

CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	Maclay Bridge Gas Line Relocation/Grant of an Easement Involving .144 acres of Trust land.
Proposed Implementation Date:	Summer 2020
Proponent:	North Western Energy Corporation
Location:	Bitterroot River Crossing within the NE4SW4, NW4SW4, of Section 26, T13N-R20W
County:	Missoula

I. TYPE AND PURPOSE OF ACTION

North Western Energy has submitted an easement application (20' wide X 308.13' long - 0.144 acres) for the relocation of a 4" natural gas distribution line underneath the Bitterroot River. This proposed relocation is intended to remove the existing gas line which is attached to the Maclay Bridge and bury it in the bed of the Bitterroot River.

Montana Code (MCA 70-16-201) provides for state ownership from the low water mark to the low water mark on navigable water bodies. Based on historical evidence, the Bitterroot River is commercially navigable from Jennings Camp Creek to its confluence with the Clark Fork River. Therefore, the state claims ownership of the riverbed below the low water mark between these two points.

II. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:

Provide a brief chronology of the scoping and ongoing involvement for this project. List number of individuals contacted, number of responses received, and newspapers in which notices were placed and for how long. Briefly summarize issues received from the public.

Affected landowners along the proposed route of the gas line relocation are limited to North Western Energy on the southeast side and the Missoula County easement for River Pines Rd. on the west side. Therefore, no scoping process was conducted for this project. DNRC claims ownership of the land below the low water mark at the Bitterroot River crossing.

2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

Examples: cost-share agreement with U.S. Forest Service, 124 Permit, 3A Authorization, Air Quality Major Open Burning Permit.

A 310 permit application was submitted to the Missoula County Conservation District. After review, the District determined proposed land disturbing activities (boring hole entry and exit points) were outside of the area encompassing the bed and banks of the river and that a permit for this project was not needed

3. ALTERNATIVE DEVELOPMENT:

Describe alternatives considered and, if applicable, provide brief description of how the alternatives were developed. List alternatives that were considered but eliminated from further analysis and why.

Two alternatives have been considered by NW Energy including:

- 1) No Action – continue to utilize the existing power distribution infrastructure.
- 2) Proposed Action – Horizontal Directional Drilling (HDD) of a natural gas distribution pipeline under the Bitterroot River.

North Western Energy has chosen to submit a proposal for HDD drilling/boring of a new natural gas distribution pipeline under the Bitterroot River.

In the analysis of this easement grant application, DNRC will evaluate the environmental effects of both (No Action) and the proposed action (Proposed Action) alternatives.

III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" if no impacts are identified or the resource is not present.*

4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify direct, indirect, and cumulative effects to soils.

Existing Conditions: The proposed action occurs in an area within the Missoula Valley that has filled with Quaternary unconsolidated deposits greater than 200 feet thick (see Montana Bureau of Mines and Geology July 2007 publication – Montana Ground-Water Assessment Atlas 4, Part B, Map 3, by Larry N. Smith).

No Action: No effects.

Proposed Action: HDD would occur below and across the Bitterroot River at a depth of 14.3 feet below the lowest elevation of the bed of the Bitterroot River which is two times the estimated scour depth at this location. No unusual geologic features are known in the area or are expected to be encountered by the proposed action.

The minimum distance the drilling and power line would be from the active channel in the vertical direction is 14.30 feet. The horizontal distance between the bore profile and the active channel would never be less than 14.30 feet. The HDD equipment would be staged approximately 140 feet back from the edge of the east bank. On the west bank, equipment would be staged on the opposite side of the River Pines Road from the river. It is anticipated that the River Pines Rd. fill would prevent and sediment from entering the river.

The risk of the pipeline being exhumed and damaged by scour or lateral migration of the river are mitigated by the lateral distance and depth of the proposed pipeline – which is outside the vertical or lateral adjustments anticipated for the river within a timescale assumed for the lifespan of the infrastructure (200 years).

Considering the above, impacts to the unusual geologic features, soil quality, stability, and moisture are not anticipated with this project.

5. WATER QUALITY, QUANTITY AND DISTRIBUTION:

Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify direct, indirect, and cumulative effects to water resources.

No Action: No effects

Proposed Action: Surface water would not be encountered by the proposed action.

Construction dewatering is not anticipated for the project.

