



## Appendix C: Centralized Services Business Case Evaluations

Please consider the environment before printing this document.

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**CIP 331001: Roofing Systems Replacement at Water Plants and  
Booster Pump Stations**



# Roofing Systems Replacement at Water Plants and Booster Pump Stations

PROJECT SUMMARY

- Innovation
- MP Right Sizing
- System Reliability

Project Status

Future Planned

**Project Status Guide:**

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

Project Title **Roofing Systems Replacement at Water Plants and Booster Pump Stations**

**Project Significance** This CIP provides funds to replace roofing systems that are past their useful service life and thus too costly to repair. Sound roofing systems are important to protect the process infrastructure inside GLWA's buildings.

Year Added: 2014

CIP Type: Project

Date Original BCE Prepared: 6/26/2014

Budget: Water

Date BCE Last Updated: 10/6/2017

Project Classification Level 1: Centralized Services

Project Engineer/Manager: Paula Anderson

Project Classification Level 2: Facilities

Title: Manager

Project Classification Level 3: General Purpose

Phone: (313) 410-7600

Project Location: Multiple Counties

Email: paula.anderson@glwater.org

Fund:

Manager: Paula Anderson

Cost Center:

Managing Dept Water Eng

PROJECT INFORMATION

**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.

**Project History:** Majority of GLWA Water Plant facilities have Built-Up-Roof (BUR) membranes systems commonly referred as "tar and gravel" roofs. Majority of the more than 70 roofs, are over 15 years old and few are even older up to 30 years old. In many instances, inadequate roof system maintenance has been provided.

Driver: 1 - Condition

Challenges: Weather dependent and seasonal work. May require management of several construction projects simultaneously to complete the work. The project should include but, not be limited to the following, material testing for hazardous materials, thermal scans and condition analysis.

Other Important Info: \*Innovation note: use cool roofs



**Roofing Systems Replacement at Water Plants and Booster Pump Stations**

New CIP# **331001**

Old CIP# **1279**

Related Project: none



New CIP# **331001**

Old CIP# **1279**

### Roofing Systems Replacement at Water Plants and Booster Pump Stations

#### Phase Overview

Phase Title Roofing Systems Replacement at Water Plants and Booster Pump Stations

Phase Category: S/D/C

Budget: Water

Contract Number: NA

Phase Status: Future Planned Start

Start Date:

End Date:

Phase Cost Allocation: CTA

Phase Financial Source: DE

Lookup Cost Est Class:

Cost Estimation Date:

Cost Estimation Source:

Cost Estimation Prep By:

Useful Life > 20Yrs Yes

Comments:

**Study and Design and Construction**

#### PPAT (Phase Program/Allowance Task) Information

PPAT CIP Number

PPAT SOW

Change PPAT PM



**Roofing Systems Replacement at Water Plants and Booster Pump Stations**

New CIP# **331001**

Old CIP# **1279**

ALL PHASES TOTAL

FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
0	0	128	169	809	1,243	4,844

**Phase Tasks and Dates**

Phase Category	S/D/C
Budget	Water
Phase Status	Future Planned Start
Contract No	NA
Cost Est Class	

**Study and Design and Construction**

Task Name	Start Date	Duration	End Date
Scope Development	10/1/2018	91	12/31/2018
Procurement	12/31/2018	272	9/29/2019
Project Execution	9/29/2019	2793	5/23/2027
Project Closeout	5/23/2027	90	8/21/2027

**PROJECT PRIORITIZATION SCORING**



**Roofing Systems Replacement at Water Plants and Booster Pump Stations**

New CIP# **331001**

Old CIP# **1279**

**Project Manager Score**

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

**Project Manager Weighted Score**

**71.4**

**Review Committee Score**

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

**Review Committee Weighted Score**

**61**

Describe Here the Changes from the 2018 CIP to 2019 CIP

CIP Version	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	Total
2018		3,000	3,000	3,000	2,500					11,500
2019			0	0	128	169	809	1,243	4,844	7,193



**CIP 331002: Roofing Systems Replacement at GLWA WRRF, CSO  
Retention Treatment Basins (RTB) and Screening Disinfection  
Facilities (SDF)**



**Roofing Systems Replacement at GLWA WRRF, CSO Retention Treatment Basins (RTB) and Screening Disinfection Facilities (SDF)**

PROJECT SUMMARY

- Innovation
- MP Right Sizing
- System Reliability

Project Status

Future Planned

Project Status Guide:

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

**Project Title** Roofing Systems Replacement at GLWA WRRF, CSO Retention Treatment Basins (RTB) and Screening Disinfection Facilities (SDF)

**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.

Year Added: 2017

CIP Type: Project

Date Original BCE Prepared: 8/8/2016

Budget: Wastewater

Date BCE Last Updated: 9/21/2017

Project Classification Level 1: Wastewater

Project Engineer/Manager: Ali Khraizat

Project Classification Level 2: Programs

Title: Manager

Project Classification Level 3: General Purpose

Phone: (313) 297-8819

Project Location: Multiple Counties

Email: ali.khraizat@glwater.org

Fund:

Manager: Ali Khraizat

Cost Center:

Managing Dept WW Eng

PROJECT INFORMATION

**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.

**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



**Roofing Systems Replacement at GLWA WRRF, CSO Retention Treatment Basins (RTB) and Screening Disinfection Facilities (SDF)**

maintained through regular maintenance and repair or patch work performed to fix the leaking roof spots.

Driver: 1 - Condition

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.

Other Important Info: \*Innovation note: Use cool roofs.

Related Project: CON 143:Complex-II Incineration Building Roof Replacement.



### Roofing Systems Replacement at GLWA WRRF, CSO Retention Treatment Basins (RTB) and Screening Disinfection Facilities (SDF)

#### Phase Overview

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

Phase Category: C

Budget: Wastewater

Contract Number: NA

Phase Status: Future Planned Start

Start Date: 7/3/2020

End Date: 6/23/2022

Phase Cost Allocation: CTA

Phase Financial Source: DE

Lookup Cost Est Class:

Cost Estimation Date: 10/2/2017

Cost Estimation Source:

Cost Estimation Prep By: Ali Khraizat

Useful Life > 20Yrs Yes

Comments:

#### PPAT (Phase Program/Allowance Task) Information

PPAT CIP Number

PPAT SOW

Change PPAT PM



**Roofing Systems Replacement at GLWA WRRF, CSO Retention Treatment Basins (RTB) and Screening Disinfection Facilities (SDF)**

**Phase Overview**

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

Phase Category: S/D/CA

Budget: Wastewater

Contract Number: NA

Phase Status: Future Planned Start

Start Date: 11/8/2018

End Date: 6/23/2022

Phase Cost Allocation: CTA

Phase Financial Source: DE

Lookup Cost Est Class:

Cost Estimation Date:

Cost Estimation Source: Contract

Cost Estimation Prep By:

Useful Life > 20Yrs Yes

Comments:

**PPAT (Phase Program/Allowance Task) Information**

PPAT CIP Number

PPAT SOW

Change PPAT PM

**Phase Expenses**

CURRENT PHASE  BUDGET  Contract No

Phase Title  PPAT CIP Number  Phase Status

Expense Type	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
Construction				4,830	5,000		
Engineering Services							
GLWA Salaries			450	435			
Materials							
Other							

Current Phase Fringe Benefit Expenses	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	0	0	180	174	0	0	0



**Roofing Systems Replacement at GLWA WRRF, CSO Retention Treatment Basins (RTB) and Screening Disinfection Facilities (SDF)**

<b>Current Phase Non-Personnel Expenses</b>	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	0	0	22	22	0	0	0
<b>Current Phase Total</b>	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	0	0	652	5,461	5,000	0	0

