FINDING OF NO SIGNIFICANT IMPACT
FOR THE SOMERS WATER AND SEWER DISTRICT, MONTANA
WATER SYSTEM IMPROVEMENTS

TO: ALL INTERESTED PERSONS

Date:	February, 28, 2020
Action:	Funding Drinking Water System Improvements
Location of Project:	Somers Water and Sewer District, Flathead County, Montana

DEQ DWSRF Loan: $ 1,303,000

An environmental assessment (EA) has been prepared by the Montana Department of Environmental Quality (DEQ) for proposed funding for improvements to the Somers Water and Sewer District. The proposed improvements include the construction of a new 250,000-gallon ground-level bolted steel storage tank (expandable to 500,000-gallons), a valve house with associated appurtenances, and installation of approximately 533 linear feet of 10-inch PVC transmission pipe. The purpose of the project is to make improvements to district's water supply system needed to protect public health.

The affected environment will be an area located on district property approximately 500 feet west of School Addition Road and 250 feet east of Highway 93. The human environment affected will include residents and visitors of the Town of Somers area. Based on the EA, the project is not expected to have any significant adverse impacts upon terrestrial and aquatic life or habitat, including endangered species, water quality or quantity, air quality, geological features, cultural or historical features, or social quality.

As indicated above, this project will be funded in part with a low interest loan through the Montana Drinking Water State Revolving Fund Program, administered by the Montana Department of Environmental Quality and the Montana Department of Natural Resources and Conservation. The loan will be repaid by a Revenue Bond.

The DEQ utilized the following references in completing its EA for this project: a Uniform Application and Uniform Environmental Checklist for Montana Public Facility Projects, the Somers Water & Sewer District Water System Master Plan (dated 2019), and the Somers New Water Tank Improvement Project Design Report (dated February 2019). These documents were prepared by Shari A. Johnson & Associates Engineering, PLLC, the district's consulting engineer.

In addition to these references, letters were sent to; Montana Department of Environmental Quality (MDEQ), Montana Department of Fish, Wildlife & Parks (FWP), Montana Department of Natural Resources & Conservation (DNRC) Floodplain Management, United States Fish and Wildlife Service (USFWS), Montana State Historic Preservation Office (SHPO), Montana Department of Transportation (MDOT), and the United States Department of Transportation Federal Highway Administration (FHWA).

Response letters that were received are noted in the EA. These references are available for review upon request by contacting:

Denver Fraser, P.E.
Montana DEQ
State Revolving Fund Program
P.O. Box 200901
Helena, MT 59620-0901
Phone (406) 444-5318
Email: dfraser@mt.gov

or

Ruth Hellen, District President
Somers W&S District
P.O. Box 117
Somers, MT 59932
(406) 284-3235

Comments on this finding or on the EA may be submitted to DEQ at the above address. After evaluating substantive comments, DEQ may revise the EA or determine if an EIS is necessary. This finding will stand if no substantive comments are received during the 30-day comment period or if substantive comments are received and evaluated and the environmental impacts are still determined to be non-significant.

Signed,

Mark Smith, P.E., Supervisor
Engineering Bureau

SOMERS WATER AND SEWER DISTRICT - WATER SYSTEM IMPROVEMENTS PROJECT

ENVIRONMENTAL ASSESSMENT

I. COVER SHEET

A. PROJECT IDENTIFICATION

Applicant:	Somers Water and Sewer District
Address:	P.O. Box 117, Somers, MT 59932
DWSRF WRF Project No.	Not yet assigned
DEQ E.Q. No.	20-1761

B. CONTACT PERSON

Name:	Ruth Hellen, District President Somers Water and Sewer District
Address:	P.O. Box 117 Somers, MT 59932
Telephone:	(406) 857-2580

C. ABSTRACT

The Somers Water and Sewer District, through a 2019 Water System Master Plan (WSMP) prepared by Shari A. Johnson & Associates Engineering, has investigated the needs of their Public Water Supply (PWS). The WSMP examined all components of the system including supply, transmission, storage, and distribution. The WSMP notes that the water system does not have adequate storage to meet Montana Department of Environmental Quality (MDEQ) design standards; additionally, the PWS's existing elevated water storage tank is over 90 years old. Adding storage to the water system is necessary to improve system reliability and pressure and improve fire protection.

