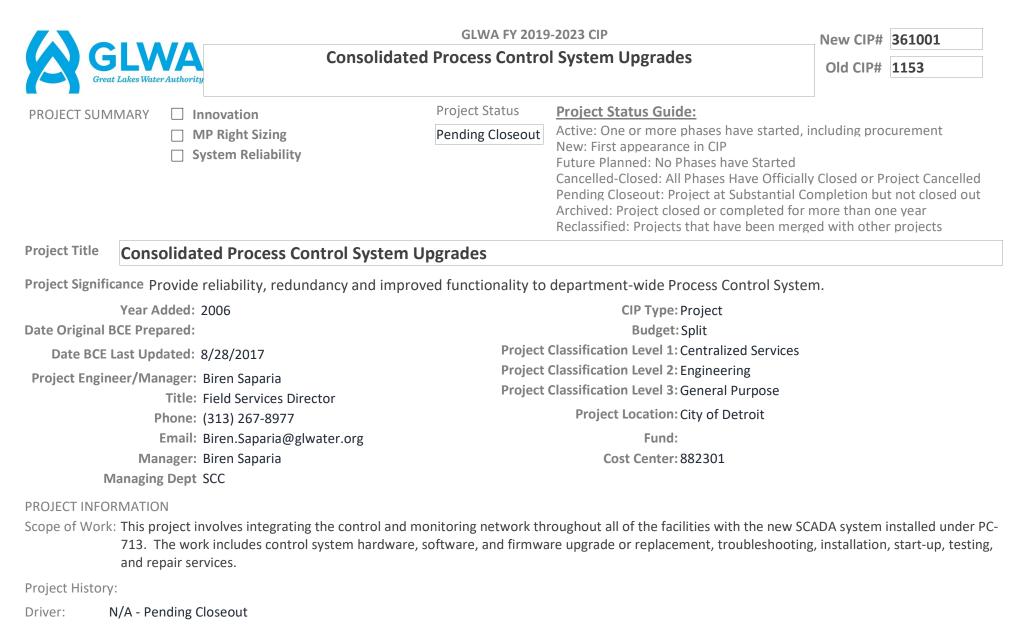


Appendix C: Centralized Services Business Case Evaluations

Please consider the environment before printing this document.

735 RANDOLPH DETROIT, MICHIGAN 48226 GLWATER.ORG



Challenges: N/A - Pending Closeout

Other Important Info:

Related Project:



Consolidated Process Control System Upgrades

Phase Category: I	DB	Des	sign and Build	
Budget:	Water			
Contract Number:	PC-773C		PPAT (Phase Program/Allowance Task) Information	
Phase Status:	Pending Close-out		PPAT CIP Number	
Start Date:		5/25/2013	PPAT SOW	
End Date:		5/25/2016	PPAT SOW	
Phase Cost Allocation: 0	СТА			
Phase Financial Source: I	DE			
Lookup Cost Est Class:				
Cost Estimation Date:		9/15/2017	Change PPAT PM	
Cost Estimation Source: 0	Contractor			
	Divon Conorio			
Cost Estmation Prep By: I	Biren Saparia			
Cost Estmation Prep By: I Useful Life > 20Yrs	·			
Useful Life > 20Yrs Y Comments:	Yes			
Useful Life > 20Yrs Y Comments:	Yes Consolidated Proces	-	n Upgrades sign and Build	
Useful Life > 20Yrs Comments: Comments: Comments: Chase Overview Phase Title Phase Category: Budget:	Yes Consolidated Proces DB Wastewater	-	sign and Build	
Useful Life > 20Yrs Comments: Comments: Contract Number:	Yes Consolidated Proces DB Wastewater PC-773D	-		
Useful Life > 20Yrs Comments: Comments: Phase Overview Phase Title Phase Category: Budget: Contract Number: Phase Status:	Yes Consolidated Proces DB Wastewater	-	sign and Build	
Useful Life > 20Yrs Comments: Comments: Phase Overview Phase Title Phase Category: Budget: Contract Number: Phase Status: Start Date:	Yes Consolidated Proces DB Wastewater PC-773D	De: 5/25/2013	sign and Build PPAT (Phase Program/Allowance Task) Information PPAT CIP Number	
Useful Life > 20Yrs Comments: Comments: Comments: Contract Number: Phase Status: Start Date: End Date:	Yes Consolidated Proces DB Wastewater PC-773D Pending Close-out	Des	sign and Build PPAT (Phase Program/Allowance Task) Information	
Useful Life > 20Yrs Comments: Comments: Comments: Phase Overview Phase Category: Budget: Contract Number: Phase Status: Start Date: End Date: Phase Cost Allocation:	Yes Consolidated Proces DB Wastewater PC-773D Pending Close-out	De: 5/25/2013	sign and Build PPAT (Phase Program/Allowance Task) Information PPAT CIP Number	
Useful Life > 20Yrs Comments: Comments: Comments: Phase Overview Phase Title Phase Category: Budget: Contract Number: Phase Status: End Date: Phase Cost Allocation: Phase Financial Source:	Yes Consolidated Proces DB Wastewater PC-773D Pending Close-out	De: 5/25/2013	sign and Build PPAT (Phase Program/Allowance Task) Information PPAT CIP Number	
Useful Life > 20Yrs Comments: Comments: Comments: Chase Overview hase Title Phase Category: Budget: Contract Number: Phase Status: Start Date: End Date: Phase Cost Allocation: Chase Financial Source: Lookup Cost Est Class:	Yes Consolidated Proces DB Wastewater PC-773D Pending Close-out	De: 5/25/2013 5/22/2016	sign and Build PPAT (Phase Program/Allowance Task) Information PPAT CIP Number	
Useful Life > 20Yrs Comments: Comments: Comments: Comments: Phase Overview Phase Title Phase Category: Budget: Contract Number: Phase Status: Contract Number: Phase Status: Contract Date: End Date: Phase Cost Allocation: Phase Financial Source: Lookup Cost Est Class: Cost Estimation Date:	Yes Consolidated Proces DB Wastewater PC-773D Pending Close-out CTA DE	De: 5/25/2013	sign and Build PPAT (Phase Program/Allowance Task) Information PPAT CIP Number	
Useful Life > 20Yrs Comments: Comments: Comments: Chase Overview hase Title Phase Category: Budget: Contract Number: Phase Status: Start Date: End Date: Phase Cost Allocation: Chase Financial Source: Lookup Cost Est Class:	Yes Consolidated Proces DB Wastewater PC-773D Pending Close-out CTA DE Contractor	De: 5/25/2013 5/22/2016	sign and Build PPAT (Phase Program/Allowance Task) Information PPAT CIP Number PPAT SOW	



Consolidated Process Control System Upgrades

Phase Exp	enses												
CURRENT	PHASE Des	ign and Buil	d				В	UDGET	Wa	ater		Contract No	PC-773C
Phase Title	PC-773C Cons	olidated Proc	ess Control S	System Up	grades	F	РРАТ С	IP Number	r			Phase Status	Pending Close-out
Expens	se Type	FY18	FY19	FY2	20	FY21		FY22		FY23	FY2	4 and Beyond	
Construction													
Engineering S	Services												
GLWA Salarie	25												
Materials													
Other													
Current Ph	ase Fringe	FY18	FY19	F۱	20	FY2	1	FY22		FY23	FY	24 and Beyond	
	Expenses	0		0	0		0		0		0		0
Current Pl		FY18	FY19	F۱	20	FY2	1	FY22		FY23	FY	24 and Beyond	
Personnel	Expenses	0		0	0		0		0		0		0
Current Ph	ase Total	FY18	FY19	F۱	20	FY2	1	FY22		FY23	FY	24 and Beyond	
		0		0	0		0		0		0		0



