SWAMP CREEK - EAST

F.A.P. F1 - 1 (29) 45

LINCOLN COUNTY, MONTANA

ENVIRONMENTAL ASSESSMENT

AND

PROGRAMMATIC SECTION 4(f) EVALUATION

STATE OF MONTANA
DEPARTMENT OF HIGHWAYS

AND

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

Reviewer:

The following Environmental Assessment and Programmatic Section 4(f) Evaluation documents the various studies and meetings that have occurred during the development of this project.

Comments and questions will be accepted for 45 calendar days after the receipt of this letter. If no communications occur during this time period, it will be assumed that person or agency has no comments. All comments should be sent to:

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PROJECT NO. F 1-1(29)45, U.S. Highway 2

SWAMP CREEK - EAST
(12 miles Southeast of Libby Southeast)

ENVIRONMENTAL ASSESSMENT

and

PROGRAMMATIC SECTION 4(f) EVALUATION

U.S. Department of Transportation
Federal Highway Administration

and

State of Montana
Department of Highways

Approved for content and public availability:

Sept 15, 1989
Date

Stephen C. Kologi
for Montana Department of Highways

9-22-89
Date of Approval

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for Federal Highway Administration

TABLE OF CONTENTS - ENVIRONMENTAL ASSESSMENT

1. DESCRIPTION OF THE PROPOSED ACTION 1

2. PURPOSE AND NEED 6

3. ALTERNATIVES CONSIDERED. 7

4. AFFECTED ENVIRONMENT AND IMPACTS 8
   - 4.1 SOCIAL AND ECONOMIC 8
   - 4.2 RELOCATIONS 8
   - 4.3 AIR QUALITY 9
   - 4.4 NOISE 10
   - 4.5 ENERGY. 10
   - 4.6 FLOODPLAIN AND CHANNEL MODIFICATIONS. 10
   - 4.7 WATER QUALITY 11
   - 4.8 IRRIGATION. 12
   - 4.9 WETLANDS. 12
   - 4.10 LAND USE. 17
   - 4.11 HISTORICAL/CULTURAL/ARCHAEOLOGICAL RESOURCES. . . . 17
   - 4.12 FISH, WILDLIFE AND THREATENED OR ENDANGERED SPECIES 18
   - 4.13 PRIME AND UNIQUE AGRICULTURAL LANDS 21
   - 4.14 RIGHT-OF-WAY. 21
   - 4.15 CONSTRUCTION. 22
   - 4.16 TRAFFIC 22
   - 4.17 PEDESTRIANS AND BICYCLISTS. 23
   - 4.18 VISUAL. 23

5. COMMENTS AND COORDINATION. 24

6. REFERENCES 25

7. APPENDIX 27

LIST OF FIGURES

FIGURE 1 - Project Location Map 2

FIGURE 2 - Vicinity Map 3

FIGURE 3 - Typical Section. 4

FIGURE 4 - Wetland Evaluation 13

FIGURE 5 - Site 24LN822, Schneider Homestead. 19

1. DESCRIPTION OF THE PROPOSED ACTION

The proposed action consists of the reconstruction of a portion of U.S. Highway 2 (FAP 1) in Lincoln County, Montana to updated standards of design and safety. The proposed project, known as Swamp Creek - East (12 Miles SE of Libby SE), will begin approximately 12.3 miles southeast of Libby at the southeast end of Project BRF 1-1(23)45 (Libby Creek Bridge) and will extend southeasterly approximately 12.2 miles. The project location, vicinity and termini are shown on Figures 1 & 2.

Construction is tentatively planned for 1993.

The roadway will be fully reconstructed in accordance with updated standards to meet a 60 mph design speed. The roadway will be graded to accommodate a 40 foot wide surface, however, only a 32 foot wide paved top surface will be constructed initially--two 12-foot wide traffic lanes with 4-foot shoulders as shown on the typical section on Figure 3. A truck climbing lane for west bound traffic is planned between mileposts 54.1 and 55.5. The new alignment will follow the existing alignment as closely as possible while flattening substandard horizontal and vertical curves.

The highway corridor runs through a rural area consisting of fairly flat bottom lands along Swamp Creek and Schreiber Creek. Outside the drainage bottoms, the terrain is steep and timber covered. The flat lands adjacent to the stream are used mainly for hay production and grazing. Timber production is an important commercial activity in the area. Scattered residences are located along the project.

Reconstruction will include widening, grading, drainage, surfacing, signing, pavement markings, guardrail, topsoiling, seeding, and necessary utility relocation.

Other related projects in the vicinity of the proposed action include:

Project 1-1(19)38, Libby Southeast, from near Libby to Libby Creek near the northwest end of this project. The project was completed in 1988;

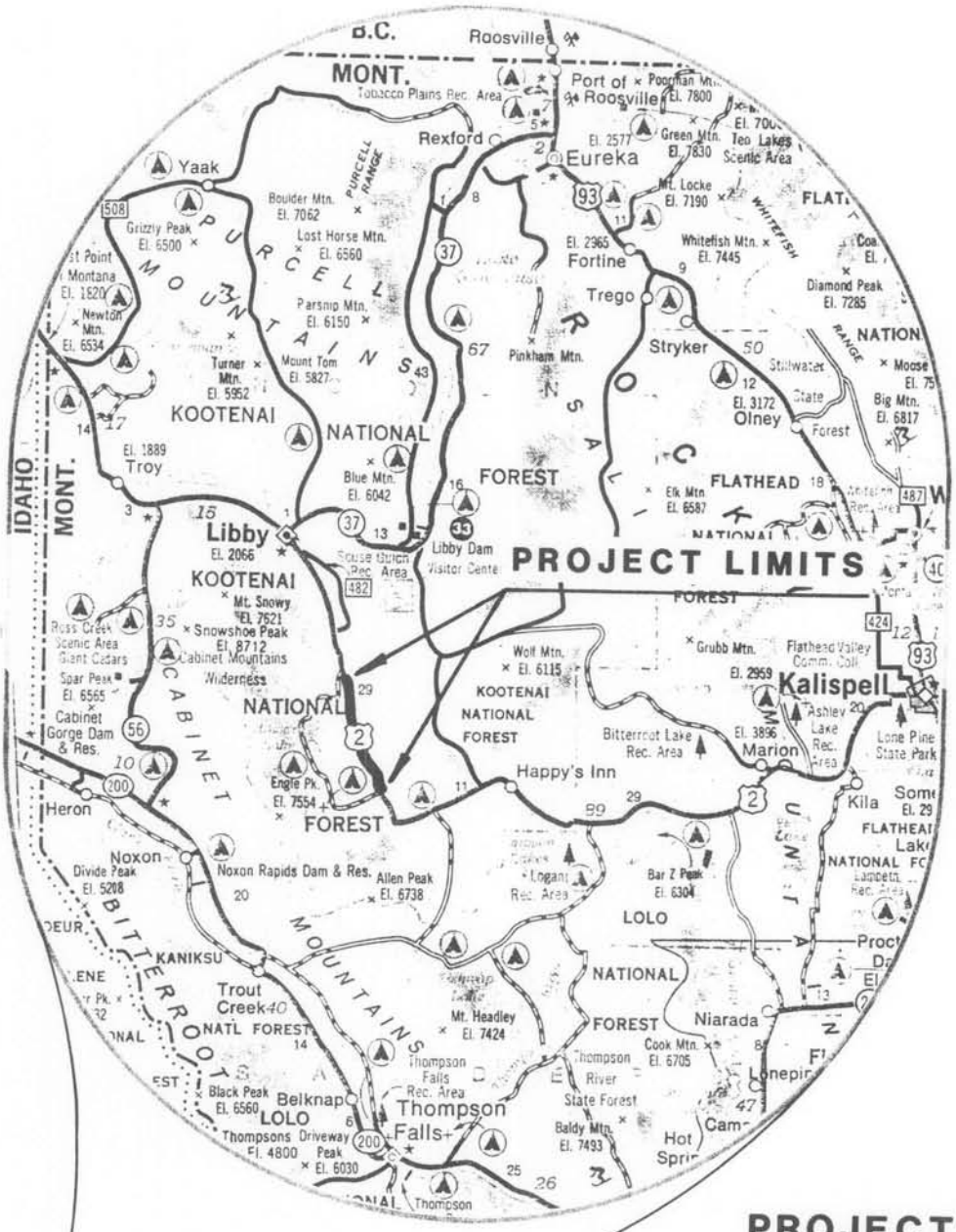
Project BRF 1-1(23)45, replacement of the Libby Creek Bridge, located adjacent to the northwest end of this project, completed in 1988;

Project BRF 1-1(23)45, replacement of the Miller Creek Bridge, located at approximate Milepost 56.7 (Sta. 662+00) and within the limits of this project, completed in 1988;

Project BRF 1-1(27)57, replacement of the Fisher River Bridge, located adjacent to the southeast end of this project, completed in 1988; and,

