



March 27, 2006

Allan Steinle
U.S. Army Corps of Engineers
Helena Regulatory Office
10 West 15th Street, Suite 2200
Helena, Montana 59626

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LEGISLATIVE ENVIRONMENTAL
POLICY OFFICE

Subject: Evaro to McClure Road
NH 5-1(30)7 (Project 1 – US 93 Evaro to Polson)
Control Number L744
Corps file number 2001-90-416

Dear Mr. Steinle:

The purpose of this application is to obtain an individual Section 404 permit for the implementation of Evaro to McClure Road referred to as Project 1 – US 93 Evaro to Polson. Project 1 begins in Evaro, Montana, at approximately US 93 reference post 6.5 and extends to approximately reference post 13.5 at McClure Road.

This application is the seventh of eight applications to be processed by your office for the projects related to the US 93 Evaro – Polson EIS.

Each permit application will include a ledger of corridor-wide impacts and corridor-wide mitigation (see attached table). The ledger presents the amount of wetland impact for the project for which MDT is seeking the permit and the amount of wetland mitigation for onsite mitigation projects as well as projects for which applications have already been submitted to your office. This ledger will track the amount of wetland impacts permitted and the amount of compensation available through onsite wetland mitigation. Remaining credits needed for the corridor will be obtained at CSKT Finley Creek property, formerly the Norgaard property.

Enclosed is a completed Joint Application and the following:

- 1) Summary Document - Includes project history; expected wetland impacts for the project corridor and measures to minimize those impacts; status of wetland mitigation for the project corridor; documentation of Endangered Species Act (ESA) compliance; and a list of relevant documentation previously provided to the Corps office
- 2) Project Area Topographic Map
- 3) Road Construction Plans
- 4) Section 404 Permit Permitting Plan Sheets 1 to 15 (dated 2/9/06)

Allen Steinle
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If you have any questions about the materials contained in this application please contact Susan Kilcrease at (406) 523-5842 or me at (406) 444-0456. Due to the complexity of this project, this office is available to meet with your staff at your convenience to discuss and explain the project.

Sincerely,



Thomas L. Hansen, P.E.
Engineering Section Supervisor
Environmental Services Bureau.

Attachment & Enclosures

cc (with application only):

Dwane Kailey, P.E. – MDT Acting Missoula District Administrator
Paul R. Ferry, P.E. – MDT Highways Engineer
Kent M. Barnes, P.E. – MDT Bridge Engineer
Bonnie Steg – MDT Resources Section Supervisor
Larry Urban – MDT Wetland Mitigation Coordinator
Jake Goettle – MDT Erosion Control/Construction Permitting Engineer

cc (with all materials):

Mike Durglo – CSKT – Water Quality Specialist
Mary Price – CSKT Wetland/Riparian Ecologist
Susan Kilcrease – MDT Project Development Engineer
Environmental Services file

Wetland impacts and mitigation ledger: US 93 Evaro to Polson number of acres of permitted wetland impacts and acres of permitted onsite mitigation.

Project	Wetland Impacts		Wetland Mitigation			Date Application Submitted
	CSKT Regulated Wetlands (acres)	Corps Regulated Wetlands (acres)	Wetland Mitigation Site	Expected CSKT Credits (acres)	Expected Corps Credits (acres)	
Project 1 – Evaro to McClure Road, Station 110 to 212, RP 6.4 to 12.8	15.21	7.05	Frog Creek	0.06	0.21	3/27/06
			US 93 Overcrossing at MRL/Finley Creek	0.49	0.34	
			Old US 93 Abutment Removal	0.12	0.17	
			Finley Creek Tributary	0.11	0.11	
			Total Mitigation Credits Expected	0.78	0.83	
Project 2 – McClure Rd to North of Arlee, Station 212 to 305, RP 12.8 to 18.5			No Onsite Mitigation in Project 2			
Project 3 – N. of Arlee to Vicinity White Coyote Rd, Station 305 to 329, RP 18.5 to 20.0	1.55	1.55	Jocko River Bridge	0.54	0.33	4/28/04
			Total Mitigation Credits Expected	0.54	0.33	
Project 4 – Vicinity White Coyote Road to S. Ravalli, Station 329 to 436, RP 20.0 to 26.7	3.64	2.5	Bouchard Property	13.35	12.15	5/19/05 Supplemented 7/15/05
			Jocko Spring Creek	1.49	2.26	
			Total Mitigation Credits Expected	14.84	14.41	
*Project 5 – South Ravalli to Medicine Tree, Station 436 to 513, RP 26.7 to 31.4	1.29	1.26	Pistol Creek	dropped	dropped	9/19/05
			Total Mitigation Credits Expected	0.32	0.16	
Project 6 – Medicine Tree to Vicinity Red Horn Road, Station 513 to 599, RP 31.4 to 36.8	11.32	10.05	Mission Creek	0.15	0.22	3/22/05
			Peterson Parcel	1.31	2.39	
			Total Mitigation Credits Expected	1.46	2.61	
Project 7 – Spring Creek Road to Minesinger Trail, Station 768 to 889, RP 48.3 to 56 [Including Mud Creek Structures Project]	5.74	5.74	Mud Creek	7.64	6.81	8/17/05
			Total Mitigation Credits Expected	7.64	6.81	
Project 8 – Minesinger Trail to MT 35, Station 889 to 922, RP 56 to 58.1	0.00	0.29	No Onsite Mitigation in Project 8			10/20/04
Total (Permitted or permits submitted) Impacts To Date	23.54	21.39	Total (Permitted) Mitigation To Date	24.48	24.16	
Total Impacts To Date Plus Impacts Anticipated for the *Subject Project	38.75	28.44	Total Permitted Mitigation To Date Plus Mitigation Anticipated for the *Subject Project	25.26	24.99	

Summary Document for Section 404 Permit Application

US 93 Evaro to Polson

Project 1 – Evaro to McClure Road

Project History

The Montana Department of Transportation and the Federal Highway Administration, in cooperation with the Confederated Salish and Kootenai Tribes, propose to reconstruct approximately 66 kilometers (41 miles) of US 93 from Evaro, Montana to Montana Highway 35 (MT 35) in Polson, Montana, excluding an 18-kilometer (11.2-mile) segment in the Ninepipe area (north of St. Ignatius through Ronan). A Supplemental Environmental Impact Statement to be published in 2005 is currently being prepared to address the excluded Ninepipe segment.

The effects of the project were addressed in the *US Highway 93 – Evaro to Polson, Missoula and Lake Counties Final Environmental Impact Statement and Section 4(f) Evaluation FHWA-MDT Project F 5-1(9) 6* (FHWA and MDT 1996), herein referred to as the 1996 FEIS. At the time the 1996 FEIS was completed, the proposed action involved reconstruction of approximately 90.6 kilometers (56.3 miles) of US 93 from Evaro, Montana through Polson and ending on the west side of the Polson bridge over the Flathead River. At the time the 1996 FEIS was issued, agreement on the lane configuration for the new roadway had not been reached by interested parties.

On December 20, 2000, the Montana Department of Transportation, the Confederated Salish and Kootenai Tribes, and the Federal Highway Administration signed the Memorandum of Agreement *US 93 – Evaro to Polson* providing for the completion of the environmental review process and for lane configuration and design concepts for a 66-kilometer (41-mile) portion of the US 93 corridor from Evaro to MT 35 that excluded a 18-kilometer (11.2-mile) portion of the corridor in the Ninepipe National Wildlife Refuge area, as well as the 6.4-kilometer (4-mile) portion of the route north of MT 35 through Polson. The impacts of the newly selected lane configurations were analyzed in the *Reevaluation of the Final Environmental Impact Statement and Section 4(f) Evaluation* (Skillings-Connolly 2001) herein referred to as the 2001 Reevaluation.

After the lane configurations were selected and the 2001 Reevaluation was completed, the roadway corridor was divided into eight projects and eight design firms were selected to prepare the roadway designs. The location of the eight projects and the design firm responsible for roadway designs are identified below in Table 1.

Project Impacts

The roadway designs and construction sequencing were altered to minimize impacts to wetlands in the project corridor. At several locations, fill slopes were steepened and passing lanes were terminated early to avoid wetlands. In addition, retaining walls will be used in other locations to minimize fill slopes. Corridor wide measures are summarized in the *Supplemental 404 (b)(1) Showing*, which was provided to your office on April 28, 2004 with the submittal for Project 3. Measures to minimize impacts that were incorporated in this project are described in the enclosed application.

Table 1. Location of the eight projects and the responsible design firms for the US 93 Evaro to Polson project.

Project	Location	Approximate Station	Reference Post	Design Firm
1	Evaro to McClure Road	110 to 212	6.4 to 12.8	Great West Engineering
2	McClure Road to North of Arlee Couplet	212 to 305	12.8 to 18.5	Allied Engineering
3	North of Arlee to Vicinity of White Coyote Road	305 to 329	18.5 to 20.0	WGM Group
4	Vicinity of White Coyote Road to South Ravalli	329 to 436	20.0 to 26.7	Robert Peccia and Associates
5	South of Ravalli to Medicine Tree	436 to 513	26.7 to 31.4	TD&H
6	Medicine Tree to Vic Red Horn Road	513 to 599	31.4 to 36.8	Stahly Engineers
7	Spring Creek Road to Minesinger Trail	768 to 889	48.3 to 56.0	Carter Burgess
8	Minesinger Trail to MT 35	889 to 922	56.0 to 58.1	Stelling Engineers

Table 2 is a summary of expected wetland impacts for each permitted project in the corridor. The first column of wetland impacts presented in the table was calculated in support of the 2001 Reevaluation. The second column of wetland impacts will be updated with each subsequent permit application submittal. This column calculates the wetland impacts for the project after the application of avoidance and minimization measures.

This project will permanently impact 7.05 acres of wetlands.

Table 2. Summary of wetland impacts in the US 93 Evaro to Polson reconstruction project corridor.

Project	Wetland ID	MDT Rating	USFWS Class	Re-Evaluation Impact Area ^a (acres)	Current Impact Area ^b (acres)
Project 1 - Evaro to McClure Road Great West Engineering Station 110 to 212 Reference Post 6.4 to 12.8	A0	II	PSS and PEM	0.26	0.26
	Evaro Wetland ^c	III	PEM	NA	1.41
	A3	II	PSS and PEM	0.20	0.30
	A4	IV	PEM	0.43	0.41
	A5	III	PEM and PSS	0.14	0.14
	A8	II	PSS and PEM	0.59	0.81
	A9	II	PSS	0.39	0.74
	A10	II/III	PFO/PSS	0.26	0.19
	A12	II	PSS and PFO	0.39	0.13
	A13	III	PSS	0.54	0.41
	A14	III	PSS	0.17	0.19
	A15	IV	PEM	0.33	0.00
	A16	IV	PEM	0.36	0.17
	A18	II	PFO	0.31	0.22
	A19	I	PSS and PFO	0.01	0.07
	A20	II	PSS	0.39	0.48
	A21	III	PSS and PEM	0.23	0.26
	A24	III	PEM and PSS	0.59	0.45
	A27	III	PEM	1.47	0.13
	A28	III	PSS and PEM	0.01	0.01
	A29	II	PSS and PFO	0.00	0.22
A30	IV	PEM	0.14	0.02	
A31	III	PSS	0.07	0.03	
			Total Corps Impacts	7.28	7.05
Project 2 - McClure Road to North of Arlee Couplet Allied Engineering Station 212 to 305 Reference Post 12.8 to 18.5	A22	III	PSS	0.31	0.31
	A23	IV	PSS	0.00	0.002
	A24	III	PEM	0.19	0.22
	A33	III	POW	0.00	0.00
	A34	IV	PSS	0.00	0.29
	A35	IV	PSS	0.00	0.11
	A36	IV	PSS	0.00	0.14
	A37	III	PSS	0.00	0.21
	A38	IV	PSS	0.00	0.01
	A2-1	III	PEM	0.00	0.06

Table 2. Summary of wetland impacts in the US 93 Evaro to Polson reconstruction project corridor (continued).

