



**Date:** April 6, 2015

**To:** Thomas J. Bonfield, City Manager

**Through:** W. Bowman Ferguson, Deputy City Manager

**From:** Donald F. Greeley, Director, Water Management

**Subject:** Reclaimed Water Master Plan – Contract Award to CDM Smith

### Executive Summary

The Department of Water Management (DWM) issued a Request for Qualifications (RFQ) for Professional Engineering Services to develop a Reclaimed Water Master Plan. The DWM received two proposals in response to the RFQ. CDM Smith, Inc. was selected based on the qualifications presented, and a scope of services for the project has been negotiated for the amount of \$307,000.00.

### Recommendation

The Department recommends the City Council:

1. Authorize the City Manager to execute a contract with CDM Smith, Inc. for Professional Services for development of a Reclaimed Water Master Plan at a contract cost of \$307,000.00.
2. Establish a contingency fund in the amount of \$31,000.00.
3. Authorize the City Manager to negotiate change orders provided that the cost of all change orders does not exceed \$31,000.00, and the total project cost does not exceed \$338,000.00.

### Background

Development of a reclaimed water utilization program has been identified by DWM as a critical component in complying with increasingly stringent nutrient reduction requirements for wastewater discharges and in planning to meet the City's future potable water demands. The North and South Durham Water Reclamation Facilities are capable of producing effluent that meets North Carolina's reclaimed water quality requirements. However, the necessary infrastructure to distribute reclaimed water to potential users does not exist. A preliminary reclaimed water feasibility study conducted in 2011 indicated significant potential exists for reclaimed water use through residential, commercial and agricultural irrigation in addition to various industrial and institutional uses.

The Reclaimed Water Master Plan will:

- Identify potential reclaimed water customers and usage areas;
- Estimate reclaimed water demand over a 25-year planning period;
- Identify and evaluate potential alternatives for reclaimed water sources, storage and distribution;
- Determine costs of necessary infrastructure upgrades;
- Analyze the costs for capital improvements, operation, and maintenance of a reclaimed water system, determine the potential savings that may be realized through deferred upgrades, and determine the appropriate rate structure for a sustainable program.
- Research regulatory implications associated with a reclaimed water program; and
- Recommend program implementation strategies.

**Issues and Analysis**

The DWM received two responses to the RFQ:

CDM Smith, Inc.  
Hazen and Sawyer, P.C.

Based on the proposals submitted, both firms were interviewed by the selection committee to gather more information about their project approaches. The selection committee was made up of staff from the DWM and the Equal Opportunity/Equity Assurance (EOEA) Department. CDM Smith, Inc. was selected for the project based on their qualifications and experience.

**Alternatives**

Alternative 1: Do not move forward with development of a Reclaimed Water Master Plan. This alternative is not recommended because a sustainable program for reclaimed water use is needed to provide a means for complying with future nutrient discharge regulations and to help ensure an adequate supply of potable water for the City’s growing population over the next 25 years. Furthermore, as part of the 2014 Jordan Lake Water Supply Storage Allocation Request, the City has committed to begin a Reclaimed Water Master Planning effort in 2015.

**Financial Impact**

The necessary funds are available in the DWM Reclaimed Water Systems Phase I & II budget:

ORG	OBJ	PROJ	AVAILABLE
4100P002	764000	P2530	\$1,955,829.00

**SDBE Summary**

The Equal Opportunity/Equity Assurance Department reviewed the proposal submitted by CDM Smith, Inc. of Raleigh, North Carolina to determine compliance with the Ordinance to Promote Equal Business Opportunities in City Contracting. It was determined that CDM Smith, Inc., is in compliance with the Ordinance to Promote Equal Business Opportunities in City Contracting.

**SDBE REQUIREMENTS**

No MSDBE or WSDBE goals were set.

**WORKFORCE STATISTICS**

Workforce statistics for CDM Smith, Inc. are as follows:

Total Workforce	71	
Total Females	18	(25%)
Total Males	53	(75%)
Black Males	4	(6%)
White Males	39	(55%)
Other Males	10	(14%)
Black Females	1	(1%)
White Females	16	(23%)
Other Females	1	(1%)