





January 16, 2019

APPENDIX C Centralized Services Projects





331001 CIP#

Roofing Systems Replacement at Water Plants and Booster Pump Stations

✓ Innovation	Project Status Future Planned	Roof in need of repo	air		
□ Water MP Right Si	cip Type Project				
☐ Reliability/Redund	dancy				
□ NEWTP Repurposi	ng Project New To CIP				
Project Engineer/Ma	nager Paula Anderson	Budget	Water		
Ма	nager Paula Anderson	Class LvI 1	Centralized Services		
Managing	Dept Fleet and Facilities	Class LvI 2	Facilities		
Date Original Busines	ss Case Prepared 6/26/2014	Class LvI 3	General Purpose		
Year Proj	ect Added to CIP 2014		Multiple Counties		
		Fund and Cost Center			
Project Significance	This CIP provides funds to replace roofing syste repair. Sound roofing systems are important to				
Scope of Work	This project encompasses the evaluation of all Water Treatment Plant and Booster Pump Station roofs to determine their current condition and to prioritize their repair or replacement. The project will evaluate the type of roof, built-up roofing material, flashing, roof drains/conductors and sealing materials that comprise the building envelope. The findings of the roof survey and evaluation will be used to prioritize roof repair and replacement projects for design and construction.				
Challenges	Weather dependent and seasonal work. May simultaneously to complete the work. The projectesting for hazardous materials, thermal scans	ect should include but, not l	• •		
Project History	Majority of GLWA Water Plant facilities have Buand gravel" roofs. Majority of the more than 70 old. In many instances, inadequate roof system) roofs, are over 15 years old	d and few are even older up to 30 years		
Related Project	none				
Lookup Driver	1 - Condition				
Other Important Info	*Innovation note: use cool roofs				
Explanation	Not provided.				

Roofing Systems Replacement at Water Plants and Booster Pump Stations

PM	Weighted
	Score

71.4

Criteria	Score	Comment
Condition	5	
Efficiency and Innovation	2	
Financial	4	
O&M	5	
Performance (Service Level/Reliability)	3	
Public Benefit	2	
Public Health & Safety	3	
Regulatory (Environmental/Legal)	4	

RC Weighted Score

61

Criteria	Score	Comment
Condition	5	
Efficiency and Innovation	1	
Financial	1	
O&M	5	
Performance (Service Level/Reliability)	5	
Public Benefit	1	
Public Health & Safety	2	
Regulatory (Environmental/Legal)	3	

GLWA Salaries CIP2020

Prior Yr Actuals

FY24

0

FY20

0

FY19

GLWA FY 2020-2024 CIP

Roofing Systems Replacement at Water Plants and Booster Pump Stations

hase GLWA En i tle GLWA Salo		roject manager	nent		Contract	NA	Statu	Js Future Planned	Start
Phase Budget						Cost Allo	cation CTA		
Phase Status	Future Pla	nned Start				Funding S	Source Bond	Proceeds	
Start Date							Fund Const	ruction Bond Fund	
End Date	End Date				Useful Life >20Yrs? No				
Co	ost Estimati	ion Information			Tot. Fee	deral Loan A	mount		\$0
	5 Cost Est. Class			Program/Allowance Task Information					
		Cost Est. D	ate	Р	roject Manage	r			
		Cost Est. S	ource	C	CIP Number				
		Cost Est. P	repared By	D	escription				
Cost Ty	pe	Fiscal Year	Expense)	Fringe Benefil	IonPersonne	C	omment	
GLWA Salaries C	CIP2020	FY21		\$16	6	1	2020CIP		
GLWA Salaries C	CIP2020	FY22		\$32	13	2	2020CIP		
GLWA Salaries C	CIP2020	FY23	(124	49	6	2020CIP		

Phase Total Expenses By FY (All figures are in \$1,000's)

47

49

179

FY23

6 2020 CIP

FY25+

0

Total

428

FY24

179

\$124

FY22

FY21

23

Roofing Systems Replacement at Water Plants and Booster Pump Stations

Phase Construction	Construction					ontract 1	۱A	Stat	us Future	e Planned Start	
Title Roofing System	ns Replac	cement at Wo	ater Plants an	d Boo	oster Pu	ımp Stati	ons				
Phase Budget Wat	er						Cost All	ocation CTA			
Phase Status Future Planned Start							Funding	Source Bono	l Proceeds	5	
Start Date								Fund Cons	truction B	ond Fund	
End Date							Useful Life	>20Yrs? Yes			
Cost Es	stimation	Information				Tot. Fed	eral Loan	Amount			
	5	Cost Est. C	lass			Pr	ogram/Allo	wance Task	Informatio	n	
		Cost Est. D	ate	P	roject l	Manager					
		Cost Est. S	ource	C	CIP Nun	nber					
	repared By	d By Description									
Cost Type		Fiscal Year	Expense)	Fringe	BenefitN	onPersonne	e	Comment		
Construction	F	Y21	\$	5202							
Construction	F	Y22	9	328							
Construction	F	Y23	\$1	,446							
Construction	F	Y24	\$1	,646							
Construction	F	Y25+	\$1	,375				2020CIP			
Task		Start Date	End Date	Dur	ation						
Scope Developmen	t	6/1/2019	9/1/2019		92	2					
Procurement		9/2/2019	3/1/2020		181						
Project Execution		3/2/2020	5/23/2027	23/2027 2638							
Project Closeout		5/23/2027	8/21/2027		90)					
Prior Yr Actuals	FY19	FY20	FY21	FY	22	FY23	FY24	FY25+	Total		
		0 0	202		328	1,446	1,64	1,375	4,997	7	
		Р	hase Total Ex	pense	es By F	(All fiau	res are in S	1,000's)			

331001 CIP#

Roofing Systems Replacement at Water Plants and Booster Pump Stations

Project Total Expenses By FY Compared to Prior CIPs (All figures are in \$1,000's)											
CIP	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	Total
2018		3,000	3,000	3,000	2,500				0	0	11,500
2019	0				128	169	809	1,243	4,844	0	7,193
2020	0	0		0	0	225	375	1,625	1,825	1,375	5,425

331002 CIP#

Roofing Systems Replacement at GLWA WRRF, CSO Retention Treatment Basins (RTB) and

✓ Innovation

☐ Water MP Right Sizing

✓ Reliability/Redundancy

☐ NEWTP Repurposing

Project Status Active

CIP Type Program

Project New To CIP \Box

Photo of Complex - I Dewatering Roof at the WRRF.



Project Engineer/Manager Ali Khraizat

Manager Ali Khraizat

Managing Dept WW Design Eng

Date Original Business Case Prepared 8/8/2016

Year Project Added to CIP 2017

Budget Wastewater

Class Lvl 1 Centralized Services

Class LvI 2 Facilities

Class Lvl 3 General Purpose

Location Multiple Counties

Fund and Cost Center

Project Significance Some of the roofs at GLWA WRRF facilities are near its end of useful life. The roofs help to protect the expensive equipment by preventing rain water entering through roofs into the facilities.

Scope of Work Inspect the roofing system conditions and assess drainage conditions on all the GLWA wastewater related facility buildings. Document the roofing systems inspections by taking and submitting high-quality photographs, scaled drawings, sketches, and inspection notes to adequately describe the conditions and deficiencies of the roofing systems and their drainage facilities. Recommend the extent of the roofing repairs and replacements required. Document the roof for each building inspected on the project. Classify the roofs into three (3) main categories, such as, 1) Roofs that require complete replacement, 2) Roofs that only require repair, and 3) Roofs that require no action within the next 10 years. Develop a recommended implementation/planning schedule with budgetary costs tied to the schedule for roofing system repairs and replacements that GLWA should plan for over the next 10 years. Provide preventative care suggestions for the GLWA's roofing systems evaluated under this contract. Provide any OSHA compliance suggestions that may be applicable for the GLWA's roofing systems evaluated under this contract.

Challenges Roof material testing for asbestos before demolition and flashing will be challenge to manage as low levels of asbestos are very common in the GLWA's old roof type systems.

Project History | Majority of GLWA WRRF facilities have Built-Up-Roof (BUR) membranes systems commonly referred as "tar and gravel" roofs. The old Administration buildings and the Newer Administration buildings have tar and gravel type of roof systems. The CSO RTB's and SDF's have metal and shingle type of roof systems. Majority of the roofs are over 15 years old and few are even older up to 30 years. These roof systems has been maintained through regular maintenance and repair or patch work performed to fix the leaking roof spots.



331002 CIP#

Roofing Systems Replacement at GLWA WRRF, CSO Retention Treatment Basins (RTB) and

Related Project	CON 143:Complex-II Incineration Building Roof Replacement.
Lookup Driver	1 - Condition
•	*Innovation note: Use cool roofs. Complex – II Incinerator (\$1.8M) and Complex – II Dewatering (\$1.0 M) replacement are under consideration to be part of fire remediation project
Explanation	GLWA wastewater roof systems are old and some are near end of its useful life.

Roofing Systems Replacement at GLWA WRRF, CSO Retention Treatment Basins (RTB) and

PM	Weighted
	Score

54.6

Criteria	Score	Comment
Condition	4	Asset has <25% of its design service life remain
Efficiency and Innovation	1	low impact on energy use & conservation
Financial	2	Project will likely result in avoidance of fines
O&M	2	Low impact on O&M
Performance (Service Level/Reliability)	4	Significant positive impact on system reliability
Public Benefit	1	Low impact on Public
Public Health & Safety	2	Moderate positive impact
Regulatory (Environmental/Legal)	4	Risk of non compliance in near term

RC Weighted Score

43.8

Criteria	Score	Comment
Condition	4	
Efficiency and Innovation	1	
Financial	3	
O&M	1	
Performance (Service Level/Reliability)	4	
Public Benefit	1	
Public Health & Safety	1	
Regulatory (Environmental/Legal)	2	

Ali Khraizat

GLWA FY 2020-2024 CIP

Roofing Systems Replacement at GLWA WRRF, CSO Retention Treatment Basins (RTB) and

nase Construction		Contract NA	Status Future Planned Start
Roofing System Disinfection Fac	•	astewater Treatment Plant CSO Retention Trec	atment Basins (RTB) and Screening
Phase Budget Was	tewater	Cost Allocation	CTA
Phase Status Futu	re Planned Start	Funding Source	Bond Proceeds
Start Date	7/3/2020	Fund	Construction Bond Fund
End Date	6/23/2022	Useful Life >20Yrs?	Yes
Cost Es	stimation Information	Tot. Federal Loan Amount	
	4 Cost Est. Class	Program/Allowance	Task Information
10/2/2	2017 Cost Est. Date	Project Manager	

Cost Type	Fiscal Year	Expense	Fringe Benefit	NonPersonne	Comment
Construction	FY20	\$1,000			2020CIP
Construction	FY21	\$4,000			
Construction	FY22	\$4,000			
Construction	FY23	\$41			2020CIP
Construction	FY24	\$42			2020CIP