Project	Wetland ID	MDT Rating	USFWS Class	Re-Evaluation Impact Area ^a (acres)	Current Impact Area ^b (acres)
Project 2 (continued)	A39	III	PEM	0.00	0.28
	B2	IV	PUB	0.13	0.20
			Total Corps Impacts	0.63	1.83
Project 3 - N. of Arlee to Vicinity White Coyote Rd WGM Group Station 305 to 329 Reference Post 18.5 to 20.0	C1A	III	POW	1.13	0.50
	C1B	I	PSS	0.62	0.27
	C1D	III	PSS	0.74	0.74
	C1E	III	PSS	0.05	0.04
			Total Corps Impacts	2.54	1.55
Project 4 - Vicinity White Coyote Road to S. Ravalli Robert Peccia & Assoc. Station 329 to 436 Reference Post 20.0 to 26.7	C3A	III	PEM	-	0.00
	C4	III	PUB	-	0.00
	C5	III	PSS	-	0.00
	C7	III	PEM	0.10	0.10
	C9	III	PEM	1.46	0.89
	C10	II	PSS	0.58	0.07
	C11	III	PSS	0.00	0.00
	C15	IV	PEM	0.01	0.17
	C16	III	PSS	0.19	0.02
	D1	III	PSS	0.15	0.22
	D2	II	PSS	0.56	0.54
	D3	II	PSS	0.04	0.22
	D4	II	PSS	0.80	0.30
			Total Corps Impacts	3.89	2.5
Project 5 – South of Ravalli to Medicine Tree Thomas, Dean, and Hoskins Station 436 to 513 Reference Post 26.7 to 31.4	F1	III	PFO	0.72	0.77
	F5	III	PEM	0.22	0.00
	F6	III	POW	0.04	0.09
	F7	III	PFO	0.13	0.39
	F8	III	PFO	0.01	0.01
			Total Corps Impacts	1.12	1.26

Table 2. Summary of wetland impacts in the US 93 Evaro to Polson reconstruction project corridor (continued).

Project	Wetland ID	MDT Rating	USFWS Class	Re-Evaluation Impact Area ^a (acres)	Current Impact Area ^b (acres)
Project 6 - Medicine Tree to Vicinity Red Horn Road Stahly Engineering Station 513 to 599 Reference Post 31.4 to 36.8	G3	III	PSS and PEM	0.50	0.32
	G4 ^d	IV	PEM	0.75	1.11^d
	G5	I	PFO and PSS	1.01	0.40
	G6	III	PEM	0.02	0.02
	G7	IV	PEM	0.16	0.00
	G8	III	PEM	1.14	0.89
	H1	III	PSS and PEM	2.90	1.43
	H2	II	PFO, PSS and	3.99	3.16
	H3	III	PEM	0.42	0.42
	H3A	III	PEM	0.43	0.30
	H4	III	PEM	0.15	0.10
	H4A	IV	PEM	0.45	0.30
	H5	III	PEM	0.27	0.20
	H6	III	PEM	0.55	0.44
	H8	III	PEM	0.21	0.22
	H9	III	PEM	0.49	0.37
	H11	III	PEM	0.62	0.37
			Total Corps Impacts	14.06	10.05
Project 7 - Spring Creek Road to Minesinger Trail Mud Creek Structures – L1 Carter Burgess Station 768 to 889 Reference Post 48.3 to 56.0	K1	III	PEM	0.07	0.74
	K2	III	PEM	0	0.07
	K3	III	PEM	1.01	0.63
	K4	III	PEM	0.57	0.66
	K5	III	PAB	0.31	0.19
	L1 ^e	II	PEM	5.14	2.14
	L2	III	PEM	1.10	1.31
				Total Corps Impacts	8.20
Project 8 - Minesinger Trail to MT 35 Stelling Engineers Station 889 to 922 Reference Post 56.0 to 58.1	N1	III	PUB	0.12	0.22
	N2	III	PEM	0.12	0.07
				Total Corps Impacts	0.24
Corps Impacts				37.96	30.27

- a. Estimated wetland impacts identified in the 2001 Reevaluation (Skillings-Connolly 2001).
- b. Current wetland impacts using the calculations that have been provided to date for the permit applications.
- c. Not included in the original delineations.
- d. Original wetland size underestimated.
- e. Original wetland size overestimated.

Project Mitigation

Compensatory wetland mitigation sites for the US 93 North Evaro - Polson projects were selected through a series of meetings attended by representatives of Montana Department of Transportation, Confederated Salish and Kootenai Tribes (CSKT), and U.S. Army Corps of Engineers, comprising the US 93 Wetland Mitigation Group. During these meetings, numerous sites were considered for onsite compensatory mitigation. The final list of sites is summarized in Table 3. This summary table presents preliminary estimates of the expected credits based on the conceptual mitigation designs for the sites and the estimated credits for the mitigation designs that are currently being permitted. Depending on the final designs, these sites are expected to yield approximately 25 acres of on-site credit.

There was one on-site mitigation site in Project 5, referred to as the Pistol Creek wetland mitigation site. This site was estimated to yield approximately 0.16 acres of Corps credits. This mitigation site was recently dropped due to the high cost of obtaining an easement from the landowner. The high cost of the easement combined with the minimal amount of expected credits from this site necessitated this decision.

MDT will monitor all mitigation sites in accordance with the MDT standard monitoring protocols and submit annual monitoring reports to the Corps until the sites meet the mitigation goals set forth in the Section 404 permit conditions for this project. Any additional wetland mitigation credits required would be obtained through a wetland mitigation reserve being established by CSKT at CSKT Finley Creek property, formerly the Norgaard site, which is now owned and operated by CSKT. An agreement between MDT and CSKT is currently being prepared and will be provided to your office as soon as it is available.

A draft onsite wetland mitigation plan was issued on November 18, 2003 to Todd Tillinger in the Helena Regulatory Office and a group meeting was held on November 21, 2003 to identify outstanding issues to be resolved relative to mitigation for this project. In March 2004, the Wetland Mitigation Group met to review final designs for the onsite mitigation sites. As a result of that meeting and subsequent field reviews, one of the sites under consideration, Parcel 2-126, was dropped due to the high cost of implementation and low yield of credits. Subsequent to the March 2004 meetings, additional field reviews occurred at the most challenging wetland mitigation sites as well as additional reviews and coordination on the final mitigation designs.

The final *Onsite Wetland Mitigation Plan: US 93 Evaro to Polson* was published and provided to your office during the week of July 6, 2004. This document largely describes the process used to select mitigation sites and develop the concepts and describes the original concepts for each site. The permit applications currently being submitted to your office include the final onsite mitigation designs for the US 93 Evaro to Polson corridor. All of the comments provided by the US 93 Wetland Mitigation Group, including the Corps, since the March 2004 meetings have been addressed and are reflected in these final mitigation designs.

There are four onsite mitigation sites in Project 1, referred to as Frog Creek, US 93 MRL Overcrossing, Old US 93 Abutment Removal, and Finley Creek Tributary mitigation sites. These sites are estimated to yield 0.83 acres of Corps credits. These sites are more thoroughly described in the attached application.

Table 3. Summary of onsite wetland mitigation sites in the US 93 Evaro to Polson reconstruction project corridor and estimated migration credits based on the conceptual and final design.

Mitigation Site Name	Expected Construction Date	Station	Ownership	Mitigation Type	Targeted Functions and Values	Estimated Corps Credits (acres)	
						Conceptual Design	Final Design
Project 1							
Frog Creek	2006-2007	132+87	MDT Right of Way	Creation	Fish habitat, Wildlife habitat, Flood attenuation, Sediment stabilization	0.16	0.21
US 93 Overcrossing at MRL	2006-2007	163+05	MRL Right of Way / MDT Right of Way	Restoration (re-establishment), Enhancement	Wildlife habitat, Fish/aquatic habitat, Sediment stabilization, Sediment removal, Food chain	0.55	0.34
Old US 93 Abutment Removal	2006-2007	163+05	MRL Right of Way	Restoration (re-establishment), Enhancement	Wildlife habitat, Fish/aquatic habitat, Water storage, Sediment removal	0.25	0.17
Finley Creek Tributary	2006-2007	172+45	MDT Right of Way / CSKT Tribal trust	Restoration (re-establishment), Enhancement	Wildlife habitat, Sediment stabilization	0.2	0.11
Project 3							
Jocko River Bridge	2004-2005	312+20	MDT Right of Way	Rehabilitation	Wildlife habitat, Flood attenuation, Sediment stabilization, Water storage	0.5	0.33
Project 4							
Bouchard Property	2005-2007	338+00	MDT (purchased)	Restoration (re-establishment), Enhancement, Creation	Wildlife habitat, Water storage	16.58	12.15
Jocko Spring Creek	2005-2007	381+00	MDT Right of Way / MRL Right of Way	Enhancement	Wildlife habitat, Fish/aquatic habitat, Food chain, Sediment removal	2.14	2.26
Project 5							
Pistol Creek DROPPED	2006	501+00	MDT Right of Way / conservation easement with landowner	Restoration (rehabilitation)	Wildlife habitat, Sediment stabilization/removal	1.15	0.16

Table 3. Summary of onsite wetland mitigation sites in the US 93 Evaro to Polson reconstruction project corridor and estimated migration credits based on the conceptual and final design (continued).

						Estimated Corps Credits (acres)	
Project 6							
Mission Creek	2005-2006	528+62	MDT Right of Way	Restoration (re-establishment), Enhancement	Threatened & Endangered species, Wildlife habitat, Flood attenuation, Shoreline/sediment stabilization, Groundwater recharge	0.22	0.22
Peterson Parcel	2005-2006	577+20	MDT (purchased)	Restoration (rehabilitation), Creation	Wildlife habitat, Water storage, Flood attenuation, Sediment stabilization	7.17	2.39
Project 7							
Mud Creek	2006-2007	808+30	MDT Right of Way	Restoration (rehabilitation), Enhancement	Wildlife habitat, Fish/aquatic habitat, Flood attenuation, Sediment removal, Food chain, Shoreline/sediment stabilization, Water storage	1.49	6.81
Total						29.26	24.99

ESA Compliance

The USFWS issued a Biological Opinion for the US 93 Evaro to Polson project on October 19, 2001 (M.17 FHWA – Evaro –Polson [Hwy 93]). Since that time, proposed critical habitat for bull trout has been identified in the project corridor. Potential impacts on critical habitat were assessed in a recent addendum to the Biological Assessment. The USFWS has issued a Conference Opinion (an addendum to the Biological Opinion containing the USFWS response on the addendum to the BA) on proposed critical habitat in the project corridor and concurred with the findings in the Addendum. A copy of the Conference Opinion has been provided to your office. In September 2004 the USFWS announced designation of critical habitat for bull trout in the Columbia and Klamath River basins, but the designation did not include any water bodies in Montana. As a result there is not proposed or designated Critical Habitat for bull trout in the project corridor.

List of Documents Previously Provided to the Corps Office

The following documents have previously been provided to your office under separate cover and during project wetland mitigation meetings attended by Todd Tillinger:

- *US Highway 93 Evaro to Polson, Missoula and Lake Counties, Montana, Final Environmental Impact Statement and Section 4(f) Evaluation, FHWA-MDT Project F5-1(9)6.* Montana Department of Transportation and Federal Highway Administration. FHWA-MT-EIS-95-01-F. 1996.
- *Memorandum of Agreement: US 93 Evaro to Polson.* Montana Department of Transportation, Federal Highway Administration, and the Confederated Salish and Kootenai Tribes. December 20, 2000.
- *Reevaluation of the US Highway 93 – Evaro to Polson-Missoula and Lake Counties: Final Environmental Impact Statement and Final Section 4(f) Evaluation.* Prepared for Montana Department of Transportation and Federal Highway Administration. Prepared by Skillings-Connolly, Inc, Lacey, Washington. 2001.
- *Draft memorandum on US 93 wetland mitigation crediting.* Herrera Environmental Consultants, Seattle, Washington. December 2, 2002.
- *Biological Assessment – US Highway 93 Reconstruction, Evaro to Polson. Prepared for Montana Department of Transportation and Federal Highway Administration.* Prepared by Herrera Environmental Consultants, Seattle, Washington. May 2001.
- *Supplement to the Biological Assessment – US Highway 93 Reconstruction, Evaro to Polson.* Prepared for Montana Department of

Transportation and Federal Highway Administration. Prepared by Herrera Environmental Consultants, Seattle, Washington. August 2001.