<b>CURRENT PHASE</b>	<b>Study and Design and Construction Assistance</b>	<b>BUDGET</b>	<b>Wastewater</b>	Contract No	NA
Phase Title	Roofing Systems Replacement at GLWA Wastewater Treatment Plant CSO Retention Treatment Basins (RTB) and Screening Disinfection Facilities (SDF)	PPAT CIP Number		Phase Status	Future Planned Start

Expense Type	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
Construction							
Engineering Services		250	50	100	100		
GLWA Salaries		25	5	10	10		
Materials							
Other							

<b>Current Phase Fringe Benefit Expenses</b>	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	0	10	2	4	4	0	0
<b>Current Phase Non-Personnel Expenses</b>	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	0	1	0	0	0	0	0
<b>Current Phase Total</b>	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	0	286	57	114	114	0	0

<b>ALL PHASES TOTAL</b>	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	0	286	709	5,575	5,114	0	0

Phase Tasks and Dates				
Phase Category	C	<b>Construction</b>		
Budget	Wastewater			
Phase Status	Future Planned Start			
Contract No	NA			
Cost Est Class				
Task Name	Start Date	Duration	End Date	
Scope Development	3/9/2019	360	3/3/2020	
Procurement	3/4/2020	180	8/31/2020	



**Roofing Systems Replacement at GLWA WRRF, CSO Retention Treatment Basins (RTB) and Screening Disinfection Facilities (SDF)**

Task Name	Start Date	Duration	End Date
Project Execution	9/1/2020	720	8/22/2022
Project Closeout	8/22/2022	60	10/21/2022

Phase Category	S/D/CA
Budget	Wastewater
Phase Status	Future Planned Start
Contract No	NA
Cost Est Class	

**Study and Design and Construction Assistance**

Task Name	Start Date	Duration	End Date
Scope Development	1/1/2018	90	4/1/2018
Procurement	4/1/2018	220	11/7/2018
Project Execution	11/8/2018	1383	8/22/2022
Project Closeout	8/22/2022	60	10/21/2022

**PROJECT PRIORITIZATION SCORING**

**Project Manager Score**

Criteria	Score	Score Comment
Condition	4	Asset has <25% of its design serv
Performance (Service Level/Reli	4	Significant positive impact on sys
Regulatory (Environmental/Lega	4	Risk of non compliance in near t
O&M	2	Low impact on O&M
Public Health & Safety	2	Moderate positive impact
Public Benefit	1	Low impact on Public
Financial	2	Project will likely result in avoida
Efficiency and Innovation	1	low impact on energy use & con

**Project Manager Weighted Score**

**54.6**

**Review Committee Score**

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

**Review Committee Weighted Score**

**43.8**

Describe Here the Changes from the 2018 CIP to 2019 CIP

Estimated cost changed.

CIP Version	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	Total



New CIP#

Old CIP#

**Roofing Systems Replacement at GLWA WRRF, CSO Retention Treatment Basins (RTB) and Screening Disinfection Facilities (SDF)**

CIP Version	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	Total
2019			0	286	709	5,575	5,114	0	0	11,684



## **CIP 351001: Water Facility Lighting Renovations**



### Water Facility Lighting Renovations

PROJECT SUMMARY

- Innovation
- MP Right Sizing
- System Reliability

Project Status

Active

**Project Status Guide:**

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

Project Title

**Water Facility Lighting Renovations**

**Project Significance** Energy savings, demand reduction improved visibility, safety, operational efficiency and worker productivity

**Year Added:** 2017

**CIP Type:** Project

**Date Original BCE Prepared:** 8/4/2016

**Budget:** Water

**Date BCE Last Updated:** 9/22/2017

**Project Classification Level 1:** Centralized Services

**Project Engineer/Manager:** Shaker Manns

**Project Classification Level 2:** Energy Management

**Title:** Energy Program Manager

**Project Classification Level 3:** General Purpose

**Phone:** (313) 910-6156

**Project Location:** Multiple Counties

**Email:** shaker.manns@glwater.org

**Fund:**

**Manager:** Shaker Manns

**Cost Center:**

**Managing Dept** Systems Planning

PROJECT INFORMATION

**Scope of Work:** Remove identified old fixtures and replace with new LED lamps and advanced control systems.

**Project History:** An audit was completed in 2010/2011 but little action was taken. Advancement in lighting technology since this audit has rendered it obsolete as to recent innovations, technology and cost. Across the system, equipment is in poor condition and exceeds its end of life. Some existing fixtures are antiques and compared to today's lighting, cannot meet minimum lighting standards.

A well detailed audit is to be carried out to determine the best suitable replacement lamps based on a set performance criteria, lighting controls to be incorporated and in cases where delamping might be an option, equivalent/appropriate lighting output and level is to be maintained per task/space requirements

**Driver:** 8 - Efficiency

**Challenges:** Some outfalls are below the river elevation; installation may be challenging.

**Other Important Info:** n/a

**Related Project:** Re lamp of Conner Creek and part of Northeast for safety issues.



**Water Facility Lighting Renovations**

New CIP# **351001**

Old CIP# **1366**



### Water Facility Lighting Renovations

New CIP# **351001**

Old CIP# **1366**

#### Phase Overview

Phase Title Water Facility Lighting Renovations

Phase Category: DB

Budget: Water

Contract Number: NA

Phase Status: Active

Start Date: 5/24/2016

End Date:

Phase Cost Allocation: CTA

Phase Financial Source: I&E

Lookup Cost Est Class:

Cost Estimation Date:

Cost Estimation Source:

Cost Estimation Prep By:

Useful Life > 20Yrs Yes

Comments:

#### Design and Build

#### PPAT (Phase Program/Allowance Task) Information

PPAT CIP Number

PPAT SOW

Change PPAT PM



**Water Facility Lighting Renovations**

New CIP# **351001**

Old CIP# **1366**

**ALL PHASES TOTAL**

FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
2	1,172	1,600	0	0	0	0

**Phase Tasks and Dates**

Phase Category	DB
Budget	Water
Phase Status	Active
Contract No	NA
Cost Est Class	

**Design and Build**

Task Name	Start Date	Duration	End Date
Scope Development	5/21/2017	40	6/30/2017
Procurement	8/8/2017	150	1/5/2018
Project Execution	1/5/2018		
Project Closeout			

**PROJECT PRIORITIZATION SCORING**



**Water Facility Lighting Renovations**

New CIP# **351001**

Old CIP# **1366**

**Project Manager Score**

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

**Project Manager Weighted Score**

**77.4**

**Review Committee Score**

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

**Review Committee Weighted Score**

**60.8**

Describe Here the Changes from the 2018 CIP to 2019 CIP

CIP Version	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	Total
2018			933	933	933					2,799
2019			2	1,172	1,600	0	0	0	0	2,774

## CIP 361001: Consolidated Process Control System Upgrades



New CIP# **361001**

Old CIP# **1153**

### Consolidated Process Control System Upgrades

PROJECT SUMMARY

- Innovation
- MP Right Sizing
- System Reliability

Project Status

Pending Closeout

**Project Status Guide:**

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

Project Title

**Consolidated Process Control System Upgrades**

**Project Significance** Provide reliability, redundancy and improved functionality to department-wide Process Control System.

**Year Added:** 2006

**CIP Type:** Project

**Date Original BCE Prepared:**

**Budget:** Split

**Date BCE Last Updated:** 8/28/2017

**Project Classification Level 1:** Centralized Services

**Project Engineer/Manager:** Biren Saparia

**Project Classification Level 2:** Engineering

**Title:** Field Services Director

**Project Classification Level 3:** General Purpose

**Phone:** (313) 267-8977

**Project Location:** City of Detroit

**Email:** Biren.Saparia@glwater.org

**Fund:**

**Manager:** Biren Saparia

**Cost Center:** 882301

**Managing Dept** SCC

PROJECT INFORMATION

**Scope of Work:** This project involves integrating the control and monitoring network throughout all of the facilities with the new SCADA system installed under PC-713. The work includes control system hardware, software, and firmware upgrade or replacement, troubleshooting, installation, start-up, testing, and repair services.