CIP Number

Description

Task		Start Date	End Date	Duration				
Procurement		10/4/2020	4/2/2021	180				
Project Execution		4/3/2021	4/30/2024	1123				
Project Closeout		5/1/2024	6/30/2024	60				
Prior Yr Actuals	FY19	FY20	FY21	FY22	FY23	FY24	FY25+	Total

 Prior Yr Actuals
 FY19
 FY20
 FY21
 FY22
 FY23
 FY24
 FY25+
 Total

 0
 1,000
 4,000
 4,000
 41
 42
 0
 9,083

Cost Est. Source

Cost Est. Prepared By

Roofing Systems Replacement at GLWA WRRF, CSO Retention Treatment Basins (RTB) and

		(SDF)				0 1		OT 4			
Phase Budget	Wastewat	er		Cost Allocation CTA							
Phase Status	Active					Funding S	ource	Bond Pro	oceeds		
Start Date		11/8/	2018				Fund	Constru	ction Bond	d Fund	
End Date		6/23/	2022			Useful Life >	20Yrs?	Yes			
C	ost Estimati	on Information			Tot. F	ederal Loan A	mount				
	3	Cost Est. C	lass			Program/Allov	wance '	Task Info	rmation		
1	0/1/2017	Cost Est. D	ate	Proje	ect Manag	er					
		Cost Est. So	ource	CIP	Number						
		Cost Est. Pi	repared By	Desc	cription			<u> </u>			
Cost Ty	pe	Fiscal Year	Expense	e Frin	nge Benefi	NonPersonne		Con	nment		
Engineering Ser	vices	FY19	9	\$250							
Engineering Ser	vices	FY20		\$50							
Engineering Ser	vices	FY21	9	\$100							
Engineering Ser	vices	FY22	•	\$100							
	(Start Date	End Date	Duratio	on						
Task	ment	7/1/2018	10/30/2018		121						
Task Scope Develop	_				220						
		11/1/2018	6/9/2019		220						
Scope Develop		11/1/2018 6/10/2019	6/9/2019 4/30/2024		786						

Phase Total Expenses By FY (All figures are in \$1,000's)

331002 CIP#

Roofing Systems Replacement at GLWA WRRF, CSO Retention Treatment Basins (RTB) and

Phase GLWA Em	nployee	s Project	managen	nent		С	ontract N	Ą	Stat	us Active		
Title GLWA Salo	aries											
Phase Budget	Wastev	vater						Cost Alloca	tion CTA			
Phase Status	Active							Funding Sou	rce Bond	Proceeds		
Start Date								F	und Cons	truction Bor	nd Fund	
End Date							U	seful Life >20	Yrs? No			
Co	ost Estim	ation In	formation				Tot. Fede	ral Loan Amo	ount		\$0	
	,	5	Cost Est. C	ass			Prog	gram/Allowa	nce Task I	nformation		
			Cost Est. Do	ate	P	roject	Manager					
			Cost Est. Sc	urce	C	CIP Nu	mber					
			Cost Est. Pr	epared By	0)escrip	otion					
Cost Ty	ne	Fig	cal Year	Expens	Δ	Fringe	e BenefitNor	nPersonne		omment		
GLWA Salaries C	•	FY19		LAPOITS	\$20	ringe	8		g Phase	Ommon		
GLWA Salaries C		FY20			\$10		4		g Phase			
GLWA Salaries C		FY20			\$20		8		Phase			
GLWA Salaries C	CIP2020	FY21			\$10		4	0En	g Phase			
GLWA Salaries C	IP2020	FY21			\$20		8	С	Phase			
GLWA Salaries C	CIP2020	FY22)		\$10		4	0 En	g Phase			
Prior Yr Actua	ls I	FY19	FY20	FY21	FY:	22	FY23	FY24	FY25+	Total		
		28	42	42		14	0	0	0	126		
	'		Ph	ase Total Ex	penso	es By F	Y (All figure	es are in \$1,00	00's)			
				D EV 0			D : OI			Ć1 000I		

Project Total Expenses By FY Compared to Prior CIPs (All figures are in \$1,000's)

										,	
CIP	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	Total
2018			2,200	2,060	1,060	1,050	540	2,140	0	0	9,050
2019	0			286	709	5,575	5,114			0	11,684
2020	0	0		278	1,092	4,142	4,114	41	42	0	9,709



Water Facility Lighting Renovations

☐ Innovation☐ Water MP Right Si☐ Reliability/Redund☐ NEWTP Repurposit	dancy Project New To CIP	Example LED light fixtu	ure
Managing	nager TBD nager Grant Gartrell g Dept Energy Management ss Case Prepared 8/4/2016	Budget Class Lvl 1 Class Lvl 2 Class Lvl 3	Centralized Services Energy Management
Year Proj	ect Added to CIP 2017	Location	Multiple Counties
		Fund and Cost Center	
Project Significance	Energy savings, demand reduction improved	visibility, safety, operational	efficiency and worker productivity
Scope of Work	Remove identified old fixtures and replace wi	th new LED lamps and advo	anced control systems.
Challenges	Some outfalls are below the river elevation; in	stallation may be challengir	ng.
Project History	An audit was completed in 2010/2011 but little audit has rendered it obsolete as to recent in poor condition and exceeds its end of life. So cannot meet minimum lighting standards. A well detailed audit is to be carried out to deperformance criteria, lighting controls to be in equivalent/appropriate lighting output and le	novations, technology and ome existing fixtures are anticestermine the best suitable responsible to the corporated and in cases with the corporated and t	cost. Across the system, equipment is in ques and compared to today's lighting, eplacement lamps based on a set here delamping might be an option,
Related Project	Re lamp of Conner Creek and part of Northeo	ast for safety issues.	· · ·
Lookup Driver	8 - Efficiency		
Other Important Info	n/a		
Explanation	Technology of LED lamps and associated fixtu	res will reduce electrical op	erating expenses and improve worker



Water Facility Lighting Renovations

PM Weighted Score

77.4

Criteria	Score	Comment
Condition	5	
Efficiency and Innovation	5	
Financial	5	
O&M	1	
Performance (Service Level/Reliability)	5	
Public Benefit	3	
Public Health & Safety	4	
Regulatory (Environmental/Legal)	3	

RC Weighted Score

8.08

Criteria	Score	Comment
Condition	3	
Efficiency and Innovation	4	
Financial	3	
O&M	4	
Performance (Service Level/Reliability)	3	
Public Benefit	1	
Public Health & Safety	3	
Regulatory (Environmental/Legal)	3	



Water Facility Lighting Renovations

ase GLWA Emplo e GLWA Salaries	-	ct managem	nent	C	Contract N	4	Sto	itus Active	
Phase Budget Wa	ter					Cost Alloc	ation CTA		
Phase Status Act	ive					Funding Sc	burce Bond	d Proceeds	
Start Date							Fund Con	struction Bor	nd Fund
End Date					U	seful Life >2	OYrs? No		
Cost E	stimation I	nformation			Tot. Fede	ral Loan Am	nount		\$0
	5	Cost Est. CI	ass		Pro	gram/Allow	ance Task	Information	
		Cost Est. Do	ate	Project	Manager				
		Cost Est. So	urce	CIP Nu	mber				
		Cost Est. Pro	epared By	Descri	otion				
Prior Yr Actuals	FY19	FY20	FY21	FY22	FY23	FY24	FY25+	Total	
	(0	0	0	0	0	0	0	

351001 CIP#

Water Facility Lighting Renovations

Contract NA	Status Closed Out
Cost Allocation	on CTA
Funding Source	:e
Fun	nd
Useful Life >20Yrs	s?
Tot. Federal Loan Amou	nt \$0
Program/Allowanc	e Task Information
Project Manager	
CIP Number	
Description	
	Cost Allocation Funding Source Fur Useful Life >20Yr: Tot. Federal Loan Amou Program/Allowance Project Manager CIP Number

Total

2,799



CIP

2018

FY16

FY17

FY18

933

FY19

933

FY20

933

Water Facility Lighting Renovations

Phase Design and Bu	uild				Со	ntract	ГВС)		Status	Active		
Title Water Facility L	ighting R	enovations											
Possible Michael Gro	aham ho	ıs been asign	ed to manag	ge?									
Phase Budget Wate	er							Cost Alloc	cation	TA			
Phase Status Activ	ve							Funding So	ource B	ond P	roceeds		
Start Date		5/24/	′2016						Fund C	Constru	oction Bor	nd Fund	
End Date							Us	eful Life >2	OYrs? Y	es			
Cost Es	timation	Information				Tot. Fed	ler	al Loan An	nount				
	2	Cost Est. C	lass			Pr	og	ram/Allow	ance To	ask Inf	ormation		
		Cost Est. D	ate	P	roject M	Manager	,						
		Cost Est. So	ource		CIP Num	ber							
		Cost Est. Pi	repared By	0)escript	ion				<u> </u>			
Cost Type		Fiscal Year	Expense		Fringe	BenefitN	on	Personne		Соі	mment		
Design-Build	F`	(19	. 9	250									
Design-Build	F`	/ 20	9	\$250									
Task		Start Date	End Date	Dur	ration								
Scope Development	+	5/21/2017	6/30/2017		40								
Procurement		8/8/2017	1/5/2018		150								
Project Execution		1/5/2018											
Project Closeout													
Prior Yr Actuals	FY19	FY20	FY21	FY:	22	FY23		FY24	FY25-	+	Total		
	25	50 250	0		0	()	0		0	500		
		P	hase Total Ex	pens	es By FY	(All figu	res	are in \$1,	000's)				
Proje	ct Tota	Expenses	By FY Cor	mpa	red to	Prior C	:IP	s (All fig	ures o	re in	\$1,000	<u>s)</u>	

FY22

FY23

FY24

0

FY25

0

FY21

GLWA

Great Lakes Water Authority

GLWA FY 2020-2024 CIP

351001 CIP#

Water Facility Lighting Renovations

CIP	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	Total
2019	0		2	1,172	1,600					0	2,774
2020	0	0		250	250	0	0	0	0	0	500



Explanation N/A - Pending Closeout

GLWA FY 2020-2024 CIP

Consolidated Process Control System Upgrades

☐ Innovation☐ Water MP Right Si☐ Reliability/Redund☐ NEWTP Repurposit	dancy Project New To CIP	A system control room						
Project Engineer/Ma	nager Biren Saparia	Budget Split						
Ma	nager Biren Saparia	Class Lvl 1 Centralized Services						
Managing	Dept SCC	Class Lvl 2 Engineering						
Date Original Busines	ss Case Prepared	Class Lvl 3 General Purpose						
Year Proj	ect Added to CIP 2006	Location City of Detroit						
		Fund and Cost Center						
Project Significance	Provide reliability, redundancy and improve	ed functionality to department-wide Process Control System.						
Scope of Work	SCADA system installed under PC-713. The	and monitoring network throughout all of the facilities with the new work includes control system hardware, software, and firmware nstallation, start-up, testing, and repair services.						
Challenges	N/A - Pending Closeout	A - Pending Closeout						
Lookup Driver	N/A - Pending Closeout							



