



Completed by: Les Major
 Department Head Review: Dan Hartman

Responsible Department: Public Works
 Fund: Wastewater #2

Project Name:	Utility Line Replacement - Wastewater				
Brief Description:	Replacement and rehabilitation of ageing wastewater collection system				
Funding Source	Existing Grant Funds Identified for Project	Potential Grant Funds Identified	Funds Identified From Capital Project Fund	Funds Identified From Other Fund (Name)	No Identified Funding
Revenue Generated	Significant Ongoing Revenue Source	Small Ongoing Revenue Source	One-Time Revenue Generated	No Revenue Generated	
Legally Mandated	Court Decision	Regulatory Requirement	Pending Legal Action	Potential Legal Action	Normal Liability
Public Health & Safety	Existing Severe Hazard	Existing Minor Hazard	Potential Severe Hazard	Potential Minor Hazard	No Health or Safety Issue
Operating Budget Impact	Decreases Operating and/or Personnel Costs	Minimal or No Impact on Operating and/or Personnel Costs	Slight Increase to Operating and/or Personnel Costs	Significant Increase to Operating and/or Personnel Costs	
Environment and Sustainability	Enhances Environment and/or Sustainability	Benefits Environment and/or Sustainability	No Environmental Impact	Minor or Negative Environmental Impact	Diminishes Environment
% Of Population Served	100% of Population Served by Project	Majority of Population Served	Approximately 50% of Population Served	Less than 50% of the Population Served	
Preservation of Facility	Loss of Facility Imminent without Project Completion	Additional Damage Likely without Project Completion	Project Constitutes Normal Major Maintenance	Project Constitutes Normal Minor Maintenance	New Facility Safety Issue
Project Useful Life	20+ Years With Little/No Maintenance	20+ Years With Normal Maintenance	10-20 Years With Normal Maintenance	5-9 Years with Normal Maintenance	1-4 Years with Normal Maintenance
Conformity to Strategic Plans & Department Goals	Critical to accomplishing Established Plans / Goals	Assists in Accomplishing Established Plans / Goals	Will Not Assist or Will Hinder Accomplishing Plans / Goals	Recommended by City Council	Recommended by Staff
Recreational or Aesthetic Value	Major Value	Moderate value	No Value	Possibly Detrimental	
Estimated Frequency of Use	Every Day	Several Times per Week	Several Times per Month	Once per Month or Less	

Vision 2030 Guiding Principles Priority - (Choose One Best Fit)

☒ (A) Safe and Reliable Public Infrastructure ☐ (B) Economic Vitality and Community Amenities that Improve Quality of Life ☐ (C) Public Safety ☐ (D) Other

Category of Capital Expenditures - (Choose One Best Fit)

☐ Land Improvement ☐ Building Improvement ☐ Equipment ☐ Vehicle ☐ Technology ☒ Infrastructure

Financial Impact - Expenses

	Life-To-Date*	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	Total
Project Costs		431,000	442,000	453,000	464,000	475,000	488,000	500,000	512,000	524,000	537,000	4,826,000
On-Going Maintenance												-
Total Project Costs	-	431,000	442,000	453,000	464,000	475,000	488,000	500,000	512,000	524,000	537,000	4,826,000

*Life-to-date includes any actual expenditures from start of project through July 2018 and estimates for the remainder of FY 2018

Basis for Project Cost Estimate

☐ Formal Proposal ☐ Contractor/Engineer Estimate ☐ State Purchasing Co-Op ☒ Staff Estimate

Financial Impact - Revenues

	Life-To-Date*	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Total
Revenue Estimate												-

*Life-to-date includes any actual revenue generated from start of project through July 2018 and estimates for the remainder of FY 2018

Project Name:	Utility Line Replacement - Wastewater
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<p>Please provide details for the following:</p> <ol style="list-style-type: none"> 1. Project Description 2. Justification 3. Measure of Success 4. Description of Revenue Generated (if applicable) 	<p>The City of Golden owns and maintains 78.67 miles of sanitary sewer mains. The expected lifespan of these pipes is approximately 75 years. In order to maintain the current system, approximately one mile of sewer main should be replaced each year. The cost estimate has been calculated based on replacing one mile of sewer at current contract unit costs and is a combination of both open trench replacement and cured in place plastic (CIPP). Replacement method is selected based on a variety of factors including size, condition, capacity, and the number of service connections. Sewer main replacements are prioritized by pipe age, video inspection, increased maintenance, repair costs and ROW costs associated with the street replacement project. A reliable wastewater collection system is expected by the residents of Golden and this type of project ensures that. This project will not change ongoing maintenance costs for the distribution system overall, but deferred investment would result in increases to maintenance.</p>
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<p>List any obstacles for implementation</p>	
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<i>Finance Use Only</i>	
Received by Finance Department	Date
Reviewed by City Manager:	