Groundwater might be intercepted by the HDD. There would be no products used in the drilling process that would impact or contaminate groundwater. Naturally occurring bentonite clay is used as a viscosifier during the drilling process to reduce friction and stabilize the drill hole by sealing pores and holding soil particles in place.

Drilling fluid is circulated from equipment on the surface, through a drill pipe, and back to the surface along the drill hole. Drilling fluid returns are collected at the entry and exit points and stored for recycling.

Bentonite clay is not a listed hazardous material/substance as defined by the U.S. EPA Emergency Planning and community Right-to-know Act or Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) regulatory criteria. Bentonite is non-toxic and commonly used in farming practices but has the potential to impact plants, fish and their eggs if discharged to waterways in significant quantities.

Impacts to water quality, quantity, and distribution are not anticipated with this project.

6. AIR QUALITY:

What pollutants or particulate would be produced (i.e. particulate matter from road use or harvesting, slash pile burning, prescribed burning, etc)? Identify the Airshed and Impact Zone (if any) according to the Montana/Idaho Airshed Group. Identify direct, indirect, and cumulative effects to air quality.

No Action: No effects

Proposed Action: A minor amount of emissions associated with the operation of motorized equipment (cars, trucks, excavators/backhoes, boring machines) would be produced during hole boring and powerline installation. These operations would not be expected to take more than 10 days to complete.

7. VEGETATION COVER, QUANTITY AND QUALITY:

What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify direct, indirect, and cumulative effects to vegetation.

No Action: No effects

Proposed Action: The State property lies below the low water marks of the Bitterroot river and does not support terrestrial vegetation. The proposal calls for boring under the river bed, thus there would be no impact to either terrestrial or aquatic vegetation on state trust land.

Two excavated bore pits approximately 4' X 4' X 3'deep would be constructed on each side of the river approximately 50'-140' back from the edge of the river. These pits are where equipment would operate and where the pipeline would enter the ground. On both sides of the river the newly buried pipeline would be reconnected to existing pipelines. Because of the moist conditions in this area, riparian shrub regrowth is expected to occur within 5 years.

8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:

Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify direct, indirect, and cumulative effects to fish and wildlife.

Existing Conditions: Terrestrial and Avian Wildlife

Limited habitats for terrestrial wildlife exist in the project area. Surrounding uplands and riparian habitats likely support a variety of wildlife species, but human disturbance in the vicinity has reduced overall species use of these habitats through time.

No Action: No disturbance to terrestrial wildlife would occur. No changes to existing habitats would be anticipated. Collectively, no effects to terrestrial wildlife would be anticipated.

Proposed Action: Some short-duration disturbance to terrestrial wildlife could occur, but would occur outside of the breeding, nesting, or wintering periods when individuals could be more affected by potential disturbance. No

appreciable changes to existing habitats on DNRC-managed lands would be anticipated, small changes to habitats on other ownerships would occur. Collectively, negligible effects to terrestrial wildlife would be anticipated.

Existing Conditions: Fisheries

The Bitterroot River supports a diverse fishery. Species present include bull-trout, westslope cutthroat trout (WCT), mountain whitefish, northern pike minnow, longnose dace, longnose sucker, slimy sculpin, brown trout, rainbow trout, brook trout, northern pike and other minor species (MFISH 2016). Both westslope cutthroat trout and bull trout are considered sensitive species by DNRC. Bull trout is a federally threatened species and potential for impacts to this species are discussed in detail in Section 9 below.

No Action: No disturbance to fisheries would occur. No changes to existing habitats would be anticipated. Collectively, no effects to fisheries would be anticipated.

Action Alternative: The proposed disturbances would occur outside of the channel of the river and would remain 14 feet below the bed of the Bitterroot River and there would be no disturbance to channel banks or bed or risk of vertical scour reaching the installed pipeline. The drill sites are located on adjacent uplands, well away from the river (and potential lateral scour) and would have no direct, indirect, or cumulative effect to fisheries.

9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:

Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify direct, indirect, and cumulative effects to these species and their habitat.

Existing Conditions: Terrestrial and Avian Wildlife

Limited habitats for terrestrial wildlife exist in the project area. Some use of the project area by bald eagles could occur. Surrounding riparian habitats likely support a variety of wildlife species, including common species as well as less common species such as great blue herons, yellow-billed cuckoos, and pileated woodpeckers. Proximity to human developments, River Pines Rd. Maclay Bridge, and numerous other forms of human disturbance likely limits some wildlife use of the vicinity.