Consolidated Process Control System Upgrades

Phase not applicabl	ase not applicable					ontract	NA	Sta	lus Closed	Out	
Title Prior Year Actu	al Expens	es-WW									
Phase Budget Was	tewater						Cost Allo	cation CTA			
Phase Status Clos	sed Out						Funding S	Source			
Start Date								Fund			
End Date							Useful Life >	20Yrs?			
Cost Es	stimation	nformation	Tot. Federal Loan Amou					mount			
	1	Cost Est. C	lass			Pr	ogram/Allov	wance Task	Information		
	Cost Est. Date					Project Manager					
		Cost Est. S	ource	C	CIP Number						
		Cost Est. P	repared By	D	escrip)	tion					
Cost Type		Fiscal Year	Expense		Fringe	BenefitN	lonPersonne	C	Comment		
Construction	FY	18-		\$143				FY18			
Unknown	FY	18-		\$165				FY16			
Unknown	FY	18-		\$8				FY17			
Prior Yr Actuals	FY19	FY20	FY21	FY2	22	FY23	FY24	FY25+	Total		
316									316		



Consolidated Process Control System Upgrades

	ase not applicable Prior Year Actual Expenses-Wtr					C	ontract 1	NA	Sta	tus (Closed	Out	
Phase Budget		лроп 13 C	3 7711					Cost Allo	cation CTA				
Phase Status	Closed	Out						Funding S	ource				
Start Date									Fund				
End Date								Useful Life >	20Yrs?				
Cost Estimation Information						Tot. Federal Loan Amount							
		l	Cost Est. C	lass			Pr	ogram/Allov	vance Task	Inforn	nation		
			Cost Est. D	ate	P	roject	Manager	r					
			Cost Est. So	ource	C	CIP Nun	nber						
			Cost Est. Pi	epared By)escrip	tion						
Cost Typ	pe	Fi	scal Year	Expens	se	Fringe	BenefitN	onPersonne	(Comn	nent		
Construction		FY1	8-		\$166				FY18				
Unknown		FY1	8-		\$36				FY16				
Unknown		FY1	8-		\$111				FY17				
Prior Yr Actua	ls f	Y19	FY20	FY21	FY:	22	FY23	FY24	FY25+	To	otal		
	313										313		



Consolidated Process Control System Upgrades

Status Closed Out Phase Design and Build Contract PC-773C PC-773C Consolidated Process Control System Upgrades Projects Capitalized/Expensed @FY18 \$313K **Phase Budget** Water Cost Allocation CTA Phase Status Closed Out Funding Source Bond Proceeds **Fund** Construction Bond Fund Start Date 5/25/2013 **End Date** 5/25/2016 Useful Life >20Yrs? Yes Tot. Federal Loan Amount **Cost Estimation Information** Program/Allowance Task Information Cost Est. Class **Project Manager** 9/15/2017 Cost Est. Date 361001 **CIP Number** Cost Est. Source Contractor Description Biren Saparia Cost Est. Prepared By Duration Task Start Date End Date Scope Development Procurement Project Execution Project Closeout



Consolidated Process Control System Upgrades

Status Closed Out Phase Design and Build Contract PC-773D PC-773D Consolidated Process Control System Upgrades Phase Budget Wastewater Cost Allocation CTA Phase Status Closed Out Funding Source Bond Proceeds Fund Construction Bond Fund Start Date 5/25/2013 **End Date** 5/22/2016 Useful Life >20Yrs? Yes Tot. Federal Loan Amount **Cost Estimation Information** Cost Est. Class Program/Allowance Task Information **Project Manager** Cost Est. Date 9/15/2017 **CIP Number** Cost Est. Source Contractor Description Cost Est. Prepared By Biren Saparia Duration Task Start Date Fnd Date Scope Development Procurement Project Execution Project Closeout



Consolidated Process Control System Upgrades

hase GLWA Employees Project management Contract NA Status Closed Out										
itle GLWA Sala	aries									
Phase Budget	Wastewater					Cost Alloc	ation CTA	<u> </u>		
Phase Status	Closed Out			Funding Source Bond Proceeds						
Start Date							Fund Cor	struction	Bond Fund	
End Date					U	seful Life >2	OYrs? No			
Co	Cost Estimation Information			Tot. Federal Loan Amount \$0						
	5	Cost Est. Cle	zsc	Program/Allowance Task Information						
		Cost Est. Do	te	Project	Manager					
		Cost Est. So	urce	CIP Nu	mber					
		Cost Est. Pre	pared By	Descrip	otion			-		
Prior Yr Actual	s FY19	FY20	FY21	FY22	FY23	FY24	FY25+	Total		
	0	0	0	0	0	0	C)	0	
Phase Total Expenses By FY (All figures are in \$1,000's)										
		_						. 61.0		

Project Total Expenses By FY Compared to Prior CIPs (All figures are in \$1,000's)

		<u> </u>		, , , , ,		<u>u 10 1110</u>				· / • • • • • • • • • • • • • • • • • •	
CIP	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	Total
2018	3928	640							0	0	4,568
2019	0	321								0	321
2020	0	0	629	0	0	0	0	0	0	0	629



Data Center Reliability/Availability Improvements

☐ Innovation☐ Water MP Right Siz	Project Status Closed		
Reliability/Redund NEWTP Repurposin	ancy Project New To CIP		
Project Engineer/Man	ager Biren Saparia	Budget	Split
Man	ager Biren Saparia	Class LvI 1	Centralized Services
Managing	Dept SCC	Class LvI 2	Engineering
Date Original Business	s Case Prepared	Class LvI 3	General Purpose
Year Proje	ct Added to CIP 2009	Location	City of Detroit
		Fund and Cost Center	
Project Significance	N/A - Pending Closeout		
Scope of Work	N/A - Pending Closeout		
Challenges	N/A - Pending Closeout		
Lookup Driver	N/A - Pending Closeout		
Explanation	N/A - Pendina Closeout		



Data Center Reliability/Availability Improvements

Phase not applicable			(Contract N	A	Statu	s Closed C	Dut
Title Prior Year Actual Expe	enses-WW							
Phase Budget Wastewate	er				Cost Alloc	cation CTA		
Phase Status Closed Ou	†				Funding S	ource		
Start Date			Fund					
End Date	Useful Life >20Yrs?							
Cost Estimation	on Information		Tot. Federal Loan Amount					
1	lass		Pro	gram/Allow	ance Task In	formation		
	Cost Est. D	ate	Projec	t Manager				
	Cost Est. S	ource	CIP Nu	ımber				
	Cost Est. P	repared By	Descri	ption				
Cost Type	Fiscal Year	Expens	e Fring	e BenefilNo	nPersonne	Сс	omment	
Unknown	FY18-		\$17		F	Y16		
Prior Yr Actuals FY19	9 FY20	FY21	FY22	FY23	FY24	FY25+	Total	
17							17	



Data Center Reliability/Availability Improvements

thase GLWA Emplo	,	t managem	ent	C	Contract N	4	Status	Closed	Out	
Phase Budget Wo						Cost Allocati	on CTA			
Phase Status Clo	sed Out					Funding Sour	ce Revenu	Revenue Financed Capital		
Start Date						Fu	nd Improve	ement & E	Extension Fun	
End Date					U	seful Life >20Y	rs? No			
Cost I	estimation Ir	nformation			Tot. Fede	ral Loan Amo	unt		\$0	
	5	Cost Est. Clo	ass		Prog	gram/Allowan	ce Task Info	ormation		
		Cost Est. Do	ite	Projec	t Manager					
		Cost Est. So	urce	CIP Nu	mber					
		Cost Est. Pre	epared By	Descri	ption					
		-								
Prior Yr Actuals	FY19	FY20	FY21	FY22	FY23	FY24	FY25+	Total		
	0	0	0	0	0	0	0	0		



Data Center Reliability/Availability Improvements

Phase Design and Build Contract DWS-881 **Status** Closed Out DWS-881 Data Center Reliability/Availability Improvements: Water **Phase Budget** Water Cost Allocation CTA Phase Status Closed Out Funding Source Revenue Financed Capital Start Date 1/29/2013 Fund Improvement & Extension Fun **End Date** 2/27/2016 Useful Life >20Yrs? No Tot. Federal Loan Amount **Cost Estimation Information** Cost Est. Class Program/Allowance Task Information **Project Manager** 9/15/2017 Cost Est. Date **CIP Number** Cost Est. Source Contractor Description Cost Est. Prepared By Biren Saparia Task Start Date Duration Fnd Date Scope Development Procurement Project Execution Project Closeout



Data Center Reliability/Availability Improvements

Phase Design and Build			Contro	act DV	VS-881	Status	Closed Out		
Title DWS-881 Data Cen	ter Reliability/Av	ailability Impr	ovements: WW						
Phase Budget Wastewe	ater								
Phase Status Closed (Dut			e Financed Capital					
Start Date 1/29/2013				ement & Extension Fun					
End Date	End Date 2/27/2016			Useful Life >20Yrs? No					
Cost Estimo	ation Information		То	t. Fede	al Loan Amount				
1 Cost Est. Class				ormation					
	Cost Est.	Date	Project Mar	nager					
	Cost Est.	Source	CIP Numbe	r					
	Cost Est.	Prepared By	Description						
Task	Start Date	End Date	Duration						
Scope Development									
Procurement									
Project Execution									
Project Closeout									



GLWA FY 2020-2024 CIP

Data Center Reliability/Availability Improvements

6,014

nase not applicabl	le				Contrac	t NA	\	S	tatus	Closed O	ut	
tle Prior Year Actu	ıal Expe	enses-Wtr										
Phase Budget Wat	ter						Cost Allo	cation C1	A			
Phase Status Clos	sed Ou	†					Funding	Source				
Start Date				Fund								
End Date				Useful Life >20Yrs?								
Cost E	stimatic	on Information		1	Tot.	Fede	al Loan A	Amount				
	1	Cost Est. C	Class			Prog	ram/Allo	wance Ta	sk Inforr	mation		
		Cost Est. D	ate	Pr	oject Mana	ger						
		Cost Est. S	ource	CIP Number								
		Cost Est. P	repared By	D€	escription							
Cost Type		Fiscal Year	Expens	se F	-ringe Bene	fitNor	Personne)	Comn	nent		
nknown		FY18-		\$16				FY16				
Prior Yr Actuals	FY19	FY20	FY21	FY2:	2 FY2	3	FY24	FY25+	To	otal		
16										16		
		P	hase Total E	xpense	s By FY (All f	igure	s are in \$	1,000's)				
Proje	ct Tot	al Expenses	By FY Co	mpar	ed to Prio	r CII	es (All fi	gures ar	e in \$	1,000's)		
CIP FY16	FY17	7 FY18	FY19	FY20	FY21	F١	′22 l	FY23	FY24	FY25	Total	



