

Montana Department of Commerce
Treasure State Endowment Program
Environmental Assessment

STORMWATER FACILITY IMPROVEMENTS PROJECT

CITY OF RED LODGE, MONTANA

DRAFT - REVIEW

Proposed Action: The stormwater facilities in the City of Red Lodge have significant deficiencies related to cross connections to the sanitary sewer, undersized mains, and localized flooding. The City proposes to replace portions of the existing system and add new infrastructure to address the cross connections (see attached table and map of problem areas). The proposed work will: reduce the risk of flooding, increase safety, and disconnect stormwater from the sanitary sewer system.

A. Environmental Checklist:

As the Engineer that prepared the preliminary engineering report, I Brandon Duffey, PE 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: _____



DRAFT - REVIEW

ENVIRONMENTAL REVIEW CHECKLIST

NAME OF PROJECT:	Stormwater Facility Improvements Project
PROPOSED ACTION:	Stormwater Facility Improvements
LOCATION:	City of Red Lodge, Montana

Key Letter:

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

PHYSICAL ENVIRONMENT

KEY	1	<p>Soil Suitability, Topographic and/or Geologic Constraints (e.g., soil slump, steep slopes, subsidence, seismic activity)</p>
N		<p><i>Response and source of information:</i></p> <p>NRCS Soil Maps indicate that the project locations are in areas with soil composed of primarily Charlos Loams and stony loam. The maps show that the site soils have a low to moderate concern for corrosion to concrete, and a high concern for corrosion to steel. There are no identified topographical or geological constraints. Slopes across the project area vary from 0 to 8+%.</p> <p>- Brandon Duffey, P.E. - USDA National Cooperative Soil Survey</p>
KEY	2	<p>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)</p>
M		<p><i>Response and source of information:</i></p> <p>A Search of the Montana Department of Environmental Quality (DEQ) State Digital Atlas indicates that the underground storage tanks may be present near proposed work sites. It is possible that some of the spill and tank sites may affect some of the proposed stormwater facility improvement construction. During the design phase, DEQ spill information will be closely reviewed so that spill areas can be avoided during construction. During final design, it will be evaluated whether the use of petroleum resistant joints sealants is warranted. There are power lines and other buried utility lines in the project areas. Utility locates will be completed during design and construction phases to avoid these utilities or relocate as necessary.</p> <p>- Brandon Duffey, P.E. - Montana Department of Environmental Quality State Digital Atlas</p>

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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		<p><i>Response and source of information:</i></p> <p>The only impacts on air quality may be temporary dust and exhaust during construction. Reasonable efforts will be taken during construction to minimize these temporary impacts.</p> <p>- Brandon Duffey, P.E.</p>
KEY	4	Groundwater Resources & Aquifers (e.g., quantity, quality, distribution, depth to groundwater, sole source aquifers)
N/P		<p><i>Response and source of information:</i></p> <p>Information from Montana Well Log Reports in the vicinity shows that average static ground water level is 19.7 feet below the ground surface, some wells do show groundwater within 5 feet of the ground surface. Where groundwater is encountered during construction, a construction dewatering permit will be obtained through DEQ by the Contractor. Adherence to this permit will mitigate any temporary effects associated with construction. No long-term impacts to groundwater are anticipated.</p> <p>- Brandon Duffey, P.E. - Montana Bureau of Mines and Geology, GWIC (T07S, R20E, Sec: 15,14,21,22,23,28,27,26,33,34,35)</p>
KEY	5	Surface Water/Water Quality, Quantity & Distribution (e.g., streams, lakes, storm runoff, irrigation systems, canals)
N/P		<p><i>Response and source of information:</i></p> <p>Stormwater facilities that drain urban and developed areas present a threat to water quality in receiving surface water due to the collection of contaminants along with urban runoff (e.g., sediment, oils/chemicals, nutrients/fertilizers) or illegal dumping of pollutants directly into the stormwater system. The majority of the proposed project will involve only the replacement of existing stormwater facilities, no new impacts to surface water/water quality, quantity & distribution is anticipated. The new areas added to the storm system will increase the potential for contaminants to stormwater, but new infrastructure will incorporate sumps in the inlets and manhole to help remove contaminate loading to stormwater, and new inlets will be clearly marked “no-dumping” “stormwater” or other words to help mitigate illegal dumping.</p> <p>If in the design stage of the project, it is determined that more than one acre will be disturbed by project implementation then a Montana Pollutant Discharge Elimination System (MPDES) construction stormwater permit would be required. Work near the outfalls of the storm drain system will be near Rock Creek, therefore, a MPDES construction dewatering permit and 318 permits may also be required. A Clean Water Act Section 404/401 certification may also be required for the project. A formal permit determination request will be submitted at the design stage.</p> <p>Water quality standards (i.e. MPDES) are not currently applicable to the City of Red Lodge’s stormwater facility.</p>

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		<ul style="list-style-type: none"> - Brandon Duffey, P.E. - Derek Fleming, MT DEQ MPDES Permitting Section - Jade Metzler, US Army Corps of Engineers
KEY	6	Floodplains & Floodplain Management (Identify any floodplains within one mile of the boundary of the project.)
N/P		<p><i>Response and source of information:</i></p> <p>A flood insurance map create by the Federal Emergency Management Agency (FEMA) shows the areas around the outfalls of the proposed project may be within the 100-year flood plain, and portions of the system adjacent to Rock Creek my be within the 500-year floodplain. A more detailed analysis of the project will be completed during the design phase to determine if a Joint Application Permit package is required.</p> <p>James Caniglia had no comments on the proposed project.</p> <ul style="list-style-type: none"> - Brandon Duffey, P.E. - James Caniglia Carbon County Floodplain Administrator - FEMA Community Panel 30009C0692D, 30009C0703D, 30009C0711D