Contract No

Cost Est Class

PC-773D

Procurement

Project Execution Project Closeout

New CIP# 361001

Consolidated Process Control System Upgrades

CURRENT PHAS	SE D	esign and Build	d				BU	JDGET	Wa	astewater		Contract No F	PC-773D
Phase Title PC-7	73D Co	nsolidated Proce	ess Control	Syst	em Upgrades	PP	AT CIP	Number				Phase Status	Pending Close-out
Expense Typ	e	FY18	FY19		FY20	FY21		FY22		FY23	FY2	4 and Beyond	
Construction													
Engineering Service	es												
GLWA Salaries													
Materials													
Other													
		FY18	FY19		FY20	FY21		FY22		FY23	ГУ	24 and Davand	
Current Phase F				0		FIZI	0	FIZZ	0			24 and Beyond	
Benefit Expen	ISES	0		0	0		0		0	C		C	
Current Phase N	lon-	FY18	FY19		FY20	FY21		FY22		FY23	FY	24 and Beyond	
Personnel Expe	nses	0		0	0		0		0	C		C)
Current Phase T	Total	FY18	FY19		FY20	FY21		FY22		FY23	FY	24 and Beyond	
current i nase i	otar	0		0	0		0		0	C		C)
		FY18	FY19		FY20	FY21		FY22		FY23	ΕV	24 and Beyond	
ALL PHASES T	OTAL	- 0	1115	0	0	1121	0	1122	0	0	1 1 4		
		0		0	0		0		0	0		0	
Phase Tasks a	and Da	ates											
Phase Category	DB		Desis		ad Duild								
Budget	Wastev	water	Desig		nd Build								
Phase Status	Pendin	g Close-out			ask Name	Start	Date	Durat	ion	End Date	e		
Contract No	PC-773	D	Scop	e De	velopment								



Consolidated Process Control System Upgrades

Old CIP# 1153

Phase Category Budget	DB Water	Design and Build	Design and Build								
Phase Status	Pending Close-out	Task Name	Start Date	Duration	End Date						
Contract No	PC-773C	Scope Development									
Cost Est Class		Procurement									
		Project Execution									
		Project Closeout									

PROJECT PRIORITIZATION SCORING

Project Manager Score

Criteria	Score	Score Comment	Criteria	Score	Scor
ondition			Condition		
Performance (Service Level/Reli			Performance (Service Level/Reliabilit		
Regulatory (Environmental/Lega			Regulatory (Environmental/Legal)		
0&M			0&M		
Public Health & Safety			Public Health & Safety		
Public Benefit			Public Benefit		
Financial			Financial		
Efficiency and Innovation			Efficiency and Innovation		
Project Manager We	eight	ed Score	Review Committee We	eighte	d Score

Review Committee Score

Describe Here the Changes from the 2018 CIP to 2019 CIP

This project is pending close-out. Did not make any changes.

CIP Version	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	Total
2018	3,928	640								4,568
2019	203	118	0	0	0	0	0	0	0	321



GLWA FY 2019-2023 CIP

New CIP# 361002

Data Center Reliability/Availability Improvements

Old CIP# 1206

PROJECT SUMMARY		ovation P Right Sizing stem Reliability	Project Status Pending Closeout	Project Status Guide: Active: One or more phases have started, including procurement New: First appearance in CIP Future Planned: No Phases have Started Cancelled-Closed: All Phases Have Officially Closed or Project Cancelled Pending Closeout: Project at Substantial Completion but not closed out Archived: Project closed or completed for more than one year Reclassified: Projects that have been merged with other projects
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Project Title Data Center Reliability/Availability Improvements

Project Significance N/A - Pending Closeout

Year Added: 2009

Date Original BCE Prepared:

Date BCE Last Updated: 10/1/2017

Project Engineer/Manager: Biren Saparia

Title: Field Services Director Phone: (313) 267-8977 Email: Biren.Saparia@glwater.org Manager: Biren Saparia

Managing Dept SCC

PROJECT INFORMATION

Scope of Work: N/A - Pending Closeout

Project History:

Driver:N/A - Pending CloseoutChallenges:N/A - Pending CloseoutOther Important Info:

Related Project:

CIP Type: Project Budget: Split Project Classification Level 1: Centralized Services Project Classification Level 2: Engineering Project Classification Level 3: General Purpose Project Location: City of Detroit Fund: Cost Center:



Data Center Reliability/Availability Improvements

Phase Overview Phase Title DWS-88	81 Data Center Reliabi	lity/Availability Ir	nprovements
Phase Category:			ign and Build
Budget:	Water		
Contract Number:	DWS-881		PPAT (Phase Program/Allowance Task) Information
Phase Status:	Pending Close-out		PPAT CIP Number
Start Date:		1/29/2013	
End Date:		2/27/2016	PPAT SOW
Phase Cost Allocation:	СТА		
Phase Financial Source:	DE		
Lookup Cost Est Class:			
Cost Estimation Date:		9/15/2017	Change PPAT PM
Cost Estimation Source:	Contractor		
Cost Estmation Prep By:	Biren Saparia		
Useful Life > 20Yrs	No		
Comments:			
Phase Overview Phase Title DWS-88	81 Data Center Reliabi	lity/Availability Ir	nprovements
Phase Category:	DB	Desi	ign and Build
Budget:	Wastewater		
Contract Number:	DWS-881		PPAT (Phase Program/Allowance Task) Information
Phase Status:	Pending Close-out		PPAT CIP Number
Start Date:		1/29/2013	DDAT COW
End Date:		2/27/2016	PPAT SOW
Phase Cost Allocation:	СТА		
Phase Financial Source:	DE		
Lookup Cost Est Class:			
Cost Estimation Date:			Change PPAT PM
Cost Estimation Source:			
Cost Estmation Prep By:			
Useful Life > 20Yrs	No		
Comments:			



Data Center Reliability/Availability Improvements

Phase Expenses									
CURRENT PHASE	esign and Buil	d			BUDGET	Water		Contract No	DWS-881
Phase Title DWS-881 D	ata Center Relia	bility/Availab	ility Improven	nents PP/	AT CIP Number	~		Phase Status	Pending Close-out
Expense Type	FY18	FY19	FY20	FY21	FY22	FY23	FY2	24 and Beyond	
Construction									
Engineering Services									
GLWA Salaries									
Materials									
Other									
Current Phase Fringe	FY18	FY19	FY20	FY21	FY22	FY23	FY	24 and Beyond	
Benefit Expenses	0		0	0	0	0	0		0
Current Phase Non-	FY18	FY19	FY20	FY21	FY22	FY23	FY	24 and Beyond	
Personnel Expenses	0		0	0	0	0	0		0
Current Phase Total	FY18	FY19	FY20	FY21	FY22	FY23	FY	24 and Beyond	
	0		0	0	0	0	0		0



Data Center Reliability/Availability Improvements

CURRENT PHASE De	esign and Build			E	BUDGET	Wastewater	Contract No	DWS-881
Phase Title DWS-881 Da	ta Center Reliab	ility/Availabilit	ty Improvemen	ts PPAT (CIP Number		Phase Status	Pending Close-out
Expense Type	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
Construction								
Engineering Services								
GLWA Salaries								
Materials								
Other								
	FV/1 0	EV/10	5220	EV/24	EV22	EV22	EV24 and Davand	
Current Phase Fringe	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
Benefit Expenses	0	0	0	0		0 0		0
Current Phase Non-	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
Personnel Expenses	0	0	0	0		0 0		ס
Current Phase Total	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
	0	0	0	0		0 0	(ס
	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
ALL PHASES TOTAL	0	0	0			0 0		
	0	-	0	0		0 0	0	
	0	0	0	U		0 0	0	
Phase Tasks and Dat	tes							
Phase Category DB		Desis	and Devilat					
Budget Wastew	ater	Design a	nd Build					

Wastewater				
Pending Close-out	Task Name	Start Date	Duration	End Date
DWS-881	Scope Development			
	Procurement			
	Project Execution			
	Project Closeout			
	Pending Close-out	Pending Close-outTask NameDWS-881Scope DevelopmentProcurementProject Execution	Pending Close-outTask NameStart DateDWS-881Scope DevelopmentProcurementProject Execution	Pending Close-outTask NameStart DateDurationDWS-881Scope DevelopmentProcurementImage: Comparison of the security of th



Data Center Reliability/Availability Improvements

Old CIP# 1206

Phase Category Budget	DB Water	Design and Build			
Phase Status	Pending Close-out	Task Name	Start Date	Duration	End Date
Contract No	DWS-881	Scope Development			
Cost Est Class		Procurement			
		Project Execution			
		Project Closeout			

