



## Legislation Details (With Text)

|                       |   |                      |   |                    |  |
|-----------------------|---|----------------------|---|--------------------|--|
| <b>File #:</b>        | 2021-050  | <b>Version:</b>      | 1 | <b>Name:</b>       |  |
| <b>Type:</b>          | Resolution  | <b>Status:</b>       |   | Passed             |  |
| <b>File created:</b>  | 2/3/2021  | <b>In control:</b>   |   | Board of Directors |  |
| <b>On agenda:</b>     | 2/24/2021   | <b>Final action:</b> |   | 2/24/2021          |  |
| <b>Title:</b>         | Contract No. 2003443<br>Study and Design Services for Conveyance System<br>CIP# 260206 and 260510 |                      |   |                    |  |
| <b>Sponsors:</b>      | Cheryl Porter, Todd King  |                      |   |                    |  |
| <b>Indexes:</b>       | Water Operations  |                      |   |                    |  |
| <b>Code sections:</b> |   |                      |   |                    |  |
| <b>Attachments:</b>   | 1. 2003443 Procurement Report, 2. 2003443 Cost Tabulation, 3. 2003443 Vendor Response Follow-up   |                      |   |                    |  |

| Date      | Ver. | Action By          | Action   | Result |
|-----------|------|--------------------|----------|--------|
| 2/24/2021 | 1    | Board of Directors | Approved | Pass   |

### Contract No. 2003443

### Study and Design Services for Conveyance System

### CIP# 260206 and 260510

Agenda of: February 24, 2021

Item No.: **2021-050**

Amount: \$7,348,888.00

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

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

**DATE:** February 3, 2021

**RE:** **Contract No. 2003443**  
**Study and Design Services for Conveyance System**  
**Vendor: FK Engineering Associates**

### 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. 2003443 “Study and Design Services for Conveyance System” with FK Engineering Associates, at a cost not to exceed \$7,348,888.00 for a duration of 1,886 days;** and authorizes the CEO to take such other action as may be necessary to accomplish the intent of this vote.

### **BACKGROUND**

The recent collapse of the B-40 outfall and the subsequent inspections of the Detroit River Interceptor outfalls by Inland Waters Pollution Control, Inc. raised concerns in many of the outfalls. Inspections revealed structural deficiencies such as fractures, missing mortar from bricks etc., and sediment deposits in many of them. GLWA's sewer system (approximately 180 miles of sewers ranging from 48 inches through 168 inches in diameter) is eighty years old on average, with some of the infrastructure dating back to the late 1800s. These sewers have been constructed in various phases under various contracts using mainly bricks or concrete. GLWA has been inspecting these sewers to determine their condition and prioritizing the rehabilitation under Contract No. GLWA-CON-149 “Emergency Sewer Repair since 2012.”

The purpose of this contract is to provide Engineering Services to evaluate the inspection results and recommend the best rehabilitation methods for the 38 remaining outfalls, the Seven Mile Sewer System, Joy Road Sewer, and the Bates (Brush) Sewer. Also, the consultant will design and prepare up to four bid packages for the construction contracts. Such design includes collecting additional data (structural and geotechnical), performing analysis of the conditions, developing feasible alternatives, working with GLWA to select the best alternative, completing the design, assisting with procurement, and providing oversight of the construction.

### **Project Objectives**

The project tasks are described as follows:

- A. Review Pipeline Assessment Certification Program (PACP) Reports, CCTV, and Historical As-built Drawings
- B. Manual Inspection of Sewers, if necessary
- C. Rehabilitation/Repair Evaluation and Option Analysis
- D. Flow Control Design if necessary
- E. Preparation of up to 4 Construction Documents
- F. Construction Services

### **JUSTIFICATION**

GLWA has been rehabilitating the CSO outfalls in phases as part of ongoing inspections. Recently, GLWA retained Inland Waters Pollution Control, Inc. (IWPC) to conduct closed circuit tv/remotely

operated vehicle (CCTV/ROV) surveys of the remaining outfalls along the Detroit River Interceptor that were not part of the recent rehabilitation contracts. Most of the existing sewers within the GLWA collection system are also older than 80 years. Due to the age and various deterioration of these aging sewer pipes, immediate repair and/or rehabilitation is often required. Contract No. 2003443 is necessary to complete the design and services during construction based on the evaluations and requisite rehabilitations of these sewers and associated outfalls along the Detroit and Rouge Rivers. This contract is meant to address the 38 remaining outfalls that are located along the Northwest Interceptor (NWI) and the Detroit River Interceptor (DRI), the Seven Mile Sewer System, Joy Road Sewer, and the Bates (Brush) Sewer.

### **FINANCIAL PLAN IMPACT**

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

**Funding Source:** Wastewater Construction Fund

**Cost Center:** Wastewater Field Engineering

**Expense Type:** Construction (5421-892411.000-617950-260206)

Construction (5421-892411.000-617950-260510)

**Estimated Cost by Year:** See table below.

Fiscal Year

|                         |                     |
|-------------------------|---------------------|
| FY 2021 Plan            | \$ 296,138.00       |
| FY 2022 Plan            | 1,422,240.00        |
| FY 2023 Plan            | 1,422,240.00        |
| FY 2024 Plan            | 1,422,240.00        |
| FY 2025 Plan            | 1,422,240.00        |
| FY 2026 Plan            | <u>1,363,790.00</u> |
| Financial Plan Estimate | \$ 7,348,888.00     |
| Proposed Contract Award | <u>7,348,888.00</u> |

This proposed contract is being funded from the unallocated Program 260200 - Sewer and Interceptor Evaluation & Program 260500 - CSO Outfall Rehabilitation balances identified in FY 2022 - 2026 CIP Draft No. 2.

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

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

**COMMITTEE REVIEW**

This item is being presented directly to the full Board of Directors.

**SHARED SERVICES IMPACT**

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