U.S. HIGHWAY 2
SWAMP CREEK

F1 - 1 (29) 45

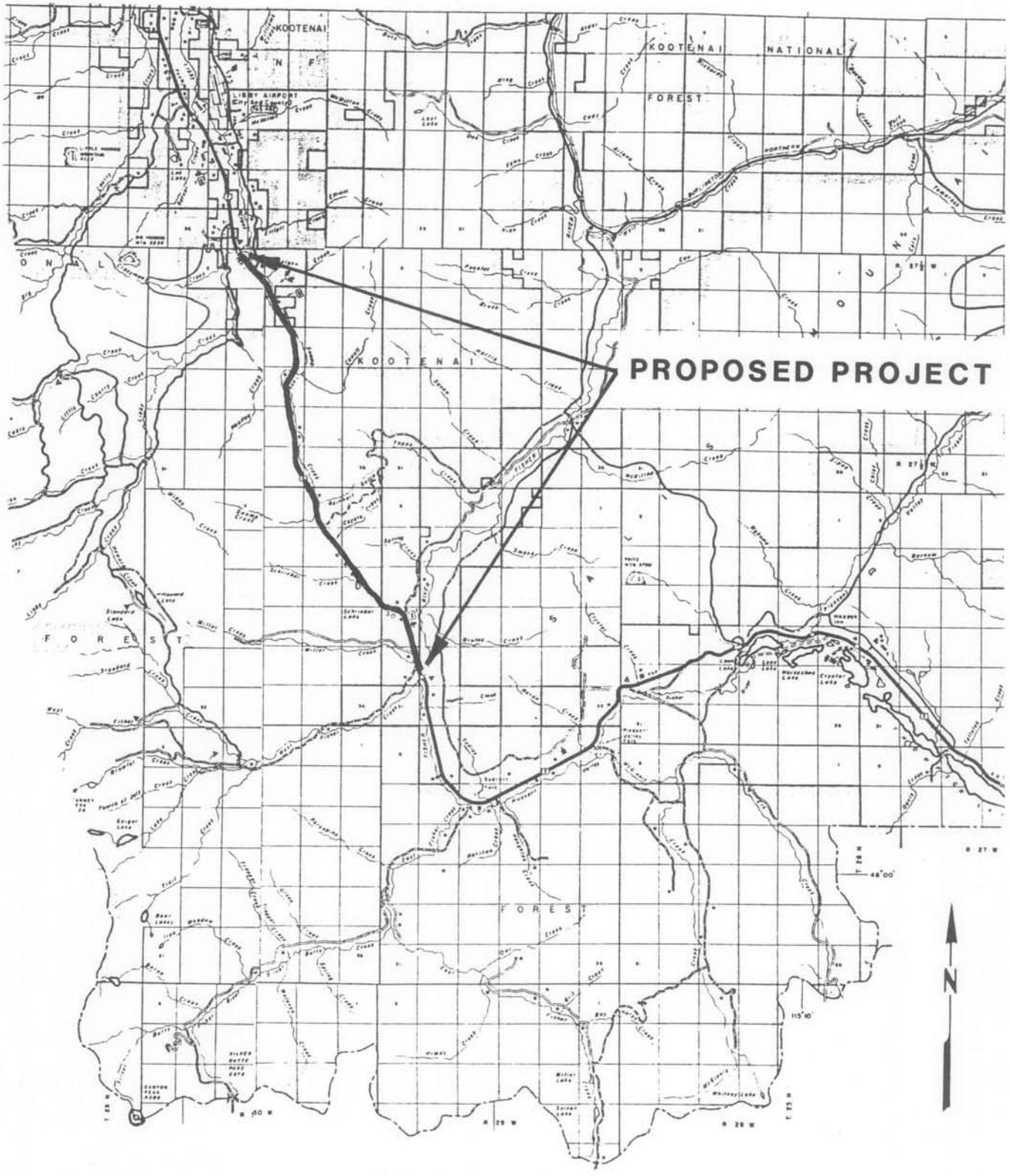


PROJECT LOCATION MAP

FIGURE 1

U.S. HIGHWAY 2 - SWAMP CREEK
F1 - 1 (29) 45

MP 44.8 To MP 57.0
12.2 MILES

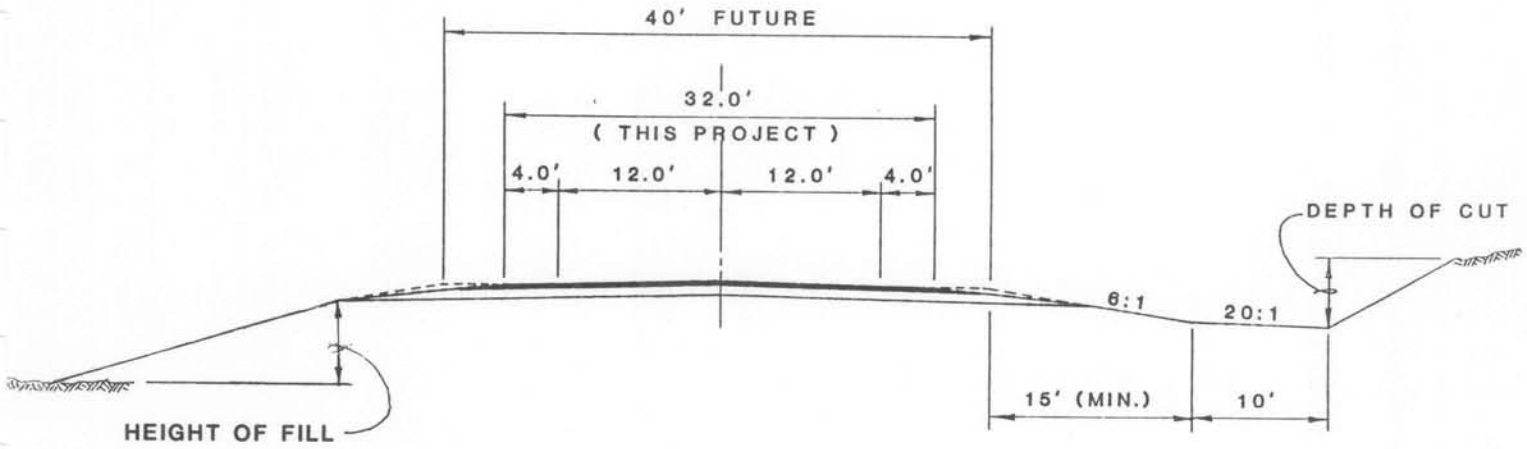


VICINITY MAP

FIGURE 2

U.S. HIGHWAY 2 - SWAMP CREEK
F1 - 1 (29) 45

MP 44.8 To MP 57.0
12.2 MILES



TYPICAL SECTION

FIGURE 3

Project F 1-1( )57, Pleasant Valley, from the Fisher River Bridge Project mentioned above to the east, scheduled ready date is May 1995.

No limited access control will be acquired along this project. Existing access will be perpetuated where necessary.

2. PURPOSE AND NEED

U.S. Highway 2 in the project area is on Federal Aid Primary Route 1. It is part of an extensive system of rural arterial routes important to interstate, statewide and regional travel. This route is a vital element contributing to the local and regional economy which is heavily oriented toward timber, agriculture and recreation activities. This route connects the communities of Libby and Kalispell.

The primary objectives of the proposed action are as follows:

- to improve highway convenience and safety and reduce accidents;

- to improve horizontal curves, vertical curves and roadway width to meet current standards; and

- to provide a modern highway facility compatible with the human and natural environment.

The highway was built as part of the Forest Highway Program under several different projects. Most of the existing road was built in 1935 and 1936 and was improved in 1939. It is generally a 20 foot wide, two lane facility--two 10 foot driving lanes with no shoulders.

For a highway of this type, in this terrain, it is normally considered acceptable to design the facility to safely accommodate vehicles traveling at 60 miles per hour -- the design speed. There are 3 horizontal curves with design speeds less that 60 mph--the curves are 5° (a radius at centerline of 1146 feet) which will accommodate a design speed of 58 mph. There are approximately 12 vertical curves with sight distance (the distance in which a vehicle can safely stop after viewing an object on the roadway) at absolute minimum or less[1].

A truck climbing lane for west bound traffic is planned between Mileposts 54.1 (Sta. 526+00) and 55.5 (Sta. 597+50). The lane is justified in this area based on percent grade (4.32%), length of grade (about 1 mile) and traffic volumes and percent truck traffic listed in 4.16 TRAFFIC and using AASHTO guidelines[1].

3. ALTERNATIVES CONSIDERED

Two alternatives are proposed:

1. The no-build alternative. While this alternative would not satisfy any of the objectives of the proposed action, the 3 existing substandard horizontal curves and the 12 substandard vertical curves would remain. The existing 20 foot wide paved surface would remain and would be inconsistent with the 32 foot wide (40 foot future) pavements recently constructed or planned for adjacent projects.

2. The preferred alternative. Widen the existing roadway to provide 12 foot traffic lanes and 4 foot paved shoulders (32 foot total surface width) with provisions for future shoulder widening to 8 feet (40 foot wide total surface width). Improve horizontal and vertical alignments to provide a 60 mph design speed.

Other alternatives, using alignments other than the existing, have been considered but were not selected for discussion and complete analysis in this document since they would require extensive amounts of additional right-of-way and would have significantly greater impacts on streams, cultural resource sites and other features than the alternatives proposed above.

4. AFFECTED ENVIRONMENT AND IMPACTS

The following sections discuss existing conditions and potential impacts of the proposed project. Where appropriate, mitigation measures are discussed.

4.1.SOCIAL AND ECONOMIC

The following is a summary of the population in the enumeration areas surrounding the project area by race and/or national origin, based on U.S. Census Data[2]:

White	838
Black	0
American Indian	5
Asian & Pacific Islander	8
Other	0
Spanish	0
Total	851

There are no known communities or concentrations of minorities in the project area.

The main trade activities in the project area are farming, logging and tourism. The route carries traffic from Kalispell to Libby and functions as a scenic drive through the area. There are no schools, churches or designated recreational sites along the project.
The improvements primarily involve upgrading the existing facility to provide a wider roadway capable of safely handling projected traffic loads and will be constructed near the existing alignment. Existing traffic patterns will not be changed significantly. Existing approaches and access will be perpetuated where needed. There will be some short term beneficial economic impacts to the local communities during the construction period.

No other social or economic impacts have been identified.

4.2. RELOCATIONS

The following structures will require relocation:

- Shed left of Milepost 47.4 (Sta. 119+50).
- Shed left of Milepost 47.5 (Sta. 125+75).

- Small barn left of Milepost 47.6 (Sta. 129+75).
- Garage and house left of Milepost 47.7 (Sta. 131+00 - 132+00).
- Garage left of Milepost 53.5 (Sta. 491+00).
- Barn right of Milepost 53.5 (Sta. 491+00).
- Residence right of Milepost 53.5 (Sta. 493+00).
- Log garage/residence and log former community hall right of Milepost 53.9 (Sta. 515+50).
- Residence left of Milepost 55.7 (Sta. 610+00).

The Montana Department of Highways has a relocation assistance program whereby supplemental housing payments, moving costs, advisory assistance and other services are offered to individuals displaced by the highway construction project. The payments for relocation are offered in addition to the amount of just compensation for the right-of-way requirements.

Adequate replacement housing is available in the project area.

No special problems with relocation or replacement have been identified.

Existing access will be perpetuated where necessary and there will be no significant impact on access to jobs, schools or social and cultural facilities.

4.3. AIR QUALITY

The State Air Quality Bureau has been consulted[3] about potential air quality impacts resulting from the reconstruction of U.S. Highway 2. They have indicated that:

> "In general, any project which will smooth out the traffic flow, and reduce stopping and idling time will also reduce the amount of air pollution emissions from transportation sources. From this standpoint the Air Quality Bureau would like to support your efforts to upgrade the Montana highway system. Asphalt plants and gravel crushers are the primary emission sources for highway construction, and they must obtain an air quality permit from our office to operate in the state."

Requirements of the Montana Department of Highways, Standard Specifications[4], will be followed to help mitigate dust and other air pollution during construction.

4.4. NOISE

No significant impact on noise levels is expected since traffic is expected to increase on this roadway whether or not the proposed project is constructed.

A beneficial impact will occur in some areas due to improved sight distance and decreased deceleration/acceleration requirements. Slight beneficial impacts will also occur where the new roadway alignment increases the distance of the roadway centerline from existing houses.

Small increases in noise levels will occur where the roadway is moved closer to existing houses. There are approximately 8 locations where the roadway will be constructed closer to existing homes, as required by steep mountain slopes or creek channels which must be avoided. The houses are classed Category B[5] with a recommended maximum noise level of 67 dBA. Based on the FHWA Noise Prediction Model[6], it has been estimated that noise will increase 1 dBA or less (1.6 dBA at the house near Station 311+00) at these locations and in all cases is significantly below the 67 dBA recommended maximum (except at Station 493+00 where the noise level will be approximately 65 dBA with the no-build alternative and 66 dBA if the proposed project is constructed).

4.5. ENERGY

The new facility will include wider horizontal curves and flatter vertical curves. Vehicles will not be required to decelerate, then accelerate to negotiate horizontal curves and passing will become easier and more efficient. The project is, therefore, expected to increase vehicle operating efficiency and; thereby save fuel and decrease wear.

Energy consumption will occur during construction activities.

4.6. FLOODPLAIN AND CHANNEL MODIFICATIONS

Most of the project parallels and encroaches on the Swamp Creek floodplain. The roadway crosses the Swamp Creek channel six times and Schreiber Creek once. The roadway embankment at many locations also serves as the streambank of Swamp Creek. Past roadway construction made channel relocations. These encroachments were unavoidable due to the narrow valley. The upgrading and widening for the highway will require additional modifications and the effect on floodwater conveyance and storage will be evaluated during design. Measures to reduce these involvements will be employed where possible to reduce the impacts on the floodplain and stream.

Based on preliminary design, which has been completed with the impacts on the stream and all possible mitigation measures in mind, it appears that modifications of the Swamp Creek channel will be required in the following locations:

FROM	TO	LENGTH
54+25 LT	67+00 LT	1320
100+80 LT	105+80 RT	600
107+00 RT	111+35 RT	455
114+00 RT	123+35 RT	960
131+45 RT	136+00 RT	560
137+40 LT	139+40 LT	230
143+80 LT	146+40 LT	300
171+25 LT	172+10 LT	200
183+00 LT	185+15 LT	235
192+00 LT	200+83 LT	950
Subtotal, Below MP 48		5810
200+83 LT	218+70 LT	1930
232+60 RT	243+52 RT	1070
389+80 LT	392+10 LT	250
394+35 LT	402+00 LT	800
Subtotal, Above MP 48		4050
Total		9860

The above changes will increase the overall length of the channel by approximately 150 feet.

Modifications of the Schreiber Creek channel should be insignificant and the hydraulic impacts should be minimal.

The Swamp Creek and Schreiber Creek floodplains have been delineated by approximate methods by the Flood Insurance Program. Lincoln County is administering floodplain regulations and a floodplain management permit will be required for encroachments below the 100 year flood level.

Flood hazard assessments have been completed for encroachments in accordance with FHWA criteria and where practical the water surface elevations will not be raised over 1 foot. Measures to minimize or mitigate impacts have been incorporated into the project such as erosion control features, channel modification excavation and fish passage facilities.

Requirements of the Montana Stream Preservation Act will be followed during design and construction.

4.7. WATER QUALITY

Only short term construction related water quality impacts are expected. The Montana Department of Highways' Standard Specifications[4] will keep these impacts to a minimum.

For most of the length of the project along Swamp Creek, the stream encroachments are at points that are considered to be below the headwaters for Section 404 permit purposes so a Section 404 Permit will be required for work below the ordinary high water mark. The other small streams involved on this project are all considered to be above the headwaters and individual permits may not be required.

The Montana Department of Natural Resources and Conservation has indicated that the construction contractor will be required to obtain a "Beneficial Water Use Permit" before water from any surface water source may be used[8].

4.8. IRRIGATION

No major irrigation systems are involved with this project but several small irrigation/drain ditches do run parallel to the existing highway in the Swamp Creek valley. These ditches are significant in making the land productive for agriculture and will be perpetuated. Some relocations will be required, but no hydraulic problems are expected. The following is a summary of expected ditch relocations:

Location	Length
Milepost 49.1 (260+50 to 302+20 Left)	4170 feet
Milepost 50.5 (333+85 to 367+00 Left)	3315 feet
Total	7485 feet

As requested by the Montana Department of Natural Resources and Conservation[8], provisions will be included with project design to assure that the timing and method of construction do not interfere with the exercise of existing water rights and that any water rights facilities that are involved will be maintained or replaced.

4.9. WETLANDS

A wetland survey[9] has been conducted and 9 areas of wetlands have been delineated as shown on Figure 4. As requested by the U.S. Environmental Protection Agency[10], the draft wetland evaluation process developed by the Montana Interagency Wetlands Group (IWG) has been used for this project.