PROJECT PRIORITIZATION SCORING

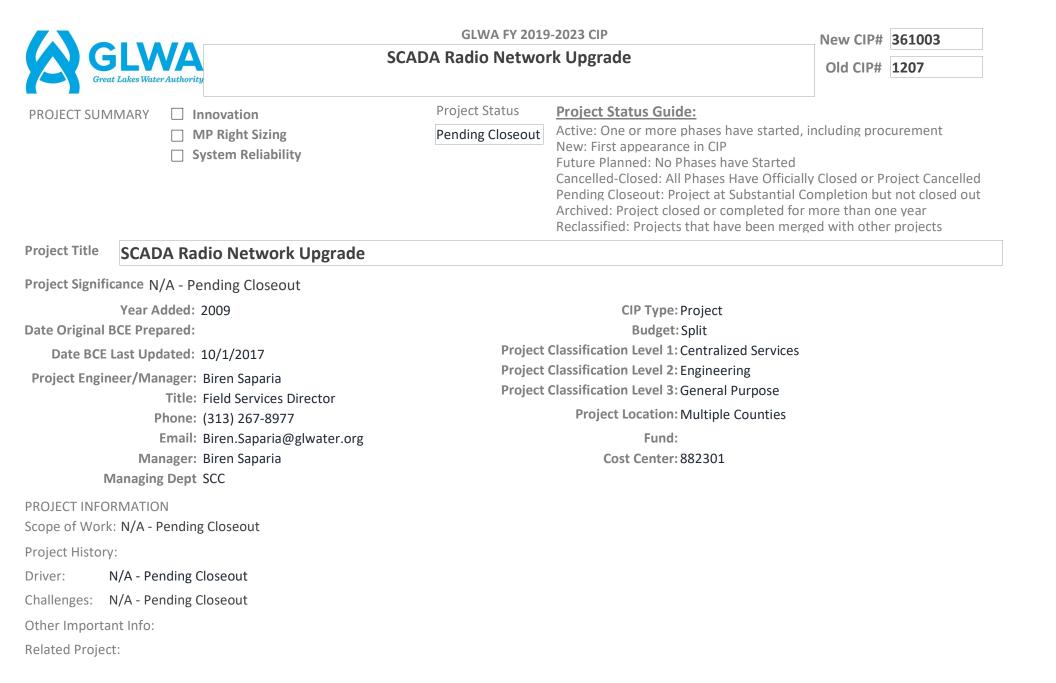
Project Manager Score

Criteria	Score	Score Comment	Criteria	Score	9
dition			Condition		
rformance (Service Level/Reli			Performance (Service Level/Reliabilit		
gulatory (Environmental/Lega			Regulatory (Environmental/Legal)		
&M			0&M		
ublic Health & Safety			Public Health & Safety		
ublic Benefit			Public Benefit		
nancial			Financial		
ficiency and Innovation			Efficiency and Innovation		
Project Manager W	'eight	ed Score	Review Committee We	eighte	ed Score

Review Committee Score

Describe Here the Changes from the 2018 CIP to 2019 CIP

CIP Version	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	Total
2018	6,003	10								6,013
2019	33		0	0	0	0	0	0	0	33





SCADA Radio Network Upgrade

Phase Overview

Phase Title DWS-8	82 SCADA Radio Netwo	ork Upgrade		
Phase Category:	DB	Des	sign and Build	
Budget:	Water			
Contract Number:	DWS-882		PPAT (Phase Program/Allowance Task) Information	
Phase Status:	Pending Close-out		PPAT CIP Number	
Start Date:		3/26/2013	PPAT SOW	
End Date:		9/30/2016	PPAT SOW	
Phase Cost Allocation:	-			
Phase Financial Source:				
Lookup Cost Est Class:				
Cost Estimation Date:		9/15/2017	Change PPAT PM	
Cost Estimation Source:				
Cost Estmation Prep By:	•			
Useful Life > 20Yrs	Yes			
Comments:				
- 1				
Phase Overview				
	82 SCADA Radio Netwo	ork Upgrade		
			sign and Build	
Phase Title DWS-8 Phase Category:				
Phase Title DWS-8 Phase Category:	DB Wastewater		sign and Build PPAT (Phase Program/Allowance Task) Information	
Phase Title DWS-8 Phase Category: Budget: Contract Number:	DB Wastewater			
Phase Title DWS-8 Phase Category: Budget: Contract Number:	DB Wastewater DWS-882 Pending Close-out		PPAT (Phase Program/Allowance Task) Information PPAT CIP Number	
Phase Title DWS-8 Phase Category: Budget: Contract Number: Phase Status: Start Date: End Date:	DB Wastewater DWS-882 Pending Close-out	Des	PPAT (Phase Program/Allowance Task) Information	
Phase Title DWS-8 Phase Category: Budget: Contract Number: Phase Status: Start Date: End Date: Phase Cost Allocation:	DB Wastewater DWS-882 Pending Close-out CTA	Des 3/26/2013	PPAT (Phase Program/Allowance Task) Information PPAT CIP Number	
Phase Title DWS-8 Phase Category: Budget: Contract Number: Phase Status: Start Date: End Date: Phase Cost Allocation: Phase Financial Source:	DB Wastewater DWS-882 Pending Close-out CTA DE	Des 3/26/2013	PPAT (Phase Program/Allowance Task) Information PPAT CIP Number	
Phase Title DWS-8 Phase Category: Budget: Contract Number: Phase Status: Start Date: End Date: Phase Cost Allocation:	DB Wastewater DWS-882 Pending Close-out CTA DE	Des 3/26/2013	PPAT (Phase Program/Allowance Task) Information PPAT CIP Number	
Phase Title DWS-8 Phase Category: Budget: Contract Number: Phase Status: Start Date: End Date: Phase Cost Allocation: Phase Financial Source: Lookup Cost Est Class: Cost Estimation Date:	DB Wastewater DWS-882 Pending Close-out CTA DE	Des 3/26/2013	PPAT (Phase Program/Allowance Task) Information PPAT CIP Number PPAT SOW	
Phase Title DWS-8 Phase Category: Budget: Contract Number: Phase Status: Start Date: End Date: Phase Cost Allocation: Phase Financial Source: Lookup Cost Est Class: Cost Estimation Date:	DB Wastewater DWS-882 Pending Close-out CTA DE	Des 3/26/2013	PPAT (Phase Program/Allowance Task) Information PPAT CIP Number	
Phase Title DWS-8 Phase Category: Budget: Contract Number: Phase Status: Start Date: Phase Cost Allocation: Phase Financial Source: Lookup Cost Est Class: Cost Estimation Date: Cost Estimation Prep By:	DB Wastewater DWS-882 Pending Close-out CTA DE	Des 3/26/2013	PPAT (Phase Program/Allowance Task) Information PPAT CIP Number PPAT SOW	
Phase Title DWS-8 Phase Category: Budget: Contract Number: Phase Status: Start Date: End Date: Phase Cost Allocation: Phase Financial Source: Lookup Cost Est Class: Cost Estimation Date:	DB Wastewater DWS-882 Pending Close-out CTA DE	Des 3/26/2013	PPAT (Phase Program/Allowance Task) Information PPAT CIP Number PPAT SOW	



SCADA Radio Network Upgrade

Phase Expenses									
CURRENT PHASE Des	ign and Build				BUDGET	Water		Contract No	DWS-882
Phase Title DWS-882 SCA	DA Radio Netw	ork Upgrade		PPA	T CIP Number	~		Phase Status	Pending Close-out
Expense Type	FY18	FY19	FY20	FY21	FY22	FY23	F	Y24 and Beyond	
Construction	60								
Engineering Services									
GLWA Salaries									
Materials									
Other									
Current Phase Fringe	FY18	FY19	FY20	FY21	FY22	FY2	3 F	-Y24 and Beyond	
Benefit Expenses	0	0		0	0	0	0		0
Current Phase Non-	FY18	FY19	FY20	FY21	FY22	FY2	3 F	Y24 and Beyond	
Personnel Expenses	0	0		0	0	0	0		0
Current Phase Total	FY18	FY19	FY20	FY21	FY22	FY2	3 F	Y24 and Beyond	
	60	0		0	0	0	0		0



