Montana Department of Commerce
Treasure State Endowment Program
Environmental Assessment

Park County, Montana
Monument Avenue Bridge Replacement

Proposed Action: The proposed project will replace the existing bridge on Monument Avenue in Silver Gate, Montana with a single span prefabricated steel bridge. The bridge will be founded on driven steel piles and precast concrete abutments. A detour will be provided at the bridge site during construction. Construction is expected to take approximately 90 days.

UNIFORM ENVIRONMENTAL CHECKLIST

A completed environmental checklist as contained in the Uniform Application for Montana Public Facility Projects, 11th Edition, begins on the next page.

As the engineer that prepared the preliminary engineering report, I, Kathy Thompson, P.E. have reviewed the information presented in this checklist and believe that it accurately identifies the environmental resources in the area and the potential impacts that the project could have on those resources. In addition, the required state and federal agencies were provided with the required information about the project and requested to provide comments on the proposed public facility project. Their comments have been incorporated into and attached to the Preliminary Engineering Report.

Engineer's Signature_____
Date:_____

Key Letter: N – No Impact/Not Applicable **B –** Potentially Beneficial **A –** Potentially Adverse
P – Approval/Permits Required **M –** Mitigation Required

PHYSICAL ENVIRONMENT	
KEY N	**1. Soil Suitability, Topographic and/or Geologic Constraints (e.g., soil slump, steep slopes, subsidence, seismic activity)** *Comments and Source of Information:* The majority of soils in the area are alternating layers of clay and gravel and are well suited for driven steel pile foundations. There are no topographic and/or geologic constraints in the area of the proposed project. (Engineer)
KEY M	**2. Hazardous Facilities (e.g., power lines, EPA hazardous waste sites, acceptable distance from explosive and flammable hazards including chemical/ petrochemical storage tanks, underground fuel storage tanks, and related facilities such as natural gas storage facilities & propane storage tanks)** *Comments and Source of Information:* Overhead power lines are present along the west side of the existing bridge, as well as across the road on the north end of the bridge. The utility company will be contacted during final design to facilitate safe construction near the utility. (Engineer)
KEY N	**3. Effects of Project on Surrounding Air Quality or Any Kind of Effects of Existing Air Quality on Project (e.g., dust, odors, emissions)** *Comments and Source of Information:* There may be some temporary dust associated with the construction; however, dust control will be required as a part of the construction. There will be no long term impacts in regard to the surrounding air quality as a result of the project. (Engineer)
KEY N	**4. Groundwater Resources & Aquifers (e.g., quantity, quality, distribution, depth to ground water, sole source aquifers)** *Comments and Source of Information:* The proposed project is not anticipated to impact the groundwater resources and/or aquifers. (Engineer)
KEY B	**5. Surface Water/Water Quality, Quantity & Distribution (e.g., streams, lakes, storm runoff, irrigation systems, canals)** *Comments and Source of Information:* The new structure will be designed to pass a 50-year storm event with one foot of freeboard. The US Army Corps of Engineers, MFWP and County Floodplain permits are required. (Engineer)
KEY B	**6. Floodplains & Floodplain Management (Identify any floodplains within one mile of the boundary of the project.)** *Comments and Source of Information*: Floodplain maps are included in Appendix B of the PER. The project is located within a FEMA Zone A special flood hazard area. Lengthening the bridge will improve stream conveyance at the bridge site; however, the project is not expected to resolve any issues associated with the floodplain. (Engineer, Montana DNRC)
KEY N	**7. Wetlands Protection (Identify any wetlands within one mile of the boundary of the project.)** *Comments and Source of Information:* A wetland map is included in Appendix B of the PER. There are wetlands identified approximately 0.05 miles downstream of the existing bridge. Neither bridge improvements nor construction activities are anticipated to impact the wetlands. BMP's will be used to keep fill material from entering the stream and conveyed to the downstream wetlands.(Engineer)