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KEY	7
Wetlands Protection (Identify any wetlands within one mile of the boundary of the project.)	
P/M	<p><i>Response and source of information:</i></p> <p>Based on information from the USFWS Survey National Wetlands Inventory, there appears to be riverine wetlands in the project vicinity, located through the channel corridor of Rock Creek.</p> <p>A wetland delineation will be performed to document any jurisdictional wetlands at the site vicinity during the design phase of the project. The entire footprint of the proposed construction disturbance will be evaluated for the presence of wetlands and those wetlands will be delineated and mapped in accordance with the Corps 1987 Delineation Manual (and applicable Regional Supplement). Wetlands boundaries will be flagged in the field and numbered. Flag numbers and locations will be surveyed using a sub-meter GPS and depicted on the delineation map.</p> <p>The Contractor will be required, to the extent feasible, to avoid wetlands in and around the project site that may be affected by construction activities. The Contract will require the Contractor to minimize wetland disturbance wherever possible and implement BMPs to avoid impacts such as material inputs and sedimentation to wetlands or Rock Creek. At this time, and based upon the preliminary information available, the City of Red Lodge anticipates that less than one-tenth of an acre of wetlands will be disturbed as a result of the proposed project. However, the potential for wetland disturbance will be evaluated in more detail during the design phase in order to determine if compensatory mitigation is required as a result of the project.</p> <p>Correspondence with Jade Metzler from USACE indicates that USACE is unable to determine impact of the proposed project. They recommend completion of a joint application permit during the design phase. A joint application will be prepared and submitted for agency review during the design phase.</p> <ul style="list-style-type: none"> - Brandon Duffey, P.E. - USFWS National Wetlands Inventory - Jade Metzler, US Army Corps of Engineers - Jeff Berglund, USFWS
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.)	
N	<p><i>Response and source of information:</i></p> <p>The project is located within city limits; therefore, no agricultural land will be impacted. The soils within the city and the project areas are described as farmland of statewide importance, farmland of local importance, prime farmland if irrigated, and some areas of not prime farmland (Natural Resource Conservation Service (NRCS) Soils Map), however the existing urban land use within the project area would exclude agricultural land use. Impact to these areas is not anticipated. No forest lands exist within one mile of the project.</p> <p>The Federal Farmland Protection Act does not apply to the project for several reasons including the project's location within an urbanized area and the project involves the replacement/repair of an existing structure. Therefore, project permitting by the NRCS is not required.</p>

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	<ul style="list-style-type: none"> - Brandon Duffey, P.E. - USDA National Cooperative Soil Survey
KEY	9 Vegetation & Wildlife Species & Habitats, Including Fish and Sage Grouse (e.g., terrestrial, avian and aquatic life and habitats)
N/M	<p><i>Response and source of information:</i></p> <p>The proposed project is not expected to have any permanent effects on vegetation or terrestrial wildlife. Any effects on plant species due to construction activities will be re-seeded to promote re-vegetation and reduce erosion. No plant species of concern are listed for the project area by the Montana Natural Heritage Program (MNHP). No terrestrial habitat will be lost as a result of the project because work will be conducted within developed areas within the City of Red Lodge.</p> <p>The US Fish and Wildlife Service (USFWS) states: <i>“The Service reviewed the project description and has no comments regarding federally-listed or proposed threatened or endangered species, critical habitat, or other trust species.”</i></p> <p>A database search conducted using the Montana Natural Heritage Program website found seven species of concern or potential species of concern that may occur in the region: Wolverine (<i>Gulo gulo</i>), Canada Lynx (<i>Lynx canadensis</i>), Grizzly Bear (<i>Ursus arctos</i>), Peregrine Faloon (<i>Falco peregrinus</i>), Cassin’s Finah (<i>Haemorhous cassinii</i>), Grean tailed Towhee (<i>Pipilo chlorurus</i>), Yellowstone Cutthroat Trout (<i>Oncorhynchus clarkia bouvieri</i>). The above listed avian and aquatic species should not be affected by the proposed project because the existing systems to not support aquatic wildlife populations. Due to the developed nature of the project area, no habitat will be lost as a result of the project.</p> <p>Based on a review of the Montana Sage Grouse Habitat Conservation Program Mapper (https://sagegrouse.mt.gov/projects), the proposed project is mapped in an Executive Order (EO) General Area for Sage Grouse Habitat but is located in an exempt community boundary. As such, Sage Grouse are not anticipated to be adversely affected by this work.</p> <p>Temporary adverse effects to water quality are expected during project implementation. However, mitigation measures including construction Best Management Practices (BMPs) will be implemented to reduce sedimentation and downstream effects on aquatic habitat. All necessary stream permits will be acquired prior to construction, and the Contractor will be required to adhere to all guidelines outlined in these documents.</p> <ul style="list-style-type: none"> - Brandon Duffey, P.E. - Jeff Berglund, USFWS - Montana Natural Heritage Program