DWS-882

Contract No

Cost Est Class

New CIP# 361003

SCADA Radio Network Upgrade

Old CIP# 1207

CURRENT PHA	SE D	esign and Build			BI	JDGET	Wastewater	Contract No	DWS-882
Phase Title DWS	S-882 S(CADA Radio Netwo	ork Upgrade		PPAT CI	P Number		Phase Status	Pending Close-out
Expense Ty	pe	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
Construction									
Engineering Servic	es								
GLWA Salaries									
Materials									
Other									
Current Dhasa I		FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
Current Phase I Benefit Exper	-	0	0	0	0	1122	0 0		0
benent Exper	1565	U	0	0	0		0 0		U
Current Phase		FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
Personnel Expe	nses	0	0	0	0		0 0		0
Current Phase	Total	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
current Filase	Iotai	0	0	0	0		0 0	-	0
		FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
ALL PHASES 1	OTAI	0	0	0	0		0 0		0
		60	0	0	0		0 0		0
								·	
Phase Tasks a	and Da	ates							
Phase Category	DB		Design a	ad Ruild					
Budget	Wastev	water	Design a						
Phase Status	Pendin	g Close-out	Та	isk Name	Start Date	Durati	ion End Date		

Scope Development

Project Execution Project Closeout

Procurement



SCADA Radio Network Upgrade

Old CIP# 1207

Phase Category	DB	Design and Build			
Budget	Water	Design and Duna			
Phase Status	Pending Close-out	Task Name	Start Date	Duration	End Date
Contract No	DWS-882	Scope Development			
Cost Est Class		Procurement			
		Project Execution	1/1/2017	1	1/2/2017
		Project Closeout	1/3/2017	90	4/3/2017

PROJECT PRIORITIZATION SCORING

Review Committee Score Project Manager Score Score Comment Criteria Score Score Comment Criteria Score Condition Condition Performance (Service Level/Reli Performance (Service Level/Reliabilit Regulatory (Environmental/Legal) Regulatory (Environmental/Lega 0&M 0&M Public Health & Safety Public Health & Safety Public Benefit Public Benefit Financial Financial Efficiency and Innovation Efficiency and Innovation Review Committee Weighted Score Project Manager Weighted Score

Describe Here the Changes from the 2018 CIP to 2019 CIP

CIP Version	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	Total
2018	6,221	218								6,439
2019	867	452	60	0	0	0	0	0	0	1,379



Old CIP# 956

Cancelled-Closed: All Phases Have Officially Closed or Project Canc	PROJECT SUMMARY	 Innovation MP Right Sizing System Reliability 	Project Status Active	Cancelled-Closed: All Phases Have Officially Closed or Project Cancel Pending Closeout: Project at Substantial Completion but not closed Archived: Project closed or completed for more than one year
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Project Title As-needed CIP Implementation Assistance and Related Services

Project Significance The purpose of this proposed contract is to provide implementation assistance and related services on a task order basis to support the GLWA. The services provided under this contract include assistance in capital projects definition and planning, design and construction phase procurement assistance and monitoring; third party contract administration/oversight assistance/scheduling services; claims/changes analysis and resolution; technical training; value engineering (VE) services on selected design projects; develop engineering study reports; identify minimum requirements, scope of work, basis of process design, performance criteria, minimum standards of quality, and preliminary design and oversight services for design/build contracts; proposal analysis assistance; engineering forensic analysis, and additional program support services.

Year Added:	2002	CIP Type: Allowance
Date Original BCE Prepared:		Budget: Split
Date BCE Last Updated:	11/2/2017	Project Classification Level 1: Centralized Services
Project Engineer/Manager:	Gaylor Johnson / Dan Edwards	Project Classification Level 2: Programs
Title:		Project Classification Level 3: Programs
Phone:		Project Location: Multiple Counties
Email:		Fund: 5421
Manager:	Ali Khraizat	Cost Center: 892111
Managing Dept	WW Eng	

PROJECT INFORMATION

Scope of Work: This project provides for multi-discipline Engineering services on an "as-needed basis" to support GLWA's Water & Sewer Systems. The purpose of this proposed contract is to provide implementation assistance and related services on a task order basis to support the GLWA. The services provided under this contract include assistance in capital projects definition and planning, design and construction phase procurement assistance and monitoring; third party contract administration/oversight assistance/scheduling services; claims/changes analysis and resolution; technical training; value engineering (VE) services on selected design projects; develop engineering study reports; identify minimum requirements, scope of work, basis of process design, performance criteria, minimum standards of quality, and preliminary design and oversight services for design/build contracts; proposal analysis assistance; engineering forensic analysis, and additional program support services.



Old CIP# 956

Project History:

Driver: N/A - Active

Challenges: N/A - Active

Other Important Info:

Related Project: CS-1433, CS-166, CS-189



Phase Overview

Phase Title CS-166 Capital Improvement Program (CIP) Implementation Assistance and Related Services

Phase Category:		udy and Design and Construction Assistance
0	Wastewater	PPAT (Phase Program/Allowance Task) Information
Contract Number:		
	Under Procurement	PPAT CIP Number 380402
Start Date: End Date:		PPAT SOW The purpose of this proposed contract is to provide implementation
	CT A	assistance and related services on a task order basis to support the
Phase Cost Allocation:		GLWA. The services provided under this contract include assistance
Phase Financial Source:	I&E	in capital projects definition and planning, design and construction
Lookup Cost Est Class:		phase procurement assistance and monitoring; third party contract
Cost Estimation Date:		administration/oversight assistance/scheduling services;
		claims/changes analysis and resolution; technical training; value engineering (VE) services on selected design projects; develop
		engineering (VL) services on selected design projects, develop engineering study reports; identify minimum requirements, scope of work, basis of process design, performance criteria, minimum standards of quality, and preliminary design and oversight services for design/build contracts; proposal analysis assistance; engineering forensic analysis, and additional program support services. Projected Expenses based upon historical percentage of use for CIP projects split 50/50 for water & Wastewater.
Cost Estimation Source:		Change PPAT PM Ali Khraizat
Cost Estimation Prep By:		
Useful Life > 20Yrs	No	
	Services on proposed GLWA Contract task order contract is a contract for s minimum or maximum quantity) and period of the contract. The services provided under this con agencies, customers, and others. Th consultant activities, which are focus consultant secured for this contract	et No. CS 166 will be provided on a task order basis, over a three (3) year period. A services that does not procure or specify a firm quantity of services (other than a d that provides for the issuance of orders for the performance of tasks during the ntract support GLWA in consistently honoring the commitments it makes to regulatory be services provided by the consultant will supplement existing GLWA staff or sed on procuring and administering contracts for individual capital projects. The will act as an Agent for GLWA. For that reason, the consultant is precluded from -contractor on any GLWA projects that the consultant participates in the scope



Old CIP# 956

development for the duration of this contract.
GLWA Contract No. CS-166 will replace CS-1433, As-Needed Capital Improvement Program (CIP) Implementation
Assistance and Related Services, which expired on July 24, 2017. Contract No. CS-189, Job Order Contracting – Project
Delivery Assistance, scheduled to expire July 24, 2018, was executed as a short term solution to assure tasks under CS-
1433 were completed seamlessly, allowing time to competitively bid the request for services. GLWA required these
consulting services contract, to provide specialized expertise in rapid and flexible project delivery methods such as
design/build, program management, and job order contracting.