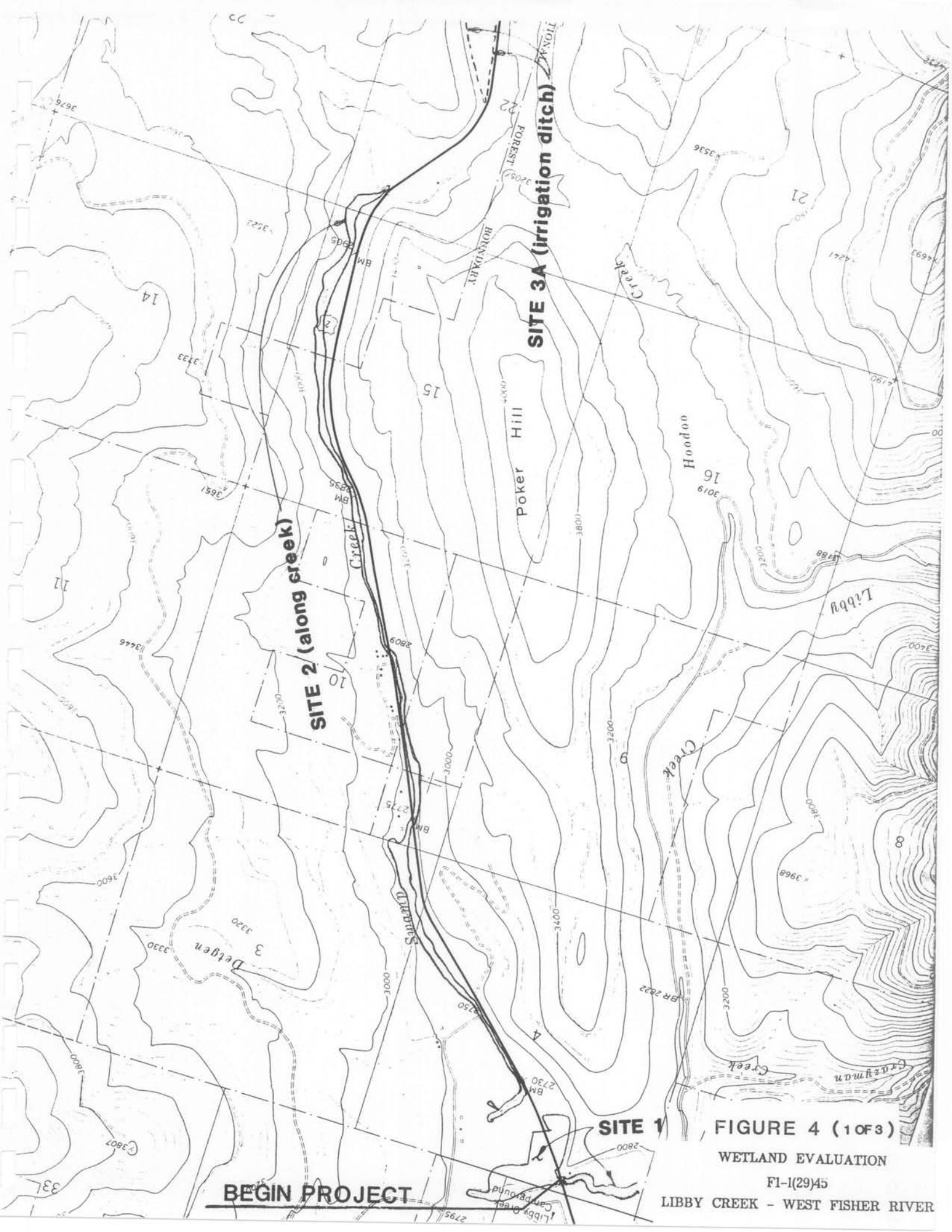


FIGURE 4 (1 OF 3)

WETLAND EVALUATION

F1-1(29)45

LIBBY CREEK - WEST FISHER RIVER

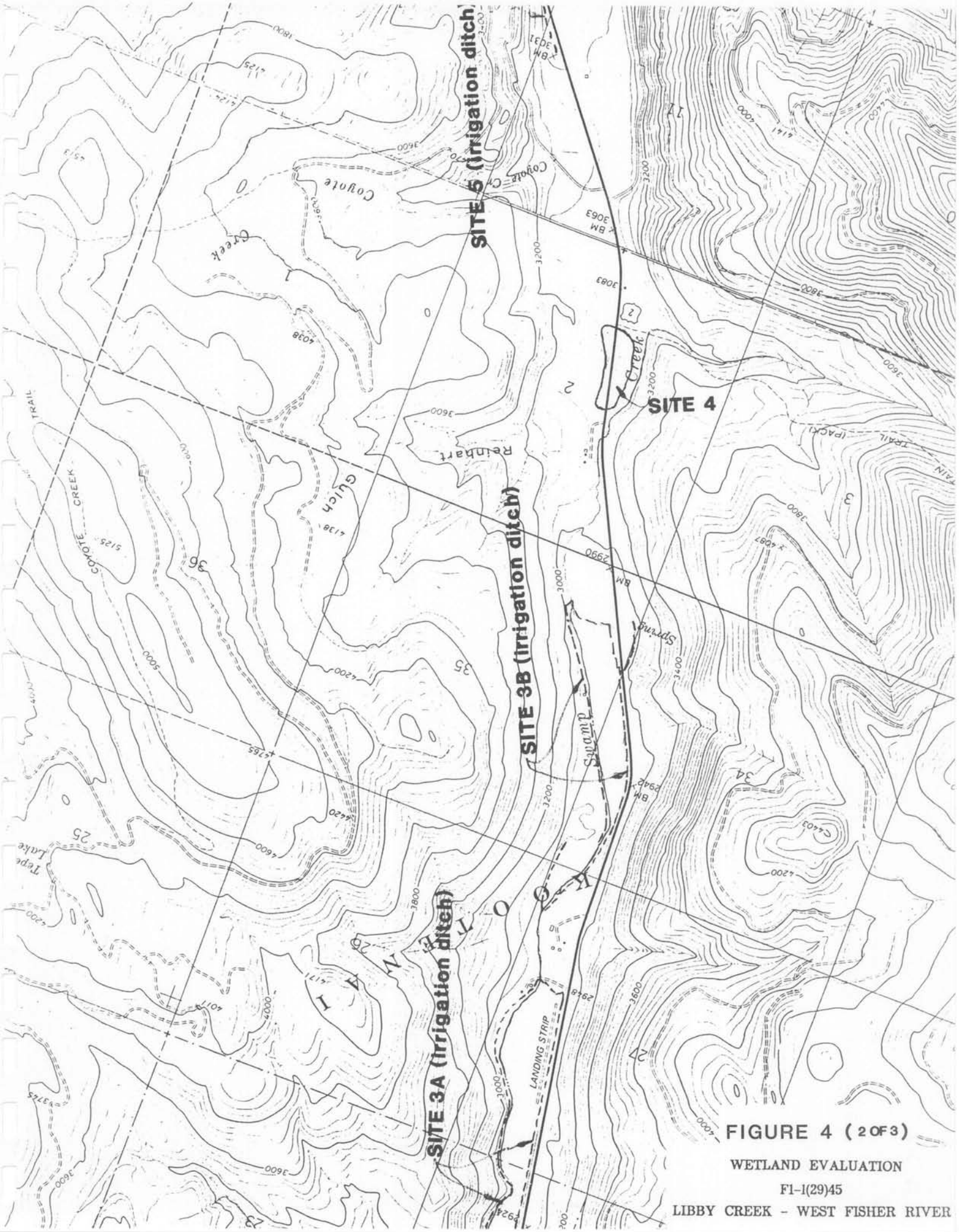


FIGURE 4 (2 OF 3)

WETLAND EVALUATION

F1-1(29)45

LIBBY CREEK - WEST FISHER RIVER

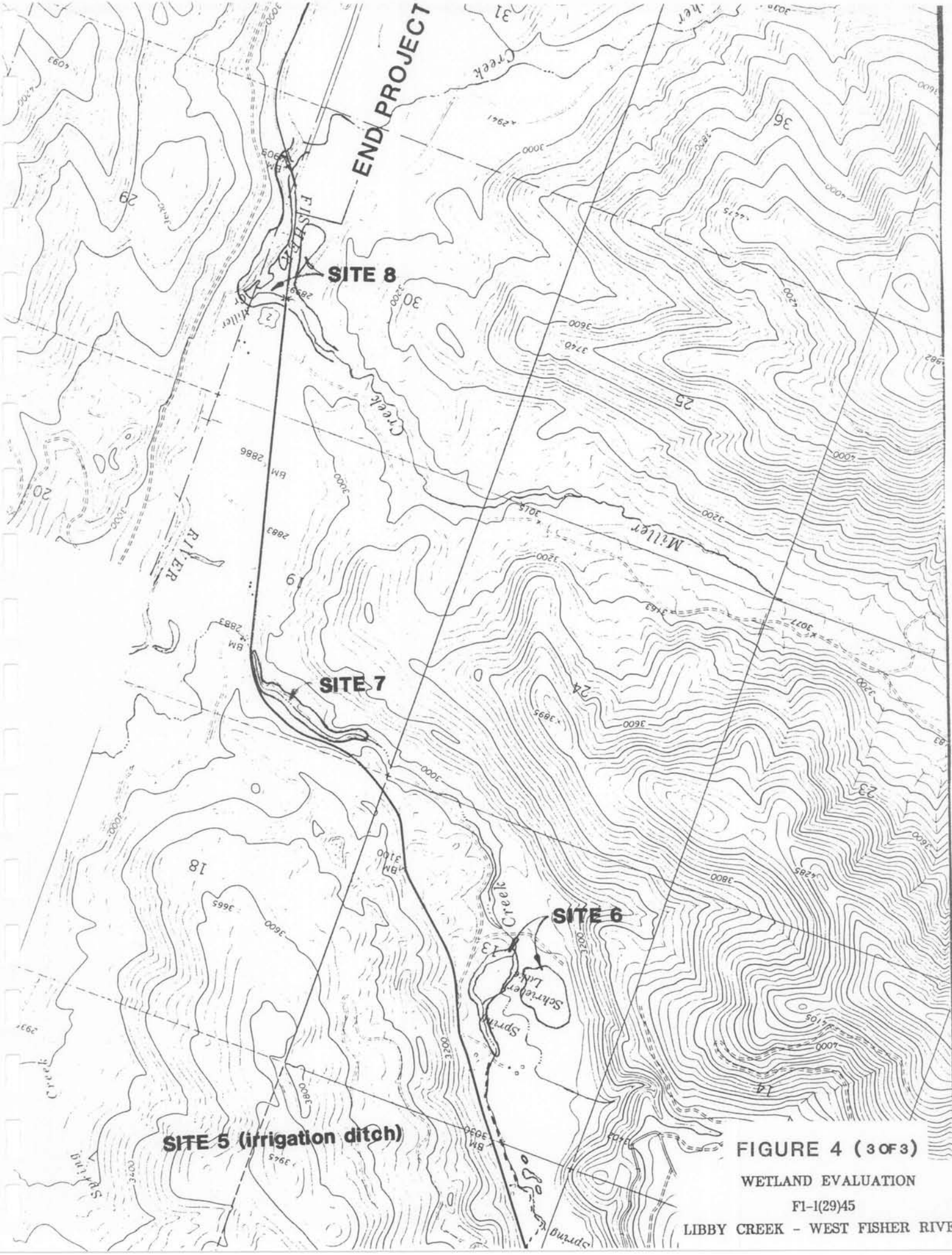


FIGURE 4 (3 OF 3)

WETLAND EVALUATION

F1-1(29)45

LIBBY CREEK - WEST FISHER RIVER

The following is a summary of wetland areas affected by the project:

	Area Affected (acres)	Replaced This Project (acres)
Site 1	1.4	0
Site 2	3.8	3.8
Site 3	1.0	1.0
Site 3B	0.4	0.4
Site 4	0.2	0.2
Site 5	0.1	0.1
Site 6	0.1	0
Site 7	0.1	0.1
Site 8	None	n/a
Totals	7.1	5.5

The existing highway has made many encroachments.

Sites 2 and 4 are the channel of Swamp Creek. After construction of the new channel, total wetland area will remain approximately the same.

Sites 3A, 3B and 5 are irrigation/drain ditches which, if affected by the new roadway, will be relocated to just outside the fill slopes. The area of wetlands will remain approximately the same.

As shown above the net potential decrease in wetland area due to this project is 1.6 acres.

Alternatives have been considered to eliminate the decrease in wetland area including:

1. Adjustments to the proposed alignment. Moving the roadway from it's existing corridor would cause significant additional environmental impacts and is not considered an acceptable alternative.

2. No-action. This alternative is not considered acceptable because the existing roadway width, horizontal alignment and vertical alignment do not meet current safety standards.

Alignments have been designed to avoid wetlands encroachments as much as possible and at the same time avoid extensive excavation on the steep, timber covered mountain slopes along the project. There is no other alternative that is considered practical.

The mitigation of these unavoidable wetlands losses will be accomplished following the guidelines outlined in the IWG Memo-

randum of Understanding: Management of Mitigation of Highway Construction Impacts to Wetlands in the State of Montana. This memorandum of understanding says that the following are acceptable replacement options for unavoidably impacted wetlands listed generally in order of decreasing importance:

1. Restoration and/or enhancement of existing, drained or filled natural wetlands.

2. Construction of impoundments with specific design features to mitigate lost wetland functions.

3. Construction of excavated wetland basins with specific design features to mitigate lost wetland functions.

The agreement also provides that "A wetlands mitigation summary balance sheet will be maintained by MDOH and MDFWP for all projects. This balance sheet will be reviewed at least annually by the Montana Interagency Wetlands Group. The overall mitigation objective is no net loss of wetlands functions, values and area on an annual basis. However, it is recognized that due to project development constraints and the lack of suitable sites for effective wetland development identifiable by the Technical Subcommittee, negative or positive balances may accrue and be carried forward from year-to-year. Balances carried forward will apply to the succeeding year's mitigation and will be directed toward wetland replacement within a similar biotic region or geographical area, as determined to be appropriate by the Technical Subcommittee."

