100 feet of the turnout construction or modifications. There would be no impacts expected on petroleum or hazardous waste facilities due to turnout construction or modification. If contaminated soils / sites are unexpectedly encountered during construction, construction would cease immediately and a qualified hazardous material professional would be consulted to ensure compliance with applicable laws, rules, and regulations. As appropriate, the MDEQ, EPA, and the MDT would be contacted and consulted.

There is a slight risk of a vehicle accident involving the construction vehicles occurring that could cause a spill of diesel fuel, hydraulic liquids, or coolant. The contractor will implement standard operating procedures outlined in the emergency spill plan for handling these situations, which would minimize resulting effects on the environment.

### **3.8.2.2 Utility Relocations**

No petroleum or hazardous waste facilities were identified where utility work would affect them. No effects are expected to occur on petroleum or hazardous waste facilities from utility relocations. If contaminated soils / sites are unexpectedly encountered during construction, construction would cease immediately and a qualified hazardous material professional would be consulted to ensure compliance with applicable laws, rules, and regulations. As appropriate, the MDEQ, EPA, and the MDT would be contacted and consulted.

There is a slight risk of a vehicle accident involving the construction vehicles occurring that could cause a spill of diesel fuel, hydraulic liquids, or coolant. The contractor will implement the standard operating procedures outlined in the emergency spill plan for handling these situations, which would minimize resulting effects on the environment.

### **3.8.2.3 Traffic Structures**

No petroleum or hazardous waste facilities were identified where traffic structure work would affect them. There would be no effects expected on petroleum or hazardous waste facilities from work on traffic structures. There is a slight risk of a vehicle accident involving the construction vehicles occurring that could cause a spill of diesel fuel, hydraulic liquids, or coolant. The contractor will implement the standard operating procedures outlined in the emergency spill plan for handling these situations, which would minimize resulting effects on the environment.

### **3.8.2.4 Tree Trimming**

All tree trimming would occur above ground and poses no risk for contacting any potential petroleum or hazardous waste facilities. There is a slight risk of a vehicle accident involving the construction vehicles occurring that could cause a spill of diesel fuel, hydraulic liquids, or coolant. The contractor will implement the standard operating procedures outlined in the emergency spill plan for handling these situations, which would minimize resulting effects on the environment.

### **3.8.2.5 Module Transportation**

The modules would not contain any petroleum substances or hazardous materials in addition to those necessary to operate the vehicles and have minimal potential to cause a risk of spills.

An accident involving the transportation of modules would not pose a risk of contacting any existing, buried petroleum or hazardous waste sites.

There is a slight risk of a vehicle accident involving the transport vehicle occurring that could cause a spill of diesel fuel, hydraulic liquids, or coolant from the transportation equipment. Travel speeds are always below 30 miles per hour or slower, when necessary, for safe operation under certain road conditions. A key selection criteria for determining the transport company will be their past safety record and training. The transportation plan contains procedures for managing fuel spill situations, including an on-board spill response kit. It is expected that there would be minimal resulting impacts on the environment from accidental spills with implementation of the emergency response plan should a spill occur. The transportation plan also contains contingencies for dealing with adverse weather conditions to prevent accidents.

Imperial Oil will ensure that automotive petroleum product land spills greater than 25 gallons or spills of any volume to an aquatic resource would be reported to MDEQ and MDT. A qualified hazardous material consultant will be consulted to ensure compliance with applicable laws, rules, and regulations regarding clean-up of the spill.

### 3.8.2.6 Conclusion

The project does not involve contaminated or hazardous waste sites. The project poses a slight risk of a spill that would affect the environment, similar to current risks from vehicles using the roads. It is expected that there would be minimal resulting impacts on the environment with implementation of the emergency response plan should a spill occur.

### 3.8.2.7 Cumulative Impacts

Other road construction work, use of the highway, and transportation of goods add slight risks of spills of hazardous materials or petroleum products. Construction work planned by MDT, while it occurs, would add traffic to the highways. Both of these situations can increase the risk of spills, although the increase is slight, as is the added increase from the KMTP. As with the KMTP, construction projects, transportation companies, and the State of Montana have emergency response plans in place that would minimize environmental problems from nearly all accidental spills. On any roadway, at any time, a rare occurrence could be the spill of a large tanker of hazardous material or petroleum. While emergency response procedures would be followed in these circumstances, it is possible that short-term and long-term environmental effects could occur from such an accident.

## 3.9 Water Resources

Montana's surface water quality is monitored through the MDEQ's Water Quality Monitoring and Assessment program. This program reports on surface water quality conditions, and trends statewide, and assesses sources and severity of pollution problems. **Table 24** presents the number of perennial and intermittent stream crossings in the analysis area based on the United States Geological Survey (USGS) National Hydrography Dataset (NHD) (USGS 2009).

For the EA, wetland features within the analysis area were evaluated through a field review of ground disturbing activity locations or by using aerial photograph interpretation and the National Wetland Inventory. Once the growing season commences, additional field review by a wetland professional will be completed prior to any ground disturbing activities. Any activities identified that could adversely affect wetlands will be relocated, modified, or mitigated to avoid or minimize impacts.

**Table 24**  
**Streams Crossed by Module Transportation Route**

County	Intermittent	Perennial	Stream Crossings by County
Glacier	15	2	17
Lewis and Clark	52	20	72
Missoula	30	39	69
Pondera	8	9	17
Powell	11	9	20
Teton	14	4	18
Toole	4	0	4
<b>Total Crossings by Stream Type</b>	<b>134</b>	<b>83</b>	<b>217</b>

Source: USGS NHD 2009.

For the aerial imagery interpretation, USDA Farm Service Agency's National Agricultural Imagery Program (NAIP). NAIP imagery is photographed during the summer crop growing season, or "leaf on" enhancing the contrast between vegetation communities. Aerial imagery was overlaid with the proposed turnout and utility work to identify areas of potential surface disturbance. National Wetland Inventory (NWI) and NHD layers within the imagery supplemented wetland identification by indicating areas with potential wetlands and providing stream class (i.e., perennial, intermittent, etc.), and drainage patterns.

For all ground disturbing activities, wetland features were reviewed on aerial imagery by a wetland biologist with extensive image interpretation experience and compared to existing wetland mapping from the NWI and

stream network in the NHD. Image interpretation occurred along the entire route and included turnouts, road modifications, and utility work.

Floodplains within the analysis area were identified using the Federal Emergency Management Agency (FEMA) Map Service Center (FEMA 2009). Forty-three floodplain maps were downloaded and analyzed for areas. The route crosses 26 floodplains (**Table 25**).

**Table 25**  
**Floodplain Zones Crossed by the Analysis Area**

Road Name	FEMA Floodplain Zones							Total Number by Road
	A	A4	A6	AE	B	C	X	
Highway 200	9	--	--	1	--	--	--	<b>10</b>
Highway 287	2	--	--	--	--	--	--	<b>2</b>
Highway 89	1	1	1	--	1	3	--	<b>7</b>
Highway 93	1	--	--	1	--	--	1	<b>3</b>
Interstate 90 and Reserve Street	--	--	--	1	--	--	--	<b>1</b>
Santa Rita Road	2	--	--	--	--	1	--	<b>3</b>
<b>Total by Zone</b>	<b>15</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>4</b>	<b>1</b>	<b>26</b>

Zone A: Areas of 100-year flood; base flood elevations and flood hazard factors not determined.

Zone B: Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood.

Zone C: Areas of minimal flooding.

Zone A1 – A30: Areas of 100-year flood; base flood elevations and flood hazard factors determined.

Zone AE: Base flood elevations determined.

Zone X: Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year flood.

### 3.9.1 No Action Alternative

There would be no impact (direct, indirect, secondary, or cumulative) from the no action alternative on water resources.

### 3.9.2 Proposed Action

#### 3.9.2.1 Turnout Construction and Road Modifications

All turnout and road modification sites will have spill response kits available to address any accidental spills.

#### Wetlands

Turnouts and road modifications were reviewed in October in the field for visual evidence of wetlands, including connectivity to streams and irrigation and vegetation and turnout locations were adjusted at that time to avoid identifiable wetlands or wet areas.

In addition image interpretation was conducted on all of the turnouts as it shows vegetation during the growing season. This interpretation indicated there were potentially three wetlands that occur within 30 feet of proposed turnout construction locations (Highway 200 at MP 8.5 and 43.0-new, and Highway 12 at MP 20.3-existing).

All sites will be investigated and delineated (if they are wetlands) in the field during the growing season of 2010 and the location adjusted or mitigation applied to avoid impacts on wetlands if necessary.

#### Streams

Initially, the NHD was queried to identify potential streams and irrigation canals near turnouts and road modifications. All turnouts were then reviewed in the field and placed to avoid all streams, rivers, and

irrigation ditches. Construction of several turnouts will modify the drainage from the road or adjacent lands; however, existing drainage patterns will be maintained or improved if necessary. **Table 26** shows the distance to streams from turnouts and **Table 27** show the distance to streams from the road modifications generated with Geographic Information System (GIS) data. All new turnouts are at least 100 feet from streams or irrigation canals. No additional effect on water is expected from the turnouts and road modifications than is already occurring from the highways and adjacent land uses. The newly disturbed area from turnout construction is limited (see **Table 4**). Best Management Practices (BMPs) (detailed in the Environmental Mitigation and Coordination Measure for Aquatic Resources - **Appendix D**) would be used to control sediment and erosion according to the Storm Water Pollution Prevention Plan. A mitigation measure is included requiring disturbed areas to be revegetated to avoid sediment entering streams, irrigation ditches, or wetlands.

### Floodplains

Floodplains would not be affected by turnout construction or road modification because none of these activities are located in floodplains.

**Table 26**  
**Turnout Construction Distance to Streams**

Highway	Mile Post	Status	Type	Feet from Stream
12	1.0	Existing	Park	220
12	1.8	Existing	Night/Extended	295
12	6.9	New	Park	834
12	8.4	Existing	Park	416
12	15.4	Existing	Park	206
12	19.1	Existing	Park	95
12	20.3	Existing	Park	230
12	21.8	Existing	Clear	127
I-90	103.5	Existing	Park	759
200	12.1	New	Park	274
200	22.1	New	Park	327
200	35.2	Existing	Clear	203
200	36.8	New	Clear	1,020
200	40.2	Existing	Night/Extended	512
200	43.0	New	Clear	1,565
200	47.2	New	Clear	163
200	52.3	New	Clear	1,674
200	55.2	Existing	Park	342
200	57.7	Existing	Park	1,030
200	62.9	Existing	Night/Extended	137
200	67.5	Existing	Night/Extended	455
200	70.1	New	Clear	100

**Table 26**  
**Turnout Construction Distance to Streams**

Highway	Mile Post	Status	Type	Feet from Stream
200	75.0	Existing	Night/Extended	259
200	77.9	New	Clear	406
200	85.0	Existing	Park	158
200	92.1	Existing	Park	259
200	96.0	New	Clear	328
200	101.5	New	Clear	628
200	102.6	New	Clear	458
200	104.0	New	Clear	504
200	106.5	Existing	Night/Extended	677
Jct. 200/287	109.8	Existing	Park	265
287	24.1	New	Clear	1,072
287	28.1	New	Park	767
287	32.4	New	Clear	495
287	36.1	New	Clear	4,341
287	38.1	New	Night/Extended	145
287	40.5	Existing	Park	1,291
287	44.7	New	Clear	3,952
287	50.3	New	Park	4,179
287	54.7	New	Clear	2,823
287	57.5	New	Clear	2,702
287	61.4	New	Clear	853
287	63.6	New	Night/Extended	147



**Table 26**  
**Turnout Construction Distance to Streams**

Highway	Mile Post	Status	Type	Feet from Stream
89	50.6	New	Clear	420
89	54.8	New	Park	2,026
89	59.2	New	Clear	1,161
89	62.5	Existing	Park	2,821
89	64.9	New	Clear	1,279
89	66.1	New	Clear	1,097
89	68.3	New	Clear	1,090
89	70.0	New	Clear	1,751
89	71.2	New	Night/Extended	946
89	73.6	New	Clear	263
89	79.5	New	Night/Extended	1,988
44	6.6	New	Park	3,385
44	10.4	New	Clear	1,043
44	13.2	New	Night/Extended	2,108
358	6.4	New	Clear	3,179

**Table 26**  
**Turnout Construction Distance to Streams**

Highway	Mile Post	Status	Type	Feet from Stream
358	8.4	New	Clear	1,416
358	15.2	New	Clear	547
358	17.7	Existing	Park	1,447
358	22.5	New	Clear	1,705
358	25.0	New	Night/Extended	792
358	11.8	New	Park	1,338
358	19.9	New	Clear	1,134
358	3.0	New	MISC	227
213	2.5	New	Clear	5,614
213	5.0	New	Clear	7,933
214	0.3	New	Clear	4,314
214	2.9	New	Clear	3,844
214	4.6	New	Park	966
214	8.3	New	Clear	6,097
214	11.9	New	Clear	2,815
214	14.7	New	Clear	4,280
214	22.0	New	Park	2,357

**Table 27**  
**Road Modification Distance to Streams**

Location	MP	Status	Type	Feet to Stream
93	87.1	Existing	Corner	448
I-90/200	0.0	New	Corner	1,547
214	21.5	New	Corner	285
358	3.0	Existing	Corner	103
214 / Santa Rita Road	Approx 20.5 miles north of Cut Bank	Existing	Repair Road surface	Various (would not affect streams)
Santa Rita Road	16.8	Existing	Corner	1,342

### 3.9.2.2 Utility Relocations

All utility relocations sites will have spill response kits available to address any accidental spills.

### Wetlands

For utilities, aerial imagery review considered areas that exhibited characteristics consistent with wetlands including color, texture, distinctness from surrounding vegetation, lower gradient, correct topographic

placement, and hydrologic connectivity. Imagery interpretation identified six potential wetland areas within 100 feet of the proposed utility relocation areas. The six potential wetland areas near proposed utility relocation areas were field reviewed by a qualified wetland delineator in November and December 2009 to inspect connectivity, vegetation, and weed invasion. Two of the six locations appear to have wetland characteristics and need to be reviewed during the growing season.

To confirm the above analysis, each site will be visited during the growing season to determine if utility work is located in or near a wetland prior to any ground disturbing activity. Best Management Practices would be used to control sediment and erosion.

### **Streams**

The NHD was queried to identify potential streams and irrigation canals near utility relocations. Based on the analysis of the above information, minimal disturbance of the activity, and BMPs implemented, there would be no impacts on streams and irrigation canals from the utility work.

### **Floodplains**

Floodplains would not be affected by utility relocation work because no activities are located in floodplains.

#### **3.9.2.3 Traffic Structures**

Work on modifying traffic structures and signs will occur where existing structures exist within Lolo, Missoula, Lincoln, Valier, Choteau, and Cut Bank, Montana. None of these locations are within or adjacent to floodplains, wetlands, streams, or waterbodies and the modification work will not affect water quality.

No impacts are anticipated on surface water quality as there is no surface water located at or near proposed traffic structure modification sites.

Floodplains would not be affected by traffic structure modifications because no floodplains are located in these work areas.

#### **3.9.2.4 Tree Trimming**

Tree trimming would not affect water resources as none of the work would occur near any surface water features, including wetlands.

#### **3.9.2.5 Module Transportation**

The modules would not contain any petroleum substances or hazardous materials in addition to those necessary to operate the vehicles and therefore have limited potential to cause contamination of water resources.

Further, all push/pull trucks will be equipped with spill response kits. In case of an environmental spill (i.e., hydraulic oil, fuel, antifreeze etc.) from any of the trucks or support vehicles, the spill response kit will be used to contain and remove contaminants to minimize the potential contamination of water resources. In the event the transport crew cannot contain and sufficiently clean the spill area, spill response agencies will be contacted immediately when required (depending on the size of spill). Transport crews would be provided local emergency contact numbers. As appropriate, the MDEQ, EPA, and the MDT would be consulted.

#### **3.9.2.6 Conclusion**

The proposed project is not expected to affect water quality or water resources, including floodplains, streams, wetlands, or water bodies.

#### **3.9.2.7 Cumulative Impacts**

As there are not expected to be any impacts on water resources from any of the activities associated with the KMTP. Therefore, when considered in conjunction with other past, present, and future actions, there would be no cumulative impacts on water.

### 3.10 Threatened or Endangered Species

Listed threatened and endangered species, their critical habitat, and species proposed for listing with the potential to occur within the project area were evaluated through review of the Montana Natural Heritage Program's database and US Fish and Wildlife Service database (USFWS 2009). In addition, the USFWS biologist was consulted to assess any concerns the USFWS may have regarding the project (USFWS 2010), see Section 4.1.1.4. The threatened and endangered species and their habitat that is located near the project and the effects the entire project would have on identified species and habitat are summarized in **Table 28**.

For analyzing the potential impacts on listed or proposed species from light and noise disturbance, the following assumptions were made.

- Lights on traffic control personnel would be directed downward on work areas and not directed towards area outside of the work area.
- Light sources (in addition to typical vehicle lighting): auxiliary lighting on the side of modules and mobile light plants positioned on the side of the road or in trucks.
- When modules are parked during weekends, holidays, or inclement weather, light disturbance would be from battery powered lights on the parked module and traffic cones.
- During module transportation, noise and light disturbance from traffic control and modules would occur for a short-duration at any one turnout or traffic control location.
- With the exception of vehicle motors and light plants, there are no additional noise sources.

#### 3.10.1 No Action Alternative

The no action alternative would have no impact (direct, indirect, secondary, or cumulative) on any threatened or endangered species or critical habitat.

#### 3.10.2 Proposed Action

##### 3.10.2.1 Turnout Construction and Road Modifications

Threatened and endangered species, or their critical habitat, may occur within the region of the proposed disturbance areas. While turnout locations may occur within Canada lynx or grizzly bear habitat, the proposed activities would occur within areas of long-term disturbance. Given that these listed species are sensitive to disturbance, species would not rely on the areas within or adjacent to the highway or proposed disturbance areas for habitat. Although some species do travel across the road, these species would not rely on the proposed disturbance areas for habitat.

The Special Provisions "Environmental Mitigation and Coordination Measures for Bears" (**Appendix D**) will be attached to all construction contracts. Compliance with these provisions will help prevent grizzly bears from being attracted to the work areas or project area. The special provisions require all potential bear attractants to be removed or kept in a bear resistant container until it can be removed from the site.

Bull trout and bull trout Critical Habitat occur within numerous streams adjacent to the project area. Direct or indirect impacts would not occur to these streams as a result of proposed activities. The Special Provisions "Environmental Mitigation and Coordination Measures for Aquatic Resources" (**Appendix D**) will be attached to all construction contracts. In the event of an accident that may directly or indirectly impact a bull trout inhabited stream or bull trout Critical Habitat, the US Fish and Wildlife Service and MDT would be contacted immediately.

##### 3.10.2.2 Utility Relocations

There would be no impacts on listed or proposed threatened or endangered species from utility modifications (refer to **Table 28**). While utility relocation sites may occur within Canada lynx or grizzly bear habitat, the proposed activities would occur within areas of long-term disturbance. Given that these listed species are

sensitive to disturbance, species would not rely on the areas within or adjacent to the highway or proposed disturbance areas for habitat. Special provisions (Appendix D) will be attached to all contracts.

### **3.10.2.3 Traffic Structures**

Work on modifying traffic structures and signs will occur where existing structures exist within Lolo, Missoula, Lincoln, Choteau, Valier, and Cut Bank. Although threatened and endangered species occur within these counties, none of the work would affect listed or proposed species or their critical habitat.

### **3.10.2.4 Tree Trimming**

There would be no impacts on listed or proposed threatened or endangered species from tree trimming.

### **3.10.2.5 Module Transportation**

Due to the slow speed that the modules and empty return trailers would move, there would be no additional impacts on listed or proposed threatened or endangered species from transportation of the modules. Special provisions (Appendix D) will be attached to the hauling contracts.

There is the potential that noise and light disturbance from nighttime traffic control and module movement that occurs adjacent to riparian corridors may temporarily disrupt grizzly bear dispersal. Noise and light disturbance associated with the module units using a turnout area would occur for only a brief period of time at any given turnout area along the route. Lighting to conduct night time activities will be controlled and directed to minimize impacts on wildlife where ever possible as long as it does not compromise safety of the workers and traffic. While grizzly bears may be temporarily deterred from using riparian corridors adjacent to actively used turnouts, the disturbance would be for a short period and would be only minimally more disruptive than the normal highway traffic light and noise disturbance.

Extended parking turnouts would require transportation vehicles to be parked within the turnout from approximately 5:00 am to 11:00 pm. Disturbance associated with the extended parking would include vehicle motor noise and auxiliary lighting on the side of modules while the modules are prepped to be transported at night. The disturbances associated with the turnout use would be temporary and within the range of disturbance associated with average highway use. If this is a temporary deterrent to grizzly bear movement, the grizzly bear would either pick another course of travel or wait and resume travel and normal behaviors as soon as the disturbance ceased.

Noise and lights associated with traffic control and module transportation may temporarily deter some grizzly bear behaviors; however, the lights and noise would not adversely affect grizzly bears.

### **3.10.2.6 Conclusion**

Bull trout, bull trout Critical Habitat, Canada lynx, Canada lynx Critical Habitat, and grizzly bears are the only threatened or endangered species and/or habitats that occur in the analysis area (**Table 28**).

Streams and wetlands, which are habitats for bull trout are not expected to be affected. Therefore, there would be no effect on bull trout or bull trout Critical Habitat.

Canada lynx are wide ranging species and generally avoid highways. The proposed activities are located adjacent to existing highways and lynx do not rely on areas within or adjacent to highways and disturbance areas for habitat. There would be no effect on Canada lynx or Canada lynx Critical Habitat.

Construction would not occur at night and therefore there would be no impacts from lights on grizzly bears. Module transportation would not occur during the evening, the prime period for grizzly bear movement. Night time light use for traffic control would be short-term and would have minimal impacts on grizzly bear movement. Module layovers on weekends, holidays, and due to inclement weather would have minimal stationary lighting for safety. This lighting would have minimal impacts on bears. The project may affect, but is not likely to adversely affect grizzly bears. This project does not include any federal funds, therefore consultation with the USFWS is not required.

The project would have no effect on any other threatened or endangered species.

**Table 28** summarizes the threatened and endangered species and their habitat and the effects the entire project would have on them.

**Table 28**  
**Threatened and Endangered Species Identified to Potentially Occur within the Project Area**

Scientific Name	Common Name	Status	Counties With Potential Occurrence*	Potential to be Impacted by Proposed Activities
<i>Salvelinus confluentus</i>	Bull Trout	Threatened	Deer Lodge, Glacier, Granite, Lewis and Clark, Missoula, Powell, Silver Bow	<b>No effect:</b> While waterways adjacent to the project areas may be occupied by bull trout, none of the proposed activities would impact waterways or water quality; therefore, the proposed project would have no impact on bull trout. Bull trout and bull trout habitat occur within numerous streams adjacent to the project area. Direct or indirect impacts would not occur to these streams as a result of proposed activities. The Special Provisions “Environmental Mitigation and Coordination Measures for Aquatic Resources” ( <b>Appendix D</b> ) will be attached to all construction contracts. In the event of an accident that may directly or indirectly impact a bull trout inhabited stream or bull trout Critical Habitat, the USFWS would be contacted immediately.
<i>Salvelinus confluentus</i>	Bull Trout Critical Habitat	N/A	Deer Lodge, Glacier, Granite, Lewis and Clark, Missoula, Powell, Silver Bow	<b>No effect:</b> There would be no effect on bull trout Critical Habitat.
<i>Ursus arctos horribilis</i>	Grizzly Bear	Threatened	Glacier, Lewis and Clark, Missoula, Pondera, Powell, Teton	<b>May affect but not likely to adversely affect:</b> Transient grizzly bears may pass through the project areas; however, the project areas are located adjacent to areas with a high level of regular disturbance, and given that grizzly bears are sensitive to disturbance, it is unlikely that grizzly bears would utilize the project areas for anything other than transient passage. The Special Provisions “Environmental Mitigation and Coordination Measures for Bears” ( <b>Appendix D</b> ) will be attached to all construction contracts. Compliance with these provisions will ensure that grizzly bears are not attracted to the work areas or project area. The special provisions basically require all potential bear attractants to be removed from the area or kept in a bear resistant container until it can be removed from the site. Lighting to conduct night time activities will be controlled and directed to minimize impacts on the public and wildlife wherever possible as long as it does not compromise safety of the workers.
<i>Lynx canadensis</i>	Canada Lynx	Threatened	Glacier, Granite, Jefferson, Lewis and Clark, Missoula, Pondera, Powell, Teton	<b>No effect:</b> There would be no effect on Canada lynx. The proposed activities would result in only minimal ground disturbing activities within lynx distribution areas and would not impact snowshoe hare habitat. In addition, the proposed activities would not result in an increase in over-the-snow routes within lynx habitat.

**Table 28**  
**Threatened and Endangered Species Identified to Potentially Occur within the Project Area**

Scientific Name	Common Name	Status	Counties With Potential Occurrence*	Potential to be Impacted by Proposed Activities
<i>Lynx canadensis</i>	Canada Lynx Critical Habitat	N/A	Glacier, Granite, Jefferson, Lewis and Clark, Missoula, Pondera, Powell, Teton	<b>No effect:</b> There would be no effect on Canada lynx Critical Habitat.
<i>Spiranthes diluvialis</i>	Ute Ladies Tresses	Threatened	Jefferson	<b>No effect:</b> The proposed activities would not impact Ute ladies tresses plants, as all known occurrences in Montana have occurred south of Helena within the Bozeman region (well outside any of the proposed project areas) (MNHP 2010a).
<i>Mustela nigripes</i>	Black-footed Ferret	Endangered	Jefferson, Lewis and Clark, Toole	<b>No effect:</b> The proposed activities or project areas would not occur within known black-footed ferret distribution or within black-footed ferret habitat (within or adjacent to prairie dog complexes).
<i>Howellia aquatilis</i>	Water Howellia	Threatened	Missoula	<b>No effect:</b> The proposed activities would not impact water howellia plants as all known occurrences in Montana have occurred within the Swan Valley and none of the proposed project areas occur within this valley (MNHP 2010b).
<i>Coccyzus americanus</i>	Yellow-billed Cuckoo	Candidate	Missoula	<b>No effect:</b> The proposed activities would not impact yellow-billed cuckoos as disturbance activities would not occur within their Montana distribution area. Summer distribution occurs within the southern half of the state and does not occur within regions of the project areas (MNHP 2010c).
<i>Charadrius melodus</i>	Piping Plover	Threatened	Pondera	<b>No effect:</b> The proposed activities would not impact piping plovers or their habitat. Piping plover habitat occurs within unvegetated sand or pebble beaches on shorelines or islands in freshwater and saline wetlands. Open shorelines and sandbars of rivers and large reservoirs are also preferred (MNHP 2010d).

\* USFWS, Ecological Services. 2009.

While gray wolves (*Canis lupus*) are not listed as threatened or endangered, it is possible that they may be relisted in the future. US Fish and Wildlife Service Biologist, Scott Jackson, was consulted regarding the proposed activities and their impacts on wolves (USFWS 2010). Mr. Jackson indicated that he did not feel the project presented any concerns for wolves and in the event the wolves were relisted, the project would have a 'no effect' determination for wolves.

### 3.10.2.7 Cumulative Impacts

There would be no impacts on bull trout, bull trout Critical Habitat, Canada lynx, or Canada lynx Critical Habitat from any of the activities associated with the KMTP. Therefore, when considered in conjunction with other past, present, and future actions, there would be no cumulative impacts.

Grizzly bears may be minimally affected by module transportation. This minimal effect, when considered in conjunction with impacts from other past, present, and reasonably foreseeable projects will result in minimal overall impacts on grizzly bears. Most past, present, and reasonably foreseeable actions listed in Section 3.2

will involve permitting processes, and associated consultation with the USFWS, when applicable, that will require analysis of impacts and mitigation measures to avoid, minimize, and mitigate potential adverse affect. Therefore, when considered in conjunction with other past, present, and future actions, there would be no significant cumulative impacts.

### **3.11 Wildlife and Fisheries**

Montana provides habitat for a diverse set of both game and nongame wildlife species. Big game species include mule and white-tailed deer, elk, moose, antelope, bighorn sheep, mountain goat, mountain lions, and black bears. Montana also has a diversity of nongame animals with a wide range of small mammals, bats and predator species such as wolves, coyotes and fox. Intermontane valleys and foothills in the Rocky Mountain Province provide winter range for mule deer, white-tailed deer, and elk.

The variety of habitats available within Montana provides nesting and wintering habitat for a wide range of birds including raptors, waterfowl, shore birds, grassland and sagebrush obligate species, and a variety of migratory birds. Raptors such as hawks, owls, falcons, and eagles are found in all habitats throughout the state.

Montana's 80 species of fish are adapted to both cold waters of western Montana and warmer waters of the eastern part of the state. Cold-water fish need the clean oxygenated gravel of high mountain streams to spawn and are most common within the western portion of the state. Salmonid fish (i.e., trout, salmon, grayling, and whitefish) are the dominant species in these cold lakes and streams. Warm water fisheries are most common within the grasslands in the eastern portion of the state. Some of the rivers and streams in this region, particularly the warm water sections of the Yellowstone and Missouri rivers in eastern Montana, harbor the most diverse communities of fish in the state. The documented occurrence of state sensitive species was determined through a query of the Montana Natural Heritage Program. The species of concern documented to occur within 100 feet of the module transportation route where direct effects from ground disturbing activities could occur are presented in **Appendix F**. Effects from noise or human presence could extend beyond 100 feet. Effects from noise beyond 100 feet are discussed under the activities below. Appendix F includes the Montana Species of Concern with habitat in the counties where module transportation would occur.

#### **3.11.1 No Action Alternative**

There would be no impact (direct, indirect, secondary, or cumulative) on wildlife or fisheries from the no action alternative.

#### **3.11.2 Proposed Action**

##### **3.11.2.1 Turnout Construction and Road Modifications**

Road modifications would impact a small area of potential habitat relative to available habitat in adjacent areas. The proposed activities would occur within areas of high levels of previous disturbance. Proposed road modifications are not expected to affect streams or waterways; therefore, there would be no impacts on fish or their habitat. The Bald and Golden Eagle Protection Act prohibits "taking" eagles, including disturbing<sup>3</sup> them. Noise could disturb eagles. The USFWS National Bald Eagle Management Guidelines (USFWS 2007) indicate that 1/2 mile is an appropriate distance to avoid impacts on eagles from "blasting and other loud, intermittent noises." Although the project would not include blasting and does not include similar noises, a 1/2 mile analysis area was used to ensure compliance with the guidelines. Although NRIS did report sitings of golden eagle nests along the module haul route, none were within 1/2 mile of a turnout construction area.

---

3 For the purposes of the bald eagle management guidelines, "disturb" means to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle, 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior."

The Montana Natural Heritage Program Point Observation Database (POD) was queried to identify all recorded bald eagle nest sites known to occur within 1 mile of the Kearsarge proposed route. Of the nest sites identified, those that have been active within the last 10 years were used to identify activities that might need mitigation. For the analysis, a distance of 1/2 mile from an eagle nest observed within the last 10 years was used. There was one nest, located 1,800 feet from the Highway 200 located at MP 8.6.

To avoid impacts on eagles, construction will not be allowed before August 1 at turnout locations with active nests within 1/2 mile. It is anticipated that this mitigation will avoid impacts on nesting eagles. If active bald or golden eagle nests are observed within 1/2 mile of disturbance areas during the nesting season, the USFWS will be contacted and consulted in an attempt to avoid impacts to nesting eagles.

No impacts are expected to any fish, wildlife, or Montana Species of Concern from turnout construction or road modifications.

### 3.11.2.2 Utility Relocations

While species and their habitat may occur within the region of the proposed utility relocations, the activities would not impact these species. Disturbance associated to utility relocation activities would impact a small area of potential habitat relative to available habitat in adjacent areas. In addition, the proposed activities would occur within areas of high levels of disturbance; therefore, these areas would generally be avoided by most wildlife species. All overhead utility structures would be constructed in compliance with raptor safe guidelines (APLIC 1996). Proposed utility relocations would not impact streams or waterways; therefore, impacts on fish or their habitat are not expected. No impacts are expected to any fish, wildlife, or Montana Species of Concern from utility relocations.

The same method was used for utility crossing to determine where active eagle nests may be located as described in Section 3.11.2.1 (see **Table 29**). To avoid impacts on eagles, construction will not be allowed after January 1 and prior to August 1 at utility relocations with active nests within 1/2 mile. It is anticipated that this mitigation will avoid impacts on nesting eagles. If active bald or golden eagle nests are observed within 1/2 mile of disturbance areas during the nesting season, the USFWS will be contacted and consulted in an attempt to avoid impacts to nesting eagles.

**Table 29**  
**Bald Eagle Nests within 1/2 Mile of a Utility Crossing**

Highway	Nest Location	Feet from Nest	Utility	Crossing Number
93	Hwy 93 MM 85 + 0708	2,341	NWE - M	10
93	Hwy 93 MM 85 + 0708	2,102	NWE - M	11
93	Hwy 93 MM 85 + 0710	2,301	NWE - M	10
93	Hwy 93 MM 85 + 0710	1,983	NWE - M	11
93	Hwy 93 MM 85 + 2222	1,812	NWE - M	11
93	Hwy 93 MM 85 + 2222	2,290	NWE - M	12
93	Hwy 93 MM 89 + 4309	1,207	Qwest	Location 9
93	Hwy 93 MM 89 + 4309	2,494	NWE - T	1
93	Hwy 93 MM 89 + 4309	2,244	BC - S	B15
93	Hwy 93 MM 89 + 4309	2,244	NWE - M	25
200	Hwy 200 MM 8 + 5097	1,502	MEC - 200	X19
200	Hwy 200 MM 8 + 5097	2,419	MEC - 200	X20
200	Hwy 200 MM 10 + 0305	2,111	MEC - 200	X21
200	Hwy 200 MM 35 + 3677	452	MEC - 200	X51
200	Hwy 200 MM 35 + 5182	2,131	MEC - 200	X51



### **3.11.2.3 Tree Trimming**

There would be no impacts on fish, wildlife, or Montana Species of Concern from tree trimming. Plans are to trim trees outside of the nesting season (April 30<sup>th</sup> to August 16<sup>th</sup>). In the event that tree trimming is required to occur during the nesting season, branches will be examined for the presence of active nests and trees with active nests will not be trimmed until the completion of the nesting season so no impacts on breeding birds are anticipated.

### **3.11.2.4 Module Transportation**

Due to the slow speed that the modules would travel, there would be fewer impacts on wildlife species from transportation of the modules than normal traffic. Returning trailers would travel mostly on the interstate highway system at a maximum speed of 50 miles per hour, slower than the posted 75 mile per hour speed. Impacts on wildlife from returning trailers are not expected to be substantially different from normal traffic. No impacts are expected to any fish, wildlife, or Montana Species of Concern from module transport or return trailers.

### **3.11.2.5 Conclusion**

The project is not expected to have impacts on fish, wildlife, or Montana Species of Concern, or habitat that is vital to their life cycle. No breeding habitat, wintering habitat, streams or wetlands would be adversely affected by proposed activities. The proposed activities are located adjacent to existing highways with moderate to high levels of average annual daily traffic (see **Table 12**) so it is unlikely that species rely on areas within or adjacent to the disturbance areas. Mitigation has been developed to avoid impacts during nesting seasons.

### **3.11.2.6 Cumulative Impacts**

The project is not expected to have impacts on fish, wildlife, or Montana Species of Concern, or habitat that is vital to their life cycle. Therefore, when considered in conjunction with other past, present, and future actions, there would be no cumulative impacts.

## **3.12 Prime Farmlands**

### **3.12.1 No Action Alternative**

There would be no impact (direct, indirect, secondary, or cumulative) on farmlands from the no action alternative.

### **3.12.2 Proposed Action**

Several types of recognized farmlands are located adjacent to the proposed route and they include: prime farmland, farmland of local importance, farmland of statewide importance, and irrigated prime farmland (NRCS 2009). Prime farmland, as defined by the U.S. Department of Agriculture, is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses (NRCS 2009). In some areas, land that does not meet the criteria for prime or unique farmland is considered to be "farmland of statewide importance" for the production of food, feed, fiber, forage, and oilseed crops. The criteria for defining and delineating farmland of statewide importance are determined by the appropriate State agencies. In some areas that are not identified as having national or statewide importance, land is considered to be "farmland of local importance" for the production of food, feed, fiber, forage, and oilseed crops. This farmland is identified by the appropriate local agencies. Important farmlands consist of prime farmland, unique farmland, and farmland of statewide or local importance.

#### **3.12.2.1 Turnout Construction and Road Modifications**

Land and soil adjacent to the highways and roads where turnouts would be constructed or modified have long been affected by the highway and no longer contain the same soil types of the surrounding lands; therefore, they would not be considered prime farmland, even if crop fields are directly adjacent to the road. Construction of the new turnouts or improvement of existing turnouts would be designed to maintain

adequate drainage to avoid runoff from the turnouts so the runoff does not affect adjacent prime farmland. There would be no direct or indirect impacts on adjacent prime farmland. No additional farmlands will be converted to a transportation use.

### **3.12.2.2 Utility Relocations**

Utility relocation work would occur within the MDT ROWs or adjacent to existing utility facilities and would not affect farmland.

### **3.12.2.3 Traffic Structures**

Work on modifying traffic structures and signs will occur where existing structures exist within Lolo, Missoula, Lincoln, Valier, Choteau, and Cut Bank. None of these locations are within farmland. Traffic structure and sign modifications would have no effects on farmlands.

### **3.12.2.4 Tree Trimming**

Tree trimming would not affect adjacent farmland.

### **3.12.2.5 Module Transportation**

As transportation of the modules will occur within the existing MDT ROWs, the transportation of modules and empty trailer return would not affect adjacent farmland.

### **3.12.2.6 Conclusion**

The project would not result in impacts to prime farmlands or farmlands of local importance. The transportation along the proposed routes would not impact adjacent farmlands.

### **3.12.2.7 Cumulative Impacts**

KMTP construction and transportation would contribute minor cumulative impacts on air quality and noise when combined with other related actions listed in Section 3.2 which would also include additional emissions and particulate matter, and noise. The cumulative impacts would be short-term and would not exceed air quality and noise regulations.

## **3.13 Mitigation to Avoid Impacts**

Imperial Oil will ensure that the following measures will be included to minimize impacts from the proposed activities.

### **Turnout Construction and Road Modifications**

Turnout and road modifications include construction of new turnouts, upgrades to existing turnouts, road surface repairs, and minor amounts of gravel infill at five corners or curves to allow adequate turning radius for the load and other long vehicles.

- Turnouts were located to avoid impacts on historical resources.
- Blackfeet cultural monitors will be invited to observe ground disturbing work occurring on the Blackfeet Reservation.
- Traffic control will be used to maintain worker and traveler safety when working near the road way as required.
- Most construction activities would occur during daylight hours to maintain worker and traffic safety.
- Equipment used will be required to meet EPA emission standards and county noise ordinances.
- New turnouts will be located a minimum of approximately 100 feet away from streams, irrigation canals, or wetlands (potential presence of wetlands will be determined by a field review prior to construction).
- New turnouts will be visited during the growing season prior to any ground disturbing activity to determine if wetlands are located within or near a proposed construction site.

- If wetlands are determined to be near a construction site, all practicable means will be used to avoid adverse impacts to those wetlands. If a wetland is determined to be within a proposed construction site, the site location will be moved to entirely avoid the wetland.
- A Storm Water Pollution Prevention Plan (SWPPP) will be prepared and used during all activities which require MPDES or NPDES permits such as road modification construction. The SWPPP structures will be maintained and monitored until all site re-vegetation goals have been met.
- Best management practices (BMPs) to control erosion and sediment will be used to prevent potential impacts on water quality and air quality.
- Construction sites will be graded to maintain existing drainage patterns.
- Topsoil will be salvaged and replaced at construction locations.
- To reduce the spread and establishment of noxious weeds and to re-establish permanent vegetation, Imperial Oil will ensure disturbed areas will be seeded with desirable plant species as soon as practicable after construction
- Seed mix will be certified weed free to limit the spread of noxious weeds.
- The contract provision “Environmental Mitigation and Coordination Measure for Aquatic Resources” (**Appendix D**) will be attached to construction contracts.
- The contract provision “Environmental Mitigation and Coordination Measure for Bears” (**Appendix D**) will be attached to construction contracts.
- In the unlikely event of an accident that may directly or indirectly impact a bull trout inhabited stream or bull trout Critical Habitat, the US Fish and Wildlife Service and MDT would be contacted immediately.
- If historic or cultural material or human remains are discovered during ground disturbing activities, construction will cease immediately and a qualified archaeologist or historian will be consulted to evaluate the significance of the artifacts. As appropriate, the State Historic Preservation Office (SHPO), or Tribal Historic Preservation Office (THPO) and the MDT will be consulted. In the case of discovery of human remains, the first contact will be the local county coroner’s office.
- If contaminated soils/sites are unexpectedly encountered during construction, construction will cease immediately and a qualified hazardous material professional will be consulted to ensure compliance with applicable laws, rules, and regulations. As appropriate, the Montana Department of Environmental Quality (MDEQ), EPA, Blackfeet Environmental Office, and the MDT will be contacted and consulted.
- Imperial Oil will ensure that all contractors have a spill prevention and clean-up plan to minimize potential for effects.
- Construction materials will be provided from State approved existing gravel sources and no new resource exploration is required.
- Lighting to conduct night time activities will be controlled and directed to minimize impacts on the public and wildlife where ever possible as long as it does not compromise safety of the workers and traffic.
- Necessary concurrence and/or approval will be secured from the USFS prior to constructing or modifying turnouts within USFS Land.
- To avoid impacts on eagles, construction will not be allowed after January 1 and prior to August 1 at turnout locations with active nests within ½ mile.

#### Utility Relocations

- Imperial Oil will ensure proper and full notice to all affected customers.

- Imperial Oil will be responsible for coordinating the utility relocations to minimize disruption to affected customers and the traveling public and where practicable coordinate the timing of the utility relocations to facilitate combined efforts between individual utility companies.
- A traffic control plan will be instituted to provide for safety of workers and the public.
- Blackfeet cultural monitors will be invited to observe ground disturbing work occurring on the Blackfeet Reservation.
- Near the Lolo Trail along Highway 12, no excavation will occur beyond the original pole location on all utilities requiring pole replacements.
- Imperial Oil will ensure that the Missoula Electric Cooperative (MEC) will prepare a Revegetation Plan for submittal to and approval by the Missoula County Weed District, see the County webpage (<http://missoulaeduplace.org/>).
- Each site will be visited during the growing season, prior to any ground disturbing activities to determine wetlands are located on or near proposed utility work.
- If wetlands are determined to be on or near a utility work site, all practicable means will be used to avoid adverse impacts to those wetlands,
- The contract provision “Environmental Mitigation and Coordination Measures for Aquatic Resources” (**Appendix D**) will be attached to construction contracts.
- The contract provision “Environmental Mitigation and Coordination Measure for Bears” (**Appendix D**) will be attached to construction contracts.
- Equipment used will be required to meet EPA emission standards and county noise ordinances.
- All overhead utility structures will be constructed in compliance with raptor safe guidelines (APLIC 1996).
- In the event of an accident that may directly or indirectly impact a bull trout inhabited stream or bull trout Critical Habitat, the US Fish and Wildlife Service would be contacted immediately.
- If historic or cultural material or human remains are discovered during ground disturbing activities, construction will cease immediately and a qualified archaeologist or historian will be consulted to evaluate the significance of the artifacts. As appropriate, SHPO, THPO, and the MDT will be consulted. In the case of discovery of human remains, the first contact will be the local county coroner’s office.
- Imperial Oil will ensure that all contractors have a spill prevention and clean-up plan to minimize potential for effects.
- If contaminated soils / sites are unexpectedly encountered during construction, construction will cease immediately and a qualified hazardous material professional will be consulted to ensure compliance with applicable laws, rules, and regulations. As appropriate, the MDEQ, EPA, Blackfeet Environmental Office, and the MDT will be contacted and consulted.
- Lighting to conduct night time activities will be controlled and directed to minimize impacts on the public and wildlife where ever possible as long as it does not compromise safety of the workers and traffic.
- To avoid impacts on eagles, construction will not be allowed after January 1 and prior to August 1 at utility locations with active nests within 1/2 mile.
- Necessary concurrence and/or approval will be secured from the USFS prior to conducting any utility relocations within USFS Land.

### **Traffic Structures**

- A traffic control plan will be instituted to provide for safety of workers and the public.

- Equipment used will be required to meet EPA emission standards and county noise ordinances.
- Lighting to conduct night time activities will be controlled and directed to minimize impacts on the public and wildlife where ever possible as long as it does not compromise safety of the workers and traffic.

### **Tree Trimming**

- Equipment will be required to meet EPA emission standards.
- Tree trimming conducted between April 30<sup>th</sup> and August 16<sup>th</sup> will be inspected for nesting migratory birds. If occupied nests are found, branches will not be removed until after the nest is vacated.

### **Module Transport**

- To minimize traffic delays and to meet the 10-minute rule, Imperial Oil will ensure module transportation activities conform to the Montana Transportation Plan (MTP), which is available for public review on the MDT website.
- To minimize traffic delays and meet the 10-minute rule, additional turnouts will be constructed and some existing turnouts will be modified.
- To minimize traffic delays and to ensure compliance with the 10-minute rule, peak traffic volumes were considered in potential delay calculations.
- To minimize traffic delays in towns and cities, traffic control plans with detours have been developed.
- Movement from Lolo Pass to just north of Valier will be done at night to minimize impacts on the public.
- Hauling will not occur on weekends or Federal or State holidays. The hauling schedule will consider other uses of the route, avoiding periods that coincide with commuters, school buses, and planned community events.
- Specific traffic management strategies were developed to address other oversized loads using the route at the same time, including farming equipment.
- The escort vehicle will ensure that turnouts are not occupied before the module moves from a parking turnout, in order to ensure that the movement is not relying on an occupied turnout to meet the 10-minute rule.
- Night / extended parking turnouts will have signage or be controlled to ensure they are not occupied by unattended vehicles when they are needed for parking.
- Trucks used for hauling will be required to meet EPA emission standards.
- Transport vehicles will be escorted by law enforcement to advise of approaching emergency vehicles.
- 2-way communication systems will be used.
- An emergency response plan has been developed.
- Lighting to conduct night time activities will be controlled and directed to minimize impacts on the public and wildlife where ever possible as long as it does not compromise safety of the workers and traffic.
- Imperial Oil will ensure that all contractors have a spill prevention and clean-up plan to minimize potential for effects.
- Imperial Oil will ensure that automotive petroleum product land spills greater than 25 gallons or spills of any volume to an aquatic resource would be reported to the appropriate state, federal, and/or tribal authority, and MDT. A qualified hazardous material consultant will be consulted to ensure compliance with applicable laws, rules, and regulations regarding clean-up of the spill.
- Imperial Oil will establish a website available to the public with an updated module transportation schedule.

- Imperial Oil will coordinate with MDT to ensure module movements are scheduled to minimize interference with planned construction projects along the route.
- The transporter will access a notification database on the internet that contains information on other oversized loads the may be encountered during transport.

## 4.0 CONSULTATION

### 4.1 Consultation Process

Imperial Oil has engaged in a consultation program to inform and obtain feedback from county officials and members of the public along the module transportation route. This includes both the module transportation and empty trailer return routes.

The objective of the consultation process is to provide up-to-date information to interested parties and gather feedback. The consultation process started in Montana in September 2009. A list of those entities contacted is shown in **Table 30**.