Options for remedying the storage system deficiency were developed and an alternatives evaluation was completed in the 2019 WSMP. Based on the analysis, specific water system improvements were recommended. The PWS did not meet DEQ-1 design requirements for source capacity (i.e, maximum day demand with largest well out of service) and also did not meet DEQ-1 requirements for water storage (i.e., volume equal to average day demand plus fire flow). Because of the age and condition of the PWS's existing storage tank, the WSMP determined that additional water storage was the most pressing need. The recommended alternatives include the following improvements:

Alternatives considered for the Somers Water system included

- No Action = $0
- Bolted Steel Tank (250,000 gal expandable to 500,000gal) = $1.3 Million
- Bolted Steel Tank (500,000 gal) = $1.6 Million
- Elevated Tank = not evaluated further due to seismic concerns and availability of District property at the elevation for a ground level tank

The recommended alternative was the Bolted Steel expandable tank since the District already had property at the proper hydraulic elevation for an ground-level tank. The expandable nature of this alternative also provided for affordability. The estimated capital

project cost including the transmission main to the existing system is $1.303 Million. Operational cost for this alternative was estimated to be $10,000 per year resulting in a net present worth cost of $1,425,000 for the Bolted Steel Tank (250,000 gal expandable to 500,000gal). A loan and forgiven loan are anticipated as the funding source. User rates will be increased by an approximate $10 to cover the loan component of this project.

The project will be funded by a combination of federal and state grants and loans. This Environmental Assessment (EA) examines the work as described in the 2019 WSMP, the submitted State Revolving Fund Loan Application, and the project's 2020 Engineering Design Report. Based on this review, environmentally sensitive characteristics such as wetlands, floodplains, and threatened or endangered species are not expected to be adversely impacted as a consequence of the proposed Somers Water and Sewer District Project. No significant long-term environmental impacts were identified.

Under Montana law (75-6-112, MCA), no person, including a municipality or county, may construct, extend, or use a public water system until the DEQ has reviewed and approved the plans and specifications for the project.

D. COMMENT PERIOD

Thirty (30) calendar days.

II. PURPOSE AND NEED FOR ACTION

The Somers Water and Sewer District water system consists of several components. Water is supplied from two well sources: Well 2 and Well 3. Both wells were drilled in 1990 and are good quality water sources. Well 2 pumps at 273 gallons per minute (gpm) and Well 3 pumps at 283 gpm. The well water is not treated.

The water distribution system is comprised of approximately 34,000 linear feet (LF) of pipe. The pipe is predominantly 6-, 8-, and 10-inches in size with some 12-inch pipe. Most of the pipe in the distribution system was replaced in 1990 with an additional 2,500 feet of pipe replaced in 2018. Fire hydrants are connected to the system for fire protection and valves are located throughout the system to facilitate maintenance and repair.

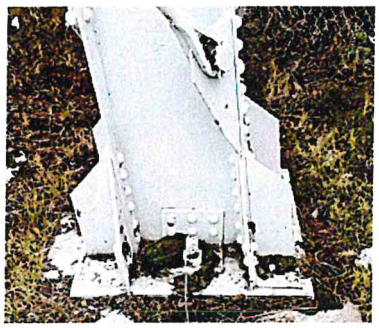
Water storage is currently provided by a 100,000-gallon elevated water storage tank located on Pavilion Hill above the town of Somers. The tank is approximately 90 feet tall and was built in 1926. The 100,000-gallon storage tank has a usable volume of 80,000 gallons. DEQ-1 standards require that storage tank volume equal the average day demand plus fire flow.

In December 2018 tank divers were hired to evaluate the inside of the tank. The results of their dive indicated some interior corrosion at previous patches and seam lines as well as some exterior corrosion where the coating has failed. One pinpoint of daylight was noted on the roof. Overall the condition of the tank was considered good. There was minor siltation in the tank.

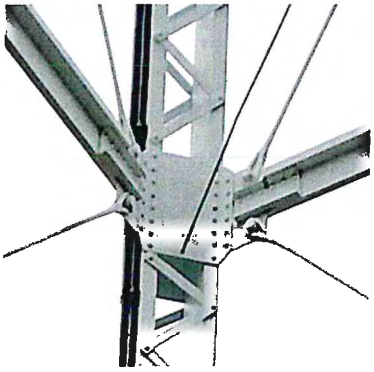
Next, a structural assessment was completed in 2019 to identify any major structural concerns with the tank. The scope was limited to a visual inspection by a structural engineer and is attached in Appendix C. The inspection noted that it is a bolted steel tank in relatively good condition for its age. The major concerns are that having been designed nearly 100 years ago and prior to seismic building codes, it is structurally obsolete. The following potential risk factors were noted:

- Likely no considerations of seismic design in the original design.