4.10. LAND USE

Land use in the area is primarily lumber production, recreation, hay production and grazing.

No effects on land use resulting from construction of this project have been identified.

4.11. HISTORICAL/CULTURAL/ARCHAEOLOGICAL RESOURCES

A cultural resource survey has been performed along the existing highway corridor[11]. The Montana State Historic Preservation Office and the National Register of Historic Places have reviewed the report.

Based on the report and additional information provided, it has been determined by the National Register of Historic Places that the following sites are eligible for the National Register[17]:

A. The Schneider farmstead (Site 24LN822), left of Station 310+00.

B. The Swamp Creek timber bridge at Station 134+50 (Site 24LN766).

C. The archaeological component of Site 24LN825 located right of Station 517+00.

The project will be constructed outside the site boundary for the Schneider Farmstead (24LN822) as shown on Figure 5[18]. This site will therefore not be discussed in the Section 4(f) Evaluation.

The Swamp Creek timber bridge (24LN766) will be removed during construction and replaced by an arch pipe culvert. The effects of this action, alternatives considered and mitigation efforts to be undertaken are discussed in the Section 4(f) Evaluation attached to this document.

At Site 24LN825, the landowner has removed an existing garage, logged, pulled stumps and plowed the area[16]. It has been determined that the site is no longer eligible[18]. This site will therefore not be discussed in the Section 4(f) Evaluation.

4.12. FISH, WILDLIFE AND THREATENED OR ENDANGERED SPECIES

A biological assessment has been completed for this project.[13]

The area of the proposed project supports populations of white-tailed deer, mule deer, elk, moose, black bear and mountain lion. Scattered populations of bighorn sheep, mountain goat and grizzly bear exist in some of the more remote forest areas.

Swamp Creek, although small, is used for spawning by rainbow trout from the Kootenai River via Libby Creek.

Swamp Creek, from its source near Milepost 54 (Sta. 519+00) to about Milepost 48.5 (Sta. 228+00) has little fishery value. It has been severely channelized in past years and is primarily a drainage ditch for hayfields. Downstream from this point the stream enters a narrow canyon, gradient increases and stream channel characteristics improve. Almost all rainbow trout spawning occurs in this canyon section, Milepost 48 (Sta. 221+00) to its junction with Libby Creek.[14]

As indicated in FLOODPLAIN AND CHANNEL MODIFICATIONS, approximately 5810 feet of channel modifications will be required downstream of Milepost 48 and 4050 feet will be required in the area above Milepost 48. Where channel modifications are required, mitigation measures will be employed to help preserve or enhance fish habitat. Where desirable to help avoid interference with fish migration, steel baffles and riprap will be placed along the bottom of some culverts to provide a smaller trickle channel to help maintain water depths and provide resting pools.

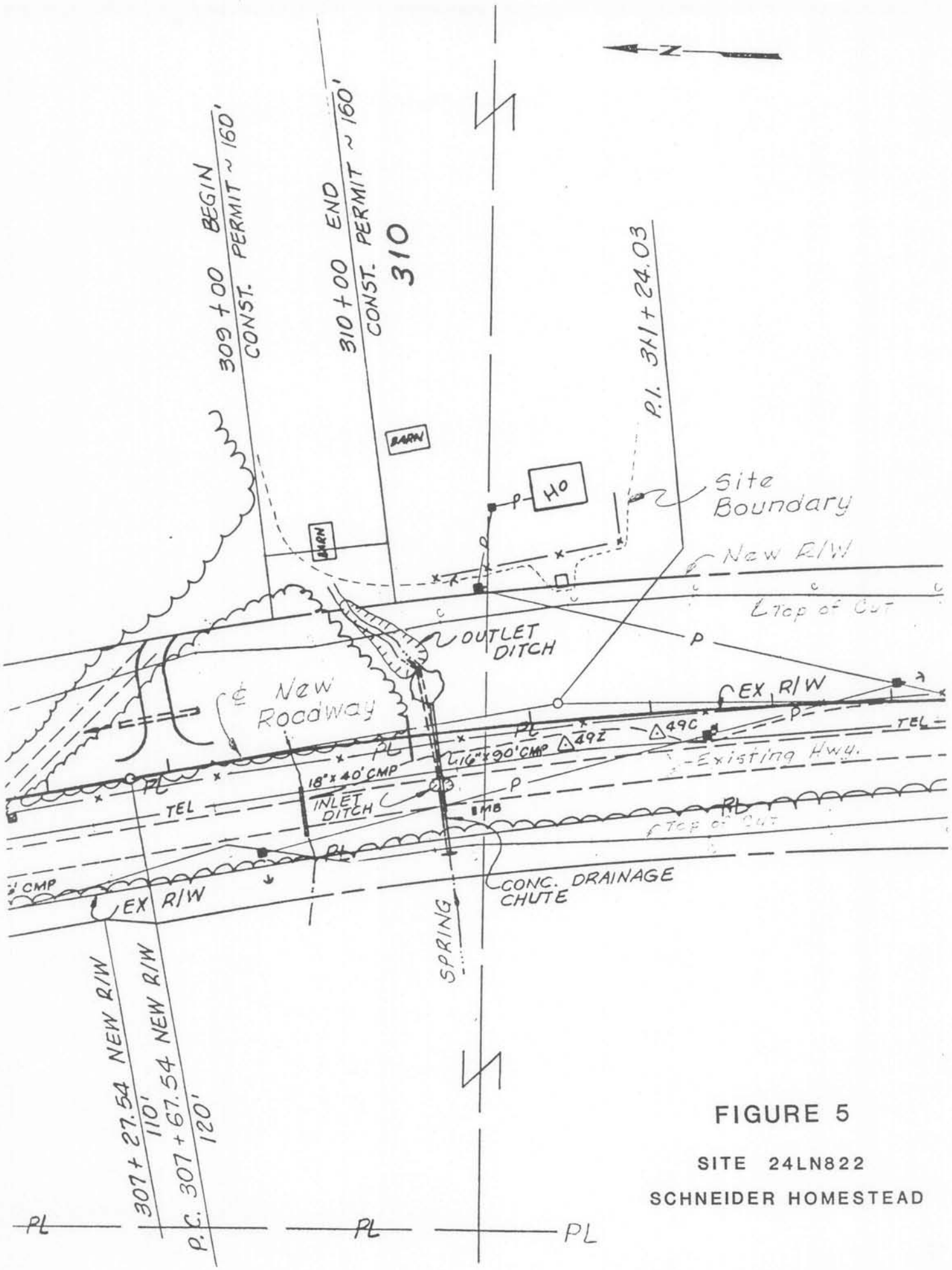


FIGURE 5

SITE 24LN822

SCHNEIDER HOMESTEAD

To provide as natural a channel as possible, approximately 2/3 of the new channel can be constructed using approved ditch blasting methods. Because of larger, deeper channels in the remaining 1/3, conventional channel excavation methods will be used.

Existing vegetation will be preserved where possible. In particular, the project will be designed to preserve a strip of existing vegetation between the new roadway and the new channel wherever practical.

The Fish and Wildlife Service, U.S. Department of the Interior, (USFWS) has determined that the endangered species which may occur in the project area are the bald eagle (Haliaeetus leucocephalus) and peregrine falcon (Falco peregrinus). They also indicate that if impacts to large trees in riparian habitats and to fisheries are avoided, no adverse impacts to these listed species are expected.[15]

The following items, recommended by the USFWS, have been considered in preliminary design and will be considered during final design:

1. Encroachment into any streams, lakes or intermittent drainages should be kept to an absolute minimum;

2. New drainage structures, if needed, should be designed to assure that these will have no effect on adjacent wetlands, fish passage and surface run-off patterns;

3. Fill placed in gullies, swales or other "low" areas which function to carry overland flow during storm events should be immediately seeded to reduce erosion; and

4. Mitigation of unavoidable wetland losses should be considered as planning progresses.

The USFWS has also indicated that, if existing power lines are to be relocated, the reconstructed lines should be designed to prevent possible electrocution of peregrine falcons, bald eagles and other raptors. Reconstruction of existing lines should assure that clearances between conductors and between conductors and ground wire are sufficient to preclude raptor electrocutions.

Deer populations in the area are high and road kills occur frequently, especially in the spring when roadside vegetation begins to "green-up". Deer are also known to use some of the road cuts in this area as "licks", where exposed soil provides essential minerals. Mitigative measures will be considered during design and construction of this project so that the current problem is reduced when the new facility is constructed.

4.13. PRIME AND UNIQUE AGRICULTURAL LANDS

There are no prime or unique farm lands in Lincoln County.

Agricultural activities in the project area include hay production, grazing and timber production. As indicated above, the new alignment will closely follow the existing alignment. Additional right-of-way required will include only narrow strips of land adjacent to existing right-of-way.

Right-of-way design and acquisition will consider potential problems if irregular parcels are created.

The project has been coordinated with the Soil Conservation Service.

Potential effects of the project on irrigation/drainage ditches are discussed in IRRIGATION of this document.

The Montana Department of Natural Resources and Conservation has indicated that "...care should be taken so that the time and method of construction do not interfere with the exercise of existing water rights, and any water rights facilities that are involved should be maintained or replaced."[8]

4.14. RIGHT-OF-WAY

Existing right-of-way widths vary significantly throughout the project. There is a 1.1 mile section with a 400 foot width (200 feet each side), two sections totaling 1.8 miles with 132 foot width (66 feet each side), a 0.7 mile section with 120 foot width

(60 feet side) and two sections totaling 1.1 miles with 100 foot width (50 feet each side). The remaining approximately 7.5 miles is a minimum of 80 feet wide (40 feet each side) with short sections where the right-of-way is wider.

The proposed typical section will require right-of-way width of at least 160 feet, in ideal conditions, and more will be required in most areas to accommodate cut and fill slopes.

It is anticipated that, except in the 1.1 mile section with a 400 foot width, new right-of-way will be required on at least one side and often both sides of the existing right-of-way.

Assuming that an average additional width of 80 feet (total both sides) will be required, except in the 400 foot wide section, approximately 108 acres of additional right-of-way will be needed. There should be no severances created.

4.15. CONSTRUCTION

Construction related activities will result in some short term adverse impacts which cannot be avoided. These impacts will be temporary and should last only for the duration of construction activities. These impacts include:

- emissions from asphalt plants and crushers,
- dust from construction equipment activities,
- increased noise levels from construction equipment,
- potential for erosion from fresh cut and fill slopes,
- increase in water turbidity in streams from construction activities, and
- inconvenience to highway users resulting from delays, detours and temporary surfacing.

These impacts will be minimized to the extent practical through proper construction practices. Air quality permits from the State Air Quality Bureau will be required for asphalt plants and crushers[3]. Dust will be controlled by watering or other acceptable methods. Construction related erosion will be controlled and slopes will be revegetated as soon as possible.

As requested by the U.S. Environmental Protection Agency[10], all appropriate pollution and erosion control measures will be provided for during project design. These measures will be implemented during construction to assure protection of water quality and aquatic habitat.

Traffic will be maintained through the project during construction--a traffic control plan will be developed to minimize inconvenience to motorists.

Gravel and borrow sources for base and surfacing aggregates have not yet been defined. Borrow material removal and gravel pits will be subject to applicable rules and regulations of the Montana Open Cut Mining Act--a mine reclamation plan will be required.

4.16. TRAFFIC

The improvements are expected to generate no significant amount of additional traffic beyond the increases that would occur with the "no-build" alternative. The improvements are expected to have a beneficial impact on safety and traffic operations.

Existing and projected traffic volumes are summarized as follows:

TRAFFIC VOLUMES

1986 ADT	=	1,050, Present
1988 ADT	=	1,080, Letting
2008 ADT	=	1,300, Future
DHV	=	180
D	=	55 - 45
T	=	16.3%
All Trucks	=	41.5%
18 Kip	=	91.82

The "no-build" alternative would do nothing to improve traffic operations.

The following is a summary of 1985 accident and severity rates for statewide average and for this section of roadway:

	Accident Rates	Severity Rates
Statewide Ave.	2.20	1.50
This Project	2.56	1.45

4.17. PEDESTRIANS AND BICYCLISTS

No special facilities are planned for pedestrians and bicyclists. The traffic lanes will be widened from 10 feet to 12 feet and 4 foot shoulders will be added (8 foot future) which will be a beneficial impact for pedestrians and bicyclists.

4.18. VISUAL

Since the project involves widening and improving an existing roadway with only minor horizontal or vertical alignment changes, effects on the visual environment are not expected to be significant.

The view of the roadway will improve since the widened roadway will be constructed with clean lines and smooth and rounded cut and fill slopes. Slopes will be revegetated with native plants.

The construction of the project will not change view from the roadway.