Project History:

**Driver:** N/A - Pending Closeout

**Challenges:** N/A - Pending Closeout

**Other Important Info:**

**Related Project:**





### Consolidated Process Control System Upgrades

#### Phase Overview

Phase Title PC-773C Consolidated Process Control System Upgrades

Phase Category: DB

Design and Build

Budget: Water

Contract Number: PC-773C

Phase Status: Pending Close-out

Start Date: 5/25/2013

End Date: 5/25/2016

Phase Cost Allocation: CTA

Phase Financial Source: DE

Lookup Cost Est Class:

Cost Estimation Date: 9/15/2017

Cost Estimation Source: Contractor

Cost Estimation Prep By: Biren Saparia

Useful Life > 20Yrs Yes

Comments:

#### PPAT (Phase Program/Allowance Task) Information

PPAT CIP Number

PPAT SOW

Change PPAT PM

#### Phase Overview

Phase Title PC-773D Consolidated Process Control System Upgrades

Phase Category: DB

Design and Build

Budget: Wastewater

Contract Number: PC-773D

Phase Status: Pending Close-out

Start Date: 5/25/2013

End Date: 5/22/2016

Phase Cost Allocation: CTA

Phase Financial Source: DE

Lookup Cost Est Class:

Cost Estimation Date: 9/15/2017

Cost Estimation Source: Contractor

Cost Estimation Prep By: Biren Saparia

Useful Life > 20Yrs Yes

Comments:

#### PPAT (Phase Program/Allowance Task) Information

PPAT CIP Number

PPAT SOW

Change PPAT PM



**Consolidated Process Control System Upgrades**

New CIP# **361001**

Old CIP# **1153**

**Phase Expenses**

CURRENT PHASE	<b>Design and Build</b>	BUDGET	<b>Water</b>	Contract No	PC-773C
Phase Title	PC-773C Consolidated Process Control System Upgrades	PPAT CIP Number		Phase Status	Pending Close-out

Expense Type	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
Construction							
Engineering Services							
GLWA Salaries							
Materials							
Other							

<b>Current Phase Fringe Benefit Expenses</b>	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	0	0	0	0	0	0	0

<b>Current Phase Non-Personnel Expenses</b>	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	0	0	0	0	0	0	0

<b>Current Phase Total</b>	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	0	0	0	0	0	0	0



**Consolidated Process Control System Upgrades**

CURRENT PHASE **Design and Build** BUDGET **Wastewater** Contract No **PC-773D**

Phase Title **PC-773D Consolidated Process Control System Upgrades** PPAT CIP Number  Phase Status **Pending Close-out**

Expense Type	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
Construction							
Engineering Services							
GLWA Salaries							
Materials							
Other							

	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
<b>Current Phase Fringe Benefit Expenses</b>	0	0	0	0	0	0	0
<b>Current Phase Non-Personnel Expenses</b>	0	0	0	0	0	0	0
<b>Current Phase Total</b>	0	0	0	0	0	0	0

ALL PHASES TOTAL	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0

**Phase Tasks and Dates**

Phase Category **DB**  
 Budget **Wastewater**  
 Phase Status **Pending Close-out**  
 Contract No **PC-773D**  
 Cost Est Class

**Design and Build**

Task Name	Start Date	Duration	End Date
Scope Development			
Procurement			
Project Execution			
Project Closeout			



**Consolidated Process Control System Upgrades**

Phase Category	DB
Budget	Water
Phase Status	Pending Close-out
Contract No	PC-773C
Cost Est Class	

**Design and Build**

Task Name	Start Date	Duration	End Date
Scope Development			
Procurement			
Project Execution			
Project Closeout			

**PROJECT PRIORITIZATION SCORING**

**Project Manager Score**

Criteria	Score	Score Comment
Condition		
Performance (Service Level/Reli)		
Regulatory (Environmental/Lega)		
O&M		
Public Health & Safety		
Public Benefit		
Financial		
Efficiency and Innovation		
<b>Project Manager Weighted Score</b>		

**Review Committee Score**

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

Describe Here the Changes from the 2018 CIP to 2019 CIP

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

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

## **CIP 361002: Data Center Reliability/Availability Improvements**



New CIP# **361002**

Old CIP# **1206**

**Data Center Reliability/Availability Improvements**

PROJECT SUMMARY

- Innovation
- MP Right Sizing
- System Reliability

Project Status

Pending Closeout

**Project Status Guide:**

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

Project Title

**Data Center Reliability/Availability Improvements**

Project Significance N/A - Pending Closeout

Year Added: 2009

Date Original BCE Prepared:

Date BCE Last Updated: 10/1/2017

Project Engineer/Manager: Biren Saparia

Title: Field Services Director

Phone: (313) 267-8977

Email: Biren.Saparia@glwater.org

Manager: Biren Saparia

Managing Dept SCC

CIP Type: Project

Budget: Split

Project Classification Level 1: Centralized Services

Project Classification Level 2: Engineering

Project Classification Level 3: General Purpose

Project Location: City of Detroit

Fund:

Cost Center:

PROJECT INFORMATION

Scope of Work: N/A - Pending Closeout

Project History:

Driver: N/A - Pending Closeout

Challenges: N/A - Pending Closeout

Other Important Info:

Related Project:



Data Center Reliability/Availability Improvements

Phase Overview

Phase Title DWS-881 Data Center Reliability/Availability Improvements

Phase Category: DB

Design and Build

Budget: Water

Contract Number: DWS-881

Phase Status: Pending Close-out

Start Date: 1/29/2013

End Date: 2/27/2016

Phase Cost Allocation: CTA

Phase Financial Source: DE

Lookup Cost Est Class:

Cost Estimation Date: 9/15/2017

Cost Estimation Source: Contractor

Cost Estimation Prep By: Biren Saparia

Useful Life > 20Yrs No

Comments:

PPAT (Phase Program/Allowance Task) Information

PPAT CIP Number

PPAT SOW

Change PPAT PM

Phase Overview

Phase Title DWS-881 Data Center Reliability/Availability Improvements

Phase Category: DB

Design and Build

Budget: Wastewater

Contract Number: DWS-881

Phase Status: Pending Close-out

Start Date: 1/29/2013

End Date: 2/27/2016

Phase Cost Allocation: CTA

Phase Financial Source: DE

Lookup Cost Est Class:

Cost Estimation Date:

Cost Estimation Source:

Cost Estimation Prep By:

Useful Life > 20Yrs No

Comments:

PPAT (Phase Program/Allowance Task) Information

PPAT CIP Number

PPAT SOW

Change PPAT PM



**Data Center Reliability/Availability Improvements**

**Phase Expenses**

CURRENT PHASE	<input type="text" value="Design and Build"/>	BUDGET	<input type="text" value="Water"/>	Contract No	<input type="text" value="DWS-881"/>
Phase Title	<input type="text" value="DWS-881 Data Center Reliability/Availability Improvements"/>	PPAT CIP Number	<input type="text"/>	Phase Status	<input type="text" value="Pending Close-out"/>

Expense Type	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
Construction							
Engineering Services							
GLWA Salaries							
Materials							
Other							

<b>Current Phase Fringe Benefit Expenses</b>	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	0	0	0	0	0	0	0

<b>Current Phase Non-Personnel Expenses</b>	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	0	0	0	0	0	0	0

<b>Current Phase Total</b>	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	0	0	0	0	0	0	0





**Data Center Reliability/Availability Improvements**

CURRENT PHASE **Design and Build** BUDGET **Wastewater** Contract No **DWS-881**

Phase Title **DWS-881 Data Center Reliability/Availability Improvements** PPAT CIP Number  Phase Status **Pending Close-out**