- *Biological Opinion – US Highway 93 Reconstruction, Evaro to Polson.* U.S. Fish and Wildlife Service, Montana Field Office, Helena, Montana. October 19, 2001.
- *US Highway 93 Evaro to Polson, Compensatory Wetland Mitigation Crediting.* U.S. Army Corps of Engineers. Corps File Number 2001-90-416, addressed to Tom Parker, Herrera Environmental Consultants, Inc., from Todd Tillinger, U.S. Army Corps of Engineers, Helena, Montana. December 18, 2002.
- Electronic deliverable. *Draft US 93 Evaro to Polson Wetland Mitigation Monitoring Plan.* Prepared by Herrera Environmental Consultants, Seattle, Washington. October 2003.
- Electronic deliverable. *US 93 Special Provisions Wetland Mitigation.* Draft 9/10/03. Prepared by Carter Burgess, Salt Lake City Utah and circulated by Tom Parker, Herrera Environmental Consultants, Seattle, Washington.
- *Wetland Mitigation Plan: US 93 Evaro to Polson.* Draft. Prepared by Herrera Environmental Consultants, Seattle, Washington. November 2003.
- *Conference Opinion – US Highway 93 Reconstruction, Evaro to Polson.* U.S. Fish and Wildlife Service, Montana Field Office, Helena, Montana. March 3, 2004.
- *Supplemental 404 (b)(1) Showing for the US 93 Evaro to Polson Reconstruction Project.* Prepared by Herrera Environmental Consultants, Seattle, Washington. Included with the application for Project 3 submitted on April 28, 2004.
- *CSKT Finley Creek Property and Frog Creek Meadow: US 93 Evaro to Polson-Offsite Wetland Mitigation Plan.* Prepared by Herrera Environmental Consultants, Seattle, Washington. Prepared for Montana Department of Transportation. Helena, Montana. April 2, 2004.
- *Onsite Wetland Mitigation Plan: US 93 Evaro to Polson.* Prepared by Herrera Environmental Consultants, Seattle, Washington. Prepared for Montana Department of Transportation Helena, Montana. July 2004.

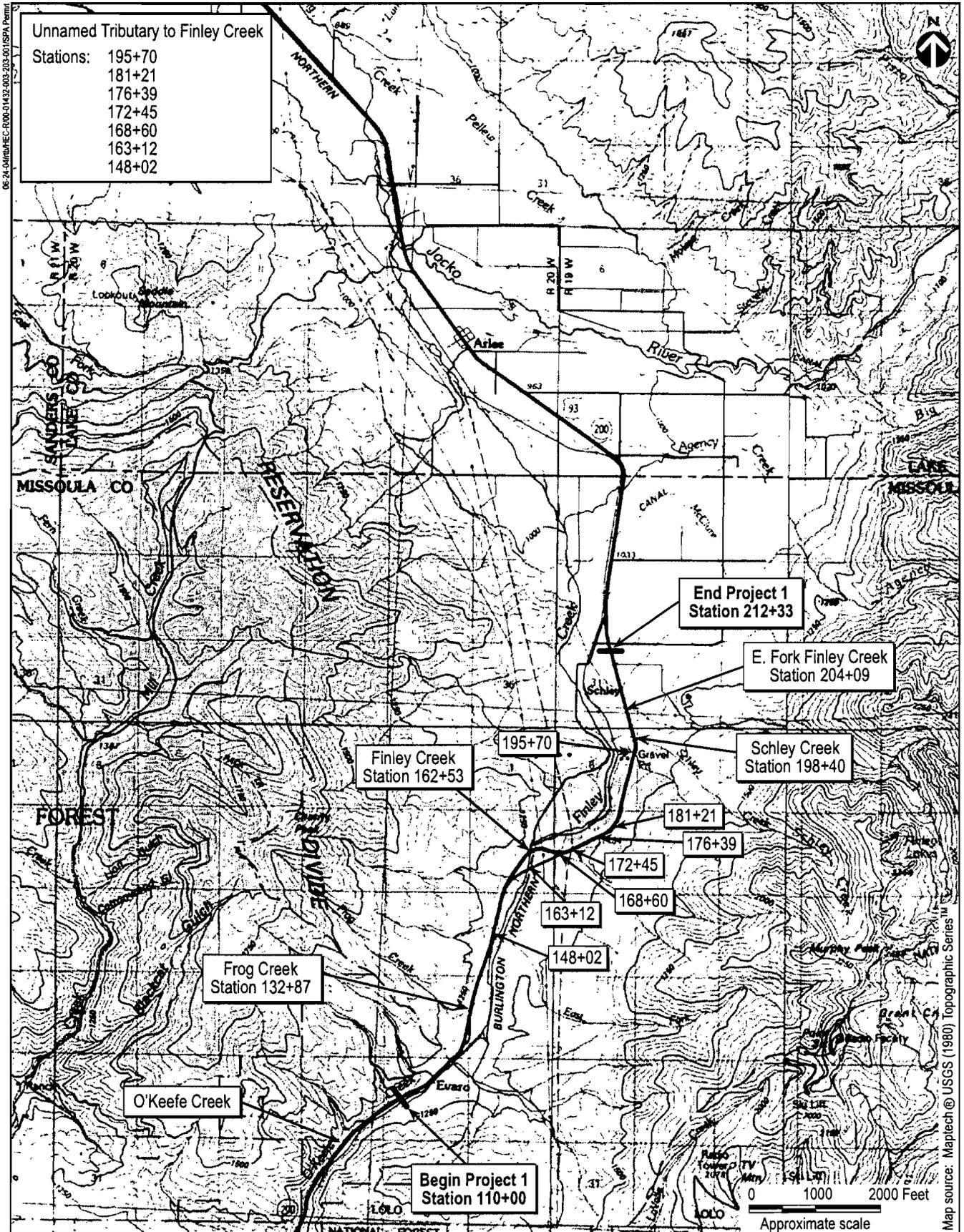


Figure 1. Quadrangle map with project limits and streams for US Highway 93 Project 1-NH 5-1(30)7.

Federal Aid project number NH 5-1(30) 7, Project 1 – Evaro to McClure Road

Application Revised 01/28/02
 Form can be downloaded from:
www.dnrc.state.mt.us/permit.htm

AGENCY USE ONLY	Application # _____	Date Received _____
Date Accepted _____	Date Forwarded _____	

JOINT APPLICATION FOR PROPOSED WORK IN MONTANA'S STREAMS, WETLANDS, FLOODPLAINS AND OTHER WATER BODIES

MASTER FILE COPY

To reduce paperwork, the agencies listed below have created this joint application form. This is **NOT** a joint permit. In the box below, **check all permits** that apply to your proposed work. After you complete the form, make a copy for each permit checked and sign each copy. **Send one copy with original signatures** to each agency responsible for each permit you have checked. Refer to the "Information for Applicant" sheet on the back of this form or the "Guide to Stream Permitting in Montana," available from participating agencies, for more information.

<u>PERMIT</u>	<u>AGENCY</u>	<u>FEE</u>
<input type="checkbox"/> Natural Streambed & Land Preservation Act (310)	Local conservation district	No Fee
<input checked="" type="checkbox"/> Stream Protection Act (SPA124) (for government agencies or government contractors only)	MT Department of Fish, Wildlife & Parks (DFWP)	No Fee
<input checked="" type="checkbox"/> Floodplain Permit	County Floodplain Administrator	Varies (\$25-\$400)
<input checked="" type="checkbox"/> Section 404/Section 10 Permits	U.S. Army Corps of Engineers (COE)	Varies (\$0-\$100)
<input type="checkbox"/> 318 Authorization	MT Department of Environmental Quality (DEQ)	\$150
<input type="checkbox"/> Navigable Rivers Land Use License/Easement	MT Department of Natural Resources & Conservation (DNRC)	License \$25-- Easement \$50

NOTE: Other laws may apply. It is your responsibility to obtain all necessary permits before beginning work. Incomplete applications will be rejected.

1. NAME OF **LANDOWNER** Montana Department of Transportation
 Address 2701 Prospect Avenue, P.O. Box 201002 Day Phone (406) 444-7228
 City/State/Zip Helena, Montana 59620-1001 Evening Phone (406) 444-7228
 Contact Susan Kilcrease (406) 523-5842 or Tom Hansen (406) 444-0456

2. NAME OF **APPLICANT** (if different from landowner) _____
 Applicant is: (check one) Landowner Contractor Other (explain) _____
 Government Agency Landowner's Agent (Title) _____
 Address _____ Day Phone _____
 City/State/Zip _____ Evening Phone _____
 Has the landowner consented to this project? Yes No

3. ATTACH A **MAP**, including **DIRECTIONS**.

Project 1 of the US Highway 93 North project begins approximately 19 miles north of Missoula, Montana in the town of Evaro. The project will occur in Missoula County and on the Flathead Indian Reservation. The segment begins at approximately milepost 6.4 and extends to approximately milepost 12.9 at McClure Road (see cover sheet of plan set for location map).

4. NAME OF **STREAM** OR **WATER BODY** at site location O'Keefe Creek, Frog Creek, Finley Creek, Schley Creek, and East Fork Finley Creek. See Table 1 for complete list. Nearest town Evaro Location See Table 1. County Missoula.

<i>This space is for SPA 124 permits only (government projects).</i> Project Name _____	
Control Number _____	Contract letting date _____
MEPA/NEPA Compliance <input type="checkbox"/> Yes <input type="checkbox"/> No	

5. **TYPE OF PROJECT** (check all that apply)
- | | | |
|--|--|--|
| <input checked="" type="checkbox"/> Stream Crossing (bridges, culverts, fords) | <input checked="" type="checkbox"/> Fish Habitat/Pond | <input type="checkbox"/> Mining |
| <input checked="" type="checkbox"/> Bridge/Culvert Removal | <input type="checkbox"/> Recreation (docks, marinas, etc.) | <input type="checkbox"/> Dredging |
| <input checked="" type="checkbox"/> Road Construction/Maintenance | <input type="checkbox"/> New Residential Structure | <input type="checkbox"/> Core Drill |
| <input checked="" type="checkbox"/> Bank Stabilization | <input type="checkbox"/> Manufactured Home | <input checked="" type="checkbox"/> Placement of Fill |
| <input type="checkbox"/> Flood Protection | <input type="checkbox"/> Commercial Structure | <input type="checkbox"/> Water Well |
| <input checked="" type="checkbox"/> Channel Alteration | <input type="checkbox"/> Improvement to Existing Structure | <input checked="" type="checkbox"/> Wetland Alteration |
| <input checked="" type="checkbox"/> Irrigation Structure | <input type="checkbox"/> Utilities | <input checked="" type="checkbox"/> On-site wetland mitigation |

6. WHAT IS THE **PURPOSE** of the proposed project?

The purpose of the proposed project is to improve approximately 66 km (41 miles) of U.S. Highway 93 from Evaro, Montana to Montana Highway 35 in Polson, Montana, excluding an 18.5-km (11.5-mile) segment in the Ninepipe area (north of St. Ignatius through Ronan). The proposed project will improve safety, traffic flow, access, and secondary features of the roadway and will provide for wildlife crossing structures. The U.S. Highway 93 corridor is important for local, regional, and national transportation. The existing roadway from Evaro to Polson has features that do not meet current safety and design guidelines, the level of service is poor, and the per mile accident rate is substantially higher than the statewide average for similar roadways.

This project would replace 12 culverts in perennial and intermittent drainages and one culvert in an irrigation canal with new culverts; would remove two abandoned culverts; and would replace one additional culvert in Finley Creek with a bridge. Approximately 80 meters (260 feet) of the Frog Creek stream channel would be restored. Approximately 240 meters (790 feet) of the Finley Creek stream channel would be restored at two sites within the corridor. Approximately 120 meters (390 feet) of the Finley Creek tributary (wildlife crossing 4) would be realigned and restored.

7. IS APPLICATION for an **annual maintenance permit**? Yes No
If yes, an **annual plan of operation** must be attached to this application.

8. PROPOSED **CONSTRUCTION DATE**: Start **Fall 2006** Finish **Fall 2008**, final stabilization completed by **Fall 2009**
Is any portion of the work **already completed**? Yes No If yes, describe the completed work.

9. IN SECTIONS 9(a) through 9(e), DESCRIBE IN DETAIL the **work** you plan to do. Attach additional sheets if necessary.

Attach a plan or drawing of the proposed project. Include (1) the dimensions of the project; (2) dimensions and location of fill or excavation sites; (3) location of storage or stockpile materials; (3) location of existing or proposed structures, such as buildings, utilities, roads, or bridges; (4) drainage facilities; (5) a north arrow Floodplain permit applicants are encouraged to inquire locally since additional information is required.

The information contained in this permit application proposes one approach to construction sequencing. If the contractor chooses to pursue an alternative option, they will be required to seek an amendment to this permit.

a. **Dimensions** of the project. Describe the impacted area. How many linear feet of bank will be impacted? How far will the proposed project extend into and away from the water body?