**Table 30**  
**Consultation Meetings**

<b>Date / Time</b>	<b>Entities / County / Location</b>	<b>Attendees</b>	
Sept. 22, 09 10:30 am	Montana Association of Counties AGM Helena		
	Yellowstone County	John Ostlund	
	Pondera County	Joe Christiaens	
	Sweet Grass County	Phil Hathaway	
	Richland County	Don Stepler	
	Carter County	Bill Loehding	
	Gallatin County	Bill Murdock	
	Musselshell County	Larry Lekse	
	Liberty County (MWCA)	Jim Ghekierre	
	Lewis and Clark County (MACRS)	Eric Griffin	
Rosebud County (MACRS)	Wayne Buck		
Sept. 22, 09 1:00 pm	Montana Association of Counties (Group of Seven Counties) Helena		
	Glacier County	Ron Rides at the Door	Commissioner
	Fergus County	John Jenson	Commissioner
	Glacier County	Michael DesRosier	Commissioner
	Glacier County	Tony Sitzmann	Commissioner
	Toole County	Ben Ober	Commissioner
	Toole County	Allan Underdal	Commissioner
	Toole County	Dave Miller	Commissioner
	Lewis and Clark County	Mike Murray	Commissioner
	Lewis and Clark County	Eric Griffin	Public Works Director
	Lewis and Clark County	Andy Hunthausen	Commissioner
	Missoula County	Jean Curtiss	Commissioner
	Pondera County	Joe Christiaens	Commissioner
	Pondera County	Cynthia Johnson	Commissioner
	Pondera County	Sandra Broesder	Commissioner
Powell County	Donna Young	Commissioner	
Powell County	Rem Mannix	Commissioner	
Powell County	Cele Pohle	Commissioner	

**Table 30  
Consultation Meetings**

<b>Date / Time</b>	<b>Entities / County / Location</b>	<b>Attendees</b>	
	Teton County	Jim Hodgskiss	Commissioner
	Teton County	Joe Dellwo	Commissioner
	Teton County	Arnie Gettel	Commissioner
Sep 23, 09 1:00 pm	Missoula County / Missoula	Bill Carey	Commissioner
	Missoula County	Michele Landquist	Commissioner
	City of Missoula	Dale Bickell	City, Chief Administrative Officer
	Missoula County	Mike McMeekin	Sheriff and Coroner
Sept 25, 09 1:00 pm	Lewis and Clark County / Helena	Mike Murray	Commissioner
	Lewis and Clark County	Derek Brown	Commissioner
Nov 12, 09 9:00 am	City of Cut Bank	Jim Suta	City Superintendent
Nov 12, 09 12:30 pm	City of Valier	Jackie Sheble	Clerk / Treasurer
Nov 12, 09 3:00 pm	City of Choteau	Jodi Rogers	Finance Officer
Nov 13, 09 9:00 am	Lewis and Clark County / Augusta	Eric Griffin	Public Works Director
Nov 13, 09 11:00 am	Augusta	Andy Hunthausen	Commissioner
	Lewis and Clark County	Eric Griffin	Public Works Director
	Lewis and Clark County	Mike Murray	Commissioner
	Lewis and Clark County	Deputy Sheriff	Deputy Sheriff
		23 members	Public
Nov 24, 09 10:00 am	Powell County Court House Deer Lodge	Ralph "Rem" Mannix	Commissioner
	Powell County	Donna Young	Commissioner
	Powell County	Cele Pohle	Commissioner
	Powell County	Mike Grey	Under Sheriff
	Powell County	Duane Hoxworth	Road Superintendent
Nov 24, 09 02:00 pm	Granite County Court House Phillipsburg	Maureen Conner	Commissioner
	Granite County	Clifford Nelson	Commissioner
	Granite County	Mike Kahoe	Administrative Assistant
Nov 24, 09 03:00 pm	Anaconda - Deer Lodge County Court House Anaconda	John Sullivan	Chief of Law Enforcement
Nov 24 04:30 pm	Butte – Silver Bow County Court House Butte	Dave Cunningham	Operations Manager - Services



**Table 30  
Consultation Meetings**

Date / Time	Entities / County / Location	Attendees	
			Division
Nov 25, 09 08:00 am	Toole County Court House Shelby	Allan Underdal	Commissioner (Chair)
	Toole County	Dave Miller	Commissioner
	Toole County	Donna Matoon	Sheriff
	Toole County	James Midboe	Road Department, supervisor
	Toole County	Val Moench	Road Department, office manager
Nov 25, 09 10:00 am	Pondera County Court House Conrad	Joe Christiaens	Commissioner
	Pondera County	Sandra J. Broesder	Commissioner
	Pondera County	Cynthia Johnson	Commissioner
	Pondera County	Janice Hoppes	Clerk and Recorder
	Pondera County	Thomas K. Miller	Sheriff / Coroner
Nov 25, 09 02:45 pm	Cascade County Annex Great Falls	Joe Briggs	Commissioner
	Cascade County	Bill Salina	Commissioner
Nov 30, 09 11:00 am	Montana Highway Patrol Missoula Office	Capt. Tom Hamilton	District 1 Commander
	Montana Highway Patrol	Shane Grimes	Patrolman
Nov 30, 09 1:00 pm	Missoula County Court House Missoula	Bill Carey	Commissioner (2009 Chair)
	Missoula County	Jean Curtiss	Commissioner
	Missoula County	Jerry Grego	Under Sheriff
	Missoula County	Greg Amundsen	Police Representative
	City of Missoula	Steve King	City Public works director
	City of Missoula	Kevin Slovarp	City Engineer
	City of Missoula	Rick Larsen	City Communication and Traffic Signal Shop
Nov 30, 09 7:00 pm	Lewis and Clark County Blackfoot Valley Comm. Council Lincoln	Jim Paris	BVCC chairman
	Lewis and Clark County	Andy Hunthausen	Commissioner Lewis and Clark
	Lewis and Clark County	Eric Griffin	County Public Works Director Lewis and Clark
	Lewis and Clark County	Mike Murray	Commissioner Lewis and Clark
	Lewis and Clark County	4 members	Public
Dec 1, 09	Glacier County Court House	Michael DesRosier	Commissioner

**Table 30  
Consultation Meetings**

<b>Date / Time</b>	<b>Entities / County / Location</b>	<b>Attendees</b>	
2:00 pm	Cut Bank		
	Glacier County	Wayne Dusterhoff	Sheriff / Coroner
	Blackfeet Tribe	Don White	Blackfeet Transportation Planner
	Blackfeet Tribe	Emerald "Beep" Grant	TERO Compliance officer
	Glacier county	Bill Bandell	Roads Superintendent
Dec 2, 09 9:30 am	Teton County Court House Choteau	Arnie Gettel	Commissioner
	Teton County	Darin Johnson	Road Foreman
Dec 2, 09 11:00 am	Teton County Court House Choteau	John "Jay" Dunkel,	Mayor
	Teton County	Jodi Rogers	Finance Officer
	Teton County	Kelly Hirsch	Public Works Director
Dec 3, 09 3:00 pm	Malmstrom Air Force Base Great Falls	Michael Miner	Civ. CES/CEMC
	Air Force Personnel	17 Staff	Various
Dec 4, 09 9:00 am	Jefferson County Court House Boulder	Tom Lythgoe	Commissioner
	Jefferson County	Joe Carter	Sheriff / Coroner
	Jefferson County	Craig Doolittle	Road & Bridge Supervisor
	Jefferson County	Carolyn Henry	Administration assistant
Dec 4, 09 11:00 am	Blackfeet Tribal Business Council	Willie Sharp	Tribal Chairman
	Blackfeet Tribe	Peter "Rusty" Tatsey	Vice Chair
	Blackfeet Tribe	Joseph "TJ" Show	Secretary
	Blackfeet Tribe	Roger "Sassy" Running Crane	Council Member
	Blackfeet Tribe	Paul McEvers	Council Member
	Blackfeet Tribe	Henry Butterfly	Council Member
	Blackfeet Tribe	Henry Deverow	Law Enforcement
	Blackfeet Tribe	Don White	Blackfeet Transportation Planner
	Blackfeet Tribe	Emerald "Beep" Grant	TERO Compliance officer
Jan 29, 2010 / 10:00am	Montana Highway Patrol HQ / Helena	Major Tom Butler	Operators Commander
	Montana Highway Patrol	Capt. Tom Hamilton	District 1 Commander
	Montana Highway Patrol	Capt. Kent Hickethier	District 2 Commander

**Table 30  
Consultation Meetings**

<b>Date / Time</b>	<b>Entities / County / Location</b>	<b>Attendees</b>	
	Montana Highway Patrol	Capt. Gary Becker	District 3 Commander
	Montana Highway Patrol	Capt. Brad Sangray	District 8 Commander
Feb 4, 10 1:00 pm	Blackfeet Tribal Employee Rights Office (TERO)	Emerald "Beep" Grant	TERO Compliance officer
	TERO	Carl Fitzpatrick	TERO Compliance officer
Feb 16, 10 / 10:30am	Town of Valier	Mackenzie Grayde	Mayor
	Town of Valier	Jackie Sheble	Clerk / Treasurer
	Town of Valier	Roger Skoges	Public Works
	Town of Valier	Leo Malinak	Public Works
Feb 16, 10 / 1:00 pm	City of Choteau	Kelly Hirsch	Public Works Director
Feb 16, 10 / 2:30 pm	Choteau Businesses	3 Businesses	
Feb 16, 10 / 12:00 pm	Augusta Residences	Five residences	
Feb 16, 10 / 1:00 pm	Lewis and Clark Co / Augusta	Eric Griffin	Public Works Director
Feb 17, 10 / 10:00 am	Pondera Co./ Valier Road Shop	John Stokes	Pondera County Road Dept.
Feb 18, 10 / 1:00 pm	City of Missoula – Engineering	Doug Harby	Construction Manager
	City of Missoula – Engineering	Kevin Slovarp	City Engineer
	City of Missoula – Engineering	Rick Larsen	City Comm.& Traffic Signal
	Montana Department of Transportation	Steve Miller	MDT Maintenance Supervisor
	Montana Department of Transportation	Jack May	MDT Maintenance Supervisor
	Kiewit	Clayne Larsen	Kiewit
Mar 03, 10 / 08:00 am	Toole County / Shelby	Allan Underdal	Commissioner (Chair)
	Toole County	Dave Miller	Commissioner
	Toole County	Ben Ober	Commissioner
	Toole County	Donna Matoon	Sheriff
	Toole County	James Midboe	Road Department, Supervisor
	Toole County	Val Moench	Road Dept., Office manager
Mar 03, 10 / 1:00 pm	Pondera County / Conrad	Joe Christiaens	Commissioner
	Pondera County	Sandra J. Broesder	Commissioner
	Pondera County	Cynthia Johnson	Commissioner
	Pondera County	Janice Hoppes	Clerk and Recorder
	Pondera County	John Stokes	Pondera County Road Dept.
Mar 04, 10 / 10:00 am	Teton County / Choteau	Arnie Gettel	Commissioner
	Teton County	Joe Dellwo	Commissioner
	Teton County	Jim Hodgskiss	Commissioner
	Teton County	Keith Van Seth	Sheriff

**Table 30  
Consultation Meetings**

<b>Date / Time</b>	<b>Entities / County / Location</b>	<b>Attendees</b>	
	Teton County	Melody Marlensen	Choteau Acantha
	Teton County	Jane Wolery	MSU Extension
	Teton County	Richard Van Auken	Teton County Fire Chief
	Teton County	Paula Jaconetty	Teton County
	Teton County	3 members	Public
March 04, 10 / 3:00 pm	Powell County / Deer Lodge	Ralph "Rem" Mannix	Commissioner
	Powell County	Cele Pohle	Commissioner
	Powell County	Pat Hansen	Montana Standard - Deer Lodge
	Powell County	Mark Eisenbeil	Silver State Post
March 5, 10 / 10:30 am	Lewis and Clark County / LinCountyln	Jim Paris	BVCC chairman
	Lewis and Clark County	Andy Hunthausen	Commissioner
	Lewis and Clark County	Derek Brown	Commissioner
	Lewis and Clark County	Andrea Stinson	Montana, Field Project Manager
	Lewis and Clark County	Susan Howsman	Blackfoot Valley Dispatch
	Lewis and Clark County	Nyle Howsman	Blackfoot Valley Dispatch
	Lewis and Clark County	Eric Bryson	County CAO
	Lewis and Clark County	Leo Dutton	Sheriff
	Lewis and Clark County	4 members	Public
Mar. 12, 10 / 11:00 am	Lewis and Clark County / Augusta	Eric Bryson	County CAO
	Lewis and Clark County	14 members	Public
Mar. 15, 09 / 3:00 pm	Glacier County / Cut Bank	Michael DesRosier	Commissioner
	Glacier County	Ron Rides At The Door	Commissioner
	Glacier County	Tony Sitzmann	Commissioner
	Glacier County	Wayne Dusterhoff	Sheriff / Coroner
	Glacier County	Glenda M.Hall	Clerk and Roecorder
	Glacier County	Nikki Lako	Minutes
	Glacier County	Della Dubbe	Library
	Glacier County	Charles Farmer	DES
Mar 16, 10 / 08:00 am	Toole County Road Board / Shelby	Allan Underdal	Commissioner (Chair)
	Toole County	Dave Miller	Commissioner
	Toole County	Ben Ober	Commissioner
	Toole County	Bert Baldwin	Road Board contact
	Toole County	Bill Meech	Road Board contact
	Toole County	Dave Sandon	Road Board contact
	Toole County	Roger Smedsrud	Road Board contact
	Toole County	Jurgen Norick	Road Board contact

**Table 30  
Consultation Meetings**

Date / Time	Entities / County / Location	Attendees	
	Toole County	Val Moench	Road Dept. Admin
	Toole County	Shawn Norick	Liberty County Roads
	Toole County	Larry Bonderud	Mayor of Shelby

A team of Imperial Oil company representatives have met face to face with each county along the routes at least once. Consultation is an ongoing process and the intention is to schedule further consultation meetings prior to shipment of the first module, as appropriate. Additional meetings will be scheduled following the movement of the initial module to solicit further feedback, as appropriate.

Imperial Oil representatives have met with the County Commissioners, Sheriff's departments and Public Works officials along the transportation route and empty trailer return route. As a result of these consultations, additional entities were identified and discussions have been held.

The up-to-date information communicated to the counties provided both a general project overview as well as county specific details. These details included county concentric maps, data, and unique traffic structure modification and/or traffic control plans. This information framework was a basis for discussion to solicit feedback.

Feedback was captured from each individual discussion and then summarized into a set of topic areas. Actions identified during the consultation process were captured. Following is a summary of the findings by topic area from the consultation discussions to date.

#### **4.1.1 State and Federal Agencies Contacted**

##### **4.1.1.1 MT Department of Environmental Quality**

Cameo Flood from Tetra Tech spoke to Jeff Ryan, who said that based on the project description, MDEQ did not have any concerns, except that the loads may be too heavy for some of the bridges and he was afraid that might lead to water pollution or a possible spill. On December 2, 2009, Tetra Tech again contacted Jeff Ryan about the need for additional turnouts to see if any concerns could be identified. Since the turnouts would be constructed in MDT ROW and avoid all water, he was not concerned.

Tetra Tech consulted with DEQ Permitting and Compliance/Water Quality regarding requirements for MDPES permits 3/17/2010 Kari Smith). DEQ stated that project construction activities involving multiple utilities, activities, contractors could be logically split into their respective categories based on geographic location, reach, or district. Determinations regarding SWPPP requirement could then follow based on the effects and size of disturbance for each geographic area. It was determined that the Missoula Electrical Cooperative Utility Occupancy and Location Agreement Permit for the 10-mile Plow and the all the new vehicle turnout construction activities would require a General Permit.

##### **4.1.1.2 Montana SHPO**

As described in the Historical and Archaeological Resources section, the SHPO was consulted on all ground disturbing activity locations to determine if any historical sites listed, eligible for listing, or undetermined for listing on the NRHP would be affected by any of the activities. An exhaustive record search was conducted.

##### **4.1.1.3 US Army Corps of Engineers**

Todd Tillinger, the US Army Corps of Engineers Montana Regulatory Program Manager, was initially contacted by Tom Martin of MDT. Ms. Cameo Flood with Tetra Tech followed up with Todd via a telephone call on October 1, 2009.

Todd said to avoid impacts to Waters of the US. If any burying of utilities would occur in aquatic areas, a permit must be granted by USACE. Ms. Flood confirmed that Tetra Tech will be investigating all buried utility locations to determine if any aquatic areas would be affected, and if any, will coordinate with the Army Corps of Engineers to see if a permit is required.

#### **4.1.1.4 US Fish and Wildlife Service**

Tetra Tech held several discussions with Scott Jackson between September and December. On December 2, 2009, Scott indicated that because the turnouts would be constructed in MDT ROW and avoid all water, he concluded effects on fish were not a concern. The analysis indicated there would be no impact on listed species, therefore, wildlife species were not discussed with FWS at that time.

Upon request of the MDT, Tetra Tech contacted Scott Jackson on February 8, 2010 to address any concerns regarding the proposed project and potential impacts to wolves in the event the federal court decides they were erroneously delisted from the endangered species act (action currently under judicial review). MDT also requested that Tetra Tech seek guidance from Scott regarding a plan to address impact avoidance and mitigation. Scott stated that the project did not present any concerns for wolves and a plan was not necessary. He also stated that the project would result in a 'no effect' determination in the event of wolves relisting.

On March 15th the US Fish and Wildlife Service was consulted regarding impacts on grizzly bears from night time activities, particularly auxiliary lighting. They indicated that sometimes traffic can be a concern, however, the module transportation and associated work would occur in locations where existing similar activities are already occurring and the speed would be slower, so there is no concern on the part of USFWS on impacts on grizzly bears. The USFWS agreed that the special provision included with all contracts (Appendix D) would be adequate to prevent situations that would attract bears to the roadway.

USFWS was also consulted about the potential impacts on eagles nesting within or near the project. USFWS was not concerned because the roads are existing and the activities are not out of the ordinary. Eagles that nest adjacent to highways are accustomed to the disturbance and the project would introduce any additional disturbance to the nesting eagles. USFWS also indicated that a 1/2 – mile buffer was ample enough to avoid adverse impacts on eagles during the nesting season.

#### **4.1.1.5 USDA Forest Service**

The Forest Service was contacted (Pat Corts, Steve Wyatt, and Ed DeCleva) on several occasions to discuss easements and historical resources. MDT and Tetra Tech provided information on turnout modifications or construction, and MEC, QWest, NorthWestern Energy provided information on utility relocations. After it was determined which activities would occur on National Forests, the potential effects on all resources were evaluated. No historical sites would be affected on National Forest System lands as the Lolo/Nez Perce trails are at least 250 feet from any ground disturbing activities. The Forest Service is reviewing potential environmental effects such as water quality, fisheries, wildlife, and weeds from the proposed ground disturbing activities. Coordination with the USFS is ongoing.

#### **4.1.2 Consultation with Blackfeet THPO**

John Murray, the THPO of the Blackfeet Indian Reservation, on September 18, 2009 regarding the proposed project, who requested the locations where utility lines will be buried. Mr. Murray indicated the Blackfeet Nation would like to have a monitor present during excavation. Imperial Oil has included mitigation measures committing to this request.

Tetra Tech applied for and received an ALPO 90-A Permit from the Blackfeet Nation for geotechnical testing completed on Highway 358 on the Blackfeet Indian Reservation.

#### **4.1.3 Consultation with Counties**

Information was communicated to the counties and provided both a general project overview as well as county specific details. These details included county concentric maps, data, and unique traffic structure

modification and/or traffic control plans. This information framework was a basis for discussion and to solicit feedback.

### **Montana Association of Counties (MACO) and Montana Highway Patrol (MHP)**

Imperial Oil attended this September meeting and provided an overview of the KMTP to the gathered attendees. Toole County Commissioner, Allen Underdal, organized a meeting of the seven counties along the module transportation route. This group received the presentation on the project as well as participated in a question period. We identified that some County Road Use Agreements would be required.

A meeting with the Operations Commander and four District Commanders of Montana Highway Patrol was held in Helena in January. The purpose of the meeting was to provide a project overview, solicit feedback on emergency response plans and determine resources available to support project escort requirements. Off duty resources are available locally and across the state. A representative schedule of module movements is required to progress planning further.

### **Missoula County**

Two meetings were held with the County and three meetings were held involving City Officials in Missoula. This stage through Missoula is at night and contains a majority of the traffic structures to be modified along the route. The discussion included an understanding of City of Missoula requirements and the need to create an agreement to meet these requirements and facilitate overview by the City.

### **Lewis and Clark County**

Eight meetings were held in Augusta, Lincoln and Helena. Four of the meetings were held on Government Days in Augusta and Lincoln and included members from the public. Topics of importance were the traffic structure in Lincoln, compatibility with the Main Street reconstruction in Augusta and parking restrictions along one end of Main Street in Augusta. Feedback was requested on the impact of night travel through the county and no concerns were raised.

### **Glacier County**

Three meetings were held with the County, two meetings were held involving the Blackfeet Tribe and one meeting with City of Cut Bank Public Works Superintendent. We clarified jurisdictional questions on N. Santa Rita Road and City of Cut Bank truck route along Railroad Street. Plans for traffic structure modifications and traffic control were reviewed and found acceptable. A County Road Use Agreement is pending.

Discussions with the Blackfeet Tribal Business Council and Tribal Employment Rights Office (TERO) focused on potential employment opportunities and gravel sources.

### **Pondera County**

Three meetings were held with County and two meetings with the Town of Valier. Plans for traffic structure modification and traffic control were reviewed and found acceptable. Parking restrictions were also discussed. The Town water system upgrade project may affect portions of the route, but is scheduled to be completed prior to first module shipment. Feedback received from County on suitable County Road parking locations and resulted in a change to avoid the school bus route. A County Road Use Agreement is pending.

### **Teton County**

Two meetings were held with County and four meetings with the City of Choteau. Review of traffic control plans and detour route resulted in the addition of a separate truck detour route along Airport Road. Traffic structure modification and turning radius drawings were reviewed and found acceptable. Three Businesses along the route where parking restrictions are required after midnight will likely be closed during this time. A potential sewer project in 3Q2010, trenching across Hwy 287 was noted. Feedback was requested on the impact of night travel through the County and no concerns were raised.

## Powell County

Two meetings were held with County. No significant concerns were identified.

## Toole County

Three meetings were held with County and the County Road Board. The Loop Road / Highway 214 / N. Santa Rita Road / By-pass Road are gravel and a Road Use Agreement is pending. No significant concerns were identified.

## Counties on the Trailer Return Route and Malmstrom AFB

Five meetings were held with these Counties along the trailer return route and one meeting with the Malmstrom AFB Missile Support Group. Cascade County provided an introduction to Malmstrom AFB as they are an important traveler on some of these roads. The empty trailers move at highway speed and will utilize interstate highways systems which has provision for following traffic to pass. No significant concerns were identified.

### 4.1.4 Agreements

Imperial Oil discussions with the local governments have investigated the opportunities where project requirements take place outside the MDT ROW. Imperial Oil has identified opportunities for five formal agreements. Another group of potential opportunities were discussed and will result in no formal agreement required. These discussions on potential opportunities will be documented with a confirmation letter. A list of these pending agreements and potential opportunities outside the MDT ROW is shown in **Table 31**.

**Table 31**  
**Agreements**

Stage	Entity	Description	Comments
All	Montana Department of Transportation	Memorandum of Agreement covering fundamental duties and responsibilities regarding the KMTP, including financial responsibility.	This Memorandum is in development.
All	Montana Highway Patrol	Agreement with Mont. Highway Patrol for transport escort services	Meetings held at District land Headquarters levels. Once Transportation plan is finalized, a schedule will be developed for resource planning and contract formation.
2	City of Missoula	House Moving Ordinance Permit with City of Missoula for Reserve Street. This document will address the ordinance requirements and includes details of traffic structure rotation.	Draft MOU wording to be provided by City. Agreement pending after MOU with MDT finalized. City overview requirements will be part of this agreement.
2	Montana Rail Link	Structure modification agreement at Railway crossing light at Bonner and intermittent rotation of structure for each shipment.	Structure modification design submitted for review. Agreement pending for construction and rotation by Rail Link staff.
3	Lewis and Clark County (Lincoln)	Reviewed location specific details of MTP including: time of travel, traffic structure modification, utility relocation and shared use of Hwy 200, MP 75, snowmobile parking turnout, traffic control plan for location at Hwy 200 MP 71.5.	Confirmation letter to be sent to County on traffic structure modifications traffic Structure rotation and Traffic Control Plan.
4	Lewis and Clark Co.	Reviewed location specific details of MTP including: time of travel, Traffic detour and	Confirmation letter to be sent to County on Traffic detour and Control



**Table 31  
Agreements**

Stage	Entity	Description	Comments
	(Augusta)	Control Plan, utility relocations and schedule for Main St. reconstruction project.	Plan.
5	Teton County and City of Choteau	Reviewed location specific details of MTP including: time of travel, Traffic detour and Control Plan, tree trimming, traffic structure modifications, utility relocations, parking restriction areas and schedule for city construction activities.	Confirmation letter to be sent to City on Traffic detour and Control Plan, traffic structure modification, traffic structure rotation and night parking restrictions.
5	Pondera County and Town of Valier	Reviewed location specific details of MTP including: time of travel, Traffic Control Plan, traffic structure modifications, utility relocations, restricted night parking and schedule for town construction activities.	Confirmation letter to be sent to Town on Traffic Control Plan, restricted night parking, traffic structure modification and traffic structure rotation.
5/6	Pondera County	Road Use Agreement with Pondera County for parking Buena Vista Rd. at MP 3.0, on HWY 358.	Draft agreement with County is pending.
6	Dupuyer	Reviewed location specific details of MTP including: time of travel and detour at rest area Hwy 89 MP 76 and side street traffic control.	A meeting was held with Commissioner and Dupuyer resident, Joe Christiaens, and no concerns were raised.
6	Glacier County and City of Cut Bank	Reviewed location specific details of MTP including: time of travel, Traffic detour and Control Plan, traffic structure modifications, utility relocations, restricted day parking and schedule for railroad overpass construction activities.	Confirmation letters sent to City on Traffic Control Plan, traffic structure modification, traffic structure rotation, use of Railroad Street and no City permit required for Railroad Street utilities relocations.
6	Glacier County	Road Use Agreement with Glacier County for N. Santa Rita Rd. (cold rolled portion) including new turnouts and maintenance. No formal agreement required for Losing Rd. detour.	Agreement with County is pending. Confirmation letter to be sent on Losing Rd. detour.
6	Toole County	Road Use agreement for Hwy 214 / N. Santa Rita Road / Loop road / By-pass.	Agreement with County is pending.

Discussions with local governments are ongoing. Additional agreements may be made, or existing agreements modified.

## 4.2 Consultation Findings

### 4.2.1 Notification

All groups consulted with were pleased that the consultation team was able to provide them with current information on the MTP. Many requested on-going information on the transportation schedule. Imperial Oil intends to establish a notification network that will provide up-to-date information on the module movements. This information is expected to be distributed to contacts which may include: law enforcement officers, state and county officials, business leaders, Malmstrom Air Force Base, agriculture producers, and the general public.

### 4.2.2 Response to Emergency Situations

The majority of the groups questioned whether emergency vehicles could successfully navigate during the module movement. Typical questions centered around movement of ambulance or fire vehicles and how

quickly the modules can be moved off the roads. The emergency response plan in the MTP (available for public review on the MDT website) describes communications and actions to not impede emergency vehicles. Additional emergency situations, such as vehicle accidents, mechanical failure, fire, environmental spills (no hazardous materials will be shipped with the modules), and extreme weather conditions have also been addressed.

#### **4.2.3 Local Community Information**

The consultation process has allowed Imperial Oil to gather information on local events and activities along the route. Module transportation during local community events (parades, major sporting events and other similar activities) would not occur. A majority of the community events identified during consultations appear to occur on Friday evenings or weekends. The modules are not scheduled to move during the weekend.

#### **4.2.4 School and School Bus Information**

Imperial Oil discussed bus routes and schedules with counties along the route and will produce a schedule that considers school bus schedules and routes. Prior to module movement, a schedule will be provided to the schools so the schools can determine if movement of the transport vehicles will interfere with school buses. Schools will be requested to inform Imperial Oil of any changes in the bus schedule that need to be accommodated.

#### **4.2.5 Residual Benefits**

Most county officials and members of the public were pleased to hear that the overhead wires along the route would be permanently raised or buried underground. The modifications to existing turnouts and addition of new turnouts were also seen as positive, recognizing that these turnouts will remain in place after the project concludes.

### **4.3 On Going Consultation Efforts**

Consultation and scoping efforts will continue with the public and agency review of this EA and associated public hearings. MDT will submit press releases to announce the availability of the EA for public review; the dates of the formal public review period; the dates, times, and locations of public hearings; the web address for electronic viewing of the EA; and various locations where “hard copies” of the document will be made available for public review.

MDT will collect and consider all comments submitted regarding this EA. Comments may be submitted in writing to Dwane Kailey, MDT, 2960 Prospect Avenue, PO Box 201001, Helena, MT 59620 1001, online at [http://www.mdt.mt.gov/pubinvolve/eis\\_ea.shtml](http://www.mdt.mt.gov/pubinvolve/eis_ea.shtml); or in person at one of the public hearings.

Upon consideration of comments received during the review period, and prior to making a decision on the proposed state actions, MDT will produce a decision document. The decision document will be made available for public review. The decision document will include responses to the comments.

## 5.0 REFERENCES

- Avian Powerline Interaction Committee (APLIC). 1996. Suggested practices for raptor protection on powerlines: The state of the art in 1996. Edison Electric Inst./Raptor Found., 701 Pennsylvania Ave. NW, Washington, 20004-2696.
- FEMA. 2010. DFIRM database by county along the route, extracted the graphic that included the mapped floodplain for 100 & 500 year flood events.  
<http://msc.fema.gov/webapp/wcs/stores/servlet/FemaWelcomeView?storeId=10001&catalogId=10001&langId=-1&userType=G>.
- MDEQ. 2009. Digital Atlas/Online Query Service. Available at:  
<http://nris.mt.gov/deq/remsitequery/portal.aspx> (individual report query)/<http://nris.mt.gov/gis/> (data download for: UST, LUST, PCS, Other Leaks, Remediation Response Sites, EPA Toxic Release, EPA Cerclis). September 21, 2009.
- Minnesota IMPLAN Group, Inc. 2001. IMPLAN System (2001 data and software), 1725 Tower Drive west, Suite 140, Stillwater, MN 55082, [www.implan.com](http://www.implan.com), 1997.
- Missoula City Municipal Code. Title 9, Chapter 9.30: Noise Control.  
<http://www.ci.missoula.mt.us/index.aspx?NID=268>
- Missoula City-County Air Pollution Control Program. 2000. Chapter 11: Motor Vehicles.  
<http://www.co.missoula.mt.us/airquality>.
- Montana Department of Environmental Quality (MDEQ). 2009. Air Quality Monitoring.  
<http://deq.mt.gov/AirMonitoring/index.asp>.
- Montana Department of Labor and Industry Employment and Earnings Databases (ES-202/QCEW)  
<http://www.ourfactsyourfuture.org/cgi/dataAnalysis/IndustryReport.asp>
- Montana Natural Heritage Program (MTNHP). 2009. Montana land ownership of public lands/ Species of Concern locations and status. Available at: <http://nris.state.mt.us/mapper> (land ownership)/  
<http://nris.mt.gov/reqapp/userMain.asp> (Species of Concern request tracker). September 24, 2009.
- MNHP. 2010a. Montana Field Guide: Ute Ladies Tresses. Accessed 1-19-10:  
[http://fieldguide.mt.gov/detail\\_PMORC2B100.aspx](http://fieldguide.mt.gov/detail_PMORC2B100.aspx)
- MNHP. 2010b. Montana Field Guide: Water Howellia. Accessed 1-19-10:  
[http://fieldguide.mt.gov/detail\\_PMORC2B100.aspx](http://fieldguide.mt.gov/detail_PMORC2B100.aspx)
- MNHP. 2010c. Montana Field Guide: Yellow-billed Cuckoo. Accessed 1-19-10:  
[http://fieldguide.mt.gov/detail\\_PMORC2B100.aspx](http://fieldguide.mt.gov/detail_PMORC2B100.aspx)
- MNHP. 2010d. Montana Field Guide: Piping Plover. Accessed 1-19-10:  
[http://fieldguide.mt.gov/detail\\_PMORC2B100.aspx](http://fieldguide.mt.gov/detail_PMORC2B100.aspx)
- National Wetlands Inventory (NWI). 2009. Montana Digital Wetlands. Available at:  
<http://www.fws.gov/wetlands>. September 22, 2009.

Natural Resources Information Service (NRIS). 2010. Natural Resource Information System of the Montana State Library. 2009.

USCB 2000. U.S. Census Bureau. 2000 Census of Population and Housing. Demographic Profiles for the United States, Montana (statewide), and Glacier, Lewis and Clark, Missoula, Pondera, Powell, Teton, and Toole Counties, Montana. Available at <http://censtats.census.gov/pub/Profiles.shtml>.

United States Department of Agriculture. 2007. Northern Rockies Lynx Management Direction: Final Environmental Impact Statement. Forest Service March 2007.

United States Department of Agriculture 2010. Farm Services Administration. National Agriculture Imagery Program. <http://www.fsa.usda.gov/FSA/apfoapp?area=home&subject=prog&topic=nai>.

United States Fish and Wildlife Service (USFWS). 2007. National Bald Eagle Management Guidelines <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Management/BaldEagle/NationalBaldEagleManagementGuidelines.pdf>

United States Fish and Wildlife Service . (USFWS). 2009. National Wetlands Inventory. Technical procedures for conducting status and trends of the nation's wetlands. Available at: [http://www.fws.gov/Wetlands/\\_documents/gSandT/OtherInformation/TechnicalProceduresConductingStatusTrendsNationsWetlands.pdf](http://www.fws.gov/Wetlands/_documents/gSandT/OtherInformation/TechnicalProceduresConductingStatusTrendsNationsWetlands.pdf). August 2009.

United States Fish and Wildlife Service (USFWS), Ecological Services. 2009. Endangered, Threatened, Proposed and Candidate Species Montana Counties: Sept. 2009.

United States Fish and Wildlife Service (USFWS). 2010. Correspondence between Stacy Pease of Tetra Tech and Scott Jackson of the US Fish and Wildlife Service regarding the impacts of the project on the gray wolf. February 8, 2010.

United States Geological Survey (USGS) National Hydrography Dataset (NHD). 2009. National Digital Hydrography Dataset. Available at: <http://nhd.usgs.gov/index.html>. September 21, 2009.

## 6.0 LIST OF PREPARERS AND REVIEWERS

<b>Preparer Name</b>	<b>Preparer Responsibility</b>
Cameo Flood	Community, Economics, Traffic, Transportation, Cumulative Impacts
Vicki Regula	Wetland Delineator
Stacy Pease	Wildlife, Water Quality, Threatened and Endangered Species, Farmlands
Lynn Peterson	Historical/Cultural Resources
Patricia Williams	Database, GIS, Maps
Mark R. Pearson	Maps
Corey Richardson	Cultural, Maps
Thad Jones	Wetland Aerial interpretation
Natalie Morrow	Hazardous Materials, Contaminated Sites
Ed Surbrugg	MEPA Review
Bill Craig	MEPA Review
Richard Dombrowski	MEPA Review
Mitch Paulson	Graphics, Document Production

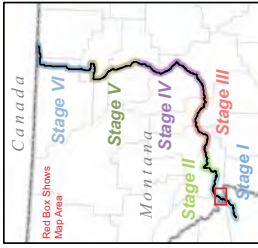
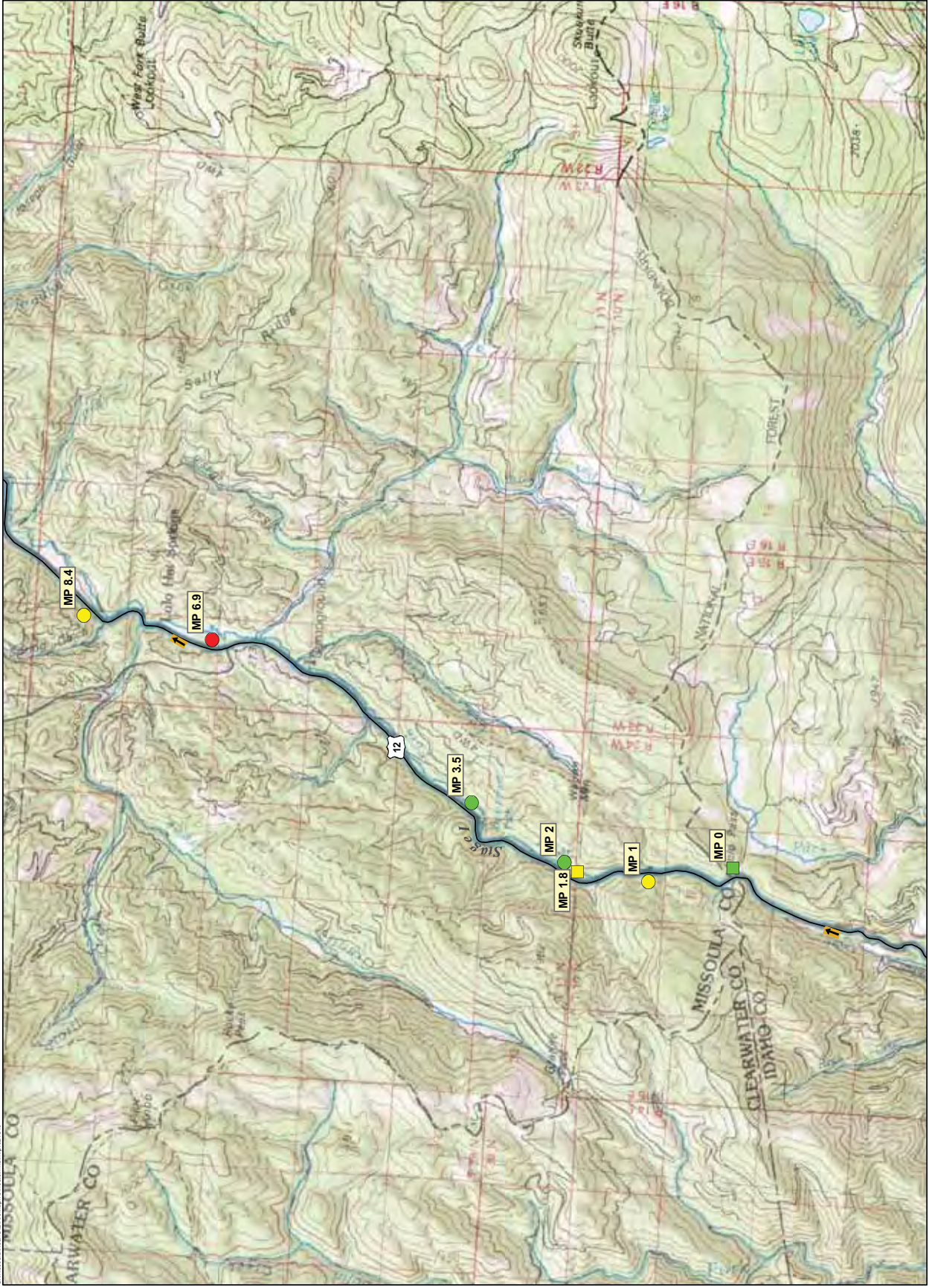
<b>Reviewer Name</b>	<b>Reviewer Responsibility</b>
MDT Chief Engineer, Dwane Kailey, P.E.	MEPA Review
MDT Environmental Services Bureau Chief, Tom S. Martin, P.E.	MEPA Review
MDT Environmental Services Engineering Section Supervisor, Heidi Bruner, P.E.	MEPA Review
MDT Environmental Services Missoula District Project Development Engineer, Susan Kilcrease	MEPA Review
MDT Environmental Services Great Falls District Project Development Engineer, Eric Thunstrom	MEPA Review
MDT Environmental Services Missoula District Biologist, Pat Basting	MEPA Review – Biological Resources
MDT Environmental Services Great Falls District Biologist, Paul Sturm	MEPA Review – Biological Resources
MDT Environmental Services Archaeologist, Steve Platt	MEPA Review - Cultural Resources
MDT Environmental Services Historian, Jon Axline	MEPA Review – Cultural Resources
MDT Environmental Services Soil/Hazardous Materials Specialist, Joe Radonich	MEPA Review – Air, Noise, Hazardous Material
MDT Rail, Transit, and Planning, Economist, Hal Fossum, Ph. D.	MEPA Review – Economic Analysis
MDT Highways Engineer, Paul Ferry, P.E.	MEPA Review - Highways
MDT Hydraulics Engineer, Mark Goodman, P.E.	MEPA Review - Hydraulics
MDT Hydraulics Operations Engineer, Dave Hedstrom, P.E.	MEPA Review - Hydraulics



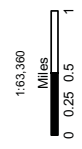
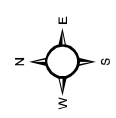
**Appendix A**  
**Maps of Turnouts and Road Modifications**





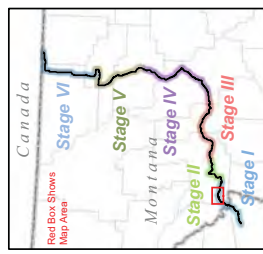
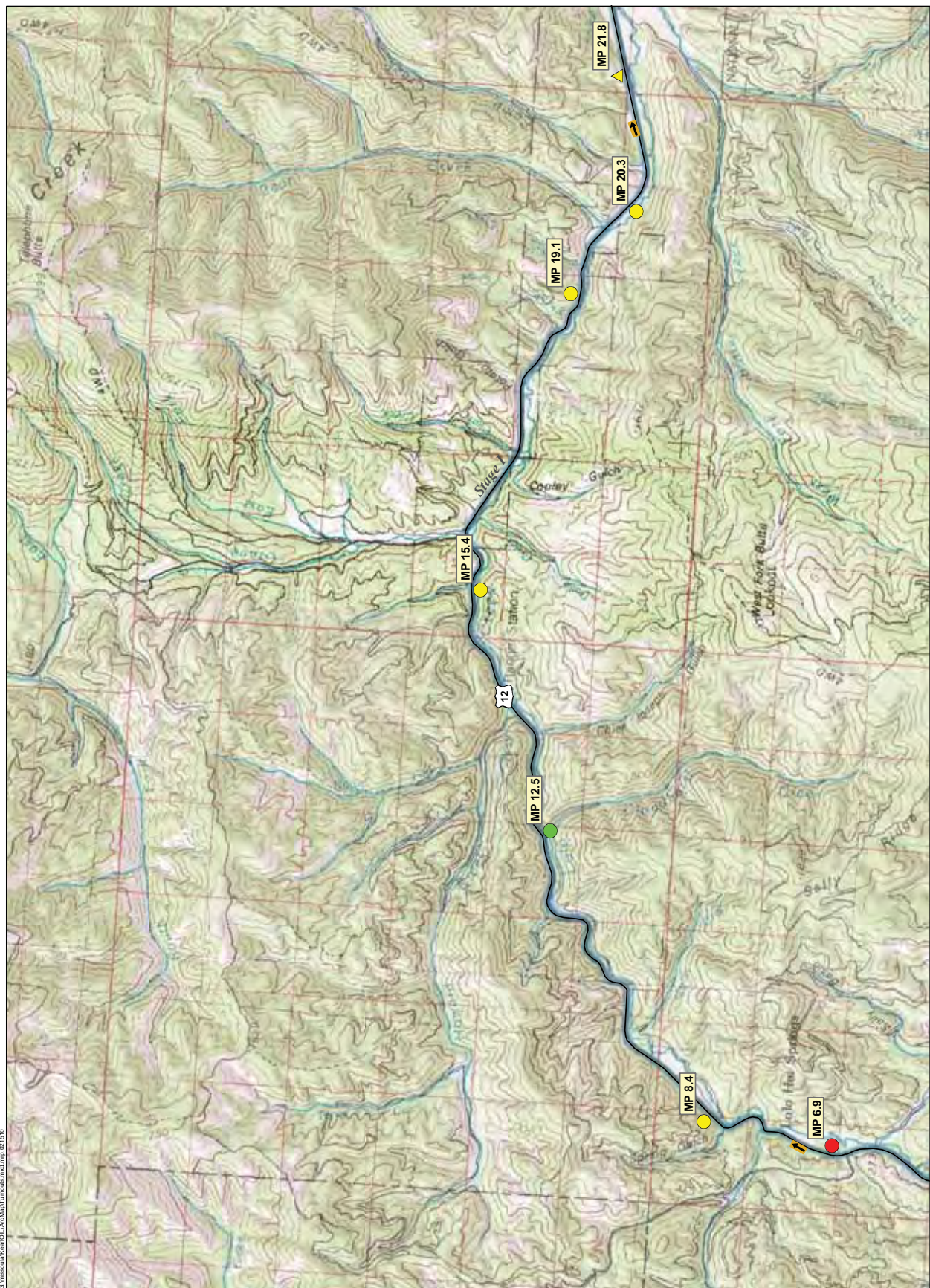


- Legend**
- ⊕ Detour
  - △ Clear
  - Park
  - Night Parking
  - ◇ Miscellaneous Road Modifications
  - Existing
  - Requires Modification
  - New
  - MP 1.5 Mile Marker
  - ➔ Route Direction

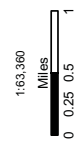
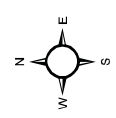


**Traffic Clearing Locations  
and Miscellaneous Road  
Modifications In Montana**

**Kearl Module  
Transportation Project  
Stage I**

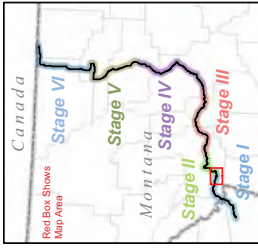
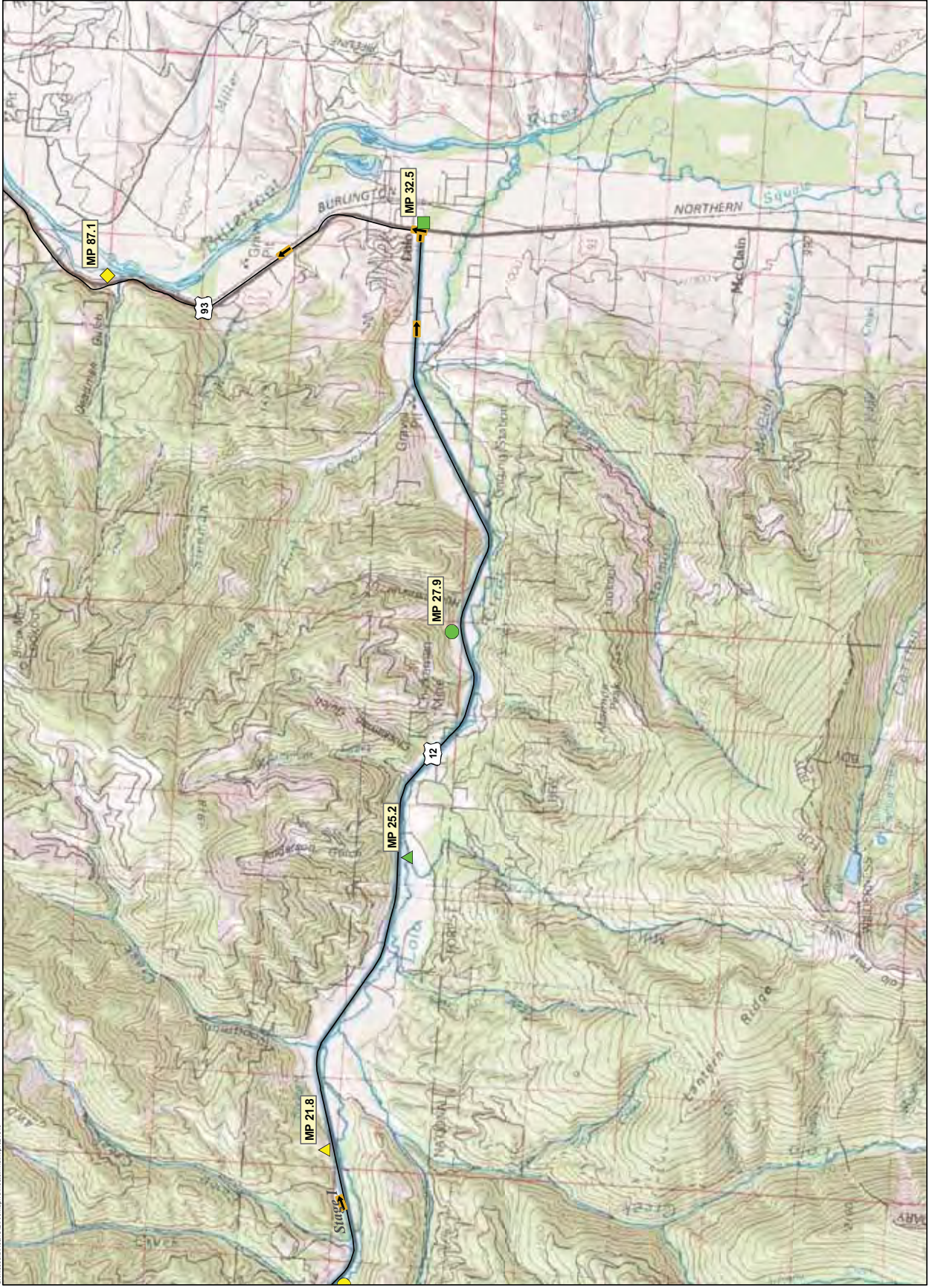


- Legend**
- ⊕ Delour
  - △ Clear
  - Park
  - Night Parking
  - ◇ Miscellaneous Road Modifications
  - Existing
  - Requires Modification
  - New
  - MP 1.5 Mile Marker
  - ➔ Route Direction

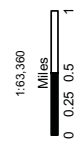
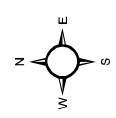


**Traffic Clearing Locations  
and Miscellaneous Road  
Modifications In Montana**

**Kearl Module  
Transportation Project  
Stage I**

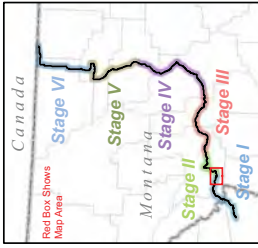
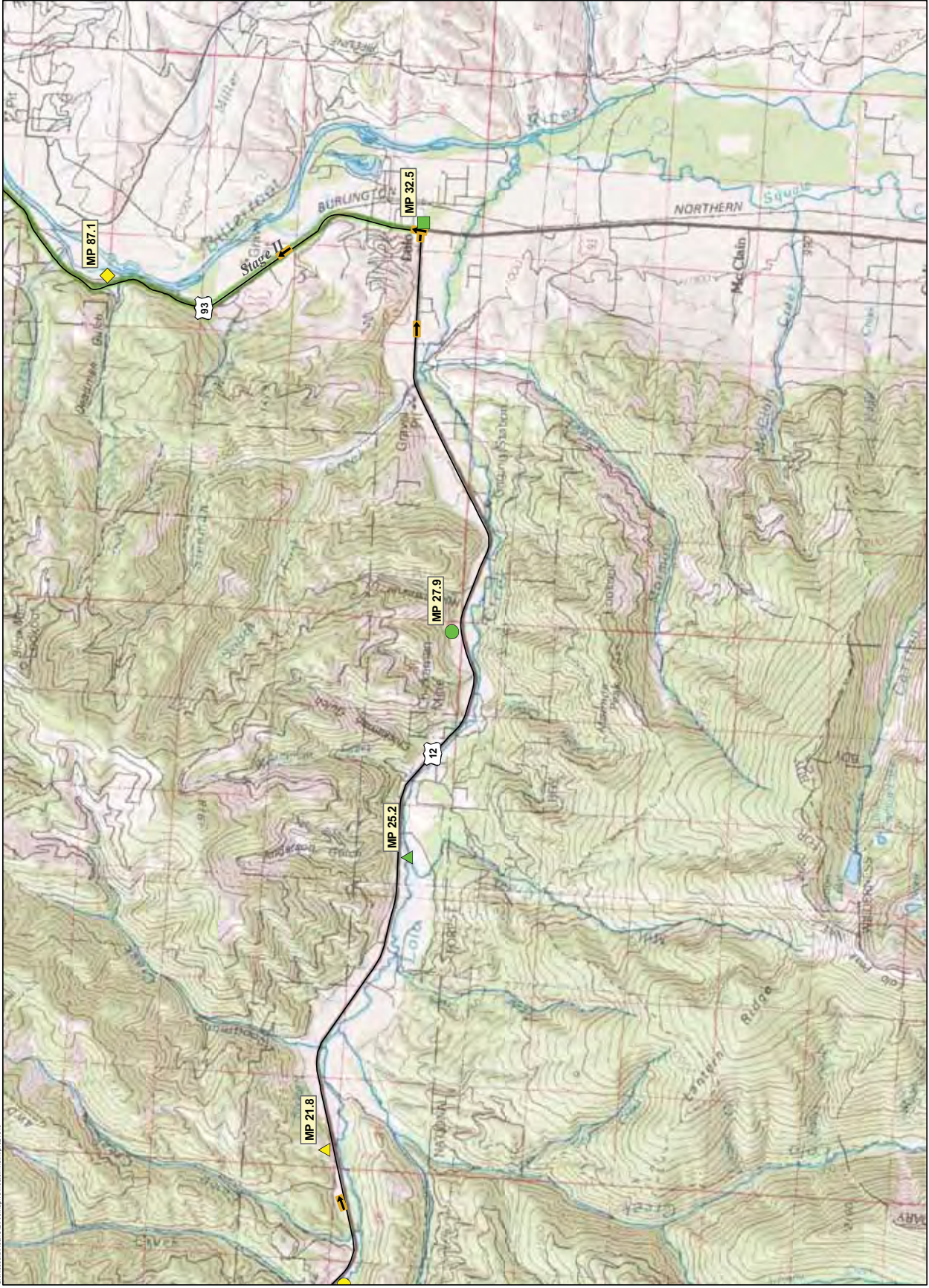


