

DRAFT
ENVIRONMENTAL ASSESSMENT
CHECKLIST

**SPA 124 Permit for USFS Culvert Replacement on
Unnamed Tributary of Russian Creek – Judith Basin
County, MT**

FWP-CEA-R4-24-024

June 24, 2024



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I. Compliance with the Montana Environmental Policy Act

Before a proposed project may be approved, environmental review must be conducted to identify and consider potential impacts of the proposed project on the human and physical environment affected by the project. The Montana Environmental Policy Act (MEPA) and its implementing rules and regulations require different levels of environmental review, depending on the proposed project, significance of potential impacts, and the review timeline. § 75-1-201, Montana Code Annotated (“MCA”), and the Administrative Rules of Montana (“ARM”) 12.2.430, General Requirements of the Environmental Review Process.

FWP must prepare an EA when:

- *It is considering a “state-proposed project,” which is defined in § 75-1-220(8)(a) as:
 - (i) a project, program, or activity initiated and directly undertaken by a state agency;
 - (ii) ... a project or activity supported through a contract, grant, subsidy, loan, or other form of funding assistance from a state agency, either singly or in combination with one or more other state agencies; or
 - (iii) ... a project or activity authorized by a state agency acting in a land management capacity for a lease, easement, license, or other authorization to act.*
- *It is not clear without preparation of an EA whether the proposed project is a major one significantly affecting the quality of the human environment. ARM 12.2.430(3)(a));*
- *FWP has not otherwise implemented the interdisciplinary analysis and public review purposes listed in ARM 12.2.430(2) (a) and (d) through a similar planning and decision-making process (ARM 12.2.430(3)(b));*
- *Statutory requirements do not allow sufficient time for the FWP to prepare an EIS (ARM 12.2.430(3)(c));*
- *The project is not specifically excluded from MEPA review according to § 75-1-220(8)(b) or ARM 12.2.430(5); or*
- *As an alternative to preparing an EIS, prepare an EA whenever the project is one that might normally require an EIS, but effects which might otherwise be deemed significant appear to be mitigable below the level of significance through design, or enforceable controls or stipulations or both imposed by the agency or other government agencies. For an EA to suffice in this instance, the agency must determine that all the impacts of the proposed project have been accurately identified, that they will be mitigated below the level of significance, and that no significant impact is likely to occur. The agency may not consider compensation for purposes of determining that impacts have been mitigated below the level of significance (ARM 12.2.430(4)).*

MEPA is procedural; its intent is to ensure that impacts to the environment associated with a proposed project are fully considered and the public is informed of potential impacts resulting from the project.

II. Background and Description of Proposed Project

Name of Project: USFS Culvert Replacement on Unnamed Tributary of Russian Creek – Judith Basin County, MT

The United States Forest Service (USFS) – Helena-Lewis and Clark National Forest has proposed replacing an existing 18-inch culvert on an Unnamed Tributary of Russian Creek with a 10.5' x 4.5' arched culvert. The proposed work falls under the SPA 124 permitting jurisdiction of FWP found in the Stream Protection Act (§ 87-5-502, MCA).

In the project area, the Unnamed Tributary of Russian Creek is a permanent stream with unaltered function and generally healthy riparian characteristics. Just downstream of the proposed project the Unnamed Tributary and

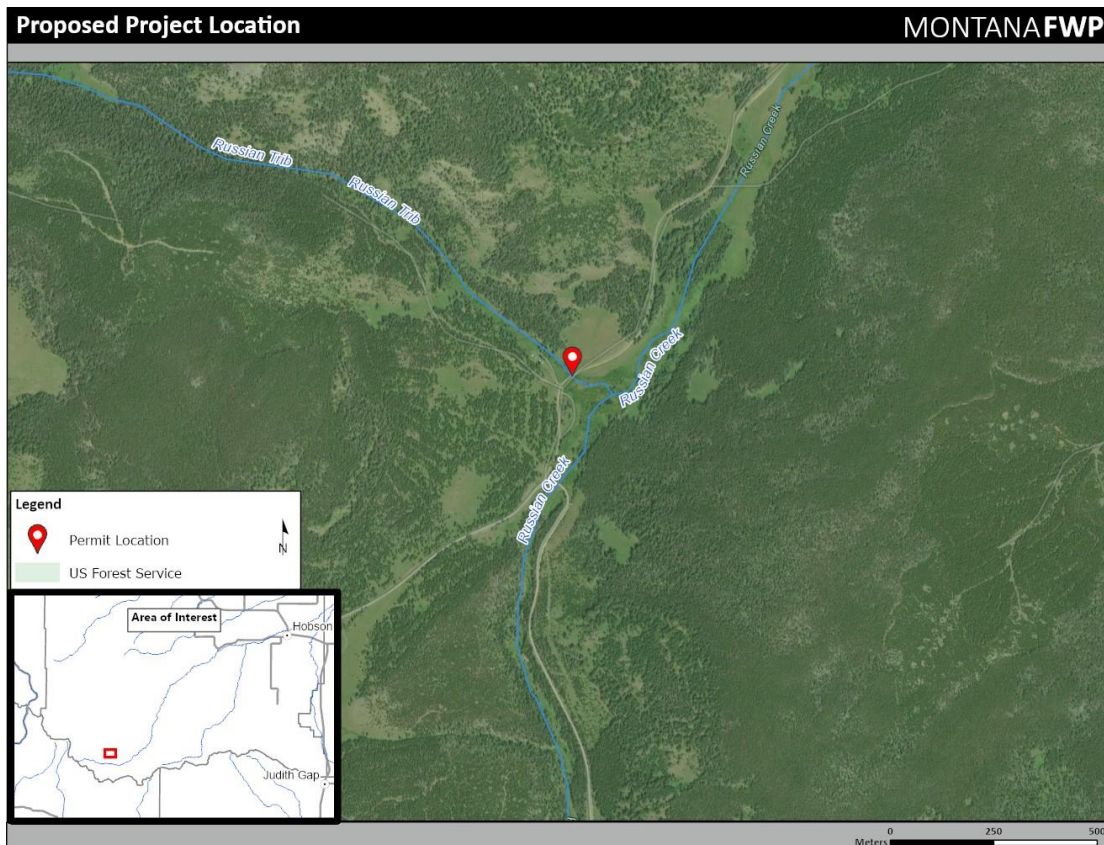
Russian Creek join in a long-established beaver pond complex. Fish species known to occur in the project area include westslope cutthroat trout hybrids and brook trout. The aquatic and riparian habitats are in generally good condition with some impairments stemming from road density and off-road recreation. The drainage area above the crossing is approximately 1.4 square miles. The proposed arched culvert is predicted to pass the 100-year flow event (96 cfs) while maintaining two feet of freeboard.

The existing culvert has been identified as undersized and nearing the end of its functional life. The proposed project would involve the construction of a temporary diversion structure and channel to bypass flow around the work zone. The existing culvert would be removed and the new arched culvert would be installed. The inlet and outlet ends of the arched culvert would be protected with placed rip-rap on a minimum 1.5:1 slope which would be overlaid with topsoil and seeded. There would be some channel regrading at the entrance of the new arched culvert to ensure adequate alignment. The proposal also includes the placement of ~6 fish rest stop rocks (~30" diameter) distributed in the channel throughout the crossing. The proposed arch culvert would improve aquatic organism passage and reduce the possibility of culvert failure in the future.