KEY	
B	**8. Agricultural Lands, Production, & Farmland Protection (e.g., grazing, forestry, cropland, prime or unique agricultural lands) (Identify any prime or important farm ground or forest lands within one mile of the boundary of the project.)** *Comments and Source of Information:* The proposed project will take place within the existing road right of way, and no agricultural lands are in the vicinity of the project. Forest lands lie to the south of the bridge site; therefore, the bridge improvements may benefit any forestry activity by allowing heavy traffic to access the area to the south of the bridge. As such, the land surrounding the proposed project area will not see a negative change in use as a result of the proposed project. (Engineer)
KEY	
B	**9. Vegetation & Wildlife Species & Habitats, Including Fish (e.g., terrestrial, avian and aquatic life and habitats)** *Comments and Source of Information:* The proposed project, by improving the stream conveyance through the bridge opening, may have beneficial impacts to the aquatic life in Soda Butte Creek. Existing vegetation may be impacted due to construction activities; however, all disturbed areas will be reseeded as part of the construction contract. (Engineer)
KEY	
N	**10. Unique, Endangered, Fragile, or Limited Environmental Resources, Including Endangered Species (e.g., plants, fish, sage grouse or other wildlife)** *Comments and Source of Information:* There are some known unique, endangered, fragile, or limited environmental resources in the area, but they are not expected to be impacted according to the USF&W Service. According to information found on the USF&W website, species of concern include the bald eagle, grizzly bear, gray wolf, Canada lynx, and North American wolverine, as well as the white bark pine tree. Both the US Fish and Wildlife Service (US FWS) and the Montana Department of Fish, Wildlife, and Parks (Montana FWP) were asked to comment on the proposed project. The project is not expected to impact any of these species as it will be contained within the existing road right of way. A SPA-124 permit will be obtained prior to construction which will identify any potential concerns of the project. (Engineer, US FWP)
KEY	
N	**11. Unique Natural Features (e.g., geologic features)** *Comments and Source of Information:* There are no known unique natural features that are anticipated to be impacted as a result of the proposed project. The State Historic Preservation Office (SHPO) was contacted and asked to comment on the proposed project. Based on information found on the SHPO cultural resource database, there are historical sites present in the project vicinity; however, since the project is located within the existing road right of way, it is likely that a cultural resource inventory will not be required. An Army Corps of Engineers permit will be applied for prior to construction, which will trigger the necessity of a cultural inventory report. (Engineer, Montana State Historic Preservation Office)
KEY	
B	12. **Access to, and Quality of, Recreational & Wilderness Activities, Public Lands and Waterways (including Federally Designated Wild & Scenic Rivers), and Public Open Space** *Comments and Source of Information:* The proposed project will provide a net benefit to the access to recreational and wilderness activities, public lands and public open spaces. The bridge improvements will allow for heavier loads to cross the bridge, permitting access to vehicles not previously able to utilize the bridge over Soda Butte Creek (US FWS, Engineer)

HUMAN POPULATION	
KEY N	**1. Visual Quality – Coherence, Diversity, Compatibility of Use and Scale, Aesthetics** *Comments and Source of Information:* No negative impacts are anticipated on visual quality as the new bridge will be placed in the same location as the existing bridge. (Engineer)
KEY N	**2. Nuisances (e.g., glare, fumes)** *Comments and Source of Information:* There are no anticipated nuisances associated with the proposed project as the new bridge will be placed in the same location as the existing bridge. (Engineer)
KEY N	**3. Noise – suitable separation between noise sensitive activities (such as residential areas) and major noise sources (aircraft, highways & railroads)** *Comments and Source of Information:* There may be some temporary noise during construction of the proposed project. However, construction operation hours will be limited to 7:00 AM to 7:00 PM. No other long term impacts to noise are anticipated upon completion of the project. (Engineer)
KEY N	**4. Historic Properties, Cultural, and Archaeological Resources** *Comments and Source of Information:* The State Historic Preservation Office (SHPO) was contacted and asked to comment on the proposed project. In addition, Jon Axline, MDT historian, was contacted regarding the historic nature specifically of the bridge. Information received from Mr. Axline indicated that because the bridge is less than 50-years old, it does not qualify as historic. (Montana State Historic Preservation Office, MDT)
KEY N	**5. Changes in Demographic (population) Characteristics (e.g., quantity, distribution, density)** *Comments and Source of Information:* The proposed project is not anticipated to impact demographic characteristics. (Engineer)
KEY N	**6. Environmental Justice – (Does the project avoid placing lower income households in areas where environmental degradation has occurred, such as adjacent to brownfield sites?)** *Comments and Source of Information:* This project does not contribute to the location of any lower income households into unacceptable areas. (Engineer)
KEY N	**7. General Housing Conditions – Quality, Quantity, Affordability** *Comments and Source of Information:* The proposed project is not anticipated to impact general housing conditions. (Engineer)
KEY N	**8. Displacement or Relocation of Businesses or Residents** *Comments and Source of Information:* The proposed project will not require displacement or relocation of businesses and/or residents. (Engineer)
KEY B	**9. Public Health and Safety** *Comments and Source of Information:* The proposed project will improve public safety as emergency vehicles currently not able to cross the bridge due to the posted load limit will be able to cross the channel after the new bridge is installed. In addition, the bridge width will be increased, and guardrail will be improved. (Engineer)