Completed by: Les Major
 Department Head Review: Dan Hartman

Responsible Department: Public Works
 Fund: Wastewater #3

Project Name:	Flow Monitoring Upgrades				
Brief Description:	Installation of new and upgradeing of existing sanitary sewer flow monitoring stations				
Funding Source	Existing Grant Funds Identified for Project	Potential Grant Funds Identified	Funds Identified From Capital Project Fund	Funds Identified From Other Fund (Name)	No Identified Funding
New/Additional Revenue Generated	Significant Ongoing Revenue Source	Small Ongoing Revenue Source	One-Time Revenue Generated	No New/Additional Revenue Generated	
Legally Mandated	Court Decision	Regulatory Requirement	Pending Legal Action	Potential Legal Action	Normal Liability
Public Health & Safety	Existing Severe Hazard	Existing Minor Hazard	Potential Severe Hazard	Potential Minor Hazard	No Health or Safety Issue
Operating Budget Impact	Decreases Operating and/or Personnel Costs	Minimal or No Impact on Operating and/or Personnel Costs	Slight Increase to Operating and/or Personnel Costs	Significant Increase to Operating and/or Personnel Costs	
Environment and Sustainability	Enhances Environment and/or Sustainability	Benefits Environment and/or Sustainability	No Environmental Impact	Minor or Negative Environmental Impact	Diminishes Environment
% Of Population Served	100% of Population Served by Project	Majority of Population Served	Approximately 50% of Population Served	Less than 50% of the Population Served	
Preservation of Facility	Loss of Facility Imminent without Project Completion	Additional Damage Likely without Project Completion	Project Constitutes Normal Major Maintenance	Project Constitutes Normal Minor Maintenance	New Facility/ Safety Issue
Project Useful Life	20+ Years With Little/No Maintenance	20+ Years With Normal Maintenance	10-20 Years With Normal Maintenance	5-9 Years with Normal Maintenance	1-4 Years with Normal Maintenance
Conformity to Strategic Plans & Department Goals	Critical to accomplishing Established Plans / Goals	Assists in Accomplishing Established Plans / Goals	Will Not Assist or Will Hinder Accomplishing Plans / Goals	Recommended by City Council	Recommended by Staff
Recreational or Aesthetic Value	Major Value	Moderate value	No Value	Possibly Detrimental	
Estimated Frequency of Use	Every Day	Several Times per Week	Several Times per Month	Once per Month or Less	

Vision 2030 Guiding Principles Priority - (Choose One Best Fit)

☒ (A) Safe and Reliable Public Infrastructure ☐ (B) Economic Vitality and Community Amenities that Improve Quality of Life ☐ (C) Public Safety ☐ (D) Other

Category of Capital Expenditures - (Choose One Best Fit)

☐ Land Improvement ☐ Building Improvement ☐ Equipment ☐ Vehicle ☐ Technology ☒ Infrastructure

Financial Impact - Expenses

	Life-To-Date*	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	Total
Project Costs		30,000	30,000	30,000	-	-	-	-	-	-	-	90,000
On-Going Maintenance												-
Total Project Costs	-	30,000	30,000	30,000	-	-	-	-	-	-	-	90,000

*Life-to-date includes any actual expenditures from start of project through July 2018 and estimates for the remainder of FY 2018

Basis for Project Cost Estimate

☐ Formal Proposal ☐ Contractor/Engineer Estimate ☐ State Purchasing Co-Op ☒ Staff Estimate

Financial Impact - Revenues

	Life-To-Date*	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	Total
Revenue Estimate												-

*Life-to-date includes any actual revenue generated from start of project through July 2018 and estimates for the remainder of FY 2018

Project Name:	Flow Monitoring Upgrades
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<p>Please provide details for the following:</p> <ol style="list-style-type: none"> 1. Project Description 2. Justification 3. Measure of Success 4. Description of Revenue Generated (if applicable) 	<p>The City of Golden currently owns and maintains five sewer flow monitoring stations. These stations are used to monitor flow and look for increases during storm events. Flow increases during storms indicate problems in the collection system such as cross connections with stormsewer or leaks into the sewer. This information allows the Utilities Division to prioritize efforts in the prevention of inflow and infiltration. These stations are an integral part of our planning process for sewer main rehabilitation and replacement. Originally installed in 2008 the flow measuring equipment has begun to deteriorate and maintenance needs are increasing. This project will install one additional monitoring station and upgrade/replace flow sensors in the other five stations. A reliable wastewater collection system is expected by the residents of Golden and this type of project ensures that. This project will not change ongoing maintenance costs for the distribution system overall, but deferred investment would result in increases to maintenance. The project will ensure that the wastewater utility continues to use the best available information to plan capital projects. 2019 project will include replacement of failing hardware and telemetry equipment. 2020 project is to install a flow monitoring station that will collect data from the downtown area.</p>
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<p>List any obstacles for implementation</p>	
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Finance Use Only