SCADA Radio Network Upgrade

☐ Innovation☐ Water MP Right Sizing☐ Reliability/Redundancy☐ NEWTP Repurposing	Project Status Closed CIP Type Project Project New To CIP		SCADA Master State Control Dense Control Links
Project Engineer/Manage	r Biren Saparia	Budget	Split
Manage	r Biren Saparia	Class Lvl 1	Centralized Services
Managing Dep	SCC	Class Lvl 2	Engineering
Date Original Business Cas	se Prepared	Class Lvl 3	General Purpose
Year Project A	dded to CIP 2009	Location	Multiple Counties
		Fund and Cost Center	
Project Significance N/A	- Pending Closeout		
Scope of Work N/A	- Pending Closeout		
Challenges N/A	- Pending Closeout		
Lookup Driver N/A	- Pending Closeout		
Explanation N/A	- Pending Closeout		



SCADA Radio Network Upgrade

Phase not applicabl	е				C	ontract	NA		Stat	rus Close	d Out	
Title Prior Year Actu	al Expens	es-WW										
Phase Budget Was	tewater						Cost	l Allo	cation CTA			
Phase Status Clos	ed Out						Func	ding S	Source			
Start Date									Fund			
End Date							Useful	Life >	20Yrs?			
Cost Es	stimation	Information				Tot. Fe	deral Lo	an A	mount			
	1	Cost Est. C	Class			P	rogram/	/Allov	wance Task	Informatio	n	
		Cost Est. D	ate	Р	roject	Manage	er					
		Cost Est. S	ource	C	CIP Nur	mber						
		Cost Est. P	repared By	D	escrip)	tion						
Cost Type		Fiscal Year	Expens	e	Fringe	Benefit	NonPerso	onne	C	Comment		
Unknown	FY	18-		\$236					FY17			
Unknown	FY	18-		\$255					FY16			
Unknown	FY	18-		\$362					Pre-Bifurcati	on		
Prior Yr Actuals	FY19	FY20	FY21	FY	22	FY23	FY	24	FY25+	Total		
853										853	3	

361003 CIP#

SCADA Radio Network Upgrade

ase GLWA Emplo e GLWA Salaries					Contract N	(Jidit	us Closed	001			
Phase Budget Wa	ter					Cost Alloc	ation CTA					
Phase Status Clo	sed Out					Funding Sc	ource Bond	Proceeds				
Start Date							Fund Const	ruction Bo	nd Fund			
End Date					U	seful Life >2	OYrs? Yes					
Cost E	stimation In	formation			Tot. Fede	ral Loan An	nount		\$0			
	5	Cost Est. Cl	ass	Program/Allowance Task Information								
		Cost Est. Do	ıte	Project	Manager							
	Cost Est. Source				mber							
		Cost Est. Pre	epared By	Descri	otion							
Prior Yr Actuals	FY19	FY20	FY21	FY22	FY23	FY24	FY25+	Total				
	0	0	0	Λ	0	0	0	0				

GLWA Great Lakes Water Authority

SCADA Radio Network Upgrade

361003 CIP#

GLWA FY 2020-2024 CIP

Phase not applic	able					(Contract	NA		Stat	us (Closed	Out	
Title Prior Year A	ctual Exp	enses-	Wtr											
Phase Budget V	Water							Cost A	Alloc	ation CTA				
Phase Status (Funding Source													
Start Date										Fund				
End Date					Useful Life >20Yrs?									
Cos	st Estimati	ion Info	ormation				Tot. Fe	deral Loa	n An	nount				
	1		Cost Est. Cl	ass	Program/Allowance Task Information									
			Cost Est. Do	ate	Р	rojec	t Manage	er						
			Cost Est. Sc	urce	CIP Number									
			Cost Est. Pr	epared By	D	escri	ption							
Cost Typ	e	Fisc	al Year	Expens	e	Fring	e Benefit	NonPersor	nne	C	Comm	nent		
Unknown		FY18-			\$251				F	Y16				
Unknown		FY18-			\$216				F	Y17				
Prior Yr Actuals	FY1	9	FY20	FY21	FY2	22	FY23	FY24	1	FY25+	То	otal		
4.	67											467		



SCADA Radio Network Upgrade

Status Closed Out Phase Design and Build Contract DWS-882 Title DWS-882 SCADA Radio Network Upgrade: Water Projects Capitalized/Expensed @FY18 \$467K **Phase Budget** Water Cost Allocation CTA Phase Status Closed Out Funding Source Bond Proceeds **Fund** Construction Bond Fund Start Date 3/26/2013 **End Date** 9/30/2016 Useful Life >20Yrs? Yes Tot. Federal Loan Amount **Cost Estimation Information** Program/Allowance Task Information Cost Est. Class **Project Manager** 9/15/2017 Cost Est. Date **CIP Number** Cost Est. Source Contractor Description Biren Saparia Cost Est. Prepared By Duration Task Start Date **End Date** Scope Development Procurement **Project Execution** 1/1/2017 1/2/2017 90 Project Closeout 1/3/2017 4/3/2017 Prior Yr Actuals FY19 FY20 FY21 FY22 FY24 FY25+ Total FY23 0 0 0 0 0 0 0

Phase Total Expenses By FY (All figures are in \$1,000's)

0



SCADA Radio Network Upgrade

Phase Design ar	nd Build			Co	ontract DV	WS-882	Status	Closed Out				
itle DWS-882 S	CADA Radio	o Network Upg	grade: Waste	water								
Phase Budget	Wastewate	r		Cost Allocation CTA								
Phase Status	Closed Out			Funding Source Bond Proceeds								
Start Date		3/26	/2013	Fund Construction Bond Fund								
End Date		9/30	/2016									
Co	ost Estimatio	n Information		Tot. Federal Loan Amount								
	1	Cost Est. (Class	Program/Allowance Task Information								
	Cost Est. Date			Project <i>l</i>	Manager							
		Cost Est. S	ource	CIP Number								
	Cost Est. Prepa				ion		,					
Task		Start Date	End Date	Duration								
Scope Developi		Sidil Daic	Lifa Date	Dorallon								
· · · · · · · · · · · · · · · · · · ·												
Procurement												
Procurement Project Executio	n											

Project Total Expenses By FY Compared to Prior CIPs (All figures are in \$1,000's)

		o o.a	.xponse.	, , , , , ,		a 10 1110		90.00	are mr q	,,,,,,,	
CIP	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	Total
2018	6221	218							0	0	6,439
2019	0	1,319	60							0	1,379
2020	0	0	1,320	0	0	0	0	0	0	0	1,320



Great Lakes Water Authority	As-needed CIP implen	nentation Assistance and Kelatea Services						
☐ Innovation☐ Water MP Right Siz☐ Reliability/Redunct☐ NEWTP Repurposir	dancy Project New To CIP	Make a Plan						
Project Engineer/Mar	nager Gaylor Johnson / Dan Edwards	Budget Split						
Mar	nager Ali Khraizat	Class Lvl 1 Centralized Services						
Managing	Dept WW Design Eng	Class Lvl 2 Programs						
Date Original Busines	s Case Prepared	Class Lvl 3 Programs						
Year Proje	ect Added to CIP 2002	Location Multiple Counties						
		Fund and Cost Center Wastewater - 5421-892111						
. •	order basis to support the GLWA. The services definition and planning, design and constructicontract administration/oversight assistance/stechnical training; value engineering (VE) serviceports; identify minimum requirements, scope	evide implementation assistance and related services on a task provided under this contract include assistance in capital projects on phase procurement assistance and monitoring; third party cheduling services; claims/changes analysis and resolution; ices on selected design projects; develop engineering study of work, basis of process design, performance criteria, minimum and oversight services for design/build contracts; proposal analysis additional program support services.						
•	Sewer Systems. The purpose of this proposed c	ering services on an "as-needed basis" to support GLWA's Water & ontract is to provide implementation assistance and related LWA. 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.

Challenges N/A - Active

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

Lookup Driver N/A - Active

As-needed CIP Implementation Assistance and Related Services

Explanation N/A - Active

GLWA Great Lakes Water Authority

GLWA FY 2020-2024 CIP

As-needed CIP Implementation Assistance and Related Services

Phase Study and Design and Construction Assistance Contract CS-166 Status	Cancelled
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Title CS-166 WW - Capital Improvement Program (CIP) Implementation Assistance and Related Services

Services on proposed GLWA Contract No. CS 166 will be provided on a task order basis, over a three (3) year period. A task order contract is a contract for services that does not procure or specify a firm quantity of services (other than a minimum or maximum quantity) and that provides for the issuance of orders for the performance of tasks during the period of the contract. The services provided under this contract support GLWA in consistently honoring the commitments it makes to regulatory agencies, customers, and others. The services provided by the consultant will supplement existing GLWA staff or consultant activities, which are focused on procuring and administering contracts for individual capital projects. The consultant secured for this contract will act as an Agent for GLWA. For that reason, the consultant is precluded from bidding/proposing as a prime or sub-contractor on any GLWA projects that the consultant participates in the scope 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.

Wastewater
Cancelled

Cost Estimation Information							
1	Cost Est. Class						
	Cost Est. Date						
	Cost Est. Source						
	Cost Est. Prepared By						

Cost Allocation	CTA
Funding Source	Revenue Financed Capital
Fund	Improvement & Extension Fun
Useful Life >20Yrs?	No
Tot. Federal Loan Amount	

Program/Allowance Task Information

Ali Khraizat

CIP Number	380402
Description	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

administration/oversight assistance/scheduling

and monitoring; third party contract

Project Manager



As-needed CIP Implementation Assistance and Related Services

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 Type	Fiscal Year	Expense	Fringe Benefit	lonPersonne	Comment
Engineering Services	FY19	\$0			
Engineering Services	FY20	\$0			
Engineering Services	FY21	\$0			

Prior Yr Actuals	FY19	FY20	FY21	FY22	FY23	FY24	FY25+	Total
	0	0	0	0	0	0	0	0

380400 CIP#

As-needed CIP Implementation Assistance and Related Services

ase GLWA Emplo	yees Projec	t managem	ent	Contract NA				us Cance	lled	
e GLWA Salaries	Wtr									
Phase Budget Wa	ter			Cost Allocation CTA						
Phase Status Car	ncelled			Funding Source Revenue Financed Capital						
Start Date					Fund Improvement & Extension					
End Date					U	seful Life >2	OYrs? No	? No		
Cost E		Tot. Fede	ral Loan Am	nount		\$0				
	1	Cost Est. Cl	ass	Program/Allowance Task Information						
		Cost Est. Do	ıte	Project Manager						
		Cost Est. So	urce	CIP Number						
Cost Est. Prepared By				Description						
Prior Yr Actuals	FY19	FY20	FY21	FY22	FY23	FY24	FY25+	Total		
	0	0	0	0	0	0	0	0		