The USFS Helena-Lewis and Clark National Forest is the sponsor of the project and has a planned implementation schedule ranging from July 2024 to November 2024.

Affected Area / Location of Proposed Project:

- Legal Description
 - Latitude/Longitude: 46.74222, -110.43044
 - Section, Township, and Range: Section 2, Township 11N, Range 10E
 - Town/City, County, Montana: Utica, Judith Basin County, Montana
- Location Map



III. Purpose and Need

The EA must include a description of the benefits and purpose of the proposed project. ARM 12.2.432(3)(b). Benefits of the proposed project refer to benefits to the resource, public, department, state, and/or other.

The purpose of this project is to issue a Stream Protection Act 124 Permit to the USFS Helena-Lewis and Clark National Forest for the purpose, by the means, at the location, and in accordance with the timeline identified in the attached *Joint Application*, only after careful review of the potential impacts to State Fish and wildlife resources stemming from the proposed action.

The purpose of the proposed project is to remove and replace an undersized, failing culvert with an arched culvert that will improve aquatic organism passage and hydrologic function of the road crossing in the future.

If FWP prepared a cost/benefit analysis before completion of the EA, the EA must contain the cost/benefit analysis or a reference to it. ARM 12.2.432(3)(b).

	Yes*	No
Was a cost/benefit analysis prepared for the proposed project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

* If yes, a copy of the cost/benefit analysis prepared for the proposed project is included in Attachment A to this Draft EA

IV. Other Agency Regulatory Responsibilities

FWP must list any federal, state, and/or local agencies that have overlapping or additional jurisdiction, or environmental review responsibility for the proposed project, as well as permits, licenses, and other required authorizations. ARM 12.2.432(3)(c).

*A list of other required local, state, and federal approvals, such as permits, certificates, and/or licenses from affected agencies is included in **Table 1** below. **Table 1** provides a summary of state requirements but does not necessarily represent a complete and comprehensive list of all permits, certificates, or approvals needed. Agency decision-making is governed by state and federal laws, including statutes, rules, and regulations, that form the legal basis for the conditions the proposed project must meet to obtain necessary permits, certificates, licenses, or other approvals. Further, these laws set forth the conditions under which each agency could deny the necessary approvals.*

Table 1: Federal, State, and/or Local Regulatory Responsibilities

Agency	Type of Authorization (permit, license, stipulation, other)	Purpose
Montana Department of Environmental Quality	Permit (318 Authorization)	Montana DEQ regulates water quality in Montana waterways. The 318 Authorization requires certain conditions be met in order to minimize short-term, construction related impacts to water quality standards.
U.S. Army Corps of Engineers	Permit (404 Permit)	USACE, in association with the Environmental Protection Agency (EPA) enforces regulatory conditions established by the Federal Clean Water Act to restore and maintain the chemical, physical, and biological integrity of the nation's waters.

United States Department of Agriculture	Environmental Review (NEPA)	Federal agencies are required to assess the environmental effects of proposed actions prior to making decisions. The NEPA process evaluates environmental and related social and economic effects.
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V. List of Mitigations, Stipulations

Mitigations, stipulations, and other enforceable controls required by FWP, or another agency, may be relied upon to limit potential impacts associated with a proposed Project. The table below lists and evaluates enforceable conditions FWP may rely on to limit potential impacts associated with the proposed Project. ARM 12.2.432(3)(g).

Table 2: Listing and Evaluation of Enforceable Mitigations Limiting Impacts

<i>Are enforceable controls limiting potential impacts of the proposed action? If not, no further evaluation is needed.</i>			Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
<i>If yes, are these controls being relied upon to limit impacts below the level of significance? If yes, list the enforceable control(s) below</i>			Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Enforceable Control	Responsible Agency	Authority (Rule, Permit, Stipulation, Other)	Effect of Enforceable Control on Proposed Project	
SPA 124 Permit - General Requirements (see Appendix 1)	FWP	SPA 124	SPA 124 Permit, General Conditions, provide best management practices in the form of enforceable controls to limit potential adverse impacts from the proposed project. Fines may be levied for violating these general requirements and/or corrective action may be required to remedy non-compliance.	
318 Authorization – Short-Term Water Quality Permit	DEQ	318 Authorization	Short-term narrative water quality standards for total suspended sediment and turbidity resulting from stream-related construction activities or stream enhancement projects.	
Limiting Fill in a Water of the U.S.	US COE	Nationwide Permit 14	Linear Transportation Projects. Ensures standards are met for activities required for crossings of waters of the United States associated with the construction, expansion, modification, or improvement of linear transportation projects in water of the United States.	

VI. SPA 124 Permit Action

Any applicable Montana stream work that is not otherwise excluded from MEPA review under the applicable requirements of ARM 12.2.454, Actions that Qualify for a Categorical Exclusion, and has the potential to alter the stream channel or bank, requires a project-specific 124 Stream Protection Act Permit or SPA 124 Permit prior to the start of work. The SPA 124 permit is issued by FWP's Fisheries Division and includes both the general conditions described in Attachment 1 and any additional Special Conditions deemed necessary to protect and preserve the affected waterway.

Additional conditions deemed necessary to protect and preserve the affected stream from potential impacts associated with the proposed project are listed in Table 4 below.

Table 3: SPA 124 Permit Conditions the Department Will Require to Issue Permit.

Activity	Special Condition	Description
Work Activity	Work shall not occur outside the project scope outlined in the permit.	All work shall occur as described in the project application.
Rip-rap Installation	Rip-rap should not constrict the natural channel and placed in a stable manner.	Placed rip-rap must not constrict the natural channel. This is to ensure capacity and channel geometry are maintained through the crossing. Rip-rap must be placed on a 1.5:1 or shallower slope with the upper ½ of the slope filled and seeded/revegetated. This is to ensure the long-term stability of the rip-rap slope.
Erosion Control Fabric	Any erosion control fabric must be made of biodegradable materials.	Any erosion control or sediment control fabric used in associated with the proposed project must be made from biodegradable materials. Alternatively, granular (gravel) filter layers may be used.

VII. Alternatives Considered

In addition to the proposed Project, and as required by MEPA, FWP analyzes the "no-action" alternative in this EA. Under the "no-action" alternative, FWP would not do the proposed project.

Under the "No Action" alternative, the proposed project would not occur. Therefore, no additional impacts to the physical environment or human population in the analysis area would occur. The "No Action" alternative forms the baseline from which the potential impacts of the proposed Project can be measured.

	Yes*	No
Were any additional alternatives considered and dismissed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

* If yes, a list and description of the other alternatives considered, but not carried forward for detailed review is included below

VIII. Summary of Potential Impacts of the Proposed Project on the Physical Environment and Human Population

The impacts analysis identifies and evaluates **direct**, **secondary**, and **cumulative impacts**.

- **Direct impacts** are those that occur at the same time and place as the action that triggers the effect.

- **Secondary impacts** “are further impacts to the human environment that may be stimulated or induced by or otherwise result from a direct impact of the action.” ARM 12.2.429(18).
- **Cumulative impacts** “means the collective impacts on the human environment of the proposed action when considered in conjunction with other past and present actions related to the proposed action by location or generic type. Related future actions must also be considered when these actions are under concurrent consideration by any state agency through pre-impact statement studies, separate impact statement evaluation, or permit processing procedures.” ARM 12.2.429(7).