Impacts on stream channels and drainages resulting from project implementation and from stream restoration at mitigation sites are summarized in Table 1. Temporary impacts on streams would result from the placement of diversion dams to reroute stream flows during culvert replacements. These impacts are also described in Table 1. One of the crossings listed in Table 1 is a Flathead Agency Irrigation Division (FAID) operated irrigation canal.

Based on recent legislation (Headwaters Inc. v. Talent Irrigation District) this system may be regulated by the Corps as a water of the United States. For the purposes of this application, primary canals that divert flows from waters of the US or discharge to waters of the US are included in the summary of impacts in Table 1. Secondary (or lateral) canals are canals that divert flows from the primary canals to irrigated lands. There are no secondary canals in this project.

A summary of culverts to be removed and replaced in the corridor is provided on Sheets 23 & 24. Generally, the culverts listed in this summary are maintaining hydrologic connections between wetlands, and the impacts associated with these replacements are included in Table 2. Cross-sectional diagrams for culvert installations at streams and drainages are shown on Sheets 72 through 79. Bridge layouts for the MRL overcrossing mitigation site are included on Sheets B2 to B4.

b. How much **vegetation** and what type of vegetation will be removed or covered with fill material? How will the disturbed area be reclaimed?

All streams and drainages in the project corridor have associated wetlands. Therefore, impacts on vegetation associated with stream channels and drainages are reflected in the summary of wetland impacts in Table 2. Additional information on vegetation disturbance associated with Frog Creek, Finley Creek, and Finley Creek tributary is provided toward the end of this application in the discussion of onsite mitigation.

After construction, exposed soils will be seeded and erosion-stabilizing materials may be used on stream bank edges. At onsite mitigation sites in the corridor [Frog Creek - station 132+87.6; MRL Overcrossing (Finley Creek) - station 163+05; Abutment Removal (Finley Creek) downstream of station 163+05; and Wildlife Crossing 4 (Finley Creek tributary) - station 172+45], the disturbed areas will be revegetated with herbaceous, shrub, and tree species (Sheets W-1 to W-6).

Table 1. Summary of existing and proposed culverts or bridges for stream and drainage crossings in Project 1 of the US 93 Evaro to Polson corridor.

Station	Resource Information	Location	Existing Culvert ¹	Proposed Culvert/ ¹ Bridge	Linear Feet of Bank Disturbance, Amount of Fill Material to be Placed
Driveway accessing US 93 at 111+44 LS	O'Keefe Creek (A0), perennial system	T15N, R20W, S26	910-mm (3-foot) RCP (approach pipe)	1,050-mm (3.5-foot) RCP or CMP	The existing 910-mm (3-foot) culvert measuring 13.4 meters (44 feet) in length underneath a driveway accessing US 93 would be replaced with a longer culvert measuring 21 meters (69 feet) in length (Sheet 25 and 404-1). Approximately 10 cubic meters (13 cubic yards) of materials would be subexcavated for the new culvert. Some bedding material ² may be placed to create a suitable foundation for the new culvert. The approximate area of permanent impact within the stream channel would be (0.008 hectares) 0.02 acres.
132+87	Frog Creek (A3), perennial system Wildlife Crossing # 1	T15N, R20W, S24	132+39 1,100- X 700-mm (3.5- X 2.5-foot) RCPA 132+73 - driveway accessing US 93 800-mm (2.5-foot) RCP	2,100- X 1,500-mm (7- X 5-foot) RBC or 3,000- X 2,150-mm (9.8- X 7.0-foot) Steel HE skewed 35° Left	The existing 19-meter (62-foot) RCPA culvert underneath US 93 would shifted approximately 48 meters (160 feet) north and would be replaced with a 28.8-meter (94.5-foot) wildlife crossing structure #1 (Sheets 404-4 and 72). A new, approximately 92-meter (300-foot) stream channel and culvert crossing would be created in adjacent uplands and the old, approximately 64-meter (210-foot) channel would be abandoned (Sheet 39). Approximately 29.5 cubic meters (39 cubic yards) of fill material ³ would be placed inside the culvert and 77 cubic meters (100 cubic yards) of fill material ³ would be placed outside the culvert for the stream. In addition, approximately 3.4 cubic meters (4.5 cubic yards) of concrete would be placed for culvert cutoff walls. Approximately 0.03 hectares (0.07 acres) of stream channel would be disturbed for culvert placement and stream restoration. To implement mitigation at this location, a temporary diversion dam would be placed in the stream channel upstream of the project site to divert flows around the work area (Sheet 72). The diversion dam would place approximately 27 cubic meters (35 cubic yards) of natural materials below the OHWM of the stream, temporarily filling a 25-square-meter- (270-square-foot-) area (Sheet 46). The abandoned channel on the west side of US 93 would be regraded to maintain wetland characteristics and planted with site appropriate species (Sheet W-2). On the east side of US 93, the abandoned channel (approximately 45 meters [148 feet]) would be regraded and a portion of it would be seeded; the remainder would become highway right-of-way (Sheet 162).
148+02	Unnamed drainage (A5) intermittent system, Wildlife Crossing # 2	T15N, R20W, S13	914-mm (3-foot) RCP at station 148+33	6,700- X 3,650-mm (22- X 12-foot) RCB or 7,750- X 5,100 mm (25.5- X 17-foot) Steel HE skewed 35° right	An existing 914-mm (3-foot) culvert measuring 22 meters (73 feet) would be replaced with a 6,700- x 3,650-mm (22- x 12-foot) RCB measuring 25.5 meters (85 feet) (Sheet 404-7). A new drainage channel would be excavated to the south in an adjacent upland and flows would be redirected to this crossing. Impacts at the abandoned drainage are included in the discussion of wetland impacts in section 10a of this application. Temporary impacts on the stream channel required for construction include a temporary culvert extension at station 148+40 (Sheet 73). The temporary culvert extension would be a 900-mm (3-foot) culvert measuring approximately 21 meters (70 feet) in length. The existing culvert and culvert extension would be removed after flow is diverted into the new crossing.
162+53	Finley Creek tributary (A8), perennial system	T15N, R20W, S12	1,829-mm (6-foot) CSP	1,800-mm (6-foot) CSP	The existing culvert would be lengthened by 28.5 meters (93.5 feet) (Sheets 404-9 and 23). Approximately 15 cubic meters (20 cubic yards) of materials would be excavated to place the extended culvert. Approximately (75 cubic meters) 98 cubic yards of bedding material would be placed to create a suitable foundation for the new structure and 3.3 cubic meters (4.3 cubic yards) of concrete would be placed for culvert cutoff walls.
163+12	Finley Creek (A8), perennial system, Wildlife Crossing # 3	T15N, R20W, S12	1,829-mm (6-foot) CSP	104-meter (340-foot) bridge	The existing 50.6-meter (166-foot) culvert would be replaced by a 104-meter (340-foot) bridge (Sheets 23, B2 and B3). Approximately 140 meters (460 feet) of the Finley Creek stream channel would be recreated under the bridge adjacent to the former stream channel (Sheets 40, W-3 and W-4). To implement mitigation at this location, the existing culvert and roadway fill will be removed and a new stream channel and associated wetland will be created. A temporary diversion dam

Table 1. Summary of existing and proposed culverts or bridges for stream and drainage crossings in Project 1 of the US 93 Evaro to Polson corridor (continued).

Station	Resource Information	Location	Existing Culvert ¹	Proposed Culvert ¹ / Bridge	Linear Feet of Bank Disturbance, Amount of Fill Material to be Placed
					would be placed in the stream channel upstream of the project site to divert flows around the work area (Sheets 40 and 46). The diversion dam would place 27 cubic meters (35 cubic yards) of natural materials below the OHWM of the stream, temporarily filling a 25-square-meter- (270-square-foot-) area (Sheet 46). In addition, the length of the abandoned stream channel would be regraded to maintain wetland characteristics and planted with site appropriate species (Sheets W-3 and W-4). Approximately 352 cubic meters (460 cubic yards) of materials would be excavated from the area originally covered by fill and from adjacent wetlands to create the new channel. The new channel would be lined with approximately 230 cubic meters (300 cubic yards) of streambed gravels and natural materials. Bank habitat log features will be placed to create in-stream habitat. Overhanging and toe log habitat features will also be used to create in-stream habitat (Sheets 29, 40 and 45).
Downstream of US 93 crossing of Finley Creek (340 meters left of Sta 165±)	Old US 93 Abutment Removal Mitigation Site, Finley Creek, perennial system	T15N, R20W, S12	65-meter (210 feet) in length	None	Mitigation at this site includes removing an existing 65-meter (210-foot) culvert and associated fill material to daylight the Finley Creek stream channel. A 100-meter (330-foot) channel would be recreated and instream habitat features added (Sheets 29, 41 and 46) and adjacent areas planted (Sheet W-5). A temporary diversion dam would be placed in the stream channel upstream of the project site to divert flows around the work area (Sheets 41 and 46). The diversion dam would place 27 cubic meters (35 cubic yards) of natural materials below the OHWM of the stream, temporarily filling a 25-square-meter- (270-square-foot-) area. Bank habitat log features will be placed to create in-stream habitat. Overhanging and toe log habitat features will also be used to create in-stream habitat (Sheets 29, 41 and 45).
168+62	Finley Creek tributary (A9), perennial system, Wildlife Crossing # 4	T15N, R19W, S7	914-mm (3-foot) RCP	6,700- X 4,250-mm (22- X 14-foot) CBC or 7,950- X 5,550-mm (26- X 18.2-foot) Steel HE.	The existing 914-mm (3-foot) culvert measuring 50.9 meters (167 feet) would be replaced by a 6,700- X 4,250-mm (22- X 14-foot) CBC or 7,950- X 5,550-mm (26- X 18.2-foot) Steel HE, measuring approximately 32.5 meters (106 feet) in length culvert ⁴ (Sheet 74). Approximately 420 cubic meters (550 cubic yards) of native fill materials would be placed below the OHWM to replace excavated muck and approximately 63 cubic meters (83 cubic yards) of bedding materials ² would be placed to create a suitable foundation for the new culvert. Approximately 31.5 cubic meters (41 cubic yards) of streambed gravels ³ and river rock would be placed in the culvert and 27 cubic meters (35 cubic yards) would be placed outside the culvert to line the disturbed stream channel. Approximately 6 cubic meters (8 cubic yards) of concrete would be placed below the OHWM for the culvert cutoff walls. The area of permanent impact within the stream channel would be approximately 0.02 hectares (0.06 acres) for culvert placement and stream restoration features.
Driveway access to US 93 at 169+02	Finley Creek tributary (A9), Mitigation Site	T15N, R19W, S7	600-mm (2-foot) CMP approach pipe 46.9 meters left of centerline	None	To implement mitigation at this location, a temporary diversion dam would be placed in the stream channel upstream of the project site to divert flows around the work area (Sheets 42, 46, and 118). The diversion dam would place 27 cubic meters (35 cubic yards) of natural materials below the OHWM of the stream, temporarily filling a 11.6-square-meter- (150-square-foot-) area. The existing 600 mm (2-foot) by 25-meter (81-foot) long culvert and associated fill would be removed and approximately 120 meters (390 feet) of stream channel would be recreated. Bank habitat log features will be placed to create in-stream habitat (Sheets 29, 42 and 45). The area would be planted with site appropriate species (Sheet W-6).

Table 1. Summary of existing and proposed culverts or bridges for stream and drainage crossings in Project 1 of the US 93 Evaro to Polson corridor (continued).