Phase Overview

Phase Title CS-1433 As-needed CIP Implementation Assistance and Related Services

Phase Category:	S/D/CM	Study and Design and Construction Management
Budget:	Wastewater	
Contract Number:	CS-1433	PPAT (Phase Program/Allowance Task) Information
Phase Status:	Closed Out	PPAT CIP Number 380401
Start Date:	3/24/2006	
End Date:	7/24/2017	PPAT SOW
Phase Cost Allocation:	СТА	
Phase Financial Source:	I&E	
Lookup Cost Est Class:		
Cost Estimation Date:		Change PPAT PM
Cost Estimation Source:		
Cost Estmation Prep By:		
Useful Life > 20Yrs	No	
Comments:		



Phase Overview

Phase Title CS-166 Capital Improvement Program (CIP) Implementation Assistance and Related Services

Phase Category:		ly and Design and Construction Assistance
Budget: Contract Number:		PPAT (Phase Program/Allowance Task) Information
	Under Procurement	PPAT CIP Number 380402
Start Date: End Date: Phase Cost Allocation: Phase Financial Source: Lookup Cost Est Class: Cost Estimation Date:	Start Date: End Date: Ise Cost Allocation: CTA le Financial Source: I&E okup Cost Est Class:	PPAT SOW The purpose of this proposed contract is to provide implementation assistance and related services on a task order basis to support the GLWA. The services provided under this contract include assistance in capital projects definition and planning, design and construction phase procurement assistance and monitoring; third party contract administration/oversight assistance/scheduling services; claims/changes analysis and resolution; technical training; value engineering (VE) services on selected design projects; develop engineering study reports; identify minimum requirements, scope of work, basis of process design, performance criteria, minimum standards of quality, and preliminary design and oversight services for design/build contracts; proposal analysis assistance; engineering forensic analysis, and additional program support services. Projected Expenses based upon historical percentage of use for CIP projects split 50/50 for water & Wastewater.
Cost Estimation Source: Cost Estmation Prep By: Useful Life > 20Yrs Comments:	Services on proposed GLWA Contract task order contract is a contract for se minimum or maximum quantity) and period of the contract.	Change PPAT PM Grant Gartrell No. CS 166 will be provided on a task order basis, over a three (3) year period. A ervices that does not procure or specify a firm quantity of services (other than a that provides for the issuance of orders for the performance of tasks during the ract support GLWA in consistently honoring the commitments it makes to regulatory
	consultant activities, which are focuse consultant secured for this contract w	services provided by the consultant will supplement existing GLWA staff or ed on procuring and administering contracts for individual capital projects. The vill act as an Agent for GLWA. For that reason, the consultant is precluded from contractor on any GLWA projects that the consultant participates in the scope



Old CIP# 956

development for the duration of this contract. GLWA Contract No. CS-166 will replace CS-1433, As-Needed Capital Improvement Program (CIP) Implementation Assistance and Related Services, which expired on July 24, 2017. Contract No. CS-189, Job Order Contracting – Project Delivery Assistance, scheduled to expire July 24, 2018, was executed as a short term solution to assure tasks under CS-1433 were completed seamlessly, allowing time to competitively bid the request for services. GLWA required these consulting services contract, to provide specialized expertise in rapid and flexible project delivery methods such as design/build, program management, and job order contracting.

Phase Expenses

CURRENT PHASE Stu	idy and Design	and Constru	ction Assista	nce	BUDGET	Wastewater	Contract No	CS-166
	al Improvement d Related Servic	• • •	Implementati	on P	PAT CIP Number	380402	Phase Status	Under Procurement
Expense Type	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
Construction								
Engineering Services	250	803	803	8	303			
GLWA Salaries								
Materials								
Other								
Current Phase Fringe	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
Benefit Expenses	0	0	0		0			
Current Phase Non-	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
Personnel Expenses	0	0	0		0			
Current Phase Total	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
	250	803	803		803			



As-needed CIP Implementation Assistance and Related Services

CURRENT	PHASE	Study and Des	udy and Design and Construction Managemen					BUDGET Wastewater			Contract No	CS-1433
Phase Title	CS-1433 A Related S	As-needed CIP Ir ervices	nplementatio	on As	sistance an	d	PPAT (CIP Number	3	80401	Phase Status	Closed Out
Expens	е Туре	FY18	FY19		FY20	FY2	1	FY22		FY23	FY24 and Beyond	
Construction												
Engineering S	Services											
GLWA Salarie	S											
Materials												
Other											<u></u>	
Current Ph	ase Fringe	FY18	FY19		FY20	FY	21	FY22		FY23	FY24 and Beyond	l
Benefit l	Expenses		0	0		0	0		0)	0
Current Ph	nase Non-	FY18	FY19		FY20	FY	21	FY22		FY23	FY24 and Beyond	1
Personnel	Expenses		0	0		0	0		0		כ	0
Current Ph	ase Total	FY18	FY19		FY20	FY	21	FY22		FY23	FY24 and Beyond	I
			0	0		0	0		0		0	0



250

803

New CIP# 380400

As-needed CIP Implementation Assistance and Related Services

Old CIP# 956

CURRENT F	PHASE	Study and Desigr	and Constru	iction Assista	nce	BUDGET	Water	Contract No	CS-166
		pital Improvement and Related Servi	- · ·	Implementatio	on PPA	AT CIP Numbe	380402	Phase Status	Under Procurement
Expens	е Туре	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
Construction									
Engineering S	ervices	250	803	803	80	3			
GLWA Salaries	s								
Materials									
Other									
Current Ph	ase Fringe	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
Benefit E	Expenses	0	0	0		0			
Current Ph		FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
Personnel	Expenses	0	0	0		0			
Current Pha	ase Total	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
		250	803	803	8	03			
		FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
ALL PHASE	ES TOTA	AL 250	803	803	80				0
		230	005	003	00		0	0	

Phase Tasks	and Dates	
Phase Category	S/D/CA	Study and Design and Construction Assistance
Budget	Water	Study and Design and Construction Assistance
Phase Status	Under Procurement	
Contract No	CS-166	
Cost Est Class		

803

803



Phase Category	S/D/CA	Study and Design an	d Construction A	ssistance	
Budget	Wastewater	study and besign an		SSIStance	
Phase Status	Under Procuremen	nt			
Contract No	CS-166				
Cost Est Class					
Phase Category	S/D/CM	Study and Design an	d Construction N	lanagomont	
Budget	Wastewater	Study and Design an		lanagement	
Phase Status	Closed Out	Task Name	Start Date	Duration	End Date
Contract No	CS-1433	Scope Development			
Cost Est Class		Procurement			
		Project Execution			
		Project Closeout			

PROJECT PRIORITIZATION SCORING

Ducient	Managar	Coore
Project	Manager	Score

Project Manager Score			 Review Committee Score		
Criteria	Score	Score Comment	Criteria	Score	Score Comment
Condition			Condition		
Performance (Service Level/Reli			Performance (Service Level/Reliabilit		
Regulatory (Environmental/Lega			Regulatory (Environmental/Legal)		
0&M			0&M		
Public Health & Safety			Public Health & Safety		
Public Benefit			Public Benefit		
Financial			Financial		
Efficiency and Innovation			Efficiency and Innovation		
Project Manager W	eight	ed Score	Review Committee We	eighte	d Score

Describe Here the Changes from the 2018 CIP to 2019 CIP



As-needed CIP Implementation Assistance and Related Services

CIP Version	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	Total
2018	4,770	1,400	100							6,270
2019	210		500	1,606	1,606	1,606	0	0	0	5,528



Wastewater General Engineering Services on an As-needed Basis

Old CIP# 1026

PROJECT SUMMARY	 Innovation MP Right Sizing System Reliability 	Project Status Active	 Project Status Guide: Active: One or more phases have started, including procurement New: First appearance in CIP Future Planned: No Phases have Started Cancelled-Closed: All Phases Have Officially Closed or Project Cancelled Pending Closeout: Project at Substantial Completion but not closed out Archived: Project closed or completed for more than one year Reclassified: Projects that have been merged with other projects

Project Title Wastewater General Engineering Services on an As-needed Basis

Project Significance Various engineering as needed services for design and replacement of aging water and sewer lines.

Year Added:	2004	CIP Type: Allowance
Date Original BCE Prepared:		Budget: Split
Date BCE Last Updated:	10/27/2017	Project Classification Level 1: Centralized Services
Project Engineer/Manager:	Beena Chackunkal	Project Classification Level 2: Programs
	Engineer	Project Classification Level 3: Programs
	(313) 297-9825	Project Location: Multiple Counties
Email:	Beena.Chackunkal@glwater.or	Fund:
Manager:	Ali Khraizat	Cost Center:
Managing Dept	WW Eng	

PROJECT INFORMATION

Scope of Work: This project involves designing water main and lateral sewer replacement projects for aging and dysfunctional water mains and sewers throughout the system and several projects at the WRRF under different tasks on an as-needed basis. The work also includes civil, structural, architectural, hydraulics, mechanical, electrical, surveying, instrumentation and piping design services.

