

Legislation Text

File #: 15-12062, Version: 1

# Preliminary Engineering for Thermal Hydrolysis Process System

## Action:

- A. Approve a contract for up to \$2,863,950 with CDM Smith Inc. for preliminary engineering for the Thermal Hydrolysis Process Facility at the McAlpine Creek Water Treatment Plant, and
- B. Authorize the City Manager to amend the contract consistent with the purpose for which the contract was approved.

#### Staff Resource(s):

David Czerr, Charlotte Water Ron Hargrove, Charlotte Water Carl Wilson, Charlotte Water

#### Explanation

- This contract is for preliminary engineering for a thermal hydrolysis process (THP) system at the McAlpine Creek Wastewater Treatment Plant, located in the Town of Pineville (adjacent to Council District 7).
- The THP is an enhanced biosolids treatment process that breaks down hard-to-digest compounds through the application of high pressure and temperature to destroy pathogens, improve nutrients, increase biogas production, and reduce the volume of biosolids.
- The enhanced biogas production and onsite energy generation from the THP project supports the city's Strategic Energy Action Plan goals and strategies by shifting energy demand away from nonrenewable sources. In addition, the project will facilitate a bio-nutrient circular economy by converting biosolids into renewable resources, thus reducing impacts from chemical fertilizers.
- Charlotte Water will have the ability to diversify its management of biosolids products by implementing this system.
- On October 9, 2015, the city issued a Request for Qualifications (RFQ) for professional engineering services for enhanced biosolids treatment. The city received six proposals and determined that CDM Smith Inc. was the best qualified firm to meet the city's needs.
- On April 11, 2016, Council approved a contract with CDM Smith, Inc. for the initial phase of this work, a Biosolids Market Study, which resulted in the recommendation for a THP system.

## **Charlotte Business INClusion**

Per Charlotte Business INClusion Policy: Part C: Section 2.1(a), the city shall not establish Subcontracting Goals for Contracts where: (a) there are not subcontracting opportunities identified for the Contract; or (b) there are no SBEs or MBEs certified to perform the scopes of work that the city regards as realistic opportunities for subcontracting.

This contract meets the provisions of (a) - No subcontracting opportunities.

## Fiscal Note

Funding: Charlotte Water Capital Investment Plan Attachment(s) Map