Where impacts are expected to occur, the impact analysis estimates the **extent, duration, frequency, and severity** of the impact. The duration of an impact is quantified as follows:

- **Short-Term:** impacts that would not last longer than the proposed project.
- **Long-Term:** impacts that would remain or occur following the proposed project.

The severity of an impact is measured using the following:

- **No Impact:** there would be no change from current conditions.
- **Negligible:** an adverse or beneficial effect would occur but would be at the lowest levels of detection.
- **Minor:** the effect would be noticeable but would be relatively small and would not affect the function or integrity of the resource.
- **Moderate:** the effect would be easily identifiable and would change the function or integrity of the resource.
- **Major:** the effect would irretrievably alter the resource.

Some impacts may require mitigation. As defined in ARM 12.2.429, mitigation means:

- Avoiding an impact by not taking a certain action or parts of a project;
- Minimizing impacts by limiting the degree or magnitude of a project and its implementation;
- Rectifying an impact by repairing, rehabilitating, or restoring the affected environment; or
- Reducing or eliminating an impact over time by preservation and maintenance operations during the life of a project or the time period thereafter that an impact continues.

A list of any mitigation strategies including, but not limited to, design, enforceable controls or stipulations, or both, as applicable to the proposed project is included in **Section VI** above.

FWP must analyze impacts to the physical and human environment for each alternative considered. The proposed project considered the following alternatives:

- **Alternative 1: No Action. Evaluation and Summary of Potential Impacts on the Physical Environment and Human Population**

Under the “No Action” alternative, the proposed project would not occur. Therefore, no additional impacts to the physical environment or human population in the analysis area would occur. The “No Action” alternative forms the baseline from which the potential impacts of the proposed Project can be measured.

- **Alternative 2: Proposed Project. Evaluation and Summary of Potential Impacts on the Physical Environment and Human Population**

See **Table 4** (Impacts on Physical Environment) and **Table 5** (Impacts on Human Population) below.

Table 4 - Potential Impacts of the Proposed Project on the Physical Environment

PHYSICAL ENVIRONMENT	Duration of Impact			Severity of Impact					Summary of Potential Direct, Secondary, and Cumulative Impacts and Mitigation Measures
	None	Short-Term	Long-Term	None	Negligible	Minor	Moderate	Major	
Terrestrial, avian, and aquatic life and habitats	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant adverse impacts to terrestrial, avian, and aquatic life and habitats would be expected because of the proposed project. The proposed work has the potential to disturb terrestrial life and habitat due to workers being present, such impacts would be expected to be short-term and negligible. The proposed work would be expected to have minor, negative impacts to local aquatic life and habitats in the short-term by increased turbidity and active disturbance in the waterway during construction activities. The proposed project would also be expected to result in long-term beneficial impacts to aquatic life and habitat by improving connectivity in the drainage and aquatic organism passage conditions at the crossing. The proposed crossing would also be expected to improve the local habitat at the crossing by improving hydrologic function of the crossing and result in improved channel and flow conditions at the site. Such impacts would be expected to be minor.
Water quality, quantity, and distribution	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant adverse impacts to water quality, quantity, and distribution would be expected because of the proposed project. The proposed project would not require the use of any additional new water resources. The proposed project would temporarily affect water distribution by creating a temporary diversion and bypass channel while the work is completed. The proposed work has the potential to temporarily reduce water quality, primarily in the form of turbidity, associated with the culvert removal and installation process. These impacts would be expected to be short-term and negligible. Additionally, the proposed project would be subject to a Montana Department of Environmental Quality 318

PHYSICAL ENVIRONMENT	Duration of Impact			Severity of Impact					Summary of Potential Direct, Secondary, and Cumulative Impacts and Mitigation Measures
Resource	None	Short-Term	Long-Term	None	Negligible	Minor	Moderate	Major	
									Authorization, which sets minimum conditions the project must abide to minimize and mitigate potential impacts to water quality.
Geology	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	FWP does not expect significant impacts to geology in the affected area because of the proposed project. No impacts would be expected because of the proposed project.
Soil quality, stability, and moisture	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	FWP does not expect significant impacts to soil quality, stability, and moisture in the affected area because of the proposed project. No impacts would be expected because of the proposed project.
Vegetation cover, quantity, and quality	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant adverse impacts to vegetation cover, quantity, and quality would be expected because of the proposed project. The proposed project would disturb vegetative cover in the work area. These impacts would be short-term and negligible. All disturbed areas would be reseeded/vegetated.
Aesthetics	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant adverse impacts to the aesthetic nature of the affected area would be expected because of the proposed project. The proposed project would impact aesthetic values in the affected area due to the presence of workers, equipment, and ground disturbance. Any such impacts would be expected to be short-term and negligible.
Air quality	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant adverse impacts to air quality would be expected because of the proposed project. The proposed project would potentially impact local air quality characteristics due to equipment and exhaust fumes. These impacts would be short-term and negligible.
Unique, endangered, fragile, or limited environmental resources	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant adverse impacts to unique, endangered, fragile, or limited environmental resources would be expected because of the proposed project. No impacts would be expected because of the proposed project.

PHYSICAL ENVIRONMENT	Duration of Impact			Severity of Impact					
Resource	None	Short-Term	Long-Term	None	Negligible	Minor	Moderate	Major	Summary of Potential Direct, Secondary, and Cumulative Impacts and Mitigation Measures
Historical and archaeological sites	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant adverse impacts to historic and archaeological sites would be expected because of the proposed project.
Demands on environmental resources of land, water, air, and energy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant adverse impacts to demands on the environmental resources of land, water, air, and energy would be expected because of the proposed project.

Table 5 - Potential Impacts of the Proposed Project on the Human Population

HUMAN POPULATION	Duration of Impact			Severity of Impact					Summary of Potential Direct, Secondary, and Cumulative Impacts and Mitigation Measures
	None	Short-Term	Long-Term	None	Negligible	Minor	Moderate	Major	
Social structures and mores	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	FWP does not expect significant adverse impacts to social structures and mores in the affected area because of the proposed project. No impact would be expected because of the proposed project.
Cultural uniqueness and diversity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	FWP does not expect significant impacts to cultural uniqueness and diversity in the affected area because of the proposed project. No impacts to the existing cultural uniqueness and diversity of the affected area would be expected because of the proposed project.
Access to and quality of recreational and wilderness activities	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	FWP does not expect significant impacts to access to and quality of recreational and wilderness activities in the affected area because of the proposed project. The proposed project would be anticipated to improve the long-term infrastructure conditions at the crossing site which would ensure continued access to recreational activities in the area. These impacts would be expected to be long-term and minor.
Local and state tax base and tax revenues	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	FWP does not expect significant impacts to local and state tax base and tax revenues in the affected area because of the proposed project. No impacts would be expected because of the proposed project.
Agricultural or Industrial production	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	FWP does not expect significant impacts to agricultural or industrial production in the affected area because of the proposed project. No impacts would be expected because of the proposed project.
Human health and safety	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	FWP does not expect significant adverse impacts to human health and safety in the affected area because of the proposed project. The proposed project would be anticipated to provide a benefit in the form of a safe, reliable vehicle crossing in the long-term. These impacts would be expected to be minor.