KEY	
N	**10. Lead Based Paint and/or Asbestos** *Comments and Source of Information:* The proposed project is not anticipated to involve the handling of any lead based paint and/or asbestos. (Engineer)
KEY N	**11. Local Employment & Income Patterns – Quantity and Distribution of Employment, Economic Impact** *Comments and Source of Information:* There are no anticipated long-term impacts to local employment or income patterns directly attributed to the proposed project. Temporary beneficial impacts could be seen from construction labor employment. (Engineer)
KEY B	**12. Local & State Tax Base & Revenues** *Comments and Source of Information:* There are no anticipated impacts to the local and state tax base and revenues directly attributed as a result of the proposed project. However, as the project may allow greater access to recreational areas, it may result in greater tax revenues from the local resort tax. (Engineer)
KEY N	**13. Educational Facilities - Schools, Colleges, Universities** *Comments and Source of Information:* There is no anticipated impact to the educational facilities as a direct result of the proposed project.
KEY N	**14. Commercial and Industrial Facilities – Production & Activity, Growth or Decline** *Comments and Source of Information:* There is no anticipated impact to the commercial and industrial facilities as a direct result of the proposed project.
KEY N	**15. Health Care – Medical Services** *Comments and Source of Information:* There is no anticipated impact to the health care facilities as a direct result of the proposed project.
KEY N	**16. Social Services – Governmental Services (e.g., demand on)** *Comments and Source of Information:* There is no anticipated impact to social services as a direct result of the proposed project.
KEY N	**17. Social Structures & Mores (Standards of Social Conduct/Social Conventions)** *Comments and Source of Information:* There is no anticipated impact to social structures as a direct result of the proposed project. (Engineer)
KEY N	**18. Land Use Compatibility (e.g., growth, land use change, development activity, adjacent land uses and potential conflicts)** *Comments and Source of Information:* The proposed project may encourage additional development south of the bridge due to improved access; however, no land use change is anticipated. (Engineer)
KEY N	**19. Energy Resources – Consumption and Conservation** *Comments and Source of Information:* There is no anticipated change in energy resources as a direct result of the proposed project. (Engineer)