- Somers & Flathead Valley are considered High Seismic Risk areas.
- Cotter pins hold the tension rods in place and not positively attached to the structure.



- Footing installations of that time period used less rebar than modern standards.
- Only two anchor bolts connect each tower leg to the foundation.
- Current requirement would be four bolts.
- Foundations appear small for potential up lift.
- Connection between footings and bedrock is unknown.
- Holes in the middle of the T brace members suggest some structural member was attached, but it is unknown if it was needed, ever existed, or was removed.



The report stated that estimating the remaining life expectancy is very difficult to determine. The tank has provided water for nearly 90 years and has survived seismic and wind events in that time period. While the tank may be structurally obsolete, it may or may not need to be taken out of service immediately. The District has been preparing for the day that it might no longer function safely and purchased land in 2010 for a new tank site.

STORAGE

Health and safely of the public is by far the largest concern for any community water system. The Somers Water and Sewer District is severely limited in storage volume, and the existing storage tank is 94 years old and has an unknown life expectancy. These deficiencies could potentially impact the health and safety of the public. The proposed drinking water storage tank, transmission piping, and appurtenances are necessary to address deficiencies in this PWS.

III. ALTERNATIVES INCLUDING THE PROPOSED ACTION AND COSTS

Alternatives analyzed in the 2019 WSMP include the "do nothing" option or adding storage to meet current MDEQ requirements and water system needs.

The "no action" alternative was not considered beyond the initial screening stage. This alternative will not remedy the problems currently being experienced due to the lack of water storage. Additionally, water storage was considered a more pressing need for the community than additional source capacity.

The 2019 WSMP examined the capital costs and net present worth costs of the viable alternatives to correct the lack of water storage. Alternatives considered for the Somers Water and Sewer District PWS included:

- No Action = $0
- Bolted Steel Tank (250,000 gal expandable to 500,000gal) = $1.3 Million
- Bolted Steel Tank (500,000 gal) = $1.6 Million
- Elevated Tank = not evaluated further due to seismic concerns and availability of District property at the elevation for a ground level tank

The recommended alternative was the Bolted Steel expandable tank since the District already had property at the proper hydraulic elevation for an at-ground-level tank. The expandable nature of this alternative also provided for affordability. The estimated capital project cost including the transmission main to the existing system is $1.3 Million. Operational cost for this alternative was estimated to be $10,000 per year resulting in a net present worth cost of $1,425,000 for the Bolted Steel Tank (250,000 gal expandable to 500,000gal). A loan and forgiven loan are anticipated as the funding source. User rates will be increased by an approximate $10 to cover the loan component of this project.

IV. AFFECTED ENVIRONMENT

A. Description of the Project Planning Area

1. The planning area is the Somers Water & Sewer District in Flathead County, MT. The water system is supplied by two wells. There is one 100,000-gallon (80,000 gallons of usable volume) elevated storage tank in the system that provides pressure and flow to meet residential and fire flow demands. The new tank will add to the storage capacity of the system to help meet DEQ requirements. The existing tank is 100 years old and will be phased out when the new tank is expanded to 500,000 in the future.

   The new Bolted Steel Tank will be constructed in the summer/fall of 2020 on District Property situated between Hwy 93 and School Addition Road.

2. Design criteria for this project are addressed in DEQ Circular 1. Storage volume must meet the average day demand plus fire flow.

   The current storage requirement is approximately 225,000 gallons for a domestic service. The largest fire demand is the school which is under remodel; including the addition of a sprinkler system. A volume of 465,000 gallons is required for storage to meet a fire demand at the school. The Fire District has mutual aid agreements in place for a fire larger than can be handled by the Somers Water District Supply. The proposed tank improves the reliability and capacity for the district.

3. Somers, Montana, consists of variable terrain from flat farm fields to rock outcroppings. This is the result of the Flathead Valley being carved out by glaciers during the last ice age. It is theorized that a large mass of stagnant ice survived after the ice age where the lake exists and caused the Flathead River to build a large delta from Bigfork to Somers where fine soils were deposited.

