THE CITY OF ASHEVILLE

STAFF REPORT

Council Meeting Date: March 10, 2020

Subject: Professional Services Contract with Brown and Caldwell for repairs to the North Fork Water Treatment Plant (WTP) five million gallon water storage tank baffle curtains and geotechnical testing of the North Fork Hypochlorite Bulk Storage area.

Staff Resource(s): David Melton, Water Resources Department Director; Leslie Carreiro, Water Production Manager.

Action Requested: Adoption of a resolution authorizing the City Manager to execute a professional services contract with Brown and Caldwell for the emergency repairs to the North Fork WTP water storage tank baffle curtains and geotechnical testing for an amount not to exceed $423,000 with a contingency of $50,000 for a total project cost of $473,000.

Background:

- The North Fork Water Treatment Plant is the largest of the three water treatment plants for the City of Asheville water system. The North Fork WTP produces approximately 67% of the water that supplies the City of Asheville's water distribution system.
- In 2008, the North Fork water storage tank was retrofitted with five baffle curtains to increase the contact time (CT) of the treated water. The CT times are important to the treatment process at North Fork because they aid the disinfection process and are regulated by state and federal agencies.
- Four of the five baffle curtains have fallen to the bottom of the tank and are no longer serving the purpose that they were intended. As a result, the North Fork clearwell must remain above 20' at all times and be dosed at a higher residual level to meet minimum mandated requirements.
- Geotechnical testing of the North Fork Water Treatment Plant sodium hypochlorite feed area is required to determine the degree of settlement and remediation options. This area supports the weight of two chemical bulk storage tanks that store up to 12,000 gallons each of sodium hypochlorite for use in the plant's water treatment and disinfection.
- The storage area has exhibited signs of significant settling resulting in cracking of the floor, tank support pads, and the building foundation. Testing of the area will be required to determine what steps are necessary to stabilize and protect the facility for the future.

Vendor Outreach Efforts:

- Through a qualifications-based selection process beginning in August 2014, the City of Asheville selected nine consulting firms to provide on-call professional services for an array of different types of water system projects. Brown and Caldwell was one of the firms selected based on their expertise in areas of water treatment plant construction and upgrades.
- The City of Asheville entered into a master agreement with Brown and Caldwell on June 8, 2015 for on-call professional services valid for three years with the option to renew for two additional years.
- On April 19, 2018, the City of Asheville executed a renewal master agreement with Brown and Caldwell for the additional two years of on-call professional services.
- If approved, the proposed engineering services will be developed into a subcontract under the conditions of the master agreement.
- City of Asheville Water Resources staff determined that utilizing the on-call professional services for General Projects was the best method to deliver this project and Brown and Caldwell 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 WTP water storage tank to design parameters and return operational flexibility.
- Decrease the requirement for higher disinfection dosages and costs.
- Reduce the risk of compliance violations.
- Protect and stabilize the North Fork Water Treatment Plant Sodium Hypochlorite Bulk Storage area.

Con(s):

- None

Fiscal Impact:

- Funding for this repair will come from Water Resources capital improvement funding that was previously allocated to NCDOT projects which are delayed and will not require payment in the current fiscal year.

Suggested Motion:

- Move to adopt a resolution authorizing the City Manager to execute a professional services contract with Brown and Caldwell for the emergency repairs to the North Fork WTP water storage tank baffle curtains for an amount not to exceed $423,000 with a contingency of $50,000 for a total project cost of $473,000.

Attachment(s)

- Resolution

RESOLUTION NO. 20-____

RESOLUTION AUTHORIZING THE CITY MANAGER TO EXECUTE A CONTRACT WITH BROWN AND CALDWELL FOR PROFESSIONAL SERVICES ASSOCIATED WITH EMERGENCY CLEARWELL REPAIRS ON THE NORTH FORK WATER TREATMENT PLANT CLEARWELL AND GEOTECHNICAL TESTING OF THE BULK STORAGE AREA

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, Brown and Caldwell was one of three firms selected by Staff via a qualifications based process to perform on-call professional services for Water Treatment Plant Projects; and

WHEREAS, the City of Asheville entered into a Master Agreement with Brown and Caldwell, on June 8, 2015 and renewed the Master Agreement on April 19, 2018 for On-Call Professional Services for the Water Treatment Plant Projects; and

WHEREAS, the professional services for the repairs to the North ForkWater Treatment Plant 5 million gallon water storage tank baffle curtains and geotechnical testing of the bulk storage area will be a subcontract under said Master Agreement; and

WHEREAS, the use of Brown and Caldwell, will utilize the most qualified firm to ensure timely completion and fulfill compliance with scope of services for the repairs to the North ForkWater Treatment Plant 5 million gallon water storage tank baffle curtains and geotechnical testing of the bulk storage area.

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

The City Manager, on behalf of the City of Asheville, is hereby authorized to execute the contract with Brown and Caldwell, for professional services required to make repairs to the North Fork Water Treatment Plant 5 million gallon water storage tank baffle curtains and geotechnical testing of the bulk storage area for an amount not to exceed $423,000 with a contingency of $50,000 for a total project cost of $473,000.

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Read, approved, and adopted this 10th day of March 2020.

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City Clerk Mayor

Approved as to form:

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City Attorney