KEY	
N	**20. Solid Waste Management** *Comments and Source of Information:* There are no anticipated impacts to solid waste management as a result of the proposed project. (Engineer)
KEY	**21. Wastewater Treatment – Sewage System**
N	*Comments and Source of Information:* There are no anticipated impacts to wastewater treatment as a result of the proposed project. (Engineer)
KEY	**22. Storm Water – Surface Drainage**
N	*Comments and Source of Information:* There are no anticipated impacts to storm water as a result of the proposed project. Gravel surfacing on the bridge deck will absorb stormwater and keep it from entering the stream directly. (Engineer)
KEY	**23. Community Water Supply**
N	*Comments and Source of Information:* There are no anticipated impacts to the public water supply as a result of the proposed project. (Engineer)
KEY	**24. Public Safety – Police**
B	*Comments and Source of Information:* There is a potential benefit to public safety as emergency vehicles will have improved access to the south side of Soda Butte Creek. (Engineer)
KEY	**25. Fire Protection – Hazards**
B	*Comments and Source of Information:* There is a potential benefit to public safety as emergency fire vehicles will have improved access to the south side of Soda Butte Creek. (Engineer)
KEY	**26. Emergency Medical Services**
B	*Comments and Source of Information:* There is a potential benefit to public safety as emergency medical vehicles will have improved access to the south side of Soda Butte Creek. (Engineer)
KEY	**27. Parks, Playgrounds, & Open Space**
B	*Comments and Source of Information:* There is a potential benefit to nearby Forest Service land due to improved access to the south side of Soda Butte Creek. (Engineer)
KEY	**28. Cultural Facilities, Cultural Uniqueness & Diversity**
N	*Comments and Source of Information:* There are no anticipated impacts to cultural facilities, cultural uniqueness, and diversity as a result of the proposed project. The State Historic Preservation Office (SHPO) was contacted and asked to comment on the proposed project. Based on information found on the SHPO cultural resource database, there are historical sites present in the project vicinity; however, since the project is located within the existing road right of way, it is likely that a cultural resource inventory will not be required. An Army Corps of Engineers permit will be applied for prior to construction, which will trigger the necessity of a cultural inventory report. (Engineer, Montana State Historic Preservation Office)
KEY	**29. Transportation Networks and Traffic Flow Conflicts (e.g., rail; auto including local traffic; airport runway clear zones - avoidance of incompatible land use in airport runway clear zones)**
B	*Comments and Source of Information:* There is a potential benefit to transportation networks and traffic flow due to improved access across Soda Butte creek. (Engineer)

KEY		
B	**30.**	**Consistency with Local Ordinances, Resolutions, or Plans (e.g., conformance with local comprehensive plans, zoning, or capital improvement plans}** *Comments and Source of Information:* The proposed project is consistent with all local ordinances, resolutions, and plans, and brings the structure up to Park County Transportation Standards. (Park County)
KEY		
N	**31.**	**Is There a Regulatory Action on Private Property Rights as a Result of this Project? (Consider options that reduce, minimize, or eliminate the regulation of private property rights.)** *Comments and Source of Information:* There will be no regulatory action on private property as a result of the proposed project. (Engineer)

ENVIRONMENTAL QUESTIONS

On a separate piece of paper, please answer the following as they apply to your proposed project:

1. **Alternatives:** Describe reasonable alternatives to the project.

2. **Mitigation:** Identify any enforceable measures necessary to reduce any impacts to an insignificant level.

3. **Is an EA or Environmental Impact Statement (EIS) required?** Describe whether or not an EA or EIS is required and explain in detail why or why not.

4. **Public Involvement:** Describe the process followed to involve the public in the proposed project and its potential environmental impacts. Identify the public meetings -- where and when -- the project was considered and discussed, and when the district approved the final environmental assessment.

5. **Person(s) Responsible for Preparing:** Identify the person(s) responsible for preparation of this checklist.

6. **Other Agencies**: List any state, local, or federal agencies that have over-lapping or additional jurisdiction or environmental review responsibility for the proposed action and the permits, licenses, and other authorizations required; and list any agencies or groups that were contacted or contributed information to this Environmental Assessment (EA).

_____ _____

Authorized Representative Date

Park County

_____

Chairperson

_____

Date

1. Alternatives

The Preliminary Engineering Report provides an Alternative Screening Process which considers all reasonable and economical bridge replacement alternatives.

Replacement options considered were:
a) No-action alternative
b) Eliminating the bridge / closing the road
c) Rehabilitation of existing structure
d) Replace with culvert
e) Single span bridge
f) Multiple span bridge

Based on these options, a single span bridge was deemed to be the best option for this bridge site. The bridge options that were evaluated for this bridge replacement are:

a) Precast, prestressed concrete superstructure on driven steel piles
b) Precast, prestressed concrete superstructure on spread footing foundation
c) Steel girder superstructure on driven steel piles
d) Steel girder superstructure on spread footing foundation

After calculating project costs and operation and maintenance costs, a present worth analysis of each option was calculated. In conjunction with environmental considerations, it was determined that a steel girder superstructure on driven steel piles will allow for the most cost-effective solution. This design aligns with the Park County Transportation Standards, and the most cost-effective solution.

