

ENVIRONMENTAL REVIEW CHECKLIST

As the engineer that prepared the Preliminary Engineering Report, I Kurt 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: 6/1/20

NAME OF PROJECT:	City of Deer Lodge – Wastewater Collection System Upgrades
PROPOSED ACTION:	Wastewater Collection System Upgrades
LOCATION:	City of Deer Lodge, Montana

Key Letter:

N: No Impact; **B:** Potentially Beneficial; **A:** Potentially Adverse; **P:** Approval/Permits Required; **M:** Mitigation Required

PHYSICAL ENVIRONMENT

Key	1	Soil Suitability, Topographic and/or Geologic Constraints (e.g., soil slump, steep slopes, subsidence, seismic activity)
		<i>Response and source of information:</i>
N		Soils in the area are suitable for construction of the proposed facilities. The site currently contains similar structures which have functioned without issues. The project site is located in a low-risk seismic zone with peak anticipated accelerations of approximately 2 percent of gravity. Existing ground slopes allow for conventional design and sufficient bearing pressure exists for the structures. Import material may be required for pipe bedding. USGS topo maps, NRCS soil mapping studies, existing treatment system design drawings, and field inspections of proposed construction sites
Key	2	Hazardous Facilities (e.g., power lines, 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)
		<i>Response and source of information:</i>
N		There are no known hazardous facilities near proposed construction areas. There are power lines and possibly underground utilities that will be called in for location during the design and construction phases. Field Observations, Stahly Engineering
Key	3	Effects of Project on Surrounding Air Quality or Any Kind of Effects of Existing Air Quality on Project (e.g., dust, odors, emissions)
N		<i>Response and source of information:</i>

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	<p>The construction activities will generate dust during the summer months. These effects can be mitigated with a spray truck when necessary.</p> <p>Facility maps, Stahly Engineering</p>
Key	4
N	Groundwater Resources & Aquifers (e.g., quantity, quality, distribution, depth to groundwater, sole source aquifers)
	Response and source of information:
	<p>Seasonally high groundwater could be encountered during construction. Provisions for groundwater control will be included in the contract documents. Wastewater system improvements will consist of piping depths consistent with existing infrastructure, which have not and have not negatively impacted water resources throughout their operation.</p> <p>NRCS mapping data, Stahly Engineering, Montana DEQ, City of Deer Lodge Public Works Department</p>
Key	5
B	Surface Water/Water Quality, Quantity & Distribution (e.g., streams, lakes, storm runoff, irrigation systems, canals)
	Response and source of information:
	<p>The City of Deer Lodge's wastewater treatment system discharges treated effluent into the Clark Fork River. Proposed improvements will reduce the effluent discharged to the river during the months of periods of significant Inflow and Infiltration, which would include rain events and snow melts.</p> <p>Stahly Engineering</p>
Key	6
N	Floodplains & Floodplain Management (Identify any floodplains within one mile of the boundary of the project.)
	Response and source of information:
	<p>Some proposed improvements are located within the 100-year flood plain, as indicated by FEMA Firm Panel 300060-0001-B. The improvements proposed consist of work to occur below ground and will not impact existing flood storage levels. The City of Deer Lodge designated the Chief Administrative Officer as the areas Flood Plain Administrator and provided no comment or concerns about the proposed wastewater collection system improvements.</p> <p>City of Deer Lodge Flood Plain Administrator, FEMA, Stahly Engineering</p>
Key	7
N	Wetlands Protection (Identify any wetlands within one mile of the boundary of the project.)
	Response and source of information:
	<p>National wetlands inventory data provided through the U.S. Fish and Wildlife Service for the City of Deer Lodge indicate that wetlands are located within 1 mile of proposed project sites. The improvements proposed consist of work to occur at locations of existing infrastructure within developed areas, and are not anticipated to impact any existing wetlands or occur within established wetlands.</p> <p>US Fish & Wildlife Service online mapping, Stahly Engineering</p>