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KEY	10	Unique, Endangered, Fragile, or Limited Environmental Resources, Including Endangered Species (e.g., plants, fish or wildlife)
N		<p><i>Response and source of information:</i></p> <p>Because the work is limited to an existing closed conduit stormwater system and proposed closed conduit systems in developed areas, the proposed project is not expected to have any effects on unique, endangered, fragile, or limited environmental resources, including endangered species.</p> <p>The US Fish and Wildlife Service (USFWS) states: “The Service reviewed the project description and has no comments regarding federally-listed or proposed threatened or endangered species, critical habitat, or other trust species.”</p> <p>A database search conducted using the Montana Natural Heritage Program website found seven species of concern or potential species of concern that may occur in the region: Wolverine (<i>Gulo gulo</i>), Canada Lynx (<i>Lynx canadensis</i>), Grizzly Bear (<i>Ursus arctos</i>), Peregrine Faloon (<i>Falco peregrinus</i>), Cassin’s Finah (<i>Haemorhous cassinii</i>), Grean tailed Towhee (<i>Pipilo chlorurus</i>), Yellowstone Cutthroat Trout (<i>Oncorhynchus clarkia bouvieri</i>). The above listed avian and aquatic species should not be affected by the proposed project because the existing systems to not support aquatic wildlife populations. Due to the developed nature of the project area, no habitat will be lost as a result of the project.</p> <ul style="list-style-type: none"> - Brandon Duffey, P.E. - Jeff Berglund, USFWS - Montana Natural Heritage Program - Montana Sage Grouse Habitat Conservation Program
KEY	11	Unique Natural Features (e.g., geologic features)
N		<p><i>Response and source of information:</i></p> <p>There are no unique natural features located in the vicinity of the proposed project.</p> <ul style="list-style-type: none"> - Brandon Duffey, P.E.
KEY	12	Access to, and Quality of, Recreational & Wilderness Activities, Public Lands and Waterways and Public Open Space
N		<p><i>Response and source of information:</i></p> <p>The proposed stormwater facility improvements will not affect access to, and quality of, recreational and wilderness activities, public lands and waterways.</p> <ul style="list-style-type: none"> - Brandon Duffey, P.E.
HUMAN POPULATION		
KEY	I	Visual Quality – Coherence, Diversity, Compatibility of Use and Scale, Aesthetics

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N		<p><i>Response and source of information:</i></p> <p>The proposed improvements consist of replacing existing sections and installing new sections, in developed areas, of a closed conduit stormwater infrastructure. Because this infrastructure is buried, no impact on the visual quality of the area is anticipated once work is complete.</p> <p>- Brandon Duffey, P.E.</p>
KEY	2	Nuisances (e.g., glare, fumes)
M/B/N		<p><i>Response and source of information:</i></p> <p>M - Mitigation would be required in the short term during project implementation. The proposed project may cause temporary nuisances such as noise and exhaust fumes from construction equipment, and traffic detours while sections beneath roadways are under construction. Efforts will be made to minimize nuisances including detours and select timing of construction work in residential areas.</p> <p>Some work will be near privately-owned residential parcels. Efforts will be made to minimize nuisances associated with work near these residences.</p> <p>B - Some work will be beneficial. Areas of the city experience localized flooding and surcharging of the existing stormwater system. Proposed improvements will convey the design storm without surcharging, and additional inlets will reduce localized flooding.</p> <p>N – No nuisance impacts is anticipated following project implementation. The improved stormwater facility would not create any long-term nuisances.</p> <p>- Brandon Duffey, P.E.</p>
KEY	3	Noise - suitable separation between noise sensitive activities (such as residential areas) and major noise sources (aircraft, highways & railroads).
N		<p><i>Response and source of information:</i></p> <p>M – Mitigation would be required in the short term during project implementation. Nearby residences may be temporarily affected by noise from excavation and construction work. Efforts will be made to minimize nuisances including select timing of construction equipment operation in residential areas.</p> <p>N – No impact is anticipated following project implementation. The improved stormwater system will not create any long-term noise issues.</p> <p>.</p> <p>- Brandon Duffey, P.E.</p>

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KEY	4	Historic Properties, Cultural, and Archaeological Resources
N		<p><i>Response and source of information:</i></p> <p>Damon Murdo of the State Historical Preservation Office (SHPO) states “As long as ground disturbance will be kept to existing disturbed areas and 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.” Any water lines [Storm Drains] that would not be located within an existing roadway, which have not had previous disturbance, for these we would recommend a cultural resource inventory be conducted in order to determine whether or not sites exist and if they will be impacted.</p> <p>All proposed work follows existing storm infrastructure or existing road right-of-way which have already been disturbed. Therefore, no impact to historic structures are anticipated.</p> <ul style="list-style-type: none"> - Brandon Duffey, P.E. - Damon Murdo, State Historical Preservation Office
KEY	5	Changes in Demographic (population) Characteristics (e.g., quantity, distribution, density)
N		<p><i>Response and source of information:</i></p> <p>The proposed project is not anticipated to affect any changes in demographics to the area.</p> <ul style="list-style-type: none"> - Brandon Duffey, P.E.
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?)
N		<p><i>Response and source of information:</i></p> <p>No impact to environmental justice is anticipated. Housing will not be placed as part of this project. The project will reduce the risk of flooding in existing developed and housing areas.</p> <ul style="list-style-type: none"> - Brandon Duffey, P.E.
KEY	7	General Housing Conditions - Quality, Quantity, Affordability
B		<p><i>Response and source of information:</i></p> <p>The project will reduce the risk of failure of the stormwater facilities in the City of Red Lodge. This will reduce the risk of flooding with existing developed and housing areas. The project will also disconnect stormwater drainage basins from the sanitary sewer system, reducing the risk of sanitary sewer backups and failures.</p> <ul style="list-style-type: none"> - Brandon Duffey, P.E.
KEY	8	Displacement or Relocation of Businesses or Residents
N		<p><i>Response and source of information:</i></p> <p>No business or residents will be relocated in conjunction with the proposed improvements. The project will reduce the risk of displacement/relocations by reducing the risk of localized flooding in existing developed and housing areas.</p> <ul style="list-style-type: none"> - Brandon Duffey, P.E.

