



**Date:** November 6, 2012

**To:** Thomas J. Bonfield - City Manager  
**Through:** Keith Chadwell - Deputy City Manager  
**From:** Marvin G. Williams – Director of Public Works  
**Subject:** Contract SD-2012-03, West Knox Street Culvert Stabilization

**Executive Summary**

On August 1, 2012, bids were opened for Contract SD-2012-03, West Knox Street Culvert Stabilization. This contract involves the furnishing of all materials, labor, equipment, tools, etc. unless otherwise specified, for the complete stabilization of the West Knox Street culvert by means of void filling and soil stabilization using a high density polyurethane system. One responsive bid was submitted by Uretek ICR Mid-Atlantic, Inc., of Kernersville, North Carolina. The Public Works Department recommends that the City Council authorize the City Manager to execute a contract with Uretek ICR Mid-Atlantic, Inc., for Contract SD-2012-03 in the amount of \$433,902.00 with a contingency of \$65,085.30 (15%). This results in a total amount of \$498,987.30.

**Recommendation**

The Administration recommends that the City Council authorize the City Manager to execute a contract for SD-2012-03, West Knox Street Culvert Stabilization, with Uretek ICR Mid-Atlantic, Inc. in the amount of \$433,902.00; establish a contingency fund in the amount of \$65,085.30 (15%); and authorize the City Manager to negotiate change orders provided that the cost of all change orders does not exceed \$65,085.30 and the total project cost does not exceed \$498,987.30.

**Background**

The North Carolina Department of Transportation (NCDOT) conducts biannual bridge and culvert inspections on behalf of the City of Durham. In February of 2010 and again in December of 2011, NCDOT conducted bridge inspections of the double barrel, 12-foot wide by 6-foot high, concrete box culvert where South Ellerbe Creek passes beneath West Knox Avenue. On January 4, 2012 a consultant working on behalf of NCDOT issued a Priority Maintenance Notice for this culvert indicating the presence of conditions requiring prompt attention. These conditions included scouring and undermining at the downstream end of the culvert as well cracking within the culvert.

Stormwater Services Division staff conducted an inspection and determined the conditions were caused by problems in a catch basin connected to the culvert. The bottom of the catch basin had deteriorated and allowed stormwater to undermine the culvert, causing scour, and leading to the cracking detailed in the Notice. In order to stabilize the culvert in the short term, Stormwater Maintenance staff patched the catch basin to stop the undermining. This patching allowed Stormwater Services Division staff the time to evaluate long term solutions.

There are two options for stabilizing the culvert in the long term, full replacement and stabilization via injected grout or polyurethane. Staff explored these options and determined that polyurethane stabilization was the most cost effective solution. The time needed for design, permitting, and construction is significantly less for stabilization (3-months) rather than full replacement (22-months). Stabilization also allows West Knox Street to remain open during construction. The polyurethane stabilization method provides a longer lifespan and greater strength than traditional grouting.

**Issues and Analysis**

The following is a summary of bids received:

Uretek ICR Mid-Atlantic, Inc., \$499,418.00.

Although only one bid was received, the project was not required to be re-bid as the estimated expenditures are less than \$500,000. Also, it is unlikely a re-bid would have a different result as the bidder owns proprietary technology that best meets the City’s specifications and requirements. Nonetheless, staff was able to negotiate a lower bid price with the firm to closer meet the project budget. The negotiations resulted in a bid of \$433,902.00. The Public Works Department recommends awarding Contract SD-2012-03 to Uretek ICR Mid-Atlantic, Inc. in the amount of \$433,902.00.

**Alternatives**

The Department of Public Works has not identified any alternatives since the bid received is competitive and is consistent with the engineer’s estimate prepared by staff.

**Financial Impact**

This project is budgeted for in the adopted Capital Improvements Project Ordinance (#14288) for right-of-way drainage repairs, from the following accounts.

4300L045-731000-LK107:	\$433,902.00
<u>4300L045-731900-LK107:</u>	<u>\$65,085.30</u>
Total Impact:	\$498,987.30

**SDBE Summary**

The Equal Opportunity/Equity Assurance Department reviewed the bid submitted by Uretek ICR Mid-Atlantic, Inc. of Kernersville, North Carolina and has determined that they are in compliance with the Ordinance to Promote Equal Business Opportunities in City Contracting.

**SDBE Requirements**

There are no goals for this project.

**Workforce Statistics**

The workforce statistics for Urettek ICR Mid-Atlantic, Inc. are as follows:

Total Workforce	21	
Total Females	4	19%
Total Males	17	81%
Black Males	1	5%
White Males	15	71%
Other Males	1	5%
Black Females	0	0%
White Females	3	14%
Other Females	1	5%

**Bidder Safety Record Review Summary**

Staff has reviewed the bid submitted by Urettek ICR Mid-Atlantic, Inc. and has determined that they are in compliance with the Policy for Bidder Safety Record Review.

**Attachments**

1. Vicinity Map
2. Construction Drawing