





Preliminary Draft 2.0 December 13, 2018

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 rep	air
☐ Water MP Right Si	izing	CIP Type Project		
☐ Reliability/Redund	dancy	Project New To CIP \Box		
☐ NEWTP Repurposi	ng	riojeci New 10 Cir		
Project Engineer/Ma	naaer P	aula Anderson	Budget	Water
	_	aula Anderson	_	Centralized Services
Managing	Dept F	leet and Facilities	Class LvI 2	Facilities
Date Original Busines	-		Class Lvl 3	General Purpose
Year Proj	ect Add	ed to CIP 2014	Location	Multiple Counties
			Fund and Cost Center	
Project Significance		provides funds to replace roofing systen Sound roofing systems are important to p		
Scope of Work	determ of roof, envelop	ject encompasses the evaluation of all Vine their current condition and to prioritize built-up roofing material, flashing, roof doe. The findings of the roof survey and estor design and construction.	ze their repair or replacem Irains/conductors and sea	nent. The project will evaluate the type ling materials that comprise the building
Challenges	simultai	er dependent and seasonal work. May re neously to complete the work. The projec for hazardous materials, thermal scans a	ct should include but, not	
Project History	and gro	y of GLWA Water Plant facilities have Buil avel" roofs. Majority of the more than 70 many instances, inadequate roof system	roofs, are over 15 years ol	d and few are even older up to 30 years
Related Project	none			
Lookup Driver	1 - Con	dition		
Other Important Info	*Innovo	ation note: use cool roofs		
Explanation	Not pro	vided		



331001 CIP#

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	

331001 CIP#

Roofing Systems Replacement at Water Plants and Booster Pump Stations

hase GLWA Emplo	•	ojec	t managen	nent		C	Contract N.	A	Sta	tus Future	Planned Start
tle GLWA Salaries Phase Budget Wa								Cost Alloc	cation CTA		
Phase Status Fut		nned	Start						ource Bond	d Proceeds	
Start Date									Fund Cons	struction Bor	nd Fund
End Date							U	seful Life >2	20Yrs? No		
Cost E	stimatio	on In	formation				Tot. Fede	eral Loan Ar	mount		\$0
	5		Cost Est. Cl	ass			Pro	gram/Allow	vance Task	Information	
			Cost Est. Do	ate	Р	rojec	l Manager				
			Cost Est. Sc	urce	C	IP Nu	mber				
			Cost Est. Pr	epared By	D	escri	otion				
Cost Type		Fis	cal Year	Expens	e	Fringe	e BenefitNo	nPersonne	(Comment	
GLWA Salaries CIP2	020	FY2	I		\$16		6	1 2	2020CIP		
GLWA Salaries CIP2	020	FY22	2		\$32		13	22	2020CIP		
GLWA Salaries CIP2	020	FY23	3		\$124		49	62	2020CIP		
GLWA Salaries CIP2	020	FY24	1		\$124		49	62	2020CIP		
Prior Yr Actuals	FY1	9	FY20	FY21	FY2	22	FY23	FY24	FY25+	Total	
		Ω	0	23		47	179	179	0	428	



331001 CIP#

Roofing Systems Replacement at Water Plants and Booster Pump Stations

			_								
Phase Construction					Co	ntract	NA	St	atus	Future F	Planned Star
Title Roofing System	ns Replac	cement at Wo	ater Plants ar	nd Boos	ter Pu	mp Stati	ons				
Phase Budget Wa	iter						Cost Allo	cation CTA	4		
Phase Status Futi	ure Plann	ed Start					Funding :	Source Bor	nd Pro	oceeds	
Start Date								Fund Cor	nstruc	ction Bor	nd Fund
End Date							Useful Life >	20Yrs? Yes	;		
Cost E	stimation	Information				Tot. Fed	deral Loan A	mount			
	5	Cost Est. C	lass			Pı	ogram/Allo	wance Tasl	k Info	rmation	
		Cost Est. D	ate	Pro	ject M	Nanage	r				
		Cost Est. S	ource	CII	P Num	ber					
		Cost Est. P	repared By	De	script	ion					
Cost Type		Fiscal Year	Expense	e F	rinae	Benefit	IonPersonne		Com	ment	
Construction	F	Y21	·	\$202	J -						
Construction	F	Y22	(\$328							
Construction	F	Y23	\$1	,446							
Construction	F	Y24	\$1	,646							
Construction	F	Y25+	\$1	,375				2020CIP			
Task		Start Date	End Date	Dura	tion						
Scope Developmer	nt	6/1/2019	9/1/2019		92						
Procurement		9/2/2019	3/1/2020		181						
Project Execution		3/2/2020	5/23/2027		2638						
Project Closeout		5/23/2027	8/21/2027		90						
Prior Yr Actuals	FY19	FY20	FY21	FY22	2	FY23	FY24	FY25+	-	Total	
		0 0	202		328	1,44	1,646	1,37	5	4,997	



2020

0

GLWA FY 2020-2024 CIP

331001 CIP#

5,425

Roofing Systems Replacement at Water Plants and Booster Pump Stations

375

1,625

1,825

1,375

	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

225

0



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	

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

Title Roofing Systems Replacement at GLWA Wastewater Treatment Plant CSO Retention Treatment Basins (RTB) and Screening Disinfection Facilities (SDF)

Phase Budget	Waste	water				Cost Allocation	CTA
Phase Status	Future	Plannec	l Start			Funding Source	Bond Proceeds
Start Date			7/3/2020			Fund	Construction Bond Fund
End Date			6/23/2022		Us	eful Life >20Yrs?	Yes
Co	ost Esti	mation In	formation		Tot. Feder	al Loan Amount	
		4	Cost Est. Class		Prog	ram/Allowance	Task Information
1	10/2/20)17	Cost Est. Date		Project Manager		
			Cost Est. Source		CIP Number		
Ali Khraizat			Cost Est. Prepared I	Ву	Description		

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

			<u> </u>
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

Prior Yr Actuals	FY19	FY20	FY21	FY22	FY23	FY24	FY25+	Total
	0	1,000	4,000	4,000	41	42	0	9,083

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

Phase Study and D	esian ar	nd Construction	n Assistance		Co	ntract	NΙΔ		Status	Active		
•	ms Repla	acement at GI		ater Tre								Screening
Phase Budget Wo	astewate	er					Cost Allo	cation C	TA			
Phase Status Ac	tive			Funding Source Bond Proceeds								
Start Date		11/8	/2018	Fund Construction Bond Fund								d
End Date		6/23	/2022	Useful Life >20Yrs? Yes								
Cost	Estimatic	on Information		Tot. Federal Loan Amount								
	3	Cost Est. C	Class			Pr	ogram/Allov	vance To	ask Info	rmatior	า	
10/1	1/2017	Cost Est. D	Oate	P	roject A	\anager						
		Cost Est. S	ource	С	IP Num	ber						
		Cost Est. P	repared By	D	escripti	on						
Cost Type		Fiscal Year	Expense		Fringe I	BenefitN	onPersonne		Con	nment		
Engineering Service	∋s	FY19		\$250								
Engineering Service		FY20		\$50								
Engineering Service		FY21		\$100								
Engineering Service	∋s	FY22		\$100								
Task		Start Date	End Date	Dur	ation							
Scope Developme	nt	7/1/2018	10/30/2018	3	121							
Procurement		11/1/2018	6/9/2019)	220							
Project Execution		6/10/2019	4/30/2024	ļ.	1786							
Project Closeout		5/1/2024	6/30/2024		60							
Prior Yr Actuals	FY19	9 FY20	FY21	FY2	22	FY23	FY24	FY25+	-	Total		