380400 CIP#

As-needed CIP Implementation Assistance and Related Services

Status Closed Out Phase not applicable Contract NA Prior Year Actual Expenses-Wtr As needed contract. Accumulated task expenditures reclassed to projects or O&M - \$(-105K) Phase Budget Water Cost Allocation CTA Phase Status Closed Out **Funding Source** Start Date **Fund** Useful Life >20Yrs? No **End Date Tot. Federal Loan Amount Cost Estimation Information** Program/Allowance Task Information Cost Est. Class **Project Manager** Cost Est. Date **CIP Number** Cost Est. Source Description Cost Est. Prepared By Cost Type Fiscal Year Expense Fringe BenefitNonPersonne Comment FY18 CS-166 **Engineering Services** FY18-\$105 Prior Yr Actuals FY19 FY20 FY21 FY22 FY23 FY25+ Total FY24 0 0

380400 CIP#

As-needed CIP Implementation Assistance and Related Services

nase not applicable						Contract NA			Statu	S Closed	Out		
Title Prior Year A	Actua	al Expen	ises-WW										
As needed con	tract.	Accur	mulated task e	expenditure:	s recla	ssed t	to projects	or 0&M - \$	(-105K)				
Phase Budget	Wastewater				Cost Allocation					СТА			
Phase Status	Closed Out							Funding	Source				
Start Date									Fund				
End Date								Useful Life >	>20Yrs?	No			
Co	Cost Estimation Information						Tot. Federal Loan Amount						
		1	Cost Est. C	lass	Program/Allowance Task Information								
			Cost Est. D	ate	Project Manager								
			Cost Est. So	ource	CIP Number								
	Cost Est. Prepared By				l By Description								
Cost Typ	ре		Fiscal Year	Expens	e	Fring	e BenefitN	onPersonne	÷	Со	mment		
Engineering Serv	neering Services FY18-				\$105				FY18 CS	5-166			
Prior Yr Actua	ls	FY19	FY20	FY21	FY2	22	FY23	FY24	FY25	5+	Total		
	0										0		

380400 CIP#

As-needed CIP Implementation Assistance and Related Services

hase Study and D itle CS-1433 As-ne	_				tract C: d Service		Status	Closed Out	
Phase Budget Wo	astewate	er				Cost Allocation	СТА		
Phase Status Cla	osed Out	<u> </u>				Funding Source	Revenue	e Financed Capital	
Start Date		3/24	1/2006			Fund	Improve	ment & Extension Fun	
End Date		7/24	1/2017		Useful Life >20Yrs? No				
Cost	Estimatio	n Information		1	ot. Fede				
	1 Cost Est. Class			Program/Allowance			Task Info	ormation	
	Cost Est. Date			Project Mo	anager				
	Cost Est. Source				CIP Number 380401				
	Cost Est. Prepared By			Description					
Task		Start Date	End Date	Duration					
Scope Developme	nt								
Procurement									
Project Execution									
Project Closeout									

GLWA FY 2020-2024 CIP Great Lakes Water Authority As-needed CIP Implementation Assis

As-needed CIP Implementation Assistance and Related Services

Phase Study and Design and Construction Assistance Contract CS-166

Status Cancelled

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

Services on proposed GLWA Contract No. CS 166 will be provided on a task order basis, over a three (3) year period. A task order contract is a contract for services that does not procure or specify a firm quantity of services (other than a minimum or maximum quantity) and that provides for the issuance of orders for the performance of tasks during the period of the contract. The services provided under this contract support GLWA in consistently honoring the commitments it makes to regulatory agencies, customers, and others. The services provided by the consultant will supplement existing GLWA staff or consultant activities, which are focused on procuring and administering contracts for individual capital projects. The consultant secured for this contract will act as an Agent for GLWA. For that reason, the consultant is precluded from bidding/proposing as a prime or sub-contractor on any GLWA projects that the consultant participates in the scope 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.

Start Date End Date	
Cost Estimation	on Information
1	Cost Est. Class
	Cost Est. Date
	Cost Est. Source
	Cost Est. Prepared By

Phase Budget Water

Phase Status Cancelled

Cost Allocation	CTA
Funding Source	Revenue Financed Capital
Fund	Improvement & Extension Fun
Useful Life >20Yrs?	No
Tot. Federal Loan Amount	

Program/Allowance Task Information

Grant Gartrell

380402

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

Project Manager

CIP Number

Description



As-needed CIP Implementation Assistance and Related Services

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.

П									
	Prior Yr Actuals	FY19	FY20	FY21	FY22	FY23	FY24	FY25+	Total
		0	0	0	0	0	0	0	0

Phase Total Expenses By FY (All figures are in \$1,000's)

Project Total Expenses By FY Compared to Prior CIPs (All figures are in \$1,000's)

OID	E) (1 (E) (1.7	E) (10	E)/10	E)/00	E) (0.1		E) (00	E) (O, 1		
CIP	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	Total
2018	4770	1,400	100						0	0	6,270
2019	0	210	500	1,606	1,606	1,606				0	5,528
2020	0	0	0	0	0	0	0	0	0	0	0



Explanation N/A - Active

GLWA FY 2020-2024 CIP

380500 CIP#

Wastewater General Engineering Services on an As-needed Basis

☐ Innovation☐ Water MP Right Siz☐ Reliability/Redunct☐ NEWTP Repurposir	dancy Project New To CIP	Example of pipe bein la	ng nid
Project Engineer/Mar	nager Beena Chackunkal	Budget	Split
Mar	nager Ali Khraizat	Class LvI 1	Centralized Services
Managing	Dept WW Design Eng	Class Lvl 2	Programs
Date Original Busines	s Case Prepared	Class LvI 3	Programs
Year Proje	ect Added to CIP 2004	Location	Multiple Counties
		Fund and Cost Center	
Project Significance	Various engineering as needed services for des	sign and replacement of a	ging water and sewer lines.
·	This project involves designing water main and water mains and sewers throughout the system needed basis. The work also includes civil, structinstrumentation and piping design services.	and several projects at the	e WRRF under different tasks on an as-
Lookup Driver	N/A - Active		

GLWA Great Lakes Water Authority

GLWA FY 2020-2024 CIP

Wastewater General Engineering Services on an As-needed Basis

PM	Weighted
	Score

20

Criteria	Score	Comment
Condition	1	
Efficiency and Innovation	1	
Financial	1	
O&M	1	
Performance (Service Level/Reliability)	1	
Public Benefit	1	
Public Health & Safety	1	
Regulatory (Environmental/Legal)	1	

RC Weighted Score

0

Criteria	Score	Comment
Condition		
Efficiency and Innovation		
Financial		
O&M		
Performance (Service Level/Reliability)		
Public Benefit		
Public Health & Safety		
Regulatory (Environmental/Legal)		

Wastewater General Engineering Services on an As-needed Basis

nase GLWA Em	ploye	es Proje	ct manager	nent		Со	ntract N	Α	Sta	tus Pendir	ng Close-c	ou†
tle GLWA Sala	ıries											
Phase Budget	Water	-						Cost Alloc	cation CTA			
Phase Status	Pendi	ng Close	e-out					Funding S	ource Reve	nue Financ	ed Capit	al
Start Date									Fund Impr	ovement &	Extension	Fun
End Date							U	Jseful Life >2	20Yrs? No			
Co	st Esti	mation I	nformation				Tot. Fede	eral Loan Ar	mount			\$0
		3	Cost Est. C	lass			Pro	gram/Allow	vance Task	Information	1	
			Cost Est. D	ate	Р	roject M	Nanager					
			Cost Est. So	ource	C	CIP Num	ber					
			Cost Est. P	repared By	D	escripti)	on					
Cost Typ	ре	F	iscal Year	Expens	e	Fringe E	BenefitNo	nPersonne	(Comment		
GLWA Salaries C	IP2020) FY	19		\$0		0	0				
GLWA Salaries C	IP2020	O FY2	20		\$0		0	0				
Prior Yr Actual	S	FY19	FY20	FY21	FY2	22	FY23	FY24	FY25+	Total		
		C	0	0		0	0	0	0	0		

380500 CIP#

Wastewater General Engineering Services on an As-needed Basis

Status Closed Out Phase not applicable Contract NA Prior Year Actual Expenses-Wtr As needed contract. Accumulated task expenditures reclassed to projects or O&M - \$(-132K) Phase Budget Water Cost Allocation CTA Phase Status Closed Out **Funding Source** Start Date **Fund End Date** Useful Life >20Yrs? Tot. Federal Loan Amount **Cost Estimation Information** Program/Allowance Task Information Cost Est. Class **Project Manager** Cost Est. Date **CIP Number** Cost Est. Source Description Cost Est. Prepared By Cost Type Fiscal Year Expense Fringe BenefitNonPersonne Comment **Engineering Services** FY18-\$132 FY16 Prior Yr Actuals FY19 FY20 FY21 FY22 FY23 FY24 FY25+ Total 0 0

380500 CIP#

Wastewater General Engineering Services on an As-needed Basis

Phase not applicable			(Contract N	A	Stat	us Closed Ou	J†
Title Prior Year Actual Exp	enses-WW							
\$148K FY18 (380501) Backe	ed out due to re	classificatio	n to O&M					
Phase Budget Wastewat	er				Cost Alloc	cation CTA		
Phase Status Closed Ou	ı†				Funding So	ource		
Start Date						Fund		
End Date				U	seful Life >2	OYrs?		
Cost Estimati	on Information			Tot. Fede	eral Loan An	nount		
1	Cost Est. C	lass		Pro	gram/Allow	ance Task I	nformation	
	Cost Est. D	ate	Projec	t Manager				
	Cost Est. So	ource	CIP Nu	ımber				
	Cost Est. Pi	epared By	Descri	ption				
Cost Type	Fiscal Year	Expens	e Fring	e BenefitNo	nPersonne	С	omment	
Engineering Services	FY18-		\$148		F	Y16		
Prior Yr Actuals FY1	9 FY20	FY21	FY22	FY23	FY24	FY25+	Total	
0							0	

Wastewater General Engineering Services on an As-needed Basis

Phase Study and Design and Construction Assistance Contract CS-1499 Status Pending Close-out

Title CS-1499 Wastewater General Engineering Services on an As-needed Basis (CS-1499 METCO)

380501 - Curren	tly most o	of the tasks are for Waste	ewater projects.		
Phase Budget	Wastewa	ater		Cost Allocation	CTA
Phase Status	Pending	Close-out		Funding Source	Revenue Financed Capital
Start Date		5/12/2010		Fund	Improvement & Extension Fun
End Date		6/2/2018	U	seful Life >20Yrs?	No
Co	ost Estimo	ition Information	Tot. Fede	ral Loan Amount	
	2	Cost Est. Class	Prog	gram/Allowance	Task Information
		Cost Est. Date	Project Manager	Ali Khraizat	
Contract		Cost Est. Source	CIP Number	380501	
		Cost Est. Prepare	d By Description		