- Legend**
- Delour
  - Clear
  - Park
  - Night Parking
  - Miscellaneous Road Modifications
  - Existing
  - Requires Modification
  - New
  - Mile Marker
  - Route Direction

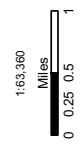
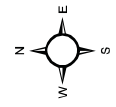


**Traffic Clearing Locations  
and Miscellaneous Road  
Modifications In Montana**

**Kearl Module  
Transportation Project  
Stage I**

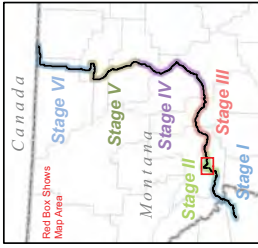
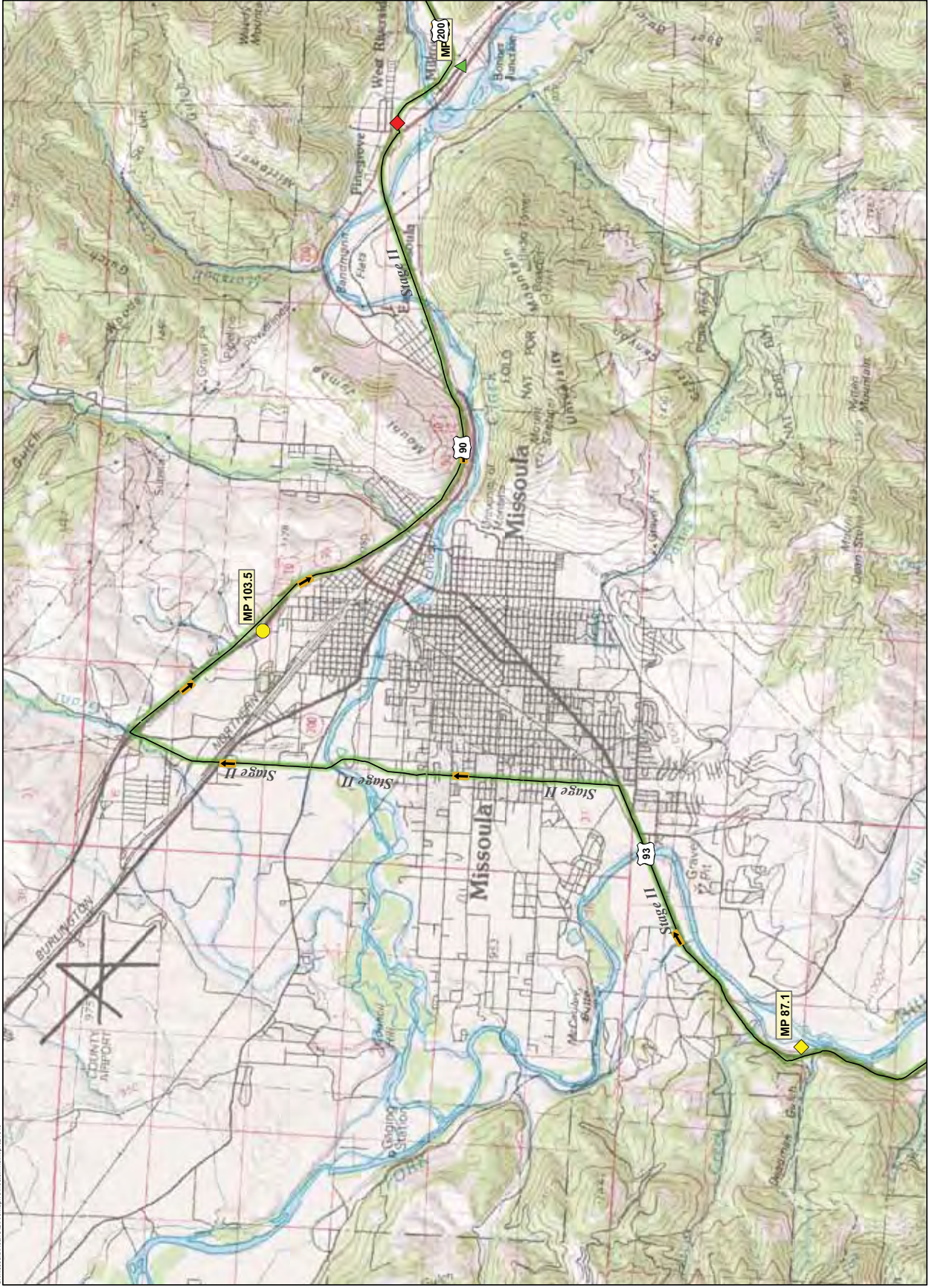


- Legend**
- ⊕ Detour
  - △ Clear
  - Park
  - Night Parking
  - ◇ Miscellaneous Road Modifications
  - Existing
  - Requires Modification
  - New
  - MP 1.5 Mile Marker
  - ➔ Route Direction

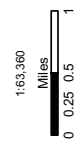
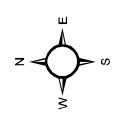


**Traffic Clearing Locations  
and Miscellaneous Road  
Modifications In Montana**

**Kearl Module  
Transportation Project  
Stage II**

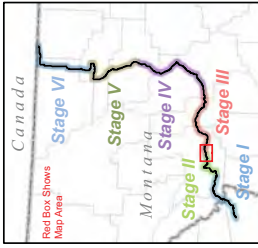
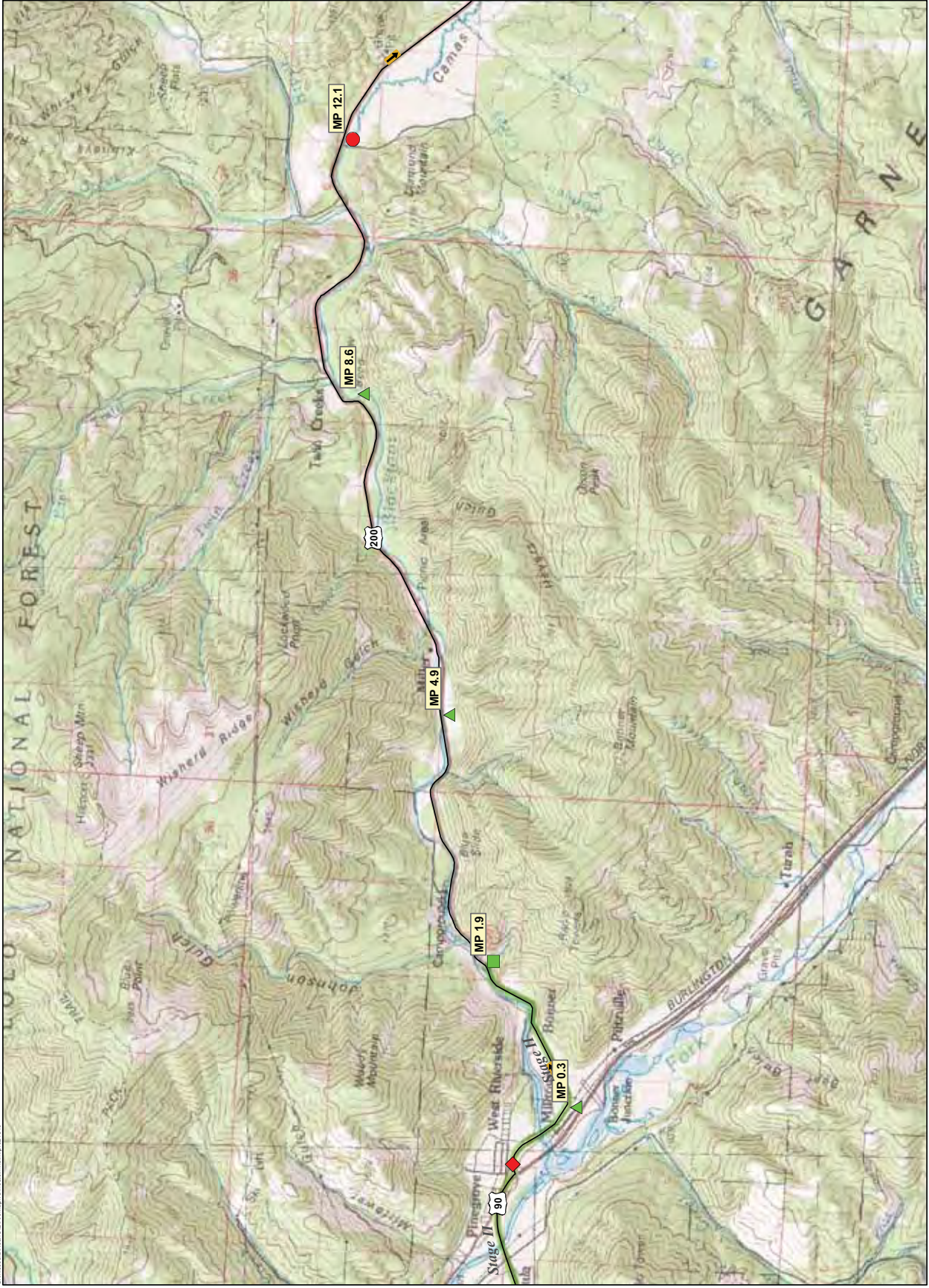


- Legend**
- Delour
  - Clear
  - Park
  - Night Parking
  - Miscellaneous Road Modifications
  - Existing
  - Requires Modification
  - New
  - Mile Marker
  - Route Direction

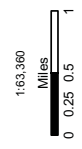
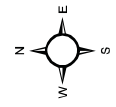


**Traffic Clearing Locations  
and Miscellaneous Road  
Modifications In Montana**

**Kearl Module  
Transportation Project  
Stage II**

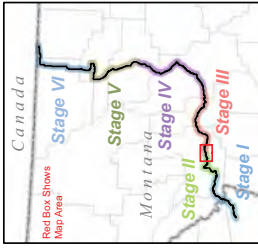


- Legend**
- ⊕ Detour
  - △ Clear
  - Park
  - Night Parking
  - ◇ Miscellaneous Road Modifications
  - Existing
  - Requires Modification
  - New
  - MP 13.5 Mile Marker
  - ➔ Route Direction

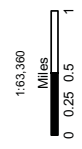
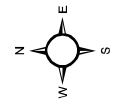


**Traffic Clearing Locations  
and Miscellaneous Road  
Modifications In Montana**

**Kearl Module  
Transportation Project  
Stage II**

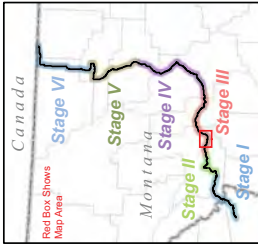
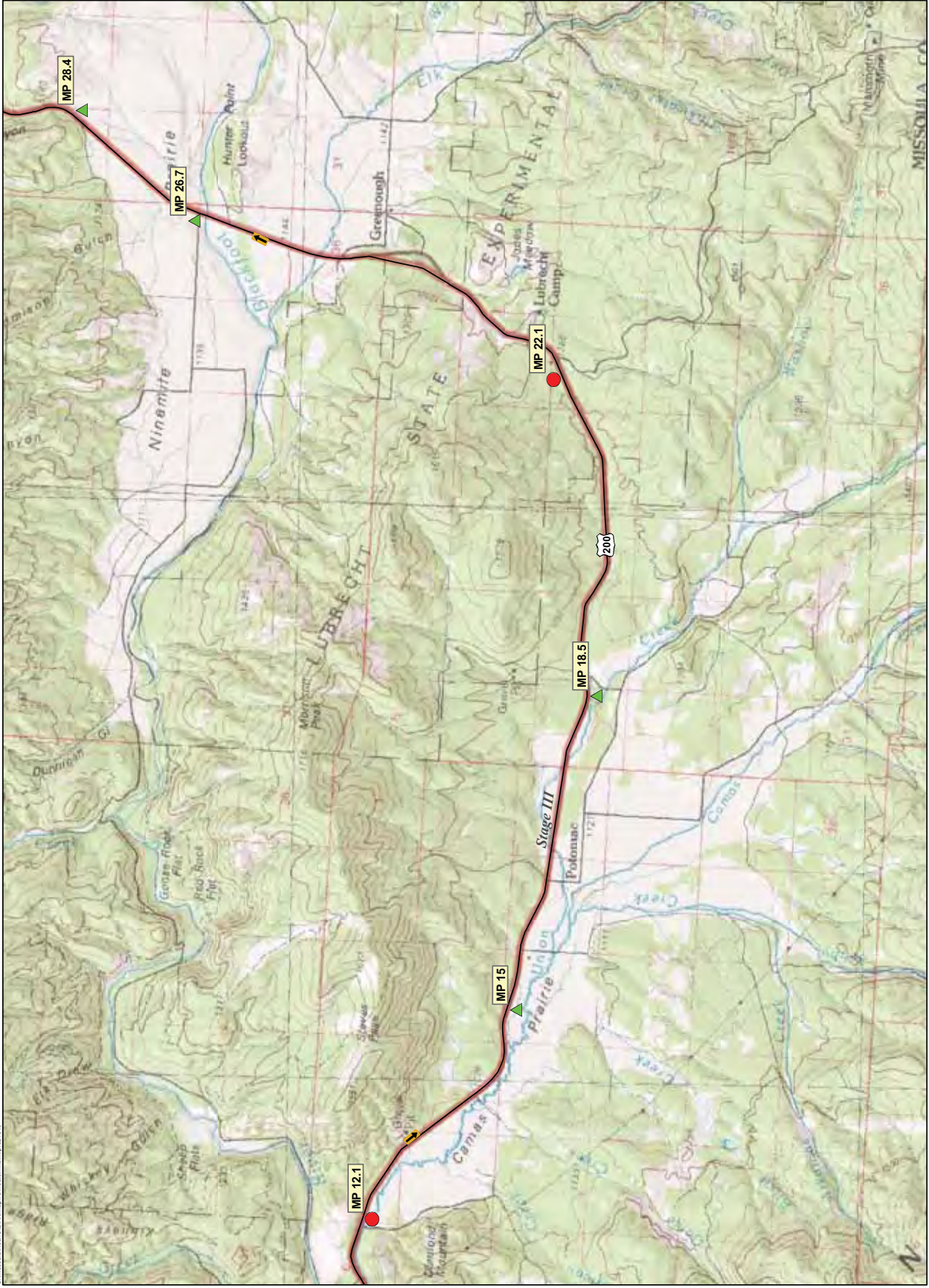


- Legend**
- ⊕ Detour
  - △ Clear
  - Park
  - Night Parking
  - ◇ Miscellaneous Road Modifications
  - Existing
  - Requires Modification
  - New
  - MP 1.5 Mile Marker
  - ➔ Route Direction

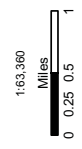
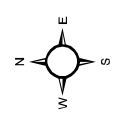


**Traffic Clearing Locations  
and Miscellaneous Road  
Modifications In Montana**

**Kearl Module  
Transportation Project  
Stage III**



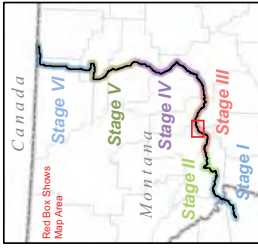
- Legend**
- Delour
  - Clear
  - Park
  - Night Parking
  - Miscellaneous Road Modifications
  - Existing
  - Requires Modification
  - New
  - Mile Marker
  - Route Direction



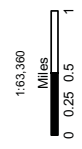
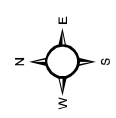
**Traffic Clearing Locations and Miscellaneous Road Modifications In Montana**

**Kearl Module  
Transportation Project  
Stage III**



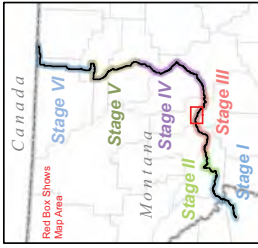


- Legend**
- ⊕ Detour
  - △ Clear
  - Park
  - Night Parking
  - ◇ Miscellaneous Road Modifications
  - Existing
  - Requires Modification
  - New
  - MP 1.5 Mile Marker
  - ➔ Route Direction

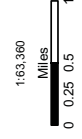
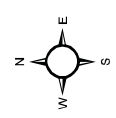


**Traffic Clearing Locations and Miscellaneous Road Modifications In Montana**

**Kearl Module Transportation Project Stage III**

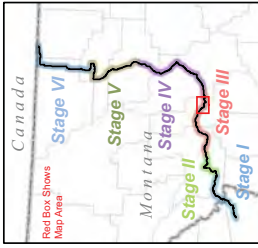
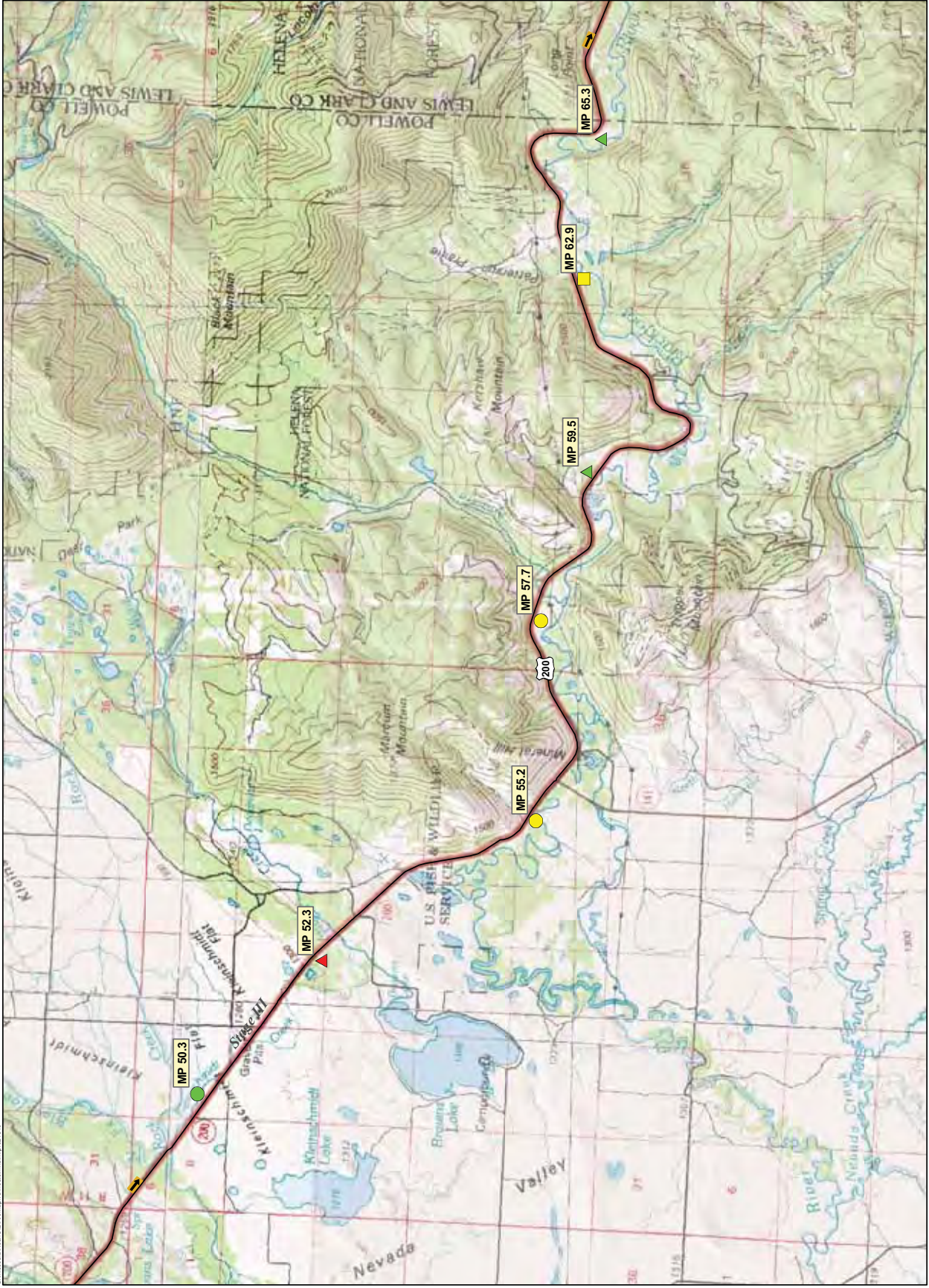


- Legend**
- ⊕ Detour
  - △ Clear
  - Park
  - Night Parking
  - ◇ Miscellaneous Road Modifications
  - Existing
  - Requires Modification
  - New
  - MP 1.5 Mile Marker
  - Route Direction

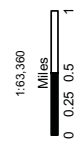
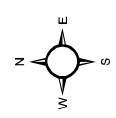


**Traffic Clearing Locations and Miscellaneous Road Modifications In Montana**

**Kearsley Transportation Project  
Stage III**

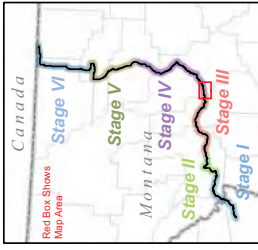


- Legend**
- Delour
  - Clear
  - Park
  - Night Parking
  - Miscellaneous Road Modifications
  - Existing
  - Requires Modification
  - New
  - Mile Marker
  - Route Direction

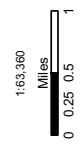
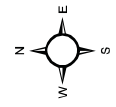


**Traffic Clearing Locations  
and Miscellaneous Road  
Modifications In Montana**

**Kearl Module  
Transportation Project  
Stage III**

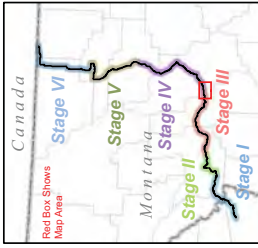


- Legend**
- Delour
  - Clear
  - Park
  - Night Parking
  - Miscellaneous Road Modifications
  - Existing
  - Requires Modification
  - New
  - Mile Marker
  - Route Direction

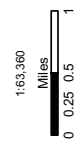
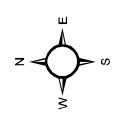


**Traffic Clearing Locations  
and Miscellaneous Road  
Modifications In Montana**

**Kearl Module  
Transportation Project  
Stage III**

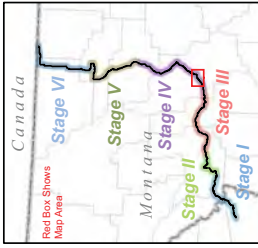


- Legend**
- ⊕ Delour
  - △ Clear
  - Park
  - ◇ Night Parking
  - ▭ Miscellaneous Road Modifications
  - ▭ Existing
  - ▭ Requires Modification
  - ▭ New
  - ▭ Mile Marker
  - ➔ Route Direction

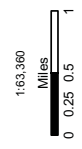
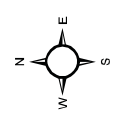


**Traffic Clearing Locations  
and Miscellaneous Road  
Modifications In Montana**

**Kearl Module  
Transportation Project  
Stage IV**



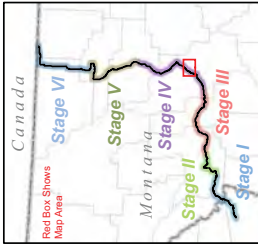
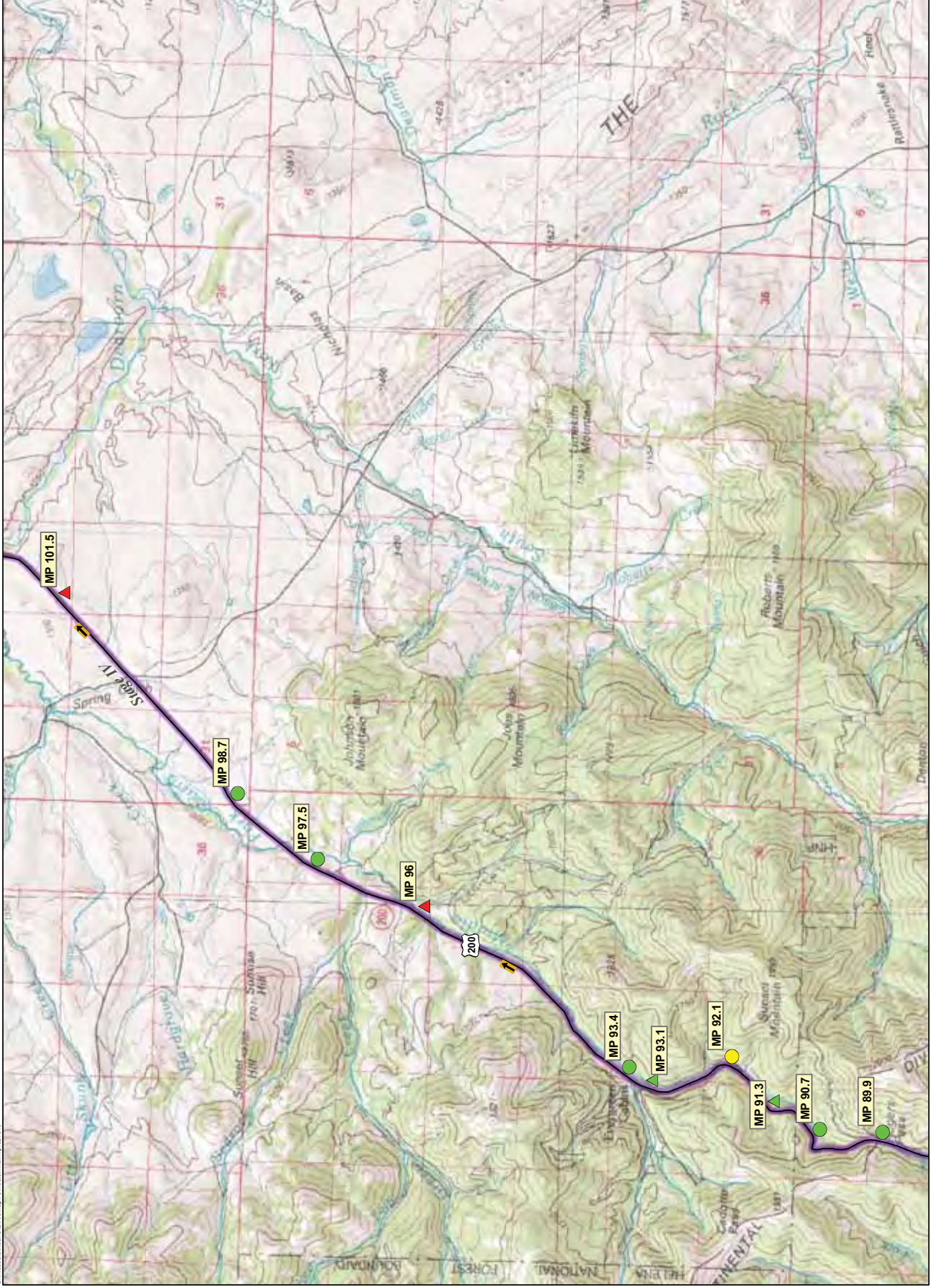
- Legend**
- Delour
  - Clear
  - Park
  - Night Parking
  - Miscellaneous Road Modifications
  - Existing
  - Requires Modification
  - New
  - Mile Marker
  - Route Direction



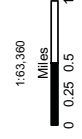
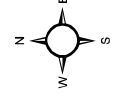
**Traffic Clearing Locations and Miscellaneous Road Modifications In Montana**

**Kearl Module Transportation Project Stage IV**

G:\ms004\Kearl\Kearl\MapDocs\Turf.mxd, 02/15/10

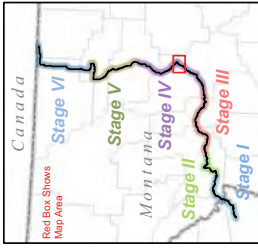
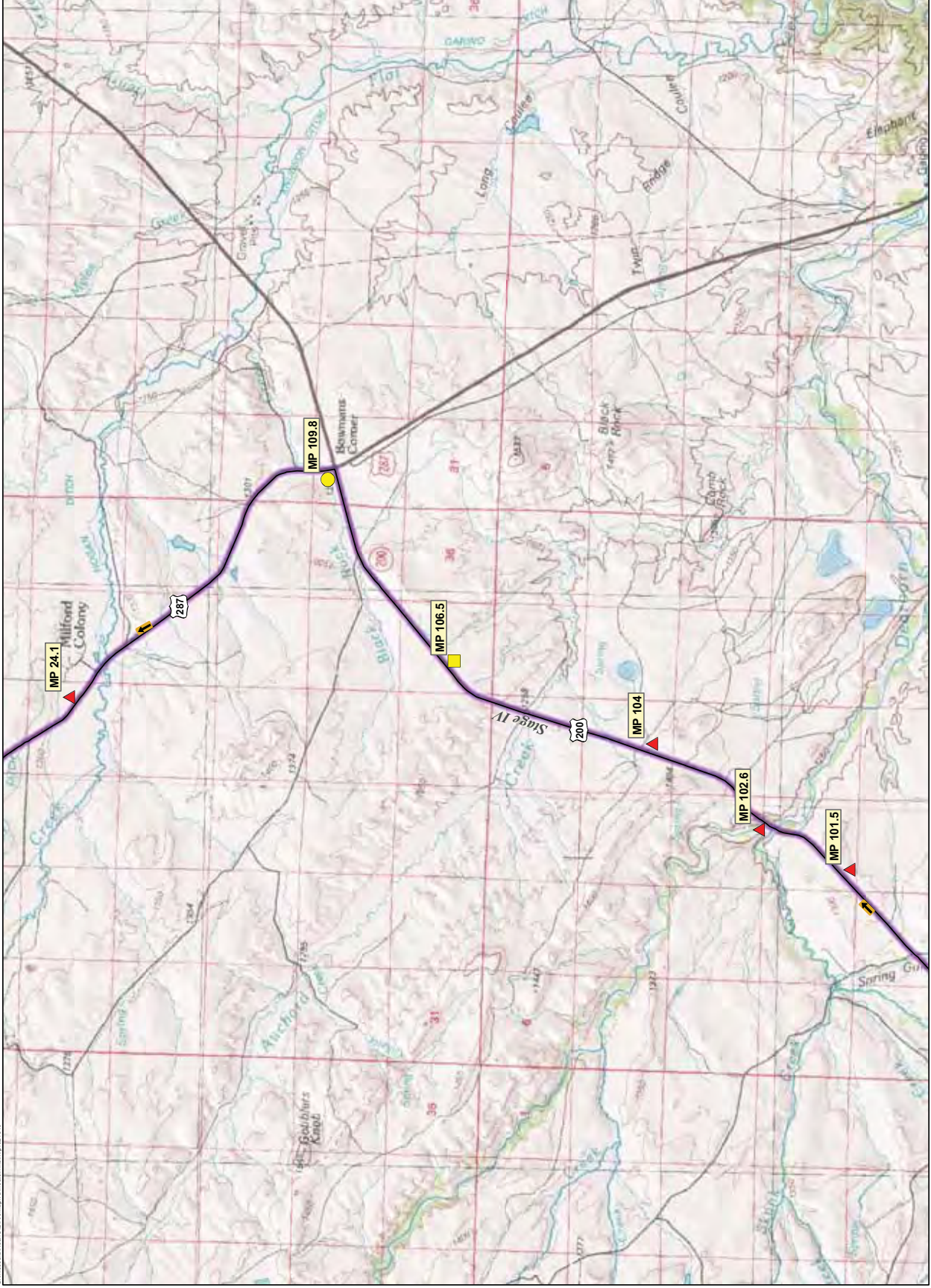


- Legend**
- ⊕ Detour
  - △ Clear
  - Park
  - Night Parking
  - ◇ Miscellaneous Road Modifications
  - Existing
  - Requires Modification
  - New
  - MP 101.5 Mile Marker
  - Route Direction

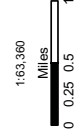
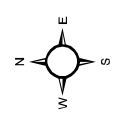


**Traffic Clearing Locations and Miscellaneous Road Modifications In Montana**

**Kearl Module Transportation Project Stage IV**



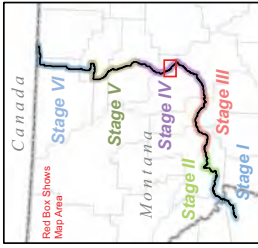
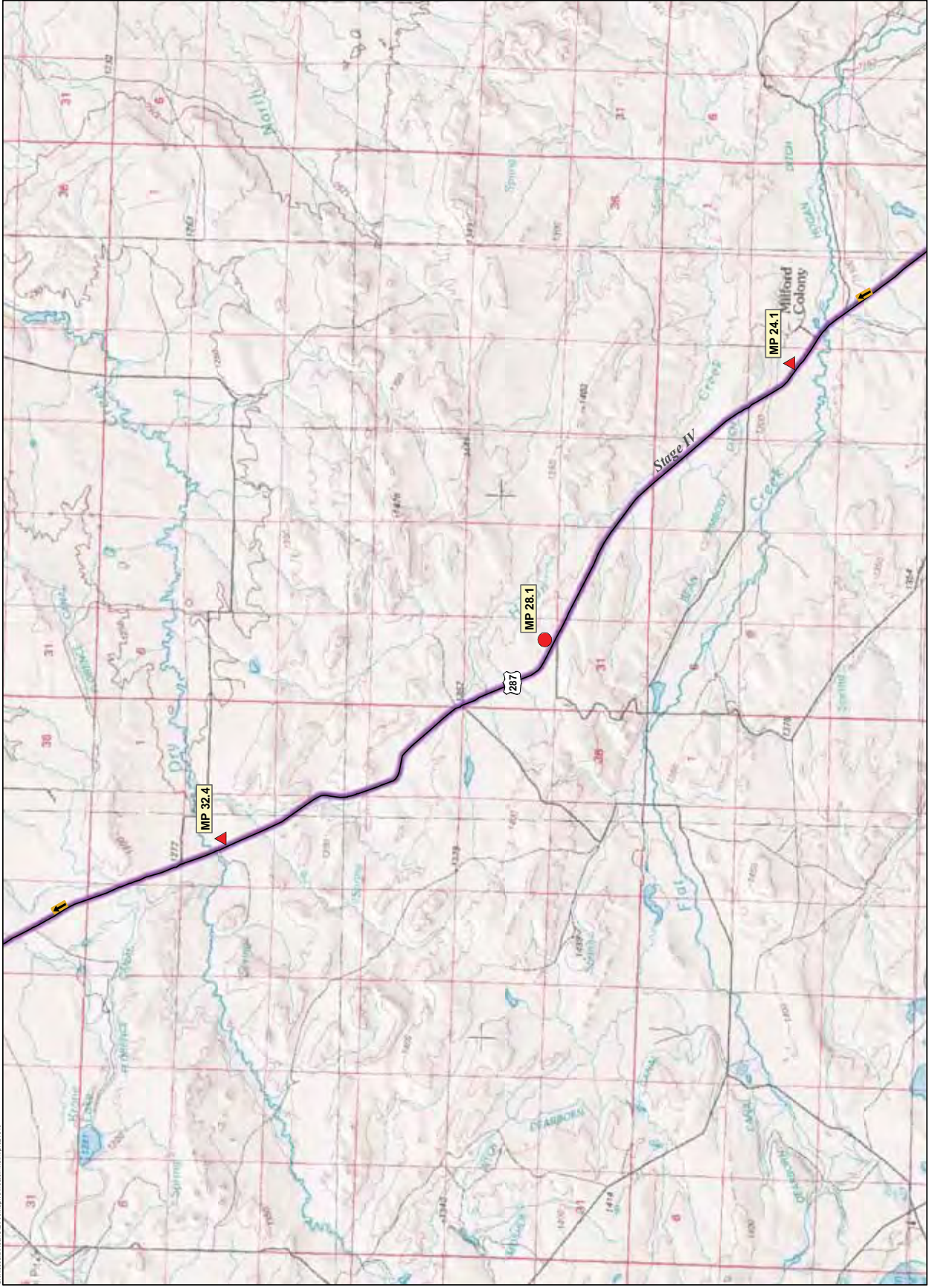
- Legend**
- Delour
  - Clear
  - Park
  - Night Parking
  - Miscellaneous Road Modifications
  - Existing
  - Requires Modification
  - New
  - Mile Marker
  - Route Direction



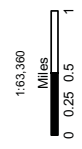
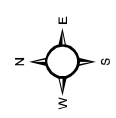
**Traffic Clearing Locations  
and Miscellaneous Road  
Modifications In Montana**

**Kearl Module  
Transportation Project  
Stage IV**



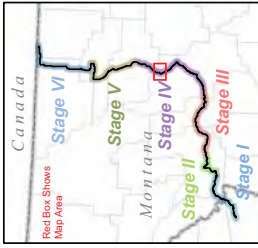
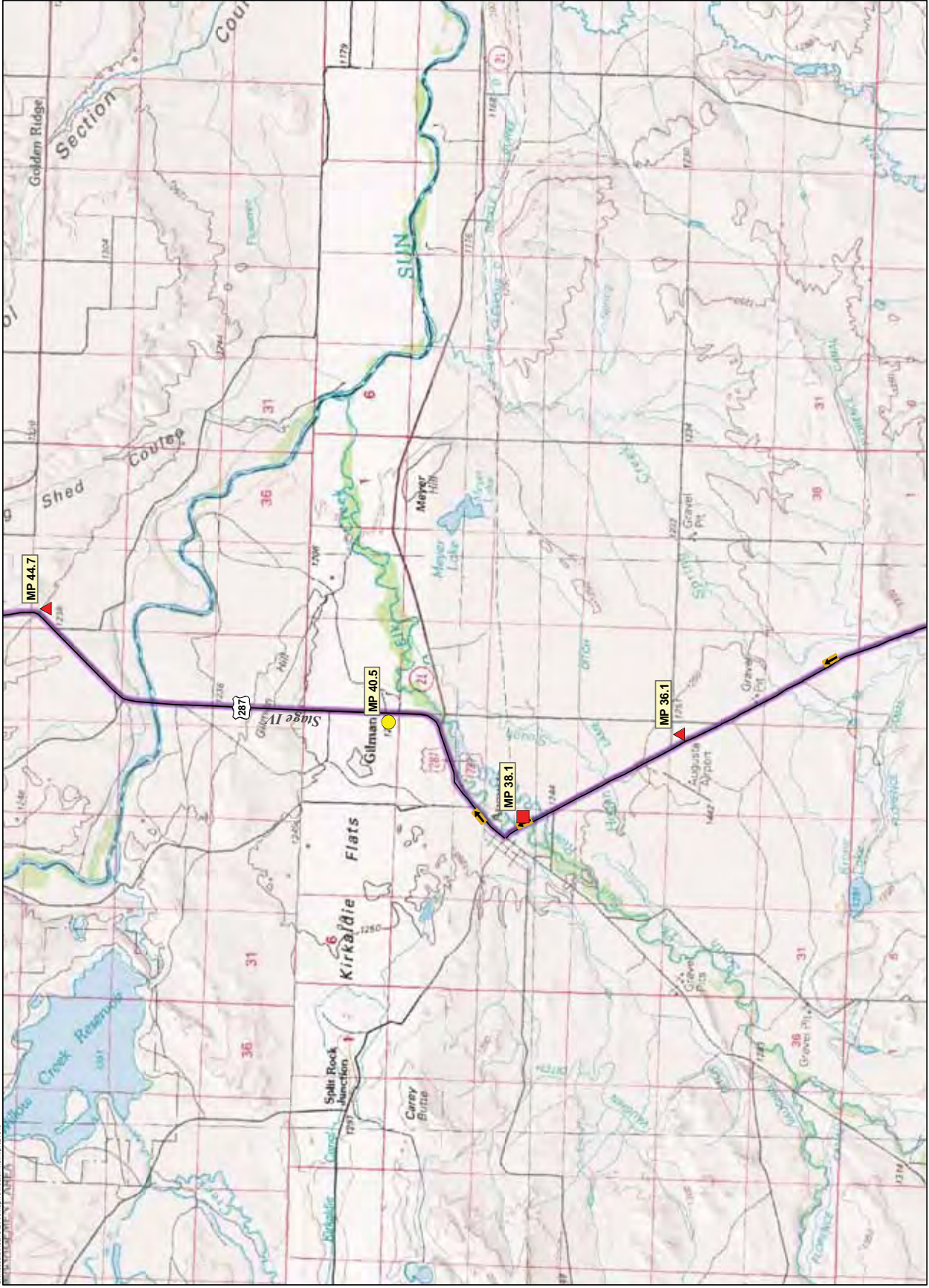


- Legend**
- ⊕ Delour
  - △ Clear
  - Park
  - Night Parking
  - ◇ Miscellaneous Road Modifications
  - Existing
  - Requires Modification
  - New
  - MP 1.5 Mile Marker
  - ➔ Route Direction

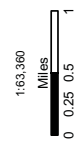
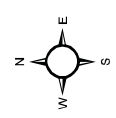


**Traffic Clearing Locations and Miscellaneous Road Modifications In Montana**

**Kearl Module Transportation Project Stage IV**

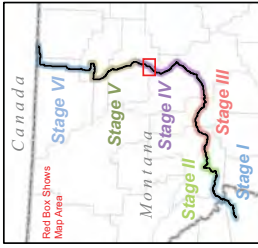
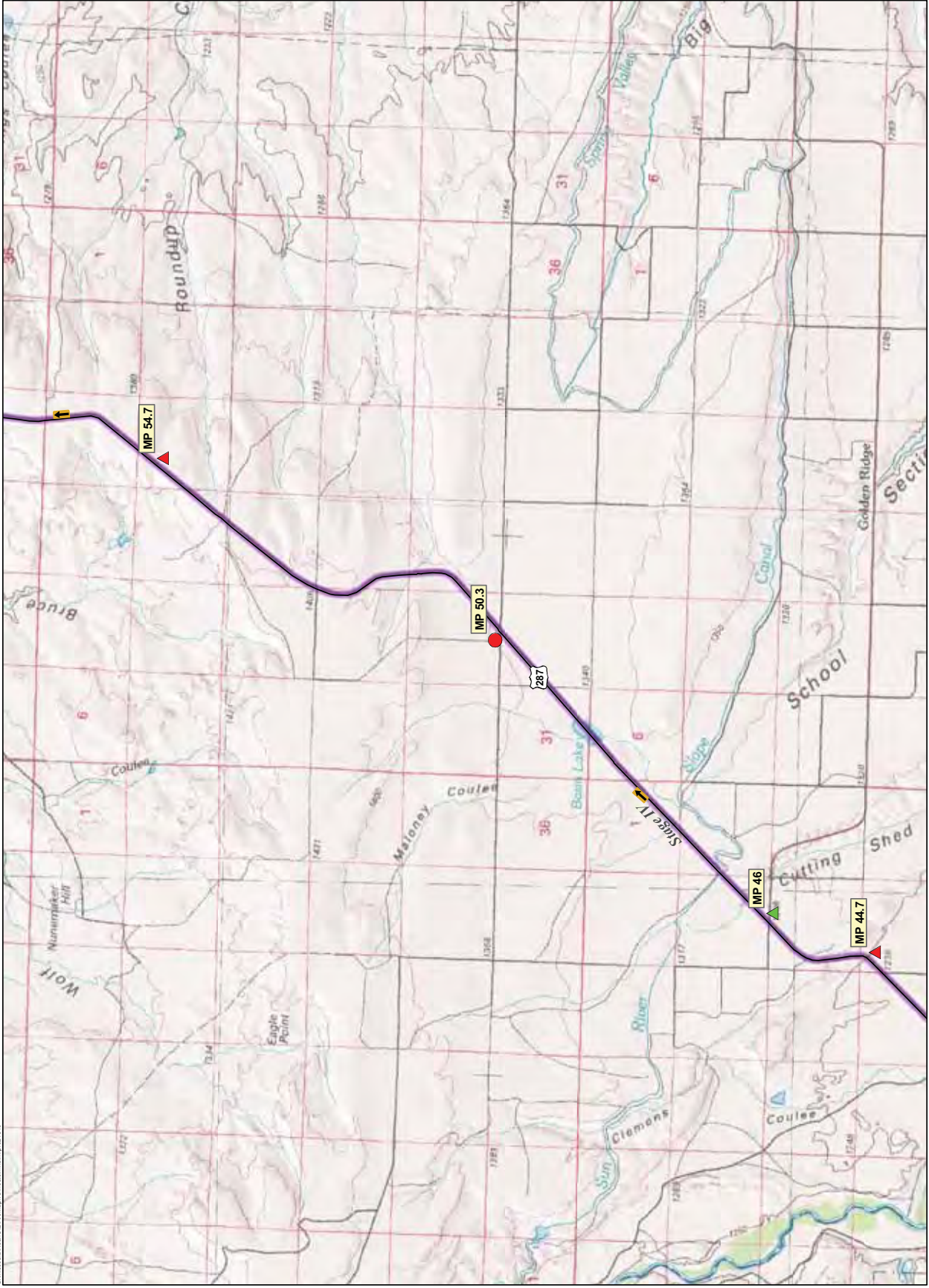


- Legend**
- Delour
  - Clear
  - Park
  - Night Parking
  - Miscellaneous Road Modifications
  - Existing
  - Requires Modification
  - New
  - Mile Marker
  - Route Direction

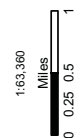
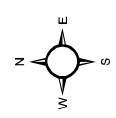


**Traffic Clearing Locations and Miscellaneous Road Modifications In Montana**

**Kearl Module Transportation Project Stage IV**

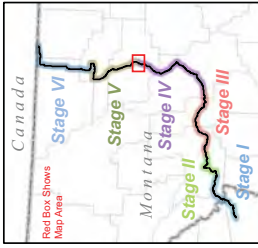
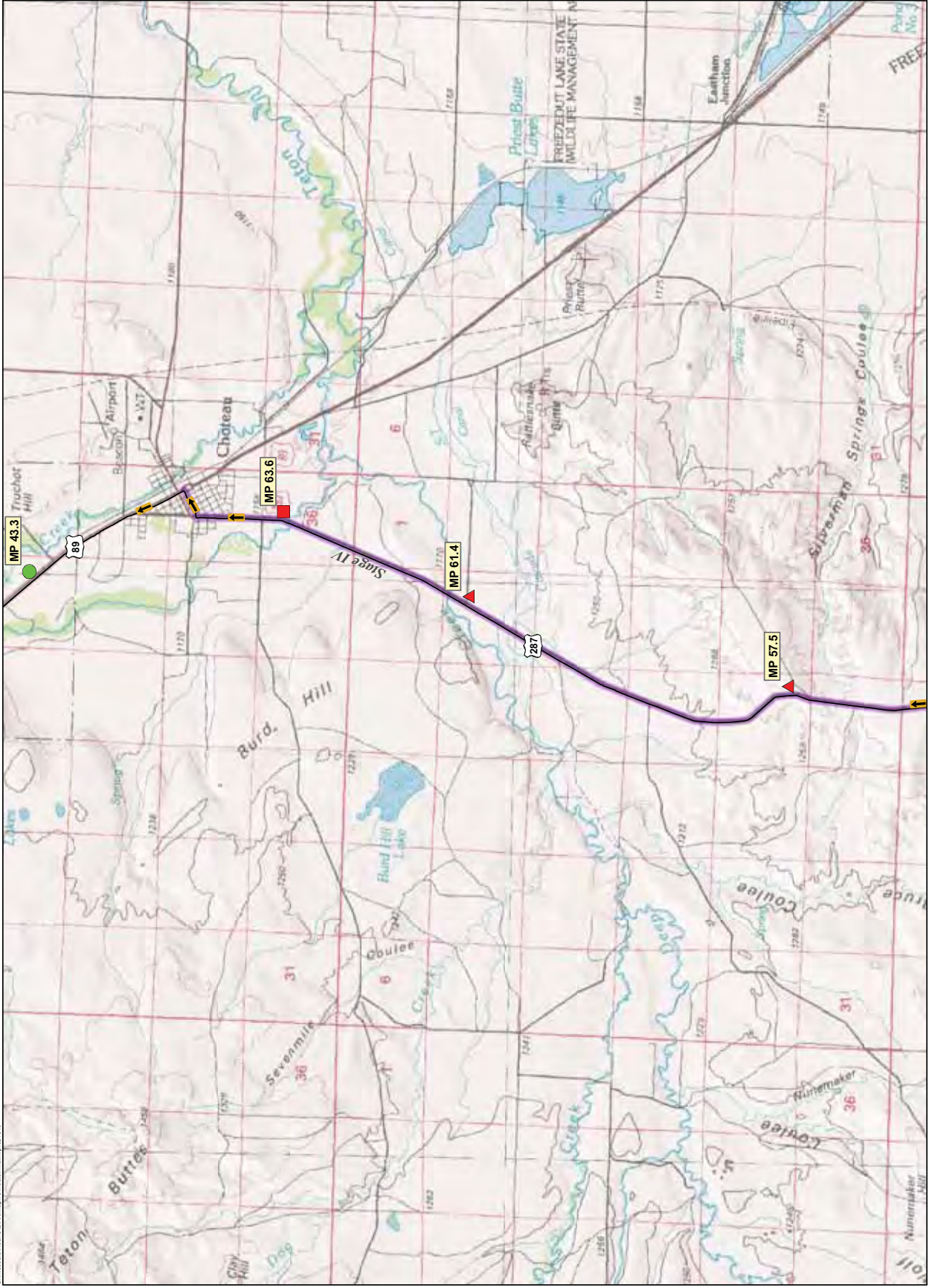