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

Phase GLWA Emplo	oyees P	rojec	t managen	nent		C	ontract NA	4	Sta	tus Active	
Title GLWA Salarie	es										
Phase Budget Wo	astewat	er						Cost Allo	cation CTA		
Phase Status Ac	ctive							Source Bond	d Proceeds		
Start Date									Fund Cons	struction Boi	nd Fund
End Date							U	seful Life >	20Yrs? No		
Cost	Estimat	ion In	formation				Tot. Fede	ral Loan A	mount		\$0
	5		Cost Est. C	ass	Program/Allowance					Information	
			Cost Est. De	ate	Project Manager						
	Cost Est. Source				e CIP Number						
	epared By	D	escrip	tion							
Cost Type		Fis	cal Year	Expense	е	Fringe	BenefitNor	nPersonne	(Comment	
GLWA Salaries CIP2	2020	FY19)		\$20		8		Eng Phase		
GLWA Salaries CIP2	2020	FY20)		\$10		4	0	Eng Phase		
GLWA Salaries CIP2	2020	FY20)		\$20		8		C Phase		
GLWA Salaries CIP2	2020	FY21	l		\$10		4	0	Eng Phase		
GLWA Salaries CIP2	2020	FY21	l		\$20		8		C Phase		
GLWA Salaries CIP2	2020	FY22	2		\$10		4	0	Eng Phase		
Prior Yr Actuals	FY	19	FY20	FY21	FY2	22	FY23	FY24	FY25+	Total	
		28	42	42		14	0	C	0	126	
Proi	ect To	tal F		ase Total Ex					1,000's)	in \$1 000	(e)

									•	•	
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 Repurposi	dancy	Project Status Active CIP Type Project Project New To CIP	Example LED light fixtu	ure
Project Engineer/Ma	nager TB	D	Budget	Water
	_	rant Gartrell	_	Centralized Services
Managing	Dept Er	nergy Management	Class Lvl 2	Energy Management
Date Original Busines	ss Case P	repared 8/4/2016	Class Lvl 3	General Purpose
Year Proj	ect Adde	ed to CIP 2017	Location	Multiple Counties
			Fund and Cost Center	
Project Significance	Energy s	avings, demand reduction improved	l visibility, safety, operational	efficiency and worker productivity
Scope of Work	Remove	identified old fixtures and replace w	ith new LED lamps and advo	anced control systems.
Challenges	Some or	utfalls are below the river elevation; ir	nstallation may be challengi	ng.
Project History	audit ha poor co cannot A well d perform	is rendered it obsolete as to recent in	enovations, technology and come existing fixtures are anticome etermine the best suitable rencorporated and in cases w	here delamping might be an option,
Related Project	Re lamp	of Conner Creek and part of Northe	ast for safety issues.	
Lookup Driver	8 - Efficie	ency		
Other Important Info	n/a			
Explanation	Technological safety.	ogy of LED lamps and associated fixt	ures will reduce electrical op	perating 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

Phase Budget Wa	ter					Cost Alloc	cation CTA		
Phase Status Act	ive					Funding So	ource Bond	Proceeds	
Start Date							Fund Cons	truction Bond	d Fund
End Date					U	OYrs? No	? No		
Cost E	stimation Ir	nformation			Tot. Fede	nount		\$0	
	5	Cost Est. Cl	ass	Program/Allowance Task Information					
		Cost Est. Do	ıte	Projec	Manager				
		Cost Est. So	urce	CIP Nu	mber				
		Cost Est. Pre	epared By	Descri	otion				
		J							
Prior Yr Actuals	FY19	FY20	FY21	FY22	FY23	FY24	FY25+	Total	
	0	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



Water Facility Lighting Renovations

Phase Design and B	Build				Contract	ТЕ	3D	Stat	us Active		
Title Water Facility	Lighting	Renovations									
Possible Michael G	raham h	as been asign	ed to manag	ge ŝ							
Phase Budget Wa	ıter						Cost Alloc	cation CTA			
Phase Status Act	tive						Funding S	ource Bond	Proceeds		
Start Date		5/24/	′2016					Fund Cons	truction Bo	nd Fund	
End Date				Useful Life >20Yrs? Yes							
Cost E	stimatio	n Information			Tot. F	ede	eral Loan Ar	mount			
	2	Cost Est. C	lass			Pro	gram/Allow	ance Task I	nformation	ı	
		Cost Est. D	ate	Proje	ect Manag	jer					
		Cost Est. So	ource	CIP Number							
		Cost Est. Pi	repared By	Desc	ription						
			,								
Cost Type		Fiscal Year	Expense	e Frir	nge Benef	oNti	nPersonne	С	omment		
Design-Build	F	FY19	\$	\$250							
Design-Build	F	FY20	\$	\$250							
Task		Start Date	End Date	Duratio	on						
Scope Developmer	n†	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	FY22	FY23		FY24	FY25+	Total		
	2	250 250	0		0	0	0	0	500		
		P	hase Total Ex	penses B	y FY (All fi	gure	es are in \$1,	.000's)		•	
Proie	ect Toto	al Expenses	By FY Cor	npared	to Prio	· CI	Ps (All fia	ures are i	n \$1,000	's)	

Project Total Expenses By	FY Co	mpared to Prior	CIPs (Al	ll figures are	e in \$	1,000's)
---------------------------	-------	-----------------	----------	----------------	---------	----------

	<u> </u>									<u> </u>	
CIP	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	Total
2018			933	933	933				0	0	2,799



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 Size☐ Reliability/Redunct☐ NEWTP Repurposing	dancy Project New To CIP	A system control room
Project Engineer/Mai	nager Biren Saparia	Budget Split
Mai	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 Proje	ect Added to CIP 2006	Location City of Detroit
		Fund and Cost Center
Project Significance	Provide reliability, redundancy and improved	d functionality to department-wide Process Control System.
	SCADA system installed under PC-713. The w	nd monitoring network throughout all of the facilities with the new ork includes control system hardware, software, and firmware stallation, start-up, testing, and repair services.
Challenges	N/A - Pending Closeout	
Lookup Driver	N/A - Pending Closeout	

Consolidated Process Control System Upgrades

'hase not applica	ble				(Contract	NA	Sta	tus Closed	Out	
itle Prior Year Ac	tual Expe	enses-WW									
Phase Budget W	astewate	ər					Cost Allo	cation CTA			
Phase Status CI	osed Ou	ıt					Funding	Source			
Start Date								Fund			
End Date							Useful Life >	20Yrs?			
Cost	Estimation	on Informatio	n	1		Tot. Fed	deral Loan A	mount			
	1	Cost Est	. Class			Pr	ogram/Allo	wance Task	Information		
		Cost Est	. Date	P	rojec	t Managei	r				
		Cost Est	. Source	C	CIP Nu	ımber					
		Cost Est	. Prepared By	0)escri	ption					
Cost Type	!	Fiscal Yea	r Expens	se	Fring	e BenefitN	lonPersonne	;	Comment		
Construction		FY18-		\$143				FY18			
Unknown		FY18-		\$165				FY16			
Unknown	known FY18-							FY17			
Prior Yr Actuals	FY1	9 FY20	FY21	FY:	22	FY23	FY24	FY25+	Total		
316	6								316		

361001 CIP#

Consolidated Process Control System Upgrades

'hase not appli	cable	€					(Contract	NA	A	Sta	tus Clo	osed	Out		
Title Prior Year <i>i</i>	Actu	al Expe	nse	s-Wtr												
Phase Budget	Wate	er								Cost Allo	cation CTA					
Phase Status	Close	ed Out								Funding S	ource					
Start Date											Fund					
End Date									U	seful Life >	20Yrs?					
Co	Cost Estimation Information							Tot. Fe	ede	ral Loan A	mount					
	1 Cost Est. Class						Program/Allowance Task Information									
	Cost Est. Date					Project Manager										
				Cost Est. So	ource	C	IP Nu	mber								
				Cost Est. Pr	epared By	D	escri	otion								
Cost Ty	ре		Fis	cal Year	Expens	е	Fring	e Benefit	Nor	nPersonne	(Comme	nt			
Construction			FY18	3-		\$166					FY18					
Unknown	rnown FY18-					\$36					FY16	16				
Unknown	known FY18-					\$111					FY17					
Prior Yr Actua	ior Yr Actuals FY19 FY20 FY21							FY23		FY24	FY25+	Toto	lc			
	r Yr Actuals FY19 FY20 FY 313												313			