Engineering Services FY19 \$0 Engineering Services FY20 \$0	Cost Type	Fiscal Year	Expense	Fringe Benefit	NonPersonne	Comment
Engineering Services FY20 \$0	Engineering Services	FY19	\$0			
	Engineering Services	FY20	\$0			

Task		Start Date	End Date	Duration				
Scope Developmen	n†							
Procurement								
Project Execution								
Project Closeout		1/9/2020	3/9/2020	60)			
Prior Yr Actuals	FY19	FY20	FY21	FY22	FY23	FY24	FY25+	Total
		0 0	0	0	0	0	0	0

Wastewater General Engineering Services on an As-needed Basis

nase Budget Wo	ater	Cost Allocation	CTA
Phase Status Per	nding Close-out	Funding Source	Revenue Financed Capital
Start Date	5/12/2010	Fund	Improvement & Extension Fur
End Date	6/2/2018	Useful Life >20Yrs?	No
Cost	Estimation Information	Tot. Federal Loan Amount	\$0
	1 Cost Est. Class	Program/Allowance	Task Information
	Cost Est. Date	Project Manager	
	Cost Est. Source	CIP Number	
	Cost Est. Prepared By	Description	

Project Total Expenses By FY Compared to Prior CIPs (All figures are in \$1,000's)

				.						· ·	
CIP	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	Total
2018	10064	228	228						0	0	10,520
2019	0	282	114	114	91					0	601
2020	0	0	0	0	0	0	0	0	0	0	0



As-Needed General Engineering Services

☐ Innovation☐ Water MP Right Siz☐ Reliability/Redund☐ NEWTP Repurposin	dancy Project New To CIP		
Project Engineer/Mai	nager Grant Gartrell	Budget	Split
Mai	nager Grant Gartrell	Class Lvl 1	Centralized Services
Managing	Dept Water Eng	Class Lvl 2	Programs
Date Original Busines	ss Case Prepared	Class LvI 3	Programs
Year Proje	ect Added to CIP 2004	Location	Multiple Counties
		Fund and Cost Center	
Project Significance	Allowance for the study and design of critica	I projects throughout the sys	tem prior to bidding and construction.
Scope of Work	As-needed engineering services for water an	d wastewater engineering.	
Challenges	N/A - Active		
Lookup Driver	N/A - Active		
Explanation	N/A - Active		



As-Needed General Engineering Services

PM Weighted Score

39.8

Score	Comment
3	
1	
1	
2	
3	
1	
3	
1	
	Score 3 1 1 2 3 1 3 1

RC Weighted Score

0

Criteria	Score	Comment
Condition		
Efficiency and Innovation		
Financial		
O&M		
Performance (Service Level/Reliability)		
Public Benefit		
Public Health & Safety		
Regulatory (Environmental/Legal)		



As-Needed General Engineering Services

nase GLWA Em ile GLWA Salc		ees Projec	ct managem	nent	(Contract N	A	Stat	us Active	
Phase Budget		ewater					Cost Alloc	ation CTA		
Phase Status	Activ	е					Funding Sc	ource Reve	nue Financ	ed Capital
Start Date								Fund Impro	vement &	Extension Fun
End Date						U	seful Life >2	OYrs? No		
Co	ost Est	imation Ir	nformation			Tot. Fede	eral Loan Am	nount		\$0
		5	Cost Est. CI	ass		Pro	gram/Allow	ance Task I	nformation	
			Cost Est. Do	ate	Projec	t Manager				
			Cost Est. So	urce	CIP Nu	ımber				
			Cost Est. Pro	epared By	Descri	ption				
Prior Yr Actual	ls	FY19	FY20	FY21	FY22	FY23	FY24	FY25+	Total	
		0	0	0	0	0	0	0	0	



As-Needed General Engineering Services

Phase not applicab	le				Co	ontract \land	1A	Stat	rus Closed	Out	
Title Prior Year Actu	Jal Expense	es-WW									
\$157K FY18 (380601) Backed o	ut to recond	ile LTD								
Phase Budget Wa	stewater						Cost Alloc	cation CTA			
Phase Status Clo	sed Out						Funding So	ource			
Start Date								Fund			
End Date						l	Useful Life >2	OYrs?			
Cost E	stimation Ir	nformation				Tot. Fed	eral Loan An	nount			
	1	Cost Est. C	ass			Pro	ogram/Allow	ance Task	Information		
		Cost Est. Do	ate	Pr	oject	Manager					
		Cost Est. So	ource	C	IP Nun	nber					
		Cost Est. Pr	epared By	De	escrip ¹	lion					
Cost Type	Fi	scal Year	Expens	e l	Fringe	BenefitNo	onPersonne	C	Comment		
Unknown	FY1	8-		\$158			F	Y16			
Prior Yr Actuals	FY19	FY20	FY21	FY2	2	FY23	FY24	FY25+	Total		
1									1		



As-Needed General Engineering Services

Phase Design Contract CS-1432A Status Active

Title CS-1432A Water As-Needed Engineering Services

80601					
Phase Budget	Water			Cost Allocation	СТА
Phase Status	Active			Funding Source	Revenue Financed Capital
Start Date		1/23/2008		Fund	Improvement & Extension Fun
End Date		12/12/2018	U	seful Life >20Yrs?	No
Co	ost Estimati	on Information	Tot. Fede	eral Loan Amount	
	5	Cost Est. Class	Pro	gram/Allowance	Task Information
		Cost Est. Date	Project Manager	Beena Chackun	kal
		Cost Est. Source	CIP Number	380601	
		Cost Est. Prepared By	Description	Alfred Benesh	

Cost Type Fisco	al Year Expense	Fringe Benefit NonPersonne	Comment
Engineering Services FY19	\$94		

Prior Yr Actuals	FY19	FY20	FY21	FY22	FY23	FY24	FY25+	Total
	94	0	0	0	0	0	0	94



As-Needed General Engineering Services

Phase Design Contract CS-1432A Status Active

Title CS-1432A Wastewater As-Needed Engineering Services

80601					
Phase Budget	Wastewater			Cost Allocation	СТА
Phase Status	Active			Funding Source	Revenue Financed Capital
Start Date		1/23/2008		Fund	Improvement & Extension Fun
End Date		12/12/2018	U	seful Life >20Yrs?	No
Co	ost Estimation I	nformation	Tot. Fede	eral Loan Amount	
	5	Cost Est. Class	Pro	gram/Allowance	Task Information
		Cost Est. Date	Project Manager	Beena Chackun	kal
		Cost Est. Source	CIP Number	380601	
		Cost Est. Prepared By	Description	Alfred Benesh	

Prior Yr Actuals	FY19	FY20	FY21	FY22	FY23	FY24	FY25+	Total
	0	0	0	0	0	0	0	0



As-Needed General Engineering Services

Phase not applic	cable				Contract	NA	State	us Closed	d Out	
Title Prior Year A	Actual Expe	enses-Wtr								
As needed con	tract. Accu	ımulated task e	expenditures	reclas	sed to projec					
Phase Budget	Water					Cost Allo	cation CTA			
Phase Status	Closed Out	-				Funding S	ource			
Start Date							Fund			
End Date						Useful Life >	20Yrs?			
Co	st Estimatio	n Information			Tot. Fe	ederal Loan A	mount			
	1	Cost Est. C	lass	Program/Allowance Task Information						
		Cost Est. D	ate	Pr	oject Manage	er				
		Cost Est. So	ource	CIP Number						
		Cost Est. Pr	epared By	De	escription					
Cost Typ	oe e	Fiscal Year	Expense	e	ringe Benefit	NonPersonne	С	omment		
Unknown		FY18-		\$158			FY16			
Prior Yr Actual	s FY19	P FY20	FY21	FY2:	2 FY23	FY24	FY25+	Total		
	1							1		
		PI	nase Total Ex	pense	s By FY (All fig	ures are in \$1	,000's)			
D _w	-:I T-I	al Evponsos	D. FV Co.		ad ta Dulau	CID. / All fi		- ¢1 000	1-1	

Project Total Expenses By FY Compared to Prior CIPs (All figures are in \$1,000's)

		<u> </u>				<u> </u>				, <u>, </u>	
CIP	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	Total
2018	14012	446	436	386					0	0	15,280
2019	0	316	406	327	50					0	1,099
2020	0	0	2	94	0	0	0	0	0	0	96

Explanation N/A - Active

GLWA FY 2020-2024 CIP

As-Needed Geotechnical and Related Engineering Services

☐ Innovation☐ Water MP Right Si☐ Reliability/Redund☐ NEWTP Repurposit	dancy Project New To CIP	Example of testing being performed					
Project Engineer/Ma	nager Peter Fromm	Budget Water					
Ma	nager Grant Gartrell	Class Lvl 1 Centralized Services					
Managing	Dept Water Eng	Class Lvl 2 Programs					
Date Original Busines	ss Case Prepared	Class Lvl 3 Programs					
Year Proj	ect Added to CIP 2006	Location Multiple Counties					
		Fund and Cost Center					
Project Significance	Design of Telegraph Rd, Wick Rd, Park-Me	erriman, & Schoolcraft water main projects.					
Scope of Work		for the Telegraph Road, Wick Road, Park-Merriman, and Schoolcraft provisions for the as-needed services associated with pipeline king, and inspection.					
Challenges	N/A - Active						
Lookup Driver	N/A - Active						

380700 CIP#

As-Needed Geotechnical and Related Engineering Services

Phase not applic	cable)			(Contract N	A	Sta	tus Closed	d Out		
Title Prior Year A	Actuc	al Expense	s-Wtr									
As needed con	tract.	Accumu	ılated task e	expenditures	s reclassed	to projects (or O&M (\$-1	15K)				
Phase Budget	Wate	er										
Phase Status	Close	ed Out					Funding S	ource				
Start Date												
End Date						U	Jseful Life >2	20Yrs?				
Co	Cost Estimation Information					Tot. Federal Loan Amount						
		1	Cost Est. C	ass		Pro	gram/Allow	vance Task	Information	ı		
			Cost Est. De	ate	Project Manager							
			Cost Est. Sc	ource	CIP Number							
			Cost Est. Pr	epared By	Descri	ption						
Cost Typ	Type Fiscal Year E				e Fring	e BenefilNo	nPersonne	(Comment			
Unknown	nown FY18-				\$115		F	-Y16				
Prior Yr Actua	ls	FY19	FY20	FY21	FY22	FY23	FY24	FY25+	Total			
	0								0			



As-Needed Geotechnical and Related Engineering Services

Phase Construction Contract CS-1488 Status Active

Title CS-1488 Engineering Services, Concrete Testing and Soil Borings

Co	ost Estimation Information	Tot. Federal Loan Amount	
End Date	4/8/2021	Useful Life >20Yrs?	No
Start Date	4/8/2009	Fund	Improvement & Extension Fun
Phase Status	Active	Funding Source	Revenue Financed Capital
Phase Budget	Water	Cost Allocation	CTA

Cost Estimation	n Information
2	Cost Est. Class
	Cost Est. Date
	Cost Est. Source
	Cost Est. Prepared By