- Legend**
- Delour
  - Clear
  - Park
  - Night Parking
  - Miscellaneous Road Modifications
  - Existing
  - Requires Modification
  - New
  - Mile Marker
  - Route Direction

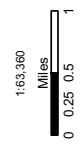
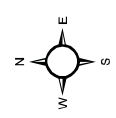


**Traffic Clearing Locations and Miscellaneous Road Modifications In Montana**

**Kearl Module Transportation Project Stage IV**

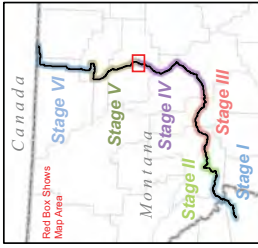
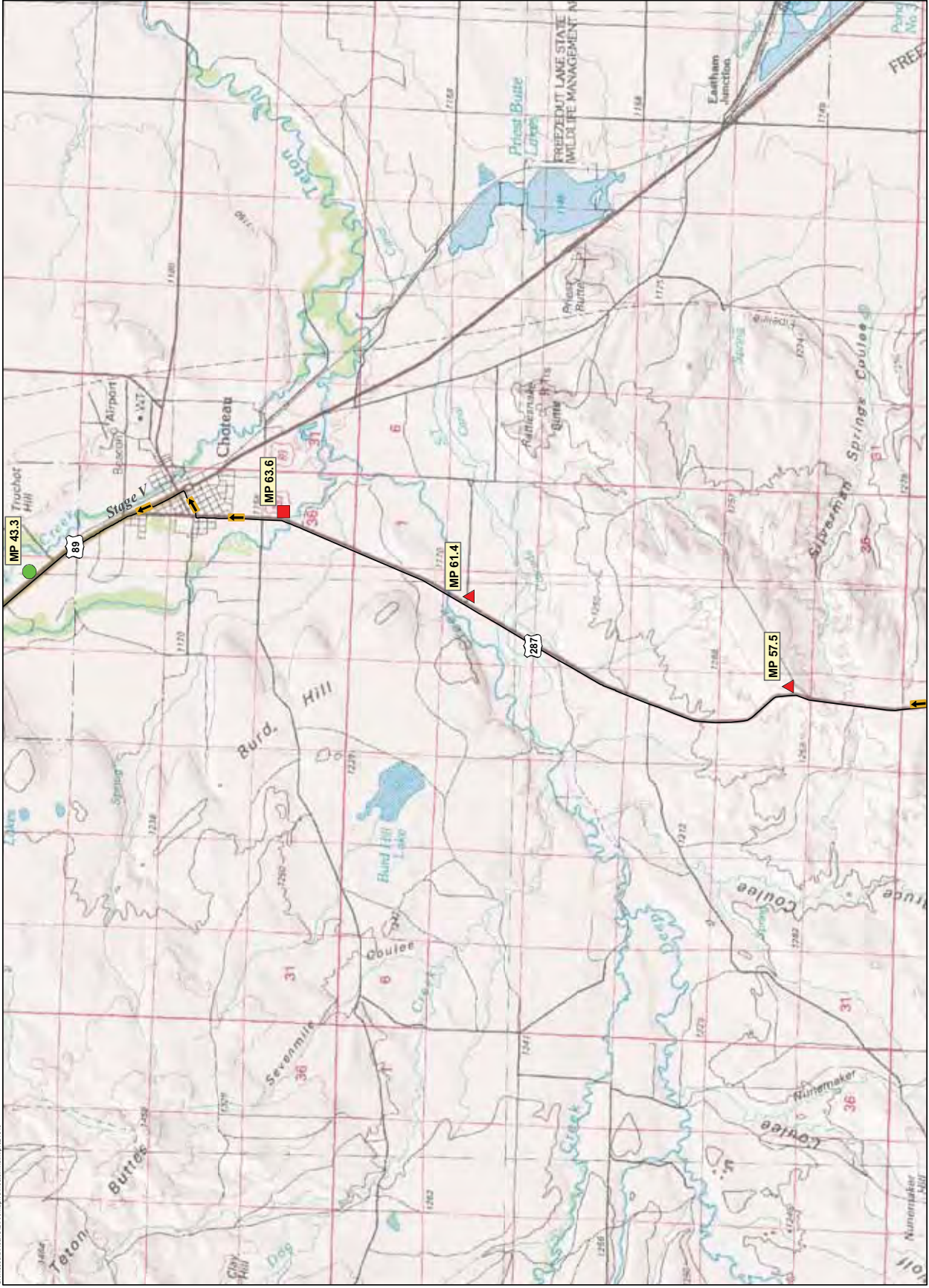


- Legend**
- ⊕ Delour
  - △ Clear
  - Park
  - Night Parking
  - ◇ Miscellaneous Road Modifications
  - Existing
  - Requires Modification
  - New
  - MP 1.5 Mile Marker
  - ➔ Route Direction

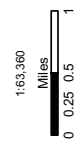
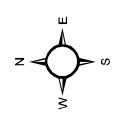


**Traffic Clearing Locations and Miscellaneous Road Modifications In Montana**

**Kearl Module Transportation Project Stage IV**

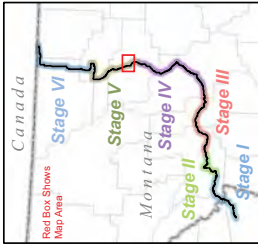
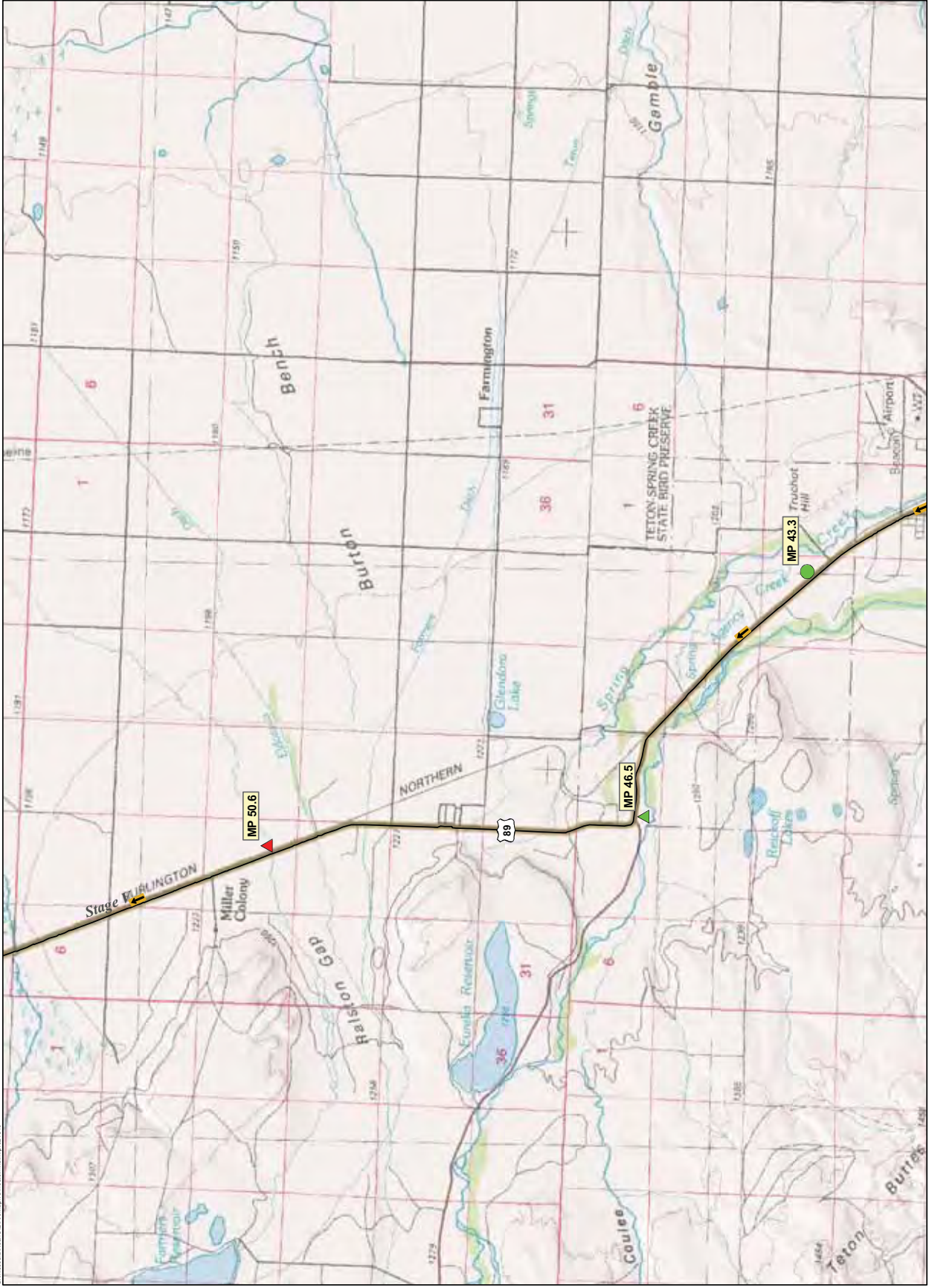


- Legend**
- Delour
  - Clear
  - Park
  - Night Parking
  - Miscellaneous Road Modifications
  - Existing
  - Requires Modification
  - New
  - Mile Marker
  - Route Direction

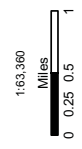
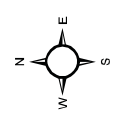


**Traffic Clearing Locations and Miscellaneous Road Modifications In Montana**

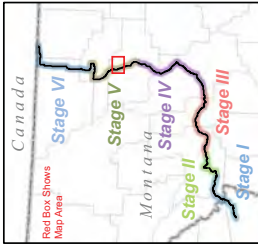
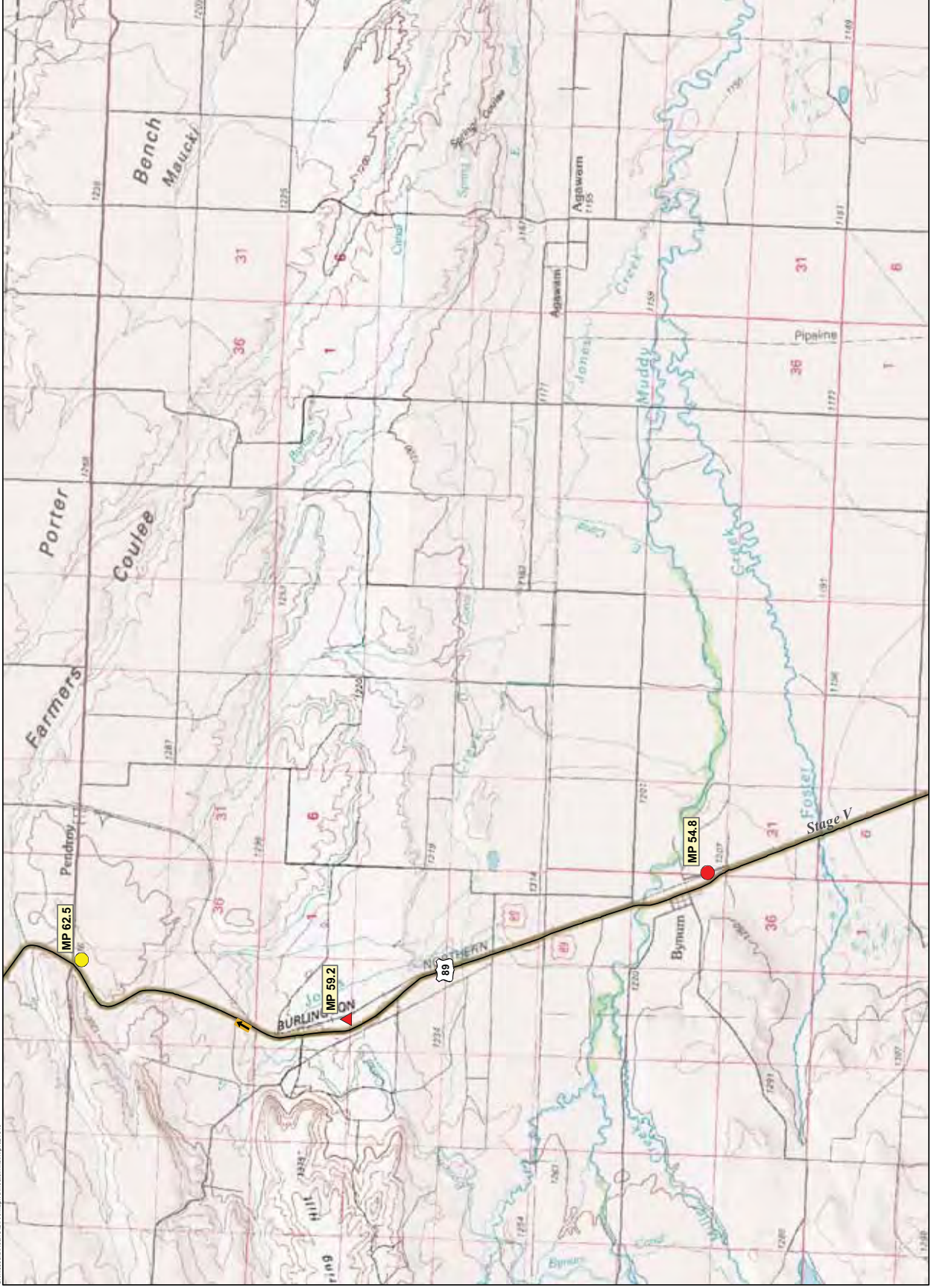
Kearl Module  
Transportation Project  
Stage V



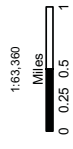
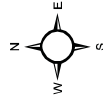
- Legend**
- ⊕ Detour
  - △ Clear
  - Park
  - Night Parking
  - ◇ Miscellaneous Road Modifications
  - Existing
  - Requires Modification
  - New
  - MP 1.5 Mile Marker
  - ➔ Route Direction



**Traffic Clearing Locations and Miscellaneous Road Modifications In Montana**  
**Kearl Module Transportation Project**  
**Stage V**

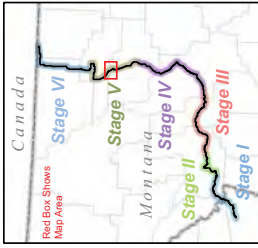
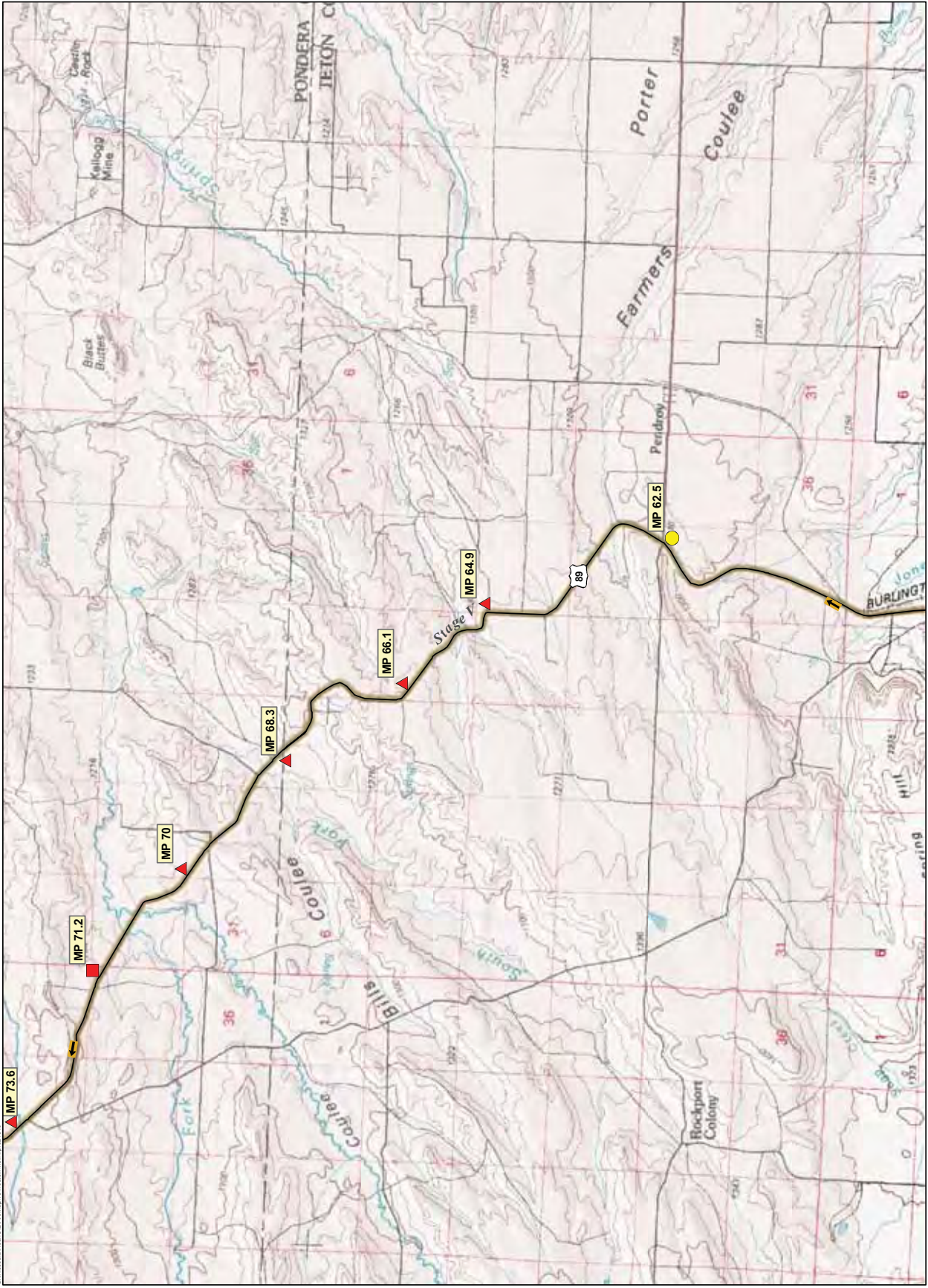


- Legend**
- ⊕ Delour
  - △ Clear
  - Park
  - Night Parking
  - ◇ Miscellaneous Road Modifications
  - Existing
  - Requires Modification
  - New
  - MP 1.5 Mile Marker
  - ➔ Route Direction

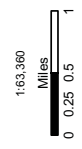
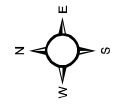


**Traffic Clearing Locations and Miscellaneous Road Modifications In Montana**

**Kearl Module Transportation Project Stage V**



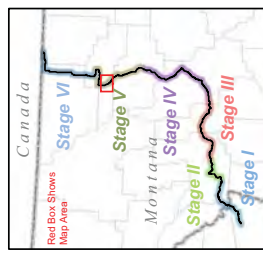
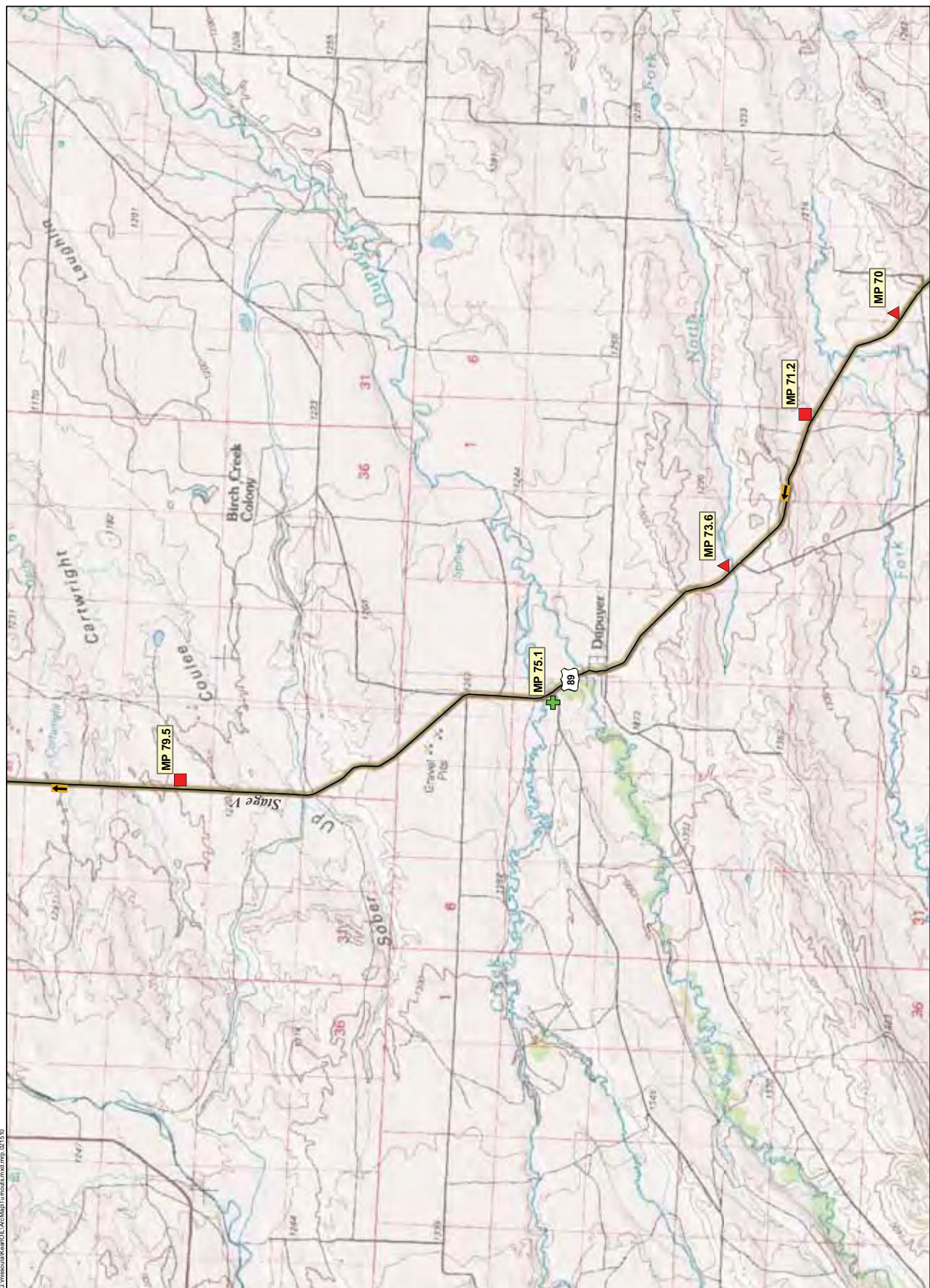
- Legend**
- ⊕ Detour
  - △ Clear
  - Park
  - ◇ Night Parking
  - ▭ Miscellaneous Road Modifications
  - ▭ Existing
  - ▭ Requires Modification
  - ▭ New
  - ▭ Mile Marker
  - ➔ Route Direction



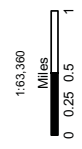
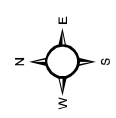
**Traffic Clearing Locations and Miscellaneous Road Modifications In Montana**

Kearl Module  
Transportation Project  
Stage V



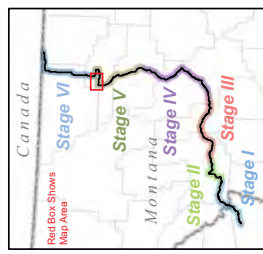
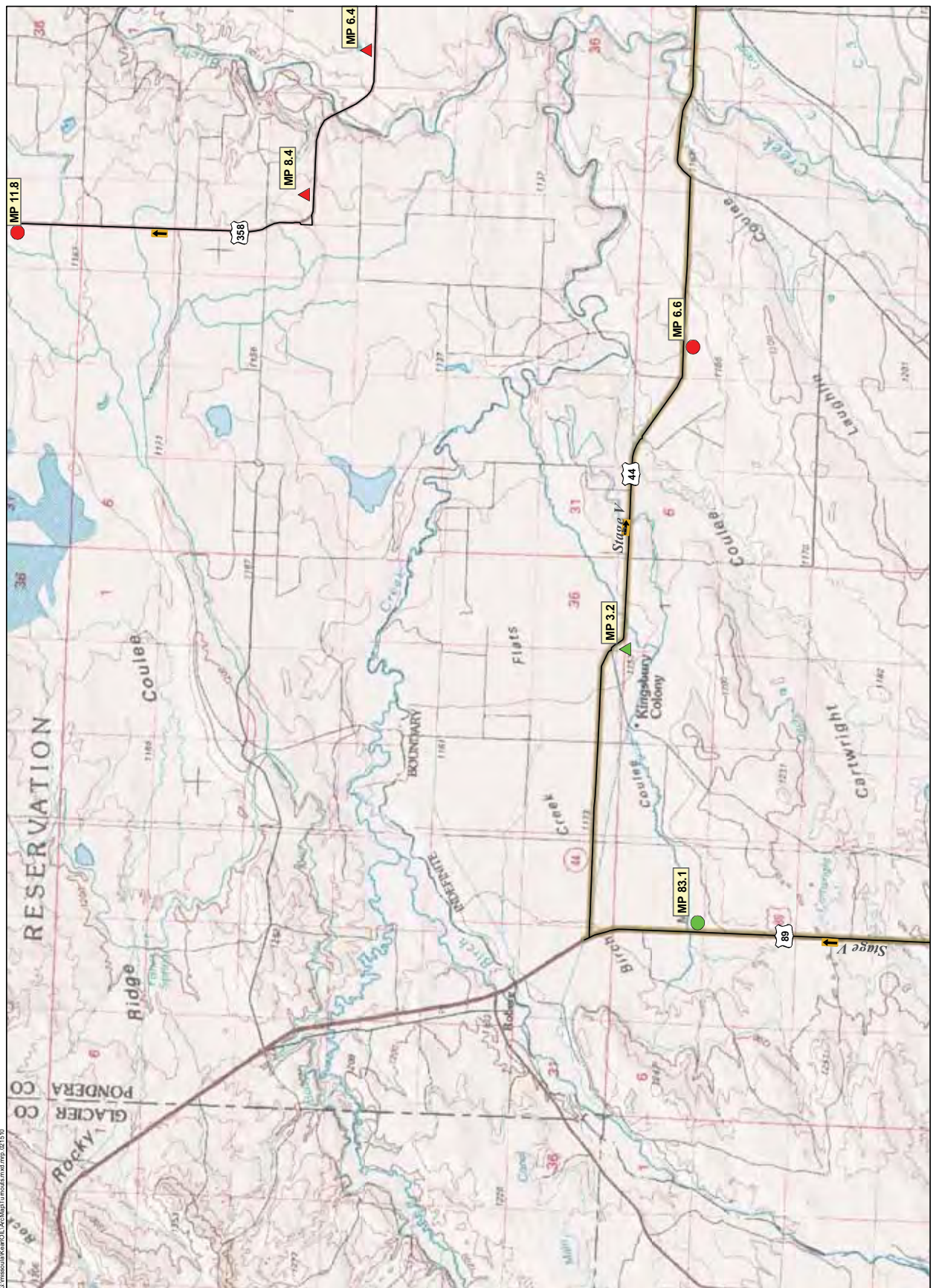


- Legend**
- Delour
  - Clear
  - Park
  - Night Parking
  - Miscellaneous Road Modifications
  - Existing
  - Requires Modification
  - New
  - Mile Marker
  - Route Direction



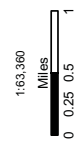
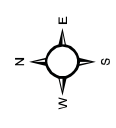
**Traffic Clearing Locations and Miscellaneous Road Modifications In Montana**

**Kearl Module Transportation Project Stage V**



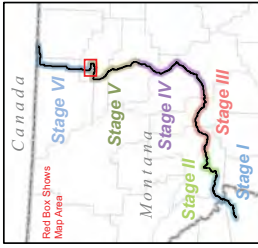
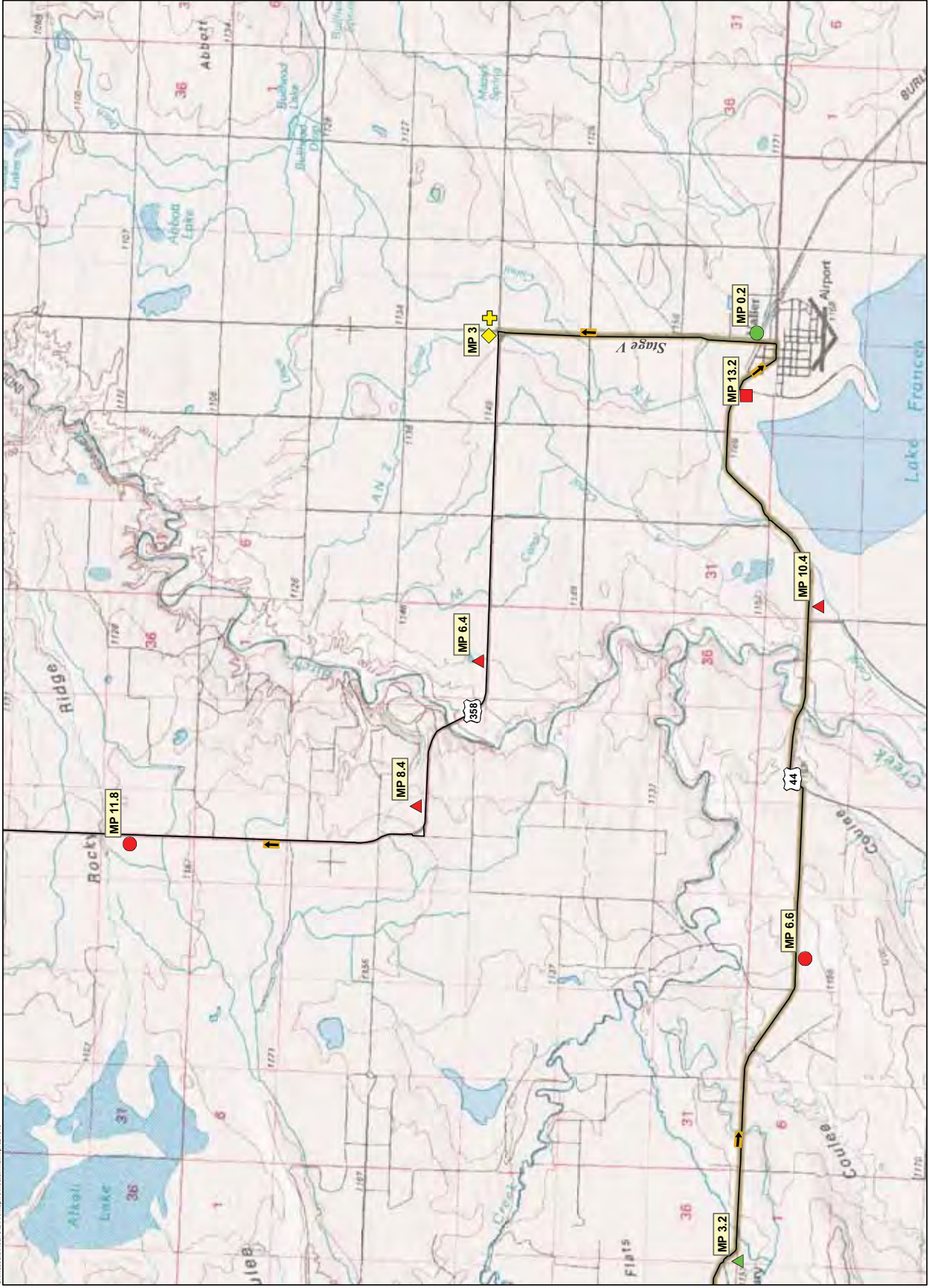
**Legend**

- Delour
- Clear
- Park
- Night Parking
- Miscellaneous Road Modifications
- Existing
- Requires Modification
- New
- Mile Marker
- Route Direction

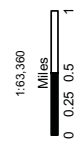
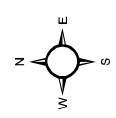


**Traffic Clearing Locations and Miscellaneous Road Modifications In Montana**

**Kearl Module Transportation Project Stage V**

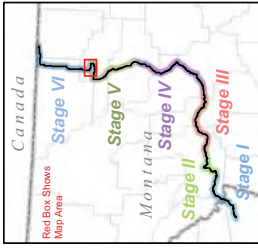
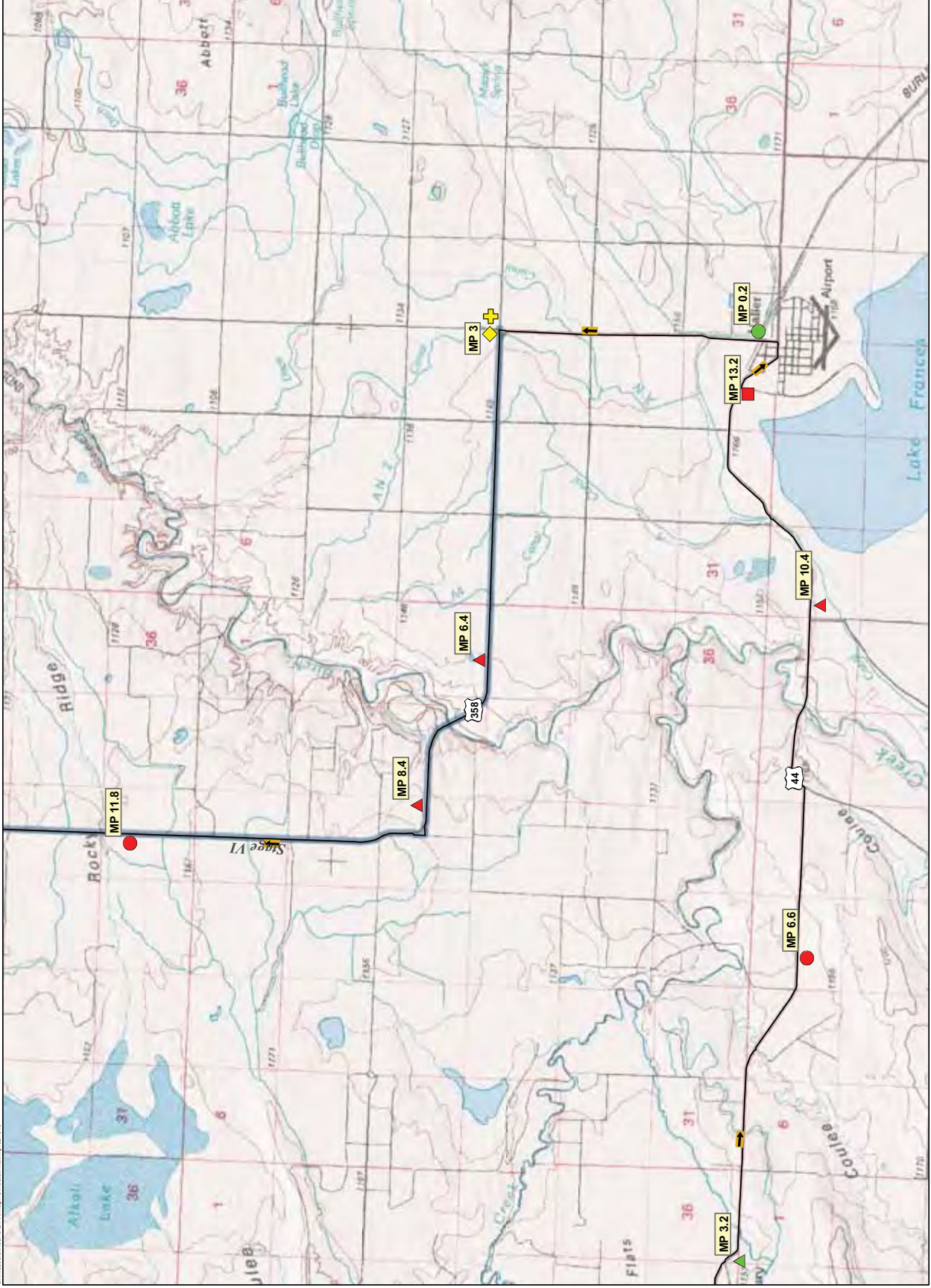


- Legend**
- Delour
  - Clear
  - Park
  - Night Parking
  - Miscellaneous Road Modifications
  - Existing
  - Requires Modification
  - New
  - Mile Marker
  - Route Direction

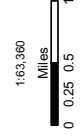
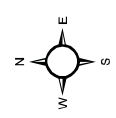


**Traffic Clearing Locations and Miscellaneous Road Modifications In Montana**

Kearl Module  
Transportation Project  
Stage V

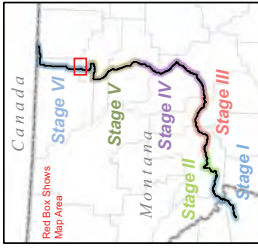
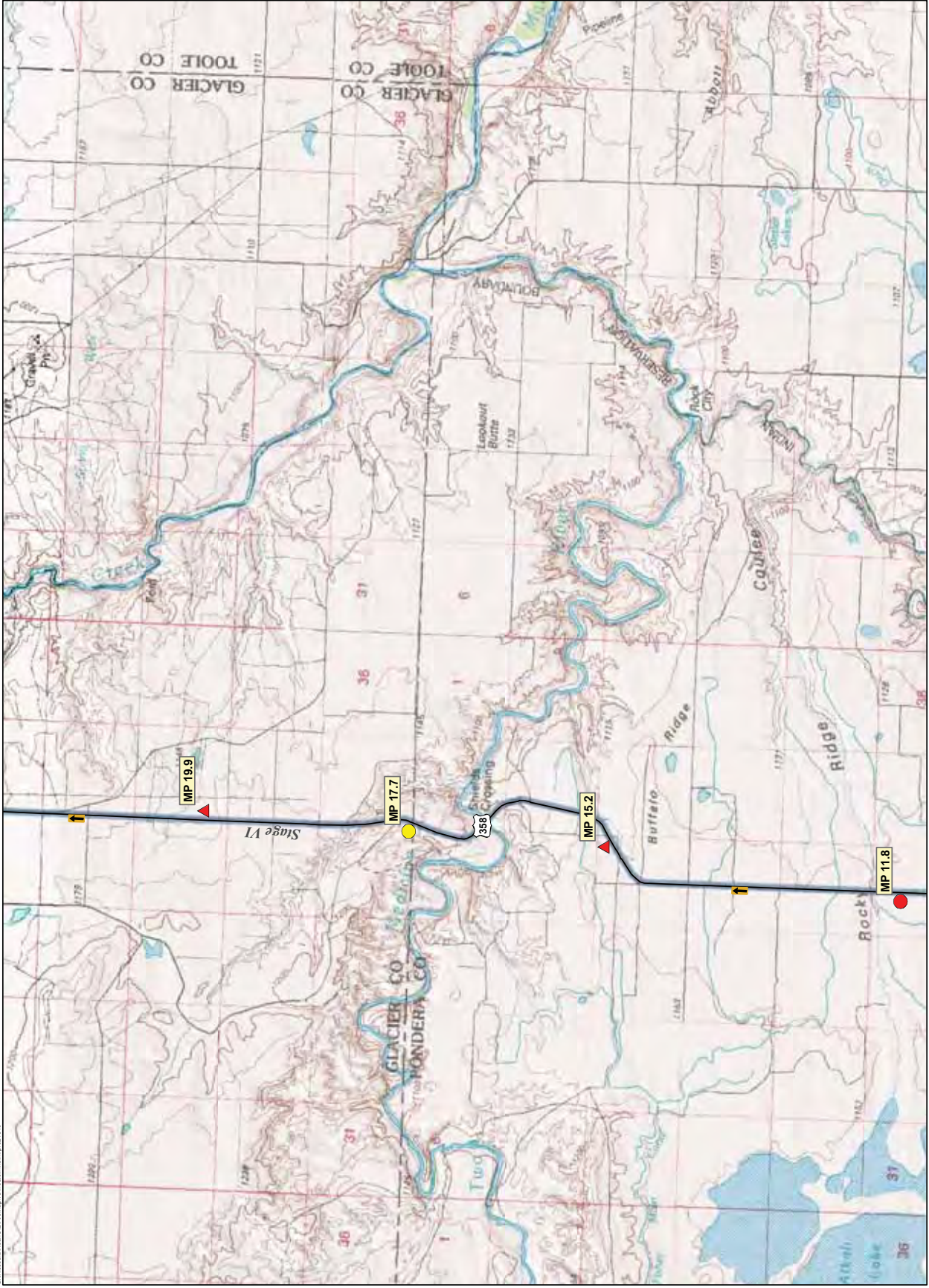


- Legend**
- Delour
  - Clear
  - Park
  - Night Parking
  - Miscellaneous Road Modifications
  - Existing
  - Requires Modification
  - New
  - Mile Marker
  - Route Direction

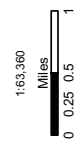
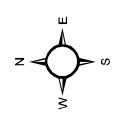


**Traffic Clearing Locations and Miscellaneous Road Modifications In Montana**

**Kearl Module Transportation Project  
Stage VI**

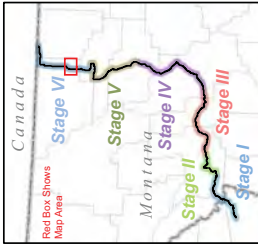
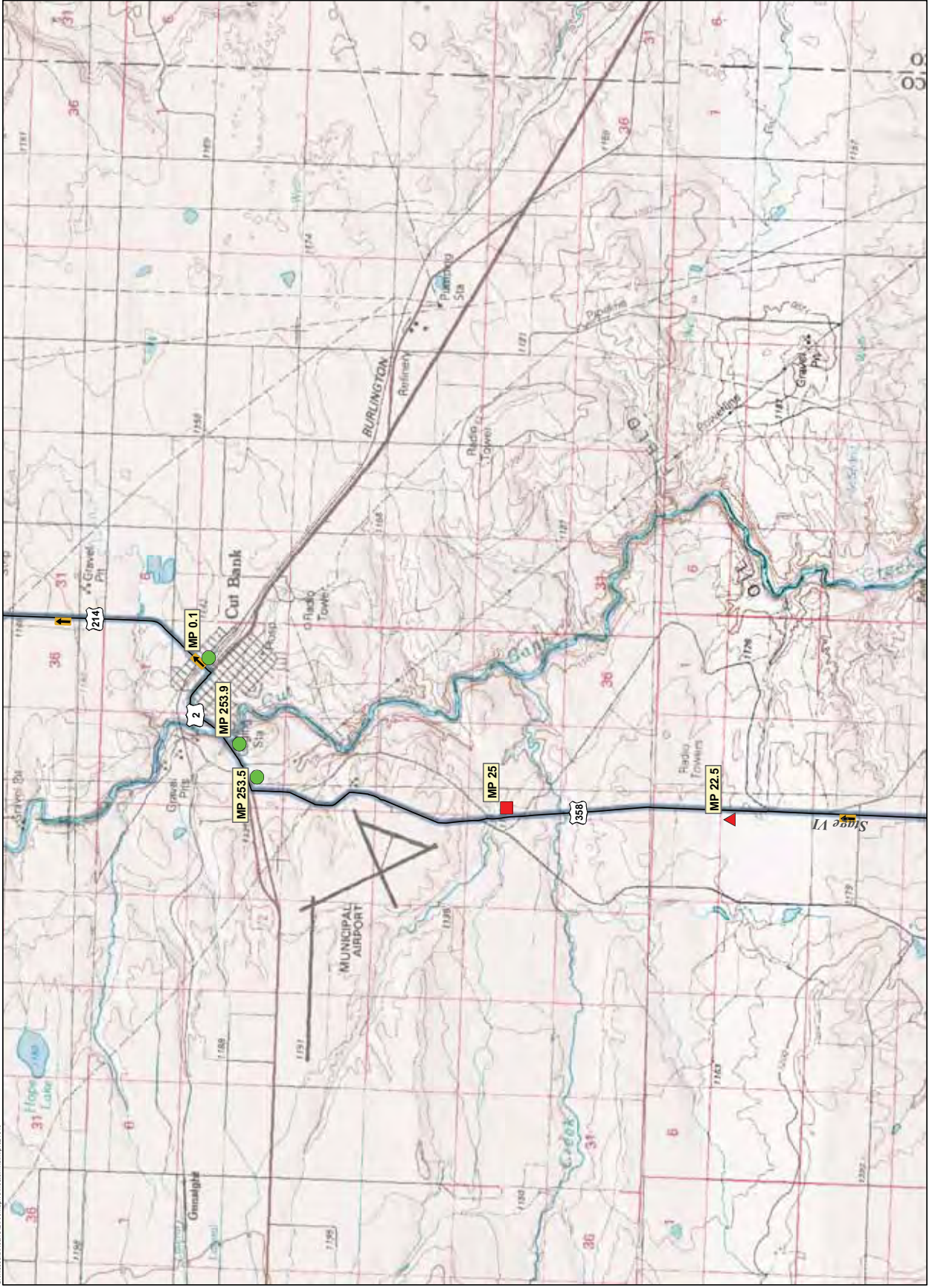


- Legend**
- Delour
  - Clear
  - Park
  - Night Parking
  - Miscellaneous Road Modifications
  - Existing
  - Requires Modification
  - New
  - Mile Marker
  - Route Direction

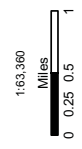
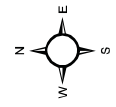


**Traffic Clearing Locations and Miscellaneous Road Modifications In Montana**

**Kearl Module Transportation Project Stage VI**

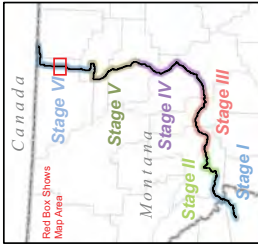
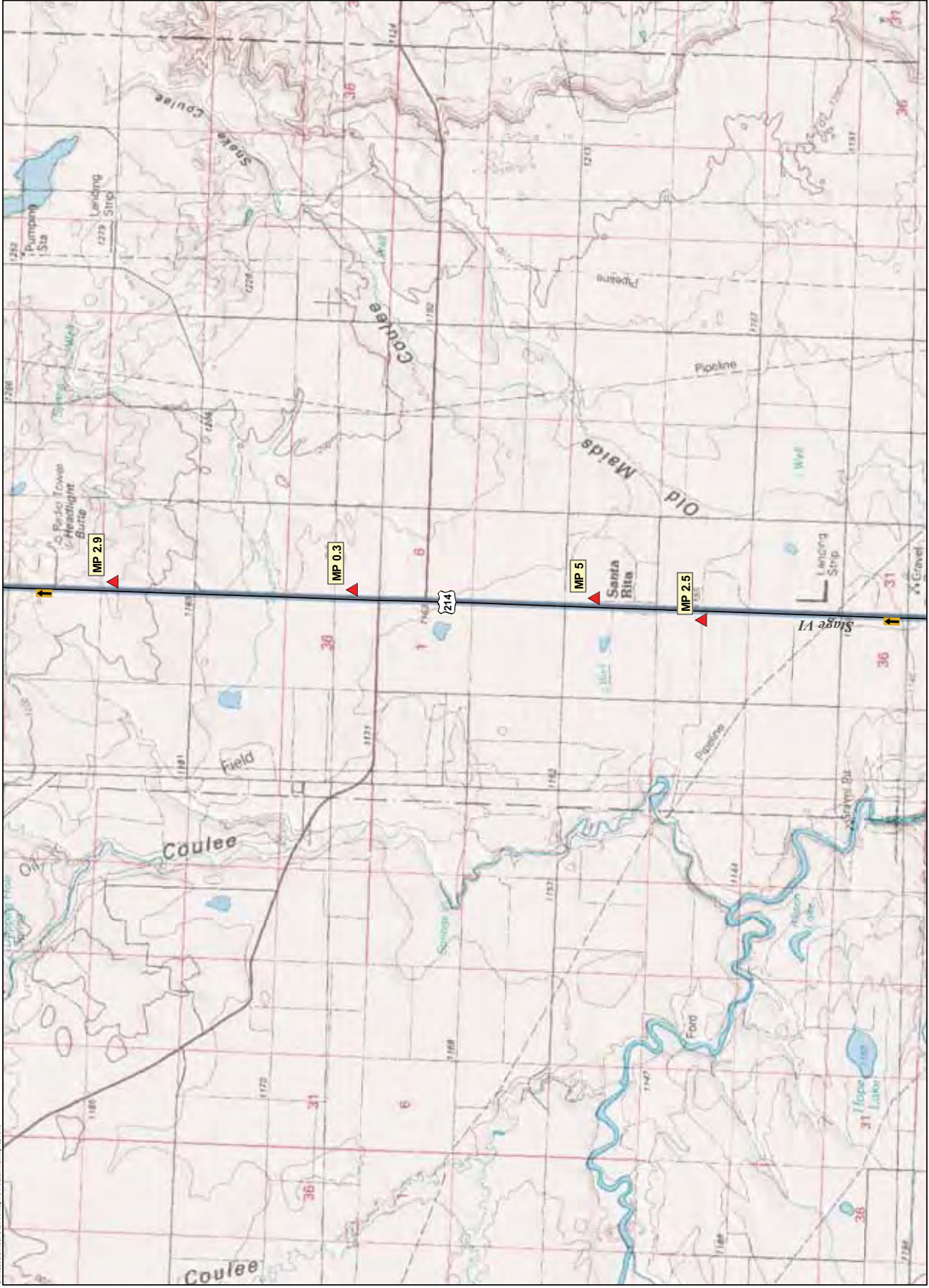


- Legend**
- ⊕ Detour
  - △ Clear
  - Park
  - Night Parking
  - ◇ Miscellaneous Road Modifications
  - Existing
  - Requires Modification
  - New
  - MP 1.5 Mile Marker
  - ➔ Route Direction

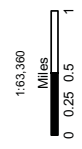
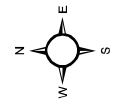