Project Execution

GLWA FY 2020-2024 CIP

361001 CIP#

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 Closeout

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

361001 CIP#

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 Task Start Date Duration Fnd Date Scope Development Procurement Project Execution Project Closeout

361001 CIP#

Consolidated Process Control System Upgrades

Phase Budget	Wastewater					Cost Alloc	cation CTA		
Phase Status (Closed Out					Funding So	ource Bond	Proceeds	
Start Date							Fund Cons	truction Bor	nd Fund
End Date					U	seful Life >2	20Yrs? No		
Co	st Estimation I	nformation			Tot. Fede	eral Loan An	nount		\$0
	5	Cost Est. Cl	ass		Pro	gram/Allow	ance Task I	nformation	
		Cost Est. Do	ite	Project	Manager				
		Cost Est. So	urce	CIP Nu	mber				
		Cost Est. Pre	epared By	Descri	otion				
Prior Yr Actuals	FY19	FY20	FY21	FY22	FY23	FY24	FY25+	Total	
	C	0	0	0	0	0	0	0	

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

	<u> </u>									<u> </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	Project Status Closed		
☐ Water MP Right Sizi	ng CIP Type Project		
☐ Reliability/Redunda	ancy		
☐ NEWTP Repurposing	Project New To CIP \Box		
Project Engineer/Mana	ager Biren Saparia	Budget	Split
Mana	ager Biren Saparia	Class Lvl 1	Centralized Services
Managing I	Dept SCC	Class Lvl 2	Engineering
Date Original Business	Case Prepared	Class Lvl 3	General Purpose
Year Projec	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 - Pending Closeout		

361002 CIP#

Data Center Reliability/Availability Improvements

Phase not applicat	ole				С	ontract $$ $$	Α	State	us Closed	l Out	
Title Prior Year Act	ual Expens	es-WW									
Phase Budget Wo	astewater						Cost Alloc	cation CTA			
Phase Status Clo	osed Out						Funding So	ource			
Start Date								Fund			
End Date						L	Jseful Life >2	20Yrs?			
Cost	Estimation	Information				Tot. Fede	eral Loan An	nount			
	1	Cost Est. C	lass			Pro	gram/Allow	ance Task I	nformation		
		Cost Est. D	ate	Pı	roject	Manager					
		Cost Est. S	ource	С	IP Nui	mber					
		Cost Est. P	repared By	D	escrip	tion					
Cost Type	í	iscal Year	Expens	е	Fringe	Benefit No	nPersonne	С	omment		
Unknown	FY	18-		\$17			F	Y16			
Prior Yr Actuals	FY19	FY20	FY21	FY2	22	FY23	FY24	FY25+	Total		
17	,								17		

361002 CIP#

Data Center Reliability/Availability Improvements

nase Budget	Water					Cost Alloco	ation CTA		
Phase Status	Closed Out					Funding So	urce Reven	ue Financed	Capital
Start Date						I	Fund Improv	ement & Ext	ension Fun
End Date					U	seful Life >20	Yrs? No		
Co	st Estimation	Information			Tot. Fede	ral Loan Am	ount		\$0
	5 Cost Est. Class				Prog	gram/Allowo	ance Task In	formation	
		Cost Est. Do	ate	Project	Manager				
		Cost Est. So	urce	CIP Nu	mber				
		Cost Est. Pre	epared By	Descri	otion				
Prior Yr Actual	s FY19	FY20	FY21	FY22	FY23	FY24	FY25+	Total	

361002 CIP#

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 **End Date** Duration Scope Development Procurement Project Execution Project Closeout

361002 CIP#

Data Center Reliability/Availability Improvements

Phase Design a	nd Build			Conti	ract D\	VS-881	Status	Closed Out		
fitle DWS-881 [Data Center	Reliability/Av	ailability Impr	ovements: WW						
Phase Budget	Wastewater	ŗ				Cost Allocation	СТА			
Phase Status	Closed Out					Funding Source	Revenue	e Financed Capital		
Start Date		1/29	2/2013			Fund	Improvement & Extension Fun			
End Date		2/27	7/2016		U	seful Life >20Yrs?	No			
C	ost Estimatio	n Information		To	ot. Fede	ral Loan Amount				
	1	Cost Est. (Class		Prog	gram/Allowance	Task Info	ormation		
		Cost Est. I	Date	Project Ma	nager					
		Cost Est. S	Source	CIP Numbe	er					
		Cost Est. F	Prepared By	Description	1		<u> </u>			
Task	(Start Date	End Date	Duration						
Scope Develop	ment									
Procurement										
Project Executio	n									
Project Closeou	ıt									

Data Center Reliability/Availability Improvements

Phase not applic Iitle Prior Year <i>A</i>		- - - - - - - - - - - - - - - - - - -	≥s-Wtr			(Contract	NA		Statu	us Closed	Out		
Phase Budget								Cost Al	location C	CTA				
Phase Status	Closed	Out						Funding	Source					
Start Date									Fund					
End Date								Useful Life	>20Yrs?					
Co	Cost Estimation Information					Tot. Federal Loan Amount								
	1 Cost Est. Class						Р	rogram/All	owance To	ask lı	nformation			
			Cost Est. D	ate	Project Manager									
			Cost Est. So	ource	C	IP Nu	ımber							,
			Cost Est. Pi	repared By	d By Description									
Cost Typ	oe	F	iscal Year	Expens		Fring	e Benefit	NonPersonn	ie	C	omment			
Jnknown									FY16					
Prior Yr Actual	S	FY19	FY20	FY21	FY2	22	FY23	FY24	FY25-	+	Total			
	16										16			
	Phase Total						FY (All fig	ures are in S	\$1,000's)					
Dr	oioct	Total	Evponsos	By EV Co	mpa	rod I	o Prior	CIDe (All (iduros d	ro i	n \$1 000's	٠)		

	11010	Ci ioiai i	-APCHISCS	, , , , , ,	ompare			ii iigoics	are iii q	1,000 3)	
CIP	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	Total
2018	6004	10							0	0	6,014
2019	0	33								0	33
2020	0	0	33	0	0	0	0	0	0	0	33



Explanation N/A - Pending Closeout

GLWA FY 2020-2024 CIP

SCADA Radio Network Upgrade

☐ Innovation	Project Status Closed		SCADA Mader StatesCorted Center Control Links 105 No. 4 (Select to States Control Center) (Select to States Control Center) (Select to States Control Center) (Select to States Control Center)
☐ Water MP Right Sizing	CIP Type Project		Rich Marine
☐ Reliability/Redundar☐ NEWTP Repurposing	Project New To CIP		HMUSCADA Master External Cointrol Points Fiber-cpics Dati-op Lessed line Prints
Project Engineer/Manag	ger Biren Saparia	Budget	Split
Manag	ger Biren Saparia	Class Lvl 1	Centralized Services
Managing De	ept SCC	Class Lvl 2	Engineering
Date Original Business (Case Prepared	Class Lvl 3	General Purpose
Year Project	Added to CIP 2009	Location	Multiple Counties
		Fund and Cost Center	
Project Significance N/	'A - Pending Closeout		
Scope of Work $\mathbb{N}/$	'A - Pending Closeout		
Challenges N/	'A - Pending Closeout		
Lookup Driver N/	'A - Pending Closeout		

SCADA Radio Network Upgrade

Phase not applicab	ole				(Contract	NA					
Title Prior Year Act	ual Expen	ses-WW										
Phase Budget Wo	ıstewater			Cost Allocation CTA								
Phase Status Clo	sed Out						Fu	ınding S	ource			
Start Date									Fund			
End Date							Usef	ul Life >2	20Yrs?			
Cost	stimation	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. P	repared By	D	escri	ption						
Cost Type		Fiscal Year	Expens	e	Fring	e Benefit	NonPe	ersonne	(Commen	it	
Unknown	F`	/ 18-		\$236				F	-Y17			
Unknown FY18-				\$255	\$255			F	Y16			
Unknown	F	/18-		\$362				F	Pre-Bifurcati	on		
Prior Yr Actuals	FY19	FY20	FY21	FY2	22	FY23		FY24	FY25+	Total		
853										8	53	