Project History:

Driver: N/A - Active

Challenges:

Other Important Info:

Related Project:



Wastewater General Engineering Services on an As-needed Basis

Phase Overview Phase Title CS-1499) Wastewater General En	igineering Servi	ices on an As-needed Basis (CS-1499 METCO)
Phase Category:	S/D/CA	-	y and Design and Construction Assistance
Contract Number:	Wastewater CS-1499		PPAT (Phase Program/Allowance Task) Information
Phase Status:	Active		PPAT CIP Number 380501
Start Date:		/12/2010	PPAT SOW
End Date:	6	6/2/2018	
Phase Cost Allocation:	СТА		
Phase Financial Source:	I&E		
Lookup Cost Est Class:			
Cost Estimation Date:			Change PPAT PM Ali Khraizat
Cost Estimation Source:	Contract		
Cost Estmation Prep By:		-	
Useful Life > 20Yrs	No		
Comments:	Currently most of the ta	asks are for Wa	stewater projects.

Phase Expe	nses									
CURRENT P	HASE	Study and Desig	n and Constru	uction Assistar	nce	BUDGET	Wastev	vater	Contract No	CS-1499
		Vastewater Gener asis (CS-1499 MET		Services on an A	As- PPAT	CIP Number	38050	1	Phase Status	Active
Expense	Туре	FY18	FY19	FY20	FY21	FY22	F	Y23	FY24 and Beyond	
Construction										
Engineering Se	rvices	100	100	80						
GLWA Salaries		10	10	8						
Materials										
Other										
Current Pha	se Fringe	FY18	FY19	FY20	FY21	FY22		Y23	FY24 and Beyond	
Benefit Ex	-	4	4	3		0	0	0		0
Current Pha	ase Non-	FY18	FY19	FY20	FY21	FY22		-Y23	FY24 and Beyond	
Personnel E	xpenses	0	0	0		0	0	0		0



Wastewater General Engineering Services on an As-needed Basis

Old CIP# 1026

Current Phase Total	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	114	114	91	0	0	0	0
ALL PHASES TOTAL	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond

Phase Tasks	and Dates								
Phase Category	S/D/CA	Study and Docign and	Construction A	ssistanco					
Budget	Wastewater	Study and Design and	Study and Design and Construction Assistance						
Phase Status	Active	Task Name	Start Date	Duration	End Date				
Contract No	CS-1499	Scope Development							
Cost Est Class		Procurement							
		Project Execution							
		Project Closeout	1/9/2020	60	3/9/2020				

PROJECT PRIORITIZATION SCORING

Project Manager Score

Criteria	Score	Score Comment
Condition	1	
Performance (Service Level/Reli	1	
Regulatory (Environmental/Lega	1	
0&M	1	
Public Health & Safety	1	
Public Benefit	1	
Financial	1	
Efficiency and Innovation	1	
Project Manager W	eight	ed Score
20		

Review Committee Score

Criteria	Score	Score Comment
Condition		
Performance (Service Level/Reliabilit		
Regulatory (Environmental/Legal)		
0&M		
Public Health & Safety		
Public Benefit		
Financial		
Efficiency and Innovation		
Review Committee We	eighte	d Score



Wastewater General Engineering Services on an As-needed Basis

CIP Version	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	Total
2018	10,065	228	228							10,521
2019	282		114	114	91	0	0	0	0	601

		GLWA FY 2019-2023 CIP	New CIP#	380600
Great Lakes	VA Vater Authority	As-Needed General Engineering Services	Old CIP#	1031
PROJECT SUMMAR	Y Innovation	Project Status Project Status Guide:		
	MP Right Sizing	Active Active: One or more phases have started, i New: First appearance in CIP	ncluding pro	curement
	System Reliability	Future Planned: No Phases have Started Cancelled-Closed: All Phases Have Officially Pending Closeout: Project at Substantial Co Archived: Project closed or completed for u Reclassified: Projects that have been merge	mpletion bu nore than or	t not closed out ne year
roject Title As-	Needed General Engine	ering Services		
roject Significance	Allowance for the study and	l design of critical projects throughout the system prior to bidding and con	struction.	
Yea	r Added: 2004	CIP Type: Allowance		
ate Original BCE P	repared:	Budget: Split		
Date BCE Last l	Jpdated: 9/25/2017	Project Classification Level 1: Water		
Project Engineer/N	Aanager: Grant Gartrell	Project Classification Level 2: WRRF		
	Title: Director - Engineering			
	Phone: (313) 926-8139	Project Location: City of Detroit		
	Email: Grant.Gartrell@glwat	-		
	Aanager: Grant Gartrell	Cost Center:		
IVIdIIdg	ing Dept Water Eng			
ROJECT INFORMAT				
	needed engineering services for	water and wastewater engineering.		
roject History:				
	Active			
	Active			
oriver: N/A - hallenges: N/A - Other Important Inf				



As-Needed General Engineering Services

Old CIP# 1031

Phase Overview

Phase Title CS-143	32A Water As-Needed Engineering Serv	ices
Phase Category	: D Des	sign
Budget	: Water	
Contract Number	: CS-1432A	PPAT (Phase Program/Allowance Task) Information
Phase Status	: Active	PPAT CIP Number 380601
Start Date	: 1/23/2008	PPAT SOW Alfred Benesh
End Date	: 12/12/2018	PPAT SOW Allied Bellesh
Phase Cost Allocation	: CTA	
Phase Financial Source	: I&E	
Lookup Cost Est Class		
Cost Estimation Date		Change PPAT PM Beena Chackun
Cost Estimation Source		
Cost Estmation Prep By		
Useful Life > 20Yr	s No	
Comments	:	
Phase Overview		
Phase Title CS-143	32A Wastewater As-Needed Engineerin	g Services
Phase Category	: D Des	sign
Budget	: Wastewater	
Contract Number	: CS-1432A	PPAT (Phase Program/Allowance Task) Information
Phase Status	: Active	PPAT CIP Number 380601
Start Date	: 1/23/2008	
End Date	: 12/12/2018	PPAT SOW Alfred Benesh
Phase Cost Allocation	: CTA	
Phase Financial Source	: I&E	
Lookup Cost Est Class		
Cost Estimation Date		Change PPAT PM Beena Chackun
Cost Estimation Source	:	
Cost Estmation Prep By	:	
Useful Life > 20Yr		



As-Needed General Engineering Services

Phase Expenses											
CURRENT PHASE Des	sign				B	BUDGET	Wate	er		Contract No	CS-1432A
Phase Title CS-1432A Wa	ter As-Needed	Engineering Se	ervices		PPAT C	CIP Number	380	0601		Phase Status	Active
Expense Type	FY18	FY19	FY20	FY2	1	FY22		FY23	FY2	4 and Beyond	
Construction											
Engineering Services	200	240									
GLWA Salaries	25	25									
Materials											
Other											
Current Phase Fringe	FY18	FY19	FY20	FY	21	FY22		FY23	FY	24 and Beyond	
Benefit Expenses	10	10		0	0		0		0		0
Current Phase Non-	FY18	FY19	FY20	FY	21	FY22		FY23	FY	24 and Beyond	
Personnel Expenses	1	1		0	0		0		0		0
Current Phase Total	FY18	FY19	FY20	FY	21	FY22		FY23	FY	24 and Beyond	
	236	276		0	0		0		0		0



As-Needed General Engineering Services

CURRENT PHASE	Design				BUDGET	Wastewater		Contract No	CS-1432A	
Phase Title CS-1432A	Wastewater As-Ne	eded Engineer	ring Services		PPAT CIP Number	380601		Phase Status	Active	
Expense Type	FY18	FY19	FY20	FY21	FY22	FY23	FY2	4 and Beyond		
Construction										
Engineering Services	170	51	50							
GLWA Salaries										
Materials										
Other										
Current Phase Fringe	FY18	FY19	FY20	FY2	1 FY22	FY23	FY	24 and Beyond		
Benefit Expenses	0	0	0							
Current Phase Non-	FY18	FY19	FY20	FY2	1 FY22	FY23	FY	24 and Beyond		
Personnel Expenses	0	0	0							
Current Phase Total	FY18	FY19	FY20	FY2	1 FY22	FY23	FY	24 and Beyond		
	170	51	50							
			51/2.0			= 1/2.2				