Program/Allowance Task Information										
Project Manager	Grant Gartrell									
CIP Number	380701									
Description	Engineering Services, Concrete Testing and Soil Borings (CS-1488)									

Cost Type	Fis	cal Year	Expense	Expense F		Benefit	VonPersonn	ne	C	Comment	
Engineering Services	FY19	7	\$	620							
Task	St	art Date	End Date	Dura	tion						
Scope Development											
Procurement											
Project Execution		6/1/2016	4/30/2020		1429	•					
Project Closeout		5/1/2020	7/30/2020		90						
Prior Yr Actuals F	119	FY20	FY21	FY22)	FY23	FY24		FY25+	Total	
	620	0	0		0		0	0	0	620	

380700 CIP#

As-Needed Geotechnical and Related Engineering Services

ase Budget Wa	stewater						cation	CTA			
Phase Status Act	ive						ource R	Revenu	e Financ	ed Capital	
Start Date								Fund I	mprove	ement &	Extension Fun
End Date						U	seful Life >2	20Yrs?	10		
Cost E	Info	mation			Tot. Fede	eral Loan Ar	mount			\$0	
	5	C	ost Est. Cl	ass	Program/Allowance Task Information						
		C	ost Est. Do	ıte	Projec	t Manager					
		С	ost Est. So	urce	CIP Nu	ımber					
		С	ost Est. Pre	epared By	Descri	ption			<u>-</u>		
Prior Yr Actuals	FY19		FY20	FY21	FY22	FY23	FY24	FY25	+	Total	
THOI II ACIDAIS											



As-Needed Geotechnical and Related Engineering Services

Phase not applic	cable			(Contract N	A	Sta	tus Closed	Out		
Title Prior Year A	Actual Expe	nses-WW									
\$115K FY18 (380	701) Backe	d out to recond	cile LTD								
Phase Budget	Wastewate	r				Cost Alloc	cation CTA	CTA			
Phase Status	Closed Out										
Start Date											
End Date					U	seful Life >2	20Yrs?				
Co	st Estimatio	n Information		Tot. Federal Loan Amount							
	1	Cost Est. C	lass		Pro	gram/Allow	vance Task	Information			
		Cost Est. D	ate	Project Manager							
		Cost Est. So	ource	CIP Nu							
		Cost Est. Pi	epared By	red By Description							
Coat Tur	20	Fiscal Year	Eypops	o Fring	o Popofithlo	n Dorsonno		Commont			
Cost Typ Unknown		FY18-	Expens	\$115	e BenefilNo		-Y16	Comment			
OTRIOWIT		1110-		ψΠΟ			110				
Prior Yr Actual	s FY19	FY20	FY21	FY22	FY23	FY24	FY25+	Total			
	0							0			
		Pl	nase Total Ex	cpenses By	FY (All figure	es are in \$1,	,000's)				

GLWA FY 2020-2024 CIP

Project Total Expenses By FY Compared to Prior CIPs (All figures are in \$1,000's)

			<u> </u>				<u> </u>			3 V	,,,,,,,	
	CIP	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	Total
20	018		650	907	333	333	333			0	0	2,556
20	019	0	230	238	477	477	477	238			0	2,137
20	020	0	0	0	620	0	0	0	0	0	0	620

Geotechnical and Related Services on an As-Needed Basis

Innovation
Water MP Right Sizing
Reliability/Redundancy
NEWTP Repurposing

Project Status Pending Closeout

CIP Type Allowance

Project New To CIP $\ \square$

Example of a pipe being laid



Project Engineer/Manager Grant Gartrell

Manager Grant Gartrell

Managing Dept Water Eng

Date Original Business Case Prepared

Year Project Added to CIP 2007

Budget Split

Class Lvl 1 Centralized Services

Class Lvl 2 Programs

Class Lvl 3 Programs

Location Multiple Counties

Fund and Cost Center

Project Significance	gnificance As Needed geotechnical consulting services.									
	The work includes consultant services for geotechnical work on as-needed basis. The work also provides for additional engineering/technical services as requested.									
Challenges	N/A - Pending Closeout									
Lookup Driver	N/A - Pending Closeout									
Explanation	N/A - Pending Closeout									

380800 CIP#

Geotechnical and Related Services on an As-Needed Basis

'hase not applicab			Contract NA				tus Closed	Out			
itle Prior Year Actu	Jal Expense	es-Wtr									
As needed contrac	ct. Accumu	ılated task e	expenditures	s reclass	ed to projec	ts or O&	M - \$(-8	32K)			
Phase Budget Wa	ter			Cost Allocation CTA							
Phase Status Clo	sed Out			Funding Source							
Start Date	Start Date				Fund						
End Date						Useful	Life >20	OYrs? No			
Cost E		Tot. Federal Loan Amount									
	1 Cost Est. Class				1	Program	/Allowo	ance Task	Information		
		Cost Est. Do	ate	Project Manager							
		Cost Est. So	ource	CIP Number							
		Cost Est. Pr	epared By	Description							
Cost Type	Fi	scal Year	Expens	e Fr	ringe Benefit	NonPers	onne	(Comment		
Unknown FY18-				\$82			FY	/16			
Prior Yr Actuals	FY19	FY20	FY21	FY22	FY23	FY	24	FY25+	Total		
0	0								0		

380800 CIP#

Geotechnical and Related Services on an As-Needed Basis

Contract CS-1490 **Status** Pending Close-out Phase Design CS-1490: NTH Consultants: As-Needed Geotechnical Services: Wtr **Phase Budget** Water Cost Allocation CTA Phase Status Pending Close-out Funding Source Revenue Financed Capital Start Date 1/14/2010 Fund Improvement & Extension Fun 7/14/2016 Useful Life >20Yrs? No **End Date** Tot. Federal Loan Amount **Cost Estimation Information** Cost Est. Class Program/Allowance Task Information Project Manager Grant Gartrell Cost Est. Date **CIP Number** 380801 Cost Est. Source Description As-Needed Geotechnical Services Cost Est. Prepared By Task Start Date Duration Fnd Date Scope Development Procurement Project Execution Project Closeout FY19 Prior Yr Actuals FY20 FY21 FY22 FY23 FY24 FY25+ Total 0 0

380800 CIP#

Geotechnical and Related Services on an As-Needed Basis

Contract CS-1490 **Status** Pending Close-out Phase Design CS-1490: NTH Consultants: As-Needed Geotechnical Services: WW Phase Budget Wastewater Cost Allocation CTA Phase Status Pending Close-out Funding Source Revenue Financed Capital Start Date 1/14/2010 Fund Improvement & Extension Fun **End Date** 7/14/2016 Useful Life >20Yrs? No Tot. Federal Loan Amount **Cost Estimation Information** Cost Est. Class Program/Allowance Task Information Project Manager Grant Gartrell Cost Est. Date **CIP Number** 380801 Cost Est. Source Description As-Needed Geotechnical Services Cost Est. Prepared By

Prior Yr Actuals	FY19	FY20	FY21	FY22	FY23	FY24	FY25+	Total
	0							0

380800 CIP#

Geotechnical and Related Services on an As-Needed Basis

ase GLWA Employees Project mar	agement	Contract NA	Status Pending Close-out				
tle GLWA Salaries							
Phase Budget Water		Cost Allocation	CTA				
Phase Status Pending Close-out		Funding Source	Revenue Financed Capital				
Start Date		Fund	Improvement & Extension Fun				
End Date		Useful Life >20Yrs?	No				
Cost Estimation Informa	ition	Tot. Federal Loan Amount	\$0				
5 Cost	Est. Class	Program/Allowance Task Information					
Cost	Est. Date	Project Manager					
Cost	Est. Source	CIP Number					
Cost	Est. Prepared By	Description					



Geotechnical and Related Services on an As-Needed Basis

Phase not applicabl	е				(Contract N	Α	Status Closed Out			
Title Prior Year Actu	al Expense	es-WW									
\$82K FY18 (380801) E	Backed ou	t to reconci	le LTD								
Phase Budget Was	stewater						Cost Alloc	cation CTA			
Phase Status Closed Out							Funding S	ource			
Start Date								Fund			
End Date						ι	Jseful Life >2	20Yrs? No			
Cost Estimation Information						Tot. Fede	eral Loan Ar	mount			
1 Cost Est. Class						Pro	gram/Allow	ance Task	Information	1	
		Cost Est. De	ate	Project Manager							
		Cost Est. So	ource	CIP Number							
		Cost Est. Pr	epared By	D	escri	ption					
Cost Type	Fi	scal Year	Expense		Fring	e BenefitNo	nPersonne	(Comment		
Unknown	FY1	8-		\$82			F	Y16			
Prior Yr Actuals	FY19	FY20	FY21	FY2	22	FY23	FY24	FY25+	Total		
0									0		
		Pł	nase Total Ex	pense	es By	FY (All figure	es are in \$1,	000's)			
	- 1 T - 1 - 1 1	_	D EV C			D . O	ID / A II C		. 61 000		

Project Total Expenses By FY Compared to Prior CIPs (All figures are in \$1,000's)

					<u> </u>				••• • • • • • • • • • • • • • • • • •	, ,	
CIP	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	Total
2018	2441	132							0	0	2,573
2019	0	164								0	164
2020	0	0	0	0							0

GLWA Great Lakes Water Authority

Explanation N/A - Active

GLWA FY 2020-2024 CIP

General Engineering Services

☐ Innovation☐ Water MP Right Siz☐ Reliability/Redunct☐ NEWTP Repurposir	dancy Project New To CIP	Analytical Lo	ab			
Project Engineer/Mar	nager Beena Chackunkal	Budget	Wastewater			
Mai	nager Ali Khraizat	Class Lvl 1	Centralized Services			
Managing	Dept WW Design Eng	Class Lvl 2	Programs			
Date Original Busines	ss Case Prepared	Class Lvl 3	Programs			
Year Proje	ect Added to CIP 2007	Location	Multiple Counties			
		Fund and Cost Center				
Project Significance	As needed multi-discipline engineering services	s for various small scale pro	ojects at WTP and WRRF.			
-	Scope of Work This project provides for rapid design turn-around for a variety of projects on an as-needed basis providing muldisciplinary professional services including meter pit improvement services.					
Challenges	N/A - Active					
Lookup Driver	N/A - Active					



General Engineering Services

PM Weighted Score

100

Criteria	Score	Comment
Condition	5	
Efficiency and Innovation	5	
Financial	5	
O&M	5	
Performance (Service Level/Reliability)	5	
Public Benefit	5	
Public Health & Safety	5	
Regulatory (Environmental/Legal)	5	

RC Weighted Score

0

Criteria	Score	Comment
Condition		
Efficiency and Innovation		
Financial		
O&M		
Performance (Service Level/Reliability)		
Public Benefit		
Public Health & Safety		
Regulatory (Environmental/Legal)		