SCADA Radio Network Upgrade

ase Budget Wa	ter					Cost Alloc	cation CTA	4			
'hase Status Clo	se Status Closed Out					Funding Sc	ource Bor	nd Proce	eds		
Start Date							Fund Co	nstruction	n Bond Fund		
End Date					U	seful Life >2	OYrs? Yes				
Cost E	stimation	nformation			Tot. Fede	ral Loan An	nount			\$0	
	5	Cost Est. Cl	ass		Prog	ance Tasl	Task Information				
		Cost Est. Do	ıte	Project	Manager						
		Cost Est. So	urce	CIP Number							
		Cost Est. Pre	epared By	Descri	otion						
Prior Yr Actuals	FY19	FY20	FY21	FY22	FY23	FY24	FY25+	Toto	lc		

SCADA Radio Network Upgrade

Phase not applic	cabl	е				(Contract	NA	\	Sta	tus	Closed	Out	
Title Prior Year <i>i</i>	Actu	al Expense	s-Wtr											
Phase Budget	Wat	er							Cost Allo	cation CTA				
Phase Status	Clos	ed Out							Funding S	ource				
Start Date										Fund				
End Date								Us	seful Life >2	20Yrs?				
Co	ost Es	stimation Ir	nformation				Tot. Fe	der	al Loan Aı	mount				
		1	Cost Est. C	lass			P	rog	ram/Allov	vance Task	Infor	mation		
			Cost Est. D	ate	Р	Project Manage		er						
			Cost Est. So	ource	C	IP Nu	ımber							
			Cost Est. Pr	epared By	D	escri	ption							
Cost Typ	ре	Fi	scal Year	Expens	е	Fring	e Benefill	Von	Personne	(Comr	ment		
Unknown		FY1	8-		\$251				f	Y16				
Unknown		FY1	8-		\$216				F	Y17				
Prior Yr Actua	ls	FY19	FY20	FY21	FY2	22	FY23		FY24	FY25+	To	otal		
4	467											467		



Project Closeout

Prior Yr Actuals

1/3/2017

FY20

0

FY19

0

4/3/2017

0

FY21

GLWA FY 2020-2024 CIP

SCADA Radio Network Upgrade

FY24

0

FY25+

0

Total

0

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

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

FY23

0

90

0

FY22



SCADA Radio Network Upgrade

Phase Design and Build			Co	ntract D	WS-882	Status	Closed Out				
Title DWS-882 SCADA Ro	adio Network Upç	grade: Waste	water								
Phase Budget Wastewe	ater		Cost Allocation CTA								
Phase Status Closed (Dut				Funding Source	Bond Pr	oceeds				
Start Date	3/26	5/2013			Fund	Constru	ction Bond Fund				
End Date	9/30)/2016		U	seful Life >20Yrs?	Yes					
Cost Estimo	ition Information			Tot. Fede	ral Loan Amount						
1	Cost Est. (Class		Prog	gram/Allowance	Task Info	ormation				
	Cost Est. I	Date	Project <i>N</i>	Manager							
	Cost Est. S	Source	CIP Num	ber							
	Cost Est. I	Prepared By	Descript	ion							
Task	Start Date	End Date	Duration								
Scope Development	oran Bare	2.10 2 010	Beraneri								
Procurement											
Project Execution											

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	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

380400 CIP#

As-needed CIP Implementation Assistance and Related Services

Innovation
Water MP Right Sizing
Reliability/Redundancy
NEWTP Repurposing

Project Status Active

CIP Type Allowance

Project New To CIP \Box

Make a Plan



Project Engineer/Manager Gaylor Johnson / Dan Edwards

Manager Ali Khraizat

Managing Dept WW Design Eng

Date Original Business Case Prepared

Year Project Added to CIP 2002

Budget Split

Class Lvl 1 Centralized Services

Class Lvl 2 Programs

Class Lvl 3 Programs

Location Multiple Counties

Fund and Cost Center Wastewater - 5421-892111

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.

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.

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 Desi	gn and Construction Assistance	Contract CS-166	Status Cancelled
-----------------------------	--------------------------------	-----------------	------------------

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.

Cost Estimation Information					
End Date					
Start Date					
Phase Status	Cancelled				
i ilase boagei	wasiewalei				

Phase Rudget Wastowator

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

	9,
Project Manager	Ali Khraizat
CIP Number	380402
Description	The purpose of this proposed contract is to

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

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 BenefitN	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

lase GLWA Employ le GLWA Salaries	C	Contract N	4	Stati	us Cancel	led			
Phase Budget Wat	er					Cost Alloc	ation CTA		
Phase Status Can			Funding Sc	ource Rever	nue Finance	ed Capital			
Start Date		Fund Improvement & Extension							
End Date		U	seful Life >2	OYrs? No					
Cost Estimation Information					Tot. Fede	ral Loan Am	nount		\$0
Cost Est. Class Cost Est. Date Cost Est. Source Cost Est. Prepared By			Project CIP Nu Descrip	Manager mber	gram/Allow	ance Task II	nformation		
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 FY24 FY25+ Total 0 0

380400 CIP#

As-needed CIP Implementation Assistance and Related Services

Status Closed Out Phase not applicable Contract NA Prior Year Actual Expenses-WW As needed contract. Accumulated task expenditures reclassed to projects or O&M - \$(-105K) Phase Budget Wastewater 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 FY24 FY25+ Total 0 0



380400 CIP#

As-needed CIP Implementation Assistance and Related Services

Phase Budget Wastew		Cost Allocation CTA					
Phase Status Closed Out				Funding Source R			Revenue Financed Capital
Start Date 3/24/2006					Fund	Improve	ment & Extension Fur
End Date 7/24/2017				Useful Life >20Yrs? No			
Cost Estim	Tot. Federal Loan Amount						
1 Cost Est. Class			Program/Allowance Task Information				ormation
	Cost Est. I	Date	Project A	Nanager			
	Cost Est. S	Source	CIP Number 380401		380401		
	Cost Est. I	Prepared By	Descripti	on			
Task	Start Date	End Date	Duration				
ope Development							
ope Development ocurement							
· · · · · · · · · · · · · · · · · · ·							

As-needed CIP Implementation Assistance and Related Services

Phase Study and Design and Construction Assistance

Contract CS-166

Status Cancelled

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 contractina.

	Odiroono	O G,	
Start Date			
End Date			
Co	ost Estimo	ation Information	
	1	Cost Est. Class	
		Cost Est. Date	
		Cost Est. Source	
		Cost Est. Prepared	Ву

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

Project Manager	Grant Gartrell
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 and monitoring; third party contract administration/oversight assistance/scheduling

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.