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KEY	9	Public Health and Safety
B		<p><i>Response and source of information:</i></p> <p>Improving the stormwater facilities in the City of Red Lodge will reduce the risk and frequency of flooding thereby benefiting public health and safety in the City by preventing interruptions to road traffic and accessibility due to localized flooding.</p> <p>- Brandon Duffey, P.E.</p>
KEY	10	Lead Based Paint and/or Asbestos
N		<p><i>Response and source of information:</i></p> <p>There is no known lead-based paint or asbestos in the stormwater system, therefore, no lead-based paint or asbestos is anticipated to be encountered as part of the proposed improvements. However, requirements from Montana DEQ require an inspection for asbestos (performed by an accredited inspector) prior to any demolition taking place. This inspection may be waived depending on the type of the existing bridge structure and its components.</p> <p>- Brandon Duffey, P.E.</p>
KEY	11	Local Employment & Income Patterns – Quantity and Distribution of Employment, Economic Impact
N		<p><i>Response and source of information:</i></p> <p>The proposed project may offer temporary local employment of works for the associated project, but no long-term impact to local employment and income patterns are anticipated.</p> <p>- Brandon Duffey, P.E.</p>
KEY	12	Local & State Tax Base & Revenues
N		<p><i>Response and source of information:</i></p> <p>The proposed project should have no impact on local and state tax base and revenues.</p> <p>- Brandon Duffey, P.E.</p>
KEY	13	Educational Facilities - Schools, Colleges, Universities
B		<p><i>Response and source of information:</i></p> <p>A section of the stormwater facility is located adjacent to schools, improved infrastructure will reduce the risk of flooding near these areas.</p> <p>- Brandon Duffey, P.E.</p>

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KEY	14	Commercial and Industrial Facilities - Production & Activity, Growth or Decline
B		<p><i>Response and source of information:</i></p> <p>Improving the stormwater facilities in the City of Red Lodge will benefit commercial and industrial facilities in the city by reducing the frequency and risk of flooding. Reduced flooding may have an indirect benefit of encouraging commercial and industrial growth in the city</p> <p>- Brandon Duffey, P.E.</p>
KEY	15	Health Care – Medical Services
B		<p><i>Response and source of information:</i></p> <p>Improving the stormwater facilities in the City of Red Lodge will reduce the risk and frequency of flooding thereby benefiting medical and emergency access to the City by preventing interruptions to road traffic and accessibility due to localized flooding.</p> <p>- Brandon Duffey, P.E.</p>
KEY	16	Social Services – Governmental Services (e.g., demand on)
N		<p><i>Response and source of information:</i></p> <p>The proposed project should not have any impact on social services or governmental services.</p> <p>- Brandon Duffey, P.E.</p>
KEY	17	Social Structures & Mores (Standards of Social Conduct/Social Conventions)
N		<p><i>Response and source of information:</i></p> <p>The proposed project should not have any impact on social structures and mores.</p> <p>- Brandon Duffey, P.E.</p>
KEY	18	Land Use Compatibility (e.g., growth, land use change, development activity, adjacent land uses and potential conflicts)
B		<p><i>Response and source of information:</i></p> <p>The reduced risk and intensity of localized flooding, due to an improved stormwater facility, would indirectly remote the stability and growth and development within the City of Red Lodge.</p> <p>- Brandon Duffey, P.E.</p>
KEY	19	Energy Resources - Consumption and Conservation
N		<p><i>Response and source of information:</i></p> <p>The improvements to the stormwater system will have no positive or negative impact on the consumption and conservation of energy.</p> <p>- Brandon Duffey, P.E.</p>

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KEY	20	Solid Waste Management
N		<p><i>Response and source of information:</i></p> <p>The proposed improvements to the stormwater facilities will not impact the City's solid waste management.</p> <p>- Brandon Duffey, P.E.</p>
KEY	21	Wastewater Treatment - Sewage System
B		<p><i>Response and source of information:</i></p> <p>The proposed improvements will remove stormwater from the sanitary sewer system reducing the hydraulic loading on the existing wastewater treatment system.</p> <p>- Brandon Duffey, P.E.</p>
KEY	22	Storm Water – Surface Drainage
B		<p><i>Response and source of information:</i></p> <p>The proposed project would improve the existing stormwater facilities in the City of Red Lodge and reduce the risk and frequency of localized flooding.</p> <p>- Brandon Duffey, P.E.</p>
KEY	23	Community Water Supply
N		<p><i>Response and source of information:</i></p> <p>The municipal water supply will not be impacted by the proposed project.</p> <p>- Brandon Duffey, P.E.</p>
KEY	24	Public Safety – Police
B		<p><i>Response and source of information:</i></p> <p>Improving the stormwater facility in the City of Red Lodge will reduce the risk and frequency of flooding thereby benefiting public safety and police access to the City by preventing interruptions to road traffic and accessibility due to localized flooding</p> <p>- Brandon Duffey, P.E.</p>
KEY	25	Fire Protection – Hazards
B		<p><i>Response and source of information:</i></p> <p>Improving the stormwater facility in the City of Red Lodge will reduce the risk and frequency of flooding thereby benefiting public safety and police access to the City by preventing interruptions to road traffic and accessibility due to localized flooding</p> <p>- Brandon Duffey, P.E.</p>