Received by Finance Department	Date
Reviewed by City Manager:	



Completed by: Les Major
 Department Head Review: Dan Hartman

Responsible Department: Public Works
 Fund: Wastewater #4

Project Name:	Equipment Upgrade for Sanitary Sewer Video System				
Brief Description:	Replace components of the sanitary sewer video system				
Funding Source	Existing Grant Funds Identified for Project	Potential Grant Funds Identified	Funds Identified From Capital Project Fund	Funds Identified From Other Fund (Name)	No Identified Funding
New/Additional Revenue Generated	Significant Ongoing Revenue Source	Small Ongoing Revenue Source	One-Time Revenue Generated	No New/Additional Revenue Generated	
Legally Mandated	Court Decision	Regulatory Requirement	Pending Legal Action	Potential Legal Action	Normal Liability
Public Health & Safety	Existing Severe Hazard	Existing Minor Hazard	Potential Severe Hazard	Potential Minor Hazard	No Health or Safety Issue
Operating Budget Impact	Decreases Operating and/or Personnel Costs	Minimal or No Impact on Operating and/or Personnel Costs	Slight Increase to Operating and/or Personnel Costs	Significant Increase to Operating and/or Personnel Costs	
Environment and Sustainability	Enhances Environment and/or Sustainability	Benefits Environment and/or Sustainability	No Environmental Impact	Minor or Negative Environmental Impact	Diminishes Environment
% Of Population Served	100% of Population Served by Project	Majority of Population Served	Approximately 50% of Population Served	Less than 50% of the Population Served	
Preservation of Facility	Loss of Facility Imminent without Project Completion	Additional Damage Likely without Project Completion	Project Constitutes Normal Major Maintenance	Project Constitutes Normal Minor Maintenance	New Facility/ Safety Issue
Project Useful Life	20+ Years With Little/No Maintenance	20+ Years With Normal Maintenance	10-20 Years With Normal Maintenance	5-9 Years with Normal Maintenance	1-4 Years with Normal Maintenance
Conformity to Strategic Plans & Department Goals	Critical to accomplishing Established Plans / Goals	Assists in Accomplishing Established Plans / Goals	Will Not Assist or Will Hinder Accomplishing Plans / Goals	Recommended by City Council	Recommended by Staff
Recreational or Aesthetic Value	Major Value	Moderate value	No Value	Possibly Detrimental	
Estimated Frequency of Use	Every Day	Several Times per Week	Several Times per Month	Once per Month or Less	

Vision 2030 Guiding Principles Priority - (Choose One Best Fit)

☒ (A) Safe and Reliable Public Infrastructure ☐ (B) Economic Vitality and Community Amenities that Improve Quality of Life ☐ (C) Public Safety ☐ (D) Other

Category of Capital Expenditures - (Choose One Best Fit)

☐ Land Improvement ☐ Building Improvement ☒ Equipment ☐ Vehicle ☐ Technology ☐ Infrastructure

Financial Impact - Expenses

	Life-To-Date*	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	Total
Project Costs		15,000	15,000	15,000	-	50,000						95,000
On-Going Maintenance												-
Total Project Costs	-	15,000	15,000	15,000	-	50,000	-	-	-	-	-	95,000

*Life-to-date includes any actual expenditures from start of project through July 2018 and estimates for the remainder of FY 2018

Basis for Project Cost Estimate

☐ Formal Proposal ☐ Contractor/Engineer Estimate ☐ State Purchasing Co-Op ☒ Staff Estimate

Financial Impact - Revenues

	Life-To-Date*	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	Total
Revenue Estimate												-

*Life-to-date includes any actual revenue generated from start of project through July 2018 and estimates for the remainder of FY 2018

Project Name:

Equipment Upgrade for Sanitary Sewer Video System

Please provide details for the following:

1. Project Description
2. Justification
3. Measure of Success
4. Description of Revenue Generated
(if applicable)

The City of Golden uses video inspection as an aid to prioritizing sewer main replacement and rehabilitation. In conjunction with flow monitoring and known maintenance issues video inspection provides valuable information on existing pipe condition. The current video system was purchased in 2012 and is showing its age. Heavy use by Utilities and Stormwater over the last several years have lead to minor failures and increased maintenance. This project will allow for replacement of the cable and cable reel along with updating the data entry pendant (laptop type device) and mechanical portions of the tractor. A reliable wastewater collection system is expected by the residents of Golden and this type of project ensures that. This project will not change ongoing maintenance costs for the collection system overall, but deferred investment would result in increases to maintenance. 2019 upgrades are replacement of cable and addition of larger tractor wheels. 2020 projects will include pendant upgrade and tractor rebuild. The replacement of the tractor/camera is planned for 2023, at that time the existing system will still have some trade in value and will decrease the cost of a new unit.