Ε									
	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)

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 Size☐ Reliability/Redunct☐ NEWTP Repurposing	dancy Project New To CIP	Example of pipe being laid	
Project Engineer/Mai	nager Beena Chackunkal	Budget Split	
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 2004	Location Multiple Counties	
		Fund and Cost Center	
Project Significance	Various engineering as needed services for des	sign and replacement of aging water and sewer lines.	
·	water mains and sewers throughout the system	lateral sewer replacement projects for aging and dysfunctional and several projects at the WRRF under different tasks on an astural, architectural, hydraulics, mechanical, electrical, surveying,	
Lookup Driver	N/A - Active		

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

hase GLWA Emp	•	Projec	t managen	nent		Con	tract N.	Α	Sta	tus Pend	ding Close-	out
itle GLWA Salaı	ries											
Phase Budget \	Water							Cost Alloc	cation CTA			
Phase Status	Pending	Close	-out					Funding S	ource Reve	enue Fina	nced Capi	tal
Start Date									Fund Impr	ovement	& Extension	n Fun
End Date							U	Jseful Life >2	20Yrs? No			
Cos	st Estimo	ation Ir	nformation			1	ot. Fede	eral Loan Ar	nount			\$0
	Cost Est. C	lass	Program/Allowance Task Information									
			Cost Est. Do	ate	Р	roject Mo	anager					
			Cost Est. So	ource	CIP Number							
			Cost Est. Pr	epared By	D	escriptio	n					
Cost Typ	e e	Fi	scal Year	Expens	е	Fringe Be	enefilNo	nPersonne		Comment	t	
GLWA Salaries Cl	P2020	FY1	9	·	\$0	_	0	0				
GLWA Salaries Cl	P2020	FY2	0		\$0		0	0				
Prior Yr Actuals	s F	Y19	FY20	FY21	FY2	22	FY23	FY24	FY25+	Total		
		0	0	0		0	0	0	0		0	

380500 CIP#

Wastewater General Engineering Services on an As-needed Basis

Phase not appli	cable				Contract NA					tus Closed	Out	
Title Prior Year	Actual	Expense	es-Wtr									
As needed con	tract.	Accumu	ulated task e	expenditures	recla	ssed t	o projects	or O&M - \$(-	-132K)			
Phase Budget	Water				Cost Allocation CTA							
Phase Status	Closed	d Out						Funding S	ource			
Start Date									Fund			
End Date								Useful Life >2	20Yrs?			
Co	ost Estir	mation Ir	nformation				Tot. Fed	eral Loan Ar	mount			
	1 Cost Est. Class		lass			Pro	ogram/Allow	ance Task	Information			
			Cost Est. D	ate	Project Manager							
			Cost Est. So	ource	С	IP Nu	mber					
			Cost Est. Pr	epared By	D	escrip	otion					
Cost Ty	pe	Fi	scal Year	Expens	e	Fringe	e BenefitNo	onPersonne	(Comment		
Engineering Serv	vices	FY1	8-		\$132			F	Y16			
Prior Yr Actua	ls	FY19	FY20	FY21	FY2	22	FY23	FY24	FY25+	Total		
	0									0		

380500 CIP#

Wastewater General Engineering Services on an As-needed Basis

'hase not applicable			(Contract N	A	210	itus Closed Ou	ſ
Title Prior Year Actual Expe	enses-WW							
\$148K FY18 (380501) Backe	d out due to re	classificatio	n to O&M					
Phase Budget Wastewate	er				Cost Alloc	cation CTA		
Phase Status Closed Out	<u> </u>				Funding S	ource		
Start Date						Fund		
End Date				ι	Jseful Life >2	20Yrs?		
Cost Estimation	n Information			Tot. Fede	eral Loan Ar	mount		
1	Cost Est. C	lass		Pro	gram/Allow	ance Task	Information	
	Cost Est. D	ate	Projec	t Manager				
	Cost Est. So	ource	CIP Nu	ımber				
	Cost Est. Pi	repared By	Descri	ption				
Cost Type	Fiscal Year	Expens	e Fring	e BenefitNo	nPersonne	(Comment	
Engineering Services	FY18-		\$148		F	Y16		
Prior Yr Actuals FY19	P FY20	FY21	FY22	FY23	FY24	FY25+	Total	
0							0	

Prior Yr Actuals

FY19

0

FY20

0

FY21

0

GLWA FY 2020-2024 CIP

380500 CIP#

Wastewater General Engineering Services on an As-needed Basis

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

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

380501 - Currently most of the tasks are for Wastewater projects. Phase Budget Wastewater Cost Allocation CTA Phase Status Pending Close-out Funding Source Revenue Financed Capital Start Date 5/12/2010 Fund Improvement & Extension Fun 6/2/2018 Useful Life >20Yrs? No **End Date** Tot. Federal Loan Amount **Cost Estimation Information Program/Allowance Task Information** Cost Est. Class **Project Manager** Ali Khraizat Cost Est. Date **CIP Number** 380501 Cost Est. Source Contract Description Cost Est. Prepared By Fiscal Year Fringe Benefit NonPersonne Cost Type Expense Comment **Engineering Services** FY19 \$0 **Engineering Services** \$0 FY20 Task Start Date **End Date** Duration Scope Development Procurement **Project Execution** Project Closeout 1/9/2020 3/9/2020 60

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

0

FY23

0

FY24

0

FY25+

0

Total

0

FY22



380500 CIP#

Wastewater General Engineering Services on an As-needed Basis

hase Budget Water		Cost A	Illocation CTA			
Phase Status Pending (Close-out	Fundin	g Source Revenue Financed	Revenue Financed Capital		
Start Date	Start Date 5/12/2010		Fund Improvement & Ext	mprovement & Extension Fun		
End Date 6/2/2018 Cost Estimation Information		Useful Life	e >20Yrs? No	No		
		Tot. Federal Loan	n Amount	\$0		
1	Cost Est. Class	Program/Al	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 Sizi	CIP type Allowance							
☐ Reliability/Redunda	Project New To CIP							
Project Engineer/Man	ager Grant Gartrell	Budget Split						
Mane	ager Grant Gartrell	Class Lvl 1 Centralized Services						
Managing I	Dept Water Eng	Class Lvl 2 Programs						
Date Original Business	Case Prepared	Class LvI 3 Programs						
Year Projec	ct Added to CIP 2004	Location Multiple Counties						
		Fund and Cost Center						
Project Significance	Allowance for the study and design of critical p	rojects throughout the system prior to bidding and construction.						
Scope of Work	As-needed engineering services for water and	wastewater engineering.						
Challenges	N/A - Active							
Lookup Driver	N/A - Active							
Explanation	N/A - Active							

GLWA Great Lakes Water Authority

GLWA FY 2020-2024 CIP

As-Needed General Engineering Services

PM Weighted Score

39.8

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

RC Weighted Score

0

Score	Comment
	Score

380600 CIP#

As-Needed General Engineering Services

hase Budget Wa	stewater					Cost Alloc	ation CTA				
Phase Status Act	ive					Funding Sc	ource Reve	nue Finance	ed Capital		
Start Date							Fund Impre	ovement & E	xtension Fun		
End Date					U	seful Life >2	OYrs? No	? No			
Cost E	stimation In	formation			Tot. Fede	nount		\$0			
	5	Cost Est. Cl	ass	Program/Allowance Task Information							
		Cost Est. Do	ıte	Project	Manager						
		Cost Est. So	urce	CIP Nu	mber						
		Cost Est. Pre	epared By	Descrip	otion						
Prior Yr Actuals	FY19	FY20	FY21	FY22	FY23	FY24	FY25+	Total			
	0	0	0	0		0	0	10101			

As-Needed General Engineering Services

Phase not appli	cable				Contract NA			Sta	tus Closed	Out		
Title Prior Year <i>i</i>	Actual	Expense	es-WW									
\$157K FY18 (380	0601) B	acked o	ut to recond	cile LTD								
Phase Budget	Waste	water						Cost Alloc	cation CTA			
Phase Status	Closed Out							Funding S	ource			
Start Date	Date								Fund			
End Date	d Date						U	seful Life >2	20Yrs?			
Co	ost Estii	mation Ir	nformation				Tot. Fede	eral Loan Ar	mount			
		1	Cost Est. C	lass			Prog	gram/Allow	ance Task	Information		
			Cost Est. D	ate	Project Manager							
			Cost Est. So	ource	C	IP Nu	ımber					
			Cost Est. Pr	epared By	D	escri	ption					
Cost Ty	pe	Fi	scal Year	Expens	e	Fring	e BenefitNo	nPersonne	(Comment		
Unknown		FY1	8-		\$158			F	Y16			
Prior Yr Actua	ls 1	FY19	FY20	FY21	FY:	22	FY23	FY24	FY25+	Total		
	ı									'		



