

City Council – Action Request Form

Date: September 14, 2020

To: Mayor, Mayor Pro Tempore, and Members of the City Council

From: Johnnie Taylor, Operations Director
Keith Huff, Field Operations Director

Council Action Requested:
Resolution approving a contract with HDR Engineering of the Carolinas to provide professional engineering services for Stormwater Masterplan updates of the Upper and Lower Muddy Creek watersheds

Strategic Focus Area: Healthy Environment
Strategic Objective: Manage Water Quality and Quantity
Strategic Plan Action Item: None
Key Work Item: Yes



Summary of Information:

During the 1990’s the City of Winston-Salem initiated a comprehensive watershed analysis program effort within the Stormwater Division in order to comply with Federal National Pollution Discharge Elimination System (NPDES) permitting requirements. This effort involved the collection of detailed survey data relating to the City’s stormwater system and analysis of the system’s performance as it relates to flooding, erosion and water quality impairment within the City. This information serves as the basis for the City’s drainage Capital Improvement Program.

Since the delivery of this information, the City has experienced changes in land use, jurisdictional size, and infrastructure condition. The City’s requirements for stormwater management have also expanded as the NPDES permit has evolved to comply with Phase II Stormwater rules.

Committee Action:

Committee	Finance 9/14/2020 Public Works 9/15/2020	Action	Approval
For	Unanimous	Against	

Remarks:

During this time, maintenance of the drainage system and capital improvements have been initiated. Update of these Watershed Masterplans is necessary for compliance with the City's NPDES permit and to correctly identify areas of flooding and erosion in order to prioritize projects for the capital improvement drainage program. In addition, this information will be used to update Total Maximum Daily Load reduction plans for Muddy Creek and Salem Creek, which have been designated as impaired streams by the State of North Carolina

Scope of work for this project will include inventory update of approximately 2,000 storm sewer structures in various watersheds throughout the city and construction of a geodatabase to electronically manage collected information. When the updated storm sewer information has been collected, a hydraulic model will be revised to show areas of flooding and erosion within the updated watersheds.

Additional work will be completed to conduct dry weather screening of stormwater outfalls that discharge to surface waters of the State, which is a direct requirement of the city's NPDES stormwater permit.

Consultant selection was initiated through a Request for Statement of Qualifications process where the consulting firms listed below responded with proposals.

- CDM consulting and Engineering
- Jewell Engineering
- Brown and Caldwell Engineers and Consultants
- WK Dickson Engineering
- HDR Engineering of Carolinas
- CH2M Hill Engineering
- Baker Engineering

A review panel of staff members evaluated proposals and scored each firm based on major categories such as: relevant consultant experience, prior consultant performance, strength of consultant project team and overall report preparation. Based on scoring in the evaluation process, staff selected HDR Engineering of the Carolinas, a consultant skilled in the creation of electronic storm sewer inventories and geodatabases who is also familiar with the needs of the City as they have successfully completed the prior stormwater master planning documents. The contract for this project was originally approved with the FY 07-08 budget. Master planning updates have been completed for seven watersheds and this contract is a continuation of the overall effort to update the watersheds within the city limits.

Staff requests approval of a contract with HDR Engineering of the Carolinas, Inc. for a total fee of \$430,250.