



## Legislation Details (With Text)

**File #:** 2020-303      **Version:** 1      **Name:**

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**File created:** 8/31/2020      **In control:** Board of Directors

**On agenda:** 9/23/2020      **Final action:** 9/23/2020

**Title:** Contract No. 2000279  
Springwells Water Treatment Plant Flocculator Drive Replacement  
CIP# 114017 / BCE Score: 47

**Sponsors:** Cheryl Porter, Grant Gartrell

**Indexes:** Water Operations

**Code sections:**

**Attachments:** 1. 2000279 Procurement Report, 2. 2000279 Cost Tabulation

Date	Ver.	Action By	Action	Result
9/23/2020	1	Board of Directors	Approved	Pass
9/9/2020	1	Operations and Resources Committee	Recommended for Approval	Pass

### Contract No. 2000279

### Springwells Water Treatment Plant Flocculator Drive Replacement

**CIP# 114017 / BCE Score: 47**

Agenda of: September 23, 2020

Item No.: **2020-303**

Amount: \$1,893,135.58

**TO:** The Honorable  
Board of Directors  
Great Lakes Water Authority

**FROM:** Sue F. McCormick  
Chief Executive Officer  
Great Lakes Water Authority

**DATE:** August 31, 2020

**RE:** **Contract No. 2000279**  
**Springwells Water Treatment Plant Flocculator Drive Replacement**  
**Vendor: Fishbeck, Thompson, Carr, & Huber, Inc.**

### MOTION

Upon recommendation of Cheryl Porter, Chief Operating Officer - Water and Field Services, the Board of Directors (Board) of the Great Lakes Water Authority (GLWA), authorizes the Chief Executive Officer (CEO) to **enter into Contract No. 2000279 “Springwells Water Treatment Plant Flocculator Drive Replacement” with Fishbeck, Thompson, Carr, & Huber, Inc., at a cost not to exceed \$1,893,135.58 for a duration of 1,440 days;** and authorizes the CEO to take such other action as may be necessary to accomplish the intent of this vote.

### **BACKGROUND**

Contract No. 2000279 is a professional engineering services contract that involves project management, preliminary design, detailed design, construction bidding assistance, construction administration, resident project representation, and construction materials testing services related to the replacement of the 1958 flocculator drives at the Springwells Water Treatment Plant. There are 20 flocculation chambers each with an associated motor, mechanical drive, drive shaft, bearing housings, and related hardware.

The flocculator drives are rotating equipment and operate continuously throughout the year. As such, there is heavy wear and tear on this equipment, and it is due for replacement. The scope of engineering services under this contract also includes inspecting several existing flocculation paddle wheel shafts to determine if they may be reused as part of the project. If it is determined that these shafts cannot be reused, then the project will also include replacing the drive shafts as well as the flocculation paddle wheel assemblies. Tasks 10 and 11 for additional engineering and resident project representation services, respectively were added as allowances in case the scope of design and construction is expanded to include the shafts and paddle wheel assemblies. Other ancillary improvement work will include replacing the existing access ladders into the flocculating chambers and access doors that separate the interior flocculation compartments.

The final design documents produced under Contract No. 2000279 will be used to publicly and competitively bid the construction. Replacement of the flocculation system equipment will be performed under a separate construction contract. The engineering services that will be provided under Contract No. 2000279 during the construction phase include construction administration, resident project representation and construction materials testing.

### **JUSTIFICATION**

The existing flocculator drives have operated continuously for nearly 25 years and are heavily worn and due for replacement to provide for reliable and consistent mechanical flocculation. The access ladder runs into the flocculation chambers and interior doors between flocculation compartments which are over 60 years old and need to be replaced. There is the possibility that the existing flocculator drive shafts and paddle wheel assemblies may be found to require replacement after the detailed inspection. Therefore, allowances for additional engineering and resident project representation services may be needed to address the entire flocculation system replacement at the 1958 treatment train.

### **FINANCIAL PLAN IMPACT**

**Summary:** Sufficient funds are provided in the financial plan for this project.

**Funding Source:** Water Construction Bond

**Cost Center:** Water Engineering

**Expense Type:** Construction (5519-882111.000-617950-114017)

**Estimated Cost by Year and Related Estimating Variance:** See table below.

Fiscal Year

FY 2021 Budget	\$	271,000.00
FY 2022 Budget		591,000.00
FY 2023 Budget		268,000.00
FY 2024 Budget		<u>722,000.00</u>

Financial Plan Estimate	\$	1,852,000.00	
Proposed Contract Award		<u>1,893,135.58</u>	
Negative Estimating Variance	\$		(41,135.58)

This negative estimating variance will be funded from Capital Reserves.

### **SAVINGS, COST OPTIMIZATION, AND REVENUE ENHANCEMENT IMPACT**

This project is the replacement of the flocculator drive at the Springwells Water Treatment Plant. Cost savings are not determinable at the time of this award.

### **COMMITTEE REVIEW**

This item was presented to the Operations and Resources Committee at its meeting on September 9, 2020. The Operations and Resources Committee unanimously recommended that the GLWA Board adopt the resolution as presented.

### **SHARED SERVICES IMPACT**

This item does not impact the shared services agreement between GLWA and DWSD.