**Traffic Clearing Locations  
and Miscellaneous Road  
Modifications In Montana**

**Kearl Module  
Transportation Project  
Stage VI**

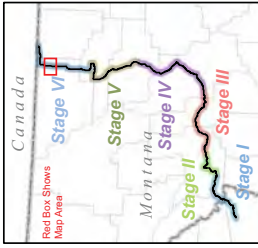
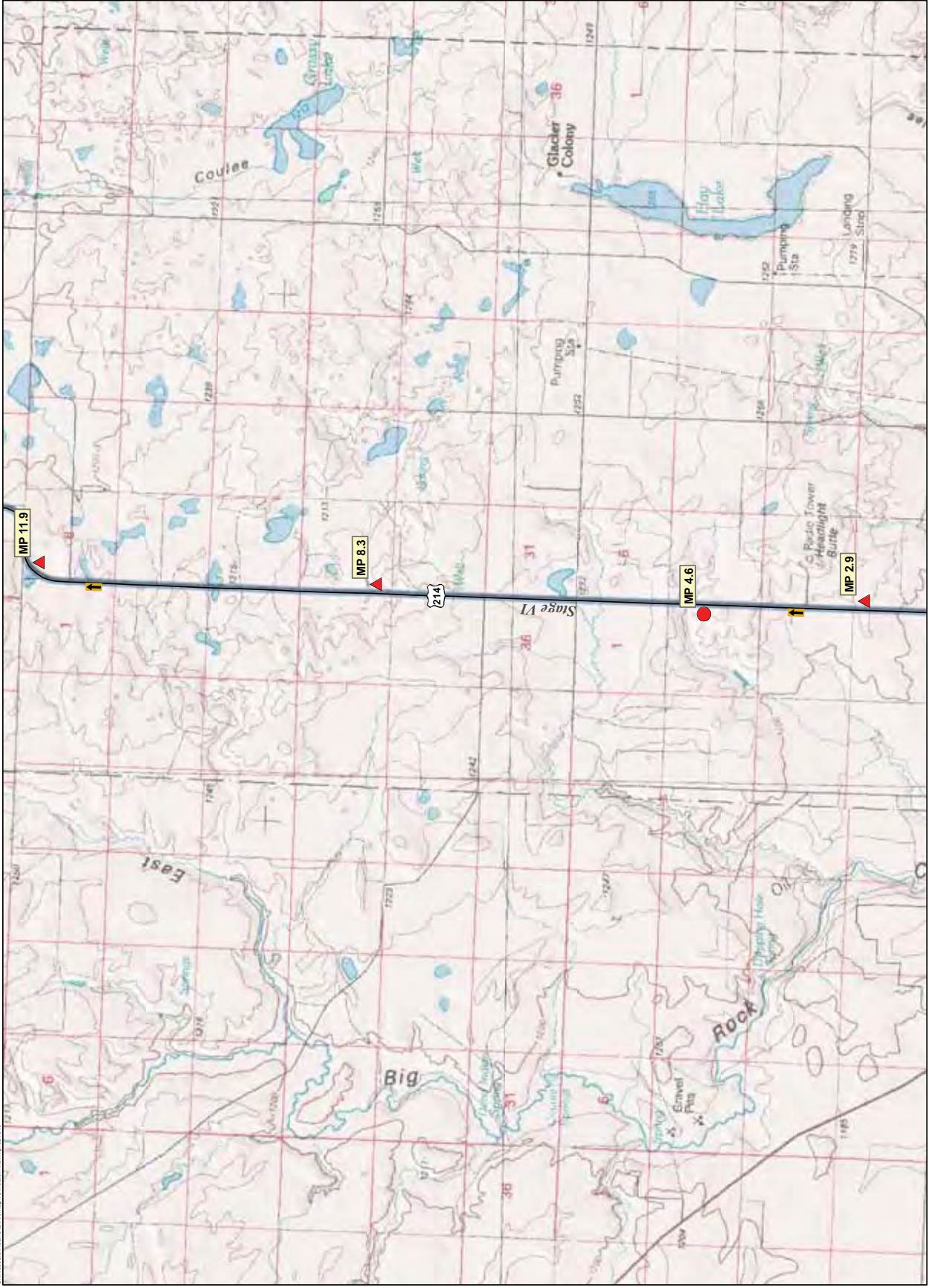


- Legend**
- ⊕ Detour
  - △ Clear
  - Park
  - Night Parking
  - ◇ Miscellaneous Road Modifications
  - Existing
  - Requires Modification
  - New
  - MP 1.5 Mile Marker
  - ➔ Route Direction

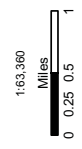
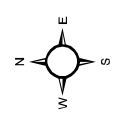


**Traffic Clearing Locations and Miscellaneous Road Modifications In Montana**

**Kearl Module Transportation Project  
Stage VI**



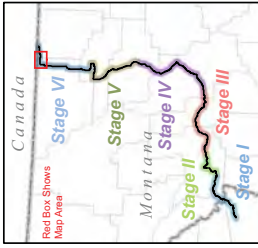
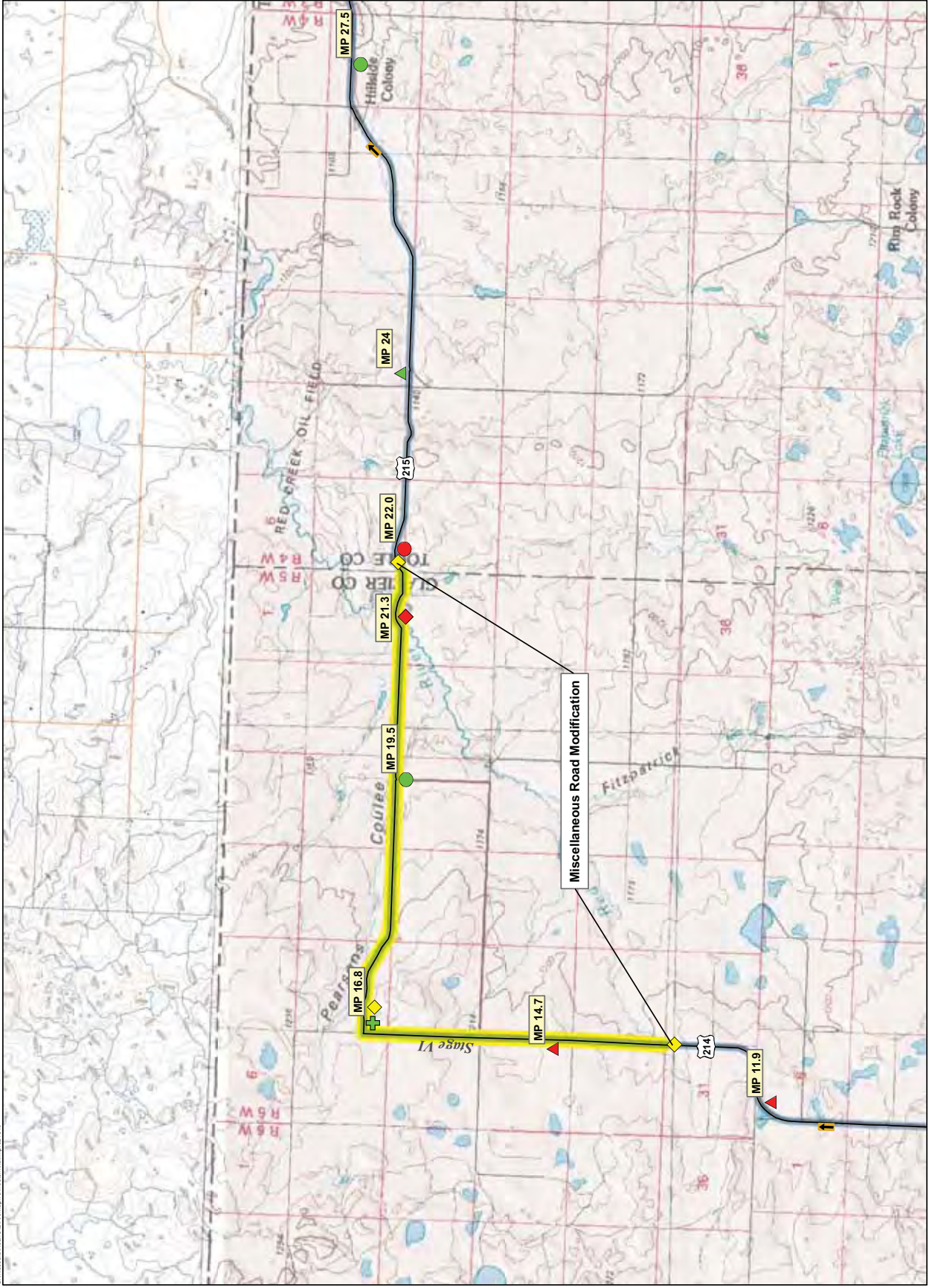
- Legend**
- ⊕ Delour
  - △ Clear
  - Park
  - Night Parking
  - ◇ Miscellaneous Road Modifications
  - Existing
  - Requires Modification
  - New
  - MP 1.5 Mile Marker
  - Route Direction



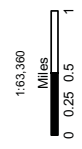
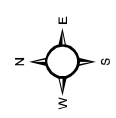
**Traffic Clearing Locations and Miscellaneous Road Modifications In Montana**

**Kearl Module  
Transportation Project  
Stage VI**



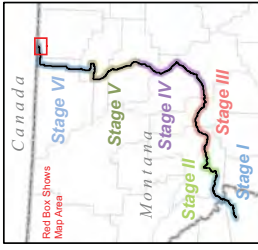
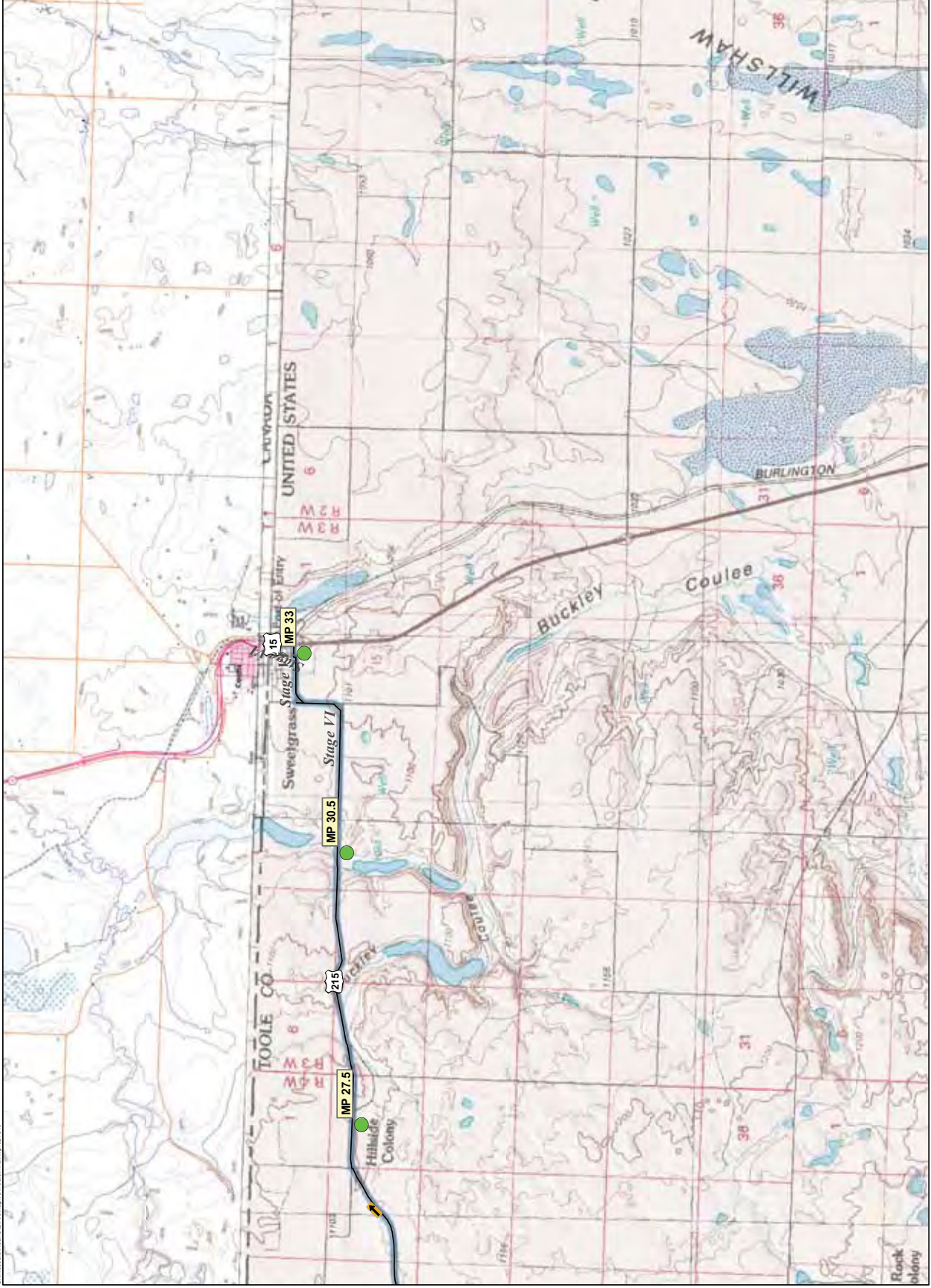


- Legend**
- Delour
  - Clear
  - Park
  - Night Parking
  - Miscellaneous Road Modifications
  - Existing
  - Requires Modification
  - New
  - Mile Marker
  - Route Direction

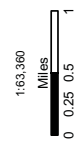
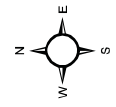


**Traffic Clearing Locations and Miscellaneous Road Modifications In Montana**

**Kearl Module Transportation Project**  
**Stage VI**



- Legend**
- Delour
  - Clear
  - Park
  - Night Parking
  - Miscellaneous Road Modifications
  - Existing
  - Requires Modification
  - New
  - Mile Marker
  - Route Direction

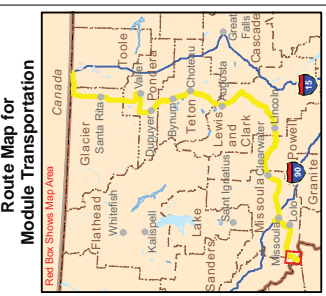
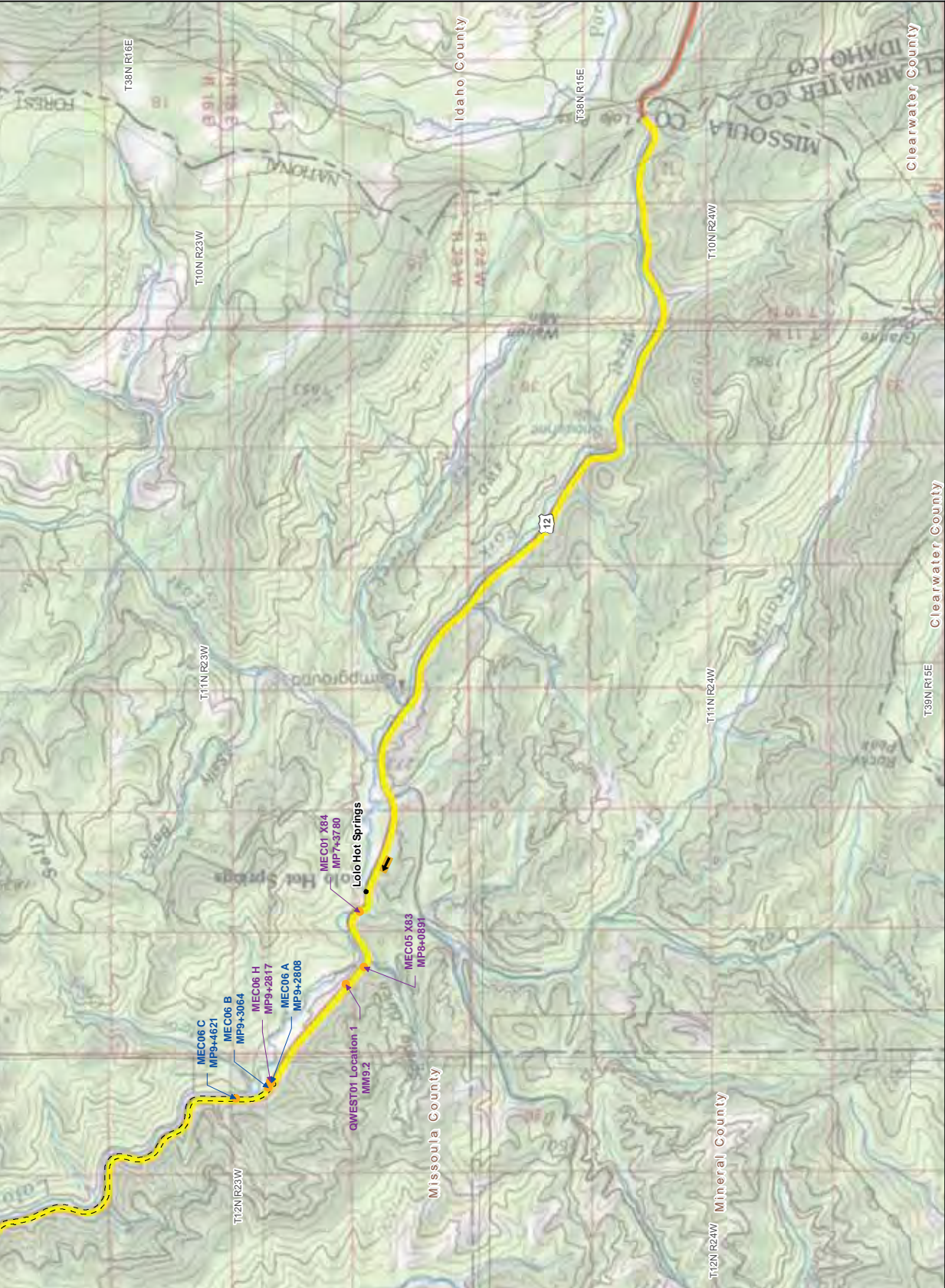


**Traffic Clearing Locations and Miscellaneous Road Modifications In Montana**

**Kearl Module Transportation Project  
Stage VI**

**Appendix B**  
**Maps of Utility Locations**





**Route Map for Module Transportation**

Red Box Shows Map Area

- Route Direction
- Approximate Utility Locations
- 10-Mile Plow
- Module Transportation Route
- County Boundary
- USA Land Survey System
- Streams
- Lake
- Interstate
- Major Road
- Highway
- Local Road

**MEC06**  
Packet Number

**B**  
Crossing Identification

**MP9+306/AM16.9**  
Mile Post/Mile Marker

**Above Ground**

**Under Ground**

Designates Priority Crossing

- 3RV - 3 Rivers (COM)
- BLF - Blackfoot Telephone (COM)
- BRESNO - Bresnan North (COM)
- BRESSO - Bresnan South (COM)
- GLACEL - Glacier Electric (POW)
- MEC - Missoula Electric Coop (POW)
- NWEGF - NorthWestern Energy
- NWEHEL - NorthWestern Energy
- NWETRANS - NorthWestern Energy
- Helena (POW)
- MIS - Transmission (POW)
- NorthWestern Energy
- Missoula (POW)
- QWEST - Qwest (COM)
- SUNRIV - Sun River (POW)

POW - Power Line COM - Communication Line  
NA - Not Available

Scale: 1:50,000

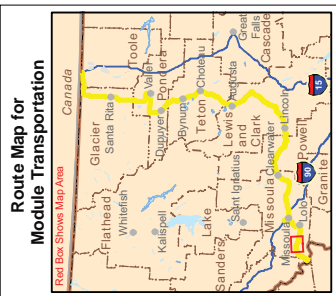
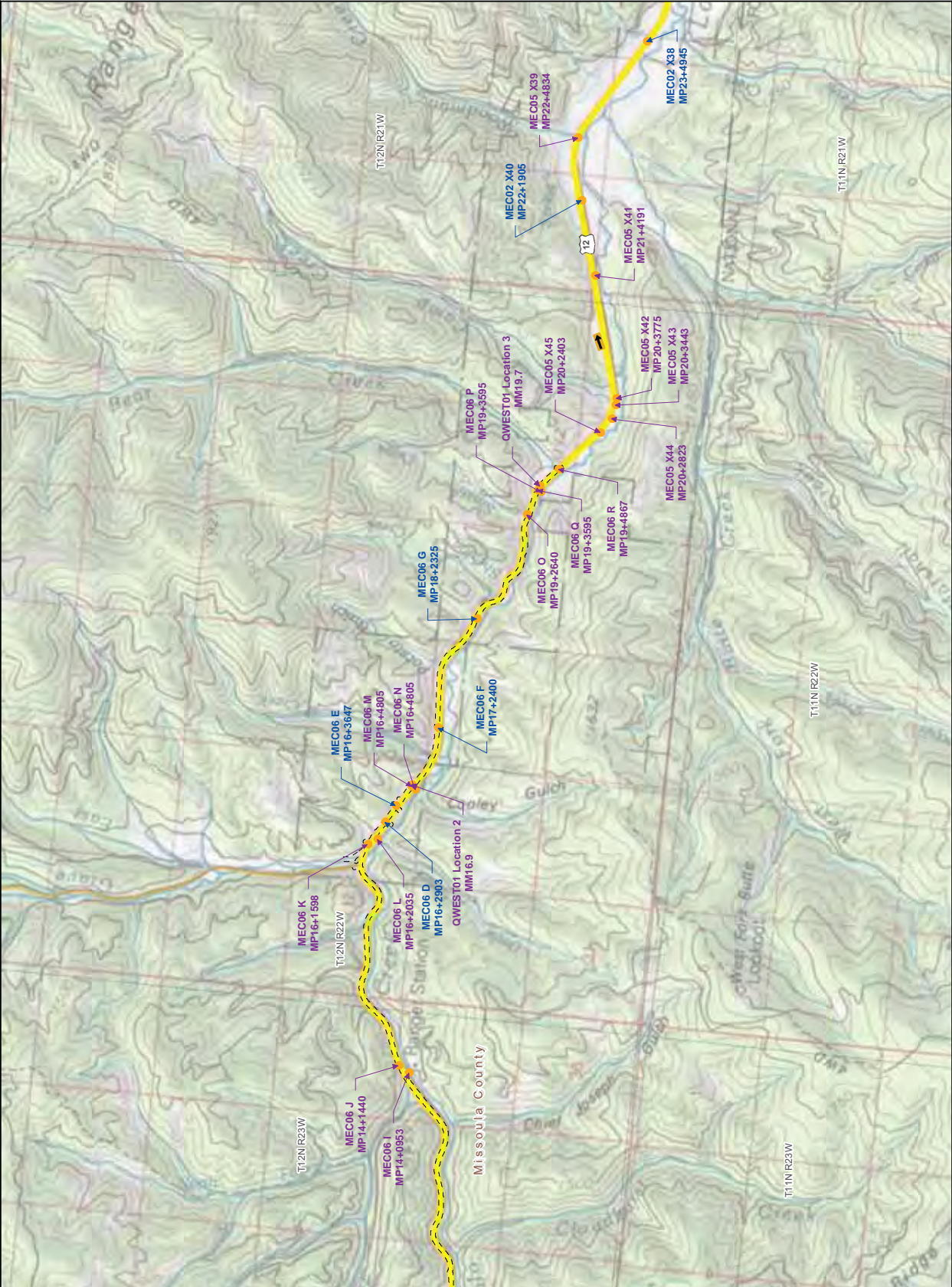
Miles: 0, 0.5, 1

North Arrow

**Approximate Utility Locations In Montana**

**Kearl Module Transportation Project**

**Sheet 1 of 26**



**Legend**

- Route Direction
- Approximate Utility Locations
  - 10-Mile Plow
  - Module Transportation Route
  - County Boundary
  - USA Land Survey System
  - Streams
  - Lake
  - Interstate
  - Major Road
  - Highway
  - Local Road
- MEC06 Packet Number
- B Crossing Identification
- MP9+306/AMM16.9 Mile Post/Mile Marker
- Above Ground
- Under Ground
- Designates Priority Crossing

**Utility List:**

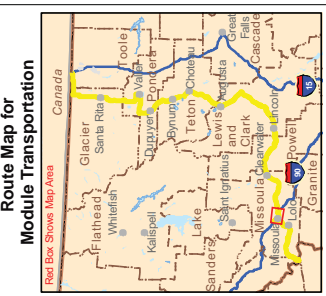
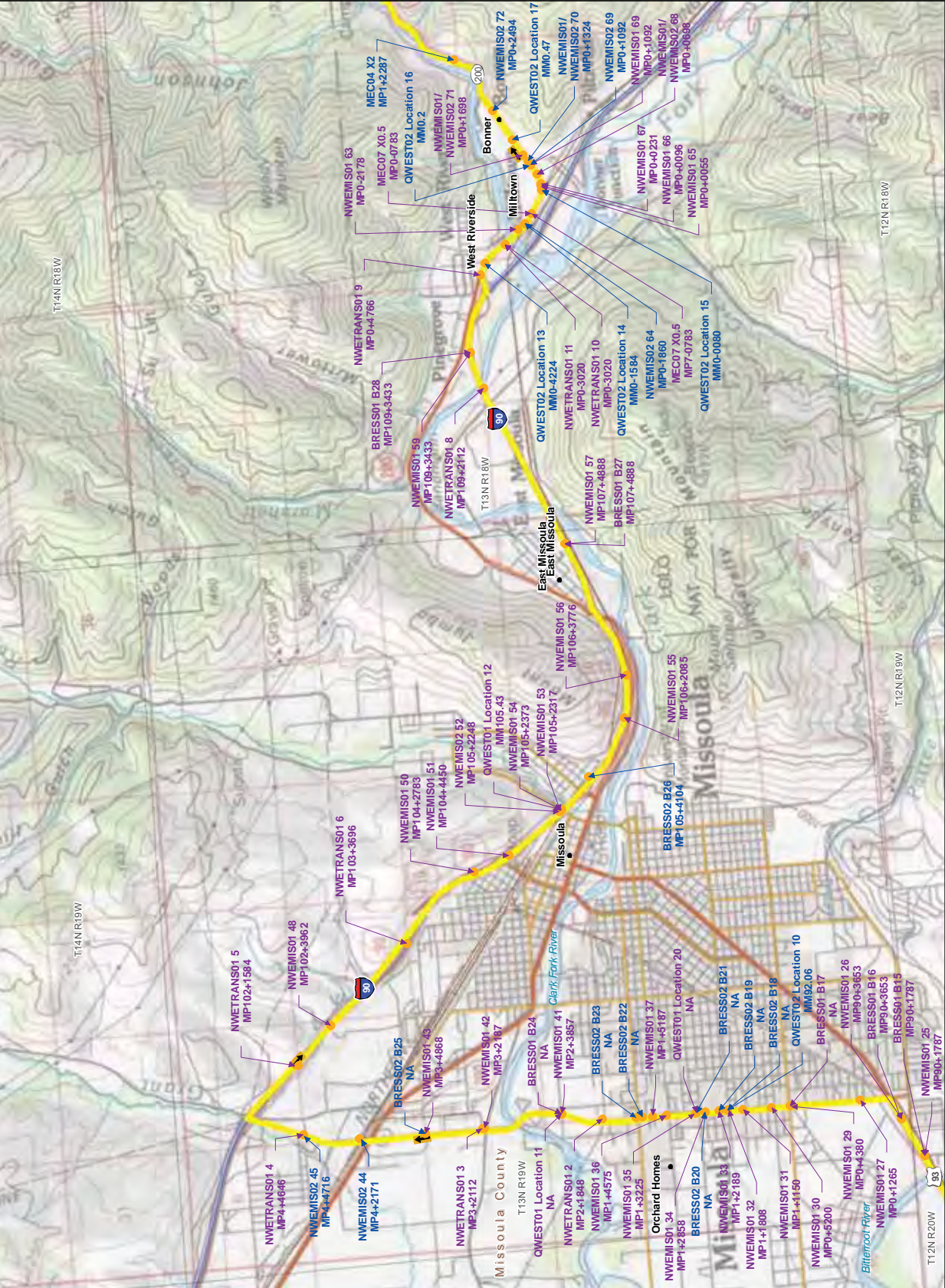
- 3RV - 3 Rivers (COM)
- BLF - Blackfoot Telephone (COM)
- BRESNO - Bresnan North (COM)
- BRESSO - Bresnan South (COM)
- GLACEL - Glacier Electric (POW)
- MEC - Missoula Electric Coop (POW)
- NWEGF - NorthWestern Energy
- NWEHEL - NorthWestern Energy
- NWETRANS - NorthWestern Energy
- MIS - Transmission (POW)
- QWEST - NorthWestern Energy
- SUNRIV - Missoula (POW)
- POW - Sun River (POW)
- POW - Power Line (COM - Communication Line)
- NA - Not Available

**Scale:** 1:50,000  
0 0.5 1 Miles

**North Arrow:** N, S, E, W

**Approximate Utility Locations in Montana**  
Kearl Module  
Transportation Project  
Sheet 2 of 26





**Route Map for Module Transportation**

Approximate Utility Locations (Within MDTROW)

Approximate Utility Locations (Outside MDTROW)

Route Direction

10-Mile Plow

Module Transportation Route

County Boundary

USAL Land and Survey System

Streams

Lake

Interstate

Highway

Local Road

Major Road

MEC06

Packet Number

Crossing Identification

Mile Post/Mile Marker

Above Ground

Under Ground

- 3 Rivers (COM)

- Blackfoot Telephone (COM)

- Bresnan North (COM)

- Bresnan South (COM)

- Glacier Electric (COM)

- Missoula Electric Coop (POW)

- NorthWestern Energy

- Great Falls (POW)

- NorthWestern Energy

- Helena (POW)

- NWHEHEL

- NWETRANS

- NorthWestern Energy

- Transmission (POW)

- NorthWestern Energy

- MISSOULA (POW)

- QWEST (COM)

- SUNRIV

- Sun River (POW)

POW - Power Line

COM - Communication Line

NA - Not Available

Scale: 0, 0.5, 1 Miles

1:50,000

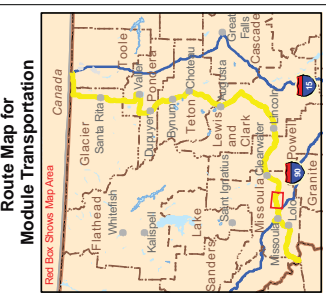
North Arrow

**Approximate Utility Locations In Montana**

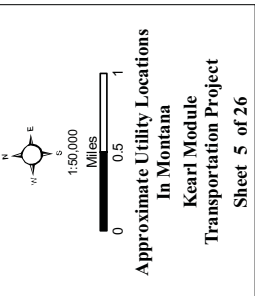
**Kearl Module Transportation Project**

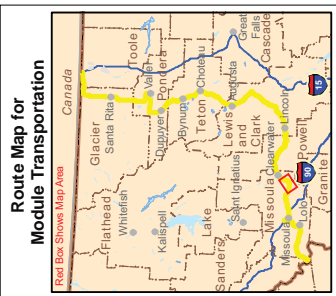
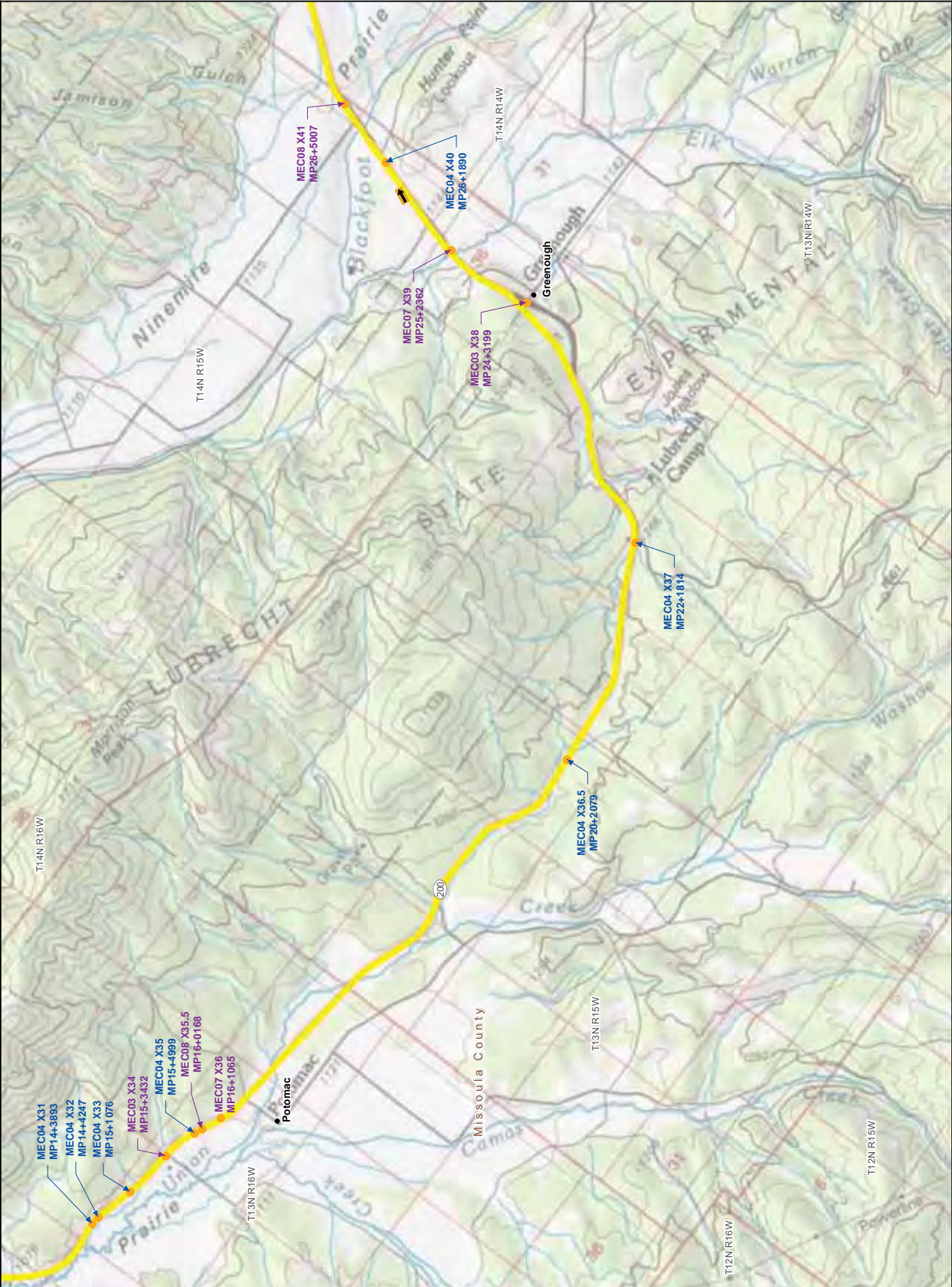
**Sheet 4 of 26**





- Route Map for Module Transportation**
- Red Box Shows Map Area
- Approximate Utility Locations (Within MDTROW)
  - Approximate Utility Locations (Outside MDTROW)
  - Route Direction
  - 10-Mile Plow
  - Module Transportation Route
  - County Boundary
  - USAL and Survey System
  - Streams
  - Lake
  - Interstate
  - Major Road
  - Highway
  - Local Road
- MEC06**
- Packet Number
- Crossing Identification
- Mile Post/Mile Marker
- MP9-3064MM16.9**
- Above Ground**
- 3 Rivers (COM)
  - Blackfoot Telephone (COM)
  - Bresnan North (COM)
  - Bresnan South (COM)
  - Glacier Electric (COM)
  - Missoula Electric Coop (POW)
  - NorthWestern Energy
  - Great Falls (POW)
  - NorthWestern Energy
  - Helena (POW)
  - NorthWestern Energy
  - Transmission (POW)
  - NorthWestern Energy
  - MIS
  - Missoula (POW)
  - QWEST (COM)
  - SUNRIV
  - Sun River (POW)
- Under Ground**
- POW - Power Line
  - COM - Communication Line
  - NA - Not Available





**Route Map for Module Transportation**

Red Box Shows Map Area

**Legend:**

- Route Direction
- Approximate Utility Locations
- 10-Mile Plow
- Module Transportation Route
- County Boundary
- USA Land Survey System
- Streams
- Lake
- Interstate
- Major Road
- Highway
- Local Road

**MEC06**

- Packet Number
- Crossing Identification
- Mile Post/Mile Marker

**MP9+306/AMM16.9**

**Above Ground**

- Designates Priority Crossing

**Under Ground**

- 3 RIVERS (COM)
- Blackfoot Telephone (COM)
- BRESNO
- BRESNO North (COM)
- BRESNO South (COM)
- GLACEL
- MEC
- Missoula Electric Coop (POW)
- NorthWestern Energy
- Great Falls (POW)
- NorthWestern Energy
- NWEHEL
- Helena (POW)
- NorthWestern Energy
- NWETRANS
- Transmission (POW)
- MIS
- NorthWestern Energy
- QWEST
- SUNRIV
- Missoula (POW)
- West (COM)
- Sun River (POW)

**POW - Power Line** COM - Communication Line

NA - Not Available

**Scale:** 1:50,000

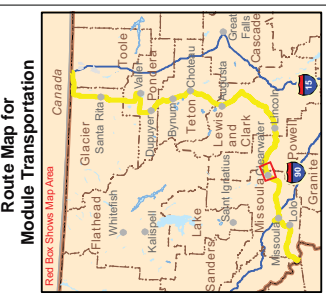
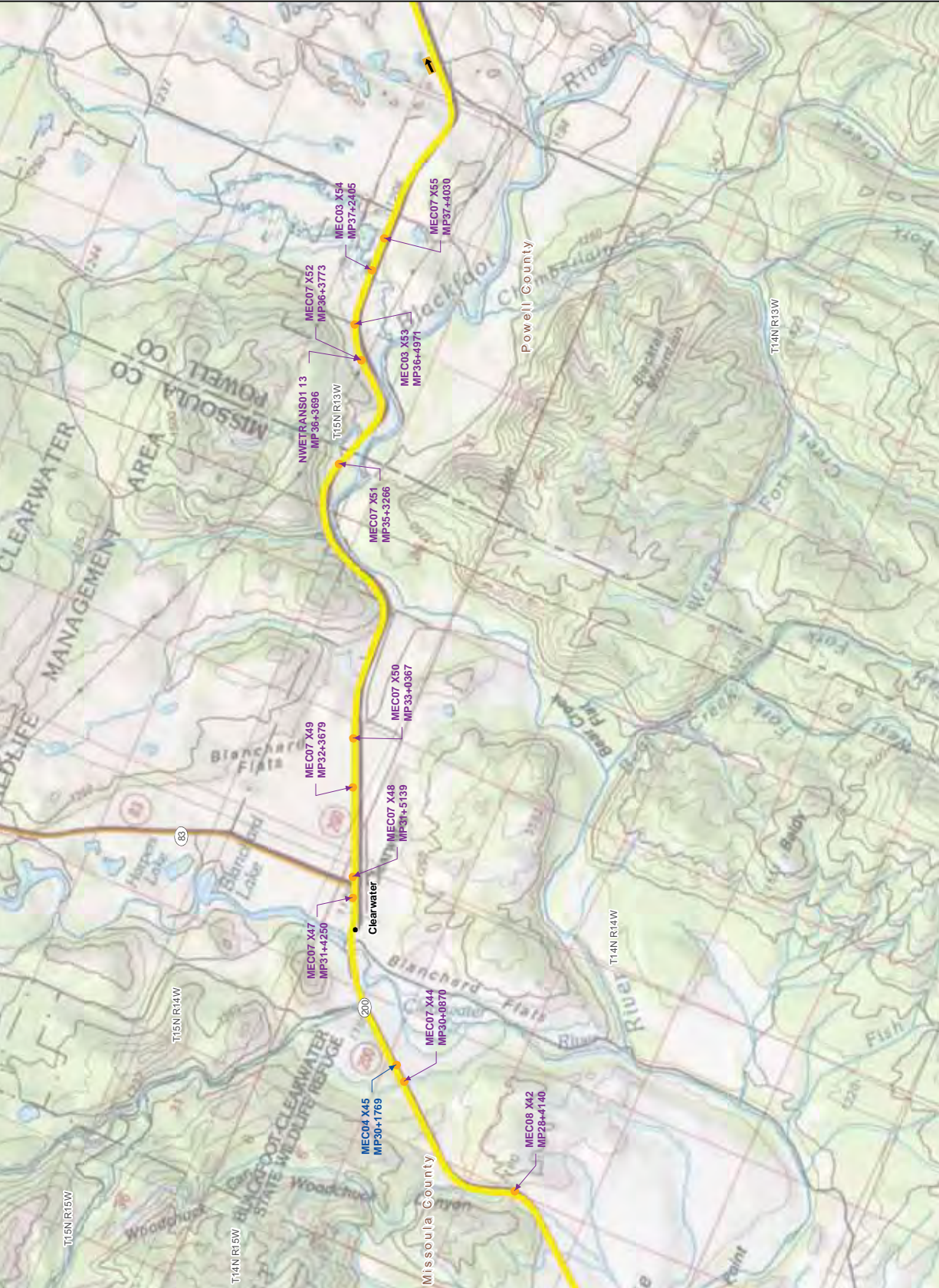
**Scale Bar:** 0, 0.5, 1 Miles

**North Arrow**

**Approximate Utility Locations In Montana**

**Kearl Module Transportation Project**

**Sheet 6 of 26**



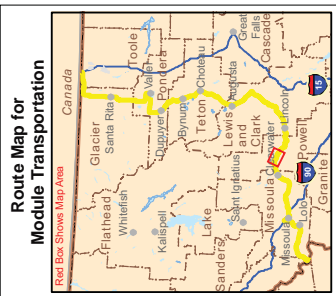
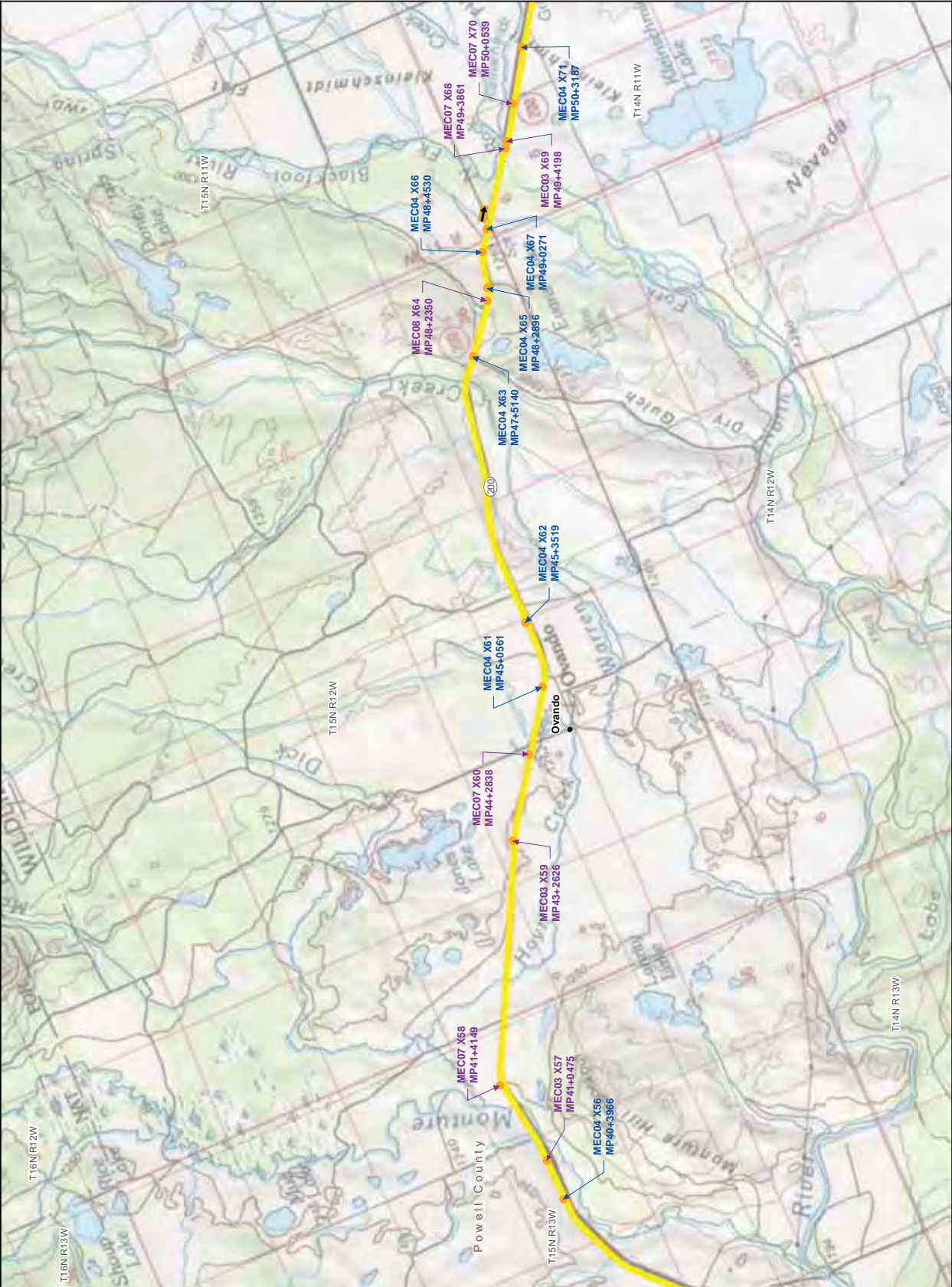
- Route Map for Module Transportation**
- Red Box Shows Map Area
  - Yellow Line: Route Direction
  - Orange Circle: Approximate Utility Locations
  - Black Dashed Line: 10-Mile Plow
  - Yellow Dashed Line: Module Transportation Route
  - Black Dotted Line: County Boundary
  - Black Outline: USA Land Survey System
  - Blue Line: Streams
  - Blue Area: Lake
  - Blue Line with Dashes: Interstate
  - Orange Line: Major Road
  - Red Line: Local Road
  - MEC06: Packet Number
  - B: Crossing Identification
  - MP9+3064/MT16.9: Mile Post/Mile Marker
  - Yellow Box: Above Ground
  - White Box: Under Ground
  - Yellow Box: Designates Priority Crossing
- 3RV - 3 Rivers (COM)
  - BLF - Blackfoot Telephone (COM)
  - BRESNO - Bresnan North (COM)
  - BRESSO - Bresnan South (COM)
  - GLACEL - Glacier Electric (POW)
  - MEC - Missoula Electric Coop (POW)
  - NWEGF - NorthWestern Energy
  - NWEHEL - NorthWestern Energy
  - NWETRANS - NorthWestern Energy
  - MIS - Transmission (POW)
  - QWEST - NorthWestern Energy
  - SUNRIV - Missoula (POW)
  - POW - Power Line (COM - Communication Line)
  - NA - Not Available

1:50,000

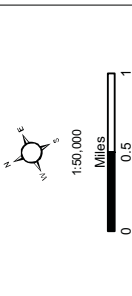
Miles 0 0.5 1

Approximate Utility Locations  
In Montana

Kearl Module  
Transportation Project  
Sheet 7 of 26

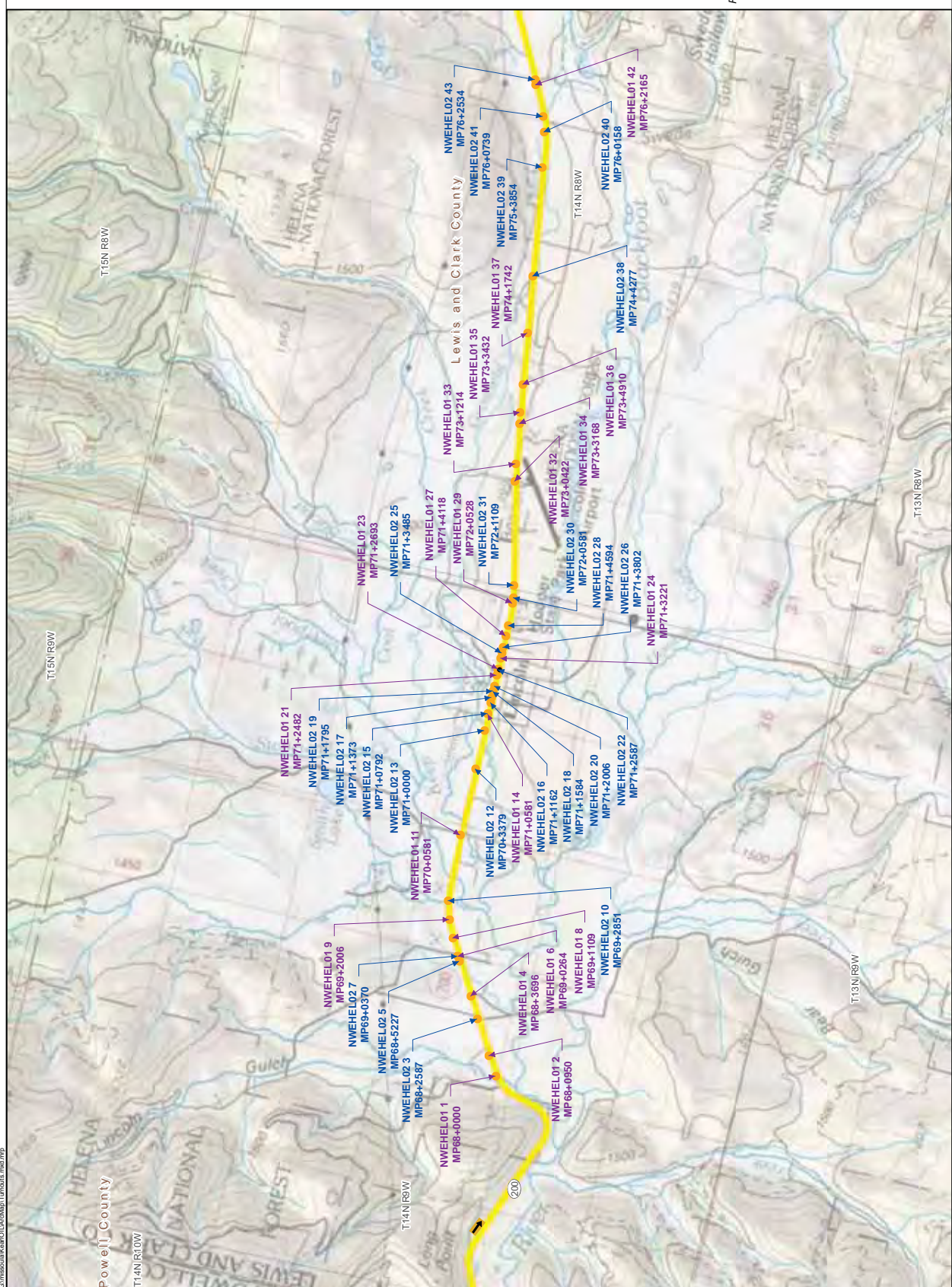


- Route Map for Module Transportation**
- Route Direction
  - Approximate Utility Locations
  - 10-Mile Plow
  - Module Transportation Route
  - County Boundary
  - USA Land Survey System
  - Streams
  - Lake
  - Interstate
  - Major Road
  - Highway
  - Local Road
  - MEC06
  - Packet Number
  - Crossing Identification
  - MP9+3064/MT16.9
  - Under Ground
  - Above Ground
  - Designates Priority Crossing
  - 3RIV - 3 Rivers (COM)
  - BLF - Blackfoot Telephone (COM)
  - BRESNO - Bresnan North (COM)
  - BRESSO - Bresnan South (COM)
  - GLACEL - Glacier Electric (COM)
  - MEC - Missoula Electric Coop (POW)
  - NWEGF - NorthWestern Energy
  - NWEHEL - NorthWestern Energy
  - NWETRANS - NorthWestern Energy
  - MIS - Missoula (POW)
  - QWEST - Qwest (COM)
  - SUNRIV - Sun River (POW)
  - POW - Power Line (COM - Communication Line)
  - NA - Not Available