No Action: No disturbance to terrestrial wildlife would occur. No changes to existing habitats would be anticipated. Collectively, no effects to terrestrial wildlife would be anticipated.

Proposed Action: Some short-duration disturbance to terrestrial wildlife could occur. Proposed activities would occur outside of the bald eagle nesting season, but some disturbance to foraging bald eagles could occur. No appreciable changes in bald eagle prey species would be anticipated. No appreciable changes to existing habitats for other species would be anticipated. Collectively, negligible effects to terrestrial threatened, endangered, or sensitive wildlife species would be anticipated.

Bull Trout: Bull trout is a federally threatened species. This reach of the Bitterroot River is considered occupied by bull trout habitat.

Bull Trout- No Action: No disturbance to fisheries would occur. No changes to existing habitats would be anticipated. Collectively, no effects to fisheries would be anticipated.

Bull Trout Action: The project would not impact the bed or banks of the Bitterroot River. There would be no direct, indirect or cumulative impacts to bull trout, with the proposed horizontal drilling project and subsurface electric power distribution line installation.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:

Identify and determine direct, indirect, and cumulative effects to historical, archaeological or paleontological resources.

No Action: No effects

Proposed Action: A Class I (literature review) level review was conducted by the DNRC staff archaeologist for the area of potential effect (APE). This entailed inspection of project maps, DNRC's sites/site leads database, land use records, General Land Office Survey Plats, and control cards. The Class I search revealed that no cultural or paleontological resources have been identified in the APE. Because the area of potential effect on state land is restricted to the Bitterroot River bed, no additional archaeological investigative work will be conducted in response to this proposed development. However, if previously unknown cultural or paleontological materials are identified during project related activities, all work will cease until a professional assessment of such resources can be made.

11. AESTHETICS:

Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify direct, indirect, and cumulative effects to aesthetics.

Existing Conditions: The proposed action is within Missoula County. The riparian river corridor provides a break from adjacent urban development. The County has recently focused attention towards preserving open space along the river corridor.

No Action: No effects

Proposed Action: The proposal to drill/bore under the river (out of sight) would not cause additional impacts to the aesthetics of the river corridor.

12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:

Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify direct, indirect, and cumulative effects to environmental resources.

No Action: There would continue to be a greater potential for extended disruption of the natural gas supply to the Big Flat/O'Brien Creek neighborhood. The current location of the pipeline is subject to vandalism and in violation of FERC regulations.

Proposed Action: The proposal is intended to bring greater safety into the natural gas distribution system for a portion of the County and reduce the potential impacts associated with vandalism to the pipeline where it is attached to the Maclay Bridge. Placing the pipeline underground, would also bring North Western Energy into compliance with FERC regulations.

13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:

List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.

IV. IMPACTS ON THE HUMAN POPULATION

- RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.
- Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.
- Enter "NONE" if no impacts are identified or the resource is not present.

14. HUMAN HEALTH AND SAFETY:

Identify any health and safety risks posed by the project.

No Action: Potential loss of natural gas service could have public safety implications for the Big Flat/O'Brien Creek neighborhood.

Proposed Action: Implementation would provide an increased level of reliability as well as improved protection of the pipeline from vandalism to Missoula customers in the Big Flat/O'Brien Creek neighborhood.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:

Identify how the project would add to or alter these activities.

No Action: Potential loss of natural gas could have adverse effects for existing and future industrial and commercial developments in the in the Big Flat/O'Brien Creek neighborhood.

Proposed Action: Implementation would provide an increased level of reliability as well as improved protection of the pipeline from vandalism to Missoula customers in the Big Flat/O'Brien Creek neighborhood.

16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:

Estimate the number of jobs the project would create, move or eliminate. Identify direct, indirect, and cumulative effects to the employment market.

No Action: No effect

Proposed Action: Drilling/boring and installation of the powerline under the river is estimated to provide potential employment for 5-10 people for up to 10 days.

17. LOCAL AND STATE TAX BASE AND TAX REVENUES:

Estimate tax revenue the project would create or eliminate. Identify direct, indirect, and cumulative effects to taxes and revenue.

No Action: No effect.

Proposed Action: An indirect effect of improving the reliability of the natural gas distribution system could be to foster additional development within the area served by this distribution line.