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KEY	26	Emergency Medical Services
B		<p><i>Response and source of information:</i></p> <p>Improving the stormwater facility in the City of Red Lodge will reduce the risk and frequency of flooding thereby benefiting public safety and police access to the City by preventing interruptions to road traffic and accessibility due to localized flooding</p> <p>- Brandon Duffey, P.E.</p>
KEY	27	Parks, Playgrounds, & Open Space
N		<p><i>Response and source of information:</i></p> <p>No adverse effects to parks, playgrounds, and open space are anticipated.</p> <p>- Brandon Duffey, P.E.</p>
KEY	28	Cultural Facilities, Cultural Uniqueness & Diversity
N		<p><i>Response and source of information:</i></p> <p>Damon Murdo of the State Historical Preservation Office (SHPO) states “<i>As long as ground disturbance will be kept to existing disturbed areas and 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.</i>” Any water lines [Storm Drains] that would not be located within an existing roadway, which have not had previous disturbance, for these we would recommend a cultural resource inventory be conducted in order to determine whether or not sites exist and if they will be impacted.</p> <p>All proposed work follows existing storm infrastructure or existing road right-of-way which have already been disturbed. Therefore, no impact to historic structures are anticipated.</p> <p>- Brandon Duffey, P.E. - Damon Murdo, State Historical Preservation Office</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)
B		<p><i>Response and source of information:</i></p> <p>The proposed project will ensure that street routes utilized by local residents and business traffic will continue to be available with reduced risk of localized flooding.</p> <p>- Brandon Duffey, P.E.</p>
KEY	30	Consistency with Local Ordinances, Resolutions, or Plans (e.g., conformance with local comprehensive plans, zoning, or capital improvement plans)
B		<p><i>Response and source of information:</i></p>

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		<p>The project is in accordance with the recommendations and priorities set forth in the City of Red Lodge 2015 Growth Policy, 2016 Zoning Regulations.</p> <ul style="list-style-type: none"> - Brandon Duffey, P.E. - 2015 City of Red Lodge Growth Policy - 2016 Zoning Regulations
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.)
N		<p><i>Response and source of information:</i></p> <p>The proposed stormwater facility improvements would be implemented in existing right-of-way.</p> <ul style="list-style-type: none"> - Brandon Duffey, P.E.

ENVIRONMENTAL REVIEW FORM

[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.

Several alternatives were explored including; no action, repair, and replacement options. The cost of replacing the entire stormwater facility is cost-prohibitive; therefore, it is in the best interest of the City to complete the projects in phases. The selected alternative(s) will provide several benefits, specifically; ease of maintenance, increased structural integrity, increased stormwater conveyance efficiency, disconnecting stormwater from sanitary sewer system, and enhanced public safety

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

Contract documents will require contractors to follow the requirements of any stream permits issued to perform the work. Contract documents for construction will require contractors to follow the requirements of the permits, any specified construction window, necessary utility location and adhere to Best Management Practices (BMP's) during construction to protect natural stream and aquatic resources.

During the design phase, if deemed necessary by the Corps of Engineers, a wetland delineation will be performed in order to map potential wetland impacts.

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.

Based on our analysis, the EA is an adequate level of environmental review. An EIS is not required.

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.

The public will be provided opportunities for comment prior to the TSEP deadline of August 3, 2020. Namely, a public meeting will be held in July at the City of Red Lodge Council Chambers. Written comments will also be accepted until the meeting. Notices advertising the availability of the draft Environmental Assessment and Public Meeting will be published in the Carbon County News a minimum of two weeks prior to the meeting. To date, there have been no written or verbal negative comments from the public concerning the project. The Red Lodge City Council will determine whether (or not) to adopt the EA during a regularly scheduled commission meeting on TBD.

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

Brandon Duffey, P.E. – Great West Engineering

Ty Albert – Great West Engineering

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).

Agencies Contacted:

- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- USDA Natural Resource and Conservation Service
- U.S. Environmental Protection Agency
- U.S. Forest Service
- U.S. Department of Transportation
- Bureau of Land Management
- Bureau of Indian Affairs
- Occupational Safety and Health Administration
- Federal Aviation Administration
- National Park Service
- Montana Department of Commerce, Census and Economic Information Center
- Montana Department of Labor and Industry
- Montana Department of Natural Resources and Conservation
- Montana Department of Environmental Quality
- Montana Department of Transportation
- Montana Nature Resource Conservation
- Montana Department of Fish, Wildlife and Parks
- Montana State Historic Preservation Office
- Montana Natural Heritage Program (via Website Database)
- Carbon County Floodplain Administration

Agencies Contributed to EA (as of 6/9/2020):

- Carbon County Floodplain Administration
- U.S. Department of Transportation
- Montana Department of Transportation
- Montana Department of Labor
- Montana Fish, Wildlife & Parks
- U.S. Army Corps of Engineers
- U.S. Fish & Wildlife Service
- Montana State Historic Preservation Office



Authorized Representative (Great West Engineering)
for City of Red Lodge

June 10, 2020

Date

City of Red Lodge - Mayor

Date

Great West Engineering prepared this Environmental Assessment on behalf of City of Red Lodge as part of a contract to assist the City in applying for Treasure State Endowment Program grant funding for the Stormwater Facility Improvements Project. The City of Red Lodge entered into a contract with Great West Engineering to prepare the Preliminary Engineering Report and assist in the grant application at a regularly scheduled Council meeting. The contract was signed on February 3, 2020.