5. COMMENTS AND COORDINATION

Coordination efforts were initiated by the Montana Department of Highways on 11 June 1987 when a letter of intent[16] was issued by the Department to federal, state and local agencies and affected private organizations. Comments and information were requested which would be relevant to this project. Copies of responses received are included in the appendix.

A location and design public hearing is planned to discuss and receive public comment for this project.

6. REFERENCES

Copies of all references listed below are available for inspection at the offices of the Montana Department of Highways, 2701 Prospect Avenue, Helena, Montana 59620.

1. American Association of State Highway and Transportation Officials, A Policy on Geometric Design of Highways and Streets, 1984.

2. Census and Economic Information Center, Montana Department of Commerce, Census of Population and Housing, 1980--Summary Tape File 3A.

3. Norton, Warren, Environmental Specialist, Air Quality Bureau, Montana Department of Health and Environmental Sciences, Letter dated 06 July 1987.

4. Montana Department of Highways, Standard Specifications for Road and Bridge Construction, 1987 Edition.

5. Federal Highway Administration, U.S. Department of Transportation, Federal-Aid Highway Program Manual, Vol. 7, Ch. 7, Sec. 3, Procedures for Abatement of Highway Traffic Noise and Construction Noise, 09 August 1982.

6. U.S. Department of Transportation, Federal Highway Administration, FHWA Highway Noise Prediction Model, FHWA-RD-77-108.

7. Gorton, Richard D., Chief, Environmental Analysis Branch, Planning Division, letter dated 01 July 1987.

8. Massman, Carole I., Administrative Officer, Montana Department of Natural Resources and Conservation, Letter dated 09 July 1987.

9. Econ, Inc., Wetland Evaluation Forms for F1-1(29)45, Libby Creek - West Fisher River,, 07 August, 1987.

10. Potts, Stephen M., P.E., Environmental Engineer, U.S. Environmental Protection Agency, letter dated 13 July 1987.

11. Historical Research Associates, Cultural Resource Survey of Montana Department of Highways' Project F1-1(29)45, 12 Miles SE of Libby SE, Lincoln County, Montana, 04 December 1987.

12. Econ, Inc., Biological Assessment for F 1-1(29)45, Libby Creek - West Fisher River, 07 August 1987.

13. Huston, Joe E., Montana Department of Fish, Wildlife and Parks, Office Memorandum to Ralph Boland dated 26 August 1987.

14. Wood, John G., Acting State Supervisor, Ecological Services, U.S. Fish and Wildlife Service, U.S. Department of the Interior, Letter dated 08 July 1987.

15. Montana Department of Highways, Letter of Intent, 11 June 1987.

16. Brumley, John H., Ethos Consultants, Inc., Archaeological Investigations within Site 24LN825 Conducted in Relation to the Swamp Creek Road Project F 1-1(29)45, April 1989.

17. Shull, Carol D., Chief of Registration, National Register of Historic Places, Interagency Resource Division, National Park Service, letter dated 19 May 1989.

18. Huppe, Katherine M., Historical Survey Reviewer, State Historic Preservation Office, Montana Historical Society, letter dated 01 August 1989.

7. APPENDIX A - COMMENTS AND INFORMATION RECEIVED

DEPARTMENT OF COMMERCE

TED SCHWINDEN, GOVERNOR

STATE OF MONTANA

(406) 444-3494

Act	Info	MAIL ROUTE	Attach	Initial
		20		
	✓	30 Eng. Specialties		
		31 Contract Plans		
	✓	32 Loc. Road Design		
	✓	33 Environment		
	✓	34 Hydraulic		
		35 Surveys [illegible] MONTANA		
	✓	36 Traffic		
		37 Pub. Hearing		
		38 Photogrammetry		
		39 Consultant Design		
	✓	[illegible]		
	✓	File		

June 19, 1987

Mr. Stephen C. Kologi, P.E., Chief
Preconstruction Bureau
Montana Department of Highways
2701 Prospect
Helena, Montana 59620

File: 1-18-18

Subject: Proposed Highway Project F 1-1(29)45 12 miles S.E. of Libby S.E.

Dear Mr. Kologi:

The Transportation Division of the Montana Department of Commerce has completed a review of the subject highway project per your correspondence dated June 11,1987. Comments resulting from review of this highway project are presented as follows:

1. The subject highway project, as proposed, would not appear to impact any rail facilities in the project area covered by the translite. Our review indicates the subject highway project is in conformance with the Montana Rail Plan - 1984 Annual Update dated May 1985.

2. Commercial truck traffic volumes on the FAP 1 PTW through the subject project area have ranged between 107 AADT in 1983 to 182 AADT in 1985. Between 1981 and 1985 truck volumes increased by 29 vehicles per day. It is estimated a large portion of this truck traffic is associated with the wood products industry.

   According to the publication "Montana Department of Highways-Montana Traffic by Sections" the highway project PTW all vehicles AADT remained somewhat constant between 1981 and 1985.

3. Improvement should be considered as part of this project with respect to any road or access drive which has or will have a hazardous intersection angle of approach to the

proposed alignment or sight distance problem in light of potential increased vehicle speeds.

4. Access control, as proposed, should be considered for incorporation into this project.

Other possible considerations include:

5. Efforts should be made to conserve agricultural lands along the valley floor adjacent to the PTW from: Project Beginning to MP 45.5, MP 48.7 to MP 51.1, MP 53 to MP 53.9 and MP 55.5 to MP55.7

6. Deliberation should be given to the disposition or use of the irregular parcels of land remaining as a result of straightening out the PTW curves from MP 47.5 to MP 48.8, and MP 54 to MP 55.3.

Due to the age, poor alignment and narrow width of the current P.T.W. facility it is our opinion the proposed highway project is needed.

This concludes our comments on this preliminary phase of the subject project. Thank you for this opportunity to comment.

Yours Truly,

Richard A. Howell, Manager
Special Projects
Transportation Division

BURLINGTON NORTHERN RAILROAD

ENGINEERING DEPARTMENT

2200 First Interstate Center
Seattle, WA 98104-1105

June 23, 1987

Mr. Stephen C. Kologi, P.E.
Chief, Preconstruction Bureau
Department of Highways
State of Montana
2701 Prospect
Helena, MT 59620

Dear Mr. Kologi:

This will refer to your June 11, 1987, letter, file F 1-1(29)45, relative proposed highway project on U.S. 2, 12 miles southeast of Libby, extending approximately 11 miles therefrom.

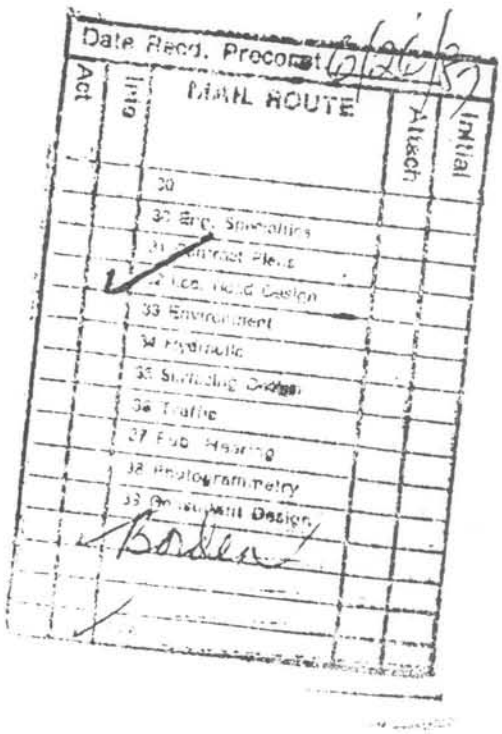
Thank you for informing us of this particular project. At the present time, it does not appear that the railroad would be adversely affected, nor do we have any projects scheduled which would affect your program. Of course, if you have any plans directly affecting the railroad, we will handle those matters at the time they are brought up.

Sincerely,

V. J. Ostrander

V. J. Ostrander
Assistant Engineer Public Works

VJO/jn2387ac06



DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

Airports District Office
FAA Building, Room 2
Helena Regional Airport
Helena, Montana 59601

Date Rec'd. Precon			
Init.	Init.	MAIL ROUTE	Attach	Initial
		30		
		32 Engr. Specialties		
		33 Environment		
		34 Hydraulic		
		35 Surfacing Design		
		36 Traffic		
		37 Pub. Hearing		
		38 Photogrammetry		
		39 Consultant Design		
		Borden		
		File		

June 25, 1987

Mr. Stephen C. Kologi, P.E
Chief, Preconstruction Bureau
Department of Highways
2701 Prospect Avenue
Helena, Montana 59620

Ref: F 1-1(29)45 12 miles
S.E. of Libby S.E.

Dear Mr. Kologi:

We have reviewed the proposed development of a federal aid highway project on U.S. 2 (FAPI) in Lincoln County. The proposed project will consist of reconstruction of the existing roadway to provide a new 2-lane facility approximately 11.7 miles along U.S. 2 in Lincoln County, Montana.

The proposed development will not have an adverse effect on any existing or future airport development.

The opportunity to review and comment on such proposals is appreciated.

Sincerely,

Susan S. Alexander

Susan S. Alexander
Planning/Program Officer

DEPARTMENT OF COMMERCE
AERONAUTICS DIVISION

TED SCHWINDEN, GOVERNOR

P.O. BOX 5178
2630 AIRPORT ROAD

STATE OF MONTANA

(406) 444-2506

HELENA, MONTANA 59604

June 25, 1987

Mr. Stephen C. Kologi, P.E.
Chief, Preconstruction Bureau
State of Montana
Department of Highways
2701 Prospect Avenue
Helena, MT 59620

FILE: F 1-1(29)45
12 MILES S.E. OF LIBBY S.E.

Dear Mr. Kologi:

The Montana Aeronautics Division has reviewed the above-mentioned project, and in our opinion this project will not have any adverse effects on aeronautical activities in this area.

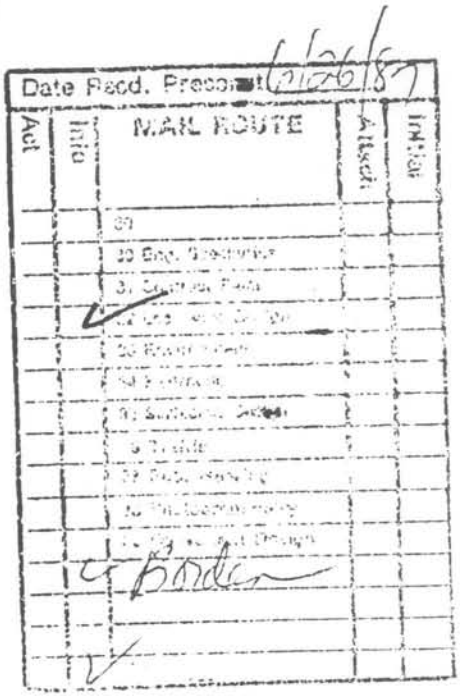
Thank you for the opportunity to comment on this project.

Sincerely,

Michael D. Ferguson, Administrator
Aeronautics Division

David C. Kneedler, Chief
Airport/Airways Bureau

bp



BURLINGTON NORTHERN RAILROAD

ENGINEERING DEPARTMENT

2200 First Interstate Center
Seattle, WA 98104-1105

June 25, 1987

Mr. Stephen C. Kologi, P.E.
Chief--Preconstruction Bureau
Department of Highways
State of Montana
2701 Prospect
Helena, MT 59620

Dear Mr. Kologi:

This will refer to your letter dated June 11, 1987, file F 1-1(29)45, concerning the proposed project on U. S. 2 beginning 12.3 miles southeast of Libby, Montana, proceeding 11.7 miles southeasterly.

From what we are able to determine based on the aerial photos sent with your above-mentioned letter, it does not appear we have any projects, concerns or opinions that would affect your proposed project.

Sincerely,

V. J. Ostrander

V. J. Ostrander
Assistant Engineer Public Works

VJO/jn2587ac08

Date Recd. Preconst.

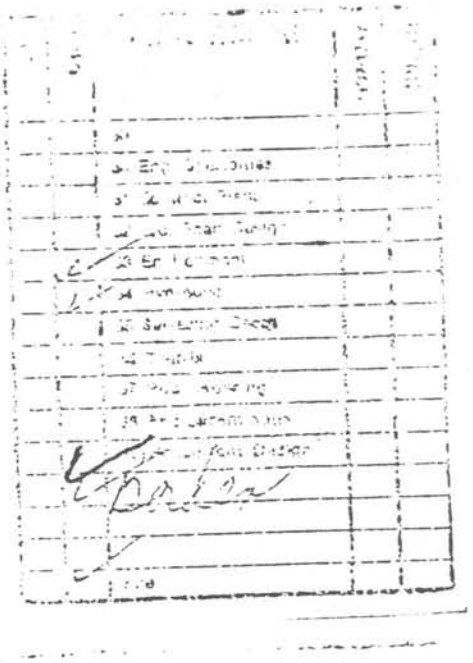
Act	Info	MAIL ROUTE	Attach	Initial
		30		
		30 Eng. Specialties		
		31 Contract Plans		
		32 Loc. Road Design		
		33 Environment		
		34 Hydraulic		
		35 Surfacing Design		
		36 Traffic		
		37 Pub. Hearing		
		38 Photogrammetry		
		39 Consultant Design		
		File		

DEPARTMENT OF THE ARMY
OMAHA DISTRICT, CORPS OF ENGINEERS
1612 U.S. POST OFFICE AND COURTHOUSE
OMAHA, NEBRASKA 68102-4978

July 1, 1987

REPLY TO
ATTENTION OF

Planning Division



Mr. Stephen C. Kologi
Chief, Preconstruction Bureau
Department of Highways
State of Montana
2701 Prospect Avenue
Helena, Montana 59620

Dear Mr. Kologi:

We have reviewed your letter dated June 11, 1987, concerning the proposed highway improvement project on U.S. Highway 2, 12 miles southeast of Libby, Montana. We offer the following comments for your consideration.

