

Completed by:	Les Major
Department Head Review:	Brian Tracy

Responsible Department:	Public Works
Fund:	Watewater Fund #2

Strategic S	uccess Facto	or	Active, Con Sustai		Afforda Thri	ble and ving	Safe, Inclusive and Engaged		Respected and Relational Governance		Quality Services	
											Х	(
Strategic Action Poplacement and rehabilit												
Strates	gic Action		Replacement and rehabilitation of ageing wastewater collection system									
Proje	ct Name		Utility Line Replacement - Wastewater									
Fundin	ng Source		_	rant Funds for Project	Potential G	irant Funds tified		tified From oject Fund	Funds Iden Other Fun		No Identifie	ed Funding
	<u> </u>		0: :5:					X	D. D. 11			
New/Additional F	Revenue Ge	nerated	Significan Revenu	e Source	_	ing Revenue irce		e Revenue erated	No New/A Revenue (
Legally I	Mandated		Court D	ecision	,	Requirement	Pending L	egal Action	Potential L		Normal I	Liability
			Existing Sev	vere Hazard		nor Hazard	Potential Se	evere Hazard	Potential M	inor Hazard	No Health or	Safety Issue
Public Hea	alth & Safety	y	J		3			Х				,
Operating B	Budget Impa	ict		Operating onnel Costs	Operatin Personn	lo Impact on g and/or nel Costs			Significant Increase to Operating and/or Personnel Costs			
			Fuhanasa F			(Minarar	Negative		
Environment a	nd Sustaina	bility		nvironment stainability	and/or Su	vironment stainabilty	No Environmental Impact		Minor or Negative Environmental Impact		Diminishes Environmen	
% Of Popul	lation Serve	d	100% of Population Served by Project		Majority of Population Served		X Approximately 50% of Population Served		Less than 50% of the Population Served			
			X		Additional Damage Likely		·		Project Constitutes			_
Preservation of Facility		without Project without F Completion Comple		Project	Project Constitutes Normal Major Maintenance		Normal Minor Maintenance		New Facility/ No Safety Issue			
			20+ Years With Little/No		20+ Years With Normal		X 10-20 Years With Normal		5-9 Years with Normal		1-4 Years with Norm	
Project Useful Life			Maintenance		Maintenance X		Maintenance		Maintenance		Maintenance	
Recreational o	r Aesthetic \	Value	Major	Value				·		y Detrimental		
			Every Day		Soveral Time	es per Week		X	Once per Me	onth or Loss		
Estimated Fro	equency of	Use		(Several IIIII	es per week	Several Times per Month Once per Mont			onth of Less		
			Visio	n 2030 Guid	ing Principle	es Priority -	(Choose One	Bost Fit)				
	(A) Safa and I	Paliable		•			•	,	(C) Dublic		(D) Other	
X	(A) Safe and I Public Infr	rastructure		(B) Economic that Impro	ove Quality of	-	nenities		(C) Public Safety		(D) Other	
			Ca	tegory of Ca	pital Expen	ditures - (Ch	oose One Be	est Fit)				
	Land		Building		Equipment		Vehicle		Technology	Х	Infrastructure	
	Improvement	t	Improvement	t								
	1:f- 7-				Financial Im	pact - Expe	nses					
	Life-To- Date*	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total
Project Costs		475,000	488,000	500,000	512,000	524,000	537,000	548,000	573,000	602,000	632,000	5,391,000
On-Going Maintenance												-
Total Project Costs	_	475,000	488,000	500,000	512,000	524,000	537,000	548,000	573,000	602,000	632,000	5,391,000
Life-to-date includes any act	tual expenditure	-		-	-	•		J-0,000	3,3,000	302,000	332,000	5,551,000
·		·			asis for Proj							
	Formal Propo	sal		Contractor/E				State Purchasir	ng Co-Op	Х	Staff Estimate	
	Life-To-				Financial Im	pact - Reve	nues					
	Date*	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total
Revenue Estimate												-
Life to date includes any act	tual rovenue car	orated from cto	et of project thes	ugh July 2022 an	d actimates for	the remainder o	f EV 2022					