As-Needed General Engineering Services

Phase Design Contract CS-1432A Status Active

Title CS-1432A Water As-Needed Engineering Services

94

0

0

380601										
Phase Budget	Water					Cost Allo	cation	СТА		
Phase Status	Active			Funding Source Revenue Financed Capit						
Start Date	1/23/2008				Fund Improvement & Extension					
End Date	e 12/12/2018				Useful Life >20Yrs? No					
Co	Cost Estimation Information				Tot. Federal Loan Amount					
	5	Cost Est. C	lass	Program/Allowance Task Information						
		Cost Est. D	ate	P	roject Manage	r Beena Ch	iackun	ıkal		
		Cost Est. S	ource	C	CIP Number	380601				
		Cost Est. P	repared By	D	escription	Alfred Ber	nesh			
Cost Ty	pe	Fiscal Year	Expense)	Fringe Benefit	IonPersonne		Comment		
		EV.10		Φ Ω 4						

Cost Type		Fiscal Year	Expense	e Fring	Fringe Benefit NonPersonne		e Comment			
Engineering Services	s F	Y19		\$94						
Prior Yr Actuals	FY19	FY20	FY21	FY22	FY23	FY24	FY25+	Total		

0

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

0

0

0

94



As-Needed General Engineering Services

Phase Design Contract CS-1432A Status Active

Title CS-1432A Wastewater As-Needed Engineering Services

380601									
Phase Budget	Wastewater				Cost Allocation	СТА			
Phase Status	Active				Funding Source	Revenue Financed Capital			
Start Date			1/23/2008	Fund Improvement & Extension					
End Date			12/12/2018	Useful Life >20Yrs? No					
Co	ost Estim	ation lı	nformation	Tot. Federal Loan Amount					
	Ţ.	5	Cost Est. Class	Pro	gram/Allowance 1	Task Information			
			Cost Est. Date	Project Manager	Beena Chackunk	cal			
			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

hase not applicab	le				Contract NA Status Closed Out					Out		
itle Prior Year Actu	Jal Expe	enses-Wtr										
As needed contrac	ct. Acc	umulated task e	expenditures	reclo	issed	to projects	or 0&M - \$(-	-157K)				
Phase Budget Wat	ter						Cost Alloc	cation CTA				
Phase Status Clos	sed Ou	†					Funding S	ource				
Start Date								Fund				
End Date							Useful Life >2	20Yrs?				
Cost E	stimatio	on Information				Tot. Fed	leral Loan Ar	mount				
	1 Cost Est. Class						Program/Allowance Task Information					
		Cost Est. D	ate	Project Manager								
		Cost Est. So	ource	CIP Number								
		Cost Est. Pi	epared By	D)escri	ption						
Cost Type		Fiscal Year	Expense		Fring	e BenefitN	onPersonne	(Comment			
Jnknown	\$158				Y16							
Prior Yr Actuals	FY1	9 FY20	FY21	FY:	22	FY23	FY24	FY25+	Total			
1	1								1			
		Pl	nase Total Ex	penso	es By	FY (All figu	res are in \$1,	.000's)				
D	.17.1	al Evenones	D. FV C.			La Dui au C	ND - / All C.		:- ¢1 000l			

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	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 Siz☐ Reliability/Redunct☐ NEWTP Repurposir	dancy Project New To CIP	Example of testing being performed						
Project Engineer/Mar	nager Peter Fromm	Budget Water						
Mar	nager Grant Gartrell	Class Lvl 1 Centralized Services						
Managing	Dept Water Eng	Class Lvl 2 Programs						
Date Original Busines	s Case Prepared	Class Lvl 3 Programs						
Year Proje	ect Added to CIP 2006	Location Multiple Counties						
		Fund and Cost Center						
Project Significance	Design of Telegraph Rd, Wick Rd, Park-Merrir	nan, & Schoolcraft water main projects.						
·		the Telegraph Road, Wick Road, Park-Merriman, and Schoolcraft visions for the as-needed services associated with pipeline, and inspection.						
Challenges	N/A - Active							
Lookup Driver	N/A - Active							

380700 CIP#

As-Needed Geotechnical and Related Engineering Services

'hase not applicab	le				Contract	NA	Sto	atus Closed	Out		
Title Prior Year Actu	Jal Expense	s-Wtr									
As needed contrac	ct. Accumu	ılated task e	expenditures	reclass	ed to projec	ts or O&M (\$-115K)				
Phase Budget Wa	ter			Cost Allocation CTA							
Phase Status Clo	sed Out					Funding	g Source				
Start Date							Fund				
End Date						Useful Life	>20Yrs?				
Cost E	Cost Estimation Information				Tot. Federal Loan Amount						
	1 Cost Est. Class				I	Program/All	owance Task	Information			
		Cost Est. Do	ate	Pro	ject Manag	er					
		Cost Est. So	ource	CIP	Number						
		Cost Est. Pr	epared By	De	scription			-			
Cost Type	Fi	scal Year	Expens	e Fr	inge Benefit	NonPersonr	ne	Comment			
Unknown	FY1	8-		\$115			FY16				
Prior Yr Actuals	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

Phase Budget	Water			Cost Allocation	СТА	
Phase Status	Active			Funding Source	Revenue Financed Capital	
Start Date		4/8/2009		Improvement & Extension Fun		
End Date		4/8/2021	U	Jseful Life >20Yrs?	No	
Co	ost Estimati	on Information	Tot. Fede	eral Loan Amount		
	2	Cost Est. Class	Pro	gram/Allowance	Task Information	
		Cost Est. Date	Project Manager	Grant Gartrell		
		Cost Est. Source	CIP Number	380701		
		Cost Est. Prepared By	Description	Engineering Ser Soil Borings (CS-	vices, Concrete Testing and	

Cost Type		Fiscal Year	Expense	F	ringe	Benefill	VonPerso	nne	C	Comment	
Engineering Services	F	Y19	\$	620							
Task		Start 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	FY19	FY20	FY21	FY22		FY23	FY2	24	FY25+	Total	
	62	20 0	0		0		0	0	0	620	

380700 CIP#

As-Needed Geotechnical and Related Engineering Services

nase GLWA Em	. ,	ject managen	nent	C	Contract N	4	Statu	s Active		
le GLWA Sala Phase Budget						Cost Alloca	ition CTA			
Phase Status								ulo Einano	ad Capital	
L	ACTIVE					Funding Sou				
Start Date						ŀ	ina Impro	vement &	Extension Fun	
End Date					U	seful Life >20	Yrs? No			
Со	Cost Estimation Information				Tot. Federal Loan Amount					
	5	ass		Prog	gram/Allowa	nce Task Ir	formation			
		Cost Est. Do	ate	Project	Manager					
		Cost Est. Sc	urce	CIP Nu	mber					
		Cost Est. Pr	epared By	Descrip	otion					
Prior Yr Actual	s FY19	FY20	FY21	FY22	FY23	FY24	FY25+	Total		
		0 0	0	0	0	0	0	0		

As-Needed Geotechnical and Related Engineering Services

Phase not applic	cable					Contract	1A	Sta	tus Closed	Out	
Title Prior Year A	Actual Ex	xpense	s-WW								
\$115K FY18 (380	701) Bac	cked o	ut to recond	ile LTD							
Phase Budget	Wastew	ater					Cost Allo	cation CTA			
Phase Status	Closed (Out					Funding S	ource			
Start Date								Fund			
End Date							Useful Life >2	20Yrs?			
Co	st Estimo	ation In	nformation			Tot. Fed	eral Loan Aı	mount			
	1		Cost Est. C	ass		Pro	gram/Allov	vance Task	Information		
			Cost Est. De	ate	Pro	ject Manager					
			Cost Est. Sc	ource	CII	Number					
			Cost Est. Pr	epared By	De	scription					
Cost Typ	ре	Fis	scal Year	Expens	e F	ringe BenefilNo	onPersonne	(Comment		
Unknown		FY1	8-		\$115		Ī	-Y16			
Prior Yr Actual	s F	Y19	FY20	FY21	FY22	P FY23	FY24	FY25+	Total		
	0								0		
			Ph	nase Total Ex	(penses	By FY (All figu	es are in \$1	,000's)			