Station	Resource Information	Location	Existing Culvert ¹	Proposed Culvert ¹ / Bridge	Linear Feet of Bank Disturbance, Amount of Fill Material to be Placed
172+45	Finley Creek tributary #2 (A10), perennial system, Wildlife Crossing # 5	T15N, R19W, S7	1,219- X 1,219-mm (4- x 4-foot) RBC	6,700- X 4,900-mm (22- x 16-foot) CBC or 7,950- X 5,550-mm (26- x 18.2-foot) Steel HE skewed 15° Left	The existing 1,219- X 1,219-mm (4- x 4-foot) culvert measuring 28.8 meters (94.5 feet) in length would be replaced by a 6,700- X 4,900-mm (22- x 16-foot) CBC or 7,950- X 5,550-mm (26- x 18.2-foot) Steel HE measuring 21.9 meters (72 feet) in length (Sheets 404-10, 24, and 75). Approximately 300 cubic yards of native fill material would be placed below the OHWM to replace excavated muck, and approximately 44 cubic meters (57 cubic yards) of bedding material ² would be placed to create a suitable foundation for the new structure. Approximately 38 cubic meters (50 cubic yards) of material would be excavated from below the OHWM to create step/pool structures in the stream channel (Sheets 75 and 88). Approximately 35 cubic meters (46 cubic yards) of fill material would be placed in the new culvert and 34 cubic meters (44 cubic yards) of fill material would be placed outside of the new culvert ³ below the OHWM to recreate the stream channel through the culvert. A temporary diversion dam would be placed in the stream channel upstream of US 93 to divert flows around the work area through a 900-mm (3-foot) flexible pipe (Sheets 46 and 75). The dam would place 27 cubic meters (35 cubic yards) of natural material and fill approximately 18.8 square meters (200 square feet). The area of permanent impact within the stream channel would be 0.08 hectares (0.02 acres).
176+39	Finley Creek tributary #3, (A12), intermittent system, Wildlife Crossing # 7	T15N, R19W, S7	610-mm (2-foot) RCP at station 176+28	6,700- X 3,650-mm (22- X 12-foot) RCB or 7,750- X 5,100-mm (25.4- X 16.7-foot) Steel HE	The existing 610-mm (2-foot) culvert measuring 38 meters (125 feet) would be replaced by a 6,700- X 3,650-mm (22- X 12-foot) RCB or 7,750- X 5,100-mm (25.4- X 16.7-foot) Steel H.E. measuring 24.3 meters (79 feet) in length ⁴ (Sheets 404-11 and 76). Approximately 455 cubic meters (596 cubic yards) of native fill materials would be placed below the OHWM to replace excavated muck. Approximately 48.5 cubic meters (63 cubic yards) of bedding material would be placed to create a suitable foundation for the new structure. Temporary impacts on the stream channel required for construction include a temporary culvert extension at station 176+30 (Sheet 76). The temporary culvert extension would be a 600-mm (2-foot) culvert measuring 4 meters (13 feet) in length. The existing culvert and culvert extension would be removed after flow is diverted into the new crossing.
181+21	Finley Creek tributary #4, (A14), intermittent system, Wildlife Crossing # 7B	T15N, R19W, S7	914-mm (3-foot) RCP	6,700- X 4,250-mm (22- X 14-foot) RCB or 7950 X 5550 mm (26.1- X 18.2-foot) Steel HE	The existing 914-mm (3-foot) culvert measuring 35 meters (115 feet) in length would be replaced by a 6,700- X 4,250-mm (22- X 14-foot) RCB measuring 25 meters (83 feet) in length ⁴ (Sheets 404-11 and 77). Approximately 344 cubic meters (450 cubic yards) of native fill materials would be placed below the OHWM to replace excavated muck. Approximately 50.4 cubic meters (66 cubic yards) of bedding material would be placed to create a suitable foundation for the new structure. Temporary impacts on the stream channel required for construction include placement of a diversion dam upstream of US 93 and diverting streamflow around the work site through a 600-mm (2-foot) flexible pipe (Sheets 46 and 77).
195+70	Finley Creek tributary (A18), intermittent system	T15N, R19W, S6	914-mm (3-foot) CMP and 1,219-mm (4-foot) RCP	1,219-mm (4-foot) RCP	At this location, the existing culvert consists of an older 914-mm (3-foot) CMP and a newer 1,219-mm (4-foot) RCP. The newer 1,219-mm (4-foot) RCP will remain and the older 914-mm (3-foot) CMP measuring 25.6 meters (84 feet) will be removed and replaced with a 1,219-mm (4-foot) RCP measuring 40 meters (131 feet) on the upstream side of the existing culvert (Sheets 404-13, 24, and 121). Impacts on the drainage are included in the discussion of wetland impacts in section 10a.

Table 1. Summary of existing and proposed culverts or bridges for stream and drainage crossings in Project 1 of the US 93 Evaro to Polson corridor (continued).

Station	Resource Information	Location	Existing Culvert ¹	Proposed Culvert ¹ / Bridge	Linear Feet of Bank Disturbance, Amount of Fill Material to be Placed
198+40	Schley Creek (A19), perennial system, Wildlife Crossing # 8	T15N, R19W, S6	1,524-mm (5- foot) RCP	6,700- X 4,250-mm (22- X 14- foot) RBC or 7,750- X 5,100-mm (25.4- X 16.7- foot) Steel HE skewed 15° right	The existing 1,524-mm (5- foot) culvert measuring 31.8 meters (104 feet) in length would be replaced by a 6,700- X 4,250-mm (22- X 14- foot) RBC or 7,750- X 5,100-mm (25.4- X 16.7- foot) Steel HE measuring 30 meters (98 feet) in length ⁴ (Sheets 404-14, 24 and 76). Approximately 230 cubic meters (300 cubic yards) of native fill materials would be placed below the OHWM to replace excavated muck and approximately 59.3 cubic meters (78 cubic yards) of bedding material ² would be placed to create a suitable foundation for the new structure. Approximately 5.1 cubic meters (6.7 cubic yards) of concrete would be placed for cutoff walls. Approximately 42 cubic meters (55 cubic yards) of material would be excavated from below the OHWM to create <u>step/pool structures</u> in the stream channel (Sheet 78 and 88). Approximately 52.5 cubic meters (69 cubic yards) of fill material would be placed in the culvert and 90 cubic meters (118 cubic yards) of fill material ⁴ would be placed outside the culvert to create instream habitat. A temporary diversion dam would be placed in the stream channel upstream of US 93 (Sheets 78 and 43) to divert flows around the work area through a 900-mm (3-foot) flexible pipe The dam would place 19 cubic meters (25 cubic yards) of natural material/ borrow in the channel, filling an 18.5-square-meter- (200-square-foot) area. The area of permanent impact within the stream channel for culvert placement and instream habitat features would be 0.016 hectares (0.04 acres).
199+74	Drainage associated with Schley Creek (A31)	T16N, R19W, S6	610-mm (2-foot) RCP	600-mm (2-foot) RCP, CSP, or CAP	The existing 610-mm (2-foot) RCP measuring 19.3 meters (63 feet) would be replaced by a 600-mm (2-foot) RCP, CSP, or CAP measuring 34.5 meters (102 feet) (Sheets 404-14, 24, and 122). Impacts at this site are described in section 10a.
Downstream of 198+40, approx. 100 m left (west) of main line roadway Sta. 198+80	Schley Creek, perennial system				To prevent non-native fish from moving upstream, a <u>fish barrier</u> will be installed at the existing irrigation diversion structure in Schley Creek downstream of US 93 (Sheets 43 and 44). The existing drop structure would be removed and a <u>new drop structure</u> would be installed. In addition, approximately 20 meters (65 feet) of stream channel would be regraded at a 1% slope to accommodate the additional drop. Instream work will occur outside the irrigation season (between October 1 and April 14). Flows would be diverted around the work site through a 900-mm (3-foot) flexible pipe (probably the same one used for the culvert replacement upstream, so that only one diversion dam is required).
204+09	East Fork Finley Creek (A20), perennial system, Wildlife Crossing # 9	T16N, R19W, S31	2,438- X 1,829-mm (8- X 6-foot) RCB at station 204+12	6,700- X 4,250-mm (22- X 14-foot) RCB or 7,750- X 5,100-mm (25.4- X 16.7- foot) Steel HE	The existing 2,438- X 1,829-mm (8- X 6-foot) culvert measuring 25.7 meters (84 feet) would be replaced by a 6,700- X 4,250-mm (22- X 14-foot) RCB or 7,750- X 5,100-mm (25.4- X 16.7- foot) Steel HE measuring 24.3 meters (80 feet) (Sheets 404-15, 24, and 79). Approximately 210 cubic meters (275 cubic yards) of native fill materials would be placed below the OHWM to replace excavated muck and approximately 48.5 cubic meters (63 cubic yards) of bedding material ² would be placed to create a suitable foundation for the new structure. Approximately 5.1 cubic meters (6.7 cubic yards) of concrete would be placed below the OHWM for cutoff walls. Approximately 42 cubic meters (55 cubic yards) of material would be excavated for construction of step/pool structures. Approximately 45 cubic meters (59 cubic yards) of fill material ³ would be placed in the culvert and 117.5 cubic meters (154 cubic yards) of fill material ³ would be placed outside the culvert (Sheet 45 and 79). A temporary diversion dam would be placed in the stream upstream of US 93 during culvert installation (Sheets 46 and 79) to divert flows around the work area through a 1500-mm (5-foot) flexible pipe The dam would require placement of 27 cubic meters (35 cubic yards) of natural material/ borrow, filling a 28-square-meter- (300-square-foot) area. The area of permanent

Table 1. Summary of existing and proposed culverts or bridges for stream and drainage crossings in Project 1 of the US 93 Evaro to Polson corridor (continued).

Station	Resource Information	Location	Existing Culvert ¹	Proposed Culvert ¹ / Bridge	Linear Feet of Bank Disturbance, Amount of Fill Material to be Placed
					impact within the stream channel for culvert installation and instream habitat features would be 0.03 acres.
207+36	S Canal This canal diverts from and returns flows to the Jocko River.	T16N, R19W, S31	1,829- X 1,524-mm (6- X 5-foot) RCB	1,800- X 1,500-mm (6- X 5-foot) RCB	The existing 1,829- X 1,524-mm (6- X 5-foot) culvert measuring 19.3 meters (63 feet) would be replaced with a 1,800- X 1,500-mm (6- X 5-foot) RCB measuring 28.5 meters (93.5 feet in length (Sheets 404-15,24, 47 and 123). Approximately 32 cubic meters (42 cubic yards) of bedding material would be placed below the OHWM to create a suitable foundation for the new structure. Approximately 2.2 cubic meters (2.9 cubic yards) of concrete would be placed below the OHWM for cutoff walls.

1. Culvert types: CMP – Corrugated metal pipe, CAP – Corrugated aluminum pipe, CSP – Corrugated steel pipe, RCP – Reinforced concrete pipe, RCPA – Reinforced concrete pipe arch, CSPA – Corrugated steel pipe arch, RCB – Reinforced concrete box, Steel HE – Steel horizontal ellipse.
2. Bedding material will be aggregate reasonably free of clay, silt, and other deleterious materials, and have the following gradation: 100% passing the 4" (100 mm) sieve; 25-60% passing the No.4 - 0.2 " (4.75 mm) sieve; 12% max passing the No.200 – 0.003" (0.075 mm) sieve.
3. Fill material placed in the culverts consists of natural fill material, streambed gravels, and river rock. Fill material placed outside the culverts consists of streambed gravels and river rock.
4. Many of the proposed culvert lengths are shorter because the new structures are concrete box culverts and most will function as wildlife crossing structures. These culverts are measured along the box length from opening to opening. The ends of these culverts include wing walls or head walls that flare out and extend beyond the length of the culvert. These walls however are not directly adjacent to the stream and therefore were not included in the linear feet of stream channel affected.

Table 2. Characteristics of and impact acreage for wetlands in Segment 1 of the US 93 Evaro to Polson corridor.