Project Name:	Utility Line Replacement - Wastewater
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 owns and maintains 79.15 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 collection system overall, but deferred investment would result in increases to maintenance.
Describe how this project connects to and supports Stragetic Action Plan success factor(s) identified above.	The utility line replacement program assures that we have a reliable wastewater collection system and can provide quality public service of wastewater collection.
List any obstacles for implementation	
	Date Received by Finance Department Reviewed by City Manager:

Affordable and

Safe, Inclusive and

Quality



Completed by:	Les Major
Department Head Review:	Brian Tracy

Active, Connected and

Responsible Department:	Public Works
Fund:	Watewater Fund #3

Respected and Relational

Strategic Si	uccess Facto	or	Sustai	nable	Thriving Engaged				Gover	nance	Services X		
Strateg	ic Action			Instal	lation of ne	w and upgra	ding of exist	ing sanitary se	ewer flow m	onitoring sta	tions		
Projec	ct Name			Sewer Flow Monitoring Upgrades									
Fundin	g Source		Existing Gr Identified	ant Funds for Project	Potential G	irant Funds tified	ified Capital Project Fund			tified From d (Name)	No Identifie	ed Funding	
New/Additional F	Revenue Ge	nerated	Significan Revenue	-	_	ing Revenue irce	One-Time	X e Revenue erated	No New/A	Generated			
Legally I	Mandated		Court D	ecision		Requirement	Pending L	egal Action	Potential Lo		Normal Liability		
Public Hea	lth & Safety	y	Existing Sev	ere Hazard		nor Hazard	Potential Se	evere Hazard	Potential M		No Health or	Safety Issue	
Operating B	Sudget Impa	ict	Decreases and/or Pers		Operatin Personn	No Impact on ig and/or nel Costs	Slight Increase to Operating and/or Personnel Costs		X Significant Increase to Operating and/or Personnel Costs				
Environment a	nd Sustaina	bility	Enhances En and/or Sus		Benefits En	vironment stainabilty	No Environn	nental Impact	Minor or Negative Environmental Impact		Diminishes Environmen		
% Of Popul	ation Serve	d	100% of P Served b	y Project	Majority of Ser	Population ved	Approxima	X ately 50% of on Served	Less than 50% of the Population Served				
Preservatio	on of Facility	у	X 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/ No Safety Issue		
Project (Useful Life		20+ Years With Little/No Maintenance		20+ Years With Normal Maintenance		10-20 Years With Normal Maintenance X		5-9 Years with Normal Maintenance		1-4 Years with Normal Maintenance		
Recreational o	r Aesthetic \	Value	Major	Value	Moderate value		No Value X		Possibly Detrimental				
Estimated Fre	equency of l	Use	Every Day X		Several Times per Week		Several Times per Month		Once per Month or Less				
			Visio	n 2030 Guid	ing Principle	es Priority -	(Choose One	e Best Fit)					
х	(A) Safe and F Public Infr	Reliable rastructure		(B) Economic	Vitality and Cove Quality of	ommunity An	•		(C) Public Safety		(D) Other		
			Ca	tegory of Ca	pital Expen	ditures - (Ch	oose One B	est Fit)					
	Land Improvement		Building Improvement		Equipment		Vehicle		Technology	Х	Infrastructure		
					Financial Im	pact - Expe	nses						
	Life-To- Date*	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total	
Project Costs		35,000	35,000	-	-	-	-	-	-	-	-	70,000	
On-Going Maintenance												-	
Total Project Costs	-	35,000	35,000	-	-	-	-	-	-	-	-	70,000	
Life-to-date includes any act	ual expenditure	s from start of p	roject through Ju	-				I					
					asis for Proj			1					
	Formal Propo	osal		Contractor/E	ngineer Estim	ate	<u> </u>	State Purchasii	ng Co-Op	X	Staff Estimate		
·	1.6				Financial Im	pact - Reve	nues						
	Life-To- Date*	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total	
Revenue Estimate Life-to-date includes any act	ual revenue cen	perated from star	rt of project thro	ugh July 2022 an	d estimates for	the remainder o	f FY 2022					-	