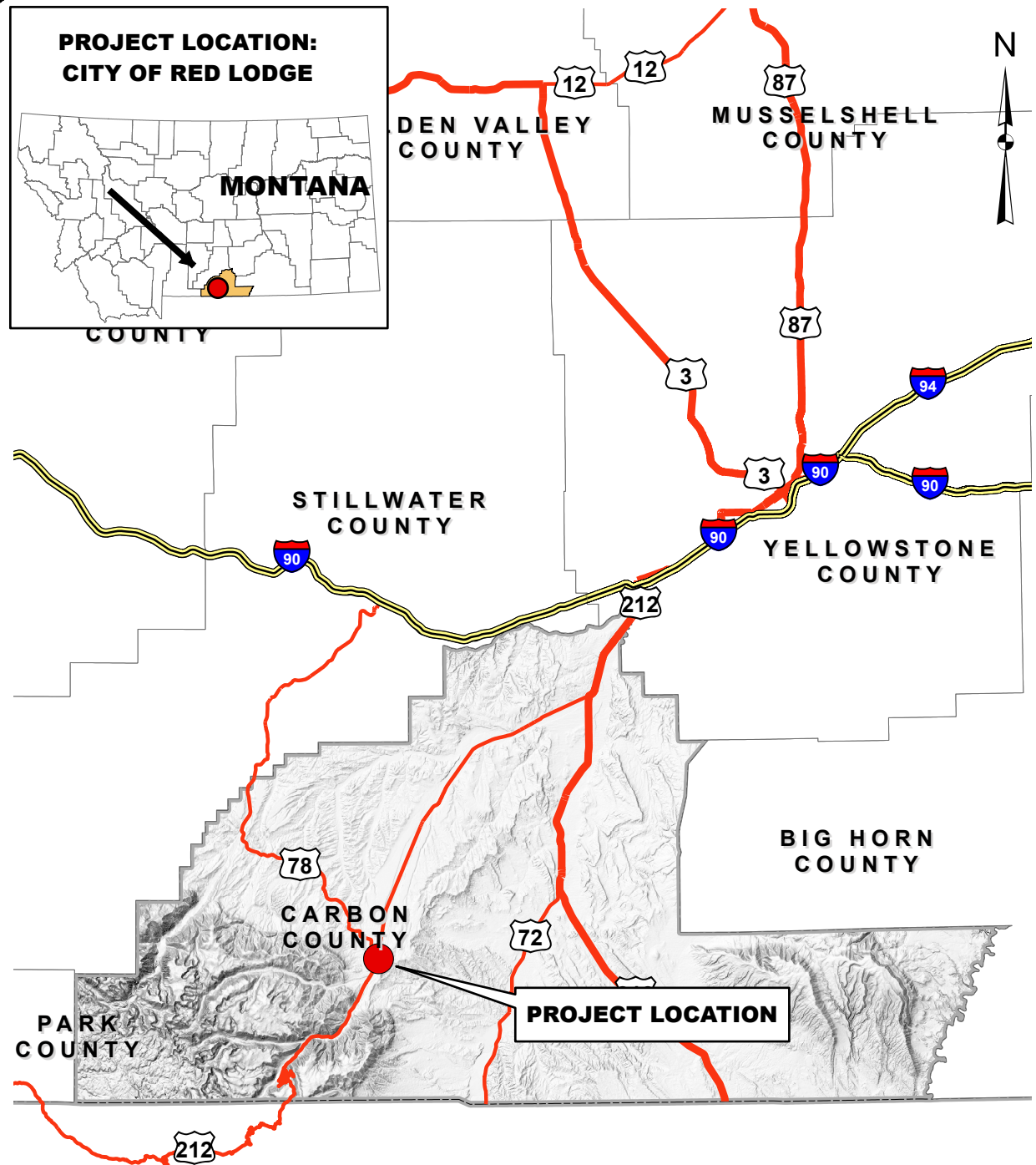
**IDENTIFICATION OF PROBLEM AREAS WITH THE EXISTING STORMWATER COLLECTION INFRASTRUCTURE
RED LODGE, MT**

LISTED IN ORDER OF **PRIORITY**

Based on Atlas maps, field inspection of drainage patterns (4/16 & 4/17 2018), and City of Red Lodge publics works staff knowledge of the system.