If construction activities involve the placement of dredged or fill material into Swamp Creek or any other water body or wetland area, a permit pursuant to Section 404 of the Clean Water Act will be required. Final project plans should be sent to Mr. Robert McInerney, U.S. Army Corps of Engineers, c/o DNRC/CDD, 1520 East 6th Avenue, Helena, Montana 59620-2301, for a detailed review of permit requirements.

The design of the proposed project should ensure that the project is in compliance with flood plain management criterion of Lincoln County and the State of Montana. As a minimum, the design should ensure that the 100-year flood water surface elevation of any stream affected is not increased more than one foot relative to pre-project conditions. It is desirable, however, that water surface elevations either remain the same or decrease as a result of this project.

Since Federal funding is involved, it may be necessary to have a cultural resources investigation for the project area. Your consultation with the Montana Historical Society should resolve this issue.

The proposed highway improvement project falls within the boundaries of the Kootenai National Forest. Consultation with the National Park Service and the U.S. Forest Service is

recommended to determine special permit needs, if you have not done so already.

Thank you for this review opportunity.

Sincerely,

Richard D. Gorton
Chief, Environmental
Analysis Branch
Planning Division

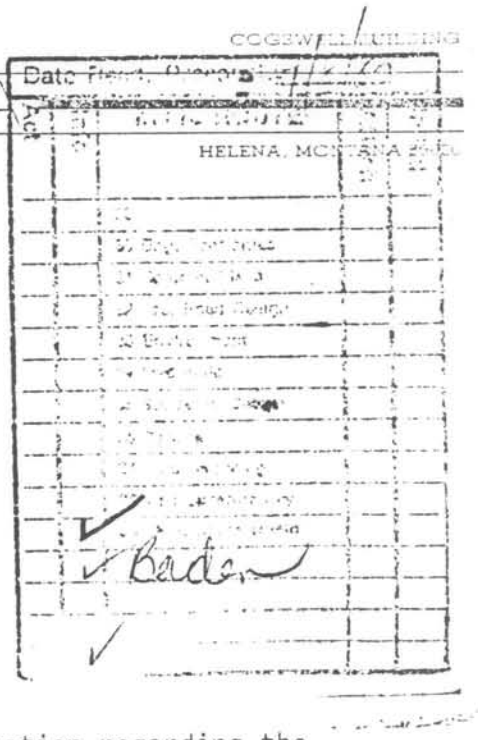
DEPARTMENT OF HEALTH AND ENVIRONMENTAL SCIENCES

AIR QUALITY BUREAU

TED SCHWINDEN, GOVERNOR

STATE OF MONTANA

(406) 444-3454



July 6, 1987

Mr. Stephen Kologi, Chief
Preconstruction Bureau
Montana Department of Highways
Capitol Station
Helena, MT 59620

Dear Mr. Kologi:

This is in response to your letter of notification regarding the highway improvement project designated as U.S. 2 (FAP1) including 12 miles S.E. of Libby in Lincoln County.

In general, any project which will smooth out the traffic flow, and reduce stopping and idling time will also reduce the amount of air pollution emissions from transportation sources. From this standpoint the Air Quality Bureau would like to support your efforts to upgrade the Montana highway system. Asphalt plants and gravel crushers are the primary emission sources for highway construction, and they must obtain an air quality permit from our office to operate in the state.

Sincerely,

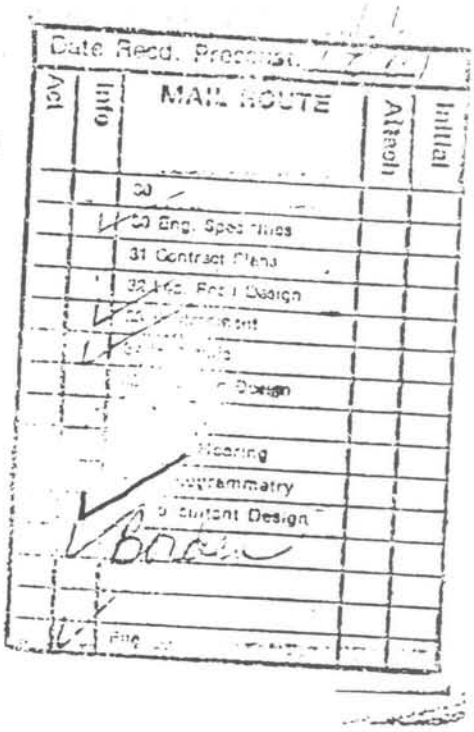
Warren Norton
Environmental Specialist

WN:sj

cc: Ron Anderson, Lincoln Co.

UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE

Fish and Wildlife Enhancement
1501 14th Street West, Suite 230
Billings, Montana 59101



IN REPLY REFER TO:

FWE-61410

July 8, 1987

Mr. Stephen C. Kologi
Preconstruction Bureau
Montana Department of Highways
2701 Prospect Avenue
Helena, Montana 59620

Dear Mr. Kologi:

We received your letter dated June 11, 1987, requesting our comments regarding the development of a federal-aid highway project on U.S. 2 (FAP-1) in Lincoln County. The proposed project will consist of reconstructing the existing road starting 12.3 miles southeast of Libby, Montana, and extending southeasterly for about 11.7 miles along U.S. 2. Junction.

In order to facilitate planning of the project, we recommend you consider the following items: 1) encroachment into any streams, lakes, or intermittent drainages should be kept to an absolute minimum; 2) new drainage structures, if needed, should be designed to assure that these will have no affect on adjacent wetlands, fish passage, and surface water run-off patterns; 3) fill placed in gullies, swales, or other "low" areas which function to carry overland flow during storm events should be immediately seeded to reduce erosion; and 4) mitigation of unavoidable wetland losses should be considered as planning progresses. In this regard, we should be advised of any known unavoidable impacts to wetlands, as soon as possible, so we can work with you to determine needed mitigation measures and to expedite any subsequent comments on Section 404 permits that may be required.

Section 7(a) of the Endangered Species Act requires that all federal agencies, in consultation with the Fish and Wildlife Service (FWS), shall insure that any action funded, authorized, or carried out by such agencies (such as the FHWA) will not jeopardize the continued existence of any threatened or endangered species. The FWS has determined that the endangered species which may occur in the project area are the bald

eagle (Haliaeetus leucocephalus) and peregrine falcon (Falco peregrinus). If impacts to large trees in riparian habitats and to fisheries are avoided, we would not expect adverse impacts to these listed species.

The limited information provided us does not indicate if the project will involve moving powerlines. However, to aid in your planning of the project, if existing powerlines are to be relocated, the reconstructed lines should be designed to prevent possible electrocution of peregrine falcons, bald eagles, and other raptors. Electrocution problems are generally most likely to occur in open habitats such as grasslands and shrublands where natural perches are scarce, and in wetlands and along rivers. Reconstruction of existing lines should assure that clearances between conductors, and conductors and ground wire, are sufficient to preclude raptor electrocutions. We recommend that power pole construction be designed as illustrated in: "Suggested Practices for Raptor Protection of Power Lines" (Raptor Research Report No. 4, Raptor Research Foundation, Inc., 1981). A copy of this report can be obtained by writing: Mr. Jim Fitzpatrick, Treasurer, Raptor Research Foundation, Carpenter St. Croix Nature Center, 12805 St. Croix Trail, Hastings, Minnesota 55033.

If you determine that federally-listed species may be adversely affected by highway reconstruction or should you have other questions in the future concerning matters addressed herein, please contact:

Field Supervisor
Fish and Wildlife Enhancement
U.S. Fish and Wildlife Service
Federal Building, U.S. Courthouse
301 South Park
P.O. Box 10023
Helena, Montana 59626
Telephone: (406) 449-5225

In that regard, we would appreciate being advised of any alignment changes which may occur as the planning progresses.

We appreciate the opportunity to comment on the project at the present planning stage.

Sincerely,

John G. Wood
Acting State Supervisor
Ecological Services

cc: Director, Montana Department of Fish, Wildlife, and Parks, Helena, MT
Paul Garrett, Montana Department of Highways, Helena, MT
Bob McInerney, U.S. Corps of Engineers, Helena, MT
John Peters, Environmental Protection Agency, Denver, CO
Regional Director, USFWS, Denver, CO (FWE-60120)
Field Supervisor, USFWS, Helena, MT (SE-61130)

DEPARTMENT OF NATURAL RESOURCES
AND CONSERVATION

TED SCHWINDEN GOVERNOR

1520 EAST SIXTH AVENUE

STATE OF MONTANA

DIRECTOR'S OFFICE (406) 444-6699

(406) 444-2301

Date Recd. Precon st.

Act	Info	MAIL ROUTE	Attach	Initial
		30		
		31 Eng. Specialties		
		31 Contract Plans		
		32 Loc. Road Design		
		33 Environment		
		34 Hydraulic		
		35 Surfacing Design		
		36 Traffic		
		37 Pub. Hearing		
		38 Photogrammetry		
		39 Consultant Design		

July 9, 1987

Mr. Stephen C. Kologi, P.E.
Chief, Preconstruction Bureau
Montana Department of Highways
2701 Prospect
Helena, MT 59620

RE: F 1-1 (29)45
12 MILES S.E. OF LIBBY S.E.

Dear Mr. Kologi:

You recently requested information pertaining to the referenced project. The Department of Natural Resources and Conservation (DNRC) has three concerns.

First, a permit will be required for any work that affects a designated floodplain. The Lincoln County Planner is the appropriate contact with regard to this project.

Second, water may be needed for dust control or some other construction-related purpose. If so, a temporary water use permit will have to be obtained. For information about application forms and procedures, contact the DNRC Water Rights Field Office, PO Box 860, 3220 Highway 93 South, Kalispell (phone 752-2288).

Finally, it appears that this project may affect irrigation facilities. Consequently, care should be taken so that the timing and method of construction do not interfere with the exercise of existing water rights, and any water rights facilities that are involved should be maintained or replaced. Our Kalispell Water Rights Field Office can provide additional information on the water rights that may be affected.

The opportunity to comment on this project is appreciated.

Sincerely,

Carole I. Massman

Carole I. Massman
Administrative Officer

cc: Water Resources Division
(Brasch, Hamill, Guse)
Kalispell Area Office
Intergovernmental Review Clearinghouse

United States
Environmental Protection
Agency

Federal Building
301 S. Park, Drawer 10096
Helena, Montana 59626-0096

EPA

REF: 8M0

JUL 13 1987

Mr. Stephen C. Kologi, P.E.
Chief, Preconstruction Bureau
Montana Department of Highways
2701 Prospect Avenue
Helena, Montana 59620

Date Recd. Precdnt.:

Act	Info	MAIL ROUTE	Attach	Initial
		30		
		30 Eng. Specialties		
		31 Contract Plans		
		32 Loc. Road Design		
		33 Environment		
		34 Hydraulic		
		35 Surfacing Design		
		36 Traffic		
		37 Pub. Hearing		
		38 Photogrammetry		
✓		39 Consultant Design		
	✓	Burden		

Re: Federal Aid Highway Project
F1-1(29)45
12 Miles S.E. of Libby S.E.

Dear Mr. Kologi:

This is in response to your letter of intent regarding the above-referenced project on U. S. Highway 2 in Lincoln County, Montana.

This project will involve widening and reconstructing 11.7 miles of U. S. Highway 2 southeast of Libby. We request that all appropriate pollution and erosion control measures be provided for during project planning and design. These measures should be implemented during construction to assure protection of water quality and aquatic habitat.

We also request that wetland impacts be identified early in the planning process, and that appropriate mitigation of wetland impacts be provided. We believe that the wetland evaluation and mitigation process being developed by the Montana Department of Highways and the Montana Department of Fish, Wildlife, and Parks for the Interagency Highway-Wetlands Committee should be utilized for this project.

Thank you very much for the opportunity to comment.

Sincerely

Stephen M. Potts

Stephen M. Potts, P.E.
Environmental Engineer

Montana Department of Fish, Wildlife & Parks

1420 East Sixth Avenue
Helena, Montana 59620
September 25, 1987

Mr. Paul Garrett
Biologist
Department of Highways
Helena, Montana 59620

Dear Paul:

RE: SE OF LIBBY
F 1-1(29)45

Please find enclosed a copy of a memo received from Joe Huston regarding the subject project.