	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
ALL PHASES TOTAL	170	51	50				
	236	276	0	0	0	0	0

Phase Tasks	and Dates		
Phase Category	D	Design	
Budget	Wastewater	Design	
Phase Status	Active		
Contract No	CS-1432A		
Cost Est Class			
Phase Category	D	Design	
Budget	Water	Design	
Phase Status	Active		
Contract No	CS-1432A		
Cost Est Class			



Review Committee Score

New CIP# 380600

As-Needed General Engineering Services

Old CIP# 1031

PROJECT PRIORITIZATION SCORING

Project Manager Score

39.8

Criteria	Score	Score Comment				
Condition	3					
Performance (Service Level/Reli	3					
Regulatory (Environmental/Lega	1					
0&M	2					
Public Health & Safety	3					
Public Benefit	1					
Financial	1					
Efficiency and Innovation	1					
Project Manager Weighted Score						

Criteria	Score	Score Comment					
Condition							
Performance (Service Level/Reliabilit							
Regulatory (Environmental/Legal)							
0&M							
Public Health & Safety							
Public Benefit							
Financial							
Efficiency and Innovation							
Review Committee Weighted Score							

Describe Here the Changes from the 2018 CIP to 2019 CIP

Updated to reflect budget remaining. Added GLWA costs.

CIP Version	n FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	Total
2018	14,011	446	436	386						15,279
2019	316		406	327	50	0	0	0	0	1,099



Geotechnical and Related Services on an As-Needed Basis

Old CIP# 1164

PROJECT SUMMARY	 Innovation MP Right Sizing System Reliability 	Project Status Pending Closeout	Project Status Guide: Active: One or more phases have started, including procurement New: First appearance in CIP Future Planned: No Phases have Started Cancelled-Closed: All Phases Have Officially Closed or Project Cancelled Pending Closeout: Project at Substantial Completion but not closed out Archived: Project closed or completed for more than one year Reclassified: Projects that have been merged with other projects
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Project Title Geotechnical and Related Services on an As-Needed Basis

Project Significance As Needed geotechnical consulting services.

Year Added: 2007	CIP Type: Allowance
Date Original BCE Prepared:	Budget: Split
Date BCE Last Updated: 10/27/2017	Project Classification Level 1: Centralized Services
Project Engineer/Manager: Grant Gartrell Title: Director - Engineering	Project Classification Level 2: Programs Project Classification Level 3: Programs
Phone: (313) 926-8139	Project Location: Multiple Counties
Email: Grant.Gartrell@glwater.org	Fund:
Manager: Grant Gartrell	Cost Center:
Managing Dept N/A - Pending Closeo	

PROJECT INFORMATION

Scope of Work: The work includes consultant services for geotechnical work on as-needed basis. The work also provides for additional engineering/ technical services as requested.

Project History:

Driver: N/A - Pending Closeout

Challenges: N/A - Pending Closeout

Other Important Info:

Related Project:



Geotechnical and Related Services on an As-Needed Basis

Phase Overview

Phase Title CS-1490: NTH Consultants: As-Needed Geotechnical Services

Phase Category:	D	De	sign	
Budget:	Water			
Contract Number:	CS-1490		PPAT (Phase Program/Allowance Task) Information	
Phase Status:	Pending Close-out		PPAT CIP Number 380801	
Start Date:	1	/14/2010	PPAT SOW As-Needed Geotechnical Services	
End Date:	7	/14/2016	PPAT SOW AS-Needed Geotechnical Services	
Phase Cost Allocation:	СТА			
Phase Financial Source:	I&E			
Lookup Cost Est Class:				
Cost Estimation Date:			Change PPAT PM Grant Gartrell	
Cost Estimation Source:				
Cost Estmation Prep By:				
Useful Life > 20Yrs	No			
Comments:				
Dhaco Ovorviow				
Phase Overview Phase Title CS-1490 Phase Category:	: NTH Consultants: As-N D		echnical Services sign	
Phase Title CS-1490 Phase Category:			sign	
Phase Title CS-1490 Phase Category:	D Wastewater			
Phase Title CS-1490 Phase Category: Budget: Contract Number:	D Wastewater		sign	
Phase Title CS-1490 Phase Category: Budget: Contract Number: Phase Status: Start Date:	D Wastewater CS-1490 Pending Close-out	De /14/2010	PPAT (Phase Program/Allowance Task) Information PPAT CIP Number 380801	
Phase Title CS-1490 Phase Category: Budget: Contract Number: Phase Status: Start Date: End Date:	D Wastewater CS-1490 Pending Close-out 1 7	De	PPAT (Phase Program/Allowance Task) Information	
Phase Title CS-1490 Phase Category: Budget: Contract Number: Phase Status: Start Date: End Date: Phase Cost Allocation:	D Wastewater CS-1490 Pending Close-out 1 7 CTA	De /14/2010	PPAT (Phase Program/Allowance Task) Information PPAT CIP Number 380801	
Phase Title CS-1490 Phase Category: Budget: Contract Number: Phase Status: Start Date: End Date: Phase Cost Allocation: Phase Financial Source:	D Wastewater CS-1490 Pending Close-out 1 7 CTA	De /14/2010	PPAT (Phase Program/Allowance Task) Information PPAT CIP Number 380801	
Phase Title CS-1490 Phase Category: Budget: Contract Number: Phase Status: Start Date: End Date: Phase Cost Allocation: Phase Financial Source: Lookup Cost Est Class:	D Wastewater CS-1490 Pending Close-out 1 7 CTA	De /14/2010	PPAT (Phase Program/Allowance Task) Information PPAT CIP Number 380801	
Phase Title CS-1490 Phase Category: Budget: Contract Number: Phase Status: Start Date: End Date: Phase Cost Allocation: Phase Financial Source: Lookup Cost Est Class: Cost Estimation Date:	D Wastewater CS-1490 Pending Close-out 1 7 CTA	De /14/2010	PPAT (Phase Program/Allowance Task) Information PPAT CIP Number 380801 PPAT SOW As-Needed Geotechnical Services	
Phase Title CS-1490 Phase Category: Budget: Contract Number: Phase Status: Start Date: End Date: Phase Cost Allocation: Phase Financial Source: Lookup Cost Est Class: Cost Estimation Date: Cost Estimation Source:	D Wastewater CS-1490 Pending Close-out 1 7 CTA	De /14/2010	PPAT (Phase Program/Allowance Task) Information PPAT CIP Number 380801 PPAT SOW As-Needed Geotechnical Services	
Phase Title CS-1490 Phase Category: Budget: Contract Number: Phase Status: Start Date: Phase Cost Allocation: Phase Financial Source: Lookup Cost Est Class: Cost Estimation Date: Cost Estimation Source:	D Wastewater CS-1490 Pending Close-out 1 7 CTA I&E	De /14/2010	PPAT (Phase Program/Allowance Task) Information PPAT CIP Number 380801 PPAT SOW As-Needed Geotechnical Services	
Phase Title CS-1490 Phase Category: Budget: Contract Number: Phase Status: Start Date: End Date: Phase Cost Allocation: Phase Financial Source: Lookup Cost Est Class: Cost Estimation Date: Cost Estimation Source:	D Wastewater CS-1490 Pending Close-out 1 7 CTA I&E	De /14/2010	PPAT (Phase Program/Allowance Task) Information PPAT CIP Number 380801 PPAT SOW As-Needed Geotechnical Services	



Geotechnical and Related Services on an As-Needed Basis



Geotechnical and Related Services on an As-Needed Basis

Old CIP# 1164

Phase Tasks and Dates							
Phase Category	D	Design					
Budget	Wastewater	Design					
Phase Status	Pending Close-out						
Contract No	CS-1490						
Cost Est Class							
Phase Category	D	Design					
Budget	Water			1			
Phase Status	Pending Close-out	Task Name	Start Date	Duration	End Date		
Contract No	CS-1490	Scope Development					
Contract No Cost Est Class	CS-1490	Scope Development Procurement					
	CS-1490						
	CS-1490	Procurement					