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

			<u> </u>							3 Y	,,,,,,	
С	IP.	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	Total
201	8		650	907	333	333	333			0	0	2,556
201	9	0	230	238	477	477	477	238			0	2,137
202	0	0	0	0	620	0	0	0	0	0	0	620

Lookup Driver N/A - Pending Closeout

Explanation N/A - Pending Closeout

GLWA FY 2020-2024 CIP

Geotechnical and Related Services on an As-Needed Basis

☐ Innovation☐ Water MP Right Sizin☐ Reliability/Redunda☐ NEWTP Repurposing	ncy Project New To CIP	Example of a pipe being laid	
Project Engineer/Mana	ger Grant Gartrell	Budget Sp	lit
Mana	ger Grant Gartrell	Class Lvl 1 Ce	entralized Services
Managing D	ept Water Eng	Class Lvl 2 Pro	ograms
Date Original Business	Case Prepared	Class LvI 3 Pro	ograms
Year Projec	t Added to CIP 2007	Location Mu	ultiple Counties
		Fund and Cost Center	
Project Significance A	s Needed geotechnical consulting services.		
-	ne work includes consultant services for geote dditional engineering/ technical services as r		asis. The work also provides for
Challenges \mathbb{N}	/A - Pending Closeout		

Geotechnical and Related Services on an As-Needed Basis

'hase not applicable			(Contract N	Α	Sta	tus Closed C)ut
Title Prior Year Actual Exp	oenses-Wtr							
As needed contract. Ac	cumulated task (expenditures	reclassed	to projects (or 0&M - \$(-	-82K)		
Phase Budget Water								
Phase Status Closed O	ut				Funding S	ource		
Start Date						Fund		
End Date				ι	Jseful Life >2	20Yrs? No		
Cost Estimat	tion Information			Tot. Fede	eral Loan Ar	mount		
1	Cost Est. C	lass		Pro	gram/Allow	ance Task	Information	
	Cost Est. D	ate	Projec	t Manager				
	Cost Est. So	ource	CIP Nu	ımber				
	Cost Est. P	repared By	Descri	ption				
Cost Type	Fiscal Year	Expense	e Fring	e BenefitNo	nPersonne	(Comment	
Unknown	FY18-		\$82		F	Y16		
Prior Yr Actuals FY	19 FY20	FY21	FY22	FY23	FY24	FY25+	Total	
0							0	

Geotechnical and Related Services on an As-Needed Basis

Phase Design				С	ontract C	:S-1490	Sta	tus Pendin	g Close-out	
Title CS-1490: NTH	Consultan	ts: As-Neede	d Geotechn	ical Service	s:Wtr					
Phase Budget Wa	ter					Cost Allo	cation CTA			
Phase Status Per	nding Clos	e-out				Funding S	ource Reve	enue Financ	ed Capital	
Start Date		1/14,	/2010				Fund Impr	ovement &	Extension Fun	
End Date		7/14	/2016	Useful Life >20Yrs? No						
Cost E	stimation	Information			Tot. Federal Loan Amount					
	5	Cost Est. C	lass		Pro	gram/Allov	vance Task	Information		
	Cost Est. Date				Manager	Grant Ga	rtrell			
	Cost Est. Source			CIP Number 380801						
		Cost Est. P	repared By	Description As-Needed Ge		d Geotech	nical Service	es		
T 1		CL 1D 1	F 1D 1	D 1:						
Task	- -	Start Date	End Date	Duration						
Scope Developmer	1T									
Procurement										
Project Execution										
Project Closeout										
Prior Yr Actuals	FY19	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 Title 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				I					
	Prior Yr Actuals	FY19	FY20	FY21	FY22	FY23	FY24	FY25+	Total
		0							0



380800 CIP#

Geotechnical and Related Services on an As-Needed Basis

ect management	Contract NA	Status Pending Close-out
	Cost Allocation	CTA
se-out	Funding Source	Revenue Financed Capital
	Fund	Improvement & Extension Fun
	Useful Life >20Yrs?	No
Information	Tot. Federal Loan Amount	\$0
Cost Est. Class	Program/Allowance	Task Information
Cost Est. Date	Project Manager	
Cost Est. Source	CIP Number	
Cost Est. Prepared By	Description	
	Cost Est. Date Cost Est. Source	Cost Allocation Funding Source Fund Useful Life >20Yrs? Tot. Federal Loan Amount Cost Est. Class Cost Est. Date Cost Est. Source CIP Number

Geotechnical and Related Services on an As-Needed Basis

Phase not applied	able			(Contract N	Α	Sta	tus Closed	Out			
Title Prior Year A	ctual Expen	ses-WW										
\$82K FY18 (38080	1) Backed c	out to reconci	le LTD									
Phase Budget V	Vastewater					Cost Allo	cation CTA					
Phase Status	Closed Out					Funding S	ource					
Start Date							Fund					
End Date					ι	Jseful Life >	20Yrs? No					
Cos	st Estimation	Information			Tot. Fede	eral Loan A	mount					
	1	Cost Est. C	lass		Pro	gram/Allov	vance Task	Information				
		Cost Est. D	ate	Projec	t Manager							
		Cost Est. So	urce	urce	urce	CIP N	umber					
		Cost Est. Pr	epared By	Descr	iption							
Cost Typ	e	Fiscal Year	Expens	e Fring	ge BenefitNo	nPersonne	(Comment				
Unknown	FY	1 18-		\$82			=Y16					
Prior Yr Actuals	FY19	FY20	FY21	FY22	FY23	FY24	FY25+	Total				
	0							0				
		PI	nase Total Ex	kpenses By	FY (All figure	es are in \$1	,000's)					
Desc	to all Tala	LEvmanaa	D. FV Ca		La Dullau Ci	Do / All fin		:- ¢1 000!-	-)			

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

		<u> </u>				<u> </u>			4 11 4 11	,,,,,,	
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



Explanation N/A - Active

GLWA FY 2020-2024 CIP

General Engineering Services

☐ Innovation☐ Water MP Right Siz☐ Reliability/Redund☐ NEWTP Repurposin	dancy Project New To CIP	Analytical Lo	ab			
Project Engineer/Mai	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	s 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 service	s for various small scale pro	ojects at WTP and WRRF.			
Scope of Work	This project provides for rapid design turn-aroud disciplinary professional services including met		·			
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

Score	Comment
	Score

General Engineering Services

Phase not applical	ble				Contract NA Status Closed Out						
Title Prior Year Act	tual Expense	es-Wtr									
As needed contra	ict. Accumi	ulated task e	expenditures	reclas	sed to proje	ects o	r O&M - (\$-	75K)			
Phase Budget Wo	ater						Cost Alloc	cation CTA			
Phase Status Cl	osed Out						Funding S	ource			
Start Date								Fund			
End Date						Us	eful Life >2	OYrs?			
Cost	Estimation I	nformation									
	1	Cost Est. C	ass	Program/Allowance Task Information							
		Cost Est. Do	ate	Project Manager							
		Cost Est. So	ource	C	P Number						
		Cost Est. Pr	epared By	De	escription						
Cost Type	F	iscal Year	Expens	e l	- -ringe Bene	fitNor	Personne		Comment		
Unknown	FY1	8-		\$75			F	Y16			
Prior Yr Actuals	FY19	FY20	FY21	FY2	2 FY2	3	FY24	FY25+	Total		
С)								0		

380900 CIP#

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	СТА	
Phase Status P	ending Close	e-out	Funding Source	Revenue	e Financed Capital
Start Date		3/27/2008	Fund	Improve	ement & Extension Fun
End Date		3/27/2018	Useful Life >20Yrs?	No	
Cos	st Estimation I	nformation	Tot. Federal Loan Amount		\$0
	1	Cost Est. Class	Program/Allowance	Task Info	ormation
		Cost Est. Date	Project Manager		
		Cost Est. Source	CIP Number		
		Cost Est. Prepared By	Description		