Wetland ID and Associated Waterbody	Station Location/Side of Roadway1	Township, Range, Section	Cowardin Class	Dominant Vegetation	MDT Rating	MDT Functional Points	Permanent Impact Acreage	Impact Type	Temporary Impact Type
A0, O'Keefe Creek	111+60 to 113+80 /LS	T 15N, R 20W, S 26	PSS and PEM	Shrub species	II	6.9	0.26	roadway fill, culvert replacement	
Evaro Wetland	Along Frontage Road that accesses US 93 at station 119+80	T 15N, R 20W, S 23	PEM	Sedges, grasses, camas, willow-herb, and buttercup	III	5.4	1.41	Fill from new frontage road	Temporary detour route
A3, Frog Creek	131+60 to 134+30 /BS	T 15N, R 20W, S 24	PSS (45%) PEM (5%)	Sedges, rushes, cattail, red-osier dogwood, thinleaf alder	II	7.7	0.30	roadway fill, wildlife crossing structure #1 installation, culvert replacement	
A4	143+00 to 145+20 /LS	T 15N, R 20W, S 13	PEM	Cattail	IV	1.8	0.41	roadway fill	
A5	148+00 to 148+60 /BS	T 15N, R 20W, S 13	PSS (20%) PEM (80%)	Primarily emergent species with some shrub species	III	4.1	0.14	roadway fill, culvert replacement, and wildlife crossing structure #2 installation	
A8, Finley Creek	162+40 to 163+20 /BS	T 15N, R 20W, S 12	PSS (60%) PEM (20%)	Bebb willow, drummonds willow, alder, beaked sedge, inflated sedge, reed canarygrass	II	9.2	0.81	roadway fill, culvert installation, and wildlife crossing structure installation, bridge replacement	
A9, Finley Creek Tributary	168+20 to 169+20 /BS	T 15N, R 19W, S 7	PSS (90%)	Alder, red-osier dogwood, sedges, large-leaved avens	II	7.6	0.74	roadway fill removal and wildlife crossing structure installation	Temporary detour route
A10	Drainage at 172+50 /BS Seep wetland at 171+10 to 172+30	T 15N, R 19W, S 7	Drainage is PSS (30%) Seep is PFO (60%) PSS (40%)	Black cottonwood (drainage), Conifers with shrub species in the understory of the seep	III (drain-age) II (seep)	5.7	0.19	roadway fill, culvert replacement, wildlife crossing structure #5 installation	Temporary detour route
A12	175+30 to 176+40 /LS	T 15N, R 19W, S 7	PFO (20%) PSS (80%)	Engelmann spruce, black cottonwood	II	5.7	0.13	roadway fill, culvert replacement, and wildlife crossing structure #7 installation	
A13	177+00 to 178+00 /LS	T 15N, R 19W, S 7	PSS	Engelmann spruce, black cottonwood	III	4	0.41	roadway fill	Riprap apron
A14	181+20 to 181+80 /BS	T 15N, R 19W, S 7	PSS	Engelmann spruce, black cottonwood	III	3.5	0.19	roadway fill, culvert replacement, and wildlife crossing structure #7B installation	Temporary detour route
A16	187+40 to 189+00 /RS	T 15N, R 19W, S 6	PEM	Cattail	IV	1.8	0.17	roadway fill	

Table 2. Characteristics of and impact acreage for wetlands in Project 1 of the US 93 Evaro to Polson corridor (continued).

Wetland ID and Associated Waterbody	Station Location/Side of Roadway ¹	Township, Range, Section	Cowardin Class	Dominant Vegetation	MDT Rating	MDT Functional Points	Permanent Impact Acreage	Impact Type	Temporary Impact Type
A18	196+00 to 196+40 /BS	T 15N, R 19W, S 6	PFO (95%)	Black cottonwood	II	7.3	0.22	roadway fill and culvert replacement	Riprap apron
A19, Schley Creek	198+00 to 198+80 /RS	T 15N, R 19W, S 6	PFO (40%) PSS (60%)	Alder, black cottonwood	I	10.2	0.07	roadway fill and wildlife crossing structure #9 installation	
A20, East Fork Finley Creek	203+70 to 204+60 /BS	T 16N, R 19W, S 31	PSS (5%)	Black cottonwood, Douglas-fir	II	7	0.48	roadway fill and wildlife crossing structure installation	
A21	207+00 to 208+00 /LS	T 16N, R 19W, S 31	PSS (55%) PEM (35%)	Mixture of herbaceous, shrub, and tree dominated communities	III	5.4	0.26	roadway fill and culvert replacement S-canal	
A24	205+60 to 207+60 /RS	T 16N, R 19W, S 31	PSS (15%) PEM (80%)	Cattail	III	4.5	0.45	roadway fill and culvert replacement S-canal	
A27, Frog Creek Meadow	137+60 to 141+20 /RS	T 15N, R 20W, S 12	PEM	Herbaceous species, including a camas population	III	3.7	0.13	roadway fill and culvert replacement	Riprap apron
A28	156+00 to 156+50 /RS	T 15N, R 20W, S 12	PSS (90%) PEM (10%)	Primarily shrub species	III	5	0.01	roadway fill and culvert replacement	Riprap apron
A29	175+00 to 176+50 /RS	T 15N, R 19W, S 7	PFO (20%) PSS (80%)	Engelmann spruce	II	5.7	0.22	roadway fill and culvert replacement	
A30	183+60 to 184+40 /RS	T 15N, R 19W, S 6			IV	1.8	0.02	roadway fill	
A31	199+60 /BS	T 16N, R 19W, S 6	PSS (90%)	Primarily shrub species	III	4.7	0.03	roadway fill	
						Total acres	7.05		

¹ Facing north, RS = right side, LS = left side, BS = both sides.

c. What materials will be used, and how much (cubic yards, linear feet, etc., of each)?

Roadway fill material will consist of locally excavated and processed materials with similar physical and chemical characteristics to materials that occur in the project corridor. In addition, where suitable materials are available, fill material will include embankment materials generated on site or nearby through excavation of cut areas.

This project contains numerous areas with soft mucky soils. To install wildlife crossing structures within these sites, the soft mucky soils must be removed and native fill material will be placed to replace the sub and muck excavation. Bedding material will be placed to create a suitable foundation for the structures. The bedding material will consist of aggregate reasonably free of clay, silt, and other deleterious materials. Gradations of materials to be used are provided in footnote 2 of Table 1, Sheets 46, 87, and 88. Approximate cubic yards of fill placement for streams and drainages are summarized in Table 1. Culvert types to be used and the approximate linear feet of disturbance for culvert placement are also described in Table 1. The approximate quantities of materials (bedding materials, cut off wall concrete, and stream bed gravel, etc.) for the two options for all the wildlife crossing structures are found on sheet 24. The quantities for the reinforced concrete box option are given in Table 1.

d. What equipment will be used for the work?

The following equipment will likely be used for construction of the roadway including bridge installation and culvert replacement: Dozers, Track hoe, Crane, Loader, Scrapers, Blade, and Dump Trucks. Installation of the wildlife fencing may require the use of an excavator or backhoe. Hand tools will be used in many instances to complete revegetation activities.

Dozers and Excavators will be used for the restoration of wetlands and stream channels to remove temporary structures and to implement stream channel restoration. In addition, hand tools will be used in many instances to complete revegetation activities.

e. What steps will be taken during and after construction to minimize: (use additional sheets if necessary)

1. Erosion and sedimentation?

Best Management Practices included in the stormwater pollution prevention plan (SWPPP) will be implemented to minimize erosion and sedimentation during construction. After construction, exposed soils will be revegetated to prevent erosion and sedimentation to streams and wetlands. In addition, bioswales and filter strips will be implemented throughout the project corridor to provide permanent erosion and sedimentation control by intercepting stormwater and provide some detainment and treatment.

Bioswales or grassed channels will be used where stormwater runoff is concentrated. The MDT standard roadside ditch section provides a good place for bioswales with the wide, relatively flat bottom. Non-standard ditch sections can also be used as long as the design criteria are met for flow through the channel. Flow will concentrate in the roadside ditches, and run toward a stream or wetland. The bioswales will be placed in the roadside ditches leading up to the water resource to be protected.

Vegetated filter strips will provide water quality treatment for storm water runoff that sheet flows off of the highway near sensitive areas. These are used mostly in fill sections where there is no roadside ditch to collect runoff. They are also used in areas where there is a roadside ditch, but insufficient length or area for a bioswale.

2. Stream channel alterations?

Prior to construction, areas to be preserved will be fenced. All construction activities within and adjacent to stream channels will adhere to the best management practices outlined in the MDT standard specifications, special provisions, and described in the SWPPP.

The roadway fill slopes have been steepened to avoid streams and to shorten culvert lengths.

These locations include:

- Frog Creek (Wetland A3),
- Tributary to Finley Creek (A9) (Wildlife Crossing 4),
- Tributary to Finley Creek (A10) (Wildlife Crossing 5),
- Tributary to Finley Creek (A12) (Wildlife Crossing 7),
- Tributary to Finley Creek (A14) (Wildlife Crossing 7B),
- Schley Creek (A19), and
- East Fork Finley Creek (A20).

At the five following stream crossings the streambed gravels and river rock will be placed to recreate the stream channel through the culvert. Streambed gravels and river rock will also be placed outside the culvert as part of the stream restoration process:

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Frog Creek (A3),
Tributary to Finley Creek (A10) (Wildlife Crossing 5),
East Fork Finley Creek (A20),

Tributary to Finley Creek (A9) (Wildlife Crossing 4),
Schley Creek (A19), and

Finley Creek (A8) – Stream channel alterations will occur during construction at Finley Creek with the removal of an existing culvert (Sheet 404-9) and installation of a new bridge (Sheets B2 to B3). Alterations of the stream channel will be minimized during construction by constructing the new bridge adjacent to the existing alignment. Traffic will then be shifted onto the new bridge while the existing roadway fill and culvert are removed. This method eliminates the need for a detour route, which would have required a temporary work bridge adjacent to the existing one.

3. Effects on streamflow or water quality caused by materials used or removal of ground cover?

All construction activities within and adjacent to stream channels and drainages will adhere to the best management practices outlined in the MDT standard specifications. Streamflow will be maintained at all sites during construction, although flows may be diverted around the work site through a pipe. In addition, a SWPPP has been prepared for this project outlining appropriate measures to be implemented during construction to reduce soil erosion and reduce site sediment loss. Prior to construction, areas to be preserved will be fenced.

Where in-stream work is required, diversion dams will be placed and stream flows will be diverted around the work site. The flow reintroduction will be staged to minimize erosion of newly stabilized areas.

4. Effects on fish and aquatic habitat?

Construction of this project will result in short-term increases in turbidity in project area streams, primarily during removal of the culverts and as flows are introduced into the new stream channels. Flow reintroduction will be staged to minimize erosion of newly stabilized areas. Increases in turbidity may displace aquatic species from the immediate project area. Overall, the project would not cause adverse long-term effects on fish or aquatic habitat.

To minimize impacts on fish and aquatic habitat, equipment will be operated from the banks versus the channel where feasible. Where in-stream work is required and fish may be present (Finley Creek, Schley Creek, and East Fork Finley Creek), streamflow will be piped around the work site during installation of the new culverts and removal of the existing culvert and roadway fill. The flow diversion will be staged in order to minimize sediment transport and allow fish to move out of the dewatered channel, by turning half of the flow the first day, half of the remaining flow the second day and the remainder the third day.

After construction is completed, stream channels will be recreated within the wildlife crossing structures and at the onsite mitigation sites to provide instream habitat features (Sheets 39 to 46, 72 to 79, 87, and 88).

5. Risks of flooding or erosion problems upstream and downstream?

No risks of flooding are anticipated. Implementation of the SWPPP would minimize the risk of erosion and resulting sedimentation.

Stream crossings will be designed to replicate natural channels to minimize the risk of flooding after construction. Stream channels were designed using fish passage information on velocity and minimum depth as well as high (2 -year) flow and low (95% exceedance) flow (Sheet 34). Within wildlife crossing structures, a shallow slope will be constructed between the edge of the channel and the wildlife path within the structures to accommodate discharges greater than the 2-year storm and will likely contain major floods including the 50- and 100-year events. Step/pool (weir) systems will be used at Finley Creek Tributary 2 (A10), Schley Creek (A19), and East Fork Finley Creek (A20) to maintain low velocities and achieve steep gradients to minimize the flood risk and prevent bedload accumulations within the wildlife crossing structures (Sheets 75, 78, and 79, respectively).

10. COMPLETE 10(a) through 10(c) ONLY if you are applying for a FLOODPLAIN OR SECTION 404/SECTION 10 PERMIT.

- a. Will the project involve placement of fill material in a wetland? If yes, describe. How much wetland area will be filled? Include a delineation of the wetland boundary and a calculation of the impacted acreage.

Permanent Impacts

Yes, the project involves placement of fill in several wetlands. A total of 7.05 acres of wetlands will be permanently filled by the project. All wetland impacts are summarized in Table 2. Table 2 summarizes the wetlands in the project area including wetland ID, location, associated waterbody, Cowardin classification, dominant vegetation, MDT rating, MDT functional points, permanent and type of temporary impact. Wetland areas, the impact locations (indicated by a cross-hatch pattern), and the amount of impact in acres are shown on the attached plan sheets (Sheets 404-1 to 404-15). Please note that these sheets also depict the locations and impact area associated with wetlands that are not under the jurisdiction of the Corps as

confirmed by Todd Tillinger via an October 20, 2003 email. These wetlands are regulated by Confederated Salish and Kootenai Tribes. These wetlands are clearly labeled on the plan sheets and are not included in Table 2. Riparian areas shown on Sheets 404-1 to 404-15 represent non-wetland areas adjacent to wetland or stream features that provide riparian functions. These areas do not meet the criteria of a jurisdictional wetland according to the 1987 manual; however, these sites are regulated by the Confederated Salish and Kootenai Tribes and are therefore shown on these plan sheets.