   The project site is undeveloped land with sparse trees and rock outcroppings. A 2020 Geotechnical Investigation found slopes from 4H:1V to 2H:1V and no observations of instability. Test pits identified bedrock at depths of 0.5 to 2.8 feet below surface.

   There are no springs, wetlands, water bodies, biological, or cultural resource concerns identified during outreach to state and federal agencies about the project site.

4. Flathead County as a whole is growing at a rate of 2.0%. Somers Census Designated Place (CDP) is growing even faster at 8%. However, the CDP is much

larger than the Somers W/S District and is not representative of the District. To project water resources for a 20 year plan the county growth rate of 2.0% was used. The limitation to the 2.0% is that there still remains large open land within the District. There have been two subdivisions within the District that received water and sewer services in the last 15 years. The subdivisions provided their own infrastructure that was then adopted by the District to own and maintain, as is the common practice.

A potential 150 home development was proposed in 2018. The land is within the District boundaries and is to be served by the District. The development, if pursued further, will be required to provide their own infrastructure, pay plant investment fees, and connection fees in accordance with the Somers W/S District Bylaws.

The following table depicts growth for the twenty-year planning period at the county rate with and without the proposed development. As discussed in the Water System Evaluation and Needs sections, the District is out of compliance with DEQ regulations without considering the proposed development. Although the developer will be required to pay for his own infrastructure, it is important to be sure they are accounted for in the twenty-year plan.

Table 1. Anticipated Growth (20-year planning period)

	Flathead Growth Plus 150 homes at 20/ year			Somers	
	2.00%			2.00%	
Year	EDU	connections		EDU	connections
1	281	112		281	112
2	307	123		287	115
3	333	133		292	117
4	359	144		298	119
5	387	155		304	122
6	414	166		310	124
7	443	177		316	127
8	471	189		323	129
9	491	196		329	132
10	501	200		336	134
11	511	204		343	137
12	521	208		349	140
13	531	213		356	143
14	542	217		364	145
15	553	221		371	148
16	564	226		378	151
17	575	230		386	154
18	587	235		393	157
19	598	239		401	161
20	610	244		409	164

D. MAPS

Figure 1 shows an aerial photo of Somers on the north side of Flathead Lake. The figure shows the existing storage tank site and the proposed site for the new tank. Figure 2 shows a map view of Somers, MT.