Sincerely,

Ralph W. Boland
Stream Protection Act Manager
Fisheries Division

RWB/sk
Enclosure
cc: Vashro/Huston

Date Rec'd. Preconst. 10/8/87			
Init.	MAIL ROUTE	Attach	Initial
	20		
	21 Contract Plans		
	23 Bridge Design		
	25 Surveying Design		
	33 Traffic		
	37 Pub. Hearing		
	38 Photogrammetry		
	39 Consultant Design		

Montana Department of Fish, Wildlife & Parks

Office Memorandum

August 26, 1987
Ref: JH16

TO: Ralph Boland

FROM: Joe E. Huston

SUBJECT: Reconstruction of U. S. Hwy. 2 Section SE of Libby, F1-1(29)45

The proposed reconstruction of this section of U. S. Hwy. 2 from Miller Creek to Libby Creek could have severe impacts on Swamp Creek. The present highway alignment follows Swamp Creep almost from its mouth to its source. Swamp Creek, although small, is used for spawning by rainbow trout from Kootenai River via Libby Creek.

Swamp Creek from its source near milepost (MP) 54 to about MP48.5 has little fishery value. It has been severely channelized in past years and is primarily a drainage ditch for hayfields. Downstream from this point the stream enters a narrow canyon, gradient increases, and stream channel characteristics improve. Almost all rainbow travel spawning occurs in this canyon section, MP48 to its junction with Libby Creek.

An irrigation diversion that impedes upstream movement of fish is located near MP45 just downstream of the junction of Farm-to-Market Road with US Hwy. 2. The Highway Department should be able to reconstruct this structure to provide better upstream fish movement.

Do we consider overgrown drainage ditches "wetland"? If so, considerable wetland could be affected upstream from MP48.5±

/bj

State Historic Preservation Office
Montana Historical Society
Mailing Address: 225 North Roberts • Helena, MT 59620-9990
Office Address: 102 Broadway • Helena, MT • (406) 444-7715

August 1, 1989

Edrie Vinson, Architectural Historian
Montana Department of Highways
2701 Prospect Avenue
Helena, MT 59620

Re: Reconsideration of Eligibility,
Prehistoric Site 24LN825

Dear Edrie:

Although we are sorry to hear of the loss of this site, and trust that the landowner's actions had nothing to do with MDOH plans, we agree with John and with you that it is not likely that sufficient intact cultural resources remain at 24LN825 to continue to treat the site as eligible.

We concur with your judgement that relocation of the highway in the area of the Schneider homestead will not have an effect on that property. As far as the bridge (24LN766) is concerned, our consultations concerning effect on this property considerably predated signing of the PA on roads and bridges, and even in the considerable fray surrounding the District, I don't think its individual eligibility was ever questioned. We do not want to precipitate another lengthly discussion about the applicability of the PA in cases like this; however, we are concerned about the fate of this structure, especially now that it is a unique example of its type. We would appreciate it if your agency would give some additional thought and special consideration to this bridge.

Thank you for the opportunity to comment.

Sincerely,

Katherine M. Huppe
Historical Survey Reviewer

File: Comp/MDOH-12 MLS SE of Libby

Date Recd. Preconst. 8-7-89

Act	Info	MAIL ROUTE	Attach	Initial
		30		
		30 Eng. Specialties		
		31 Contract Plans		
		32 Loc. Road Design		
✓		33 Environment		
		34 Hydraulic		
		35 Surfacing Design		
		36 Traffic		
		37 Pub. Hearing		
		38 Photogrammetry		
✓		39 Consultant Design		
		Weaver		

State Historic Preservation Office
Montana Historical Society
Mailing Address: 225 North Roberts • Helena, MT 59620-9990
Office Address: 102 Broadway • Helena, MT • (406) 444-7715

September 21, 1989

Ms. Edrie Vinson, Supervisor
Environmental Unit
Preconstruction Bureau
Montana Department of Highways
2701 Prospect Avenue
Helena, MT 59620

Re: 12 Miles SE of Libby
F1-1(29)45

Dear Edrie:

I am writing to re-explain our August 1, 1989, letter on the project identified above as it affects a historic bridge 24LN766. That letter does not recommend that all the procedures outlined in 36CFR800 be applied to the bridge--since the programmatic is in place. We recognize that the programmatic agreement is indeed applicable to its handling at this time. Instead, we were identifying the fact that the bridge is unique enough that it warrants <u>whatever</u> consideration you may be able to afford it in further project planning. That consideration can range from avoidance, but if avoidance or preservation is not possible, consideration might only entail recordation for future research or interpretive projects outlined in the programmatic. Since treatment of the bridge is <u>not</u> subject to regular procedures within 36CFR800, the final decision on any further treatment of the bridge rests with you and the Federal Highway Administration.

Sincerely,

Marcella

Marcella Sherfy
State Historic Preservation Officer

File: Comp/MDOH/12 Miles SE of Libby

PROJECT NO. F 1-1(29)45, U.S. Highway 2

SWAMP CREEK - EAST
(12 miles Southeast of Libby Southeast)

PROGRAMMATIC SECTION 4(f) EVALUATION

U.S. Department of Transportation
Federal Highway Administration

and

State of Montana
Department of Highways

TABLE OF CONTENTS

I. DESCRIPTION OF THE PROPOSED ACTION. 1

II. PURPOSE AND NEED. 5

III. SECTION 4(f) RESOURCES. 5

IV. IMPACTS ON SECTION 4(f) RESOURCES 6
IV.A. Swamp Creek Timber Bridge (Site 24LN766) 6

V. ALTERNATIVES CONSIDERED 6

VI. MITIGATION. 6
VI.A. Swamp Creek Timber Bridge (Site 24LN766) 6

VII. COORDINATION. 8

IX. REFERENCES. 8

LIST OF FIGURES

FIGURE 1 - Vicinity Map 2

FIGURE 2 - Location Map 3

FIGURE 3 - Typical Section 4

FIGURE 4 - Swamp Creek Timber Bridge 7

I. DESCRIPTION OF THE PROPOSED ACTION

The proposed action consists of the reconstruction of a portion of U.S. Highway 2 (FAP 1) in Lincoln County, Montana to updated standards of design and safety. The proposed project, known as Swamp Creek - East (12 Miles SE of Libby SE), will begin approximately 12.3 miles southeast of Libby at the southeast end of Project BRF 1-1(23)45 (Libby Creek Bridge) and will extend southeasterly approximately 12.2 miles. The project limits and vicinity are shown on Figures 1 and 2.

Construction is tentatively planned for 1993.

The roadway will be fully reconstructed in accordance with updated standards to meet a 60 mph design speed. The roadway will be graded to accommodate a 40 foot wide surface, however, only a 32 foot wide paved top surface will be constructed initially--two 12-foot wide traffic lanes with 4-foot shoulders as shown on the typical section on Figure 3. A truck climbing lane for west bound traffic is planned between mileposts 54.5 and 56.0. The new alignment will follow the existing alignment as closely as possible while flattening substandard horizontal and vertical curves.

The highway corridor runs through a rural area consisting of fairly flat bottom lands along Swamp Creek and Schreiber Creek. Outside the drainage bottoms, the terrain is steep and timber covered. The flat lands adjacent to the stream are used mainly for hay production and grazing. Timber production is an important commercial activity in the area. Scattered residences are located along the project.

Reconstruction will include widening, grading, drainage, surfacing, signing, pavement markings, guardrail, topsoiling, seeding, and necessary utility relocation.

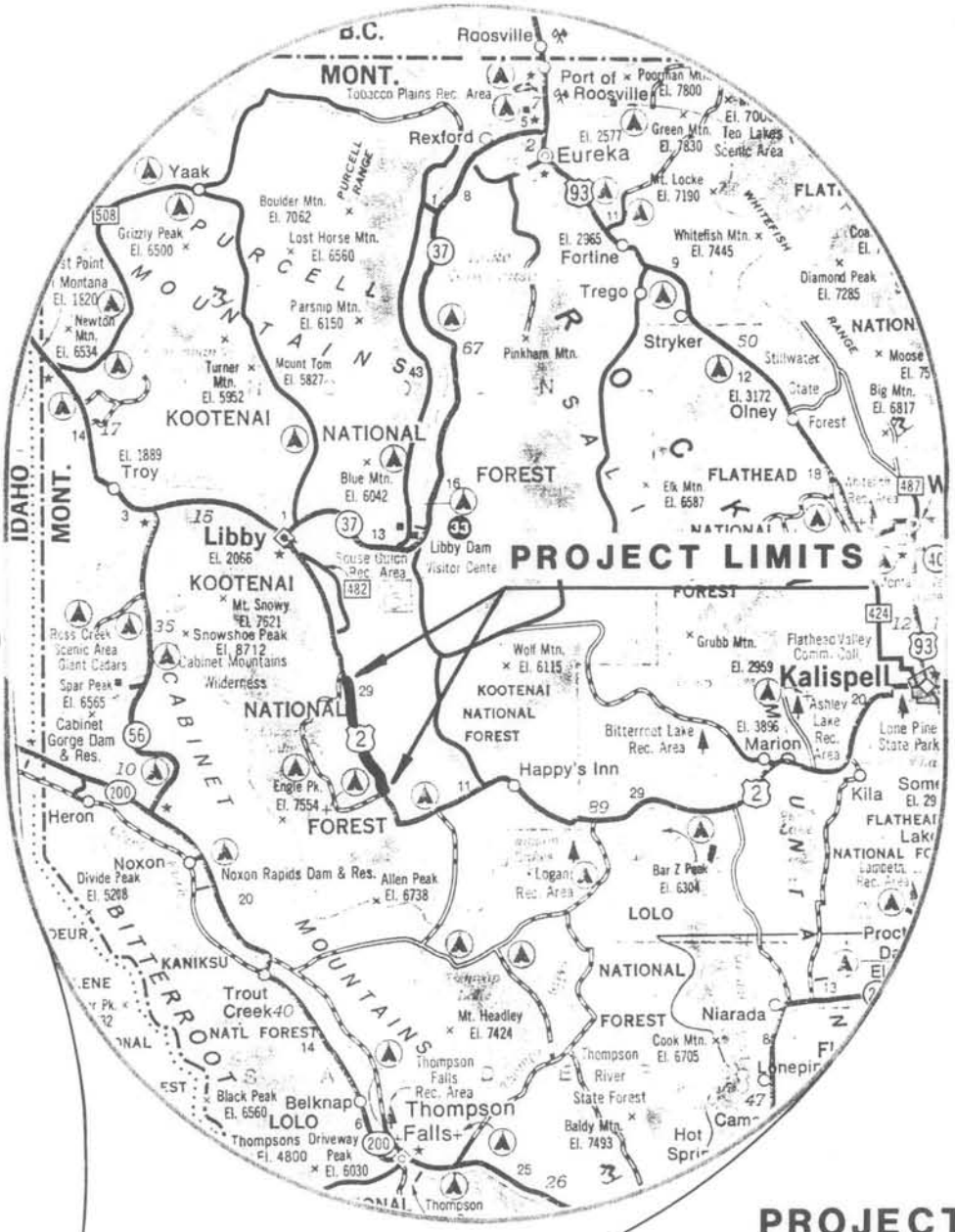
Other related projects in the vicinity of the proposed action include:

Project 1-1(19)38, Libby Southeast, from near Libby to Libby Creek near the northwest end of this project. The project was completed in 1988;

Project BRF 1-1(23)45, replacement of the Libby Creek Bridge, located adjacent to the northwest end of this project, completed in 1988;

Project BRF 1-1(23)45, replacement of the Miller Creek Bridge, located at approximate Milepost 56.7 (Sta. 662+00) and within the limits of this project, completed in 1988;