Minimization of Permanent Impacts

This segment of the US 93 corridor begins as a four-lane roadway in Evaro and transitions to a three-lane configuration (two lanes and an alternating passing lane). Long-term effects on aquatic habitats were minimized through roadway designs, including changes in the horizontal alignment to minimize impacts on wetlands. The bridge over Finley Creek (A8) (station 162+40) was lengthened to span the entire wetland area east of the railroad tracks. In addition, fill slopes at wetland A27, station 137+00 to 148+00, were steepened from 6:1, typically required by MDT, to 4:1. This change avoided 1.34 acres of impact at this location. Where guardrail is proposed, fill slopes were steepened to avoid streams and wetland areas (guardrail locations are shown on Sheets 404-1 to 404-15).

Compared to the initial estimate of impacts completed at the time of the 2001 Reevaluation, which did not include the Evaro Wetland, 1.60 acres of impact were avoided through roadway design modifications in this segment. An attempt was made to avoid impacts at the Evaro wetland. Shifting the Frontage Road to the northwest as close to the railroad tracks as feasible to minimize the impact on this wetland was investigated. However, Montana Rail Link maintains a right-of-way along their railroad tracks. Therefore, the location of the Frontage Road on Sheet 404-2 represents the minimum distance from the railroad tracks allowed by the Montana Rail Link, and wetland impacts could not be further avoided.

Temporary Impacts

Temporary impacts are necessary for construction of detour routes, riprap aprons, and construction vehicle access. Locations where these impacts would occur are provided in Table 2. In these areas, any temporary fill will be removed and the site will be regraded and seeded after construction is complete.

Additional temporary impacts on wetlands would result from the installation of wildlife fencing. Wildlife fencing would be buried to a depth of approximately 0.9 meters (3 feet) below ground and would extend approximately 6 feet above ground (Sheet 91). Fencing locations are designated on Sheets 156-195. To minimize impacts, where soils allow, a trencher could excavate the trench. In other locations an excavator or backhoe with a 0.6-meter- (2-foot) wide bucket would be used to excavate the trench. The trench would then be backfilled with the excavated soils and the area would be seeded.

ONSITE MITIGATION

This segment also includes four wetland mitigation sites for unavoidable impacts on wetlands in the US 93 Evaro to Polson corridor. These sites include the Frog Creek, Finley Creek – MRL Overcrossing, Finley Creek – Abutment Removal, and Wildlife Crossing 4 mitigation site. Impacts at the mitigation sites are included in Tables 1 and 2 and the design is described below.

Frog Creek Mitigation Site

Location

The Frog Creek mitigation site is located at the US 93 crossing of Frog Creek at approximately station 132+87 (Sheets 404-4, W-2, 39, and 72). The mitigation site is located in MDT right-of-way.

Existing Condition

Currently, Frog Creek is conveyed under US 93 through a 610-mm (3-foot) reinforced concrete pipe. The riparian corridor immediately adjacent to the highway crossing consists of a narrow band of forested, shrub, and emergent species on the west side. On the east side of the highway, the stream flows within the highway right-of-way through a roadside ditch dominated with sedges. Beyond the right-of-way on the east side of the roadway, shrub species dominate. Common species found at this site are serviceberry (*Symphoricarpos* sp.), alder (*Alnus incana*), and hawthorne (*Crataegus douglasii*).

The wetland functional assessment conducted at this site rated the Frog Creek system as a Category II system yielding 7.7 functional points.

Mitigation Proposal

The wetland mitigation proposal for this site involves relocating the stream channel, replacing the culvert under US 93, restoring instream habitat features, slightly expanding the floodplain, and planting the site with native species.

A new 100-meter (312-foot) stream channel would be excavated within the upland area to the north of the existing channel and Frog Creek would be relocated out of the roadside ditch (Sheet 39). The existing 610-mm (3-foot) culvert underneath US

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93 would be replaced with a 2,150- X 1,500-mm (7- X 5-foot) CBC or 3,000- X 2,150-mm (9.8- X 7.0-foot) Steel HE approximately 48 meters (160 feet) to the north, which will also function as a wildlife crossing structure (Sheets 404-4 and 72). The new stream channel would include bank habitat log features and would be lined with stream gravels and river rock to create instream habitat (Sheet 39). The abandoned channel segment on the west would be regraded to maintain wetland characteristics and planted with site appropriate species. The abandoned channel segment (approximately 45 meters [148 feet]) on the east side would be filled and planted with species suitable for the highway right-of-way.

Frog Creek Credits

The total area of creation at the Frog Creek site is 0.08 hectares (0.21 acres). Therefore, this site is expected to yield 0.21 acres of Corps credits (Sheet PP-1) using a 1:1 crediting ratio.

Finley Creek – MRL Overcrossing Mitigation Site

Location

The Finley Creek – MRL Overcrossing mitigation site is located at the crossing of US 93 and Finley Creek and the Montana Rail Link at approximately station 162+80 (Sheets 404-9, W-3, and W-4). This site is owned by MDT.

Existing Condition

The Montana Rail Link parallels Finley Creek at this location and bounds the floodplain to the south. Currently, Finley Creek is conveyed under US 93 through a 1,800-mm (6-foot) corrugated steel pipe. Upstream of US 93, beaver activity has created a pool at the culvert inlet. The riparian corridor of Finley Creek near the highway crossing primarily consists of shrub species with emergent species common along the banks of the stream channel. Common species found at this site are Bebb willow (*Salix bebbiana*), raspberry (*Rubus* sp.), sedges (*Carex* sp.) and mannagrass (*Glyceria* sp.).

The wetland functional assessment conducted at this site rated the Finley Creek system as a Category II system yielding 9.2 functional points.

Mitigation Proposal

The proposed roadway project would replace the existing culvert with a 340-foot multi-span bridge. The wetland mitigation proposal for this site involves restoring the stream channel and floodplain in the area currently covered with roadway fill material. After the culvert and associated fill is removed, a new channel will be excavated and adjacent areas will be regraded to maintain wetland characteristics. The channel will be lined with gravels and river rocks. In addition, upstream and downstream reaches of the stream channel will be regraded and instream features will be added. Bank habitat log features and overhanging and toe log habitat features will be added to the stream channel to create instream habitat (Sheets 40 and 45), and the site will also be planted with a variety of site appropriate species (Sheets W-3 and W-4).

Finley Creek Credits

The total area of restoration at the Finley Creek – MRL Overcrossing site is approximately 0.37 hectares (0.92 acres). The MDT functional points are expected to increase from 9.2 to 9.6 for this site. In addition, the site would improve from a Category II wetland to a Category I wetland. Based on the following calculations, this site would yield 0.14 ha (0.34 acres) of Corps credits (Sheet PP-2 and PP-3).

Reestablishment – 0.32 acres (112 sq meters + 1201 sq meters) at 1:1 = 0.32 acres of credit.

Enhancement – 0.60 acres (148 sq meters + 2275 sq meters) at 25:1 = 0.02 acres of credit.

$$\text{Enhancement factor} = \left(\frac{F_{\text{post}} - F_{\text{pre}}}{F_{\text{pre}}} \right) = \frac{(9.6 - 9.2)}{9.2} = 0.04 \text{ --- } 25:1$$

Finley Creek – Abutment Removal Mitigation Site

Location

The Finley Creek Abutment Removal mitigation site is located on Finley Creek, approximately 200 yards downstream of the US 93 crossing at station 162+80, which is the location of the Finley Creek – MRL Overcrossing mitigation site. This site is owned by Montana Rail Link; and MDT and MRL have developed a conservation easement and maintenance provisions to preserve this site.

Existing Condition

Currently, Finley Creek is conveyed through a culvert under an abandoned roadway abutment. Upstream of the culvert, the culvert inlet is partially filled, creating a large ponded area. The riparian area upstream of the culvert is primarily a shrub community dominated by willows and raspberry. Downstream of the culvert, the riparian area is a narrow forested draw dominated by Engelmann spruce (*Picea engelmanni*) and Douglas-fir (*Pseudotsuga menziesii*).

The wetland functional assessment conducted at this site rated the onsite wetlands as Category II yielding 7.9 functional points.

Mitigation Proposal

The wetland mitigation proposal for this site involves removing the existing culvert and abutment fill material and restoring the stream channel and floodplain.

In addition, the site would be regraded to recreate the stream channel and associated floodplain, creating a transition from the shrub dominated wetland upstream of the abutment to the narrow riparian forest downstream of the abutment (Sheet 41). Native vegetation would be planted along the floodplain at the abutment removal site (Sheet W-5)

The project will create 50 meters (160 feet) of stream channel where culvert and fill are removed and an additional 50 meters (160 feet) of stream channel will be enhanced. Adjacent wetlands will be regraded and planted to recreate the floodplain in this reach.

Finley Creek Abutment Credits

The total area of restoration at the Finley Creek Abutment Removal site is 0.09 hectares (0.23 acres). The MDT functional points for the wetland restoration area are expected to increase from 7.9 to 8.8. The site is expected to retain a Category II rating and yield 0.07 hectares (0.17 acres) of Corps credits, based on the following calculations (Sheet PP-4).

Reestablishment – 0.16 acres (90 sq meters + 569 sq meters) at 1:1 = 0.16 acres of credit.

Enhancement – 0.07 acres (49 sq meters + 246 sq meters) at 9:1 = 0.01 acres of credit.

$$\text{Enhancement factor} = \left(\frac{F_{\text{post}} - F_{\text{pre}}}{F_{\text{pre}}} \right) = \frac{(8.8 - 7.9)}{7.9} = 0.11 \text{ --- } 9:1$$

Finley Creek Tributary – Wildlife Crossing 4 Mitigation Site

Location

The Finley Creek tributary, wildlife crossing 4 mitigation site is located on the west side of US 93 at station 168+60 (Sheets 404-9 and 404-10). This site is owned by CSKT. Agreements on the future protection of this site will be provided as soon as they are available.

Existing Condition

The mitigation site is located in a narrow, steep draw that leads to a conifer-dominated riparian system. Currently, an access road completely fills the draw with a small culvert for water passage in the bottom of the draw. Conifers dominate the overstory of the riparian area and shrub species such as alder and red-osier dogwood (*Cornus stolonifera*) dominate the shrub layer. Herbaceous species, including large leaved avens (*Geum macrophyllum*) and sedges dominate the understory.

The wetland functional assessment conducted at this site rated the onsite wetlands as Category II yielding 7.6 functional points.

Mitigation Proposal

The proposed roadway project would remove the access road, associated fill material, and culvert from the narrow riparian draw. A new stream channel would be created and restored in the draw bottom and stream gravels and bank habitat logs would be added for instream habitat features (Sheets 42 and 74). Native vegetation would be planted along the new stream channel (Sheet W-6).

Finley Creek Tributary Credits (Wildlife Crossing 4)

The total area of restoration at the Finley Creek Tributary, wildlife crossing 4 mitigation site is 0.10 hectares (0.25 acres). The MDT functional points for the wetland restoration area are expected to increase to 7.9. The site is expected to retain a Category II rating. Based on the following calculations, this site would yield 0.04 hectares (0.11 acres) of Corps credits (Sheet PP-5).

Reestablishment – 0.11 acres (41 sq meters + 408 sq meters) at 1:1 = 0.11 acres of credit.

Enhancement – 0.10 acres (30 sq meters + 358 sq meters) at 25:1 = 0.004 acres of credit.

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$$\text{Enhancement factor} = \left(\frac{F_{\text{post}} - F_{\text{pre}}}{F_{\text{pre}}} \right) = \frac{(7.9 - 7.6)}{7.6} = 0.04 \quad \text{---} \quad 25:1$$

- b. List names and addresses of landowners adjacent to and across from the project site. (At its discretion, the permitting agency may contact these landowners.)

See Table 3 Landowner List for non-tribal landowners adjacent to the project site and other interested parties in the project corridor. The attached list includes all non-tribal landowners adjacent to the project site and those parties within 300 feet of the beginning and ending points of the project site.

- c. If you have already applied for any permits, list them and indicate whether they were issued, denied, or are pending.

The following permits will be sought.

CSKT – ALCO 87A Permit

Flathead Agency Irrigation District – Special Use Permit

MFWP – SPA 124 Permit

EPA/CSKT – 401 Certification

MT DEQ – MPDES Permit

EPA – NPDES Permit

The contractor will be responsible for obtaining other necessary permits.

- d. FEMA Map Number: **Not available.**
- e. Does this project comply with local planning or zoning regulations? Yes No

Application Submittal Information (Send only to those agencies checked on page one of this form.)