HUMAN POPULATION	Duration of Impact			Severity of Impact					
Resource	None	Short-Term	Long-Term	None	Negligible	Minor	Moderate	Major	Summary of Potential Direct, Secondary, and Cumulative Impacts and Mitigation Measures
Quantity and distribution of employment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant adverse impacts to the quantity and distribution of employment in the affected area would be expected because of the proposed project. No impacts would be expected because of the proposed project.
Distribution and density of population and housing	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant adverse impacts to the distribution and density of population and housing would be expected because of the proposed project. No impacts would be expected because of the proposed project.
Demands for government services	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant adverse impacts to the demands for government services in the affected area would be expected because of the proposed project. No impacts would be expected because of the proposed project.
Industrial, agricultural, and commercial activity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant adverse impacts to industrial, agricultural, and commercial activity would be expected because of the proposed project. No impacts to industrial, agricultural, or commercial activity would be expected because of the proposed project.
Locally adopted environmental plans and goals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	FWP does not expect significant adverse impacts to locally adopted environmental plans and goals would be expected because of the proposed project. No impacts would be expected.
Other appropriate social and economic circumstances	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant adverse impacts to any other appropriate social and economic circumstances would be expected because of the proposed project. FWP is unaware of any other appropriate social and economic circumstances that may be impacted by the proposed project. Therefore, no significant adverse impacts to other appropriate social and economic circumstances would be expected because of the proposed project.

Table 6: Determining the Significance of Impacts on the Quality of the Human Environment

If the EA identifies impacts associated with the proposed project FWP must determine the significance of the impacts. ARM 12.2.431. This determination forms the basis for FWP's decision as to whether it is necessary to prepare an environmental impact statement. An impact may be adverse, beneficial, or both. If none of the adverse effects of the impact are significant, an EIS is not required. An EIS is required if an impact has a significant adverse effect, even if the agency believes that the effect on balance will be beneficial. ARM 12.2.431.

According to the applicable requirements of ARM 12.2.431, FWP must consider the criteria identified in this table to determine the significance of each impact on the quality of the human environment. The significance determination is made by giving weight to these criteria in their totality. For example, impacts identified as moderate or major in severity may not be significant if the duration is short-term. However, moderate or major impacts of short-term duration may be significant if the quantity and quality of the resource is limited and/or the resource is unique or fragile. Further, moderate or major impacts to a resource may not be significant if the quantity of that resource is high or the quality of the resource is not unique or fragile.

Criteria Used to Determine Significance

1	<p>The severity, duration, geographic extent, and frequency of the occurrence of the impact</p> <p>"Severity" describes the density of the potential impact, while "extent" describes the area where the impact will likely occur, e.g., a project may propagate ten noxious weeds on a surface area of 1 square foot. Here, the impact may be high in severity, but over a low extent. In contrast, if ten noxious weeds were distributed over ten acres, there may be low severity over a larger extent.</p> <p>"Duration" describes the time period during which an impact may occur, while "frequency" describes how often the impact may occur, e.g., an operation that uses lights to mine at night may have frequent lighting impacts during one season (duration).</p>
2	The probability that the impact will occur if the proposed project occurs; or conversely, reasonable assurance in keeping with the potential severity of an impact that the impact will not occur
3	Growth-inducing or growth-inhibiting aspects of the impact, including the relationship or contribution of the impact to cumulative impacts
4	The quantity and quality of each environmental resource or value that would be affected, including the uniqueness and fragility of those resources and values
5	The importance to the state and to society of each environmental resource or value that would be affected
6	Any precedent that would be set as a result of an impact of the proposed project that would commit FWP to future actions with significant impacts or a decision in principle about such future actions
7	Potential conflict with local, state, or federal laws, requirements, or formal plans

IX. Private Property Impact Analysis (Takings)

The 54th Montana Legislature enacted the Private Property Assessment Act, now found at § 2-10-101. The intent was to establish an orderly and consistent process by which state agencies evaluate their proposed projects under the "Takings Clauses" of the United States and Montana Constitutions. The Takings Clause of the Fifth Amendment of the United States Constitution provides: "nor shall private property be taken for public use, without just compensation." Similarly, Article II, Section 29 of the Montana Constitution provides: "Private property shall not be taken or damaged for public use without just compensation..."

The Private Property Assessment Act applies to proposed agency projects pertaining to land or water management or to some other environmental matter that, if adopted and enforced without due process of law and just compensation, would constitute a deprivation of private property in violation of the United States or Montana Constitutions.

The Montana State Attorney General's Office has developed guidelines for use by state agencies to assess the impact of a proposed agency project on private property. The assessment process includes a careful review of all issues identified in the Attorney General's guidance document (Montana Department of Justice 1997). If the use of the guidelines and checklist indicates that a proposed agency project has taking or damaging implications, the agency must prepare an impact assessment in accordance with Section 5 of the Private Property Assessment Act.

Table 7: Private Property Assessment (Takings)

	Yes	No	
Is FWP regulating the use of private property under a regulatory statute adopted pursuant to the police power of the state? (Property management, grants of financial assistance, and the exercise of the power of eminent domain are not within this category.) If not, no further analysis is required	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Does the proposed regulatory action restrict the use of the regulated person's private property? If not, no further analysis is required.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Does FWP have legal discretion to impose or not impose the proposed restriction or discretion as to how the restriction will be imposed? If not, no further analysis is required	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
If so, FWP must determine if there are alternatives that would reduce, minimize, or eliminate the restriction on the use of private property, and analyze such alternatives. Have alternatives been considered and/or analyzed? If so, describe below:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
PRIVATE PROPERTY ASSESMENT ACT (PPAA)			
Does the Proposed Action Have Takings Implications under the PPAA?	Question #	Yes	No
Does the project pertain to land or water management or environmental regulations affecting private property or water rights?	1	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does the action result in either a permanent or an indefinite physical occupation of private property?	2	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does the action deprive the owner of all economically viable uses of the property?	3	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does the action require a property owner to dedicate a portion of property or to grant an easement? (If answer is NO, skip questions 4a and 4b and continue with question 5)	4	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is there a reasonable, specific connection between the government requirement and legitimate state interest?	4a	<input type="checkbox"/>	<input type="checkbox"/>
Is the government requirement roughly proportional to the impact of the proposed use of the property?	4b	<input type="checkbox"/>	<input type="checkbox"/>

Does the action deny a fundamental attribute of ownership?	5	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does the action have a severe impact of the value of the property?	6	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public general? (If the answer is NO, skip questions 7a-7c.)	7	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is the impact of government action direct, peculiar, and significant?	7a	<input type="checkbox"/>	<input type="checkbox"/>
Has the government action resulted in the property becoming practically inaccessible, waterlogged, or flooded?	7b	<input type="checkbox"/>	<input type="checkbox"/>
Has the government action diminished property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?	7c	<input type="checkbox"/>	<input type="checkbox"/>
Does the proposed action result in taking or damaging implications?		<input type="checkbox"/>	<input checked="" type="checkbox"/>
Taking or damaging implications exist if YES is checked in response to Question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to question 4a or 4b.			
If taking or damaging implications exist, the agency must comply with MCA § 2-10-105 of the PPAA, to include the preparation of a taking or damaging impact assessment. Normally, the preparation of an impact assessment will require consultation with agency legal staff.			
Alternatives: The analysis under the Private Property Assessment Act, §§ 2-10-101 through -112, MCA, indicates no impact. FWP does not plan to impose conditions that would restrict the regulated person's use of private property to constitute a taking.			