Project Name:	Sewer Flow Monitoring Upgrades
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 currently owns and maintains six 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. The equipment in the five stations originally installed in 2008 has begun to deteriorate and maintenance needs are increasing. In 2022 the flow monitoring equipment and building at the meter station (final point of measurement before Coors) were rehabilitated and connected to the city SCADA system. In 2023 and 2024 we will evaluate existing flow measuring devices, repair as needed and design two additional stations that will collect data from the Mt Zion and downtown areas.
Describe how this project connects to and supports Stragetic Action Plan success factor(s) identified above.	Flow monitoring of the sewer system aids in the prioitization of mainline replacement and rehabilitation by locating areas of infiltration and inflow. This will reduce future sanitary sewer treatment costs and the risk of main backups and failures.
List any obstacles for implementation	
	Date Received by Finance Department Reviewed by City Manager:

Affordable and

Safe, Inclusive and

Quality



Completed by:	Les Major
Department Head Review:	Brian Tracy

Active, Connected and

Responsible Department:	Public Works
Fund:	Wastewater Fund # 4

Respected and Relational

Strategic Si	uccess Facto	or	Sustainable Thriving Engaged				Gover	nance	Services X				
Strateg	ic Action			Replace major components of the sanitary sewer video system									
Projec	ct Name			Equpment upgrade for sanitary sewer video system									
Fundin	g Source		Existing Gi Identified	rant Funds for Project	Potential Grant Funds Funds Identified I Identified Capital Project F			roject Fund		tified From id (Name)	No Identifie	ed Funding	
New/Additional F	Revenue Ge	nerated	_	t Ongoing Source	_	ing Revenue urce	X One-Time Revenue Generated		No New/Additional Revenue Generated				
Legally I	Mandated		Court D	ecision		Requirement	Pending Legal Action		X Potential Legal Action		Normal Liability		
Public Hea	Ith & Safety	У	Existing Sev	vere Hazard		inor Hazard	Potential S	evere Hazard	Potential M	inor Hazard	No Health or		
Operating B	udget Impa	ıct	Decreases and/or Pers	Operating onnel Costs	Operatir Personr	No Impact on ig and/or nel Costs		se to Operating rsonnel Costs	Operatin	Increase to g and/or el Costs	^		
Environment a	nd Sustaina	bility	Enhances En and/or Sus			nvironment stainabilty	No Environmental Impact		Minor or Negative Environmental Impact		Diminishes Environment		
% Of Popul	ation Serve	d	100% of Population Served by Project		Majority of Population Served		X 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/ No Safety Issue			
Project Useful Life Mainter		•	20+ Years With Normal Maintenance		10-20 Years With Normal Maintenance		5-9 Years with Normal Maintenance X		1-4 Years with Normal Maintenance				
Recreational or Aesthetic Value		Major Value		Moderate value		No Value X		Possibly Detrimental					
Estimated Fre	equency of	Use	Every Day		Several Times per Week X		Several Times per Month		Once per Month or Less				
			Visio	n 2030 Guid	ing Principle	es Priority -	Choose One	e Best Fit)					
	(A) Safe and I Public Infr	Reliable rastructure		(B) Economic		Community An			(C) Public Safety	Х	(D) Other		
			Ca	tegory of Ca	ıpital Expen	ditures - (Ch	oose One B	est Fit)					
	Land Improvement	<u> </u>	Building Improvement		Equipment		Vehicle		Technology		Infrastructure		
					Financial In	pact - Expe	nses						
	Life-To- Date*	2023	2024	2024	2026	2027	2028	2029	2030	2031	2032	Total	
Project Costs		50,000										50,000	
On-Going Maintenance												-	
Total Project Costs	-	50,000	-	-	-	-	-	-	-	-	-	50,000	
Life-to-date includes any act	ual expenditure	s from start of p	roject through Ju	•									
	Formal Dura	ocal I		•		ect Cost Est	imate	State Developed	ng Co O:-	V	Chaff Fairner		
	Formal Propo	osai		Contractor/E	ingineer Estim	ale 		State Purchasii	ilg Co-Up	Х	Staff Estimate		
	Life-To-				Financial Im	pact - Reve	nues						
	Date*	2023	2024	2024	2026	2027	2028	2029	2030	2031	2032	Total	
Revenue Estimate	ual revenue gen	perated from star	t of project thro	ugh July 2022 an	nd estimates for	the remainder o	f FY 2022					-	