PRIORITY /PHASE	SITE ID	AREA	EXISTING STRUCTURE TYPE	EXISTING SIZE	DESCRIPTION	TYPE OF IMPROVEMENT	PROPOSED STRUCTURE TYPE	PROPOSED SIZE	ESTIMATED TOTAL COST
PHASE 1									
1	1	6th St. to 8th St. & Platt to Broadway	N/A	N/A	Drainage basin drains to sanitary sewer	New Storm Infrastructure	PVC or HDPE	18"	\$145,095
1	2	5th St. to 8th St. & Hauser to Word	N/A	N/A	Drainage basin drains to sanitary sewer	New Storm Infrastructure	PVC or HDPE	15"	\$503,265
1	7a	Haggin Ave: Outfall to 8th St.	PVC/Vitrified Clay pipe	24" & 18"	Main is undersized	Replace existing main, New main along Platt, add additionalal inlets	PVC or HDPE	42", 48" & 54"	\$2,012,535
1	6	Diamond C Estates Subdivision	N/A	N/A	Potential for some storm inlets to be tied into sanitary sewer system.	Further Investigation	PVC or HDPE	TBD	\$11,087
Phase 1 Total:									\$2,671,982
PHASE 2									
2	3	9th St. to 11 St. & Platt to Word	N/A	N/A	Drainage basin drains to sanitary sewer	New Storm Infrastructure	PVC or HDPE	18"	\$749,183
2	7b	Haggin Ave: 8th St. to 11th St.	PVC/Vitrified Clay pipe	18"	Main is undersized	New main in Platt, add additional inlets	PVC or HDPE	42"	\$570,706
Phase 2 Total:									\$1,319,889
PHASE 3									
3	4	Broadway to top of hill/airport rd.	N/A	N/A	Drainage basin drains to sanitary sewer	New Storm Infrastructure	PVC or HDPE	15"	\$511,040
3	7c	Haggin Ave: 11th St. to 14th St.	PVC/Vitrified Clay pipe	15"	Main is undersized	New main in Platt, add additional inlets	PVC or HDPE	36"	\$542,669
3	9	11th St.: Haggin to Word	PVC/Vitrified Clay pipe	12"	Main is undersized	Replace existing main, add additional inlets	PVC or HDPE	24" & 15"	\$558,765
Phase 3 Total:									\$1,612,474
PHASE 4									
4	5	15th St. to 17th St/Hauser to Grant & 14th St. to 19th St./Grant to Mcgillen	N/A	N/A	Drainage basin drains to sanitary sewer	New Storm Infrastructure	PVC or HDPE	24" & 18"	\$1,045,470
4	7d	14th St. to 16th St., & 16th St.: alley to Broadway	PVC/Vitrified Clay pipe	15" & 12"	Main is undersized	Replace existing main, add additional inlets	PVC or HDPE	36" & 30"	\$602,475
4	11	19th St Storm Main System	PVC/Vitrified Clay pipe	24" & 8"	Main is undersized	Replace existing main, add additional inlets	PVC or HDPE	36", 30", & 18"	\$1,301,765
Phase 4 Total:									\$2,949,711
FUTURE PROJECTS									
F	8	8th St.: Haggin to Word, & Word: 10th to 7th	PVC/Vitrified Clay pipe	12" & 8"	Main is undersized	Replace existing main, add additional inlets	PVC or HDPE	24", 18", & 15"	\$990,641
F	10	14th St.: 7d issues to Grant	PVC/Vitrified Clay pipe	12"	Main is undersized	Replace existing main, add additional inlets	PVC or HDPE	15"	\$687,287
F	13	Cooper Ave: 9th St. to 1st St.	N/A	N/A	no storm infrastructure	New Mains, Inlets, stormwater pond	PVC or HDPE	24"	\$319,346
Future Projects Total:									\$1,997,273

