

## Legislation Text

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File #: 2021-215, Version: 1

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### Contract No. 2002193

### Southwest Water Treatment Plant Chlorine Scrubber and Raw Water Screen Replacement

**CIP# 113006 / BCE Score: 68.2**

Agenda of: June 23, 2021

Item No.: **2021-215**

Amount: \$6,840,000.00

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

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

**DATE:** June 2, 2021

**RE: Contract No. 2002193**  
**Southwest Water Treatment Plant Chlorine Scrubber and Raw Water**  
**Screen Replacement**  
**Vendor: Kokosing Industrial, 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. 2002193 “Southwest Water Treatment Plant Chlorine Scrubber and Raw Water Screen Replacement” with Kokosing Industrial, Inc., at a cost not to exceed \$6,840,000.00 for a duration of 635 days;** and authorizes the CEO to take such other action as may be necessary to accomplish the intent of this vote.

### **BACKGROUND**

Contract No. 2002193 is a design-build contract that involves project management, preliminary and final design, construction and construction administration, permitting, resident project representation, and operations and maintenance training services related to the replacement of the gaseous chlorine scrubber and raw water traveling screens at the Southwest Water Treatment Plant (SWWTP). The

existing chlorine scrubber system was installed in 1990 and is comprised of a wet chemical feed process designed to neutralize accidental gas chlorine leaks in the chlorine storage and feed rooms, thereby protecting the health and safety of GLWA personnel and residents in the surrounding area. The wet scrubbing process used by this unit is outdated. Dry scrubbing processes are now more commonly used and preferable in terms of maintenance. Furthermore, GLWA's other four water treatment plants use the dry-based scrubbing units. Therefore, the new chlorine scrubber to be installed under this contract will be dry based too. The three existing raw water screens were installed in 1960. The screens are used to remove foreign materials from raw water prior to subsequent treatment processes, including rapid mix, flocculation, sedimentation, and filtration. Typically, foreign materials are comprised of silt, sand, algae, weeds, fish, and zebra mussels. The screens are driven by chain and sprocket mechanisms and run continuously. Due to the nature of the materials being removed and the continuous operation of the screens, they experience substantial wear and tear and, as a result, are due for replacement.

### **JUSTIFICATION**

The existing wet chlorine scrubbing system has reached its useful service life and is based on an antiquated technology. A new, dry-based system similar to those at GLWA's other water plants will provide the Southwest Water Treatment Plant with reliable scrubbing equipment that is standardized critical emergency equipment at all five treatment plants. The raw water screens have surpassed their useful service life and need replacing so that downstream treatment equipment is reliably protected. Additionally, new screens will prevent accumulation of foreign materials in downstream conduits and the burdens associated with cleaning these conduits.

### **FINANCIAL PLAN IMPACT**

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

**Funding Source:** Water Construction Fund

**Cost Center:** Water Engineering

**Expense Type:** Construction (5519-882111.000-616900-113006)

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

Fiscal Year

FY 2022 Planned Spend	\$ 4,000,000.00
FY 2023 Planned Spend	1,500,000.00
FY 2024 Planned Spend	<u>500,000.00</u>

Financial Plan Estimate	\$ 6,000,000.00
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Proposed Contract Award	<u>6,840,000.00</u>
Estimating Variance	\$ (840,000.00)

Amounts above as per the Board approved 2022-2026 CIP. A budget amendment will be prepared to fund the negative estimating variance from Capital Reserves.

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

The proposed contract is for the replacement of chlorine scrubber and raw water screens at the Southwest Water Treatment Plant. No costs savings are determinable at this time.

### **COMMITTEE REVIEW**

This item was presented to the Operations and Resources Committee at its meeting on June 9, 2021. 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.