2. Mitigation

Best management practices (BMP's) will be implemented to prevent dust and sedimentation during construction, and water will be used for dust abatement as directed by the construction inspector. A Montana DEQ – Pollutant Discharge Elimination System (MPDES) Permit will be obtained prior to construction. Furthermore, erosion and sediment control plans will be included as part of the contract specifications. Sediment control fencing and/or straw wattles will be placed on the downhill edge of all disturbances.

All alternatives considered have minimal impacts to wetlands (0.0 to 0.05 acres total) due to the elevation and footprint of the structure crossing. None of the options are expected to require wetland mitigation (triggered when wetland impacts are greater than 0.10 acres).

3. Is an EA or Environmental Impact Statement (EIS) required?

The Montana Environmental Policy Act requires than an environmental review be performed whenever a state agency takes an action; whenever that action is not exempt or excluded from MEPA; and whenever the action may impact the human environment. As the new bridge will be constructed in the same location as the existing bridge, and within the County road right of way, this project qualifies for a categorical exemption, and no Environmental Assessment or EIS is required.

4. Public Involvement

The first public meeting was held at the Park County Commissioners office, July 18, 2019 at 10:00 a.m. for the purpose of obtaining public comments regarding the bridge selection for replacement through the Treasure State Endowment Program (TSEP). The meeting was advertised on the Park County website as part of the Commission agenda. The County Commissioners and representatives of Stahly Engineering attended the first meeting; no citizens were present. The Monument Avenue Bridge was selected for replacement based on the following factors:

a) The bridge has an NBI sufficiency rating of 31.4 and ranked 4th of all the bridges over 20-ft in Park County.
b) The cost of the project is beyond the ability/capability of the County.
c) The bridge is just over 40-years old and in very poor structural condition.
d) The posted load limit of 6-tons and the narrow bridge width precludes the use of the bridge by heavy commercial and emergency response vehicles and there is no alternate access route.
e) Monument Avenue provides access to Forest Service land and numerous recreational activities, which are the backbone of the economy is this portion of Park County.
f) Public support for the project.

A second public meeting was held by Park County at the Range Rider Lodge in Silver Gate, Montana on August 16, 2019 at 10:30 a.m. for the purpose of discussing specific project issues, design alternatives, and the overall project timeline. The meeting was advertised in the Livingston Enterprise, as well as the weekly Cooke City newsletter. There were four community members in attendance, as well as two representatives of the U.S. Forest Service. No adverse comments were received during the meeting.

A third public meeting will be held at a regularly scheduled Park County Commission meeting for the purpose of receiving comments concerning the Draft Environmental Assessment.

The Draft Environmental Assessment will be advertised in the Livingston Enterprise on September 4 and September 11, 2019, with comments to be received by Kathy Thompson, Stahly Engineering, or the Park County Commissioners Office until September 19, 2019 until 9:00 a.m.

5. Person(s) Responsible for Preparing

Kathy Thompson, Project Manager, Stahly Engineering

The Park County Public Works Director chose to assign the responsibility of the Environmental Checklist and Assessment to the project engineer, Kathy Thompson, P.E., of Stahly Engineering.

6. Other Agencies

There are no additional agencies that have over-lapping jurisdiction or environmental review responsibility for the proposed bridge replacement project.

Permits required for the project include:

- SPA 124 – Montana Stream Protection Act administered by the Montana Fish, Wildlife and Parks.
- 404 Permit – Federal Clean Water Act administered by the U.S. Army Corps of Engineers.
- 318 Authorization – Short-Term Water Quality Standard for Turbidity administered by the Department of Environmental Quality.
- Floodplain Development Permit – Fergus County Floodplain Administrator

Agencies that were contacted to comment on the proposed action include:

- Montana Fish, Wildlife and Parks
- Department of Environmental Quality
- Department of Natural Resources and Conservation
- Montana Department of Transportation Historian
- Natural Heritage Program
- State Historic Preservation Office
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- U.S. Forest Service
- Park County Floodplain Administrator