**Approximate Utility Locations  
In Montana**  
Kearl Module  
Transportation Project  
Sheet 8 of 26





### Route Map for Module Transportation

*Red Box Shows Map Area*

**Legend:**

- Route Direction
- Approximate Utility Locations
- 10-Mile Plow
- Module Transportation Route
- County Boundary
- USA Land Survey System
- Streams
- Lake
- Interstate
- Major Road
- Local Road

**MEC06**  
 Packet Number  
 Crossing Identification  
 Mile Post/Mile Marker  
**MP9+306/AM16.9**

**Above Ground**

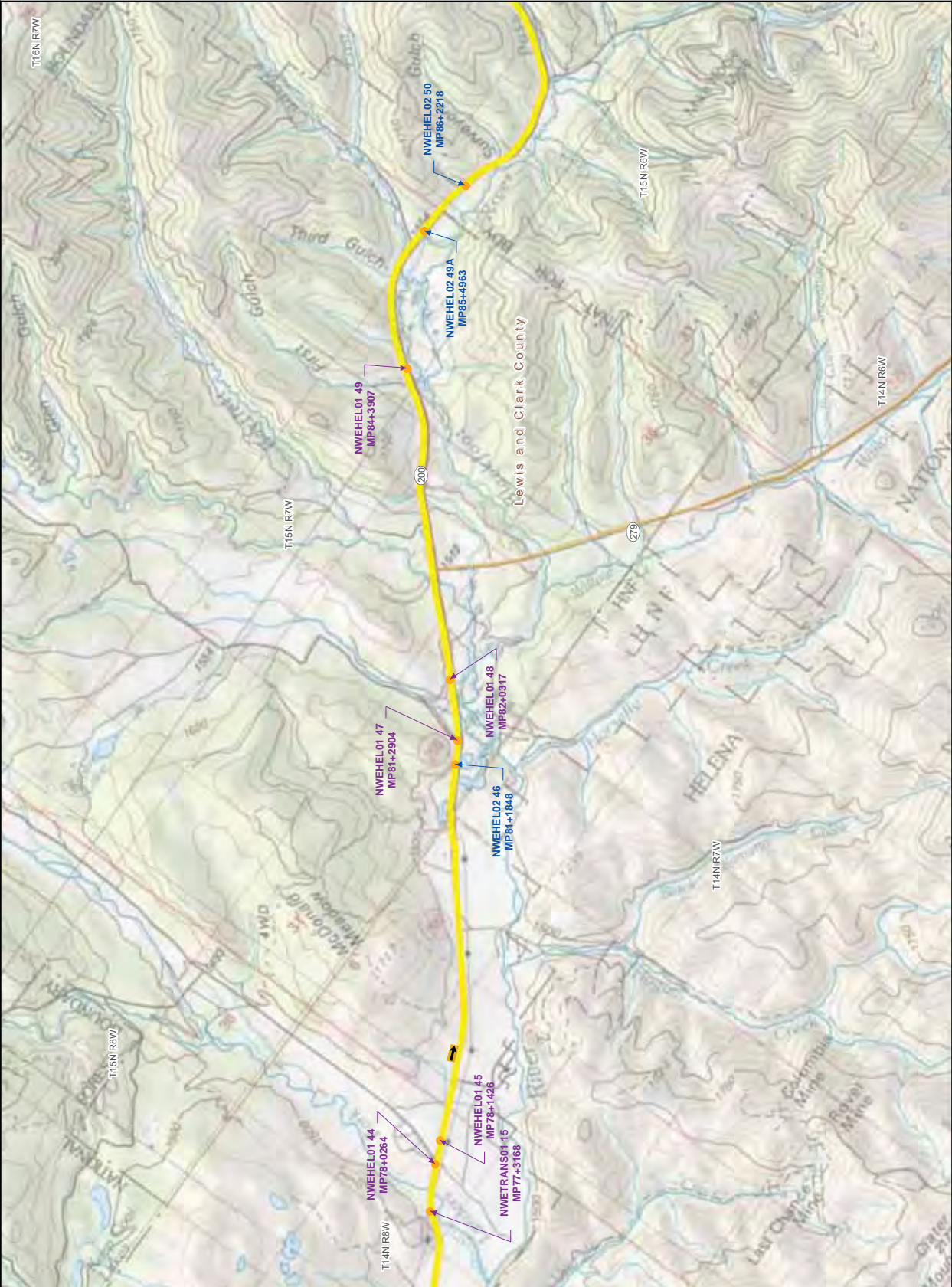
- 3RV - 3 Rivers (COM)
- BLF - Blackfoot Telephone (COM)
- BRESNO - Bresnan North (COM)
- BRESSO - Bresnan South (COM)
- GLACEL - Glacier Electric (POW)
- MEC - Missoula Electric Coop (POW)
- NWEGF - NorthWestern Energy
- NWEHEL - Helena (POW)
- NWETRANS - NorthWestern Energy
- MIS - Transmission (POW)
- QWEST - Missoula (POW)
- SUNRIV - West (COM)
- POW - Sun River (POW)

**Under Ground**

- Designates Priority Crossing
- NA - Not Available

**Scale:** 1:90,000  
 0 0.5 1 Miles

**Approximate Utility Locations In Montana**  
 Kearl Module  
 Transportation Project  
 Sheet 10 of 26



### Route Map for Module Transportation

**Red Box Shows Map Area**

**Legend:**

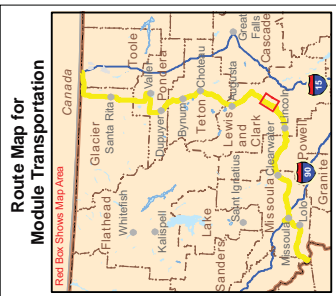
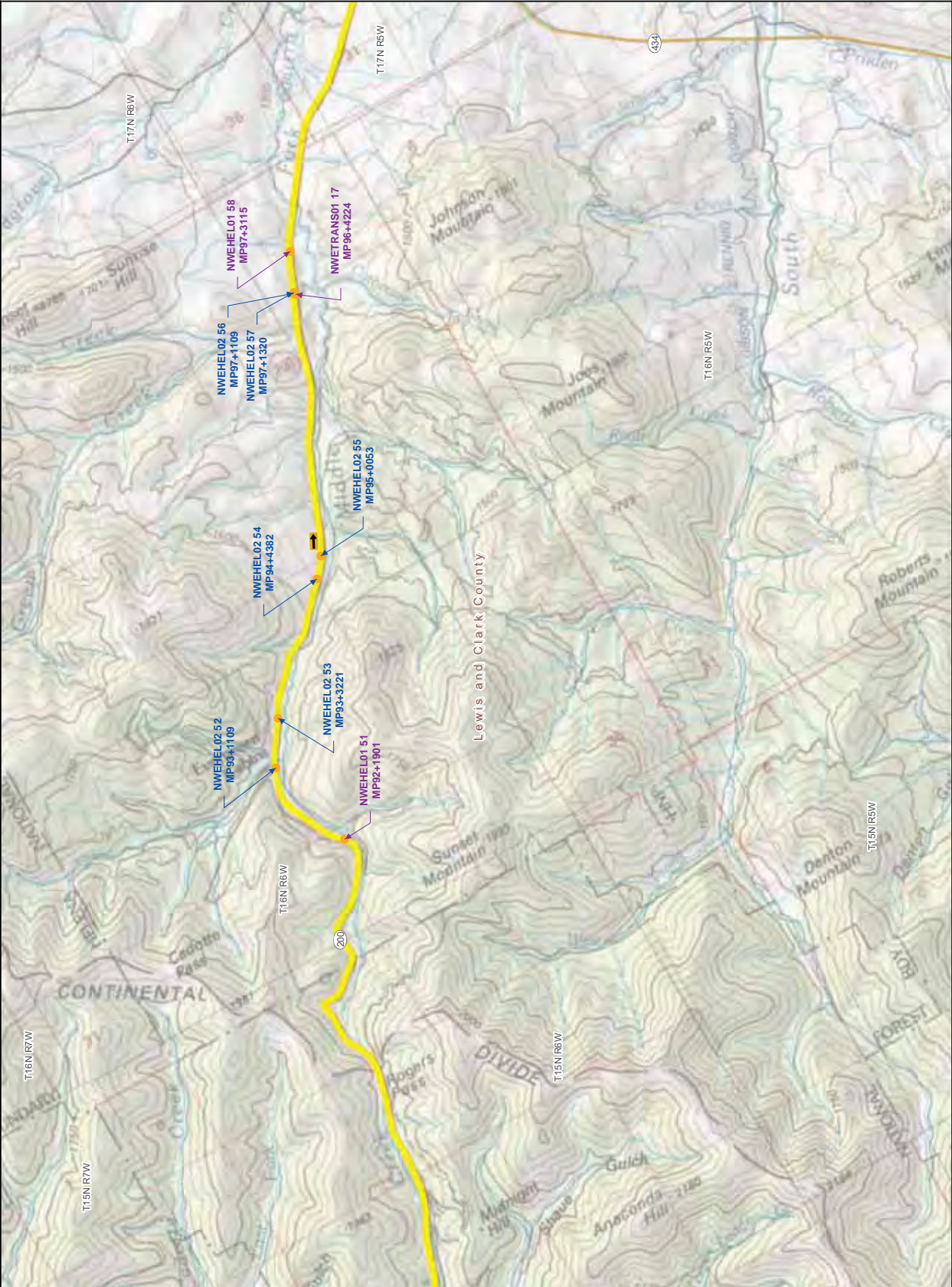
- Route Direction
- Approximate Utility Locations
- 10-Mile Plow
- Module Transportation Route
- County Boundary
- USA Land Survey System
- Streams
- Lake
- Interstate
- Major Road
- Highway
- Local Road
- MEC06
- Packet Number
- Crossing Identification
- Mile Post/Mile Marker
- Above Ground
- Under Ground
- Designates Priority Crossing

**Utility List:**

- 3RV - 3 Rivers (COM)
- BLF - Blackfoot Telephone (COM)
- BRESNO - Bresnan North (COM)
- BRESSO - Bresnan South (COM)
- GLACEL - Glacier Electric (POW)
- MEC - Missoula Electric Coop (POW)
- NWEGF - NorthWestern Energy
- NWEHEL - NorthWestern Energy
- NWETRANS - NorthWestern Energy
- MIS - NorthWestern Energy
- QWEST - Qwest (COM)
- SUNRIV - Sun River (POW)
- POW - Power Line
- COM - Communication Line
- NA - Not Available

**Scale:** 1:50,000  
0 0.5 1 Miles

**Approximate Utility Locations In Montana**  
Kearl Module  
Transportation Project  
Sheet 11 of 26



**Route Map for Module Transportation**

Red Box Shows Map Area

Approximate Utility Locations

- 10-Mile Plow
- Module Transportation Route
- County Boundary
- USA Land Survey System
- Streams
- Lake
- Interstate
- Major Road
- Highway
- Local Road

MEC06  
B  
Packet Number  
Crossing Identification  
MP9+306/AMM16.9  
Mile Post/Mile Marker

Above Ground  
Under Ground

Designates Priority Crossing

- 3RV - 3 Rivers (COM)
- BLF - Blackfoot Telephone (COM)
- BRESNO - Bresnan North (COM)
- BRESSO - Bresnan South (COM)
- GLACEL - Glacier Electric (POW)
- MEC - Missoula Electric Coop (POW)
- NWEGF - NorthWestern Energy
- NWEHEL - NorthWestern Energy
- NWETRANS - NorthWestern Energy
- Helena (POW)
- MIS - NorthWestern Energy
- QWEST - West (COM)
- SUNRIV - Sun River (POW)
- POW - Power Line (COM - Communication Line)
- NA - Not Available

1:50,000  
Miles  
0 0.5 1

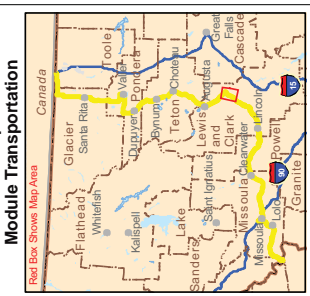
**Approximate Utility Locations  
In Montana**

**Kearl Module  
Transportation Project**

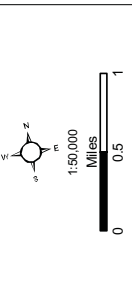
Sheet 12 of 26



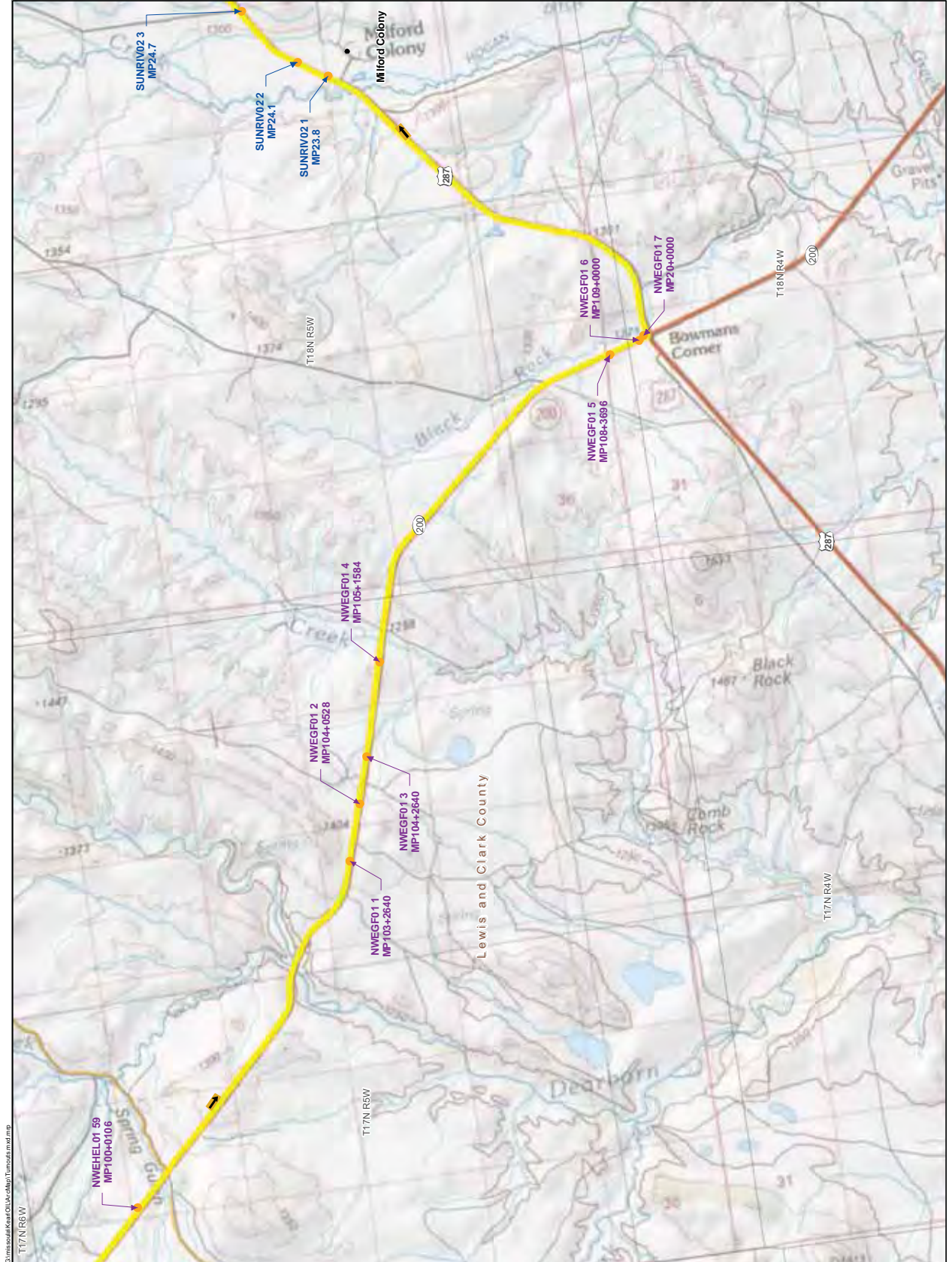
**Route Map for Module Transportation**



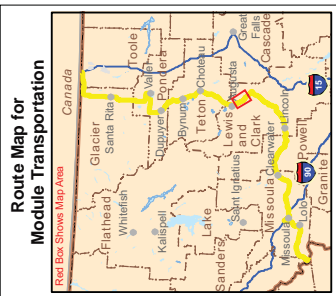
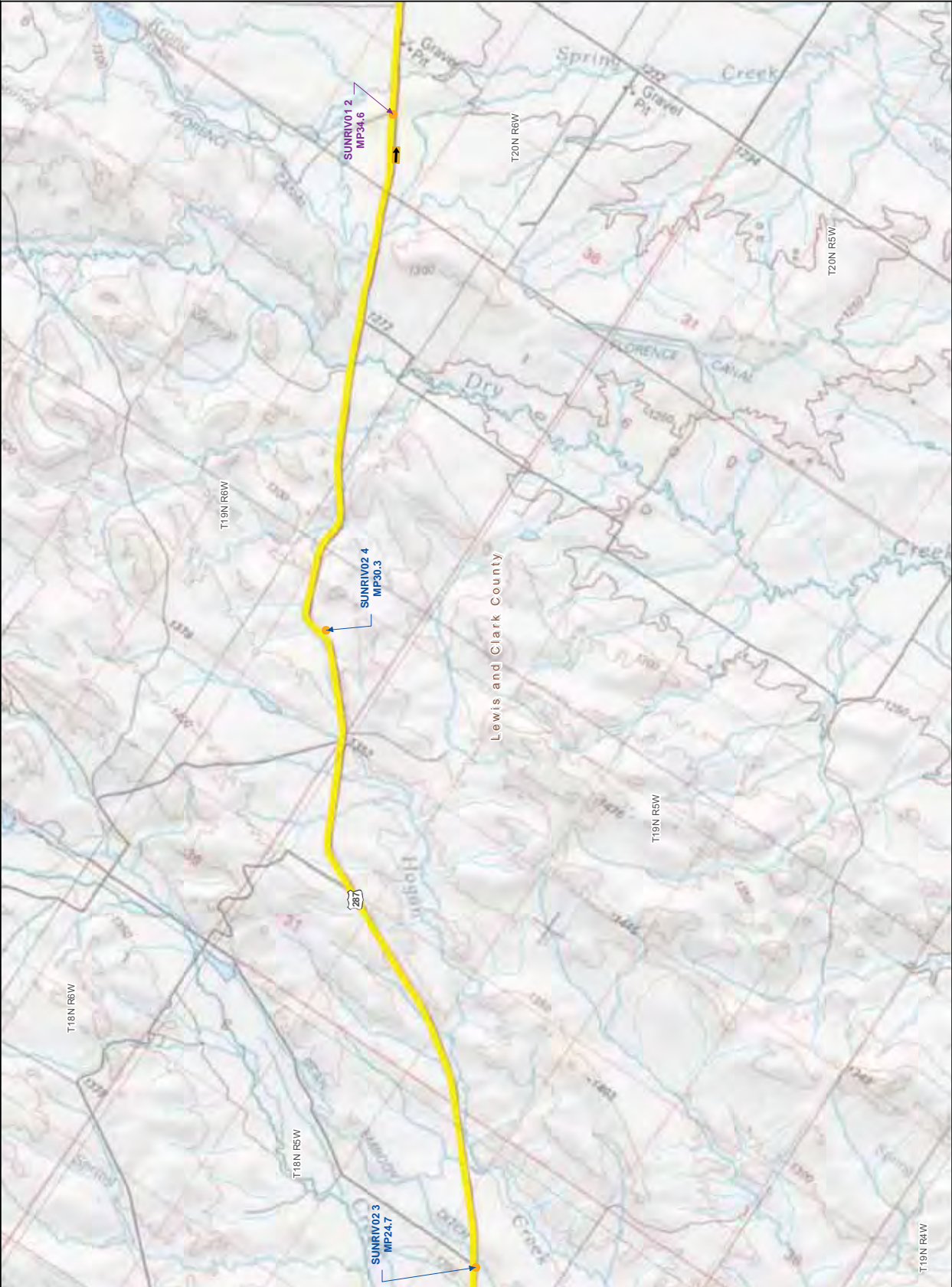
- Approximate Utility Locations (Within MDTROW)
  - Approximate Utility Locations (Outside MDTROW)
  - Route Direction
  - 10-Mile Plow
  - Module Transportation Route
  - County Boundary
  - USAL Land and Survey System
  - Streams
  - Lake
  - Interstate
  - Highway
  - Local Road
  - Major Road
- MEC06**
- Packet Number  
 Crossing Identification  
 Mile Post/Mile Marker
- MP9-3064/MM16.9**
- ABOVE GROUND**
- 3 RIV - 3 Rivers (COM)
  - BLF - Blackfoot Telephone (COM)
  - BRESNO - Bresnan North (COM)
  - BRESSO - Bresnan South (COM)
  - GLACEL - Glacier Electric (POW)
  - MEC - Missoula Electric Coop (POW)
  - NWEGF - NorthWestern Energy
  - NWEHEL - NorthWestern Energy
  - NWEHEL - Helena (POW)
  - NWETRANS - NorthWestern Energy
  - MIS - Transmission (POW)
  - QWEST - NorthWestern Energy
  - SUNRIV - Missoula (POW)
  - SUNRIV - Sun River (POW)
- UNDER GROUND**
- POW - Power Line
  - COM - Communication Line
  - NA - Not Available



**Approximate Utility Locations In Montana**  
**Kearl Module**  
**Transportation Project**  
**Sheet 13 of 26**



G:\msouth\Kearl\OU\w\c\k\Tumofz.mxd  
 T17N R5W

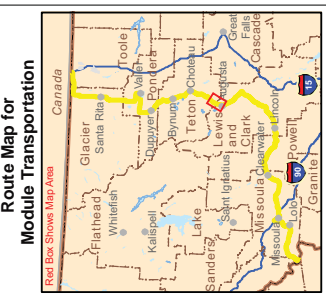
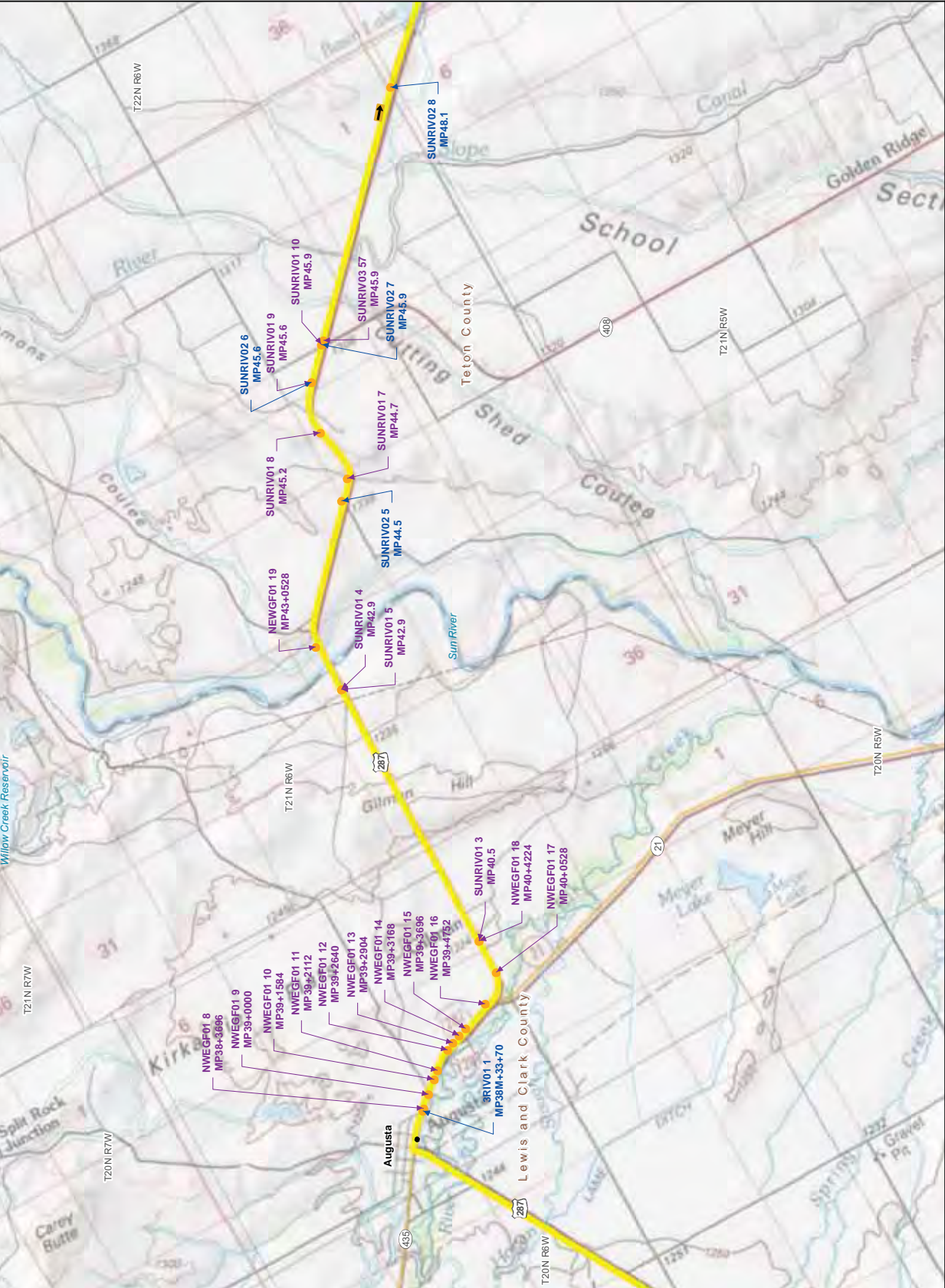


- Route Map for Module Transportation**
- Route Direction
  - Approximate Utility Locations
  - 10-Mile Plow
  - Module Transportation Route
  - County Boundary
  - USA Land Survey System
  - Streams
  - Lake
  - Interstate
  - Major Road
  - Highway
  - Local Road
  - Packet Number
  - Crossing Identification
  - Mile Post/Mile Marker
  - Above Ground
  - Under Ground
  - Designates Priority Crossing
- MEC06**  
**B**  
**MP9+306/AM16.9**
- 3RV - 3 Rivers (COM)
  - BLF - Blackfoot Telephone (COM)
  - BRESNO - Bresnan North (COM)
  - BRESSO - Bresnan South (COM)
  - GLACEL - Glacier Electric (POW)
  - MEC - Missoula Electric Coop (POW)
  - NWEGF - NorthWestern Energy
  - NWEHEL - NorthWestern Energy
  - NWETRANS - NorthWestern Energy
  - MIS - Missoula (POW)
  - QWEST - Qwest (COM)
  - SUNRIV - Sun River (POW)
  - POW - Power Line (COM - Communication Line)
  - NA - Not Available

1:50,000

Miles  
 0 0.5 1

**Approximate Utility Locations  
 In Montana**  
**Kearl Module  
 Transportation Project**  
 Sheet 14 of 26



**Route Map for Module Transportation**

Red Box Shows Map Area

- Route Direction
- Approximate Utility Locations
- 10-Mile Plow
- Module Transportation Route
- County Boundary
- USA Land Survey System
- Streams
- Lake
- Interstate
- Highway
- Major Road
- Local Road

**MEC06**  
 Packet Number  
 Crossing Identification  
 Mile Post/Mile Marker

**MP9+306/AM16.9**  
 Above Ground  
 Under Ground

Designates Priority Crossing

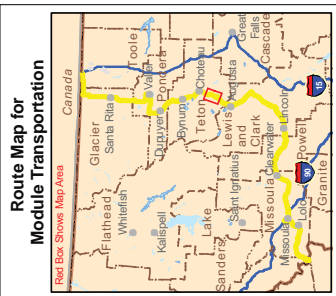
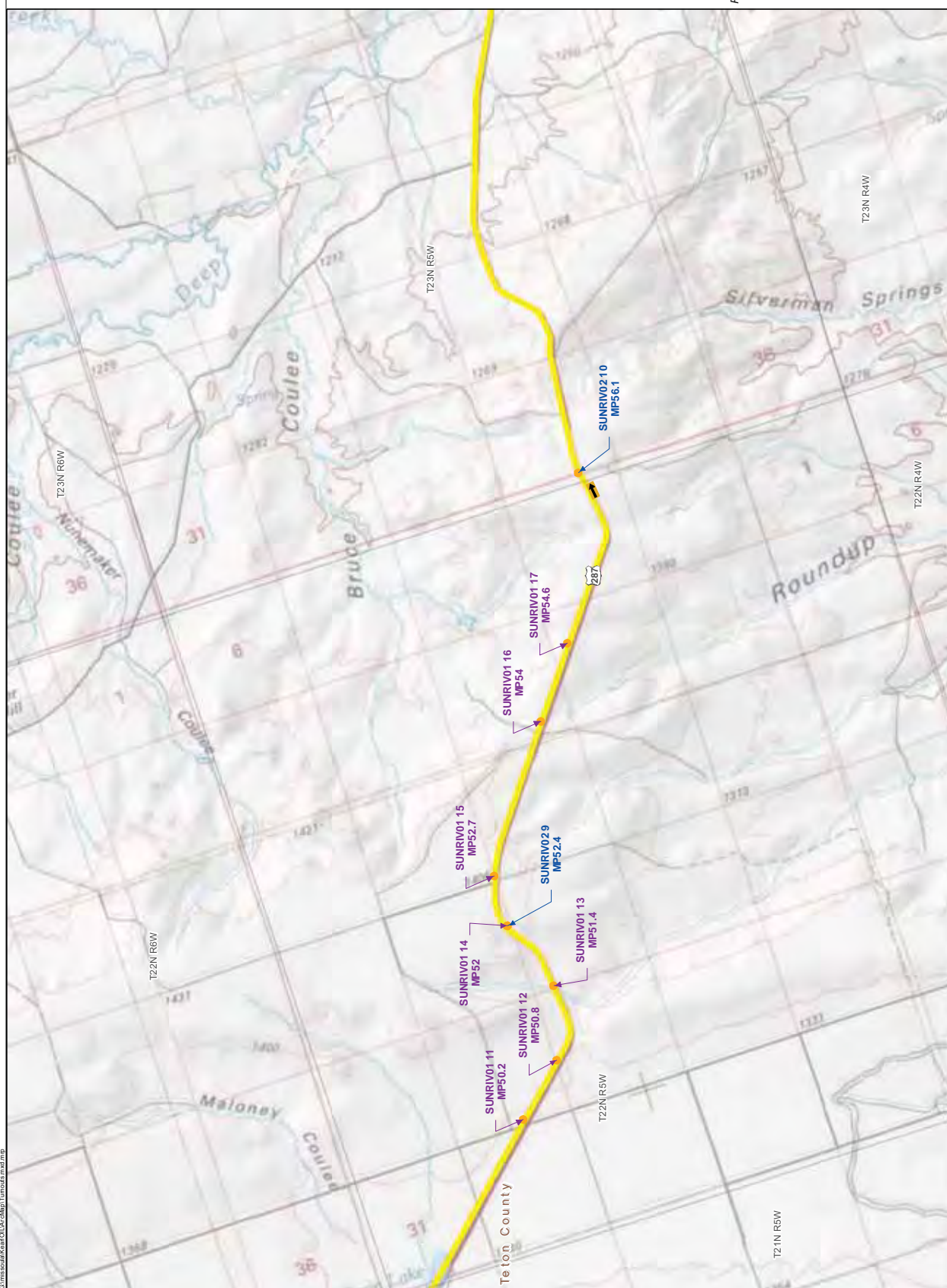
- 3RV - 3 Rivers (COM)
- BLF - Blackfoot Telephone (COM)
- BRESNO - Bresnan North (COM)
- BRESSO - Bresnan South (COM)
- GLACEL - Glacier Electric (POW)
- MEC - Missoula Electric Coop (POW)
- NWEGF - NorthWestern Energy
- NWEHEL - NorthWestern Energy
- NWETRANS - NorthWestern Energy
- MIS - Transmission (POW)
- QWEST - NorthWestern Energy
- SUNRIV - Missoula (POW)
- POW - Sun River (POW)
- POW - Power Line (COM - Communication Line)
- NA - Not Available

Scale: 1:50,000  
 0 0.5 1 Miles

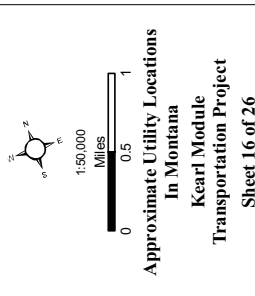
**Approximate Utility Locations In Montana**

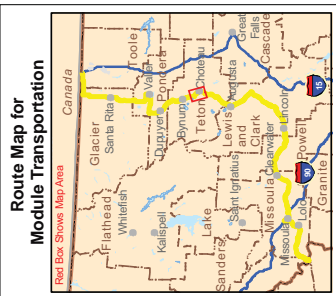
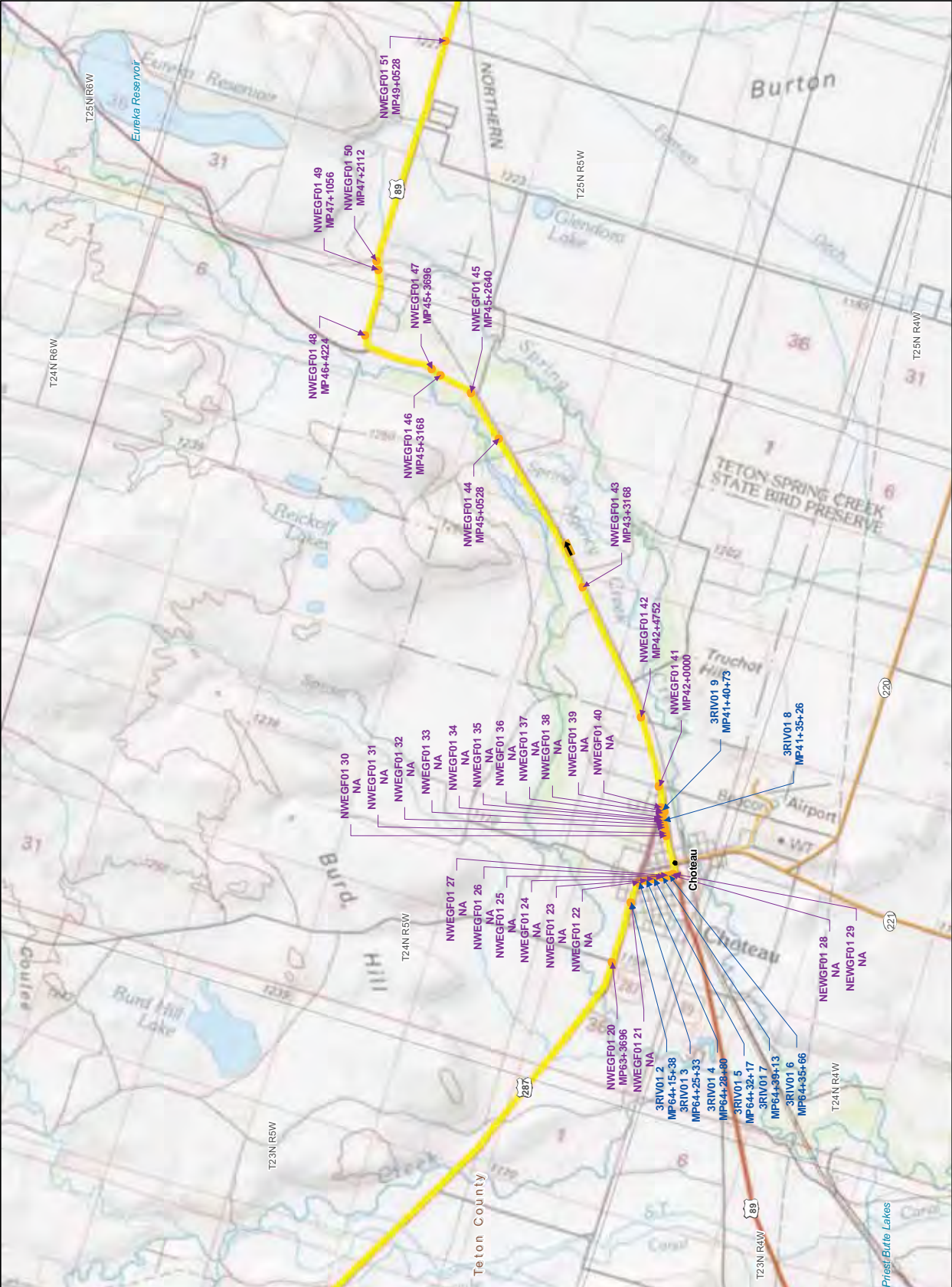
**Kearl Module Transportation Project**

Sheet 15 of 26



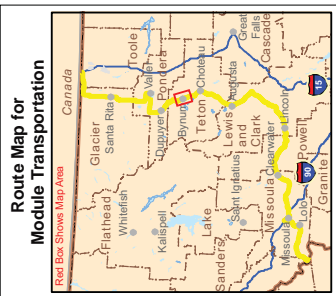
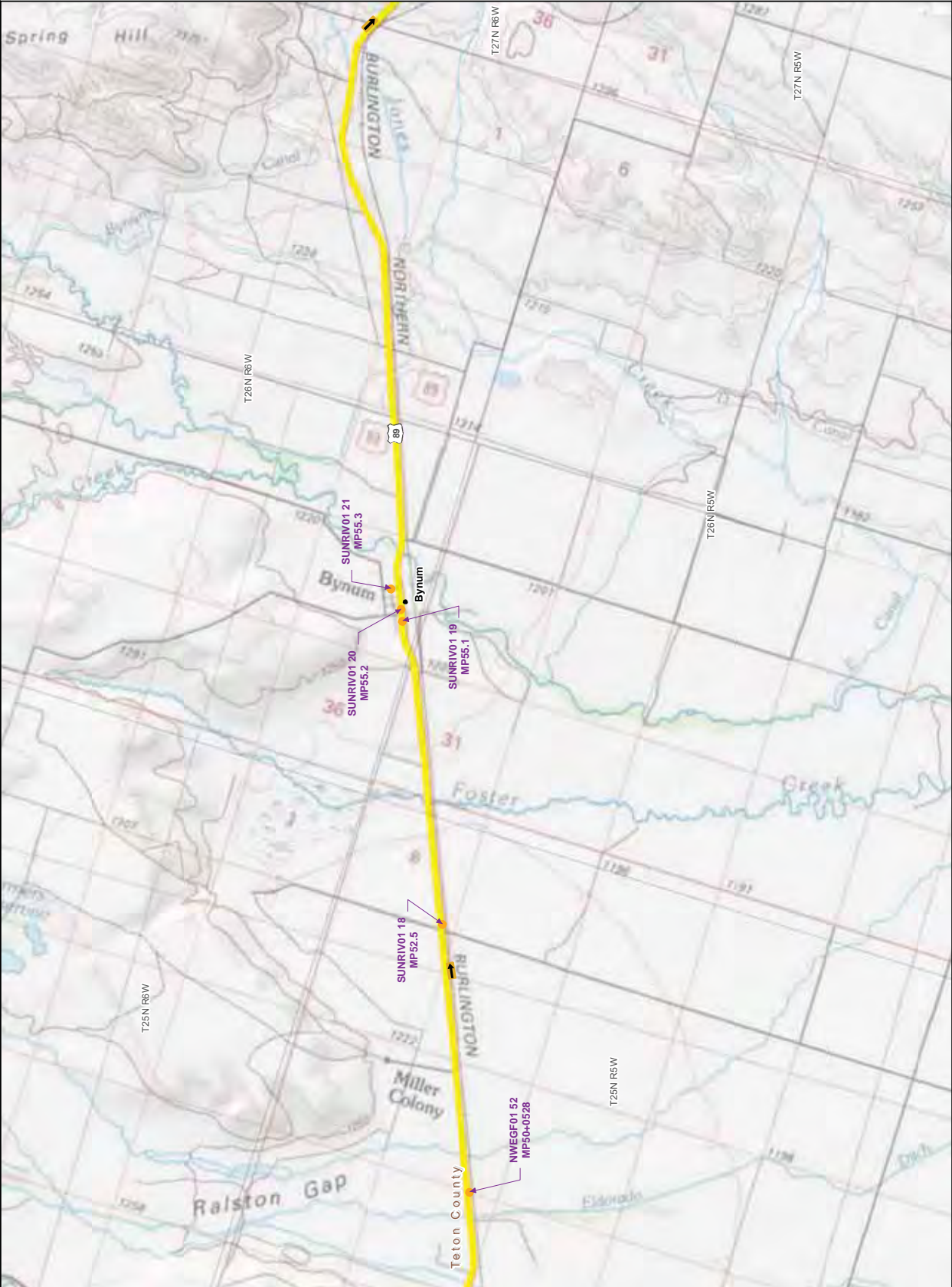
- Approximate Utility Locations**
- Approximate Utility Locations (Within MDTROW)
  - Approximate Utility Locations (Outside MDTROW)
  - ➔ 10-Mile Plow
  - ➔ Route Direction
  - Module Transportation Route
  - - - County Boundary
  - ▭ USA Land Survey System
  - ▭ Streams
  - ▭ Lake
  - ▭ Interstate
  - ▭ Major Road
  - ▭ Highway
  - ▭ Local Road
- MEC06**
- Packet Number**
- Crossing Identification**
- MP9-3064MM16.9** Mile Post/Mile Marker
- Above Ground**
- 3 Rivers (COM)
  - Blackfoot Telephone (COM)
  - Bresnan North (COM)
  - Bresnan South (COM)
  - Glacier Electric (POW)
  - Missoula Electric Coop (POW)
  - NorthWestern Energy
  - Great Falls (POW)
  - NorthWestern Energy
  - Helene (POW)
- Under Ground**
- NWTRANS - NorthWestern Energy
  - Transmission (POW)
  - MIS - NorthWestern Energy
  - Missoula (POW)
  - QWEST (COM)
  - SUNRIV - Sun River (POW)
- POW - Power Line** COM - Communication Line
- NA - Not Available



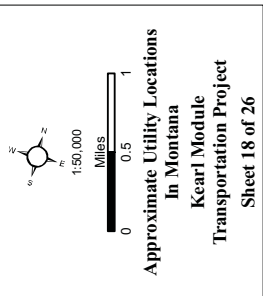


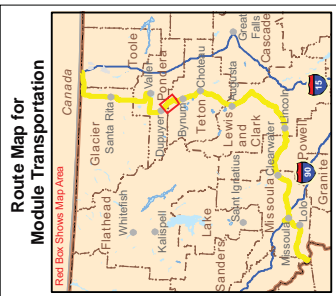
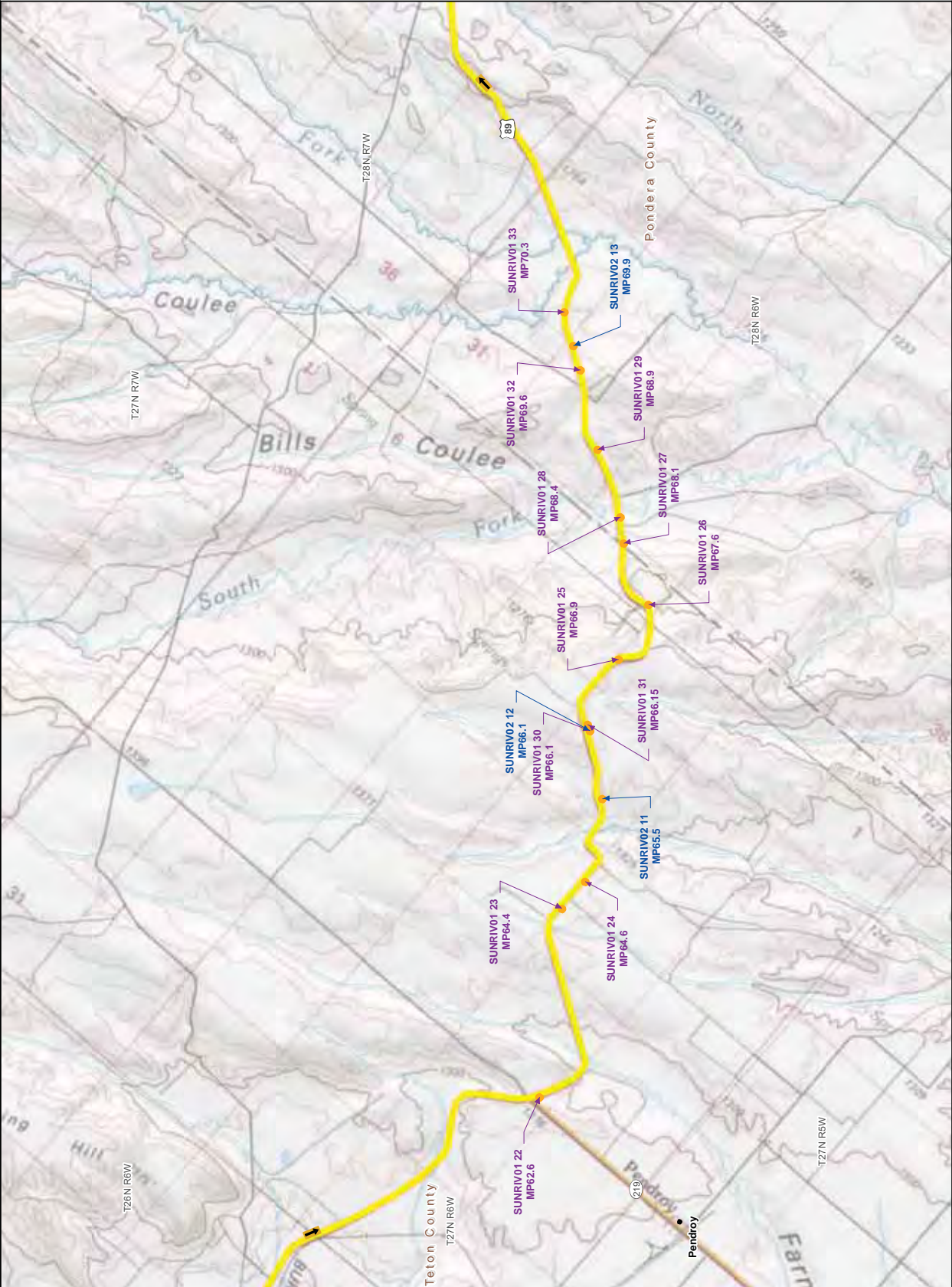
- Approximate Utility Locations (Within MDTROW)**
- Orange dot
  - Green dot
- Approximate Utility Locations (Outside MDTROW)**
- Yellow arrow
  - Black arrow
- Route Direction**
- 10-Mile Plow
- Module Transportation Route**
- Yellow line
- County Boundary**
- Dashed line
- USAL and Survey System**
- Blue line
- Streams**
- Blue line
- Lake**
- Blue area
- Interstate**
- Red line
- Highway**
- Orange line
- Local Road**
- Black line
- MEC06**
- Black line
- Packet Number**
- MP9-3064MM16.9
- Crossing Identification**
- Black line
- Mile Post/Mile Marker**
- Black line
- Above Ground**
- Black line
- Under Ground**
- Black line
- 3 Rivers (COM)**
- Black line
- Blackfoot Telephone (COM)**
- Black line
- Bresnan North (COM)**
- Black line
- Bresnan South (COM)**
- Black line
- Glacier Electric (COM)**
- Black line
- Missoula Electric Coop (POW)**
- Black line
- NorthWestern Energy**
- Black line
- Great Falls (POW)**
- Black line
- NorthWestern Energy**
- Black line
- Helena (POW)**
- Black line
- NorthWestern Energy**
- Black line
- Transmission (POW)**
- Black line
- NorthWestern Energy**
- Black line
- Missoula (POW)**
- Black line
- CWest (COM)**
- Black line
- SunRiv - Sun River (POW)**
- Black line
- POW - Power Line**
- Black line
- COM - Communication Line**
- Black line
- NA - Not Available**





