

Date: August 1, 2022

To: Wanda S. Page, City Manager

Through: Bertha T. Johnson, Deputy City Manager

From: Donald F. Greeley, Director, Water Management

Subject: Construction Contract to Crofton Diving Corporation for Little River and Lake Michie

Reservoir Safety Improvements and Miscellaneous Rehabilitation Items

Executive Summary

The Department of Water Management (DWM) opened bids on June 7, 2022 for the Little River and Lake Michie Reservoir Safety Improvements and Miscellaneous Rehabilitation Items project. These improvements will include installation of a safety barrier upstream of Lake Michie Dam, installation of a debris boom and safety buoys upstream of Little River Dam, and miscellaneous concrete and equipment repairs at Little River Dam. DWM recommends the contract be awarded to Crofton Diving Corporation, the lowest responsive and responsible bidder.

Motion

To authorize the City Manager to execute a contract with Crofton Diving Corporation for construction of Little River and Lake Michie Reservoir Safety Improvements in the amount of \$942,911;

To establish a contingency fund for the contract in the amount of \$94,000; and

To authorize the City Manager to negotiate change orders for the contract provided the cost of all change orders together with the original contract amount does not exceed \$1,036,911.

Background

The DWM operates two source water supply reservoirs controlled by the Lake Michie Dam and Little River Dam. Both dams are classified as large, high hazard structures by North Carolina Dam Safety. Raw water from the Lake Michie and Little River reservoirs is delivered to the Brown Water Treatment Plant and Williams Water Treatment Plant prior to treatment and distribution to water system customers.

At Little River Dam, spillway roller gates are used to control the reservoir level during rainfall events. Inflow from the watershed during storms often causes large, floating log debris to collect on the spillway gates. Debris can become trapped underneath the steel gates when they are operated, causing damage when the gates are inadvertently closed on debris. In the past, damaged gate seals have resulted in loss of stored water. Severe damage to gates could lead to a serious dam safety issue if the ability to operate a gate during a flood event is impacted. In 2021, two gates required seal repairs at a cost of \$127,000. A debris barrier is needed to keep log debris away from the dam and spillway gates. The debris barrier will allow City staff to periodically and safely remove log debris upstream of the dam before it impacts the spillway gates.

Also, because both the Little River Reservoir and Lake Michie are open to the public for fishing and

boating, this project includes installation of warning buoys at Little River Reservoir and a warning barrier at Lake Michie. These will be located upstream of Little River's new debris boom and keep boaters away from Lake Michie's uncontrolled spillway.

In addition to the safety improvements described above, the project includes the following rehabilitation items at Little River Dam: repair of deteriorated concrete on two spillway bridge piers, replacement of broken steel hatches on three seepage measurement stations, and replacement of broken or missing cleanout caps on the spillway chute slab drainage system.

Issues and Analysis

The construction contract was advertised on April 28, 2022. Three bids were received on June 7, 2022:

Contractor	Bid Total
Crofton Diving Corporation	\$942,911.00
Crowder Construction Company	\$1,305,929.00
Haren Construction Company	\$1,442,000.00

DWM, its consulting engineer and the Finance Department performed a due diligence evaluation of the lowest bid and determined that Crofton Diving Corporation is the lowest responsive and responsible bidder.

Alternatives

One alternative would be to attempt to install these features with City crews. City staff do not have access to major equipment needed for this work, such as barges, nor the training to perform underwater work.

Another alternative would be to not go forward with this project. This would leave the City liable for potential damage at Little River Dam's spillway gates and leave boaters on both lakes vulnerable to potentially dangerous conditions near the spillway areas.

Financial Impact

Funds for this contract are currently available in the following accounts:

4100P002	731000	P0525	\$942,911
4100P002	731900	P0525	\$94,000
Total			\$1,036,911

Equal Business Opportunity Summary

The Finance Department reviewed the bid submitted by Crofton Diving Corporation of Portsmouth, VA and have determined that they are in compliance with the Equal Business Opportunity Program Ordinance.

The goal for this project was **M**UBE 0%, and **W**UBE 0%. No goals were set as a result of limited subcontractor opportunities and dollar value identified by the Department of Water Management.

UBE REQUIREMENTS

Trimat Testing is a HUB certified firm.

Firm	ID	City/State	Amount	% Of Contract
Trimat Testing	M UBE	Durham, NC	\$ 2,500.00	.266%

Contractor Workforce Diversity Hiring Practices

According to the contractor's responses to the Contractor Workforce Diversity Questionnaire, the contractor is a large employer (185 employees) consisting of a mix of professional/skilled and unskilled workers. The contractor believes it has a diverse workforce because: "We practice nondiscriminatory hiring." The contractor did list a couple of examples of efforts it makes to have a more diverse workforce. The completed Contractor Workforce Diversity Questionnaire is provided as an attachment to this agenda item.

WORKFORCE STATISTICS

Total Workforce:

Employment Category	Total Employees	Total	Total
		Males	Females
Project Manager	10	6	4
Professional	15	13	2
Clerical	19	11	8
Labor	141	137	4
Total	185	167	18

Male:

Employment Category	White	Black	Hispanic	Asian or Pacific Islander	Indian or Alaskan Native
Project Manager	4	1	1	0	0
Professional	11	0	1	1	0
Clerical	9	2	0	0	0
Labor	98	34	4	0	1
Total	122	37	6	1	1

Female:

Employment Category	White	Black	Hispanic	Asian or Pacific Islander	Indian or Alaskan Native
Project Manager	4	0	0	0	0
Professional	2	0	0	0	0
Clerical	4	4	0	0	0
Labor	2	2	0	0	0
Total	12	6	0	0	0