General Engineering Services

Phase not applicable			(us Closed O	ut			
Title Prior Year Actual Exper	ises-Wtr							
As needed contract. Accur	nulated task e	xpenditures	reclassed	to projects (or 0&M - (\$-	-75K)		
Phase Budget Water					Cost Alloc	cation CTA		
Phase Status Closed Out					Funding S	ource		
Start Date						Fund		
End Date		Useful Life >20Yrs?						
Cost Estimation	Information		Tot. Federal Loan Amount					
1	Cost Est. Clo	ass		Pro	gram/Allow	ance Task li	nformation	
	Cost Est. Do	ite	Project Manager					
	Cost Est. So	urce	CIP Number					
	Cost Est. Pre	epared By	Description					
Cost Type	Fiscal Year	Expens	e Fring	e BenefitNo	nPersonne	С	omment	
Unknown F	Y18-		\$75		F	Y16		
Prior Yr Actuals FY19	FY20	FY21	FY22	FY23	FY24	FY25+	Total	
0							0	

General Engineering Services

hase Study and	Design and C	Construction Assistance	Contract NA	Status	Pending Close-out				
tle General Eng	gineering Sen	vices							
Phase Budget W	Vater		Cost Allocation						
Phase Status P	ending Close	e-out	Funding Source	e Financed Capital					
Start Date	3/27/2008		Fund	Improve	ement & Extension Fun				
End Date		3/27/2018	Useful Life >20Yrs?	Useful Life >20Yrs? No					
Cos	st Estimation I	nformation	Tot. Federal Loan Amount		\$0				
	1	Cost Est. Class	Program/Allowance	Program/Allowance Task Information					
		Cost Est. Date	Project Manager						
		Cost Est. Source	CIP Number						
		Cost Est. Prepared By	Description						





General Engineering Services

Phase Study and Design and Construction Assistance Contract CS-1481 Status Pending Close-out CS-1481 Sigma General Engineering Services Currently most of the projects are for Wastewater Services. Cost Allocation CTA Phase Budget Wastewater Phase Status Pending Close-out Funding Source Revenue Financed Capital Fund Improvement & Extension Fun Start Date 3/27/2008 **End Date** 3/27/2018 Useful Life >20Yrs? No Tot. Federal Loan Amount **Cost Estimation Information Program/Allowance Task Information** Cost Est. Class **Project Manager** Beena Chackunkal Cost Est. Date **CIP Number** 380901 Cost Est. Source Contract Description Cost Est. Prepared By Cost Type Fiscal Year Fringe Benefit NonPersonne Expense Comment **Engineering Services** FY19 \$0 **Engineering Services** FY20 \$0 Task Start Date **End Date** Duration Project Closeout 3/28/2021 5/27/2021 60 FY21 FY25+ Total Prior Yr Actuals FY19 FY20 FY22 FY23 FY24 0 0 0 0 0 0 0 0



General Engineering Services

Phase not applicable			Contract NA Status					l Out		
Title Prior Year Actua	al Expense	s-WW								
\$63K FY18 (380901) B	acked out	t to reconci	e LTD							
Phase Budget Wast	ewater			Cost Allocation CTA						
Phase Status Close	se Status Closed Out						Funding S	ource		
Start Date								Fund		
End Date	End Date						seful Life >2	20Yrs?		
Cost Est		Tot. Federal Loan Amount								
	1 Cost Est. Class					Prog	gram/Allow	ance Task	Information	
		Cost Est. Do	ate	Project Manager						
		Cost Est. Sc	ource	CII	P Number					
		Cost Est. Pr	epared By	Description						
Cost Type	Fis	scal Year	Expens	e F	ringe Bene	fitNor	Personne	(Comment	
Unknown FY18-				\$63			F	Y16		
Prior Yr Actuals	FY19	FY20	FY21	FY22	2 FY2:	3	FY24	FY25+	Total	
0									0	



General Engineering Services

Phase GLWA Emplo	yees Pr	oject man	agem	ent		С	ontract N	A	Stat	us Pendir	ng Close-out		
Title GLWA Salaries	S												
Phase Budget Wa	ıter							Cost Alloc	ation CTA	СТА			
Phase Status Per	Phase Status Pending Close-out							Funding So	Reve	Revenue Financed Capital			
Start Date									Fund Impro	vement &	Extension Fur	n	
End Date							U	seful Life >2	OYrs? No				
Cost E	stimatio	on Informo	tion				Tot. Fede	eral Loan An	nount		\$0	١	
	5	Cost	Est. Clo	ass			Pro	gram/Allow	ance Task I	nformation	1		
		Cost	Est. Da	ıte	Project Manager								
		Cost	Est. So	urce	CIP Number								
		Cost	Est. Pre	epared By	D	escrip	otion						
Cost Type		Fiscal Ye	ear	Expense		Fringe	e BenefitNo	nPersonne	С	omment			
GLWA Salaries CIP2	020	FY19			\$0		0	0					
GLWA Salaries CIP2	020	FY20			\$0		0	0					
Prior Yr Actuals	FY1	9 FY	20	FY21	FY2	22	FY23	FY24	FY25+	Total			
		0	0	0		0	0	0	0	0			
		·	Ph	ase Total Ex	pense	es By F	Y (All figure	es are in \$1,	000's)				
				D. FV C.				D / A II 61	•	- ¢1 000			

Project Total Expenses By FY Compared to Prior CIPs (All figures are in \$1,000's)

CIP	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	Total
2018	28	1,250	1,154						0	0	2,432
2019	0	138	572	916	425					0	2,051
2020	0	0	0	0	0	0	0	0	0	0	0

Energy Management: Electric Metering Improvement Program

□ Innovation ☐ Water MP Right Sizing ▼ Reliability/Redundancy

NEWTP Repurposing

Project Status Future Planned

CIP Type Program

Project New To CIP \Box

Example of an electric meter



Project Engineer/Manager TBD

Manager Grant Gartrell

Managing Dept Energy Management

Date Original Business Case Prepared 8/18/2016

Year Project Added to CIP 2016

Budget Split

Class Lvl 1 Centralized Services

Class Lvl 2 Programs

Class Lvl 3 Programs

Location Multiple Counties

Fund and Cost Center

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

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)

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

Lookup Driver



Energy Management: Electric Metering Improvement Program

PM Weighted Score

64.6

Criteria	Score	Comment
Condition	4	
Efficiency and Innovation	5	
Financial	3	
O&M	2	
Performance (Service Level/Reliability)	5	
Public Benefit	4	
Public Health & Safety	1	
Regulatory (Environmental/Legal)	3	

RC Weighted Score

0

Criteria	Score	Comment
Condition		
Efficiency and Innovation		
Financial		
O&M		
Performance (Service Level/Reliability)		
Public Benefit		
Public Health & Safety		
Regulatory (Environmental/Legal)		

Energy Management: Electric Metering Improvement Program

Phase Design and B	Build			Contract NA Status Future Planned Star									
Title Energy Manaç	gement:	Wtr - Electric	Metering Imp	provement	Program								
Phase Budget Wa	ıter			Cost Allocation CTA									
Phase Status Futi	ure Plann	ned Start				iource Reve	Revenue Financed Capital						
Start Date							Fund Impr	ovement &	Extension Fun				
End Date				Useful Life >20Yrs? No									
Cost E	stimation	n Information		Tot. Federal Loan Amount									
	1	Cost Est. C	lass		Pr	ogram/Allov	vance Task	Information					
		Cost Est. D	ate	Project Manager									
		Cost Est. S	ource	CIP Nu	ımber								
		Cost Est. P	repared By	Descri	ption								
Cost Type		Fiscal Year	Expense	e Fring	e BenefitN	onPersonne	(Comment					
Design-Build	F	Y25+	\$2	2,500			2020CIP						
Task		Start Date	End Date	Duration									
Scope Developmer	nt	7/1/2018	9/30/2018	3	91								
Procurement 9/30/2019 12/2			12/25/2021	8	17								
Project Execution 12/25/2021 6/21				237	70								
Project Closeout		6/21/2028	9/19/2028	3	90								
Prior Yr Actuals	FY19	FY20	FY21	FY22	FY23	FY24	FY25+	Total					
		0 0	0	0	() 0	2,500	2.500					

Energy Management: Electric Metering Improvement Program

Phase Design and B	Build				Co	ntract	NA		Sto	itus	Future F	Planned	Start		
Title Energy Manaç	gement:	WW - Electric	Metering Im	provem	ent P	rogram									
Phase Budget Wa	ıstewater			Cost Allocation CTA											
Phase Status Fut	Phase Status Future Planned Start				Funding Source							Revenue Financed Capital			
Start Date	Start Date								Fund Impi	rovei	ment &	Extensior	n Fun		
End Date							Use	eful Life >2	OYrs? No						
Cost E	stimation	Information		Tot. Federal Loan Amount											
	1	Cost Est. C	lass			Pı	rogı	ram/Allow	ance Task	Info	rmation				
		Cost Est. D	ate	Project Manager											
		Cost Est. S	ource	CIF	ber										
		Cost Est. P	repared By	red By Description											
Cost Type		Fiscal Year	Expense	e Fr	ringe	BenefitN	lonl	Personne	(Com	ment				
Design-Build	F	Y25+	\$2	\$2,500 2020CII					020CIP						
Task		Start Date	End Date	Durat	tion										
Scope Developmer	nt	7/1/2018	9/30/2018		91										
Procurement		4/30/2019	12/25/2021		970										
Project Execution 12/25/2021 6/2					2370										
Project Closeout		6/21/2028	9/19/2028		90										
Prior Yr Actuals	FY19	FY20	FY21	FY22		FY23		FY24	FY25+	Т	otal				
		0 0	0		0	(0	0	2,500		2,500				

Energy Management: Electric Metering Improvement Program

ase GLWA Em e GLWA Sala	. ,	ct managem	ent	C	Contract NA	4	Statu	s Future Pl	anned Start			
Phase Budget				Cost Allocation CTA								
Phase Status	Future Planned Start					Funding So	ource Bond I	Proceeds				
Start Date							Fund Constr	ruction Bond	d Fund			
End Date					U	seful Life >20	OYrs? No					
Со	st Estimation II	nformation			Tot. Fede	ral Loan Am	nount		\$0			
	5	Cost Est. Clo	ass	Program/Allowance Task Information								
		Cost Est. Da	te	Project	Manager							
		Cost Est. So	urce	CIP Nu	mber							
		Cost Est. Pre	epared By	Descrip	otion							
Prior Yr Actual	s FY19	FY20	FY21	FY22	FY23	FY24	FY25+	Total				
	0	0	0	0	0	0	0	0				
		Ph	ase Total Ex	penses By F	FY (All figure	es are in \$1,0	000's)					

Project Total Expenses By FY Compared to Prior CIPs (All figures are in \$1.000's)

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CIP	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	Total
2018		1,000	1,000	1,000	1,000	1,000	1,000		0	0	6,000
2019	0				120	120	510	878	4,372	0	6,000
2020	0	0		0	0	0	0	0	0	5,000	5,000