Expense Type	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
Construction							
Engineering Services							
GLWA Salaries							
Materials							
Other							
<b>Current Phase Fringe Benefit Expenses</b>	<b>FY18</b>	<b>FY19</b>	<b>FY20</b>	<b>FY21</b>	<b>FY22</b>	<b>FY23</b>	<b>FY24 and Beyond</b>
	0	0	0	0	0	0	0
<b>Current Phase Non-Personnel Expenses</b>	<b>FY18</b>	<b>FY19</b>	<b>FY20</b>	<b>FY21</b>	<b>FY22</b>	<b>FY23</b>	<b>FY24 and Beyond</b>
	0	0	0	0	0	0	0
<b>Current Phase Total</b>	<b>FY18</b>	<b>FY19</b>	<b>FY20</b>	<b>FY21</b>	<b>FY22</b>	<b>FY23</b>	<b>FY24 and Beyond</b>
	0	0	0	0	0	0	0

ALL PHASES TOTAL	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0

Phase Tasks and Dates	
Phase Category	DB
Budget	Wastewater
Phase Status	Pending Close-out
Contract No	DWS-881
Cost Est Class	
<b>Design and Build</b>	
Task Name	Start Date    Duration    End Date
Scope Development	
Procurement	
Project Execution	
Project Closeout	



**Data Center Reliability/Availability Improvements**

Phase Category	DB
Budget	Water
Phase Status	Pending Close-out
Contract No	DWS-881
Cost Est Class	

**Design and Build**

Task Name	Start Date	Duration	End Date
Scope Development			
Procurement			
Project Execution			
Project Closeout			

**PROJECT PRIORITIZATION SCORING**

**Project Manager Score**

Criteria	Score	Score Comment
Condition		
Performance (Service Level/Reli)		
Regulatory (Environmental/Lega		
O&M		
Public Health & Safety		
Public Benefit		
Financial		
Efficiency and Innovation		
<b>Project Manager Weighted Score</b>		

**Review Committee Score**

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

Describe Here the Changes from the 2018 CIP to 2019 CIP

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

## CIP 361003: SCADA Radio Network Upgrade



### SCADA Radio Network Upgrade

New CIP# **361003**

Old CIP# **1207**

PROJECT SUMMARY

- Innovation
- MP Right Sizing
- System Reliability

Project Status

Pending Closeout

**Project Status Guide:**

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

Project Title **SCADA Radio Network Upgrade**

Project Significance N/A - Pending Closeout

Year Added: 2009

Date Original BCE Prepared:

Date BCE Last Updated: 10/1/2017

Project Engineer/Manager: Biren Saparia

Title: Field Services Director

Phone: (313) 267-8977

Email: Biren.Saparia@glwater.org

Manager: Biren Saparia

Managing Dept SCC

CIP Type: Project

Budget: Split

Project Classification Level 1: Centralized Services

Project Classification Level 2: Engineering

Project Classification Level 3: General Purpose

Project Location: Multiple Counties

Fund:

Cost Center: 882301

PROJECT INFORMATION

Scope of Work: N/A - Pending Closeout

Project History:

Driver: N/A - Pending Closeout

Challenges: N/A - Pending Closeout

Other Important Info:

Related Project:



### SCADA Radio Network Upgrade

New CIP# **361003**

Old CIP# **1207**

#### Phase Overview

Phase Title DWS-882 SCADA Radio Network Upgrade

Phase Category: DB

Design and Build

Budget: Water

Contract Number: DWS-882

Phase Status: Pending Close-out

Start Date: 3/26/2013

End Date: 9/30/2016

Phase Cost Allocation: CTA

Phase Financial Source: DE

Lookup Cost Est Class:

Cost Estimation Date: 9/15/2017

Cost Estimation Source: Contractor

Cost Estimation Prep By: Biren Saparia

Useful Life > 20Yrs Yes

Comments:

#### PPAT (Phase Program/Allowance Task) Information

PPAT CIP Number

PPAT SOW

Change PPAT PM

#### Phase Overview

Phase Title DWS-882 SCADA Radio Network Upgrade

Phase Category: DB

Design and Build

Budget: Wastewater

Contract Number: DWS-882

Phase Status: Pending Close-out

Start Date: 3/26/2013

End Date: 9/30/2016

Phase Cost Allocation: CTA

Phase Financial Source: DE

Lookup Cost Est Class:

Cost Estimation Date:

Cost Estimation Source:

Cost Estimation Prep By:

Useful Life > 20Yrs Yes

Comments:

#### PPAT (Phase Program/Allowance Task) Information

PPAT CIP Number

PPAT SOW

Change PPAT PM



**SCADA Radio Network Upgrade**

New CIP# **361003**

Old CIP# **1207**

**Phase Expenses**

CURRENT PHASE	<b>Design and Build</b>	BUDGET	<b>Water</b>	Contract No	DWS-882
Phase Title	DWS-882 SCADA Radio Network Upgrade	PPAT CIP Number		Phase Status	Pending Close-out

Expense Type	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
Construction	60						
Engineering Services							
GLWA Salaries							
Materials							
Other							

<b>Current Phase Fringe Benefit Expenses</b>	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	0	0	0	0	0	0	0
<b>Current Phase Non-Personnel Expenses</b>	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	0	0	0	0	0	0	0
<b>Current Phase Total</b>	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	60	0	0	0	0	0	0



**SCADA Radio Network Upgrade**

New CIP# **361003**

Old CIP# **1207**

CURRENT PHASE **Design and Build** BUDGET **Wastewater** Contract No **DWS-882**

Phase Title **DWS-882 SCADA Radio Network Upgrade** PPAT CIP Number  Phase Status **Pending Close-out**

Expense Type	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
Construction							
Engineering Services							
GLWA Salaries							
Materials							
Other							
<b>Current Phase Fringe Benefit Expenses</b>	<b>FY18</b>	<b>FY19</b>	<b>FY20</b>	<b>FY21</b>	<b>FY22</b>	<b>FY23</b>	<b>FY24 and Beyond</b>
	0	0	0	0	0	0	0
<b>Current Phase Non-Personnel Expenses</b>	<b>FY18</b>	<b>FY19</b>	<b>FY20</b>	<b>FY21</b>	<b>FY22</b>	<b>FY23</b>	<b>FY24 and Beyond</b>
	0	0	0	0	0	0	0
<b>Current Phase Total</b>	<b>FY18</b>	<b>FY19</b>	<b>FY20</b>	<b>FY21</b>	<b>FY22</b>	<b>FY23</b>	<b>FY24 and Beyond</b>
	0	0	0	0	0	0	0

ALL PHASES TOTAL	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	0	0	0	0	0	0	0
	60	0	0	0	0	0	0

Phase Tasks and Dates	
Phase Category	DB
Budget	Wastewater
Phase Status	Pending Close-out
Contract No	DWS-882
Cost Est Class	
<b>Design and Build</b>	
Task Name	Start Date    Duration    End Date
Scope Development	
Procurement	
Project Execution	
Project Closeout	



**SCADA Radio Network Upgrade**

New CIP# **361003**

Old CIP# **1207**

Phase Category	DB
Budget	Water
Phase Status	Pending Close-out
Contract No	DWS-882
Cost Est Class	

**Design and Build**

Task Name	Start Date	Duration	End Date
Scope Development			
Procurement			
Project Execution	1/1/2017	1	1/2/2017
Project Closeout	1/3/2017	90	4/3/2017

**PROJECT PRIORITIZATION SCORING**

**Project Manager Score**

Criteria	Score	Score Comment
Condition		
Performance (Service Level/Reli)		
Regulatory (Environmental/Lega)		
O&M		
Public Health & Safety		
Public Benefit		
Financial		
Efficiency and Innovation		
<b>Project Manager Weighted Score</b>		

**Review Committee Score**

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

Describe Here the Changes from the 2018 CIP to 2019 CIP

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



**CIP 380400: As-needed CIP Implementation Assistance and Related  
Services**



New CIP# 380400

Old CIP# 956

**As-needed CIP Implementation Assistance and Related Services**

- PROJECT SUMMARY
- Innovation
  - MP Right Sizing
  - System Reliability

Project Status  
Active

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

Project Title **As-needed CIP Implementation Assistance and Related Services**

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

Year Added: 2002

CIP Type: Allowance

Date Original BCE Prepared:

Budget: Split

Date BCE Last Updated: 11/2/2017

Project Classification Level 1: Centralized Services

Project Engineer/Manager: Gaylor Johnson / Dan Edwards

Project Classification Level 2: Programs

Title:

Project Classification Level 3: Programs

Phone:

Project Location: Multiple Counties

Email:

Fund: 5421

Manager: Ali Khraizat

Cost Center: 892111

Managing Dept WW Eng

PROJECT INFORMATION

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



**As-needed CIP Implementation Assistance and Related Services**

New CIP# **380400**

Old CIP# **956**

Project History:

Driver: N/A - Active

Challenges: N/A - Active

Other Important Info:

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



As-needed CIP Implementation Assistance and Related Services

Phase Overview

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

Phase Category: S/D/CA

Budget: Wastewater

Contract Number: CS-166

Phase Status: Under Procurement

Start Date:

End Date:

Phase Cost Allocation: CTA

Phase Financial Source: I&E

Lookup Cost Est Class:

Cost Estimation Date:

Study and Design and Construction Assistance

PPAT (Phase Program/Allowance Task) Information

PPAT CIP Number 380402

PPAT SOW The purpose of this proposed contract is to provide implementation assistance and related services on a task order basis to support the GLWA. The services provided under this contract include assistance in capital projects definition and planning, design and construction phase procurement assistance and monitoring; third party contract administration/oversight assistance/scheduling services; claims/changes analysis and resolution; technical training; value engineering (VE) services on selected design projects; develop engineering study reports; identify minimum requirements, scope of work, basis of process design, performance criteria, minimum standards of quality, and preliminary design and oversight services for design/build contracts; proposal analysis assistance; engineering forensic analysis, and additional program support services. Projected Expenses based upon historical percentage of use for CIP projects split 50/50 for water & Wastewater.

Change PPAT PM Ali Khraizat

Cost Estimation Source:

Cost Estimation Prep By:

Useful Life > 20Yrs No

Comments: 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



As-needed CIP Implementation Assistance and Related Services

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

Phase Overview

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

Phase Category: S/D/CM

Budget: Wastewater

Contract Number: CS-1433

Phase Status: Closed Out

Start Date: 3/24/2006

End Date: 7/24/2017

Phase Cost Allocation: CTA

Phase Financial Source: I&E

Lookup Cost Est Class:

Cost Estimation Date:

Cost Estimation Source:

Cost Estimation Prep By:

Useful Life > 20Yrs No

Comments:

Study and Design and Construction Management

PPAT (Phase Program/Allowance Task) Information

PPAT CIP Number 380401

PPAT SOW

Change PPAT PM



As-needed CIP Implementation Assistance and Related Services

Phase Overview

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

Phase Category: S/D/CA

Budget: Water

Contract Number: CS-166

Phase Status: Under Procurement

Start Date:

End Date:

Phase Cost Allocation: CTA

Phase Financial Source: I&E

Lookup Cost Est Class:

Cost Estimation Date:

Study and Design and Construction Assistance

PPAT (Phase Program/Allowance Task) Information

PPAT CIP Number 380402

PPAT SOW The purpose of this proposed contract is to provide implementation assistance and related services on a task order basis to support the GLWA. The services provided under this contract include assistance in capital projects definition and planning, design and construction phase procurement assistance and monitoring; third party contract administration/oversight assistance/scheduling services; claims/changes analysis and resolution; technical training; value engineering (VE) services on selected design projects; develop engineering study reports; identify minimum requirements, scope of work, basis of process design, performance criteria, minimum standards of quality, and preliminary design and oversight services for design/build contracts; proposal analysis assistance; engineering forensic analysis, and additional program support services. Projected Expenses based upon historical percentage of use for CIP projects split 50/50 for water & Wastewater.

Change PPAT PM Grant Gartrell

Cost Estimation Source:

Cost Estimation Prep By:

Useful Life > 20Yrs No

Comments: 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



**As-needed CIP Implementation Assistance and Related Services**

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

**Phase Expenses**

<b>CURRENT PHASE</b>	<b>Study and Design and Construction Assistance</b>	<b>BUDGET</b>	<b>Wastewater</b>	Contract No	CS-166
Phase Title	CS-166 Capital Improvement Program (CIP) Implementation Assistance and Related Services	PPAT CIP Number	380402	Phase Status	Under Procurement

Expense Type	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
Construction							
Engineering Services	250	803	803	803			
GLWA Salaries							
Materials							
Other							

<b>Current Phase Fringe Benefit Expenses</b>	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	0	0	0	0			
<b>Current Phase Non-Personnel Expenses</b>	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	0	0	0	0			
<b>Current Phase Total</b>	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	250	803	803	803			



New CIP# **380400**

**As-needed CIP Implementation Assistance and Related Services**

Old CIP# **956**

CURRENT PHASE **Study and Design and Construction Managemen** BUDGET **Wastewater** Contract No **CS-1433**

Phase Title **CS-1433 As-needed CIP Implementation Assistance and Related Services** PPAT CIP Number **380401** Phase Status **Closed Out**

Expense Type	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
Construction							
Engineering Services							
GLWA Salaries							
Materials							
Other							

**Current Phase Fringe Benefit Expenses**

FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
0	0	0	0	0	0	0

**Current Phase Non-Personnel Expenses**

FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
0	0	0	0	0	0	0

**Current Phase Total**

FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
0	0	0	0	0	0	0





New CIP# **380400**

Old CIP# **956**

**As-needed CIP Implementation Assistance and Related Services**

<b>CURRENT PHASE</b>	<b>Study and Design and Construction Assistance</b>	<b>BUDGET</b>	<b>Water</b>	Contract No	CS-166
Phase Title	CS-166 Capital Improvement Program (CIP) Implementation Assistance and Related Services	PPAT CIP Number	380402	Phase Status	Under Procurement

Expense Type	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
Construction							
Engineering Services	250	803	803	803			
GLWA Salaries							
Materials							
Other							

<b>Current Phase Fringe Benefit Expenses</b>	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	0	0	0	0			
<b>Current Phase Non-Personnel Expenses</b>	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	0	0	0	0			
<b>Current Phase Total</b>	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	250	803	803	803			

<b>ALL PHASES TOTAL</b>	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	250	803	803	803	0	0	0
	250	803	803	803			

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



**As-needed CIP Implementation Assistance and Related Services**

Phase Category	S/D/CA
Budget	Wastewater
Phase Status	Under Procurement
Contract No	CS-166
Cost Est Class	

**Study and Design and Construction Assistance**

Phase Category	S/D/CM
Budget	Wastewater
Phase Status	Closed Out
Contract No	CS-1433
Cost Est Class	

**Study and Design and Construction Management**

Task Name	Start Date	Duration	End Date
Scope Development			
Procurement			
Project Execution			
Project Closeout			

**PROJECT PRIORITIZATION SCORING**

**Project Manager Score**

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

**Project Manager Weighted Score**

**Review Committee Score**

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

**Review Committee Weighted Score**

Describe Here the Changes from the 2018 CIP to 2019 CIP



New CIP# **380400**

Old CIP# **956**

**As-needed CIP Implementation Assistance and Related Services**

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

**CIP 380500: Department-wide General Engineering Services on an  
As-needed Basis**



New CIP# **380500**

Old CIP# **1026**

## Wastewater General Engineering Services on an As-needed Basis

PROJECT SUMMARY

- Innovation
- MP Right Sizing
- System Reliability

Project Status

Active

**Project Status Guide:**

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

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

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

Year Added: 2004

CIP Type: Allowance

Date Original BCE Prepared:

Budget: Split

Date BCE Last Updated: 10/27/2017

Project Classification Level 1: Centralized Services

Project Engineer/Manager: Beena Chackunkal

Project Classification Level 2: Programs

Title: Engineer

Project Classification Level 3: Programs

Phone: (313) 297-9825

Project Location: Multiple Counties

Email: Beena.Chackunkal@glwater.or

Fund:

Manager: Ali Khraizat

Cost Center:

Managing Dept WW Eng

PROJECT INFORMATION

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

Project History:

Driver: N/A - Active

Challenges:

Other Important Info:

Related Project:



**Wastewater General Engineering Services on an As-needed Basis**

New CIP# **380500**

Old CIP# **1026**

**Phase Overview**

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

Phase Category: S/D/CA

**Study and Design and Construction Assistance**

Budget: Wastewater

Contract Number: CS-1499

Phase Status: Active

Start Date: 5/12/2010

End Date: 6/2/2018

Phase Cost Allocation: CTA

Phase Financial Source: I&E

Lookup Cost Est Class:

Cost Estimation Date:

Cost Estimation Source: Contract

Cost Estimation Prep By:

Useful Life > 20Yrs No

Comments: Currently most of the tasks are for Wastewater projects.