Key	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.)
		<i>Response and source of information:</i>
N		<i>The improvements proposed consist of work to occur at locations of existing infrastructure within developed areas owned by the City of Deer Lodge and are not anticipated to impact any existing areas of farmland.</i> <i>Stahly Engineering</i>
Key	9	Vegetation & Wildlife Species & Habitats, including Fish and Sage Grouse (e.g., terrestrial, avian and aquatic life and habitats)
		<i>Response and source of information:</i>
N		<i>The improvements proposed consist of work to occur at locations of existing infrastructure within developed areas owned by the City of Deer Lodge and are not anticipated to impact any existing habitats. Additionally, the U.S. Fish and Wildlife Service provided no comment when contacted regarding the proposed improvements.</i> <i>Stahly Engineering, USFWS</i>
Key	10	Unique, Endangered, Fragile, or Limited Environmental Resources, Including Endangered Species (e.g., plants, fish, sage grouse or wildlife)
		<i>Response and source of information:</i>
N		<i>The improvements proposed consist of work to occur at locations of existing infrastructure within developed areas owned by the City of Deer Lodge. No endangered species have been identified within the areas of construction and no environmental consequences are anticipated as a result of the proposed improvements.</i> <i>Stahly Engineering, USFWS</i>
Key	11	Unique Natural Features (e.g., geologic features)
		<i>Response and source of information:</i>
N		<i>No unique natural features are known or thought to be present.</i> <i>Stahly Engineering</i>
Key	12	Access to, and Quality of, Recreational & Wilderness Activities, Public Lands and Waterways, and Public Open Space
		<i>Response and source of information:</i>
B		<i>No impacts to the access or quality of any recreational and/or wilderness activities is anticipated. The quality of the Clark Fork River may be improved with the anticipated reduced effluent volume of the wastewater treatment system.</i> <i>Stahly Engineering</i>

HUMAN ENVIRONMENT		
Key	1	Visual Quality – Coherence, Diversity, Compatibility of Use and Scale, Aesthetics
		<i>Response and source of information:</i>
N		<i>The improvements proposed consist of work to occur at locations of existing infrastructure within developed areas owned by the City of Deer Lodge and are not anticipated to adversely impact the visual quality of the area.</i> <i>Stahly Engineering</i>
Key	2	Nuisances (e.g., glare, fumes)
		<i>Response and source of information:</i>
N		<i>The improvements proposed consist of work to occur at locations of existing infrastructure within developed areas owned by the City of Deer Lodge and are not anticipated to introduce any nuisances.</i> <i>Stahly Engineering</i>
Key	3	Noise -- suitable separation between noise sensitive activities (such as residential areas) and major noise sources (aircraft, highways & railroads)
		<i>Response and source of information:</i>
N		<i>The improvements proposed consist of work to occur at locations of existing infrastructure within developed areas owned by the City of Deer Lodge and are not anticipated to introduce any nuisances.</i> <i>Stahly Engineering</i>
Key	4	Historic Properties, Cultural, and Archaeological Resources
		<i>Response and source of information:</i>
N		<i>No historical or cultural impacts are anticipated.</i> <i>Stahly Engineering, Montana State Historic Preservation Office</i>
Key	5	Changes in Demographic (population) Characteristics (e.g., quantity, distribution, density)
		<i>Response and source of information:</i>
N		<i>No adverse impacts to demographic or the population's characteristics are anticipated by the proposed improvements.</i> <i>Stahly Engineering</i>
Key	6	Environmental Justice – (Does the project avoid placing lower income households in areas where environmental degradation has occurred, such as adjacent to brownfield sites?)
		<i>The project will not create environmental degradation or place lower income households in areas where environmental degradation has occurred.</i> <i>Stahly Engineering</i>

Key	7	General Housing Conditions - Quality, Quantity, Affordability
N	<i>Response and source of information:</i>	
	No adverse impacts to the City's general housing conditions are anticipated by the proposed improvements. Stahly Engineering	
Key	8	Displacement or Relocation of Businesses or Residents
N	<i>Response and source of information:</i>	
	The proposed project will not require and is not anticipated to displace or relocate any businesses or residents Stahly Engineering	
Key	9	Public Health and Safety
B	<i>Response and source of information:</i>	
	Implementation of this project will increase public health and safety by improving the quality of discharged effluent to the Clark Fork River. Stahly Engineering	
Key	10	Lead Based Paint and/or Asbestos
N	<i>Response and source of information:</i>	
	There is no lead-based paint or asbestos is anticipated to be encountered through the improvements proposed. Stahly Engineering	
Key	11	Local Employment & Income Patterns - Quantity and Distribution of Employment, Economic Impact
N	<i>Response and source of information:</i>	
	There are no direct impacts to local employment and income patterns anticipated through the improvements proposed. Stahly Engineering	
Key	12	Local & State Tax Base & Revenues
N	<i>Response and source of information:</i>	
	There are no direct impacts to local and state tax bases and revenues anticipated through the improvements proposed. Stahly Engineering	
Key	13	Educational Facilities - Schools, Colleges, Universities
N	<i>Response and source of information:</i>	