PROJECT PRIORITIZATION SCORING

Project Manager Score

, 0					
Criteria	Score	Score Comment	Criteria	Score	S
ondition			Condition		
Performance (Service Level/Reli			Performance (Service Level/Reliabilit		
Regulatory (Environmental/Lega			Regulatory (Environmental/Legal)		
0&M			0&M		
Public Health & Safety			Public Health & Safety		
Public Benefit			Public Benefit		
Financial			Financial		
Efficiency and Innovation			Efficiency and Innovation		
Project Manager W	eight	ed Score	Review Committee We	eighte	ed Score

Review Committee Score

Describe Here the Changes from the 2018 CIP to 2019 CIP



Geotechnical and Related Services on an As-Needed Basis

CIP Version	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	Total
2018	2,441	132								2,573
2019	164		0	0	0	0	0	0	0	164



Old CIP# 1343

PROJECT SUMMARY	Innovation	Project Status	Project Status Guide:
	 MP Right Sizing System Reliability 	Active	Active: One or more phases have started, including procurement New: First appearance in CIP Future Planned: No Phases have Started Cancelled-Closed: All Phases Have Officially Closed or Project Cancelled Pending Closeout: Project at Substantial Completion but not closed out Archived: Project closed or completed for more than one year Reclassified: Projects that have been merged with other projects
Project Title Eng	ray Managamant, Electric M		Drogram

Project Title Energy Management: Electric Metering Improvement Program

Project Significance Advanced meters for measuring power usage in real-time to reduce the electrical demands and further optimize load management practices

Year Added: 2016	CIP Type: Program
Date Original BCE Prepared: 8/18/2016	Budget: Split
Date BCE Last Updated: 10/6/2017	Project Classification Level 1: Centralized Services
Project Engineer/Manager: Shaker Manns	Project Classification Level 2: Programs
Title: Energy Program Manager	Project Classification Level 3: Programs
Phone: (313) 910-6156	Project Location: Multiple Counties
Email: shaker.manns@glwater.org	Fund:
Manager: Shaker Manns	Cost Center:
Managing Dept Energy Management	

PROJECT INFORMATION

Scope of Work: This program will increase the number of electric meters at pumping stations and treatment facilities to allow for active demand management to reduce electricity rates. The meters can be tied to the existing data management system for data archiving and use.

Project History: Project is in the works targeting high demand (kW) sites - all the water treatment plants (Phase 1)

Driver:

Challenges:

Other Important Info:

Related Project: Completed Adams Road booster station install as a pilot piece



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Phase little Energy	Management: Electric Metering Imp	provement Program	
Phase Category:	S/D/C St	tudy and Design and Construction	
Budget:	Water		
Contract Number:	NA	PPAT (Phase Program/Allowance Task) Information	
Phase Status:	Future Planned Start	PPAT CIP Number	
Start Date: End Date:		PPAT SOW	
Phase Cost Allocation:	СТА		
Phase Financial Source:	DE		
Lookup Cost Est Class:			
Cost Estimation Date: Cost Estimation Source:		Change PPAT PM	
Cost Estmation Prep By:			
Useful Life > 20Yrs	No		
Comments:			
Phase Overview Phase Title Energy Phase Category:	Management: Electric Metering Imp S/D/C	provement Program tudy and Design and Construction	
Budget:	Wastewater		
Contract Number:	NA	PPAT (Phase Program/Allowance Task) Information	
Phase Status:	Future Planned Start	PPAT CIP Number	
Start Date: End Date:		PPAT SOW	
Phase Cost Allocation:			
Phase Financial Source:	• · · · ·		
Lookup Cost Est Class:			
Cost Estimation Date:		Charges DDAT DAA	
Cost Estimation Source:		Change PPAT PM	
Cost Estmation Prep By:			
Useful Life > 20Yrs	No		
Comments:			



New CIP# 381000

Old CIP# 1343

Phase Expenses Contract No NA CURRENT PHASE Study and Design and Construction BUDGET Water Phase Title Energy Management: Electric Metering Improvement Program PPAT CIP Number Phase Status Future Planned Start Expense Type FY18 FY19 FY20 FY23 FY24 and Beyond FY21 FY22 Construction 255 60 60 439 2,186 Engineering Services **GLWA** Salaries Materials Other FY22 FY23 FY24 and Beyond FY18 FY19 FY20 FY21 **Current Phase Fringe** 0 0 0 0 0 0 0 **Benefit Expenses** Current Phase Non-FY23 FY24 and Beyond FY18 FY19 FY20 FY21 FY22 **Personnel Expenses** 0 0 0 0 0 0 0 FY20 FY22 FY23 FY24 and Beyond FY18 FY19 FY21 **Current Phase Total** 60 60 0 0 255 439 2,186



Energy Management: Electric Metering Improvement Program

CURRENT PHASE Stu	dy and Desigr	n and Const	ruction		BUDGET	Wastewater	Contract No	NA
Phase Title Energy Manag	gement: Electr	ic Metering I	mprovement Pro	ogram PPAT	CIP Number		Phase Status	Future Planned Start
Expense Type	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
Construction			60	60	25	5 439	2,186	
Engineering Services								
GLWA Salaries								
Materials								
Other								
Current Phase Fringe	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
Benefit Expenses	0	(0 0	(ט	0 0		0
Current Phase Non-	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
Personnel Expenses	0	(0 0	(ט	0 0		0
Current Phase Total	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
	0	(0 60	60	2	55 439	2,18	6
	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	
ALL PHASES TOTAL	0	0		60			2,186	5
	0	0	60	60			2,186	

Phase Category	S/D/C	Study and Design and Construction										
Budget	Wastewater	Study and Design and										
Phase Status	Future Planned Start	Task Name	Start Date	Duration	End Date							
Contract No	NA	Scope Development	7/1/2018	91	9/30/2018							
Cost Est Class		Procurement	9/30/2018	1182	12/25/2021							
		Project Execution	12/25/2021	2370	6/21/2028							
		Project Closeout	6/21/2028	90	9/19/2028							



S/D/C	Study and Design and	Construction								
Water	Study and Design and Construction									
Future Planned Start	Task Name	Start Date	Duration	End Date						
NA	Scope Development	7/1/2018	91	9/30/2018						
	Procurement	9/30/2018	1182	12/25/2021						
	Project Execution	12/25/2021	2370	6/21/2028						
	Project Closeout	6/21/2028	90	9/19/2028						
	Water Future Planned Start	WaterStudy and Design andFuture Planned StartTask NameNAScope DevelopmentProcurementProject Execution	WaterStudy and Design and ConstructionFuture Planned StartTask NameStart DateNAScope Development7/1/2018Procurement9/30/2018Project Execution12/25/2021	WaterTask NameStart DateDurationFuture Planned StartScope Development7/1/201891Procurement9/30/20181182Project Execution12/25/20212370						

PROJECT PRIORITIZATION SCORING

Project Manager Score

Criteria	Score Score Comment			Criteria	Score	Score Comment		
Condition	4			Condition				
Performance (Service Level/Reli	5			Performance (Service Level/Reliabilit				
Regulatory (Environmental/Lega	3			Regulatory (Environmental/Legal)				
0&M	2			0&M				
Public Health & Safety	1			Public Health & Safety				
Public Benefit	4			Public Benefit				
Financial	3			Financial				
Efficiency and Innovation	5			Efficiency and Innovation				
Project Manager W	ed Score	Review Committee Weighted Score						
64.6								

Review Committee Score

Describe Here the Changes from the 2018 CIP to 2019 CIP

The electric metering improvement program BCE has been fully evaluated causing the need to delay the start of the program to ensure the ability to fully implement, ensure adequate and appropriate planning and to ensure adequate time to procure the highest quality consultant/contractor to assist in implementation of this program.

CIP Version	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	Total
2018		1,000	1,000	1,000	1,000	1,000	1,000			6,000
2019			0	0	120	120	510	878	4,372	6,000