



## Legislation Text

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File #: 2020-007, Version: 1

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### Contract No. 1900516

### Energy Management: Freeze Protection Pump Installation at Imlay Pumping Station

### CIP# 132007 / BCE 37.6

Agenda of: January 22, 2020

Item No.: **2020-007**

Amount: \$4,994,000.00

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

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

**DATE:** January 6, 2020

**RE:** **Contract No. 1900516**  
**Energy Management: Freeze Protection Pump Installation at Imlay Pumping Station**

**Vendor: Commercial Contracting Corporation**

### 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. 1900516 "Energy Management: Freeze Protection Pump Installation at Imlay Pumping Station" with Commercial Contracting Corporation, at a cost not to exceed \$4,994,000.00 for a duration of 820 days;** and authorizes the CEO to take such other action as may be necessary to accomplish the intent of this vote.

### BACKGROUND

This proposed Contract No. 1900516 is a design-build contract that involves the design and construction of a new pumping unit at Imlay Water Pumping Station (Imlay Station). Imlay Station was constructed in the early 1970s and houses eight 75 million-gallon-per-day (MGD) pumping units and an 18 million-gallon (MG) finished water reservoir. Imlay Station receives pressure and flow from the Lake Huron Water Treatment Plant. Imlay Station boosts water system pressures to member partners served both south and west of Imlay Station. Member partners served west of the station

include the Imlay City, Flint, Mayfield Township, and Lapeer. Member partners served south of the station include numerous communities in northern Oakland and Macomb counties.

### **JUSTIFICATION**

Installation of the new pumping unit at Imlay Station will involve removing an existing pump, motor, variable frequency drive (VFD), and associated pipes, valves, and mechanical and electrical appurtenances; and providing new. The new pumping unit will be 22.5 MGD whereas the existing unit is 75 MGD. The smaller capacity pumping unit is sized to better match current as well as projected future water system demands. Operation of the new, smaller sized 22.5 MGD pumping unit will reduce long-term energy costs and therefore provides energy management opportunities at this pump station. Furthermore, the 22.5 MGD pumping unit will avoid the risk of damaging station equipment because of more frequent pump cycling and potential large pressure swings that are associated with the existing larger, 75 MGD pumping unit. Additionally, the new 22.5 MGD pumping unit will allow the operations team to run the pump longer during the winter months to cycle water into and out of the finished water reservoir at the station. This action will reduce the potential for water freezing inside the reservoir during winter months and improve water quality by reducing water age.

### **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 (5519-882411.000-616900-132007)

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

#### **Fiscal Year**

FY 2020 Budget	\$	646,000.00	
FY 2021 Budget		4,153,000.00	
FY 2022 Budget		<u>195,000.00</u>	
Financial Plan Estimate	\$	4,994,000.00	
Proposed Contract Award		<u>4,994,000.00</u>	
Estimating	Variance	\$	0.00

Please note that the amounts above are per the DRAFT 2021 - 2025 CIP.

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

The cost savings are not determinable at the time of award.

### **COMMITTEE REVIEW**

This item was presented to the Operations and Resources Committee at its meeting on January 8, 2020. The Operations and Resources Committee unanimously recommended to refer this item to the full Board of Directors without a

recommendation.

**SHARED SERVICES IMPACT**

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