		<p><i>There are no adverse impacts to educational facilities anticipated through the improvements proposed.</i></p> <p><i>Stahly Engineering</i></p>
Key	14	Commercial and Industrial Facilities - Production & Activity, Growth or Decline.
		<i>Response and source of information:</i>
N		<p><i>There are no adverse impacts to commercial and industrial facilities anticipated through the improvements proposed.</i></p> <p><i>Stahly Engineering</i></p>
Key	15	Health Care – Medical Services
		<i>Response and source of information:</i>
N		<p><i>There are no adverse impacts to healthcare and medical services anticipated through the improvements proposed.</i></p> <p><i>Stahly Engineering</i></p>
Key	16	Social Services – Governmental Services (e.g., demand on)
		<i>Response and source of information:</i>
N		<p><i>There are no adverse impacts social services anticipated through the improvements proposed.</i></p> <p><i>Stahly Engineering</i></p>
Key	17	Social Structures & Mores (Standards of Social Conduct/Social Conventions)
		<i>Response and source of information:</i>
N		<p><i>There are no adverse impacts to social structures and mores anticipated through the improvements proposed.</i></p> <p><i>Stahly Engineering</i></p>
Key	18	Land Use Compatibility (e.g., growth, land use change, development activity, adjacent land uses and potential conflicts)
		<i>Response and source of information:</i>
N		<p><i>The improvements proposed consist of work to occur at locations of existing infrastructure within developed areas owned by the City of Deer Lodge and are considered to be consistent with existing land uses.</i></p> <p><i>Stahly Engineering</i></p>
Key	19	Energy Resources - Consumption and Conservation
		<i>Response and source of information:</i>
B		<p><i>Through the City’s continued I&I reduction efforts, which this project is a part of, a significant reduction of inflow to the wastewater treatment system is anticipated to reduce the system’s energy consumption by reducing the load on various devices such as pumps and lift stations.</i></p> <p><i>Stahly Engineering</i></p>

Key	20	Solid Waste Management
		<i>Response and source of information:</i>
N		<i>There are no adverse impacts to solid waste management anticipated through the improvements proposed.</i> <i>Stahly Engineering</i>
Key	21	Wastewater Treatment - Sewage System
		<i>Response and source of information:</i>
B		<i>The improvements proposed are anticipated to reduce the wastewater treatment system's influent volume and increase its treatment efficiency, ultimately improving the quality of effluent disposed into the Clark Fork River.</i> <i>Stahly Engineering</i>
Key	22	Storm Water – Surface Drainage
		<i>Response and source of information:</i>
B		<i>Some of the improvements proposed include the installation of storm drain systems to collect surface runoff existing foundation drains and existing sump pumps, which may otherwise of entered the wastewater collection system. The proper collection and conveyance of this stormwater is considered an improvement to the area's current ability to convey stormwater.</i> <i>Stahly Engineering</i>
Key	23	Community Water Supply
		<i>Response and source of information:</i>
N		<i>There are no adverse impacts to the community's water supply is anticipated through the improvements proposed.</i> <i>Stahly Engineering</i>
Key	24	Public Safety – Police
		<i>Response and source of information:</i>
N		<i>There are no adverse impacts to the community's public safety is anticipated through the improvements proposed.</i> <i>Stahly Engineering</i>
Key	25	Fire Protection – Hazards
		<i>Response and source of information:</i>
N		<i>There are no adverse impacts to the community's fire protection is anticipated through the improvements proposed.</i> <i>Stahly Engineering</i>
Key	26	Emergency Medical Services
N		<i>Response and source of information:</i>