18. DEMAND FOR GOVERNMENT SERVICES:

Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify direct, indirect, and cumulative effects of this and other projects on government services

No Action: No effect

Proposed Action: By improving the natural gas distribution to a portion of the county, there may be a reduction in the need for government services to deal with the impacts of disruptions in the gas supply or vandalism to the exposed portions of the pipeline where it is attached to Maclay Bridge.

19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:

List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.

No Action: No effect.

Proposed Action: N/A.

20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:

Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify direct, indirect, and cumulative effects to recreational and wilderness activities.

No Action: No effect

Proposed Action: The area is an open space river corridor within a suburban setting. The property does not provide access to wilderness. The proposal to drill/bore a gas pipeline under the river would not be expected to impact current and future use of the area for recreational purposes.

21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:

Estimate population changes and additional housing the project would require. Identify direct, indirect, and cumulative effects to population and housing.

No Action: No effect

Proposed Action: The proposal is intended to improve the reliability of natural gas service to a portion of Missoula. There could be a slight growth inducing effect to population and housing associated with improved electrical service to the area served by this powerline.

22. SOCIAL STRUCTURES AND MORES:

Identify potential disruption of native or traditional lifestyles or communities.

No Action: No effect

Proposed Action: No effect

23. CULTURAL UNIQUENESS AND DIVERSITY:

How would the action affect any unique quality of the area?

No Action: No effect

Proposed Action: No effect

24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:

Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify direct, indirect, and cumulative economic and social effects likely to occur as a result of the proposed action.

No Action: No effect

Proposed Action: An easement approximately 308' long and 20' wide involving 0.144 acres of land would be granted to North Western Energy Corporation for a buried pipeline. The cost of this easement would be calculated at ½ the value similar adjacent properties. The revenue collected would be deposited in the permanent fund for the Public Lands Navigable Waters Trust account. This trust is for the support of public schools (K-12) facilities and technology needs.

EA Checklist Prepared By:	Name: Jonathan Hansen	Date: June 29, 2020
	Title: Missoula Unit Manager	

V. FINDING

25. ALTERNATIVE SELECTED:

I select the proposed Action alternative.

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

I find that implementation of this alternative will not cause significant environmental impacts.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

EIS

More Detailed EA

No Further Analysis

EA Checklist Approved By:	Name: Robert H Storer
	Title: SWLO Trust lands Program Manager
Signature: <i>Robert H Storer</i>	Date: 7/14/2020