Figure 1. Somers Montana Aerial View Tank Sites

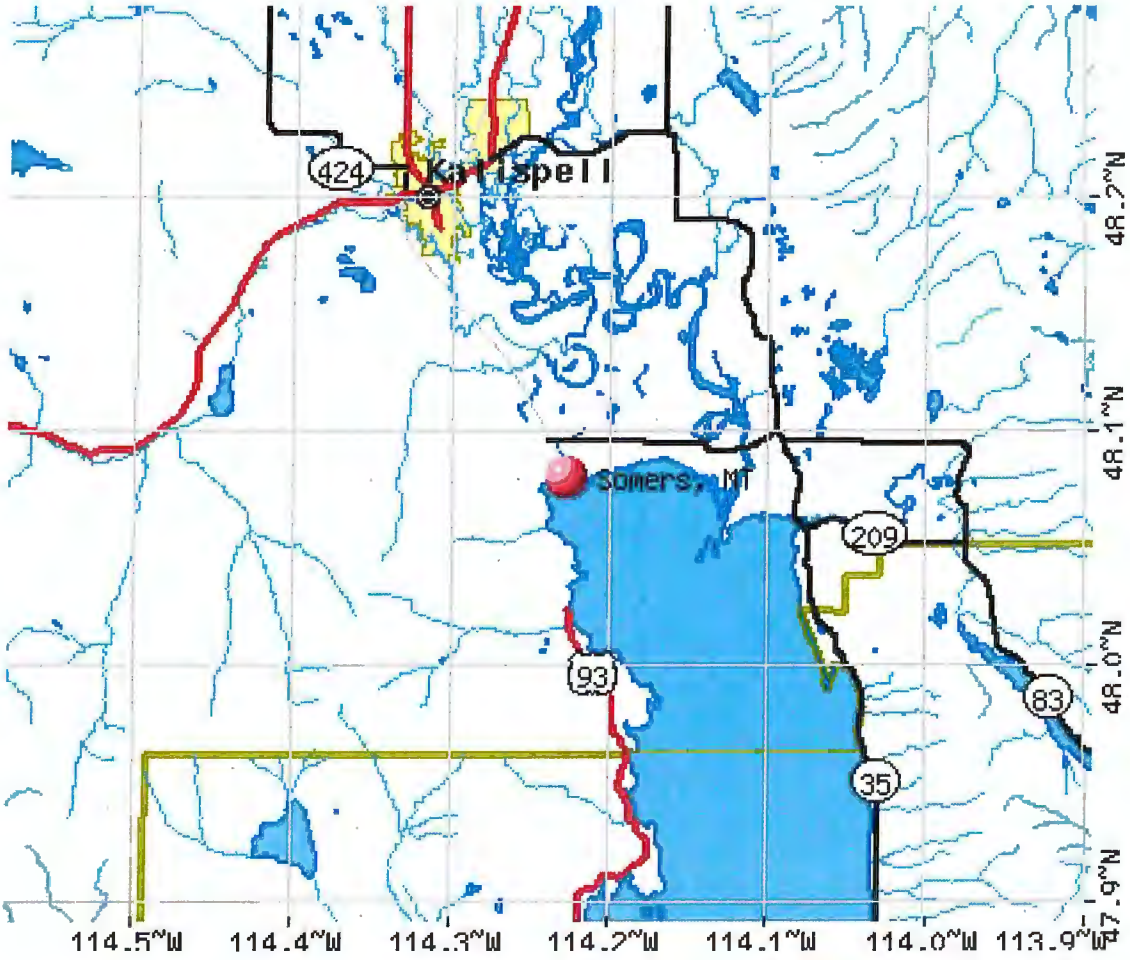


Figure 2. Somers, Montana Map

V. DIRECT AND INDIRECT ENVIRONMENTAL IMPACTS OF PROPOSED PROJECT

No adverse impacts to the environment are anticipated by implementation of the proposed water system improvements. All of the storage tank, transmission main piping, and appurtenances will be located within existing easements and right-of-ways.

A. DIRECT ENVIROMENTAL IMPACTS

Soils Suitability, topographic and Geologic Constraints
Soils in the area are suitable for the construction of ground-level bolted storage tank and transmission main. A geotechnical investigation of the site was completed on February 4, 2020, by Slopeside Engineering. The report has several recommendations for site work, excavation, and construction materials. The report can be obtained upon request.

Land Use
The current land use is undeveloped property with previous tree thinning activities.

Floodplains and Wetlands
There are no water bodies, springs, or floodplains associated with this property.

Historical/Cultural Resources

The Montana State Historic Preservation Office was contacted and indicated the following. "As long as there will be no disturbance or alteration to structures over fifty years of age we feel that there is a low likelihood cultural properties will be impacted. We, therefore, feel that a recommendation for a cultural resource inventory is unwarranted at this time." There are no structures on site.

Biological Resources and Vegetation
The Fish Wildlife Service stated that because the proposed work was situated in a developed setting they did not anticipate any adverse effects to listed, proposed, or candidate threatened or endangered species, listed species, or habitat. Recommendations were given for conservation measures to minimize potential conflicts with grizzly bear which may occur in the general project vicinity. These measures can be reviewed by requesting the correspondence received.

Surface Water and Groundwater
The proposed water system project will have no impacts on surface water/water quality, quantity or distribution. Likewise, the project will have no impact on groundwater resources. Available groundwater information, in the proposed project area, indicates that all construction will be above the groundwater elevation.

Socio-Economic/Environmental Justice and Public Health
This project will benefit all community members regardless of socio-economic status.

Air Quality
Short-term negative impacts on the air quality will occur from heavy equipment, dust and exhaust fumes during project construction. Proper construction practices and dust abatement measures will be implemented during construction to control dust, thus minimizing this problem.

Energy
No increased long-term energy consumption is anticipated.

Noise
Short-term impacts from increased noise levels will occur during construction of the proposed project improvements. Construction activities are anticipated to last less than 90 days and will occur only during daylight hours. Post-construction, no noise level impacts are expected.

B. UNAVOIDABLE ADVERSE IMPACTS

Short-term construction related impacts, such as noise, dust and traffic disruption, will occur but should be minimized through proper construction management. Energy consumption during construction cannot be avoided.

C. CUMMULATIVE IMPACTS

This project addresses the existing water utility needs and will have no subsequent negative cumulative effects on resources, ecosystems, or human communities. The projected growth of Somers over the next 20 years is not expected to cause cumulative effects beyond the capacity of the resources. Further environmental analysis would be required for any discussion of cumulative impacts beyond this scope and time frame.