X. Public Participation

The level of analysis in an EA will vary with the complexity and seriousness of environmental issues associated with a proposed action. The level of public interest will also vary. FWP is responsible for adjusting public review to match these factors (ARM 12.2.433(1)). Because FWP determines the proposed action will result in limited environmental impact, and little public interest has been expressed, FWP determines the following public notice strategy will provide an appropriate level of public review:

- *An EA is a public document and may be inspected upon request. Any person may obtain a copy of an EA by making a request to FWP. If the document is out-of-print, a copying charge may be levied (ARM 12.2.433(2)).*
- *Public notice will be served on the Montana Fish, Wildlife and Parks website at:*
<https://fwp.mt.gov/aboutfwp/public-comment-opportunities>

XI. Recommendation for Further Environmental Analysis

NO further analysis is needed for the proposed action	<input checked="" type="checkbox"/>
FWP must conduct EIS level review for the proposed action	<input type="checkbox"/>

XII. EA Preparation and Review

	Name	Title
EA prepared by:	Clint Smith	Lewistown Area Fisheries Biologist
EA reviewed by:	Jason Mullen	R4 Fisheries Manager

Attachment 1

SPA 124 Permit General Conditions

FWP.MT.GOV



THE **OUTSIDE** IS IN US ALL.

Stream Protection Act 124 Permit General Conditions

1. Complete work affecting a streambed or stream bank in an expeditious manner to avoid unnecessary impacts to the stream.
2. Limit the clearing of vegetation to that which is absolutely necessary for construction of the project. Take precautions to preserve existing riparian vegetation. Salvage and reuse native vegetation where possible.
3. Install and maintain erosion control measures where appropriate to protect aquatic resources. Do not clear and grub land adjacent to streams prior to installing proper erosion and sedimentation controls. Conduct all work in a manner that minimizes turbidity and other disturbances to aquatic resources.
4. Plan temporary construction facilities to:
 - a. Minimize disturbance to stream banks, stream bank vegetation, and the streambed by locating staging or storage facilities at least 50' horizontally from the highest anticipated water level during construction;
 - b. not restrict or impede fish passage in streams; and
 - c. not restrict any flow anticipated during use.
5. Provide sediment controls for drainage from topsoil stockpiles, staging areas, access roads, channel changes, and instream excavations.
6. Isolate work zones from flowing and standing waters to prevent turbid water and sediments from being discharged into streams or other drainages that flow directly into the stream. Divert flowing waters around the work zone.
7. Do not spill or dump material into streams. Store and handle petroleum products, chemicals, cement and other deleterious materials in a manner that will prevent their entering streams.
8. Do not permit wash water from cleaning concrete-related equipment or wet concrete to enter streams.
9. Do not operate mechanized equipment in any stream or flowing water unless special authorization is obtained. If special authorization is granted, the following conditions apply:
 - a. Power-wash all equipment allowed in a stream prior to entering the stream channel.
 - b. Clean and maintain all equipment so that petroleum-based products and hydraulic fluids do not leak or spill into the waterway.
10. Reclaim streambeds and stream banks as closely as possible to their pre-disturbed condition.
11. Restore disturbed stream banks to their natural or pre-disturbed configuration to match adjacent ground contours or as specified in the project plans. Stabilize, reseed, and re-vegetate disturbed areas. Install and maintain long-term biodegradable erosion-control measures to protect these areas until adequate vegetation has been established.
12. Restore temporary access routes and any temporarily disturbed areas to original conditions, including original contours and vegetation.
13. Dispose of any excess material generated from the project above the ordinary high-water mark and in an area not classified as a wetland.

Attachment 2

Copy of Joint Application for the Proposed Work



ATTACH A PROJECT SITE MAP OR A SKETCH that includes: 1) the water body where the project will take place, roads, tributaries, landmarks; 2) a circled "X" representing the exact project location. IF NOT CLEARLY STATED ON THE MAP OR SKETCH, **PROVIDE WRITTEN DIRECTIONS TO THE SITE.** See Attached plans for map.

Driving directions: From Utica, Drive SW on the SF Judith Road, FS 487 ~ 30 miles. Turn right onto 6513 just after crossing Russian Creek and continue driving .25 miles.

1. TYPE OF PROJECT (check all that apply)

- | | | |
|----------------------------------------------------------------------|------------------------------------------------------------|--------------------------------------------|
| <input checked="" type="checkbox"/> Bridge/Culvert/Ford Construction | <input type="checkbox"/> Fish Habitat | <input type="checkbox"/> Mining |
| <input checked="" type="checkbox"/> Bridge/Culvert/Ford Removal | <input type="checkbox"/> Recreation (docks, marinas, etc.) | <input type="checkbox"/> Dredging |
| <input type="checkbox"/> Road Construction/Maintenance | <input type="checkbox"/> New Residential Structure | <input type="checkbox"/> Core Drill |
| <input type="checkbox"/> Bank Stabilization/Alteration | <input type="checkbox"/> Manufactured Home | <input type="checkbox"/> Placement of Fill |
| <input type="checkbox"/> Flood Protection | <input type="checkbox"/> Improvement to Existing Structure | <input type="checkbox"/> Diversion Dam |
| <input type="checkbox"/> Channel Alteration | <input type="checkbox"/> Commercial Structure | <input type="checkbox"/> Utilities |
| <input type="checkbox"/> Irrigation Structure | <input type="checkbox"/> Wetland Alteration | <input type="checkbox"/> Pond |
| <input type="checkbox"/> Water Well/Cistern | <input type="checkbox"/> Temporary Construction Access | <input type="checkbox"/> Debris Removal |
| <input type="checkbox"/> Excavation/Pit | <input type="checkbox"/> Other _____ | |

2. PLAN OR DRAWING of the proposed project **MUST** be attached. **This plan or drawing must include:**

- a plan view (looking at the project from above)
- dimensions of the project (height, width, depth in feet)
- location of storage or stockpile materials
- drainage facilities
- an arrow indicating north
- a cross section or profile view
- an elevation view
- dimensions and location of fill or excavation sites
- location of existing or proposed structures, such as buildings, utilities, roads, or bridges

3. IS THIS APPLICATION FOR an annual maintenance permit? ☐ Yes ☒ No
(If yes, an annual plan of operation must be attached to this application – see "Information for Applicant")

4. PROPOSED CONSTRUCTION DATE. Include a project timeline. Start date 7/15/2024
Finish date 11/1/2024 Is any portion of the work already completed? ☐ Yes ☒ No
(If yes, describe the completed work.)

5. WHAT IS THE PURPOSE of the proposed project? To replace an under-sized, and rusted-out culvert, improve aquatic organism passage and reduce the possibility of culvert failure.

6. PROVIDE A BRIEF DESCRIPTION of the proposed project.

Replace an existing 18-inch. culvert located on a tributary of Russian Creek will be removed and replaced with a 10' 6" span, 4' 5" rise structural steel plate arch. The project will require ~ 1- 2 meters of road fill excavation. This fill will be stored on-site and will be used to refill the breach in the road. Once the new culvert is in place, water will be diverted into the new culvert. Any extra material will be dispersed onsite.

