THE CITY OF ASHEVILLE

STAFF REPORT

Council Meeting Date: July 26, 2022

Subject: North Fork and William DeBruhl Water Treatment Plant Filter Rehabilitation Project

Staff Resource(s): David Melton, Water Resources Department Director, Bill Hart, Water Production Division Manager.

Action Requested: Adoption of a resolution authorizing the City Manager to execute a professional services contract with Black & Veatch for the North Fork and William DeBruhl Water Treatment Plant Filter Rehabilitation Project for an amount not to exceed $124,290 with a contingency of $30,000 for a total project cost of $154,290.

Background:

- This contract is to provide engineering services associated with the condition assessment and preliminary investigation for the North Fork and William DeBruhl Water Treatment Plant filter rehabilitation and filter media replacement, with select improvements to the North Fork post chlorination feed system and William DeBruhl finished water sample line improvements.
- The North Fork and William DeBruhl Water Treatment Plants (WTP) are located in eastern Buncombe County and collectively supply around 83% of the drinking water for the customers of the City of Asheville Water System.
- Both plants are direct filtration water treatment plants and treat water from pristine reservoirs.
- The North Fork WTP is rated for a maximum production of 31 million gallons per day, while the William DeBruhl WTP is rated for a maximum production of 5 million gallons per day.
- The North Fork and William DeBruhl WTPs rely on dual media filters that use layers of anthracite (carbon), sand, and gravel, to effectively filter particles out of the raw source water.
- This media degrades over time and has a useful life of between 10 and 15 years depending on water quality and operational conditions.
- This media was replaced at both plants in 2007 and has been in constant use since that time and has now reached the end of life.
- It is important that this media be replaced as soon as practical to maintain the high level of filtration and treatment that is required to consistently produce high quality drinking water.
- Media replacement provides the opportunity to evaluate the condition of the filter, structures, walls, airwash system, filter drains, pipe penetrations, etc..
- These repairs ensure reliability and proper long term function of each filter, which results in a resilient water system.
- The scope of work includes1) project management and administration, 2) data collection and review, 3) condition assessment, 4) preliminary engineering of solutions, and 5) documentation.

Vendor Outreach Efforts:

- Through a qualifications based selection process beginning on May 18, 2020 the City of Asheville selected 5 consulting firms to provide on-call professional services for an array of different types of water system Water Plant Projects.
- Black & Veatch was one of the selected firms due to their expertise in areas of water treatment plant construction and upgrades.
- The City of Asheville entered into a master agreement with Black & Veatch on January 18, 2021 for on-call professional services valid for three years with the option to renew for two additional years.

- If approved, the proposed engineering services described here within will be developed into a supplemental contract under the conditions of the master agreement.
- City of Asheville Water Resources Staff determined that utilizing the on-call professional services for Water Treatment Plant projects was the best method to deliver this project and Black & Veatch was the most qualified of the on-call firms.

Council Goal(s):
- A Financially Resilient City
- A Clean and Healthy Environment

Committee(s):
- None

Pro(s):
- Return the North Fork and William DeBruhl WTPs to design parameters and ensure the ability for each plant to continue to produce high quality drinking water.
- Make needed repairs to filter structures to ensure long term reliability.
- Provide improved filtration at both treatment plants.
- Provide resilience for the disinfection process.
- Reduce the risk of compliance violations.

Con(s):
- None

Fiscal Impact:
- An amount not to exceed $124,290 with a contingency of $30,000 for a total project cost of $154,290.
- Funding for this project is currently allocated within the Water Resources Capital Improvements Project Fund - Water Treatment Plant account - W1806

Suggested Motion:
- Move to adopt a resolution authorizing the City Manager to execute a professional services contract with Black & Veatch for the North Fork and William DeBruhl Water Treatment Plant Filter Rehabilitation Project for an amount not to exceed $124,290 with a contingency of $30,000 for a total project cost of $154,290.

Attachment(s)
- Resolution

RESOLUTION NO. 22-_____

RESOLUTION AUTHORIZING THE CITY MANAGER TO EXECUTE A PROFESSIONAL SERVICES CONTRACT WITH BLACK & VEATCH CORPORATION FOR THE NORTH FORK AND WILLIAM DEBRUHL WATER TREATMENT PLANT FILTER REHABILITATION PROJECT

WHEREAS, pursuant to N.C.G.S. § 160A-312, the City of Asheville has authority to operate a public enterprise; and

WHEREAS, pursuant to N.C.G.S. § 160A-20.1, the City of Asheville may enter into contracts with private entities to carry out any public purpose the City is authorized to engage in; and

WHEREAS, the Water Resources Department issued a Request for Proposals (RFQ) for the Water Treatment Plant On Call Engineering; and

WHEREAS, Black & Veatch Corporation was selected by Water Resources staff for the project based on their qualifications, understanding of project scope, cost, and proposal for land application of the residuals; and

WHEREAS, the City wishes to provide funding for the professional services contract with Black & Veatch Corporation to conduct a condition assessment of the North Fork and William DeBruhl Water Treatment Plant filters, chemical feed lines and finished water sample line; and

WHEREAS, the funding for the agreement is allocated within the Water Resources - Water Production Operating Budget; and

WHEREAS, funding be provided for $124,290.00 for the Black & Veatch Corporation scope of service with an additional $30,000.00 contingency, for a total not to exceed $154,290.00;

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF ASHEVILLE THAT:

The City Manager is hereby authorized to execute a professional services contract for $154,290.00, with Black & Veatch Corporation for the condition assessment of the North Fork and William DeBruhl Water Treatment Plant filters, chemical feed lines and finished water sample lines.

Read, approved and adopted this 26th day of July, 2022.

_____ _____

City Clerk Mayor

Approved as to form:

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City Attorney