Project Name:	Replace major components of the sanitary sewer video system
Please provide details for the following: 1. Project Description 2. Justification 3. Measure of Success 4. Description of Revenue Generated	The City of Golden uses video inspection as an aid to prioritize 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 has 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. 2022 projects will include reel and cable rebuild and replacement. 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.
(if applicable)	
	Video inspection of sanitary sewer mains allows the utility to prioritize replacement and rehabilitation to make the best use of the funds available. This helps the utiltiy to be fiscally responsible while delivering quality public services to the community.
Describe how this project connects to and supports Stragetic Action Plan success factor(s) identified above.	
List any obstacles for implementation	
	Finance Use Only Date
	Received by Finance Department
	Reviewed by City Manager:



Completed by:	Anne Beierle
Department Head Review:	Anne Beierle

Responsible Department:	Public Works
Fund:	Wastewater Fund #5

Strategic Success Factor		Active, Connected and		Affordable and				Respected and Relational		Quality		
		Sustainable x		Thriving		Engaged		Governance x		Services x		
			<u>'</u>	`					<u>'</u>	•		`
Strategic Action Golden's contributions to the upgrade or replacement of the wastewater treatment plant at the Coors Brewery								ewery				
Proje	Project Name											
FTOJE	ct ivallie					V	Vastwater Trea	atment Upgrade	es			
			Existing G	rant Funds	Potential G	rant Funds	Funds Ider	ntified From	Funds Iden	tified From	No Identifi	ed Eunding
Fundin	ng Source		Identified for Project		Identified		Capital Project Fund		Other Fund (Name)		No Identified Funding	
			Significan	t Ongoing	Small Ongoing Revenue		X One-Time Revenue		No New/	Additional		
New/Additional I	Revenue Ge	nerated	Significant Ongoing Revenue Source		Source		Generated		No New/Additional Revenue Generated			
									X			
			Court D	ecision	Regulatory Requirement		Pending Legal Action		Potential Legal Action		Normal Liability	
Legally	Mandated				х							
			Existing Sev	ere Hazard	Existing Minor Hazard		Potential Severe Hazard		Potential Minor Hazard		No Health or Safety Issue	
Public Hea	alth & Safet	У	Existing occure natura						x		·	
			Decreases Operating		Minimal or No Impact on		Slight Increase to Operating		Significant Increase to			
Operating E	Budget Impa	ıct		onnel Costs	Operating and/or		and/or Personnel Costs		Operating and/or			
	· ·		,		Personnel Costs		X		Personnel Costs			
			Enhances F	nvironment	Benefits En	vironment			Minor or	Negative		
Environment a	nd Sustaina	bility		stainability	and/or Sus		No Environmental Impact		Environme	_	Diminishes Environment	
		•			•	•				·		
			100% of Population		Majority of Population		Approximately 50% of		Less than 50% of the			
% Of Population Served		Served by Project		Served		Population Served		Population Served				
			Loss of Facility Imminent		X Additional Damage Likely				Project Constitutes			
Preservation of Facility		without Project		without Project		Project Constitutes Normal Major Maintenance		Normal Minor		New Facility/ No Safety Issue		
Freservation of Facility		Completion		Completion		-		Maintenance		. to surety issue		
		20+ Years With Little/No		20+ Years With Normal		x 10-20 Years With Normal		5-9 Years with Normal		1-4 Years with Normal		
Project Useful Life		Maintenance		Maintenance		Maintenance		Maintenance		Maintenance		