7. WHAT IS THE CURRENT CONDITION of the proposed project site? Describe the existing bank condition, bank slope, height, nearby structures, and wetlands.
Presently the stream banks above and below the culvert are well vegetated. Bankfull width is ~ 1.5 feet. Downstream is a large beaver complex.

8. PROJECT DIMENSIONS. How many linear feet of bank will be impacted? How far will the proposed project encroach into and extend away from the water body?
Very little new disturbance of the bank is expected, almost all of the disturbance will occur in the road prism. A beaver dam downstream of the project area will likely need to be breached during the dewatering stage.

9. **VEGETATION.** Describe the vegetation present on site. How much vegetation will be disturbed or covered with fill material during project installation? (Agencies require that only vegetation necessary to do the work be removed.) Describe the revegetation plan for all disturbed areas of the project site in detail.

Above the road is a mix obligate grass. Slopes along edges of new culvert will be seeded by the contractor, using USFS approved weed-free seed mix. This would occur in 2024 as construction is completed.

10. **MATERIALS.** Describe the materials proposed to be used. Note: This may be modified during the permitting process. It is recommended you do not purchase material until all permits are issued.

Cubic yards/Linear feet- see attached plans	Size and Type	Source
Existing road material will be used after the new culvert is installed		On site.

11. **EQUIPMENT.** List all equipment that will be used for construction of the project. How will the equipment be used on the bank and/or in the water? Note: Make sure equipment is clean and free of weeds, weed seeds, and excess grease before using it in the water waterway. To prevent the spread of aquatic invasive species, to the extent practical, remove mud and aquatic plants from heavy machinery and other equipment before moving between waters and work sites, especially in waters known to be infested with aquatic invasive species. Drain water from machinery and let dry before moving to another location.

Hydraulic excavator with dump will used and will stay on the existing road adjacent to the culvert.

12. **DESCRIBE PLANNED EFFORTS TO MINIMIZE PROJECT IMPACTS.** The contractor will be required to submit a final erosion control and de-watering plan to the USFS before implementation. Sedimentation barriers in the form of silt fences and or straw bales will be installed before work begins. Work will take place during summer drier conditions in order to minimize soil compaction and sedimentation to the stream.

- Minimize erosion, sedimentation, or turbidity?
- Sediment control will be in place. The dewatering channels will be lined to minimize turbidity.

- Minimize stream channel alterations?

Very little channel alterations are expected except in the road prism

- Minimize effects to stream flow or water quality caused by materials used or removal of ground cover?

The erosion control methods detailed above will help minimize impacts to water quality from sedimentation. Excavated material will be re-used. Equipment fueling will take place on existing roads outside the floodplain, and an emergency spill plan is required for all mechanized equipment.

- Minimize effects on fish and aquatic habitat?

Fish will be removed from the construction area.

- Minimize risks of flooding or erosion problems upstream and downstream?

Riprap if necessary will be placed on the fill slopes to enhance stability and reduce erosion.

- Minimize vegetation disturbance, protect existing vegetation, and control weeds?

Disturbance will only occur to the existing road prism

13. **WHAT ARE THE NATURAL RESOURCE BENEFITS** of the proposed project?

Reduce chances for culvert failure and improve aquatic organism passage to an important WCT spawning tributary. .

14. **LIST ALTERNATIVES** to the proposed project. Why was the proposed alternative selected?

NA.

D. ADDITIONAL INFORMATION FOR SECTION 404, SECTION 10, AND FLOODPLAIN PERMITS ONLY.

If applying for a Section 404 or Section 10 permit, fill out questions 1-3. If applying for a floodplain permit, fill out questions 3-6. (Additional information is required for floodplain permits – See “Information for Applicant.”)

1. Will the project involve placement of dredged (excavated) and/or fill material below the ordinary high water mark, in a wetland, or other waters of the US? If yes, what is the surface area to be filled? How many cubic yards of fill material will be used? Note: Wetland delineations are required if wetlands are affected.

No

2. Description of avoidance, mitigation, and compensation (see Information for Applicant). Attach additional sheets if necessary.

[Click here to enter text.](#)

3. List the names and address of landowners adjacent to the project site. This includes properties adjacent to and across from the project site. (Some floodplain communities require certified adjoining landowner lists).

NA

4. List all applicable local, state, and federal permits and indicate whether they were issued, waived, denied, or pending. Note: All required local, state, and federal permits, or proof of waiver must be issued prior to the issuance of a floodplain permit.

[Click here to enter text.](#)

5. Floodplain Map Number NA

6. Does this project comply with local planning or zoning regulations? ☒ Yes ☐ No

E. SIGNATURES/AUTHORIZATIONS -- Each agency must have original signatures signed in blue ink.

After completing the form, make the required number of copies and **then sign each copy**. Send the copies with original signatures and additional information required directly to each applicable agency.

The statements contained in this application are true and correct. The applicant possess' the authority to undertake the work described herein or is acting as the duly authorized agent of the landowner. The applicant understands that the granting of a permit does not include landowner permission to access land or construct a project. Inspections of the project site after notice by inspection authorities are hereby authorized.

APPLICANT (Person responsible for the project):

Print Name: Jason Oltrogge

JASON

OLTROGGE

Digitally signed by JASON
OLTROGGE
Date: 2024.06.18 15:41:16 -06'00'

Signature of Applicant

Date

LANDOWNER:

Print Name: [Click here to enter name.](#)

Signature of Landowner

Date

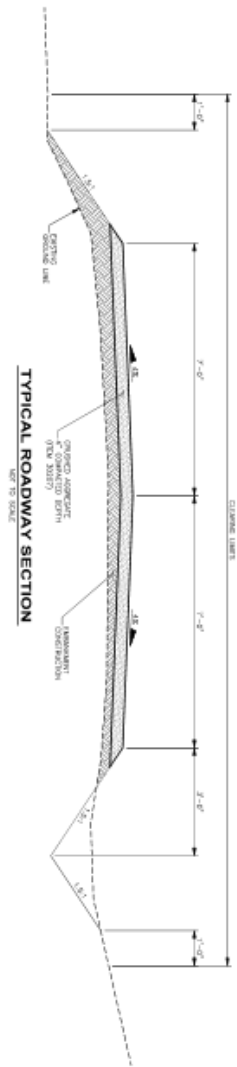
*CONTRACTOR/AGENT:

Print Name:

Signature of Contractor/Agent

Date

*Contact agency to determine if contractor signature is required.



GENERAL NOTES:

PRELIMINARY: THIS DRAWING IS A PRELIMINARY DESIGN AND IS NOT TO BE USED FOR CONSTRUCTION. THE DESIGNER ASSUMES NO LIABILITY FOR ANY ERRORS OR OMISSIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.

DESIGN ASSUMPTIONS: THE DESIGN IS BASED ON THE ASSUMPTIONS THAT THE ROADWAY WILL BE USED FOR TRUCK TRAFFIC AND THAT THE SUBGRADE WILL BE ADEQUATE TO SUPPORT THE ROADWAY. THE DESIGNER ASSUMES NO LIABILITY FOR ANY ERRORS OR OMISSIONS.

CONSTRUCTION: THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.

HAZARDOUS MATERIALS: THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.

HAZARDOUS MATERIALS: THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.