TOTAL ALL PROJECTS: \$10,551,329



NOT TO SCALE

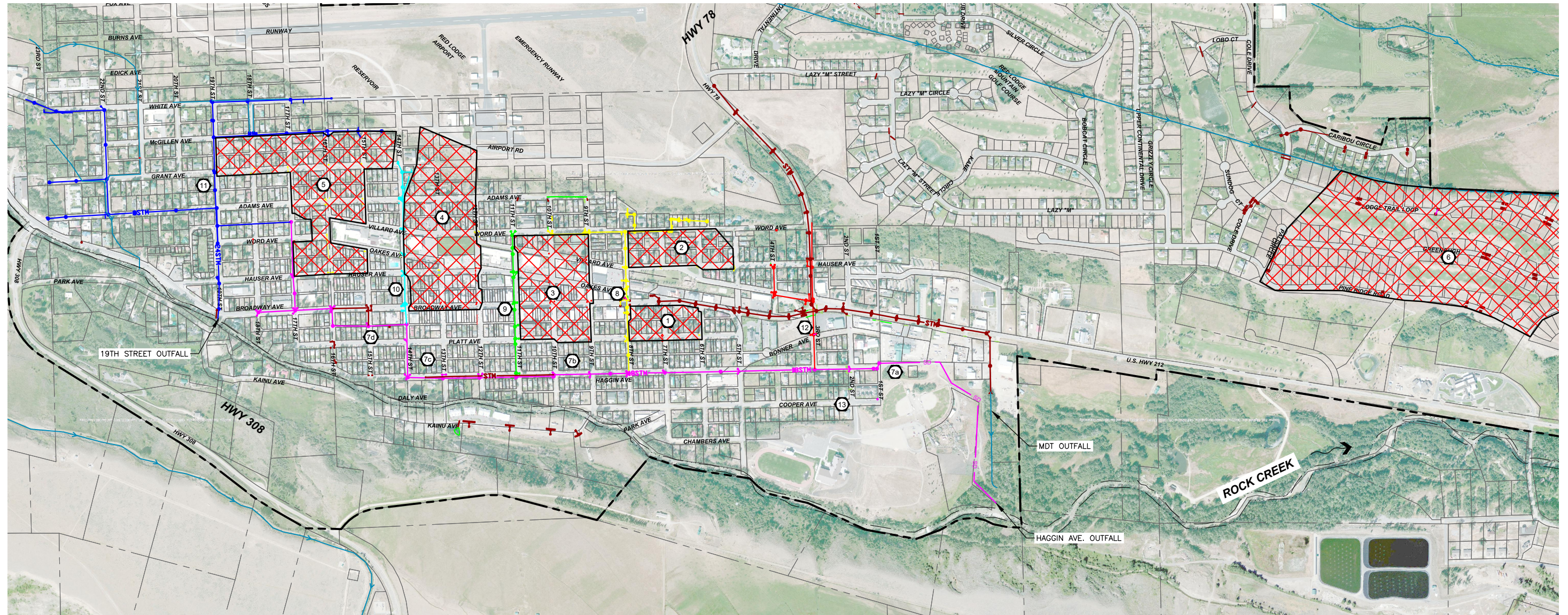
**RED LODGE STORMWATER FACILITY IMPROVEMENTS
FIGURE 1 - PROJECT LOCATION**

CITY OF RED LODGE, MONTANA
2020 STORMWATER SYSTEM IMPROVEMENTS



Red Lodge Stormwater PER Location Map

J:\2-17103 - Red Lodge On-Call 2017\TO 15 - Stormwater PER Update\CADD_2-17103-TO15-Exhibits\PER_2-17103-TO15-PER-ID of problem areas.dwg



LEGEND	
①	SITE ID OF IDENTIFIED PROBLEM AREAS
— — — — —	RED LODGE CITY LIMITS
SD	HAGGIN AVE. STORM MAINS
SD	3RD ST. STORM MAINS
SD	8TH ST. STORM MAINS
SD	11TH ST. STORM MAINS
SD	14TH ST. STORM MAINS
SD	19TH ST. STORM MAINS
SD	OTHER STORM WATER FACILITIES
⊗	DRAINS TO SANITARY SEWER
→	IRRIGATION/DRAINAGE DITCH

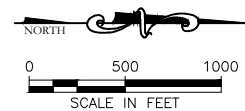
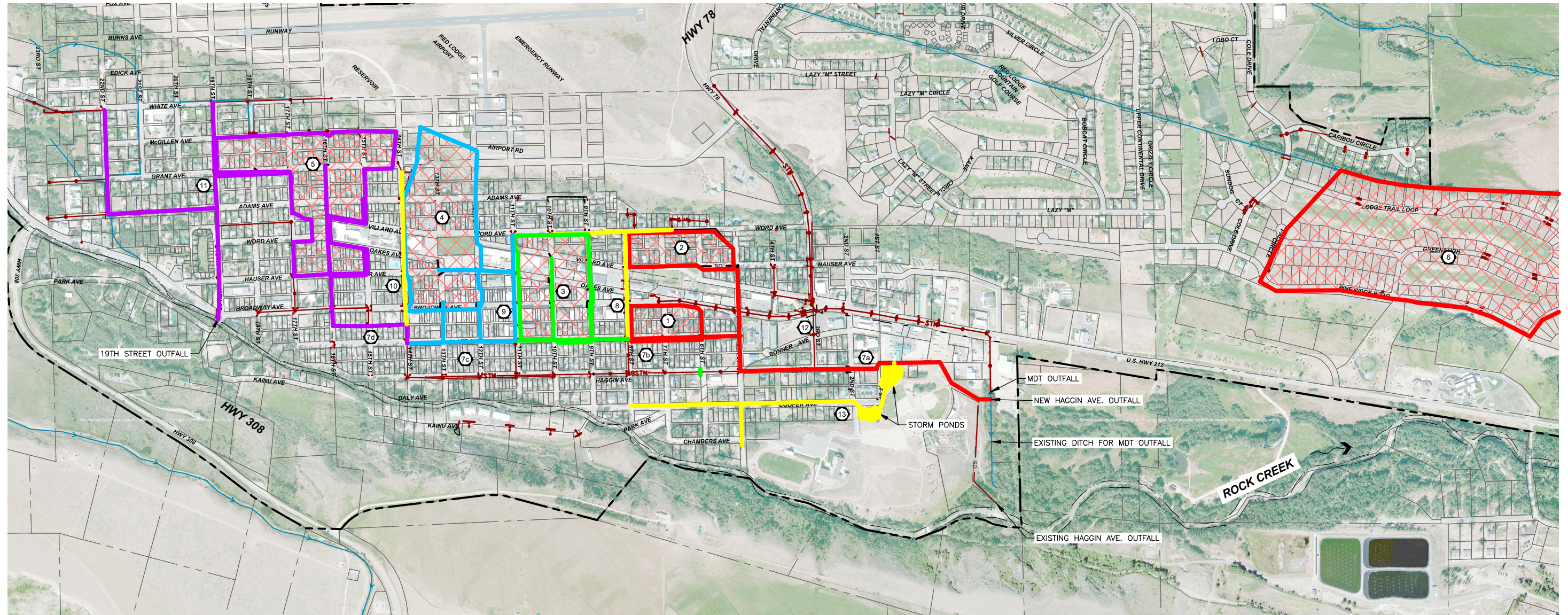


Figure #2
ID OF PROBLEM AREAS
 CITY OF RED LODGE
 2020 STORMWATER IMPROVEMENTS PER



LEGEND	
①	SITE ID OF IDENTIFIED PROBLEM AREAS
--- ---	RED LODGE CITY LIMITS
—	PHASE 1 IMPROVEMENTS
—	PHASE 2 IMPROVEMENTS
—	PHASE 3 IMPROVEMENTS
—	PHASE 4 IMPROVEMENTS
—	FUTURE PHASE(S) IMPROVEMENTS

Figure #3
PHASING OF PROPOSED IMPROVEMENTS

CITY OF RED LODGE
 2020 STORMWATER IMPROVEMENTS PER