U.S. HIGHWAY 2
SWAMP CREEK
F1 - 1 (29) 45

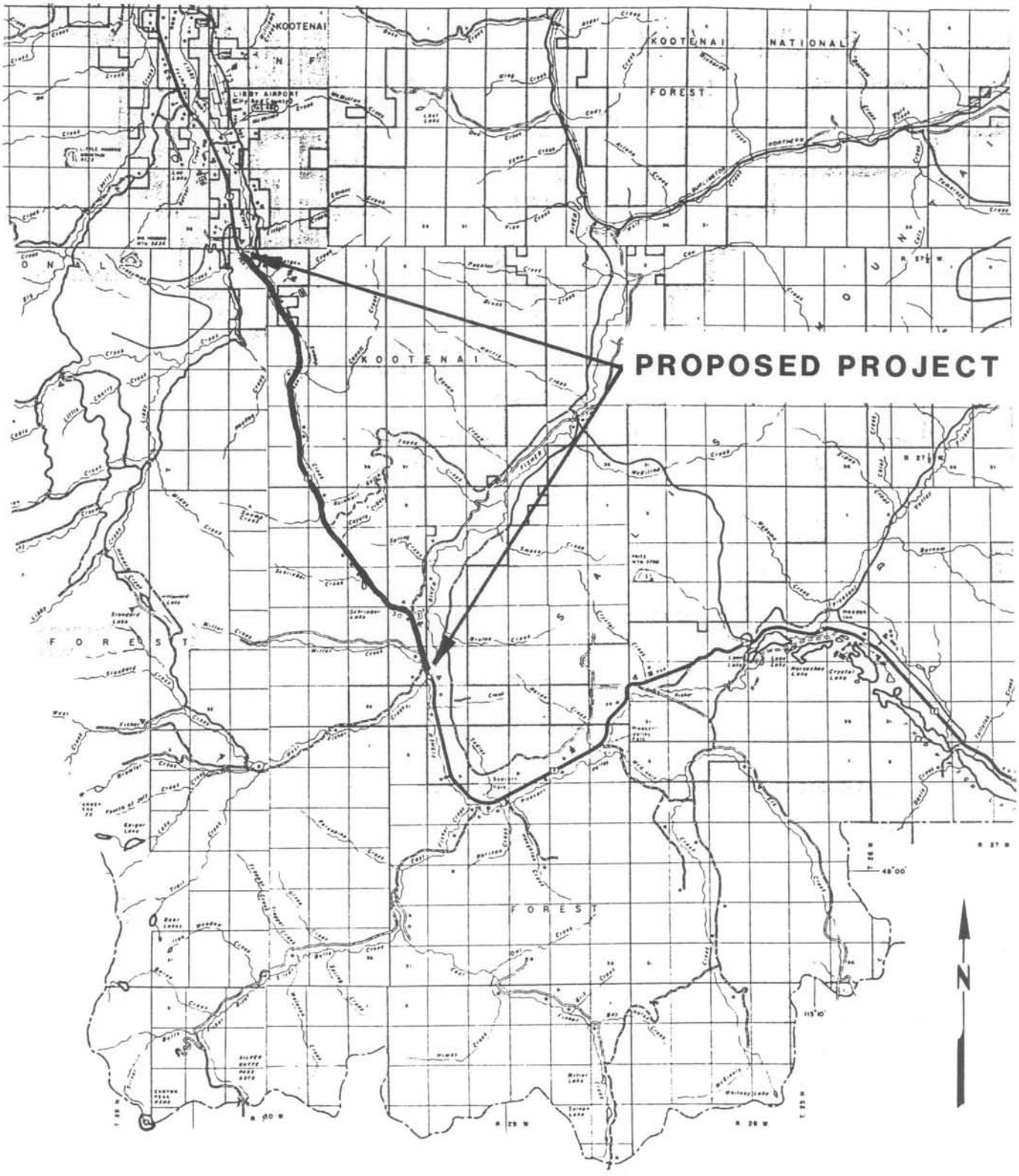


PROJECT LOCATION MAP

FIGURE 1

U.S. HIGHWAY 2 - SWAMP CREEK
F1 - 1 (29) 45

MP 44.8 To MP 57.0
12.2 MILES

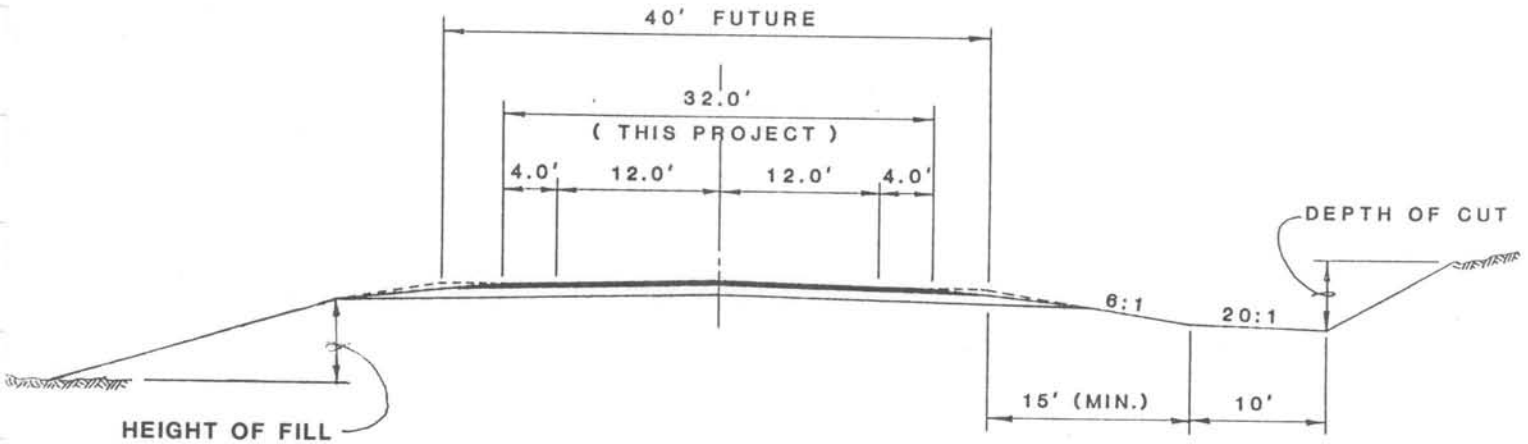


VICINITY MAP

FIGURE 2

U.S. HIGHWAY 2 - SWAMP CREEK
F1 - 1 (29) 45

MP 44.8 To MP 57.0
12.2 MILES



TYPICAL SECTION

FIGURE 3

Project BRF 1-1(27)57, replacement of the Fisher River Bridge, located adjacent to the southeast end of this project, completed in 1988; and,

Project F 1-1( )57, Pleasant Valley, from the Fisher River Bridge Project mentioned above to the east, scheduled ready date is May 1995.

No limited access control will be acquired along this project. Existing access will be perpetuated where necessary.

II. PURPOSE AND NEED

U.S. Highway 2 in the project area is on Federal Aid Primary Route 1. It is part of an extensive system of rural arterial routes important to interstate, statewide and regional travel. This route is a vital element contributing to the local and regional economy which is heavily oriented toward timber, agriculture and recreation activities. This route connects the communities of Libby and Kalispell.

The primary objectives of the proposed action are as follows:

- to improve highway convenience and safety and reduce accidents;

- to improve horizontal curves, vertical curves and roadway width to meet current standards;

- to provide a modern highway facility compatible with the human and natural environment; and

- to connect similar projects being constructed at each end of this project (see Section I. DESCRIPTION OF THE PROPOSED ACTION).

The highway was built as part of the Forest Highway Program under several different projects. Most of the existing road was built in 1935 and 1936 and was improved in 1939. It is generally a 20 foot wide, two lane facility--two 10 foot driving lanes with no shoulders. There are 3 horizontal curves with design speeds less that 60 mph--the curves are 5° or about 58 mph design speed. There are approximately 12 vertical curves with sight distance at absolute minimum or less.

III. SECTION 4(f) RESOURCES

III.A. Swamp Creek Timber Bridge (Site 24LN766), located at Station 134+50. This bridge was determined eligible by the National Register of Historic Places[1]. This bridge is significant as a rare example of depression-era construction activity conducted by the Bureau of Public Roads in rural Montana areas,

especially those adjacent to National Forest land. Figure 4 shows the location of the existing and proposed roadways and bridges.

IV. IMPACTS ON SECTION 4(f) RESOURCES

IV.A. Swamp Creek Timber Bridge (Site 24LN766)

Construction of the proposed project will require removal of the existing bridge. It will be replaced with an arch pipe culvert.

V. ALTERNATIVES CONSIDERED

The following alternatives to removal of the Swamp Creek Timber Bridge have been considered:

1. No-Action. Under this alternative the existing bridge would remain in-place with no significant reconstruction taking place. This alternative is not feasible because the bridge is only 26 feet wide -- design standard for this roadway is 40 feet.

2. Widen Existing Bridge. This alternative is not considered acceptable because widening the structure would destroy its integrity as an historic bridge.

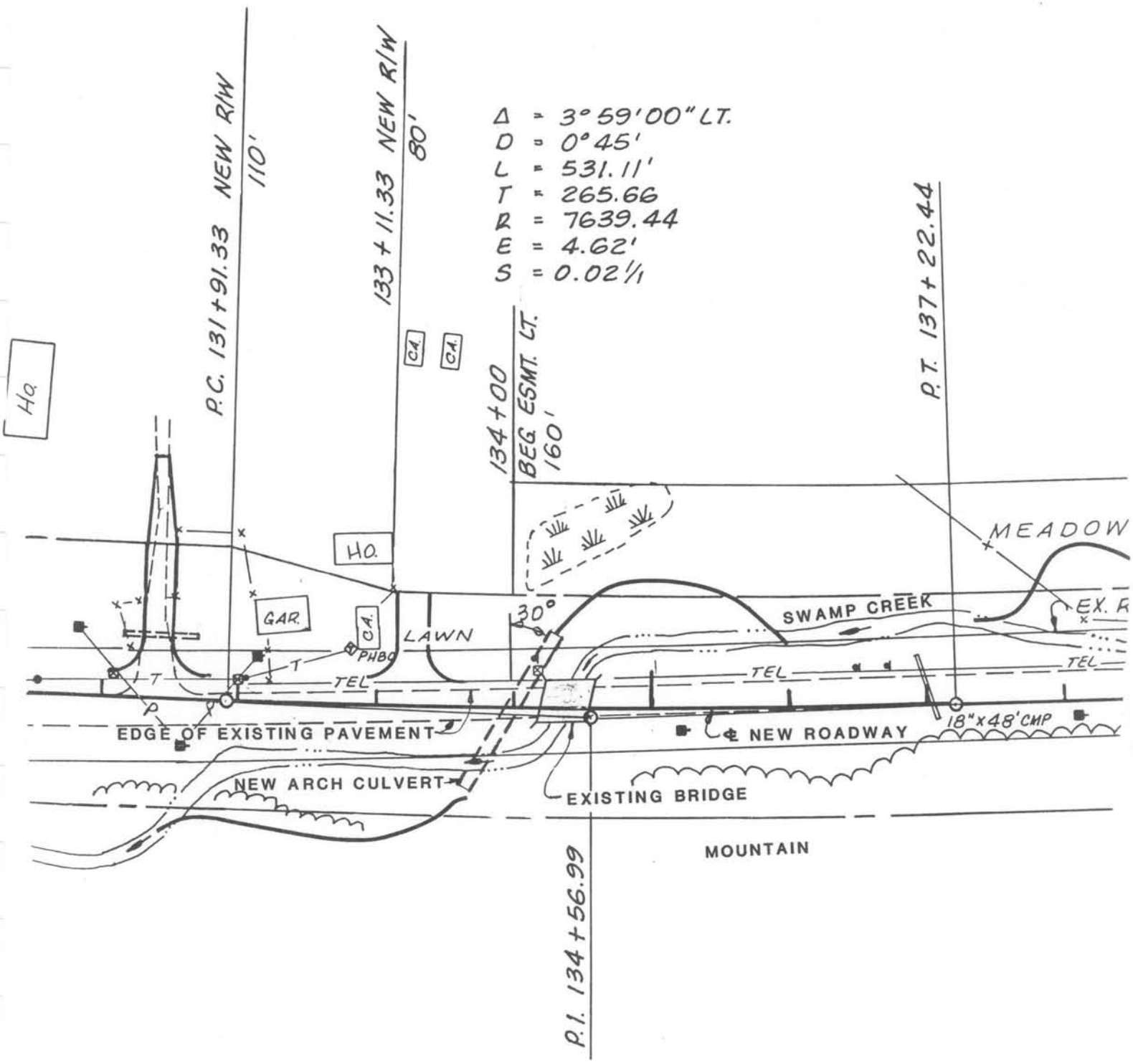
3. Move the Roadway and Construct a New Bridge in a New Location. Throughout most of the project length, steep mountains are on one side of the roadway and Swamp Creek and wetlands are on the other side. In other areas, the existing roadway passes through farmland. Moving the roadway from its existing corridor would cause significant additional environmental impacts and is not considered an acceptable alternative.

4. Move and Reuse the Bridge in Another Location. The type of construction and condition of the existing bridge make relocation impractical.

VI. MITIGATION

VI.A. Swamp Creek Timber Bridge (Site 24LN766)

Mitigation will be as outlined in the Programmatic Agreement on Historic Roads and Bridges. This agreement provides that, in lieu of regular Section 106 procedures, a program will be enacted to enhance the preservation potential of historic roads and bridges and to promote management and public understanding of and appreciation for these cultural resources[2].



SWAMP CREEK TIMBER BRIDGE

SITE 24LN766

FIGURE 4

The program includes:

A public education program.

Preparation of an historic preservation plan for roads and bridges.

VII. COORDINATION

A cultural resource survey for this project was completed 04 December 1987[3].

The project, and specifically the Swamp Creek Timber Bridge (Site 24LN766) have been coordinated with the following agencies with regard to cultural resources:

Carol D. Shull
Chief of Registration
National Register of Historic Places
Interagency Resources Division
National Park Service
P.O. 37127
Washington, D.C. 20013-7127

Marcella Sherfy
State Historic Preservation Office
Montana Historical Society
225 North Roberts Street
Helena, MT 59620-9990

VIII. REFERENCES

Copies of all references listed below are available for inspection at the offices of the Montana Department of Highways, 2701 Prospect Avenue, Helena, Montana 59620.

1. Carol D. Shull, Chief of Registration, National Register of Historic Places, Interagency Resources Division, National Park Service, letter dated 19 May 1989.

2. Federal Highway Administration, Montana State Historic Preservation Officer, Advisory Council on Historic Preservation and the Montana Department of Highways, Programmatic Agreement on Historic Roads and Bridges, 11 May 1989.

3. Historical Research Associates, Cultural Resource Survey of Montana Department of Highways' Project F1-1(29)45, 12 Miles SE of Libby SE, Lincoln County, Montana, 04 December 1987.