ESTIMATED QUANTITIES*

ITEM	DESCRIPTION	UNIT	QUANTITY
1001	CONSTRUCTION ERECTION AND REMOVAL	LS	1
1002	CONSTRUCTION ERECTION AND REMOVAL	LS	1
1003	CONSTRUCTION ERECTION AND REMOVAL	LS	1
1004	CONSTRUCTION ERECTION AND REMOVAL	LS	1
1005	CONSTRUCTION ERECTION AND REMOVAL	LS	1
1006	CONSTRUCTION ERECTION AND REMOVAL	LS	1
1007	CONSTRUCTION ERECTION AND REMOVAL	LS	1
1008	CONSTRUCTION ERECTION AND REMOVAL	LS	1
1009	CONSTRUCTION ERECTION AND REMOVAL	LS	1
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1099	CONSTRUCTION ERECTION AND REMOVAL	LS	1
1100	CONSTRUCTION ERECTION AND REMOVAL	LS	1

RUSSIAN CREEK CULVERT REPLACEMENT

ROAD NO. 2011 - M.P. 0.174

HELENA - LEWIS AND CLARK NATIONAL FOREST

TYPICAL ROADWAY SECTION & QUANTITIES

SHEET NO.

2 OF 7

CREST WEST

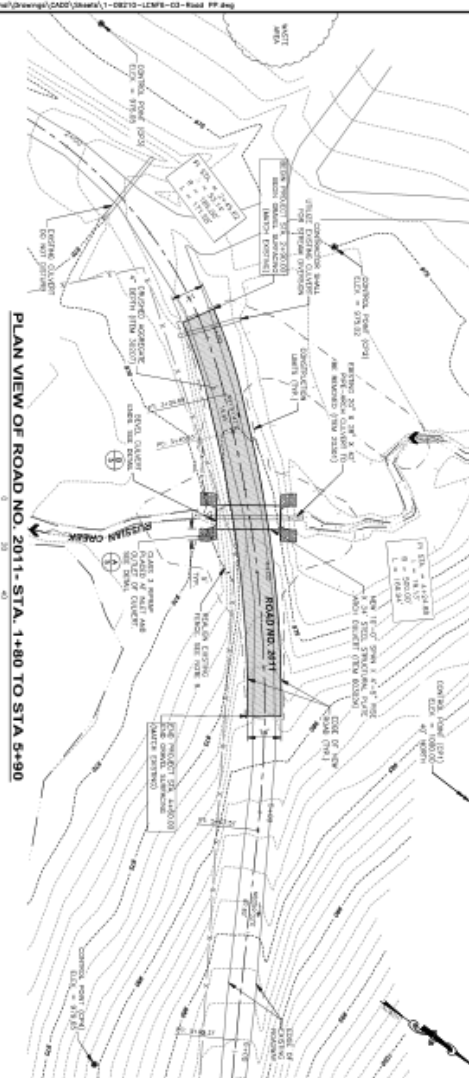
ENGINEERING

HELENA, MONTANA

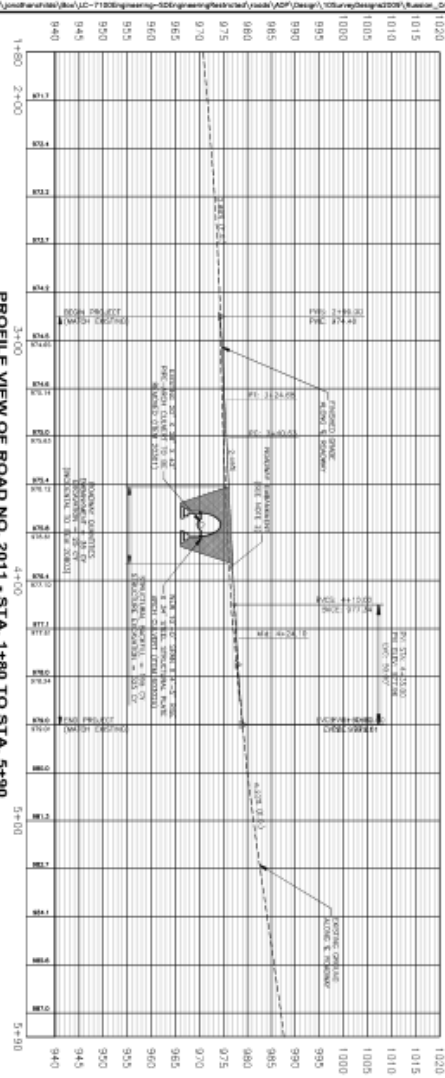
U.S. ARMY

ENGINEERING

HELENA, MONTANA



PLAN VIEW OF ROAD NO. 2011- STA. 1+80 TO STA 5+90



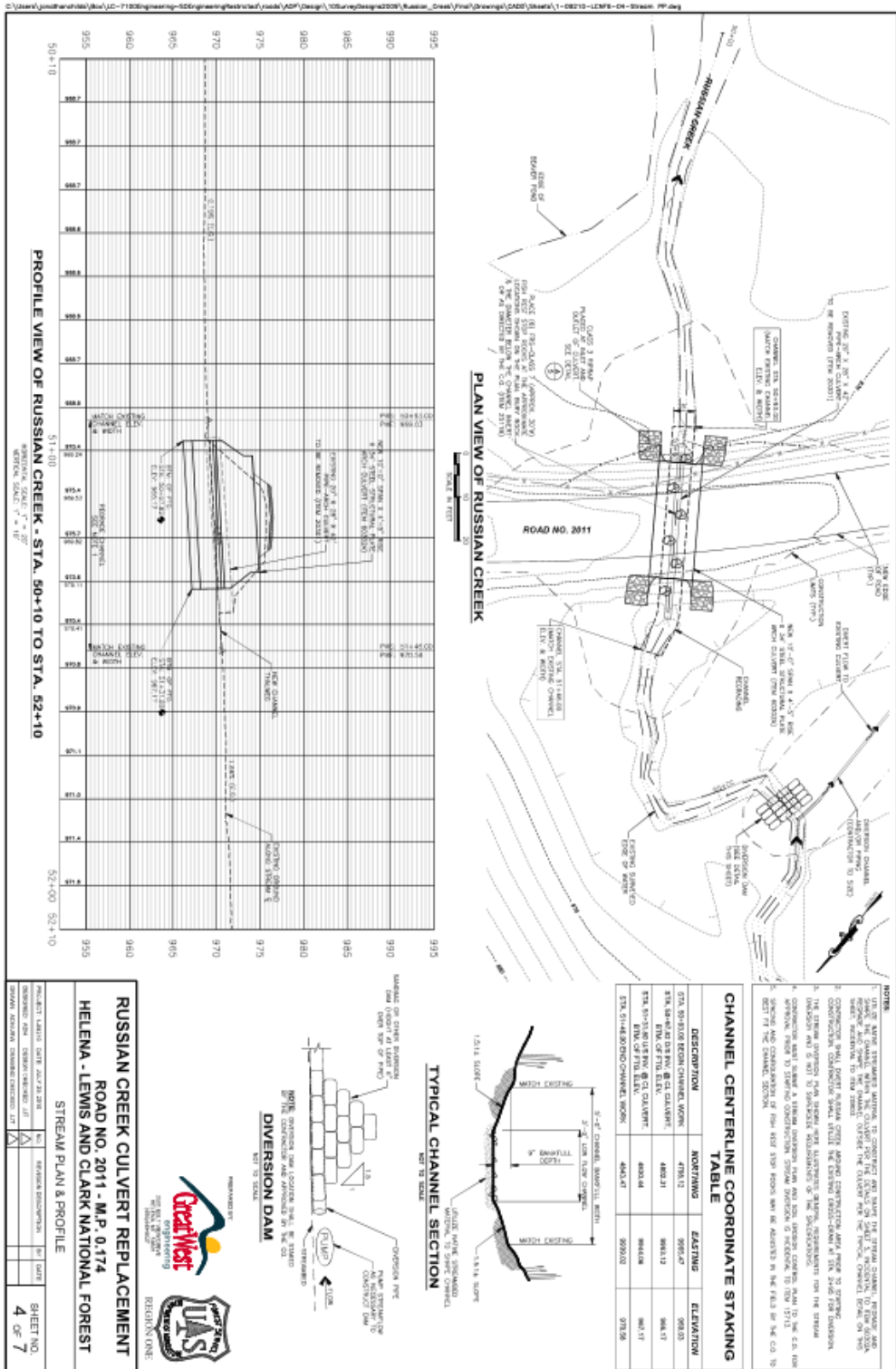
PROFILE VIEW OF ROAD NO. 2011 - STA. 1+80 TO STA. 5+90