		<p><i>There is no adverse impact to the community's emergency medical services is anticipated through the improvements proposed.</i></p> <p><i>Stahly Engineering</i></p>
Key	27	Parks, Playgrounds, & Open Space
		<i>Response and source of information:</i>
N		<p><i>There are no adverse impacts to the community's parks, playgrounds or open spaces anticipated through the improvements proposed.</i></p> <p><i>Stahly Engineering</i></p>
Key	28	Cultural Facilities, Cultural Uniqueness & Diversity
		<i>Response and source of information:</i>
N		<p><i>There are no adverse impacts to cultural facilities or cultural uniqueness and diversity anticipated through the improvements proposed.</i></p> <p><i>Stahly Engineering</i></p>
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)
		<i>Response and source of information:</i>
N		<p><i>There are no adverse impacts to the community's transportation networks anticipated through the improvements proposed.</i></p> <p><i>Stahly Engineering</i></p>
Key	30	Consistency with Local Ordinances, Resolutions, or Plans (e.g., conformance with local comprehensive plans, zoning, or capital improvement plans)
		<i>Response and source of information:</i>
N		<p><i>The proposed improvements are modifications to existing facilities and are compliant with local regulations and zoning (where zoning exists).</i></p> <p><i>Stahly Engineering, City of Deer Lodge</i></p>
Key	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.)
		<i>Response and source of information:</i>
N		<p><i>No regulatory action on private property is anticipated through the improvements proposed</i></p> <p><i>Stahly Engineering</i></p>

Environmental Review Form (to be finalized following Public Meeting to receive comments)

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 applicant 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).

(1) Authorized Representative *, Title

Date

City of Deer Lodge

(2) Mayor/Commissioner/Board President

Date:

* If an authorized representative (1) completes the checklist and this form, a chief elected official (2) must also sign authorizing acceptance of the review process. Explanation or statement of how/why that representative was authorized should also be included.

I. Alternatives

The Preliminary Engineering Report provides an Alternative Screening and Evaluation Process which considers all reasonable and economical alternatives for increasing the existing wastewater treatment facility's efficiency.

Alternatives considered were:

- No Action*
- Building New Centralized Facilities*
- Optimizing Current Facilities (No Construction)*
- Developing Centrally Managed Decentralized Systems*
- Developing an Optimum Combination of Centralized and Decentralized Systems*
- Wastewater Collection System Improvements*

Considering the financial and technical feasibility, environmental impacts, public health and safety, and operation and maintenance detailed in the previous sections, all but one alternative has been eliminated. Based on this analysis, the City has determined that wastewater collection system improvements are the best options for meeting both current and future environmental regulations and for providing the necessary capacity for Deer Lodge's future growth.

2. Mitigation

The checklist provided above finds no significant impacts to the environment resulting from this project. Best management practices (BMP's) will be implemented to prevent dust and storm water runoff during construction. The contract documents will contain these requirements. Sediment control fencing will be placed on the downhill edge of all disturbances. The selected alternative has no impacts to wetlands due to the project location which is within developed portions of City of Deer Lodge Right-Of-Way. The anticipated improved effluent quality reduces any impacts to fish and other aquatic species. No wildlife is anticipated to be impacted by the proposed improvements. There is no requirement for a cultural resource at this time. However, if cultural relics are encountered during construction, the Montana Historical Preservation Office will be contacted.

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

The Montana Environmental Policy Act requires that 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 this project is not anticipated to have a significant adverse effect, an EA is adequate for this project and it is recommended that the City adopt this recommendation.

4. Public Involvement

A draft Environmental Assessment was made available via the City of Deer Lodge web site and at the City Clerk's office in City Hall for public review on [REDACTED], 2020. Notice of availability of the document for review was advertised on the web site beginning on [REDACTED] and will be published in the Silver State Post June 24 and July 1, 2020. Comments are encouraged via email or regular mail to the attention of the City Clerk by July 6th prior to the public hearing on the subject and the subsequent Council meeting on July 8, 2020 to approve the final environmental assessment.

The agenda for this public meeting will be to discuss:

- a) Design alternatives*
- b) Project Costs*
- c) Environmental considerations*
- d) Project implementation*

5. Person(s) Responsible for Preparing

Kurt Thomson, PE - Project Engineer at Stahly Engineering

6. Other Agencies

*Army Corps of Engineers
Environmental Protection Agency (EPA)
Montana Department of Environmental Quality (MDEQ)
Montana Department of Transportation (MDT)
Department of Natural Resources and Conservation (DNRC)
Department of Fish, Wildlife and Parks (FWP)
State Historic Preservation Office (SHPO)
U.S Fish and Wildlife Service (USFWS)
National Park Service (NPS)*