380900 CIP#



General Engineering Services

Phase Study and Design and Construction Assistance Contract CS-1481 Status Pending Close-out

Title CS-1481 Sigma General Engineering Services

- 00	911101 0 01101	ar Enginoening	00111003									
Currently most o	of the proje	cts are for Was	ewater Serv	ices.								
Phase Budget	Wastewate	er			Cost Allocation CTA							
Phase Status	Pending C	lose-out			Funding Source Revenue Financed Capit							
Start Date		3/27/	2008		Fund Improvement & Extension Fund							
End Date		3/27/	2018			Useful Life >2	20Yrs? No					
Co	ost Estimatio	on Information			Tot. Federal Loan Amount							
	2	Cost Est. C	lass		P	rogram/Allov	vance Tas	k Information				
		Cost Est. D	ate	P	Project Manager Beena Chackunkal							
Contract		Cost Est. So	ource		CIP Number 380901							
		Cost Est. Pi	epared By	D	Description							
Cost Tu	0.0	Fished Voor	Evnons		Eringa Panafil	lon Dorsonno		Commont				
Cost Ty _l		Fiscal Year	Expense		Fringe Benefill	nomersome		Comment	_			
ngineering Serv	vices .	FY19		\$0								
Engineering Serv	vices .	FY20		\$0								

Task		Start Date	End Date	Duration					
Project Closeout		3/28/2021	5/27/2021	60	0				
Prior Yr Actuals	FY19	FY20	FY21	FY22	FY23	FY24	FY25+	Total	
		0 0	0	0	0	0	0	0	

General Engineering Services

Phase not applic	cable					Contract NA State					Out		
Title Prior Year A	Actual Exp	oense	s-WW										
\$63K FY18 (3809)	01) Backe	ed out	t to reconci	le LTD									
Phase Budget	Wastewa	ıter						Cost Alloc	cation CTA				
Phase Status	Closed O	ut						Funding S	ource				
Start Date									Fund				
End Date							U	seful Life >2	20Yrs?				
Со	st Estima	tion In	formation		Tot. Federal Loan Amount								
	1		Cost Est. C	lass			Pro	gram/Allow	ance Task	Information			
			Cost Est. D	ate	Project Manager								
			Cost Est. So	ource	C	IP Nu	ımber						
			Cost Est. Pr	epared By	D	escri	ption						
Cost Typ	эе	Fis	scal Year	Expens	e	Fring	e BenefitNo	nPersonne	(Comment			
Unknown		FY18	8-		\$63			F	Y16				
Prior Yr Actual	s FY	19	FY20	FY21	FY:	22	FY23	FY24	FY25+	Total			
	0									0			

380900 CIP#



General Engineering Services

hase GLWA Emplo He GLWA Salaries	•	oject manager	ment		C	Contract N	A	Stat	t us Pendir	ng Close-out
Phase Budget Wa	ter						Cost Alloc	cation CTA		
Phase Status Per	nding Cla	ose-out					Funding So	ource Reve	nue Financ	ced Capital
Start Date								Fund Impro	ovement &	Extension Fun
End Date						U	seful Life >2	OYrs? No		
Cost E	stimatio	n Information				Tot. Fede	eral Loan An	nount		\$0
	5	Cost Est. C	Class			Pro	gram/Allow	ance Task	Information	า
		Cost Est. D	ate	Р	roject	Manager				
		Cost Est. S	ource	CIP Number						
		Cost Est. P	repared By	D	escrip	otion				
Cost Type		Fiscal Year	Expens	e	Fringe	e BenefitNo	nPersonne	C	Comment	
GLWA Salaries CIP20	020 l	FY19		\$0		0	0			
GLWA Salaries CIP20	020	FY20		\$0		0	0			
Prior Yr Actuals	FY19	FY20	FY21	FY2	22	FY23	FY24	FY25+	Total	
		0 0	0		0	0	0	0	0	
		P	hase Total Ex	(pense	es By I	FY (All figure	es are in \$1,	000's)		
Proje	ect Toto	al Expenses	By FY Co	mna	red t	o Prior CI	Ps (All fig	ures 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

381000 CIP#

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	uild				Co	ontract N	A	Statu	s Future	Planned Start		
Title Energy Manag	gement:	Wtr - Electric	Metering Imp	orovem	ent Pi	rogram						
Phase Budget Wa	ter						Cost Alloc	cation CTA				
Phase Status Futu	ure Plann	ed Start					Funding S	ource Rever	nue Financ	ed Capital		
Start Date				Fund Improvement & Extension Fun								
End Date						L	seful Life >2	20Yrs? No				
Cost E	stimation	Information				Tot. Fede	eral Loan Ar	mount				
	1	Cost Est. C	lass			Pro	gram/Allow	rance Task lı	nformation			
		Cost Est. D	ate	Project Manager								
		Cost Est. S	ource	CI	P Nun	nber						
		Cost Est. P	repared By	De	escript	rion						
Cost Type		Fiscal Year	Expense	e F	ringe	BenefitNo	nPersonne	C	omment			
Design-Build	F'	Y25+	\$2	2,500			2	2020CIP				
Task		Start Date	End Date	Durc	ıtion							
Scope Developmer	nt	7/1/2018	9/30/2018		91							
Procurement		9/30/2019	12/25/2021		817							
Project Execution		12/25/2021	6/21/2028		2370							
Project Closeout		6/21/2028	9/19/2028		90)						
Prior Yr Actuals	FY19	FY20	FY21	FY22	2	FY23	FY24	FY25+	Total			
		0 0	0		0	0	0	2,500	2,500			

Energy Management: Electric Metering Improvement Program

Phase Design and B	Build				Con	tract N	A	Stat	rus Future	Planned Start		
Title Energy Manaç	gement:	WW - Electric	Metering Imp	orovem	ent Pro	gram						
Phase Budget Wastewater				Cost Allocation CTA								
Phase Status Future Planned Start							Funding Sc	Durce Reve	Revenue Financed Capital			
Start Date				Fund Improvement & Extension Fund								
End Date				Useful Life >20Yrs? No								
Cost E	stimation	Information			1	ot. Fede	eral Loan An	nount				
	1	Cost Est. C	lass			Pro	gram/Allow	ance Task	Information			
		Cost Est. D	ate	Project Manager								
		Cost Est. S	ource	CIP Number								
		Cost Est. P	repared By	Des	criptio	n						
Cost Type		Fiscal Year	Expense	e Fr	inge Be	enefitNo	nPersonne	C	Comment			
Design-Build	F	Y25+	\$2,	.500			2	020CIP				
Task		Start Date	End Date	Durat	ion							
Scope Developmer	n†	7/1/2018	9/30/2018		91							
Procurement		4/30/2019	12/25/2021		970							
Project Execution		12/25/2021	6/21/2028		2370							
Project Closeout		6/21/2028	9/19/2028		90							
Prior Yr Actuals	FY19	FY20	FY21	FY22		FY23	FY24	FY25+	Total			
		0 0	0		0	0	0	2,500	2,500			

Energy Management: Electric Metering Improvement Program

nase GLWA Em He GLWA Sala		ect managem	nent	C	Contract N	4	Status	Future Pl	anned Start	
tle GLWA Sala Phase Budget						Cost Alloc	ation CTA			
Phase Status	Future Planne	ed Start				Funding Sc	ource Bond P	Bond Proceeds		
Start Date							Fund Constru	Construction Bond Fund		
End Date					U	seful Life >2	OYrs? No			
Со	st Estimation	Information			Tot. Fede	ral Loan An	nount		\$ 0	
	5	Cost Est. CI	ass	Program/Allowance Task Information						
		Cost Est. Do	ate	Project	Manager					
	Cost Est. Source				mber					
		Cost Est. Pro	epared By	Descrip	otion					
Prior Yr Actuals	s FY19	FY20	FY21	FY22	FY23	FY24	FY25+	Total		
		0 0	0	0	0	0	0	0		
		Ph	ase Total Ex	penses By I	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)

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