NORTHWESTERN ENERGY
GAS TRANSMISSION PIPELINE BORE PROJECT
BITTERROOT RIVER
T13N, R20W, SECTION 26
MISSOULA COUNTY, MT

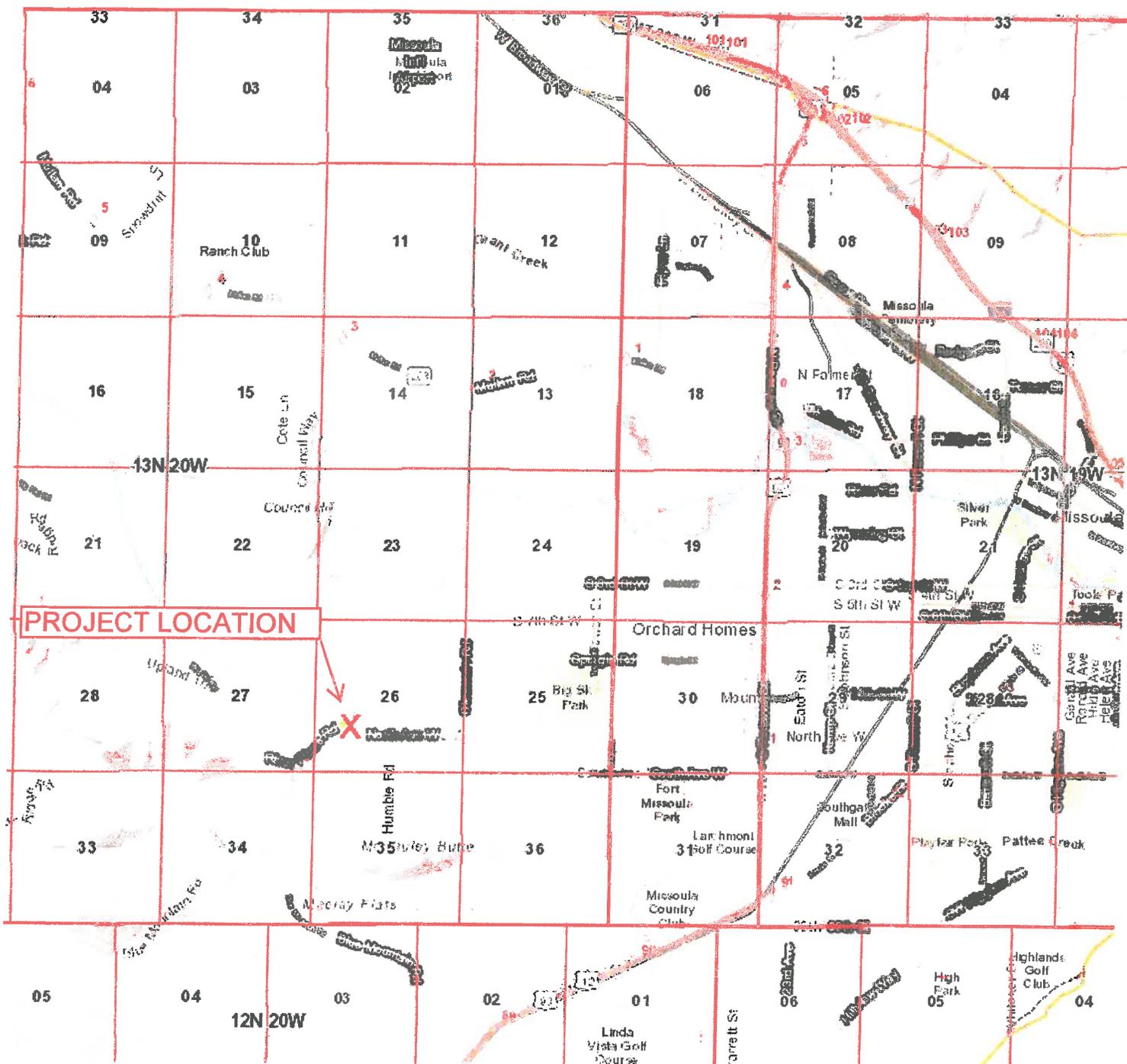
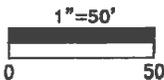


EXHIBIT A1- Certificate of Survey



DATE OF SURVEY
JANUARY 2020

LEGAL DESCRIPTION

A fifty (50) foot wide access and utility easement located in and being a portion of the southwest one-quarter (SW1/4) of Section 26, T.13N., R.20W., P.M.M., Missoula County, Montana, lying 25 feet on each side of the following described centerline:

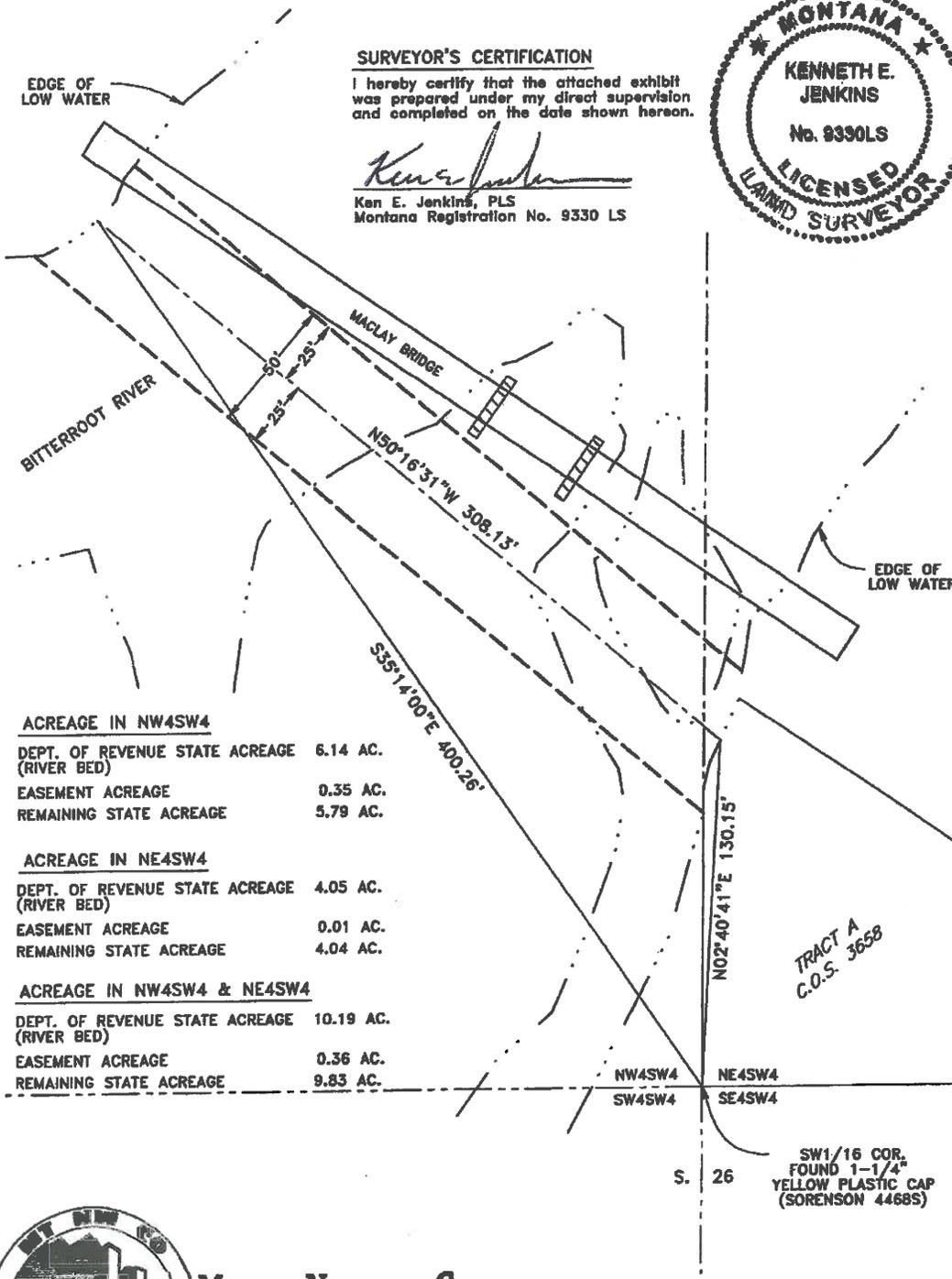
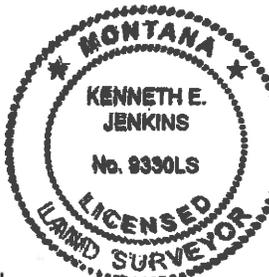
Commencing at the southwest one-sixteenth (SW1/16) corner of Section 26, T.13N., R.20W., P.M.M., thence N.02°40'41"E., 130.15 feet; to a point at the low water mark of the east side of the Bitterroot River, said point being The True Point of Beginning; thence N.50°16'31"W., 308.13 feet to a point at the low water mark of the west side of the Bitterroot River, said point being the end of described centerline of easement. Containing 0.36 acres more or less.

The sidelines of said easement shall be prolonged or shortened so as to terminate at said east and west low water marks.

SURVEYOR'S CERTIFICATION

I hereby certify that the attached exhibit was prepared under my direct supervision and completed on the date shown hereon.

Kenn E. Jenkins
Kan E. Jenkins, PLS
Montana Registration No. 9330 LS



ACREAGE IN NW4SW4

DEPT. OF REVENUE STATE ACREAGE (RIVER BED)	6.14 AC.
EASEMENT ACREAGE	0.35 AC.
REMAINING STATE ACREAGE	5.79 AC.

ACREAGE IN NE4SW4

DEPT. OF REVENUE STATE ACREAGE (RIVER BED)	4.05 AC.
EASEMENT ACREAGE	0.01 AC.
REMAINING STATE ACREAGE	4.04 AC.

ACREAGE IN NW4SW4 & NE4SW4

DEPT. OF REVENUE STATE ACREAGE (RIVER BED)	10.19 AC.
EASEMENT ACREAGE	0.36 AC.
REMAINING STATE ACREAGE	9.83 AC.



MONTANA NORTHWEST COMPANY

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PREPARED AT THE REQUEST OF
 NORTHWESTERN ENERGY MTHNCO PROJECT
 NO. 2713-19 D-1523