- Route Map for Module Transportation**
- Red Box Shows Map Area
  - Yellow Arrow: Route Direction
  - Orange Circle: Approximate Utility Locations
  - Black Dashed Line: 10-Mile Plow
  - Yellow Dashed Line: Module Transportation Route
  - Black Dotted Line: County Boundary
  - Black Outline: USA Land Survey System
  - Blue Line: Streams
  - Blue Area: Lake
  - Blue Line with Red Border: Interstate
  - Blue Line with Yellow Border: Major Road
  - Blue Line with Green Border: Local Road
  - MEC06: Packet Number
  - B: Crossing Identification
  - MP9-3064/MM16.9: Mile Post/Mile Marker
  - Yellow Box: Above Ground
  - White Box: Under Ground
  - Yellow Box with Black Border: Designates Priority Crossing
- 3RV - 3 Rivers (COM)
  - BLF - Blackfoot Telephone (COM)
  - BRESNO - Bresnan North (COM)
  - BRESSO - Bresnan South (COM)
  - GLACEL - Glacier Electric (POW)
  - MEC - Missoula Electric Coop (POW)
  - NWIEGF - NorthWestern Energy
  - NWEHEL - Great Falls (POW)
  - NWETRANS - NorthWestern Energy
  - MIS - Helena (POW)
  - QWEST - Transmission (POW)
  - SUNRIV - NorthWestern Energy
  - POW - Power Line
  - COM - Communication Line
  - NA - Not Available





**Route Map for Module Transportation**

Red Box Shows Map Area

- Route Direction
- Approximate Utility Locations
- 10-Mile Plow
- Module Transportation Route
- County Boundary
- USA Land Survey System
- Streams
- Lake
- Interstate
- Major Road
- Highway
- Local Road

MEC06  
Packet Number

B  
Crossing Identification

MP9+306/AMM16.9  
Mile Post/Mile Marker

Above Ground

Under Ground

Designates Priority Crossing

- 3RV - 3 Rivers (COM)
- BLF - Blackfoot Telephone (COM)
- BRESNO - Bresnan North (COM)
- BRESSO - Bresnan South (COM)
- GLACEL - Glacier Electric (POW)
- MEC - Missoula Electric Coop (POW)
- NWEGF - NorthWestern Energy
- NWEHEL - NorthWestern Energy
- NWETRANS - NorthWestern Energy
- MIS - Transmission (POW)
- QWEST - NorthWestern Energy
- SUNRIV - Missoula (POW)
- POW - Sun River (POW)

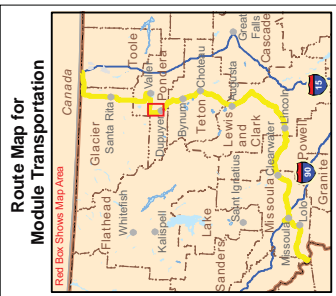
POW - Power Line COM - Communication Line  
NA - Not Available

1:50,000  
0 0.5 1  
Miles

**Approximate Utility Locations In Montana**

**Kearl Module Transportation Project**

Sheet 19 of 26



- Route Direction**
- Approximate Utility Locations
  - 10-Mile Plow
  - Module Transportation Route
  - County Boundary
  - USA Land Survey System
  - Streams
  - Lake
  - Interstate
  - Major Road
  - Highway
  - Local Road
- MEC06**
- Packet Number
  - Crossing Identification
  - Mile Post/Mile Marker
  - Above Ground
  - Under Ground
  - Designates Priority Crossing
- 3RV - 3 Rivers (COM)
  - BLF - Blackfoot Telephone (COM)
  - BRESNO - Bresnan North (COM)
  - BRESSO - Bresnan South (COM)
  - GLACEL - Glacier Electric (POW)
  - MEC - Missoula Electric Coop (POW)
  - NWEGF - NorthWestern Energy
  - NWEHEL - NorthWestern Energy
  - NWETRANS - NorthWestern Energy
  - MIS - NorthWestern Energy
  - QWEST - Qwest (COM)
  - SUNRIV - Sun River (POW)
  - POW - Power Line (COM - Communication Line)
  - NA - Not Available

1:50,000

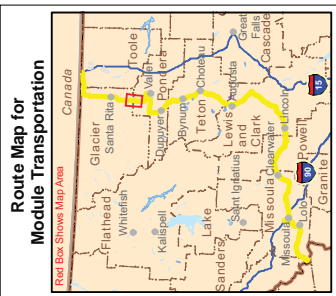
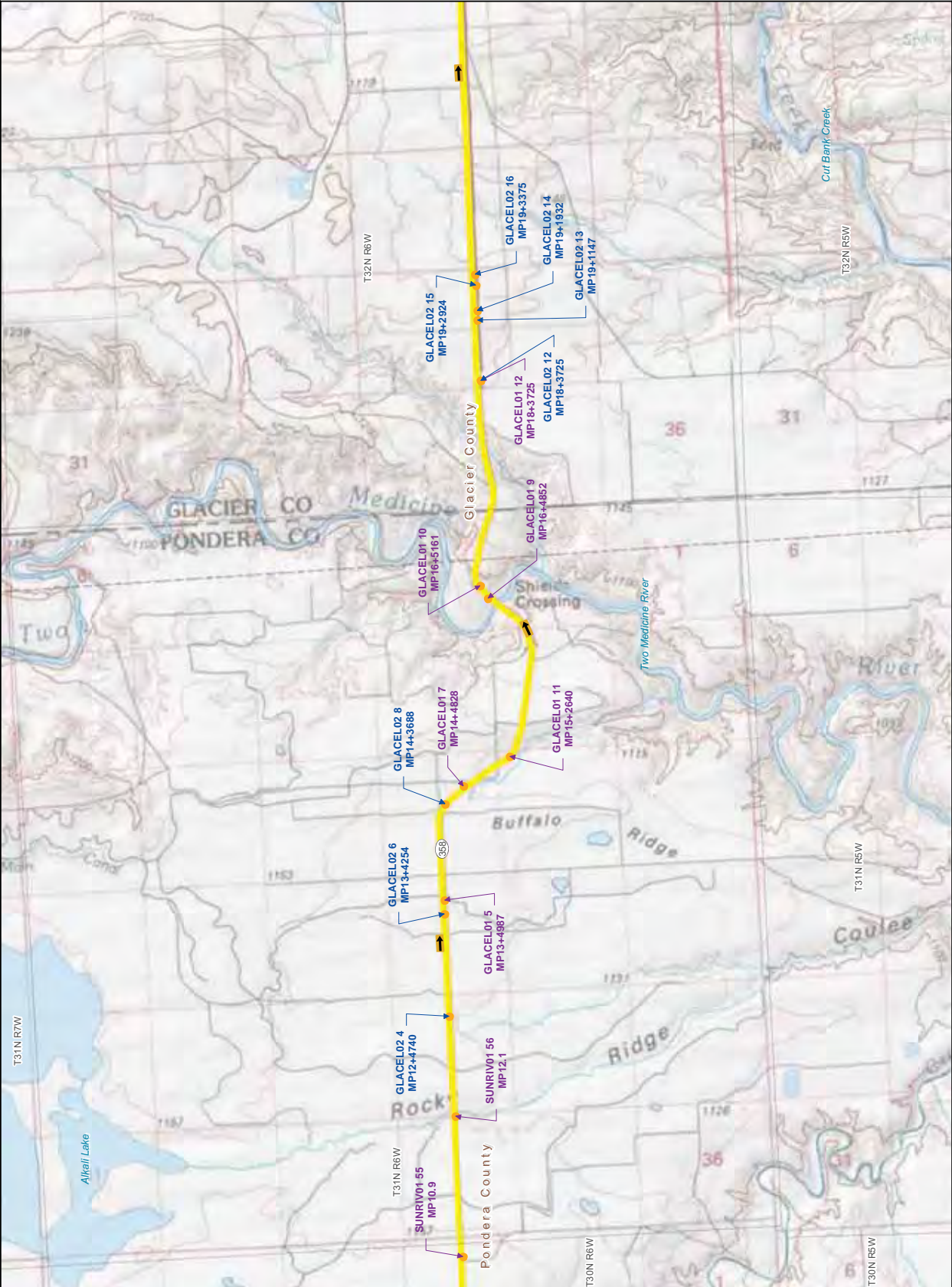
Miles 0 0.5 1

North Arrow

**Approximate Utility Locations  
In Montana  
Kearl Module  
Transportation Project  
Sheet 20 of 26**







- Route Map for Module Transportation**
- Red Box Shows Map Area
  - Black Arrow: Route Direction
  - Orange Circle: Approximate Utility Locations
  - Black Dashed Line: 10-Mile Plow
  - Yellow Dashed Line: Module Transportation Route
  - Black Dotted Line: County Boundary
  - Black Outline: USA Land Survey System
  - Blue Line: Streams
  - Blue Area: Lake
  - Blue Line with Dashes: Interstate
  - Red Line with Dashes: Major Road
  - Black Line with Dashes: Local Road
  - Black Line: Packet Number
  - Black Line: Crossing Identification
  - Black Line: Mile Post/Mile Marker
  - Black Line: Under Ground
  - Yellow Box: Designates Priority Crossing
- MEC06**
- MP9+306/AM16.9
  - B
- Above Ground**
- 3RV - 3 Rivers (COM)
  - BLF - Blackfoot Telephone (COM)
  - BRESNO - Bresnan North (COM)
  - BRESSO - Bresnan South (COM)
  - GLACEL - Glacier Electric (POW)
  - MEC - Missoula Electric Coop (POW)
  - NWEGF - NorthWestern Energy
  - NWEHEL - NorthWestern Energy
  - NWETRANS - NorthWestern Energy
  - MIS - Transmission (POW)
  - QWEST - NorthWestern Energy
  - SUNRIV - Missoula (POW)
  - POW - Sun River (POW)
- Under Ground**
- POW - Power Line (COM - Communication Line)
  - NA - Not Available

Scale: 1:50,000

Miles: 0, 0.5, 1

North Arrow

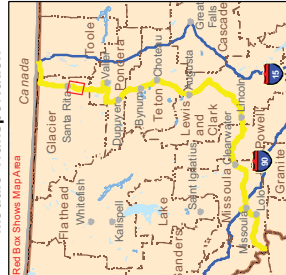
**Approximate Utility Locations In Montana**

**Kearl Module**

**Transportation Project**

**Sheet 22 of 26**

### Route Map for Module Transportation



**Legend:**

- Route Direction
- Approximate Utility Locations
- 10-Mile PLOW
- Module Transportation Route
- County Boundary
- USA Land Survey System
- Streams
- Lake
- Interstate
- Major Road
- Local Road
- Packet Number
- Crossing Identification
- MP# + 306/AMM16.9
- Mile Post/Mile Marker
- Above Ground
- Under Ground
- Designates Priority Crossing

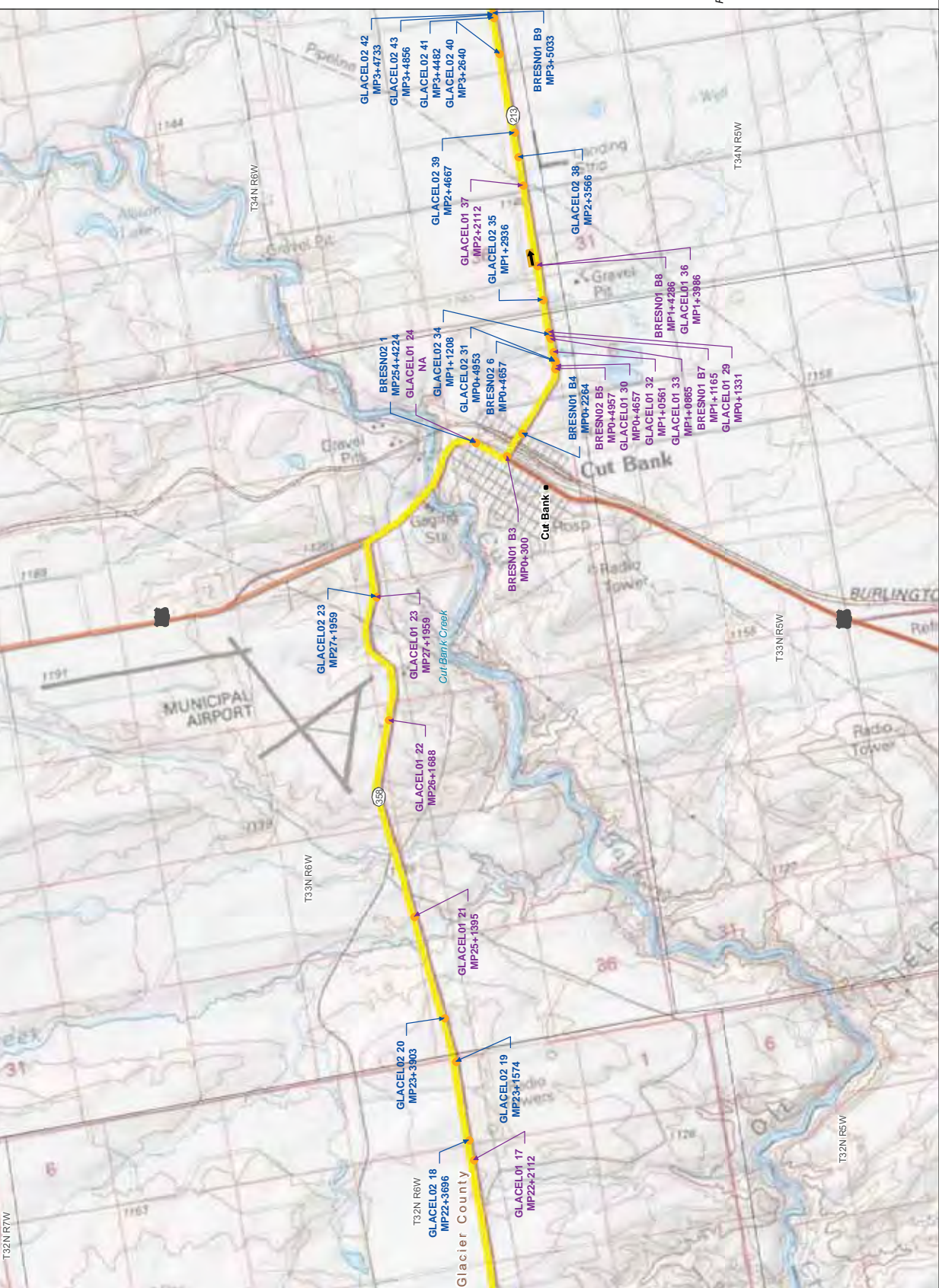
**Utility Types:**

- 3 RIV - 3 Rivers (COM)
- BLF - Blackfoot Telephone (COM)
- BRESNO - Bresnan North (COM)
- BRESSO - Bresnan South (COM)
- GLACEL - Glacier Electric (POW)
- MEC - Missoula Electric Coop (POW)
- NWEGF - NorthWestern Energy
- NWEHEL - NorthWestern Energy
- NWETRANS - NorthWestern Energy
- MIS - Transmission (POW)
- QWEST - NorthWestern Energy
- SUNRIV - Missoula (POW)
- POW - Sun River (POW)
- POW - PowerLine - COM - Communication Line
- NA - Not Available

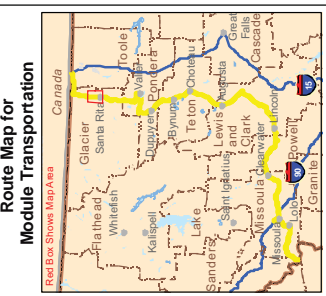
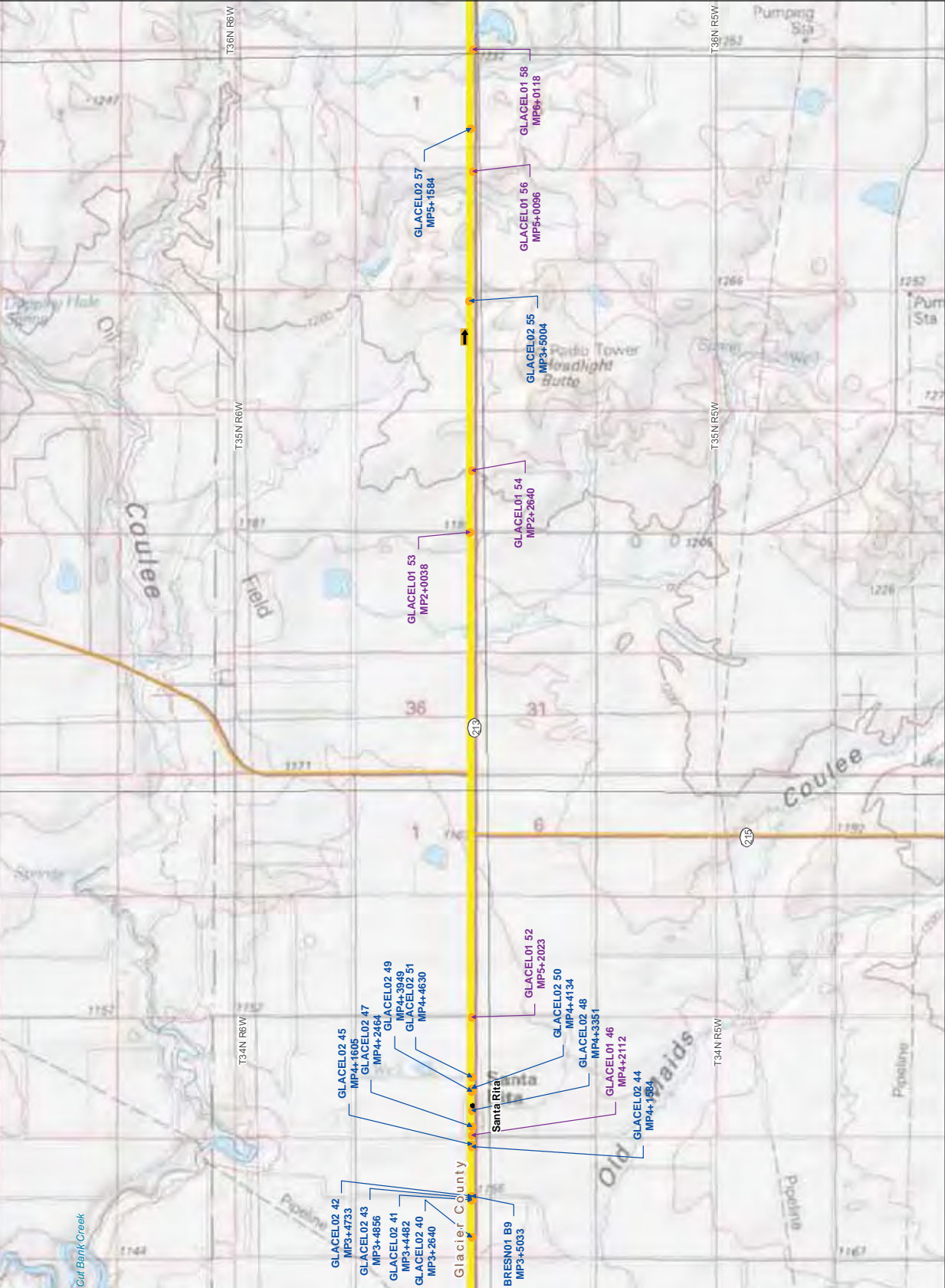
**Scale:** 1:30,000  
0 0.5 1 Miles

### Approximate Utility Locations In Montana

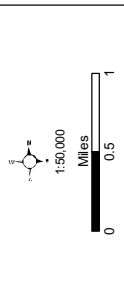
**Kearl Module Transportation Project**  
Sheet 23 of 26



G:\Missoula\Kearl\01\A\Map\Turnouts.mxd

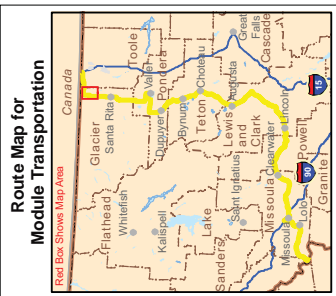
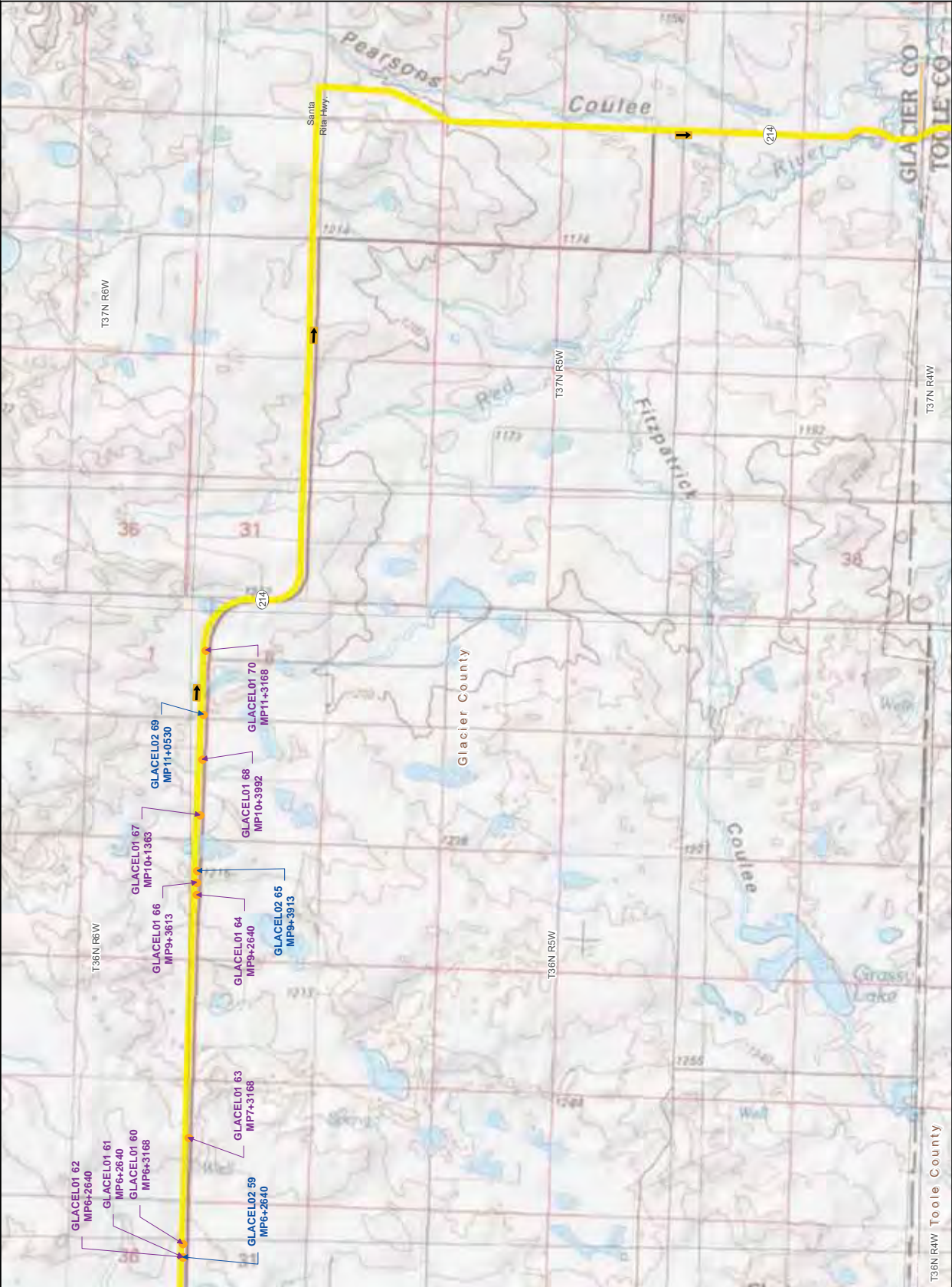


- Route Map for Module Transportation**
- Route Direction
  - Approximate Utility Locations
  - 10-Mile Plow
  - Module Transportation Route
  - County Boundary
  - USA Land Survey System
  - Streams
  - Lake
  - Interstate
  - Major Road
  - Local Road
  - MEC06
  - Packet Number
  - Crossing Identification
  - Mile Post/Mile Marker
  - Above Ground
  - Under Ground
  - Designates Priority Crossing
  - 3 RIV - 3 Rivers (COM)
  - BLF - Blackfoot Telephone (COM)
  - BRESNO - Bresnan North (COM)
  - BRESSO - Bresnan South (COM)
  - GLACEL - Glacier Electric (POW)
  - MEC - Missoula Electric Coop (POW)
  - NWEGF - NorthWestern Energy
  - NWEHL - NorthWestern Energy
  - NWETRANS - NorthWestern Energy
  - MIS - Missoula (POW)
  - QWEST - Qwest (COM)
  - SUNRIV - Sun River (POW)
  - POW - PowerLine
  - COM - Communication Line
  - NA - Not Available

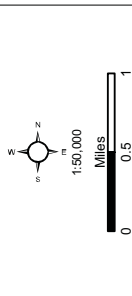


**Approximate Utility Locations  
In Montana**  
Kearl Module  
Transportation Project  
Sheet 24 of 26

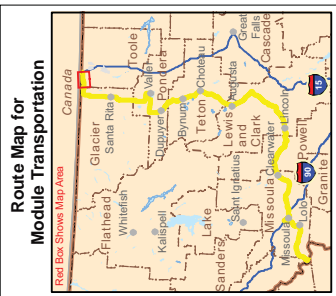
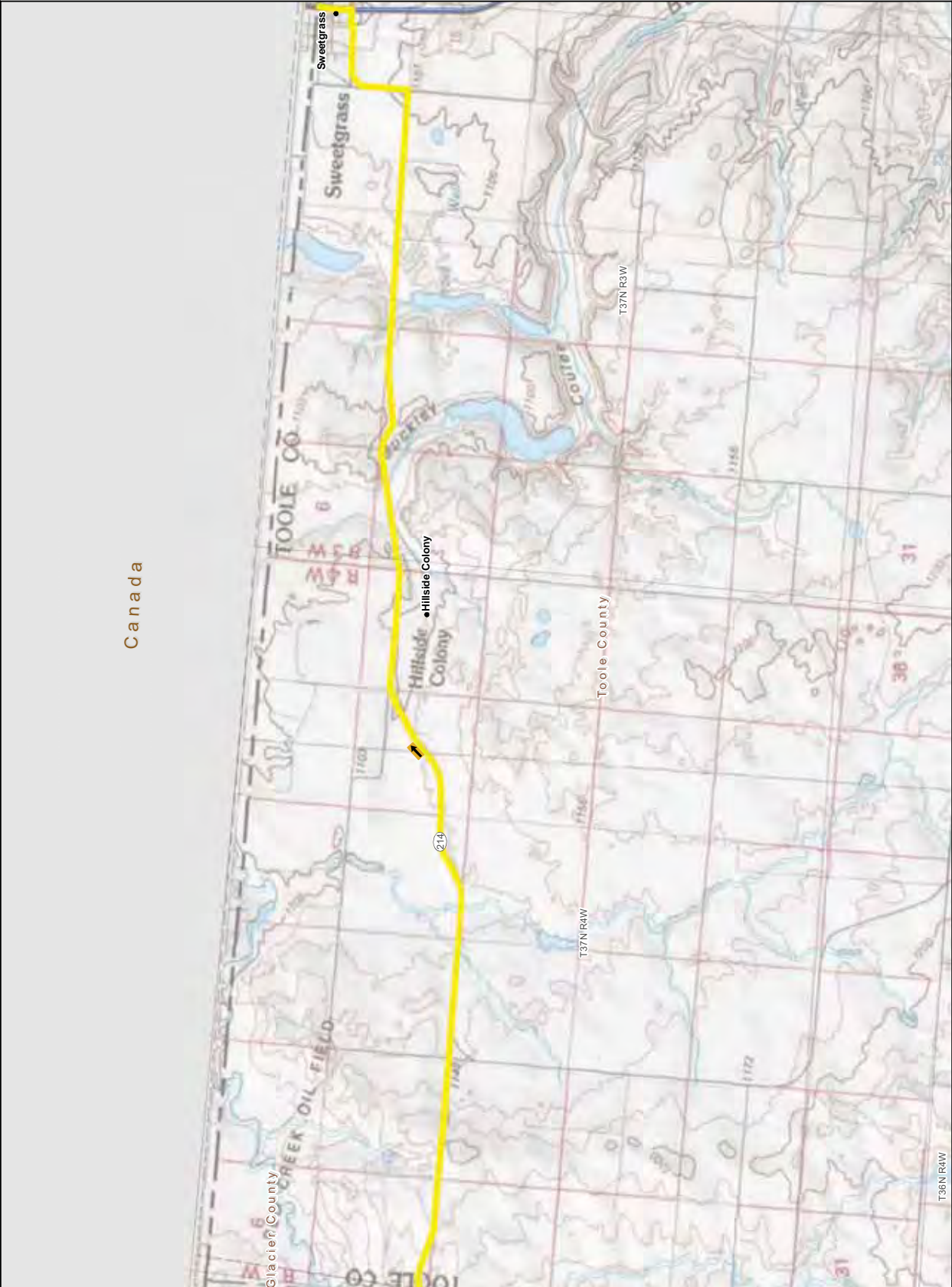
G:\msouli\kcar\01\wcd\g01\turnouts.mxd.mpp



- Route Map for Module Transportation**
- Red Box Shows Map Area
  - Yellow Arrow: Route Direction
  - Orange Circle: Approximate Utility Locations
  - Black Dashed Line: 10-Mile Plow
  - Yellow Dashed Line: Module Transportation Route
  - Black Dotted Line: County Boundary
  - Black Outline: USA Land Survey System
  - Blue Line: Streams
  - Blue Area: Lake
  - Blue Line with Dashes: Interstate
  - Blue Line: Major Road
  - Red Line: Highway
  - Black Line: Local Road
  - MEC006: Packet Number
  - B: Crossing Identification
  - MP9+306.4/MM16.9: Mile Post/Mile Marker
  - Yellow Box: Above Ground
  - White Box: Under Ground
  - Yellow Box: Designates Priority Crossing
- 3RV - 3 Rivers (COM)
  - BLF - Blackfoot Telephone (COM)
  - BRESNO - Bresnan North (COM)
  - BRESSO - Bresnan South (COM)
  - GLACEL - Glacier Electric (POW)
  - MEC - Missoula Electric Coop (POW)
  - NWEGF - NorthWestern Energy
  - NWEHEL - NorthWestern Energy
  - NWETRANS - NorthWestern Energy
  - Helena (POW)
  - Transmission (POW)
  - MIS - NorthWestern Energy
  - Missoula (POW)
  - QWEST - Qwest (COM)
  - SUNRIV - Sun River (POW)
  - POW - Power Line (COM - Communication Line)
  - NA - Not Available



**Approximate Utility Locations  
In Montana**  
Kearl Module  
Transportation Project  
Sheet 25 of 26



**Route Map for Module Transportation**

Red Box Shows Map Area

Canada

Glacier, Santa Rita, Toole, Whitefish, Kalispell, Bynum, Teton, Choteau, Sanders, Lake, Lewis and Clark, Missoula, Powell, Granite

Great Falls, Cascade

USA Land Survey System

Streams

Lake

Interstate

Major Road

Highway

Local Road

MEC006

Packet Number

Crossing Identification

MP9+3064/MM16.9

Mile Post/Mile Marker

Above Ground

Under Ground

Designates Priority Crossing

3RV - 3 Rivers (COM)

BLF - Blackfoot Telephone (COM)

BRESNO - Bresnan North (COM)

BRESSO - Bresnan South (COM)

GLACEL - Glacier Electric (POW)

MEC - Missoula Electric Coop (POW)

NWEGF - NorthWestern Energy

NWEHEL - NorthWestern Energy

NWETRANS - NorthWestern Energy

MIS - Transmission (POW)

QWEST - Missoula (POW)

SUNRIV - Sun River (POW)

POW - Power Line

COM - Communication Line

NA - Not Available

Approximate Utility Locations

10-Mile Plow

Module Transportation Route

County Boundary

USA Land Survey System

Streams

Lake

Interstate

Major Road

Highway

Local Road

MEC006

Packet Number

Crossing Identification

MP9+3064/MM16.9

Mile Post/Mile Marker

Above Ground

Under Ground

Designates Priority Crossing

3RV - 3 Rivers (COM)

BLF - Blackfoot Telephone (COM)

BRESNO - Bresnan North (COM)

BRESSO - Bresnan South (COM)

GLACEL - Glacier Electric (POW)

MEC - Missoula Electric Coop (POW)

NWEGF - NorthWestern Energy

NWEHEL - NorthWestern Energy

NWETRANS - NorthWestern Energy

MIS - Transmission (POW)

QWEST - Missoula (POW)

SUNRIV - Sun River (POW)

POW - Power Line

COM - Communication Line

NA - Not Available

Approximate Utility Locations

In Montana

Kearl Module

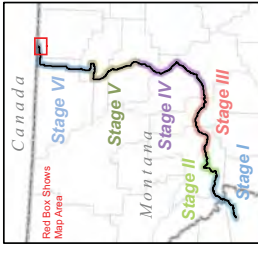
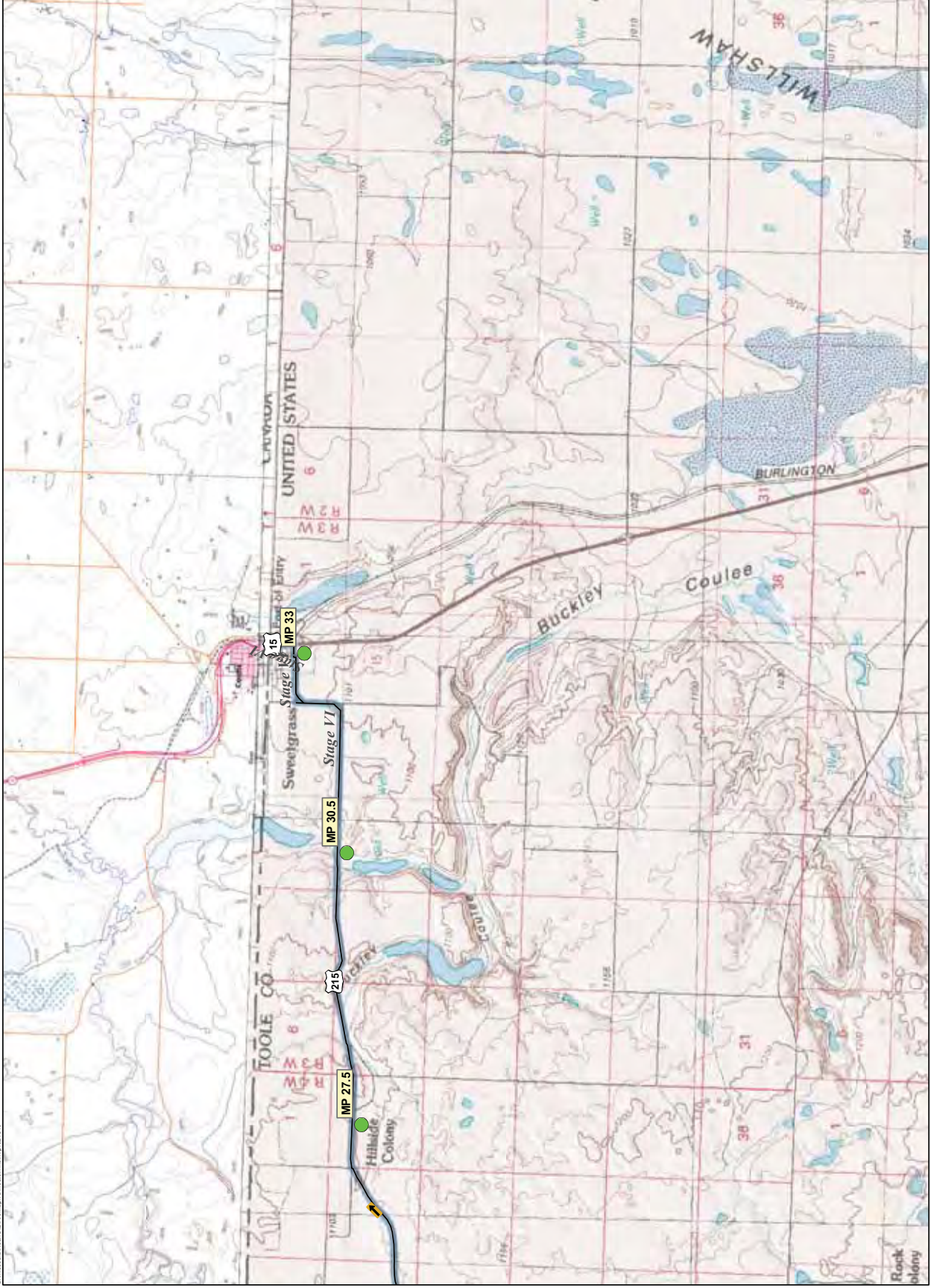
Transportation Project

Sheet 26 of 26

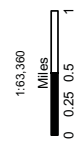
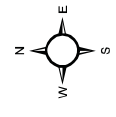
Scale: 1:50,000

Miles: 0, 0.5, 1

North Arrow



- Legend**
- Delour
  - Clear
  - Park
  - Night Parking
  - Miscellaneous Road Modifications
  - Existing
  - Requires Modification
  - New
  - Mile Marker
  - Route Direction



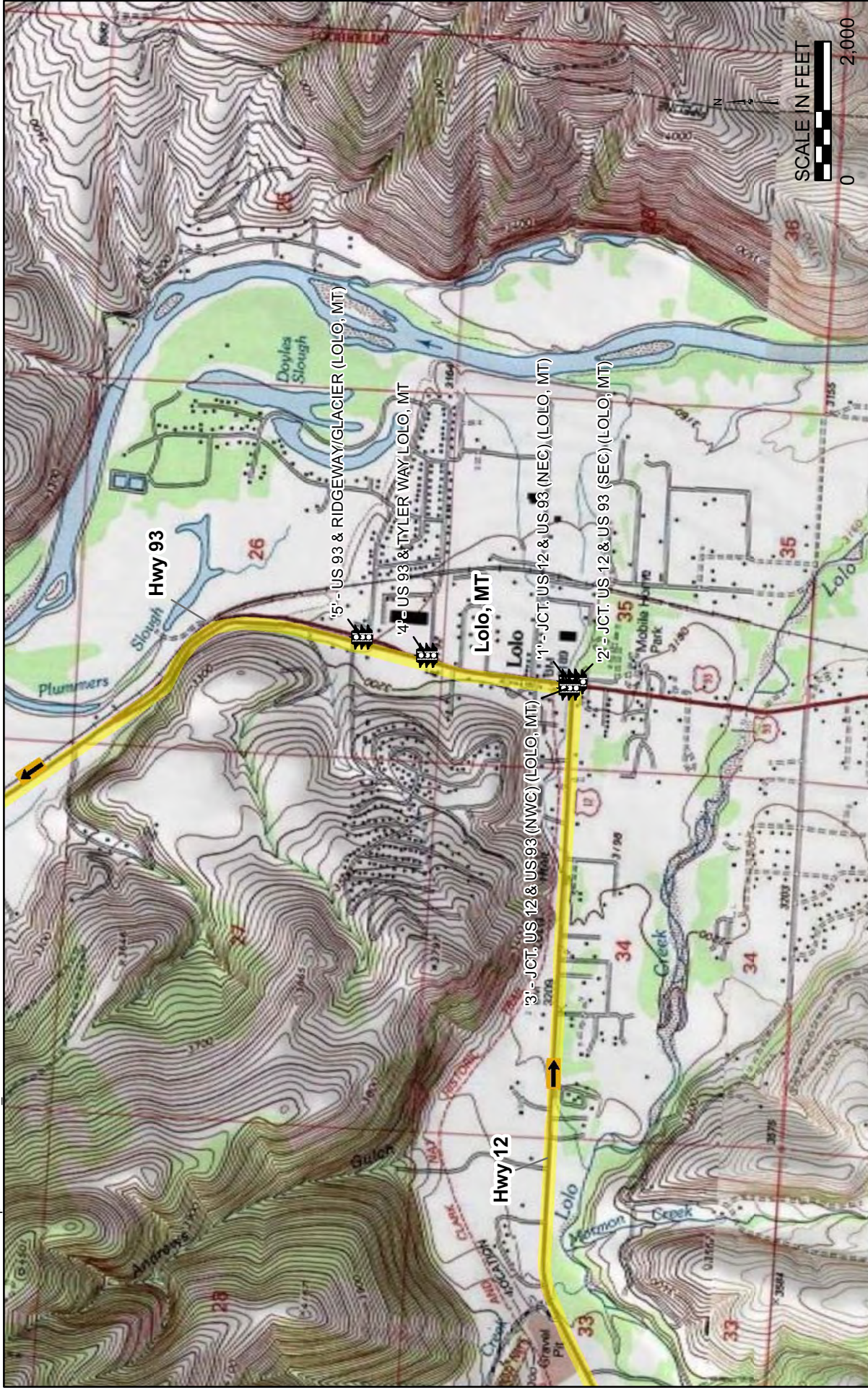
**Traffic Clearing Locations  
and Miscellaneous Road  
Modifications In Montana**

**Kearl Module  
Transportation Project  
Stage VI**

**Appendix C**  
**Maps of Traffic Structure and Sign Modifications**







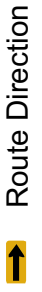
Traffic Signals and Signs ('Pole #' - Location)



Traffic Signal



Module Route

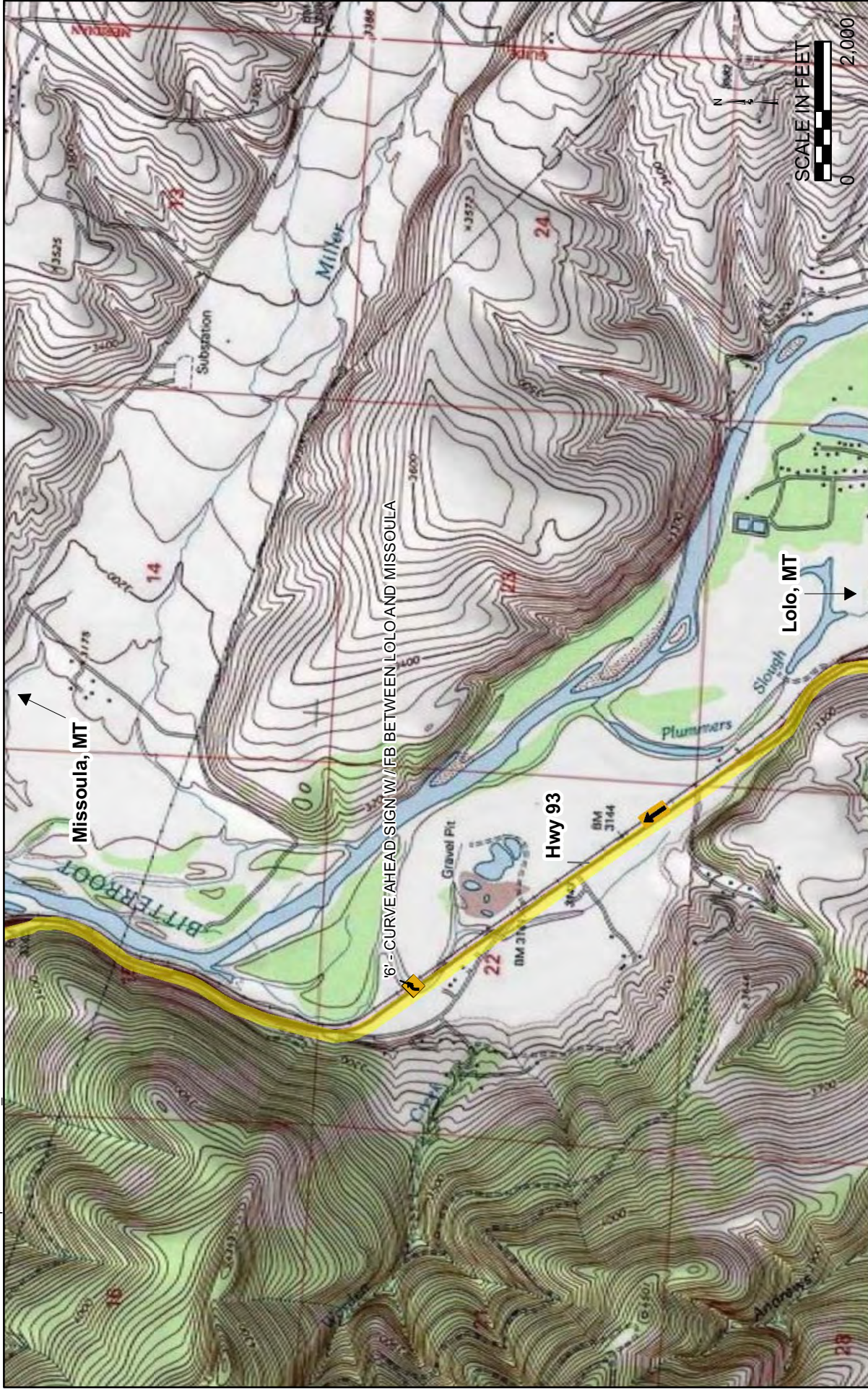


Route Direction

Figure 1

Traffic Structure Modifications  
Pole Numbers 1 - 5  
Kearl Project





Traffic Signals and Signs ('Pole #' - Location)

◆ Curve Ahead Sign

■ Module Route

➔ Route Direction

Figure 2







Traffic Structure Modifications  
Pole Number 6

Kearl Project



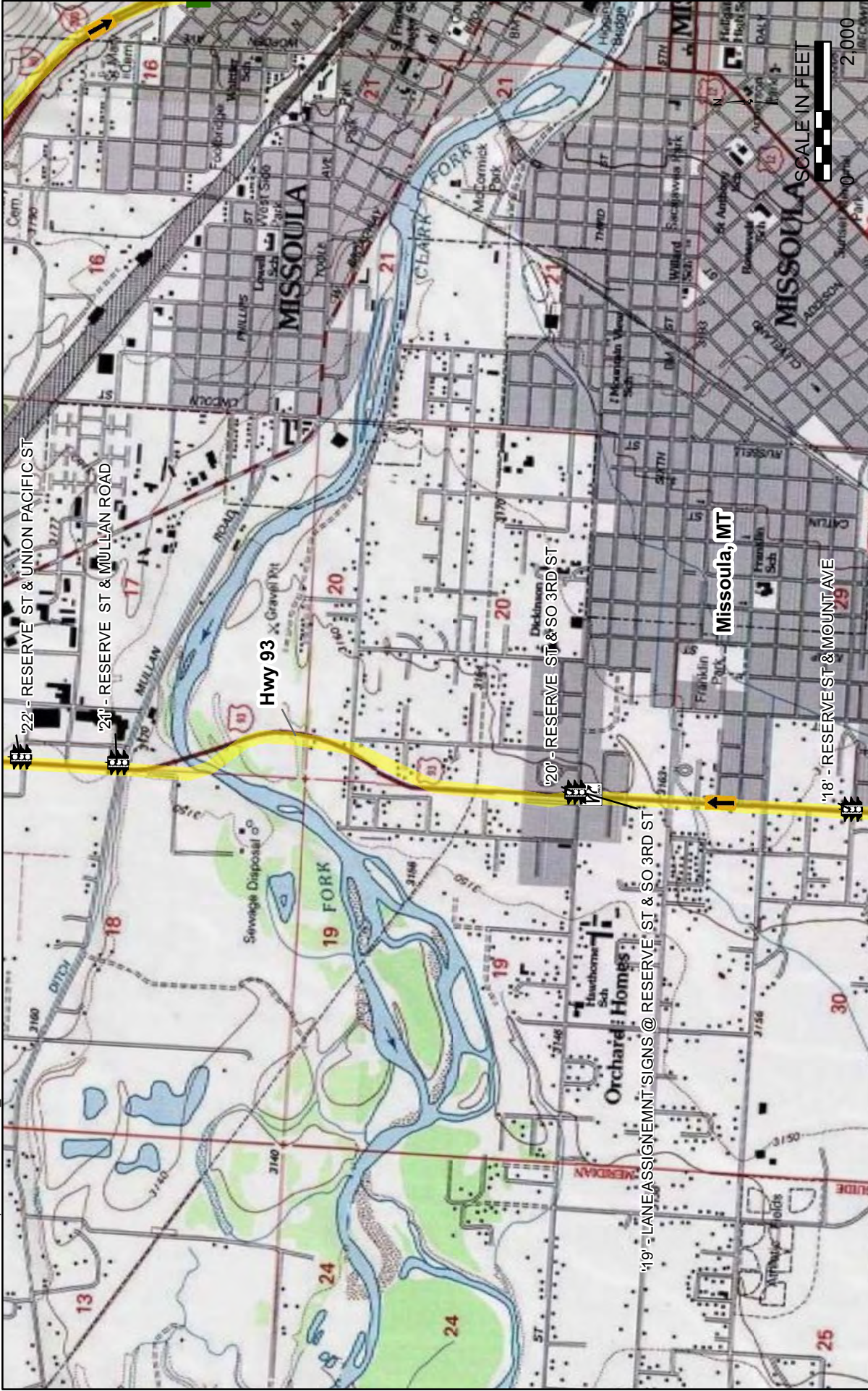


**Traffic Signals and Signs ('Pole #' - Location)**

-  Traffic Signal
-  Lane Assignment Sign
-  Signal Ahead Sign
-  Module Route
-  Guide Signs
-  Route Direction

**Figure 3**  
**Traffic Structure Modifications**  
**Pole Number 7 - 17**  
**Kearl Project**





Traffic Signals and Signs ('Pole #' - Location)

-  Traffic Signal
-  Lane Assignment Sign
-  Module Route
-  Route Direction

Figure 4  
Traffic Structure Modifications  
Pole Numbers 18 - 22  
Kearl Project