List any obstacles for implementation

Finance Use Only

Date

Received by Finance Department

Reviewed by City Manager:



Completed by: Anne Beierle
 Department Head Review: Dan Hartman

Responsible Department: Public Works
 Fund: Wastewater #5

Project Name:	Treatment Plant Upgrades - Wastewater				
Brief Description:	Golden's contribution to upgrades or replacement of the domestic wastewater plant at Coors				
Funding Source	Existing Grant Funds Identified for Project	Potential Grant Funds Identified	Funds Identified From Capital Project Fund x	Funds Identified From Other Fund (Name)	No Identified Funding
Revenue Generated	Significant Ongoing Revenue Source	Small Ongoing Revenue Source	One-Time Revenue Generated	No Revenue Generated x	
Legally Mandated	Court Decision	Regulatory Requirement x	Pending Legal Action	Potential Legal Action	Normal Liability
Public Health & Safety	Existing Severe Hazard	Existing Minor Hazard	Potential Severe Hazard	Potential Minor Hazard x	No Health or Safety Issue
Operating Budget Impact	Decreases Operating and/or Personnel Costs	Minimal or No Impact on Operating and/or Personnel Costs x	Slight Increase to Operating and/or Personnel Costs	Significant Increase to Operating and/or Personnel Costs	
Environment and Sustainability	Enhances Environment and/or Sustainability	Benefits Environment and/or Sustainability	No Environmental Impact x	Minor or Negative Environmental Impact	Diminishes Environment
% Of Population Served	100% of Population Served by Project x	Majority of Population Served	Approximately 50% of Population Served	Less than 50% of the Population Served	
Preservation of Facility	Loss of Facility Imminent without Project Completion	Additional Damage Likely without Project Completion	Project Constitutes Normal Major Maintenance x	Project Constitutes Normal Minor Maintenance	New Facility Safety Issue
Project Useful Life	20+ Years With Little/No Maintenance	20+ Years With Normal Maintenance x	10-20 Years With Normal Maintenance	5-9 Years with Normal Maintenance	1-4 Years with Normal Maintenance
Conformity to Strategic Plans & Department Goals	Critical to accomplishing Established Plans / Goals x	Assists in Accomplishing Established Plans / Goals	Will Not Assist or Will Hinder Accomplishing Plans / Goals	Recommended by City Council	Recommended by Staff
Recreational or Aesthetic Value	Major Value	Moderate value	No Value x	Possibly Detrimental	
Estimated Frequency of Use	Every Day x	Several Times per Week	Several Times per Month	Once per Month or Less	

Vision 2030 Guiding Principles Priority - (Choose One Best Fit)

☒ (A) Safe and Reliable Public Infrastructure ☐ (B) Economic Vitality and Community Amenities that Improve Quality of Life ☐ (C) Public Safety ☐ (D) Other

Category of Capital Expenditures - (Choose One Best Fit)

☐ Land Improvement ☐ Building Improvement ☐ Equipment ☐ Vehicle ☐ Technology ☒ Infrastructure

Financial Impact - Expenses

	Life-To-Date*	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	Total
Project Costs			2,000,000	2,000,000	2,000,000							6,000,000
On-Going Maintenance												-
Total Project Costs	-	-	2,000,000	2,000,000	2,000,000	-	-	-	-	-	-	6,000,000

*Life-to-date includes any actual expenditures from start of project through July 2018 and estimates for the remainder of FY 2018

Basis for Project Cost Estimate

☐ Formal Proposal ☐ Contractor/Engineer Estimate ☐ State Purchasing Co-Op ☒ Staff Estimate

Financial Impact - Revenues

	Life-To-Date*	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	Total
Revenue Estimate												-

*Life-to-date includes any actual revenue generated from start of project through July 2018 and estimates for the remainder of FY 2018

Project Name:	Treatment Plant Upgrades - Wastewater
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<p>Please provide details for the following:</p> <ol style="list-style-type: none"> 1. Project Description 2. Justification 3. Measure of Success 4. Description of Revenue Generated (if applicable) 	<p>Domestic wastewater from Golden is treated under contract at a wastewater plant located on the Coors Brewery and operated by MillerCoors. The contract includes provisions requiring Golden's financial contribution for upgrades at the plant under limited circumstances, including changes to regulations that would require treatment changes. Golden has been placed on notice by Coors that they are evaluating potential upgrades that may qualify for reimbursement by Golden. This budget item is a placeholder anticipating this possibility and has been scheduled based on compliance schedules that exist in the current MillerCoors discharge permit issued by the State.</p>
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<p>List any obstacles for implementation</p>	<p>Timing and costs are unknown. Would require bonds to fund completely.</p>
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Finance Use Only

Received by Finance Department	Date
Reviewed by City Manager:	