310 Permits. Submit three copies of the application form and plans to the conservation district. Nothing additional is required unless specifically requested by the conservation district. **Application review usually takes 30 to 60 days.**

SPA 124 Permits (government projects only). A set of preliminary plans or sketches of the proposed project must accompany the application. (Note: For projects sponsored by the Department of Transportation, two sets of plans must be sent with this form to the Helena DFWP office.)

Application review may take up to 60 days.

Floodplain Permits. Prior to submitting this application, contact the local floodplain administrator. Permit requirements and fees may vary. Applicant may be required to hire a professional engineer to submit plans. **Application review usually takes up to 60 days.**

Section 404/Section 10 Permits. Nothing additional is required unless specifically requested. **Application review may take 30 to 120 days.**

318 Authorizations. Do not send this form directly to DEQ if you are applying for a 310 permit of SPA 124 permit. You will be notified if you must apply. **If this authorization is needed, application review usually takes 10 days.**

Easements on State Navigable Water Bodies. Additional fees, a land survey, and other information will be required. Contact the local DNRC land office for information. **Land use license review usually takes up to 60 days. Easements may take up to 90 days.**

SIGNATURES/AUTHORIZATIONS

I certify that the above statements are true and correct. I further certify that I possess the authority to undertake the work described authorities. Both the landowner and the person doing the work have the duty to comply with the stipulations of all permits and laws.

Signature of Landowner
*(may be waived by agency for utilities
and other easement holders)*

Date



Signature of Applicant

Date

3/27/04

Contractor/Agent

Date

For 310 applicants only

When an applicant or other team member disagrees with the conservation district supervisors' decision, the applicant or other team member shall request that an arbitration panel be appointed as provided in MCA 75-7-113 to hear the dispute and make a decision. The request must be made in writing and must be received by the district within five working days of the receipt of the supervisors' decision. Disputes may also be solved informally. The rules of arbitration are included with this form.

By signing this form, I acknowledge that I have read and understand the Natural Streambed and Land Preservation Act rules of arbitration and agree, in any disputes arising from the supervisors' decision, to abide by the rules of arbitration.

Table 3. Landowner mailing list for Project 1 of the US 93 Evaro to Polson corridor.

Parcel No.	Owner Last Name/ Business	Owner First Name	Owner Mailing Address	City	State	Zip Code
1-1	Willig	Gretchen R.	16619 Highway 93 North	Missoula	MT	59808
1-2	Liszak	Ann Marie and Ronald James	16885 Hwy 93 N	Missoula	MT	59808
1-3	Klepper	Donald K.	799 Spartan Dr #A	Missoula	MT	59801
1-4	Halstead	Robert L. and Glenna J.	16955 US Hwy 93 N	Missoula	MT	59802
1-5	W & F Investments, LLP		16995 US Hwy 93 N	Evaro	MT	59808
1-6	Evaro Community Center, Inc.		1011 Grizzly Mountain Road	Evaro	MT	59808
1-7	Crow-Bar, Inc., Imalou	Wayne W. and Julie Ann Schwoob	1629 Belvue Drive	Missoula	MT	59801
1-8	Erlandson, Jr.	Carl F. and Barbara	6782 Grooms Rd	Missoula	MT	59808
1-9	Carriere	David E.	17095 US 93 N	Missoula	MT	59808
1-10	Erlandson	Robert E. and Lucy K.	17150 US Hwy 93 N	Missoula	MT	59808
1-11i	State of Montana		Dept Of Hwys	Helena	MT	59620
1-12	Hammack (Truman)	Linda L	17225 Hwy 93 N	Missoula	MT	59802
1-13	Lemley	Chris A	11333 San Fernando Rd, Suite 1	San Fernando	CA	91430
1-14	Lorrah	Arthur M. and Sara	17355 Hwy 93 N	Missoula	MT	59802
1-15	Arrowsmith	Merlyn	17405 Hwy 93 N	Missoula	MT	59808
1-16	Espenschade	C. Wayne	17455 US Hwy 93 N	Missoula	MT	59808
1-17	Taber	Marvin and Marie	17570 US Hwy 93 N	Missoula	MT	59808
1-18	Haacke	Albert and Ramona	P.O. Box 2998	Missoula	MT	59806
1-20	Heare	Sharon L.	17790 Beargrass Mtn Rd	Missoula	MT	59808
1-21	Neuman	Josephine D.	17600 US Hwy 93 N	Missoula	MT	59808
1-22	Liberti	Peter J.	17800 US Hwy 93 N	Missoula	MT	59808
1-23	Clarke	Conald L. and Clara	18005 US Hwy 93 N	Missoula	MT	59802
1-24	Clarke	Conald L. and Clara	18005 US Hwy 93 N	Missoula	MT	59802
1-25	Higgins	Stephen Lewis and Brenda Joyce	18080 US Hwy 93 N	Missoula	MT	59808
1-37						
1-56	Peterson	Lucille B.	19300 US Hwy 93 N	Missoula	MT	59808
1-72	Peck	Harvey A. and Rae Jean	20375 Whispering Pines Rd	Missoula	MT	59808
1-73	Simmons	Jerry A. and Shirley	20550 US Hwy 93 N	Missoula	MT	59808
1-74	Dschaak	Melvin and Helen Marie	20405 Whispering Pines Rd	Missoula	MT	59808
1-75	Sauer	Walt and Bridgette K.	20690 Whispering Pines Rd	Missoula	MT	59808
1-78	Lukasik	Jacqueline K. and Gerald	20750 Whispering Pines Rd	Missoula	MT	59808
1-79	Crowder	James and Trudy	20650 Hwy 93 N	Missoula	MT	59808
1-80	Simmons	Jerry A. and Shirley	20550 Hwy 93 N	Missoula	MT	59808
1-81	Muzzana	David G. and Kaye U.	20850 Whispering Pines Rd	Missoula	MT	59808

Federal Aid project number NH 5-1(30) 7, Project 1 – Evaro to McClure Road

Parcel No.	Owner Last Name/ Business	Owner First Name	Owner Mailing Address	City	State	Zip Code
1-82	Simmons	Jerry A. and Shirley	20550 Hwy 93 N	Missoula	MT	59808
1-83	Brandley	Kent Paul	P.O. Box 426373 (415) 621-7338	San Francisco	CA	94142
1-84	Vaile	John and Letha	20780 US Hwy 93 N	Missoula	MT	59808
1-85	Clinkenbeard	Dorothy	PO Box 95	Arlee	MT	59821
1-122	Ivanoff	Barney and Evelyn	Gray Wolf Drive	Arlee	MT	59821
1-123	Frederick	Alexander Peter	1514 N. Morely Ave.	Napa	CA	94558
1-126	Hendrickson	Drew E.	22720 US Hwy 93 N	Arlee	MT	59821
1-127	Bond	Teddy Gwen and Shirley Ann	RR 1, Box 1524	Arlee	MT	59821
1-128	Stafford	Donald R. and Sandra J.	4812 62nd Ave SW	Great Falls	MT	59404
1-129	Therriault	Alvin and Margaret	170 Black Pine Rd	Philipsburg	MT	59858
1-130	Simons	Michael H.	726 Kensington	Missoula	MT	59801
1-131	Otoupalik	Ernie and Shelley	9863 Callahan Rd	Hayward	WI	
1-132	Kiriazze	George	23460 US Hwy 93 S	Arlee	MT	59821
1-133	Schulz	Gary Gordon and Lindsay M.	23565 US Hwy 93 N - Box 186	Arlee	MT	59821
1-134	Howes	Alan and Rosemary	23580 US 93 N.	Arlee	MT	59821
1-135	Daniels	Dr. John	P.O. Box 323	Arlee	MT	59821
1-136	Lytle	Maurice D. and Vernabelle	24325 US Hwy 93 N	Arlee	MT	59821
1-137	Otoupalik	Ernie and Shelley	14100 US Hwy 93 N	Missoula	MT	59802
1-138	Morin	Steven	P.O. Box 466	Arlee	MT	59821
1-140	Lytle	Maurice D and Vernavelle	24325 US Hwy 93 S	Arlee	MT	59821
1-141	Lytle	Maurice D. and Vernavelle	24325 US Hwy 93 S	Arlee	MT	59821
1-142	Ursua	Larinio L and Jill J	24450 US Hwy 93 N	Arlee	MT	59821
1-170	Montana Rail Link		101 International Way	Missoula	MT	59808
1-177	Schulz	Obediah	530 Martz Road	Arlee	MT	59821
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Federal Aid project number NH 5-1(30) 7, Segment 1 – Evaro to McClure Road

The following documents have previously been provided to your office under separate cover and during project wetland mitigation meetings attended by Todd Tillinger.

- *U.S. Highway 93 Evaro to Polson, Missoula and Lake Counties, Montana, Final Environmental Impact Statement and Section 4(f) Evaluation, FHWA-MDT Project F 5-1(9) 6.* Montana Department of Transportation and Federal Highway Administration. FHWA-MT-EIS-95-01-F. 1996.
- *Memorandum of Agreement: US 93 Evaro to Polson.* Montana Department of Transportation, Federal Highway Administration, and the Confederated Salish and Kootenai Tribes. December 20, 2000.
- *Reevaluation of the US Highway 93 - Evaro to Polson -Missoula and Lake Counties: Final Environmental Impact Statement and Final Section 4(f) Evaluation.* Prepared for Montana Department of Transportation and Federal Highway Administration. Prepared by Skillings-Connolly, Inc, Lacey, Washington. 2001.
- *Draft memorandum on US 93 wetland mitigation crediting.* Herrera Environmental Consultants, Seattle, Washington. December 2, 2002.
- *Biological Assessment – US Highway 93 Reconstruction, Evaro to Polson.* Prepared for Montana Department of Transportation and Federal Highway Administration. Prepared by Herrera Environmental Consultants, Seattle, Washington. May 2001.
- *Supplement to the Biological Assessment – US Highway 93 Reconstruction, Evaro to Polson.* Prepared for Montana Department of Transportation and Federal Highway Administration. Prepared by Herrera Environmental Consultants, Seattle, Washington. August 2001.
- *Biological Opinion – US Highway 93 Reconstruction, Evaro to Polson.* U.S. Fish and Wildlife Service. Montana Field Office, Helena, Montana. October 19, 2001.
- *US Highway 93 Evaro to Polson, Compensatory Wetland Mitigation Crediting.* U.S. Army Corps of Engineers. Corps File Number 2001-90-416, Addressed to Tom Parker, Herrera Environmental Consultants, Inc., from Todd Tillinger, U.S. Army Corps of Engineers, Helena, Montana. December 18, 2002.
- Electronic deliverable. *Draft US 93 Evaro to Polson Wetland Mitigation Monitoring Plan.* Prepared by Herrera Environmental Consultants, Seattle, Washington. October 2003.
- Electronic deliverable. *US 93 Special Provisions Wetland Mitigation.* Draft 9/10/03. Prepared by Carter Burgess and circulated by Tom Parker, Herrera Environmental Consultants, Seattle, Washington.
- *Wetland Mitigation Plan: US 93 Evaro to Polson.* Draft. Prepared by Herrera Environmental Consultants, Seattle, Washington. November 2003.
- *Conference Opinion – US Highway 93 Reconstruction, Evaro to Polson.* U.S. Fish and Wildlife Service, Montana Field Office, Helena, Montana. March 3, 2004.
- *Supplemental 404 (b)(1) Showing for the US 93 Evaro to Polson Reconstruction Project.* Prepared by Herrera Environmental Consultants, Seattle, Washington. Included with the application for Project 3 submitted on April 28, 2004.
- *CSKT Finley Creek Property and Frog Creek Meadow: US 93 Evaro to Polson - Offsite Wetland Mitigation Plan.* Prepared by Herrera Environmental Consultants, Seattle, Washington. Prepared for Montana Department of Transportation. Helena, Montana. April 4, 2004.
- *Onsite Wetland Mitigation Plan: US 93 Evaro to Polson.* Prepared by Herrera Environmental Consultants, Seattle, Washington. Prepared for Montana Department of Transportation Helena, Montana. July 2004.
- *Supplement to Onsite Wetland Mitigation: US 93 Evaro to Polson.* Prepared by Herrera Environmental Consultants, Seattle, Washington. Prepared for Montana Department of Transportation Helena, Montana.

The following items are included with this permit application:

- Cover Letter and Wetland Impacts and Mitigation Ledger: US 93 Evaro to Polson.
- Summary Document
- Index of Plan Sheets and Plan Sheets for Project 1.