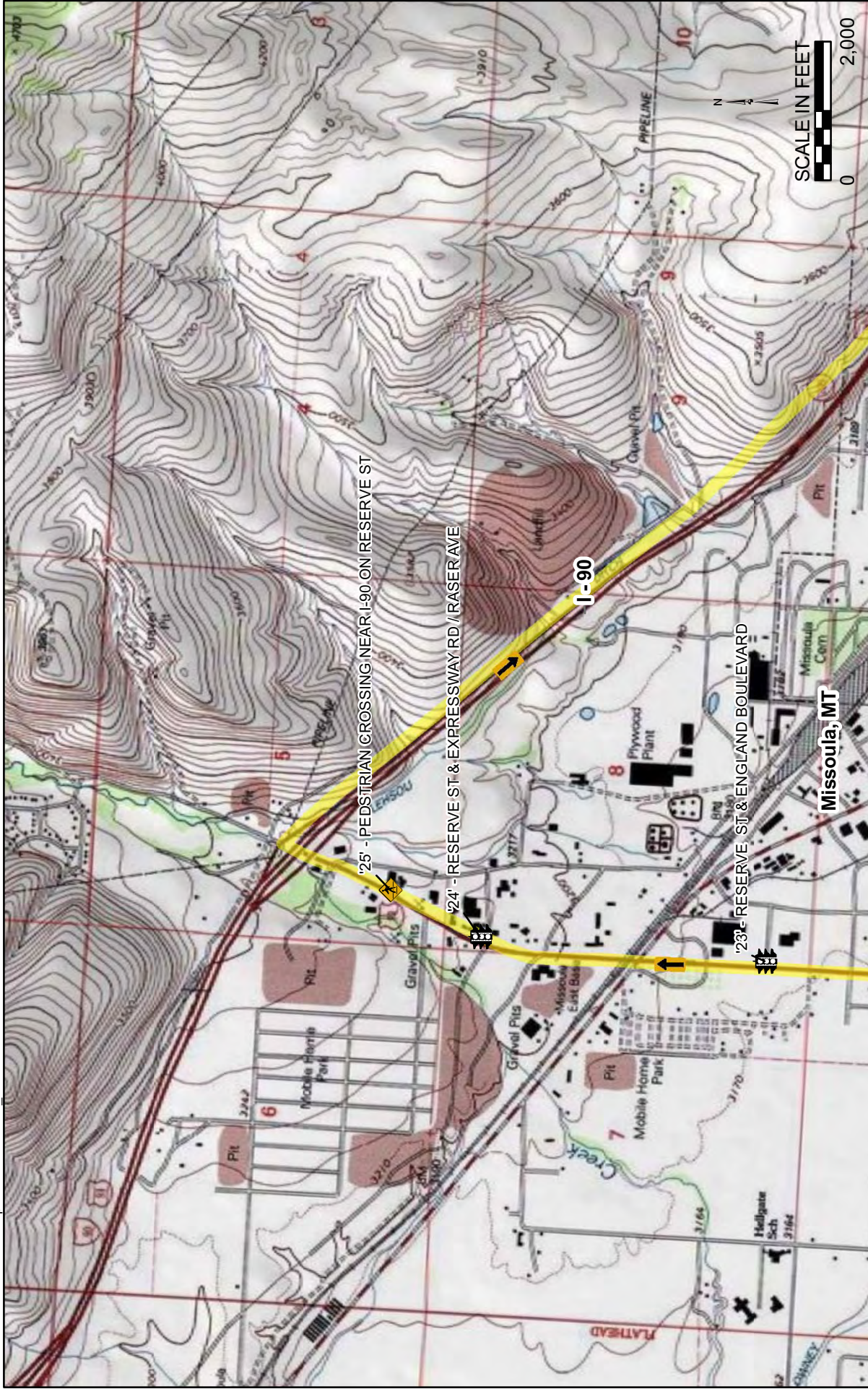


Figure 5  
Traffic Signals and Signs ('Pole #' - Location)

-  Traffic Signal
-  Pedestrian Crossing Sign
-  Module Route
-  Route Direction

Traffic Structure Modifications  
Pole Numbers 23 - 25  
Kearl Project





Figure 6  
Traffic Signals and Signs ('Pole #' - Location)

■ I - 90 Exit Sign

■ Module Route

➔ Route Direction

Traffic Structure Modifications  
Pole Numbers 26 - 28

Kearl Project





Traffic Signals and Signs ('Pole #' - Location)



Traffic Signal



Module Route



Route Direction

Figure 7

Traffic Structure Modifications  
Pole Number 29  
Kearl Project







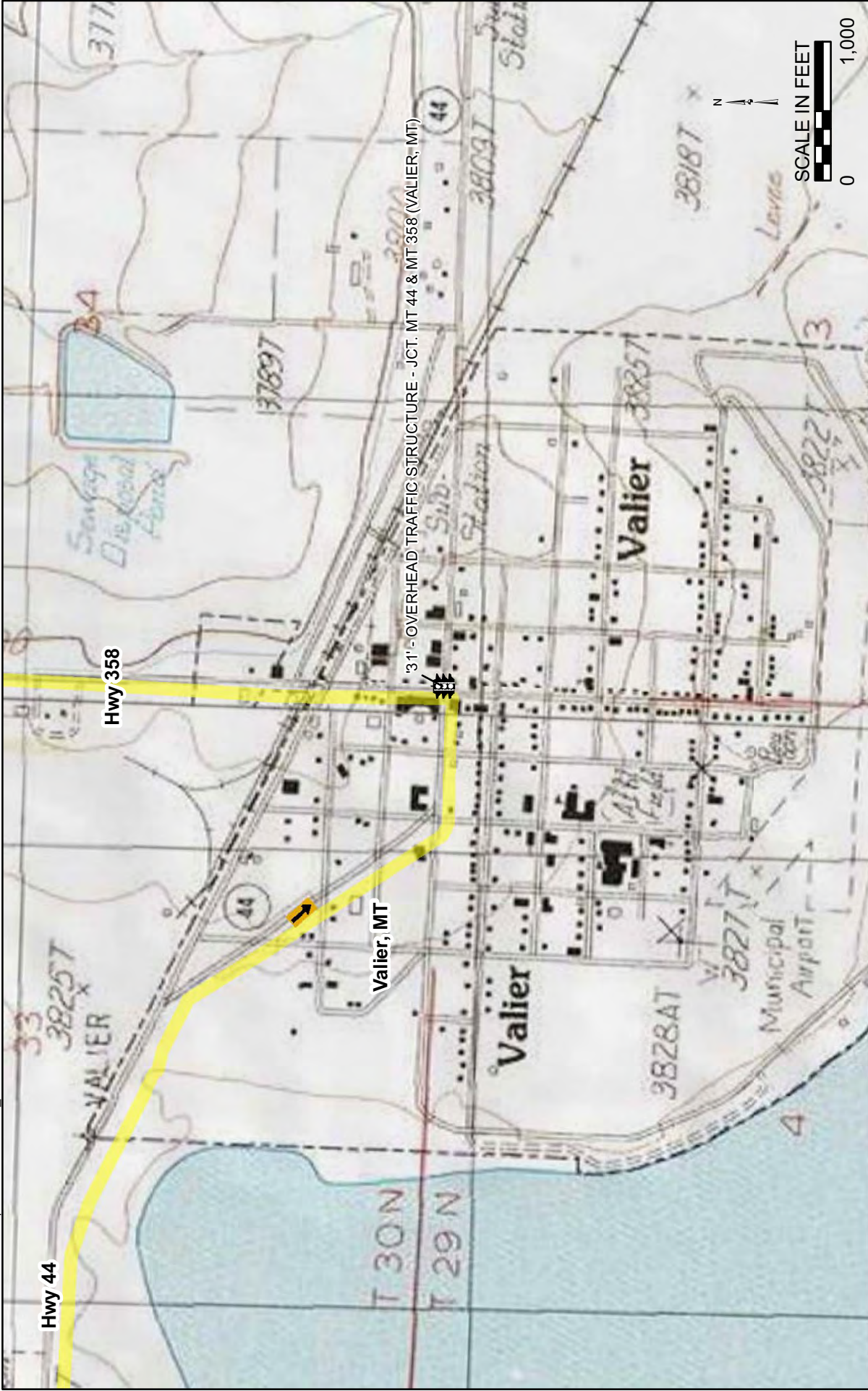
Traffic Signals and Signs ('Pole #' - Location)



Figure 8

Traffic Structure Modifications  
Pole Number 30  
Kearl Project





Traffic Signals and Signs ('Pole #' - Location)

Traffic Signal

Module Route

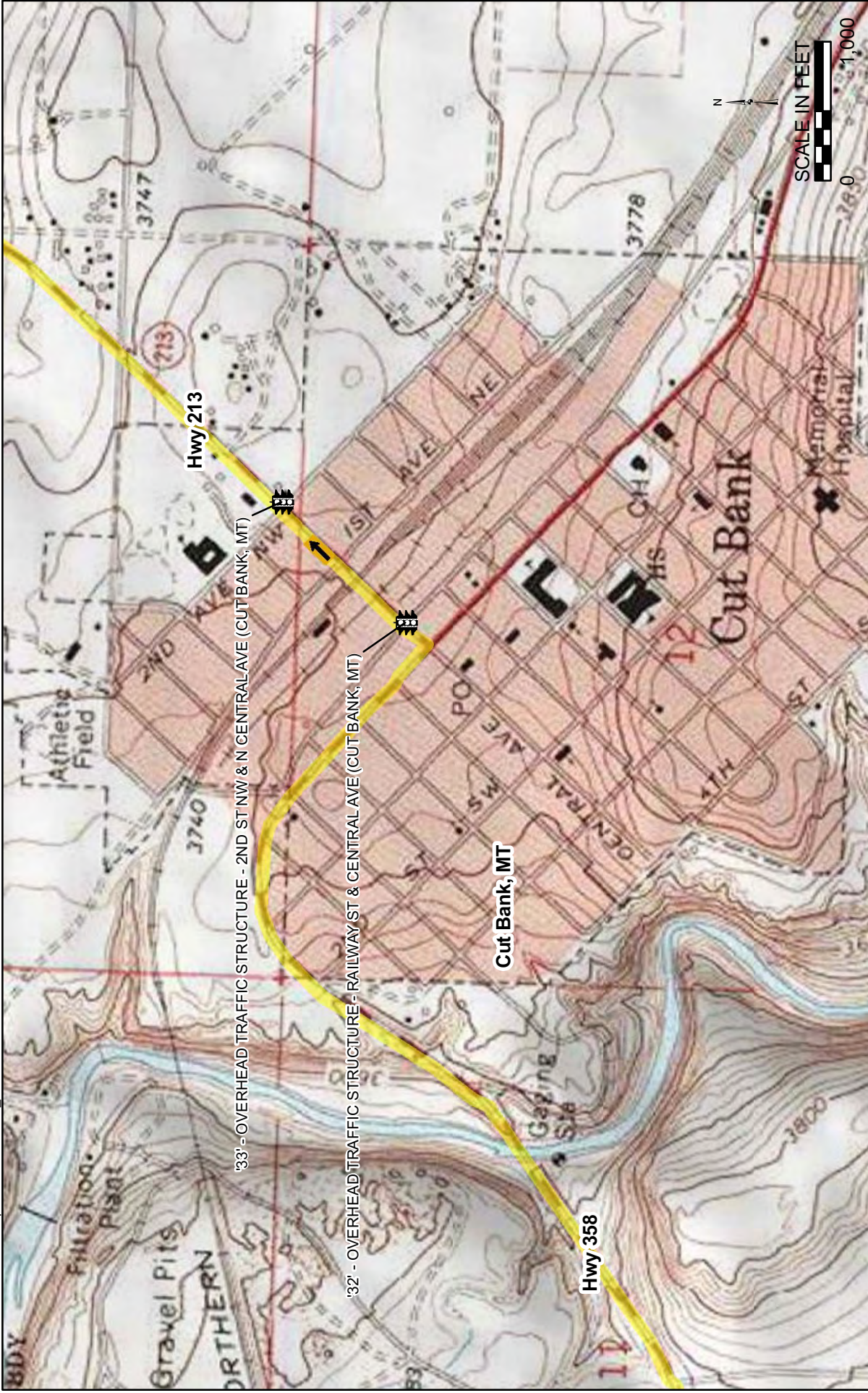
Route Direction



Figure 9

Traffic Structure Modifications  
Pole Number 31

Kearl Project



Traffic Signals and Signs ('Pole #' - Location)



Traffic Signal



Module Route



Route Direction

Figure 10  
Traffic Structure Modifications  
Pole Numbers 32 & 33  
Kearl Project



**Appendix D**  
**Bear and Aquatic Resources Special Provisions**



## **SPECIAL PROVISION: ENVIRONMENTAL MITIGATION AND COORDINATION MEASURES FOR BEARS**

Portions of the Kearsarge Project area are located within bear habitat. Bears are known to occur within the region of the project area and transient bears may infrequently occur within the vicinity of the project area. To reduce the potential for grizzly bear-human conflicts and to minimize impacts to bears, all persons involved with the Kearsarge Project will adhere to the following provisions:

- Keep all areas in a neat condition; promptly clean up any project related spills, litter garbage, food, etc.
- Keep all food and food related items inside a closed, hard-sided vehicle or special bear resistant container,\* except when preparing or eating food.
- Store petroleum products, antifreeze, and personal items such as deodorants, toothpaste, soap, and lotions in the same manner as food, as these products may attract bears.
- Deposit garbage and waste items in bear resistant containers. Remove the accumulated garbage and waste from the project site daily and dispose of it in accordance with all Tribal, Federal, State and local laws, regulations and ordinances.
- No overnight camping is allowed within the project vicinity, except designated campgrounds, by any crew member or other personnel associated with this project.
- Promptly notify the Project Manager of any road killed game animals found in the vicinity of the project. The Project Manager will arrange to have the animals picked-up and disposed of.
- Notify MDT and USFWS (Scott Jackson 406-444-5225) if a grizzly bear is observed along the route.

\* A bear resistant container is a securable container constructed of solid material capable of withstanding 200 foot-pound of energy applied by direct impact. The container, when secured and under stress, will not have any openings greater than 6.35 mm (1/4 inch), that would allow a bear to gain entry by biting or pulling with it's claws.

**Basis of Payment:** Consider all costs associated with this provision incidental to performance of the work. Include the cost in the cost of other items.

## **SPECIAL PROVISION: ENVIRONMENTAL MITIGATION AND COORDINATION MEASURES FOR AQUATIC RESOURCES**

Impact to aquatic resources\* are not expected for this project. Imperial Oil has not acquired any special authorizations or water quality permits (Clean Water Act Section 404 (COE), Stream Protection Act 124 Notification (MT FW&P), or 318 Authorization (DEQ)); therefore impacts to any and all aquatic resources are not permitted. In order to ensure that impacts would not occur, all agents associated with the Kearl project would administer the following provisions:

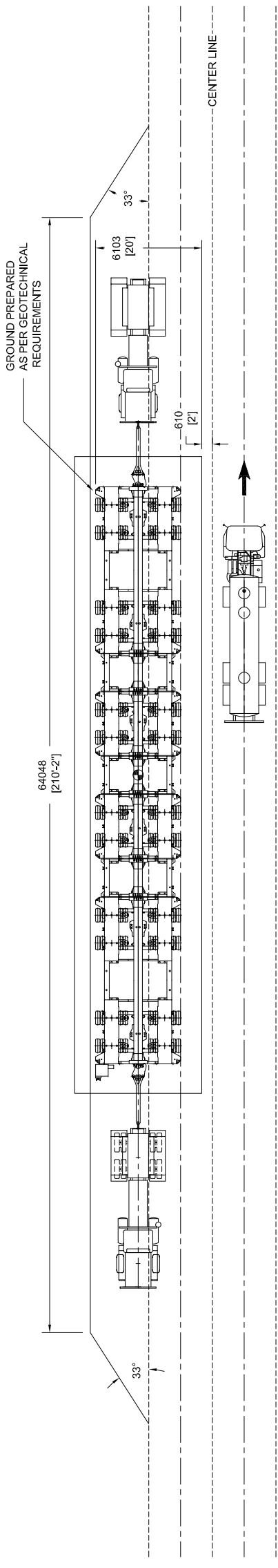
- Avoid all equipment traffic, fill material, staging activities and other disturbances to aquatic resources;
- Conduct utility operations in a manner to avoid placement of materials in any water body including streams or irrigation ditches crossing the highway and any wetland areas;
- Impacts to any aquatic resources and associated consequences, without proper permitting, are the responsibility of the Contractor; and
- If complete avoidance of impacts to aquatic resources is not possible, the contractor must secure the appropriate permits and/or authorizations prior to working in these areas..

\* Aquatic resources for this project include but are not limited to streams (perennial, ephemeral, and intermittent), rivers, lakes and reservoirs, irrigation systems and impoundments, springs, wetlands, and associated riparian areas.

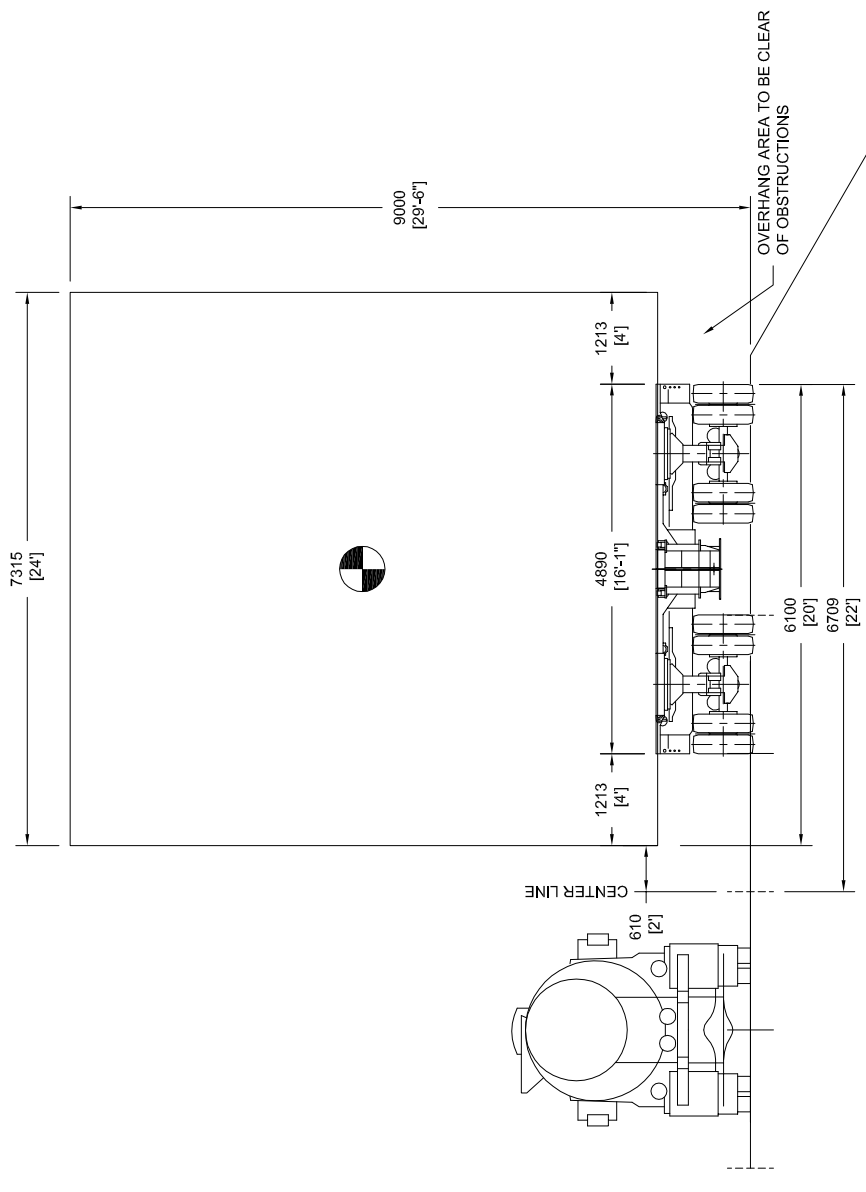
**Appendix E**  
**Plan Sheets of Turnouts**







**PLAN VIEW - CLEAR**  
PULLOUT CONDITION  
1:300



**ENDVIEW - CLEAR**  
REQUIRED PULLOUT SURFACE  
1:100

THIS DRAWING PRODUCED UNDER  
MAMMOET CANADA WESTERN  
APEGGA PERMIT #P07433

**PRELIMINARY**  
**NOT INTENDED FOR USE**  
THE INFORMATION CONTAINED IN THIS DRAWING  
SHALL BE CONSIDERED PRELIMINARY AND IS SUBJECT  
TO CHANGE PRIOR TO FINAL (IFC) ISSUE.

**GENERAL NOTES:**

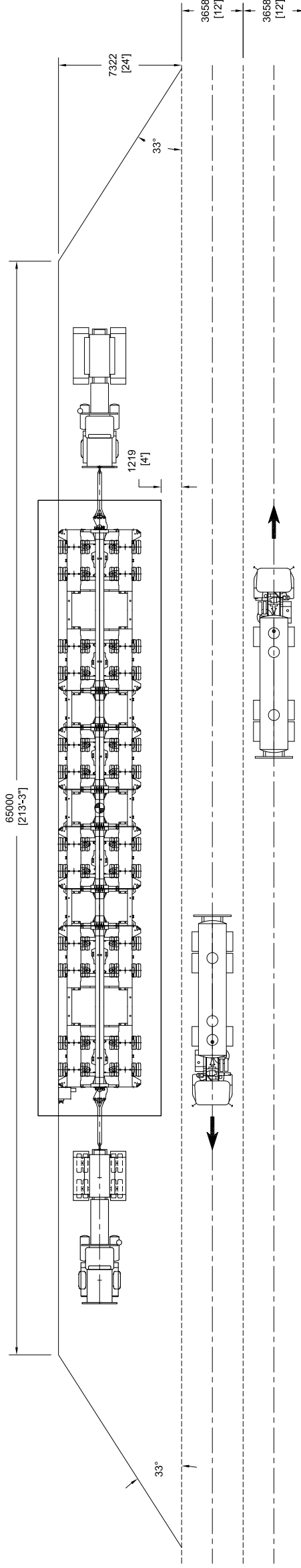
1. ENSURE LOAD IS SECURELY FASTENED TO TRAILER DURING TRANSPORTATION.
2. ENSURE TRANSPORT ROAD IS CLEAR OF OBSTACLES.
3. TRAILER SHALL BE MAINTAINED AND OPERATED IN ACCORDANCE WITH MANUFACTURERS' PROCEDURES AND ALL OTHER APPLICABLE CODES, STANDARDS, GUIDELINES, ETC.
4. ALL TONNES ARE METRIC (1T = 2,205lbs).

REFERENCE DRAWING TITLE	DRAWING NUMBER	REV
02 UPDATED INFORMATION	NOV 4, 09	BAP
01 UPDATED INFORMATION	NOV 4, 09	WLB
00 PRELIMINARY RELEASE	NOV 4, 09	WLB
REV	DESCRIPTION	DATE
	DWN	CHKD

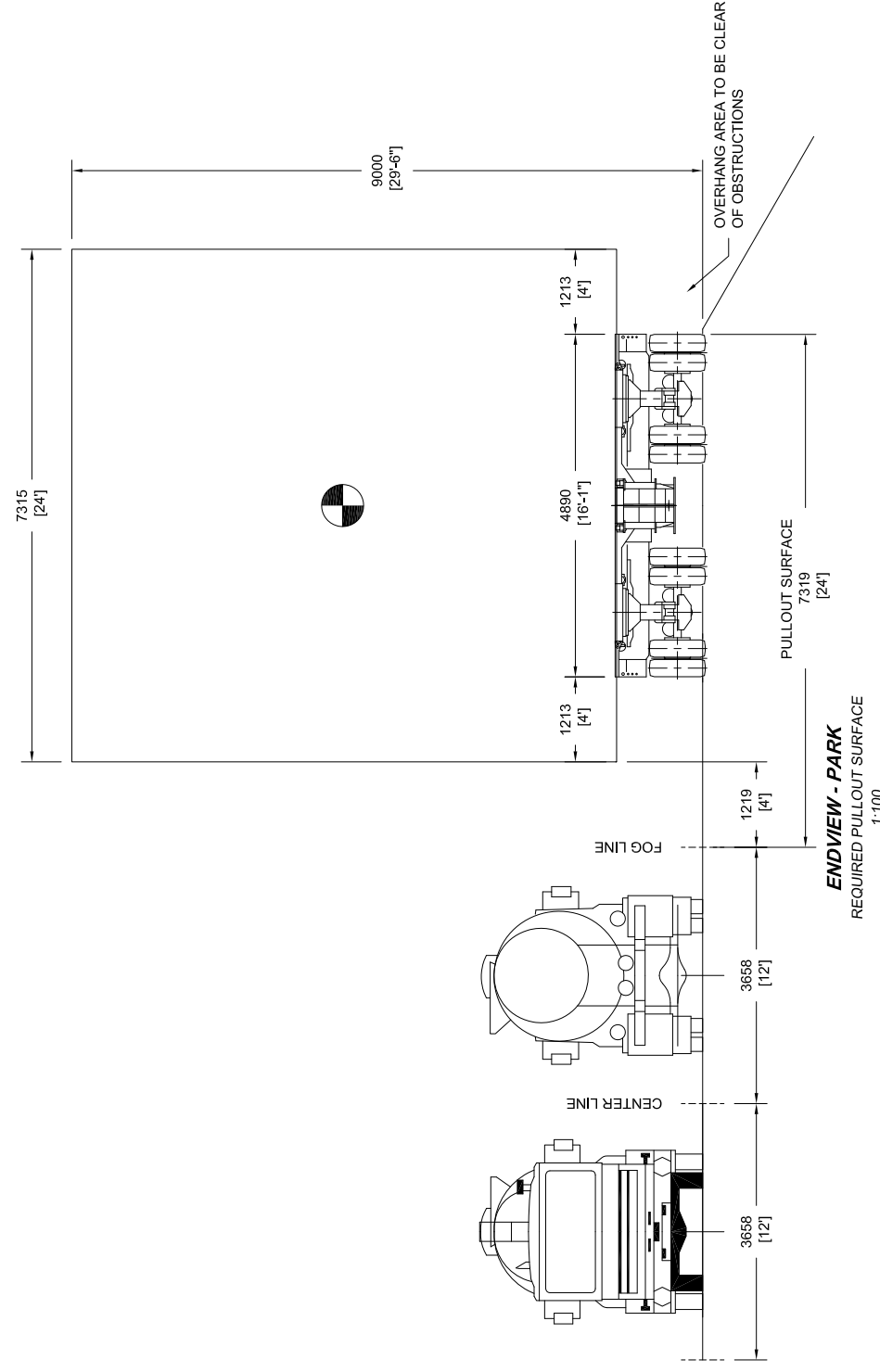
CLIENT: FLUOR - IOL  
PROJECT: KEARL OIL SANDS PROJECT  
TITLE: CLEAR - PULLOUT CONDITIONS OF A MODULE ON A 12 LINE 16' WIDE GOLDHOFER TRAILER 2' FROM CENTERLINE

THIS PUBLICATION REMAINS THE PROPERTY OF THE PUBLISHER AND SHALL BE TREATED AS CONFIDENTIAL UNLESS CONTRACTUALLY SPECIFIED OTHERWISE. NO PART OF IT MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM, TRANSMITTED, OR IN ANY MANNER COMMUNICATED WITHOUT THE PRIOR WRITTEN PERMISSION OF THE PUBLISHER.  
© 2000 MAMMOET [COSP-02-01-01]  
MAMMOET CANADA Western Ltd.  
1292b-33rd Street N.E., Edmonton, Alberta  
CANADA, T6S 1H6  
Tel. +1 (780) 449-0552 / Fax. +1 (780) 417-9623  
DRAWING NUMBER: [COSP-02-01-01]  
SHEET: 1 OF 1

SAP No: 7000045867  
SCALE: NOTED  
PROJECT NO: B 10039355 - P042 - D - T047 - 02  
DOC: PART: REV: REV: REV:



**PLAN VIEW - PARK**  
PULLOUT CONDITIONS  
1:300



**ENDVIEW - PARK**  
REQUIRED PULLOUT SURFACE  
1:100

THIS DRAWING PRODUCED UNDER  
MAMMOET CANADA WESTERN  
APEGGA PERMIT #P07433

**PRELIMINARY**  
NOT INTENDED FOR USE  
THE INFORMATION CONTAINED IN THIS DRAWING  
SHALL BE CONSIDERED PRELIMINARY AND IS SUBJECT  
TO CHANGE PRIOR TO FINAL (FC) ISSUE.

**GENERAL NOTES:**

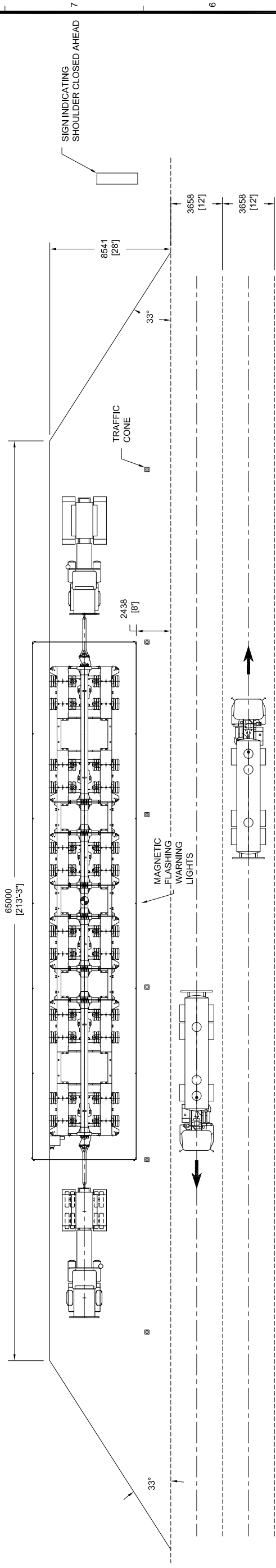
1. ENSURE LOAD IS SECURELY FASTENED TO TRAILER DURING TRANSPORTATION.
2. ENSURE TRANSPORT ROAD IS CLEAR OF OBSTACLES.
3. TRAILER SHALL BE MAINTAINED AND OPERATED IN ACCORDANCE WITH MANUFACTURERS' PROCEDURES AND ALL OTHER APPLICABLE CODES, STANDARDS, GUIDELINES, ETC.
4. ALL TONNES ARE METRIC (1Tt = 2,205lbs).

REFERENCE DRAWING TITLE	DRAWING NUMBER	REV
MT PRELIMINARY RELEASE	OCT 20, 09	WLB MT
DESCRIPTION	DATE	DWN CHKD

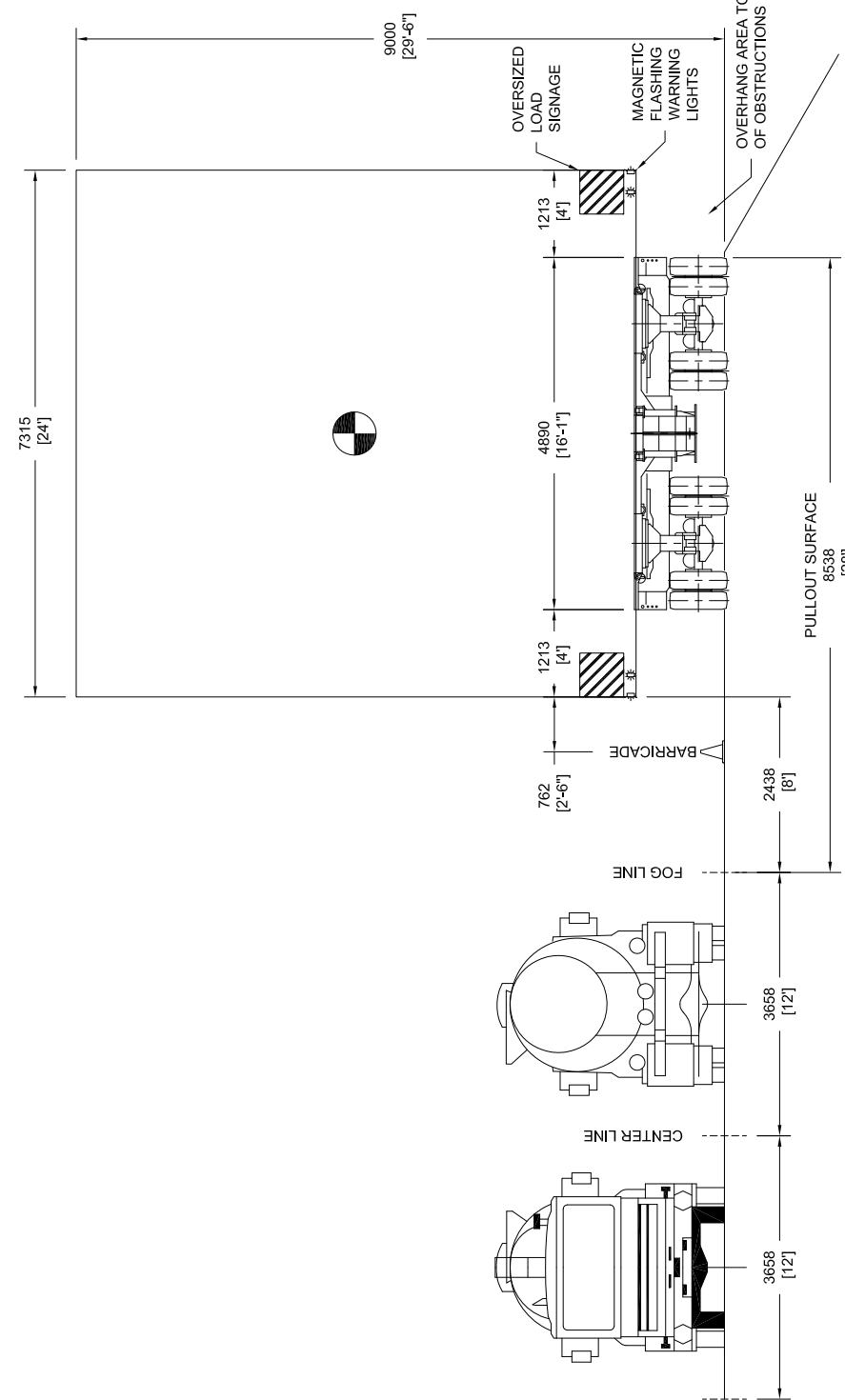
CLIENT: FLUOR - IOL  
PROJECT: KEARL OIL SANDS PROJECT  
TITLE: PARK - PULLOUT CONDITIONS OF A MODULE ON A 12 LINE 16' WIDE GOLDHOFFER TRAILER

THIS PUBLICATION REMAINS THE PROPERTY OF THE PUBLISHER AND SHALL BE TREATED AS CONFIDENTIAL UNLESS CONTRACTUALLY SPECIFIED OTHERWISE. NO PART OF IT MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM, TRANSMITTED, OR IN ANY MANNER DISSEMINATED WITHOUT THE PRIOR WRITTEN PERMISSION OF THE PUBLISHER.  
©2000 MAMMOET [COSP-02-01-01]  
MAMMOET CANADA WESTERN Ltd. [COSP-02-01-01]  
12920-53rd Street NE., Edmonton, Alberta  
CANADA, T6S 1H6  
Tel. +1 (780) 449-0552 / Fax. +1 (780) 417-9623  
DRAWING NUMBER: 10039355  
PROJECT NO.: 10039355 - P042 - D - T042 - 00  
SHEET: 1 OF 1  
SCALE: NOTED  
SAP No: 7000045867  
NOTED B

7000045867  
NOTED B  
10039355 - P042 - D - T042 - 00



**PLAN VIEW - PARK OVERNIGHT**  
PULLOUT CONDITIONS  
1:300



**ENDVIEW - PARK OVERNIGHT**  
REQUIRED PULLOUT SURFACE  
1:100

THIS DRAWING PRODUCED UNDER  
MAMMOET CANADA WESTERN  
APEGGA PERMIT #P07433

**PRELIMINARY**  
NOT INTENDED FOR USE  
THE INFORMATION CONTAINED IN THIS DRAWING  
SHALL BE CONSIDERED PRELIMINARY AND IS SUBJECT  
TO CHANGE PRIOR TO FINAL (IFC) ISSUE.

**GENERAL NOTES:**

1. ENSURE LOAD IS SECURELY FASTENED TO TRAILER DURING TRANSPORTATION.
2. ENSURE TRANSPORT ROAD IS CLEAR OF OBSTACLES.
3. TRAILER SHALL BE MAINTAINED AND OPERATED IN ACCORDANCE WITH MANUFACTURERS' PROCEDURES AND ALL OTHER APPLICABLE CODES, STANDARDS, GUIDELINES, ETC.
4. ALL TONNES ARE METRIC (1Tt = 2,205lbs).

REV	DESCRIPTION	DATE	DWN	CHKD
02	ADDED SHOULDER SIGN	MAR 15, 2010	SJG	
01	PRELIMINARY RELEASE - ADDED DETAIL	OCT 20, 09	WLB	
00	PRELIMINARY RELEASE	OCT 20, 09	WLB	MT

CLIENT: FLUOR - IOL  
PROJECT: KEARL OIL SANDS PROJECT  
TITLE: PARK OVERNIGHT - PULLOUT CONDITIONS OF A MODULE ON A 12 LINE 16' WIDE GOLDHOFFER TRAILER

THIS PUBLICATION REMAINS THE PROPERTY OF THE PUBLISHER AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, WITHOUT THE PRIOR WRITTEN PERMISSION OF THE PUBLISHER.

**MAMMOET**  
MAMMOET CANADA Western Ltd.  
12920/3345 Street N.E., Edmonton, Alberta  
CANADA, T6S 1H6  
Tel: +1 (780) 449-0552 / Fax: +1 (780) 417-9623

SAP No: 7000045867  
SCALE: NOTED  
SIZE: B  
PROJECT NO: 10039355 - P042 - D - T043 - 02  
DRAWING NUMBER: [03SP-02-01-01]  
SHEET: 1 of 1  
OFFICE: [03SP-02-01-01]  
DOC: [03SP-02-01-01]  
REV: [03SP-02-01-01]

**Appendix F**  
**Montana Species of Concern**



### Montana Species of Concern

Common Name	Scientific Name	Rank	County
Alpine Mountainsnail	<i>Oreohelix alpina</i>	S1	Missoula, Lewis and Clark
Boreal Whiteface	<i>Leucorrhinia borealis</i>	S1	Powell
Carinate Mountainsnail	<i>Oreohelix elrodi</i>	S1	Lewis and Clark
Keeled Mountainsnail	<i>Oreohelix carinifera</i>	S1	Missoula, Powell
Lyre Mantleslug	<i>Udosarx lyrata</i>	S1	Missoula
Meltwater Lednian Stonefly	<i>Lednia tumana</i>	S1	Glacier
Rhyacophilan Caddisfly	<i>Rhyacophila glaciera</i>	S1	Glacier
Rocky Mountain Capshell	<i>Acroloxus coloradensis</i>	S1	Glacier
Rocky Mountain Dusksnail	<i>Colligyrus greggi</i>	S1	Powell
Western Glacier Stonefly	<i>Zapada glacier</i>	S1	Glacier
Northern Leopard Frog	<i>Rana pipiens</i>	S1, S4	Glacier
Sharp-tailed Grouse	<i>Tympanuchus phasianellus</i>	S1, S4	Toole, Lewis and Clark, Powell, Glacier, Teton
A Subterranean Amphipod	<i>Stygobromus tritus</i>	S1S2	Missoula
Bitterroot Mountainsnail	<i>Oreohelix amariradix</i>	S1S2	Missoula
Glacier Amphipod	<i>Stygobromus glacialis</i>	S1S2	Glacier
Pale Jumping-slug	<i>Hemphillia camelus</i>	S1S2	Missoula
A Freshwater Sponge	<i>Ephydatia cooperensis</i>	S1S3	Missoula, Powell
A Millipede	<i>Adirityla cucullata</i>	S1S3	Missoula
A Millipede	<i>Austrotyla montani</i>	S1S3	Missoula
A Millipede	<i>Corypus cochlearis</i>	S1S3	Missoula
A Millipede	<i>Lophomus laxis</i>	S1S3	Missoula
A Stonefly	<i>Isoperla petersoni</i>	S2	Glacier
A Stonefly	<i>Zapada cordillera</i>	S2	Missoula
Black Rosy-Finch	<i>Leucosticte atrata</i>	S2	Missoula, Powell
Bull Trout	<i>Salvelinus confluentus</i>	S2	Missoula, Lewis and Clark, Powell, Glacier
Coeur d'Alene Salamander	<i>Plethodon idahoensis</i>	S2	Missoula
Gillette's Checkerspot	<i>Euphydryas gillettii</i>	S2	Missoula, Powell, Glacier, Pondera
Great Plains Toad	<i>Bufo cognatus</i>	S2	Toole, Lewis and Clark
Lake Trout	<i>Salvelinus namaycush</i>	S2	Glacier
Lolo Mayfly	<i>Caurinella idahoensis</i>	S2	Missoula
Northern Bog Lemming	<i>Synaptomys borealis</i>	S2	Missoula
Northern Bog Lemming	<i>Synaptomys borealis</i>	S2	Lewis and Clark
Northern Rocky Mountains Refugium Caddisfly	<i>Goereilla baumanni</i>	S2	Missoula
Northern Rocky Mountains Refugium Caddisfly	<i>Rossiana montana</i>	S2	Missoula
Northern Rocky Mountains Refugium Stonefly	<i>Soyedina potteri</i>	S2	Missoula
Sauger	<i>Sander canadensis</i>	S2	Teton
Spotted Bat	<i>Euderma maculatum</i>	S2	Lewis and Clark

## Montana Species of Concern

Common Name	Scientific Name	Rank	County
Townsend's Big-eared Bat	<i>Corynorhinus townsendii</i>	S2	Missoula, Lewis and Clark, Glacier
Trout-perch	<i>Percopsis omiscomaycus</i>	S2	Glacier
Western Hog-nosed Snake	<i>Heterodon nasicus</i>	S2	Toole
Western Pearlshell	<i>Margaritifera falcata</i>	S2	Missoula, Powell
Western Toad	<i>Bufo boreas</i>	S2	Missoula, Lewis and Clark, Powell, Glacier, Teton, Pondera
Westslope Cutthroat Trout	<i>Oncorhynchus clarkii lewisi</i>	S2	Missoula, Lewis and Clark, Powell, Glacier, Teton, Pondera
Chestnut-collared Longspur	<i>Calcarius ornatus</i>	S2B	Toole, Lewis and Clark, Teton
Harlequin Duck	<i>Histrionicus histrionicus</i>	S2B	Missoula, Lewis and Clark, Powell, Glacier, Teton, Pondera
Lewis's Woodpecker	<i>Melanerpes lewis</i>	S2B	Missoula, Lewis and Clark, Powell
Mountain Plover	<i>Charadrius montanus</i>	S2B	Toole, Teton
Piping Plover	<i>Charadrius melodus</i>	S2B	Pondera
Gray-crowned Rosy-Finch	<i>Leucosticte tephrocotis</i>	S2B, S5N	Lewis and Clark, Glacier, Teton
Blue Sucker	<i>Cycleptus elongatus</i>	S2S3	Teton
Dwarf Shrew	<i>Sorex nanus</i>	S2S3	Toole, Pondera
Grizzly Bear	<i>Ursus arctos</i>	S2S3	Missoula, Lewis and Clark, Powell, Glacier, Teton, Pondera
Magnum Mantleslug	<i>Magnipelta mycophaga</i>	S2S3	Missoula
Sheathed Slug	<i>Zacoleus idahoensis</i>	S2S3	Missoula
Smoky Taildropper	<i>Prophysaon humile</i>	S2S3	Missoula
Sturgeon Chub	<i>Macrhybopsis gelida</i>	S2S3	Teton
Bald Eagle	<i>Haliaeetus leucocephalus</i>	S3	Missoula, Lewis and Clark, Powell, Glacier, Teton
Black-backed Woodpecker	<i>Picoides arcticus</i>	S3	Missoula, Lewis and Clark, Powell
Black-tailed Prairie Dog	<i>Cynomys ludovicianus</i>	S3	Toole, Lewis and Clark
Brown Creeper	<i>Certhia americana</i>	S3	Missoula, Lewis and Clark, Powell, Glacier, Teton
Canada Lynx	<i>Lynx canadensis</i>	S3	Missoula, Lewis and Clark, Powell, Glacier, Teton, Pondera
Cassin's Finch	<i>Carpodacus cassinii</i>	S3	Missoula, Lewis and Clark, Powell, Glacier, Teton
Clark's Nutcracker	<i>Nucifraga columbiana</i>	S3	Missoula, Lewis and Clark, Powell, Glacier, Teton, Pondera
Fisher	<i>Martes pennanti</i>	S3	Missoula, Lewis and Clark, Powell, Glacier, Teton, Pondera
Fringed Myotis	<i>Myotis thysanodes</i>	S3	Missoula, Lewis and Clark, Powell, Teton
Golden Eagle	<i>Aquila chrysaetos</i>	S3	Missoula, Toole, Lewis and Clark, Powell, Glacier, Teton, Pondera
Gray Wolf	<i>Canis lupus</i>	S3	Missoula, Lewis and Clark, Powell, Glacier, Teton, Pondera
Great Blue Heron	<i>Ardea herodias</i>	S3	Missoula, Toole, Lewis and Clark, Powell, Glacier, Teton, Pondera
Great Gray Owl	<i>Strix nebulosa</i>	S3	Missoula, Powell, Teton



### Montana Species of Concern

Common Name	Scientific Name	Rank	County
Greater Short-horned Lizard	<i>Phrynosoma hernandesi</i>	S3	Toole, Glacier, Teton
Merriam's Shrew	<i>Sorex merriami</i>	S3	Teton
Northern Alligator Lizard	<i>Elgaria coerulea</i>	S3	Missoula
Northern Goshawk	<i>Accipiter gentilis</i>	S3	Missoula, Lewis and Clark, Powell, Glacier, Teton
Peregrine Falcon	<i>Falco peregrinus</i>	S3	Missoula, Toole, Lewis and Clark, Powell, Glacier, Teton, Pondera
Pileated Woodpecker	<i>Dryocopus pileatus</i>	S3	Missoula, Lewis and Clark, Powell, Glacier
Pinyon Jay	<i>Gymnorhinus cyanocephalus</i>	S3	Missoula, Lewis and Clark
Plains Spadefoot	<i>Spea bombifrons</i>	S3	Toole, Lewis and Clark
Preble's Shrew	<i>Sorex preblei</i>	S3	Missoula, Powell, Teton
Spiny Softshell	<i>Apalone spinifera</i>	S3	Teton
Spoonhead Sculpin	<i>Cottus ricei</i>	S3	Glacier
Swift Fox	<i>Vulpes velox</i>	S3	Glacier
Trumpeter Swan	<i>Cygnus buccinator</i>	S3	Lewis and Clark
Western Skink	<i>Eumeces skiltonianus</i>	S3	Missoula
White-tailed Ptarmigan	<i>Lagopus leucura</i>	S3	Missoula, Lewis and Clark, Powell, Glacier, Teton, Pondera
Winter Wren	<i>Troglodytes troglodytes</i>	S3	Missoula, Lewis and Clark, Powell, Glacier, Teton
Wolverine	<i>Gulo gulo</i>	S3	Missoula, Lewis and Clark, Powell, Glacier, Teton, Pondera
Alder Flycatcher	<i>Empidonax alnorum</i>	S3B	Teton
American Bittern	<i>Botaurus lentiginosus</i>	S3B	Missoula, Glacier, Teton
American White Pelican	<i>Pelecanus erythrorhynchos</i>	S3B	Teton, Pondera
Baird's Sparrow	<i>Ammodramus bairdii</i>	S3B	Toole, Lewis and Clark, Glacier, Teton
Black Tern	<i>Chlidonias niger</i>	S3B	Powell, Glacier, Teton, Pondera
Black-crowned Night-Heron	<i>Nycticorax nycticorax</i>	S3B	Teton
Black-necked Stilt	<i>Himantopus mexicanus</i>	S3B	Lewis and Clark, Teton
Bobolink	<i>Dolichonyx oryzivorus</i>	S3B	Missoula, Lewis and Clark, Powell, Teton
Brewer's Sparrow	<i>Spizella breweri</i>	S3B	Toole, Lewis and Clark, Powell, Glacier, Teton
Burrowing Owl	<i>Athene cunicularia</i>	S3B	Toole, Teton, Pondera
Clark's Grebe	<i>Aechmophorus clarkii</i>	S3B	Lewis and Clark, Powell, Teton
Common Loon	<i>Gavia immer</i>	S3B	Missoula, Lewis and Clark, Powell, Glacier, Teton
Common Tern	<i>Sterna hirundo</i>	S3B	Teton
Ferruginous Hawk	<i>Buteo regalis</i>	S3B	Missoula, Toole, Lewis and Clark, Powell, Glacier, Teton, Pondera
Flammulated Owl	<i>Otus flammeolus</i>	S3B	Missoula, Lewis and Clark, Powell
Forster's Tern	<i>Sterna forsteri</i>	S3B	Teton
Franklin's Gull	<i>Leucophaeus pipixcan</i>	S3B	Teton
Grasshopper Sparrow	<i>Ammodramus savannarum</i>	S3B	Missoula, Lewis and Clark, Powell
Horned Grebe	<i>Podiceps auritus</i>	S3B	Lewis and Clark, Powell, Teton

### Montana Species of Concern

Common Name	Scientific Name	Rank	County
Loggerhead Shrike	<i>Lanius ludovicianus</i>	S3B	Toole, Teton
Long-billed Curlew	<i>Numenius americanus</i>	S3B	Toole, Lewis and Clark, Powell, Glacier, Teton
McCown's Longspur	<i>Calcarius mccownii</i>	S3B	Toole, Lewis and Clark, Teton
Sage Thrasher	<i>Oreoscoptes montanus</i>	S3B	Lewis and Clark
Sprague's Pipit	<i>Anthus spragueii</i>	S3B	Toole, Lewis and Clark, Teton
Veery	<i>Catharus fuscescens</i>	S3B	Missoula, Lewis and Clark, Powell, Glacier, Teton, Pondera
White-faced Ibis	<i>Plegadis chihi</i>	S3B	Teton
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	S3B	Missoula

NRIS 2010

1/ S1 - At high risk because of extremely limited and/or rapidly declining population numbers, range and/or habitat, making it highly vulnerable to global extinction or extirpation in the state.

S2 - At risk because of very limited and/or potentially declining population numbers, range and/or habitat, making it vulnerable to global extinction or extirpation in the state.

S3 - Potentially at risk because of limited and/or declining numbers, range and/or habitat, even though it may be abundant in some areas.

S4 - Apparently secure, though it may be quite rare in parts of its range, and/or suspected to be declining.

S5 - Common, widespread, and abundant (although it may be rare in parts of its range). Not vulnerable in most of its range.

B – Breeding, N – Non-Breeding

2 rankings for same species indicates a range of uncertainty about the status of the species.