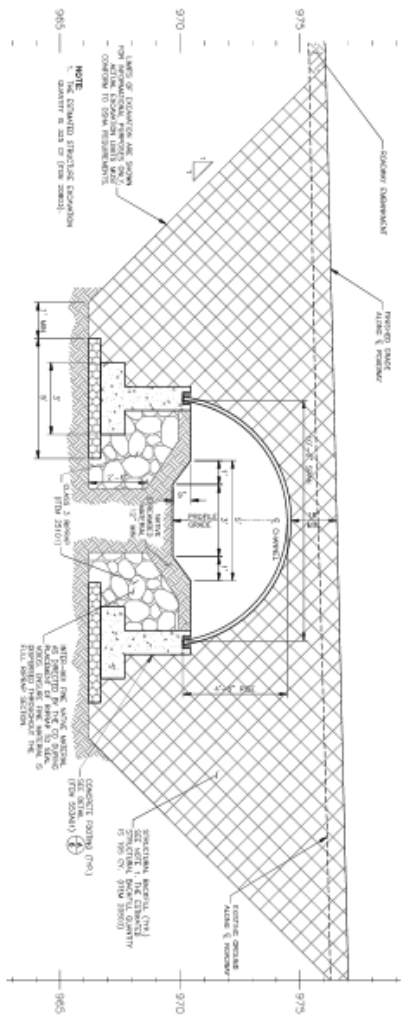
[illegible]ROADWAY CENTERLINE COORDINATE
STAKING TABLE

SECTION	SECTORS	ELEVATION
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171.4+0.25 (PT)	171.4+0.25	97.13
171.4+0.50 (PT)	171.4+0.50	97.13
171.4+0.75 (PT)	171.4+0.75	97.13
171.4+1.00 (PT)	171.4+1.00	97.13
171.4+1.25 (PT)	171.4+1.25	97.13
171.4+1.50 (PT)	171.4+1.50	97.13
171.4+1.75 (PT)	171.4+1.75	97.13
171.4+2.00 (PT)	171.4+2.00	97.13
171.4+2.25 (PT)	171.4+2.25	97.13
171.4+2.50 (PT)	171.4+2.50	97.13
171.4+2.75 (PT)	171.4+2.75	97.13
171.4+3.00 (PT)	171.4+3.00	97.13
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171.4+3.50 (PT)	171.4+3.50	97.13
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171.4+4.50 (PT)	171.4+4.50	97.13
171.4+4.75 (PT)	171.4+4.75	97.13
171.4+5.00 (PT)	171.4+5.00	97.13
171.4+5.25 (PT)	171.4+5.25	97.13
171.4+5.50 (PT)	171.4+5.50	97.13
171.4+5.75 (PT)	171.4+5.75	97.13
171.4+6.00 (PT)	171.4+6.00	97.13
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171.4+6.75 (PT)	171.4+6.75	97.13
171.4+7.00 (PT)	171.4+7.00	97.13
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171.4+64.50 (PT)	171.4+64.50	97.

RUSSIAN CREEK CULVERT REPLACEMENT
ROAD NO. 2011 - M.P. 0.174
HELENA - LEWIS AND CLARK NATIONAL FOREST







TYPICAL SECTION - STRUCTURAL-PLATE ARCH CULVERT

SECTION SCALE: 1" = 4'

CULVERT NOTES

1. CULVERT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN SPECIFICATIONS.
2. THE CULVERT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN SPECIFICATIONS.
3. THE CULVERT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN SPECIFICATIONS.
4. THE CULVERT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN SPECIFICATIONS.
5. THE CULVERT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN SPECIFICATIONS.
6. THE CULVERT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN SPECIFICATIONS.
7. THE CULVERT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN SPECIFICATIONS.
8. THE CULVERT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN SPECIFICATIONS.
9. THE CULVERT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN SPECIFICATIONS.
10. THE CULVERT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN SPECIFICATIONS.

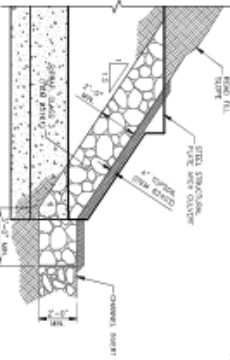
GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE DESIGN SPECIFICATIONS.
2. THE CULVERT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN SPECIFICATIONS.
3. THE CULVERT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN SPECIFICATIONS.
4. THE CULVERT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN SPECIFICATIONS.
5. THE CULVERT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN SPECIFICATIONS.
6. THE CULVERT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN SPECIFICATIONS.
7. THE CULVERT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN SPECIFICATIONS.
8. THE CULVERT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN SPECIFICATIONS.
9. THE CULVERT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN SPECIFICATIONS.
10. THE CULVERT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN SPECIFICATIONS.

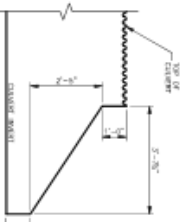
NOTES

1. THE CULVERT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN SPECIFICATIONS.
2. THE CULVERT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN SPECIFICATIONS.
3. THE CULVERT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN SPECIFICATIONS.
4. THE CULVERT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN SPECIFICATIONS.
5. THE CULVERT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN SPECIFICATIONS.
6. THE CULVERT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN SPECIFICATIONS.
7. THE CULVERT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN SPECIFICATIONS.
8. THE CULVERT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN SPECIFICATIONS.
9. THE CULVERT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN SPECIFICATIONS.
10. THE CULVERT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN SPECIFICATIONS.

1 RIPRAP @ INLET & OUTLET



2 CULVERT END TREATMENT



RUSSIAN CREEK CULVERT REPLACEMENT
ROAD NO. 2011 - M.P. 0.174
HELENA - LEWIS AND CLARK NATIONAL FOREST

CULVERT DETAILS

PROJECT NAME	DATE	BY	REVISION DESCRIPTION	BY	DATE
RUSSIAN CREEK CULVERT REPLACEMENT	JULY 2011	JL			
HELENA - LEWIS AND CLARK NATIONAL FOREST					
SHEET NO.					
5 OF 7					