				х								
Recreational or Aesthetic Value		Value	Major Value		Moderate value		No Value		Possibly Detrimental			
Recreational of Aesthetic Value				х								
Estimated Frequency of Use		Every Day		Several Times per Week		Several Times per Month		Once per Month or Less				
Estimated Frequency of Ose			х									
Vision 2030 Guiding Principles Priority - (Choose One Best Fit)												
	1			•		•	•				1	
x (A) Safe and Reliable (B) Economic Vitality and Community Amenities (C) Public (D) Other Public Infrastructure that Improve Quality of Life Safety												
	Public Inii	rastructure		that impro	ove Quality of	Lile			Safety			
			Ca	tegory of Ca	pital Expen	ditures - (Ch	oose One Bo	est Fit)				
	المسط						1		Tacharata		Infract	
	Land Improvemen	<u> </u>	Building Improvement		Equipment		Vehicle		Technology	Х	Infrastructure	2
		-	p. o remen									
Financial Impact - Expenses												
	Life-To- Date*	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total
Project Costs				1010	10,000,000	10,000,000	10,000,000	2023		1001		30,000,000
Project costs					10,000,000	10,000,000	10,000,000					30,000,000
On-Going Maintenance												-
Total Project Costs					10,000,000	10,000,000	10,000,000					30,000,000
Life-to-date includes any act	tual aveas dit	os from start -f	roject through t	- uly 2022 and acti				-	_	-	-	30,000,000
Life-to-uate includes any act	tuai expenditure	s nom start of p	roject through Jt									
				В	asis for Proj	ect Cost Est	imate					
Formal Proposal Contractor/Engineer Estimate State Purchasing Co-Op x Staff Estimate												
					Financial Im	pact - Reve	nues					
	Life-To- Date*	2023	2024	2024	2026	2027	2028	2029	2030	2031	2032	Total
.	Date	2023	2024	2024	2020	2021	2020	2023	2030	2031	2032	TOLAI
Revenue Estimate												-
Life-to-date includes any act	tual rovonue cor	aratad from cta	rt at araiast thra	ugh luly 2022 as	d actimates for	tha ramaindar a	• EV 2022					

	Golden's contributions to the upgrade or replacement of the wastewater				
Project Name:	treatment plant at the Coors Brewery				
Please provide details for the following: 1. Project Description 2. Justification 3. Measure of Success 4. Description of Revenue Generated (if applicable)	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. MillerCoors has reached out to see if Golden would participate in the initial engineering for the improvements. The funding in out years 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 and the amounts have no engineering basis at this time.				
Describe how this project connects to and supports Stragetic Action Plan success factor(s) identified above.	Active, Connected and Sustainable: upgrades to the wastewater treatment plant will improved air quality (odors) and water quality Respected and Relational Governance: working proactively and collaboratively with MillerCoors on improvements will result in bette transparancy for the upgrades needed and their costs. It also provides an opportunity to strengthen the relationship we have with MillerCoors. Quality Services: this investment in critical infrastructure assures we can continue to provide quality services to the community.				
List any obstacles for implementation	There remain many unknowns in this project: the total cost of the improvments, the share - if any - that is Golden's responsibility, and the timing of the improvements.				

Finance Use Only

	Date
Received by Finance Department	
Reviewed by City Manager:	