**PPAT (Phase Program/Allowance Task) Information**

PPAT CIP Number 380501

PPAT SOW

Change PPAT PM Ali Khraizat

**Phase Expenses**

CURRENT PHASE **Study and Design and Construction Assistance** BUDGET **Wastewater** Contract No CS-1499

Phase Title CS-1499 Wastewater General Engineering Services on an As-needed Basis (CS-1499 METCO) PPAT CIP Number 380501 Phase Status Active

Expense Type	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
Construction							
Engineering Services	100	100	80				
GLWA Salaries	10	10	8				
Materials							
Other							

Current Phase Fringe Benefit Expenses	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	4	4	3	0	0	0	0

Current Phase Non-Personnel Expenses	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	0	0	0	0	0	0	0



**Wastewater General Engineering Services on an As-needed Basis**

<b>Current Phase Total</b>	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	114	114	91	0	0	0	0

<b>ALL PHASES TOTAL</b>	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	114	114	91	0	0	0	0

**Phase Tasks and Dates**

Phase Category	S/D/CA
Budget	Wastewater
Phase Status	Active
Contract No	CS-1499
Cost Est Class	

**Study and Design and Construction Assistance**

Task Name	Start Date	Duration	End Date
Scope Development			
Procurement			
Project Execution			
Project Closeout	1/9/2020	60	3/9/2020

**PROJECT PRIORITIZATION SCORING**

**Project Manager Score**

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

**Project Manager Weighted Score**

**20**

**Review Committee Score**

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

**Review Committee Weighted Score**

Describe Here the Changes from the 2018 CIP to 2019 CIP



**Wastewater General Engineering Services on an As-needed Basis**

New CIP# **380500**

Old CIP# **1026**

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



## **CIP 380600: General Engineering Services**



New CIP# **380600**

Old CIP# **1031**

### As-Needed General Engineering Services

PROJECT SUMMARY

- Innovation
- MP Right Sizing
- System Reliability

Project Status

Active

**Project Status Guide:**

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

Project Title **As-Needed General Engineering Services**

Project Significance Allowance for the study and design of critical projects throughout the system prior to bidding and construction.

Year Added: 2004

CIP Type: Allowance

Date Original BCE Prepared:

Budget: Split

Date BCE Last Updated: 9/25/2017

Project Classification Level 1: Water

Project Engineer/Manager: Grant Gartrell

Project Classification Level 2: WRRF

Title: Director - Engineering

Project Classification Level 3: Programs

Phone: (313) 926-8139

Project Location: City of Detroit

Email: Grant.Gartrell@glwater.org

Fund:

Manager: Grant Gartrell

Cost Center:

Managing Dept Water Eng

PROJECT INFORMATION

Scope of Work: As-needed engineering services for water and wastewater engineering.

Project History:

Driver: N/A - Active

Challenges: N/A - Active

Other Important Info:

Related Project:



### As-Needed General Engineering Services

#### Phase Overview

Phase Title CS-1432A Water As-Needed Engineering Services

Phase Category: D

Design

Budget: Water

Contract Number: CS-1432A

Phase Status: Active

Start Date: 1/23/2008

End Date: 12/12/2018

Phase Cost Allocation: CTA

Phase Financial Source: I&E

Lookup Cost Est Class:

Cost Estimation Date:

Cost Estimation Source:

Cost Estimation Prep By:

Useful Life > 20Yrs No

Comments:

#### PPAT (Phase Program/Allowance Task) Information

PPAT CIP Number 380601

PPAT SOW Alfred Benesh

Change PPAT PM Beena Chackun

#### Phase Overview

Phase Title CS-1432A Wastewater As-Needed Engineering Services

Phase Category: D

Design

Budget: Wastewater

Contract Number: CS-1432A

Phase Status: Active

Start Date: 1/23/2008

End Date: 12/12/2018

Phase Cost Allocation: CTA

Phase Financial Source: I&E

Lookup Cost Est Class:

Cost Estimation Date:

Cost Estimation Source:

Cost Estimation Prep By:

Useful Life > 20Yrs No

Comments:

#### PPAT (Phase Program/Allowance Task) Information

PPAT CIP Number 380601

PPAT SOW Alfred Benesh

Change PPAT PM Beena Chackun



**As-Needed General Engineering Services**

New CIP# **380600**

Old CIP# **1031**

**Phase Expenses**

CURRENT PHASE	<b>Design</b>	BUDGET	<b>Water</b>	Contract No	CS-1432A
Phase Title	CS-1432A Water As-Needed Engineering Services	PPAT CIP Number	380601	Phase Status	Active

Expense Type	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
Construction							
Engineering Services	200	240					
GLWA Salaries	25	25					
Materials							
Other							

<b>Current Phase Fringe Benefit Expenses</b>	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	10	10	0	0	0	0	0

<b>Current Phase Non-Personnel Expenses</b>	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	1	1	0	0	0	0	0

<b>Current Phase Total</b>	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	236	276	0	0	0	0	0



**As-Needed General Engineering Services**

New CIP# **380600**

Old CIP# **1031**

<b>CURRENT PHASE</b>	<b>Design</b>	<b>BUDGET</b>	<b>Wastewater</b>	Contract No	CS-1432A	
Phase Title	CS-1432A Wastewater As-Needed Engineering Services		PPAT CIP Number	380601	Phase Status	Active

Expense Type	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
Construction							
Engineering Services	170	51	50				
GLWA Salaries							
Materials							
Other							
<b>Current Phase Fringe Benefit Expenses</b>	<b>FY18</b>	<b>FY19</b>	<b>FY20</b>	<b>FY21</b>	<b>FY22</b>	<b>FY23</b>	<b>FY24 and Beyond</b>
	0	0	0				
<b>Current Phase Non-Personnel Expenses</b>	<b>FY18</b>	<b>FY19</b>	<b>FY20</b>	<b>FY21</b>	<b>FY22</b>	<b>FY23</b>	<b>FY24 and Beyond</b>
	0	0	0				
<b>Current Phase Total</b>	<b>FY18</b>	<b>FY19</b>	<b>FY20</b>	<b>FY21</b>	<b>FY22</b>	<b>FY23</b>	<b>FY24 and Beyond</b>
	170	51	50				

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

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



**As-Needed General Engineering Services**

New CIP# **380600**

Old CIP# **1031**

**PROJECT PRIORITIZATION SCORING**

**Project Manager Score**

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

**Project Manager Weighted Score**

**39.8**

**Review Committee Score**

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

**Review Committee Weighted Score**

Describe Here the Changes from the 2018 CIP to 2019 CIP

Updated to reflect budget remaining. Added GLWA costs.