VI. PUBLIC PARTICIPATION

The District has held several public meetings specifically about the tank project as well as project discussion at monthly meetings which are open to the public. In addition, they have mailed

postcards and letters describing the tank project while conducting a rate survey. Feedback has been in support of the project. No objections were raised to the construction of a new tank. Public Meeting Dates: June 2017, January 2019 (two meetings), February 2019.

VII. AGENCY ACTION, APPLICABLE REGULATIONS, AND PERMITTING AUTHORITIES

All water system improvements will be designed to meet Montana DEQ requirements. Proper State regulatory review and approval of the project plans and specifications will be obtained. All applicable local, federal, and state permits will be acquired including, but not limited to, a stormwater discharge permit and a construction-dewatering permit if needed.

All appropriate easements and access will be addressed with regards to the water system infrastructure. If required, land acquisition or long-term agreements will be established for the land requirements associated with the new water storage tank.

VIII. REFERENCE DOCUMENTS

The following documents were utilized in the environmental review of this project and are considered to be part of the project file:

A. Somers Water & Sewer District Water System Master Plan, 2019, prepared by Shari Johnson, P.E., Shari A. Johnson & Associates Engineering, PLLC.
B. Somers New Water Tank Improvement Project Design Report--Tank, February 2020, prepared by Shari Johnson, P.E., Shari A. Johnson & Associates Engineering, PLLC.
C. Somers Water and Sewer District – Uniform Application Form for Montana Public Facility Projects, March 19, 2019, Prepared by the Somers Water and Sewer District, Montana.
D. Uniform Environmental Checklist for Montana Public Facility Projects, November 18, 2019, prepared by Shari Johnson, P.E., Shari A. Johnson & Associates Engineering, PLLC.

IX. AGENCIES CONSULTED

Several federal and state government agencies were sent letters on September 25, 2019, requesting a review of the proposed water system improvements project. The agencies that provided recent comments include the following:

A. U.S. Fish and Wildlife Service reviewed the project and a comment letter dated October 8, 2019 stated, "Based on the confined nature and location of this proposed work in an existing developed setting, we do not anticipate its implementation would result in adverse effects to listed, proposed or candidate threatened or endangered species, or listed or proposed critical habitat." The letter also provides recommendations and guidance regarding grizzly bear, migratory birds, bald and golden eagles, and wetlands. The full letter can be provided upon request.
B. Department of the Army Corps of Engineers reviewed the project and stated, "Based on the information provided in your submittal, we are unable to ascertain if regulated activities are proposed or if jurisdictional waters of the U.S. are present within the project area." They note that a permit would be required if any fill material was going to be placed into waters of the U.S. They also state, "If waters of the U.S. will not be affected by the jurisdictional activity a DA permit will not be required for the project." The full letter can be provided upon request.
C. Montana Historical Society's Historic Preservation Office reviewed the project and provided a comment email September 24, 2019. The letter states, "As long as there will be no disturbance or alteration to structures over fifty years of age we feel that there is a low

likelihood cultural properties will be impacted. We, therefore, feel that a recommendation for a cultural resource inventory is unwarranted at this time."

D. Montana Fish, Wildlife & Parks reviewed the project and provided a comment letter October 15, 2019. The letter states, "Montana Fish, Wildlife & Parks has no comment on the proposed Somers Water Tank Improvements."

X. RECOMMENDATION FOR FURTURE ENVIRONMENTAL ANALYSIS

[ ] EIS [ ] More Detailed EA [X] No Further Analysis

Rationale for Recommendation: Through this EA, The Montana DEQ has verified that none of the adverse impacts of the Somers Water and Sewer District Improvements Project are significant. Therefore, an environmental impact statement is not required. Richard Knatterud, P.E., representing TSEP has reviewed this EA and is in concurrence with the MDEQ finding. Based on this EA, a Finding of No Significant Impact (FONSI) will be issued and legally advertised in the local newspaper and distributed to a list of interested government agencies. Comments regarding the project will be received for 30 days before final approval of the EA is granted. This environmental review was conducted in accordance with the Administrative Rules of Montana (ARM) 17.4.607 thru 17.4.610.

EA Prepared By:

Denver Fraser — 02/28/2020

Denver Fraser, P.E. — Date

EA Reviewed By:

Mark A Smith — 2/28/20

Mark Smith, P.E. — Date