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

**CIP 380700: As-Needed Geotechnical and Related Engineering  
Services**



New CIP# **380700**

Old CIP# **1147**

# As-Needed Geotechnical and Related Engineering Services

PROJECT SUMMARY

- Innovation
- MP Right Sizing
- System Reliability

Project Status

Active

**Project Status Guide:**

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

Project Title **As-Needed Geotechnical and Related Engineering Services**

Project Significance Design of Telegraph Rd, Wick Rd, Park-Merriman, & Schoolcraft water main projects.

Year Added: 2006

CIP Type: Allowance

Date Original BCE Prepared:

Budget: Water

Date BCE Last Updated: 9/25/2017

Project Classification Level 1: Water

Project Engineer/Manager: Eric Kramp

Project Classification Level 2: Programs

Title: Engineer

Project Classification Level 3: Programs

Phone: (313) 999-3875

Project Location: Multiple Counties

Email: Eric.Kramp@glwater.org

Fund:

Manager: Grant Gartrell

Cost Center:

Managing Dept Water Eng

PROJECT INFORMATION

Scope of Work: Project utilized as the design mechanism for the Telegraph Road, Wick Road, Park-Merriman, and Schoolcraft water main projects. Also, contract has provisions for the as-needed services associated with pipeline construction projects such as testing, staking, and inspection.

Project History:

Driver: N/A - Active

Challenges: N/A - Active

Other Important Info:

Related Project:





New CIP# **380700**

**As-Needed Geotechnical and Related Engineering Services**

Old CIP# **1147**

**Phase Overview**

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

Phase Category: C

**Construction**

Budget: Water

Contract Number: CS-1488

Phase Status: Active

Start Date: 4/8/2009

End Date: 4/8/2021

Phase Cost Allocation: CTA

Phase Financial Source: I&E

Lookup Cost Est Class:

Cost Estimation Date:

Cost Estimation Source:

Cost Estimation Prep By:

Useful Life > 20Yrs No

Comments:

**PPAT (Phase Program/Allowance Task) Information**

PPAT CIP Number 380701

PPAT SOW Engineering Services, Concrete Testing and Soil Borings (CS-1488)

Change PPAT PM Grant Gartrell



**As-Needed Geotechnical and Related Engineering Services**

New CIP# **380700**

Old CIP# **1147**

**ALL PHASES TOTAL**

FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
238	477	477	477	238	0	0

**Phase Tasks and Dates**

Phase Category	C
Budget	Water
Phase Status	Active
Contract No	CS-1488
Cost Est Class	

**Construction**

Task Name	Start Date	Duration	End Date
Scope Development			
Procurement			
Project Execution	6/1/2016	1429	4/30/2020
Project Closeout	5/1/2020	90	7/30/2020

**PROJECT PRIORITIZATION SCORING**



**As-Needed Geotechnical and Related Engineering Services**

**Project Manager Score**

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

**Project Manager Weighted Score**

**Review Committee Score**

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

**Review Committee Weighted Score**

Describe Here the Changes from the 2018 CIP to 2019 CIP

CIP Version	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond	Total
2018		650	907	333	333	333				2,557
2019	230		238	477	477	477	238	0	0	2,137

**CIP 380800: Geotechnical and Related Services on an As-Needed Basis**



New CIP# **380800**

Old CIP# **1164**

**Geotechnical and Related Services on an As-Needed Basis**

PROJECT SUMMARY

- Innovation
- MP Right Sizing
- System Reliability

Project Status

Pending Closeout

**Project Status Guide:**

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

Project Title

**Geotechnical and Related Services on an As-Needed Basis**

Project Significance As Needed geotechnical consulting services.

Year Added: 2007

CIP Type: Allowance

Date Original BCE Prepared:

Budget: Split

Date BCE Last Updated: 10/27/2017

Project Classification Level 1: Centralized Services

Project Engineer/Manager: Grant Gartrell

Project Classification Level 2: Programs

Title: Director - Engineering

Project Classification Level 3: Programs

Phone: (313) 926-8139

Project Location: Multiple Counties

Email: Grant.Gartrell@glwater.org

Fund:

Manager: Grant Gartrell

Cost Center:

Managing Dept N/A - Pending Closeo

PROJECT INFORMATION

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

Project History:

Driver: N/A - Pending Closeout

Challenges: N/A - Pending Closeout

Other Important Info:

Related Project:



Geotechnical and Related Services on an As-Needed Basis

New CIP# 380800

Old CIP# 1164

Phase Overview

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

Phase Category: D

Design

Budget: Water

Contract Number: CS-1490

Phase Status: Pending Close-out

Start Date: 1/14/2010

End Date: 7/14/2016

Phase Cost Allocation: CTA

Phase Financial Source: I&E

Lookup Cost Est Class:

Cost Estimation Date:

Cost Estimation Source:

Cost Estimation Prep By:

Useful Life > 20Yrs No

Comments:

PPAT (Phase Program/Allowance Task) Information

PPAT CIP Number 380801

PPAT SOW As-Needed Geotechnical Services

Change PPAT PM Grant Gartrell

Phase Overview

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

Phase Category: D

Design

Budget: Wastewater

Contract Number: CS-1490

Phase Status: Pending Close-out

Start Date: 1/14/2010

End Date: 7/14/2016

Phase Cost Allocation: CTA

Phase Financial Source: I&E

Lookup Cost Est Class:

Cost Estimation Date:

Cost Estimation Source:

Cost Estimation Prep By:

Useful Life > 20Yrs No

Comments:

PPAT (Phase Program/Allowance Task) Information

PPAT CIP Number 380801

PPAT SOW As-Needed Geotechnical Services

Change PPAT PM Grant Gartrell



**Geotechnical and Related Services on an As-Needed Basis**

New CIP# **380800**

Old CIP# **1164**

**Phase Expenses**

CURRENT PHASE	<b>Design</b>	BUDGET	<b>Water</b>	Contract No	CS-1490
Phase Title	CS-1490: NTH Consultants: As-Needed Geotechnical Services	PPAT CIP Number	380801	Phase Status	Pending Close-out

Expense Type	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
Construction							
Engineering Services							
GLWA Salaries							
Materials							
Other							

<b>Current Phase Fringe Benefit Expenses</b>	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	0	0	0	0	0	0	0
<b>Current Phase Non-Personnel Expenses</b>	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	0	0	0	0	0	0	0
<b>Current Phase Total</b>	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	0	0	0	0	0	0	0

CURRENT PHASE	<b>Design</b>	BUDGET	<b>Wastewater</b>	Contract No	CS-1490
Phase Title	CS-1490: NTH Consultants: As-Needed Geotechnical Services	PPAT CIP Number	380801	Phase Status	Pending Close-out

<b>Current Phase Fringe Benefit Expenses</b>	
<b>Current Phase Non-Personnel Expenses</b>	
<b>Current Phase Total</b>	

<b>ALL PHASES TOTAL</b>	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	0	0	0	0	0	0	0



**Geotechnical and Related Services on an As-Needed Basis**

New CIP# **380800**

Old CIP# **1164**

**Phase Tasks and Dates**

Phase Category	D
Budget	Wastewater
Phase Status	Pending Close-out
Contract No	CS-1490
Cost Est Class	

**Design**

Phase Category	D
Budget	Water
Phase Status	Pending Close-out
Contract No	CS-1490
Cost Est Class	

**Design**

Task Name	Start Date	Duration	End Date
Scope Development			
Procurement			
Project Execution			
Project Closeout			

**PROJECT PRIORITIZATION SCORING**

**Project Manager Score**

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

**Project Manager Weighted Score**

**Review Committee Score**

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

**Review Committee Weighted Score**

Describe Here the Changes from the 2018 CIP to 2019 CIP





**Geotechnical and Related Services on an As-Needed Basis**

New CIP# **380800**

Old CIP# **1164**

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

**CIP 380900: General Engineering Services**



General Engineering Services

New CIP# 380900

Old CIP# 1182

PROJECT SUMMARY

- Innovation
- MP Right Sizing
- System Reliability

Project Status

Active

**Project Status Guide:**

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

Project Title

General Engineering Services

Project Significance As needed multi-discipline engineering services for various small scale projects at WTP and WRRF.

Year Added: 2007

CIP Type: Allowance

Date Original BCE Prepared:

Budget: Wastewater

Date BCE Last Updated: 9/21/2017

Project Classification Level 1: Centralized Services

Project Engineer/Manager: Beena Chackunkal

Project Classification Level 2: Programs

Title: Engineer

Project Classification Level 3: Programs

Phone: (313) 297-9825

Project Location: Multiple Counties

Email: Beena.Chackunkal@glwater.or

Fund:

Manager: Ali Khraizat

Cost Center:

Managing Dept WW Eng

PROJECT INFORMATION

Scope of Work: This project provides for rapid design turn-around for a variety of projects on an as-needed basis providing multi-disciplinary professional services including meter pit improvement services.

Project History:

Driver: N/A - Active

Challenges: N/A - Active

Other Important Info:

Related Project:



General Engineering Services

New CIP# 380900

Old CIP# 1182

**Phase Overview**

Phase Title CS-1481 Sigma General Engineering Services

Phase Category: S/D/CA

Study and Design and Construction Assistance

Budget: Wastewater

Contract Number: CS-1481

Phase Status: Active

Start Date: 3/27/2008

End Date: 3/27/2018

Phase Cost Allocation: CTA

Phase Financial Source: I&E

Lookup Cost Est Class:

Cost Estimation Date:

Cost Estimation Source: Contract

Cost Estimation Prep By:

Useful Life > 20Yrs No

Comments: Currently most of the projects are for Wastewater Services.

**PPAT (Phase Program/Allowance Task) Information**

PPAT CIP Number 380901

PPAT SOW

Change PPAT PM Beena Chackun

**Phase Expenses**

CURRENT PHASE Study and Design and Construction Assistance BUDGET Wastewater Contract No CS-1481

Phase Title CS-1481 Sigma General Engineering Services PPAT CIP Number 380901 Phase Status Active

Expense Type	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
Construction							
Engineering Services	500	800	371				
GLWA Salaries	50	80	37				
Materials							
Other							

Current Phase Fringe Benefit Expenses	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	20	32	15	0	0	0	0

Current Phase Non-Personnel Expenses	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	2	4	2	0	0	0	0



General Engineering Services

New CIP#

Old CIP#

<b>Current Phase Total</b>	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	572	916	425	0	0	0	0

<b>ALL PHASES TOTAL</b>	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	572	916	425	0	0	0	0

Phase Tasks and Dates

Phase Category	S/D/CA
Budget	Wastewater
Phase Status	Active
Contract No	CS-1481
Cost Est Class	

Study and Design and Construction Assistance

Task Name	Start Date	Duration	End Date
Project Closeout	3/28/2021	60	5/27/2021

PROJECT PRIORITIZATION SCORING

Project Manager Score

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

Project Manager Weighted Score

**100**

Review Committee Score

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

Review Committee Weighted Score

Describe Here the Changes from the 2018 CIP to 2019 CIP



**General Engineering Services**

New CIP# **380900**

Old CIP# **1182**

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

**CIP 381000: Energy Management: Electric Metering Improvement  
Program**



New CIP# **381000**

Old CIP# **1343**

### Energy Management: Electric Metering Improvement Program

PROJECT SUMMARY

- Innovation
- MP Right Sizing
- System Reliability

Project Status

Active

**Project Status Guide:**

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

Project Title

**Energy Management: Electric Metering Improvement Program**

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

**Year Added:** 2016

**CIP Type:** Program

**Date Original BCE Prepared:** 8/18/2016

**Budget:** Split

**Date BCE Last Updated:** 10/6/2017

**Project Classification Level 1:** Centralized Services

**Project Engineer/Manager:** Shaker Manns

**Project Classification Level 2:** Programs

**Title:** Energy Program Manager

**Project Classification Level 3:** Programs

**Phone:** (313) 910-6156

**Project Location:** Multiple Counties

**Email:** shaker.manns@glwater.org

**Fund:**

**Manager:** Shaker Manns

**Cost Center:**

**Managing Dept** Energy Management

PROJECT INFORMATION

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

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

**Driver:**

**Challenges:**

**Other Important Info:**

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





### Energy Management: Electric Metering Improvement Program

#### Phase Overview

Phase Title Energy Management: Electric Metering Improvement Program

Phase Category: S/D/C

Study and Design and Construction

Budget: Water

Contract Number: NA

Phase Status: Future Planned Start

Start Date:

End Date:

Phase Cost Allocation: CTA

Phase Financial Source: DE

Lookup Cost Est Class:

Cost Estimation Date:

Cost Estimation Source:

Cost Estimation Prep By:

Useful Life > 20Yrs No

Comments:

#### PPAT (Phase Program/Allowance Task) Information

PPAT CIP Number

PPAT SOW

Change PPAT PM

#### Phase Overview

Phase Title Energy Management: Electric Metering Improvement Program

Phase Category: S/D/C

Study and Design and Construction

Budget: Wastewater

Contract Number: NA

Phase Status: Future Planned Start

Start Date:

End Date:

Phase Cost Allocation: CTA

Phase Financial Source: DE

Lookup Cost Est Class:

Cost Estimation Date:

Cost Estimation Source:

Cost Estimation Prep By:

Useful Life > 20Yrs No

Comments:

#### PPAT (Phase Program/Allowance Task) Information

PPAT CIP Number

PPAT SOW

Change PPAT PM



**Energy Management: Electric Metering Improvement Program**

**Phase Expenses**

CURRENT PHASE	<b>Study and Design and Construction</b>	BUDGET	<b>Water</b>	Contract No	NA
Phase Title	Energy Management: Electric Metering Improvement Program		PPAT CIP Number	Phase Status	
				Future Planned Start	

Expense Type	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
Construction			60	60	255	439	2,186
Engineering Services							
GLWA Salaries							
Materials							
Other							

<b>Current Phase Fringe Benefit Expenses</b>	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	0	0	0	0	0	0	0

<b>Current Phase Non-Personnel Expenses</b>	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	0	0	0	0	0	0	0

<b>Current Phase Total</b>	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	0	0	60	60	255	439	2,186



**Energy Management: Electric Metering Improvement Program**

CURRENT PHASE **Study and Design and Construction** BUDGET **Wastewater** Contract No **NA**

Phase Title **Energy Management: Electric Metering Improvement Program** PPAT CIP Number  Phase Status **Future Planned Start**

Expense Type	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
Construction			60	60	255	439	2,186
Engineering Services							
GLWA Salaries							
Materials							
Other							

	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
<b>Current Phase Fringe Benefit Expenses</b>	0	0	0	0	0	0	0
<b>Current Phase Non-Personnel Expenses</b>	0	0	0	0	0	0	0
<b>Current Phase Total</b>	0	0	60	60	255	439	2,186

ALL PHASES TOTAL	FY18	FY19	FY20	FY21	FY22	FY23	FY24 and Beyond
	0	0	60	60	255	439	2,186
	0	0	60	60	255	439	2,186

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



**Energy Management: Electric Metering Improvement Program**

Phase Category	S/D/C
Budget	Water
Phase Status	Future Planned Start
Contract No	NA
Cost Est Class	

**Study and Design and Construction**

Task Name	Start Date	Duration	End Date
Scope Development	7/1/2018	91	9/30/2018
Procurement	9/30/2018	1182	12/25/2021
Project Execution	12/25/2021	2370	6/21/2028
Project Closeout	6/21/2028	90	9/19/2028

**PROJECT PRIORITIZATION SCORING**

**Project Manager Score**

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

**Project Manager Weighted Score**

**64.6**

**Review Committee Score**

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

**Review Committee Weighted Score**

**Describe Here the Changes from the 2018 CIP to 2019 CIP**

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

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



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