



## Legislation Details (With Text)

**File #:** ID 16-0482    **Version:** 1    **Name:** Raw Water Transmission Mains  
**Type:** Resolution    **Status:** Passed  
**File created:** 5/31/2016    **In control:** City Council  
**On agenda:** 6/21/2016    **Final action:** 6/21/2016  
**Title:** Resolution Approving a Contract with Hazen and Sawyer P.C. for the Evaluation of the Mitchell Water Treatment Plant Raw Water Transmission Mains  
**Sponsors:**  
**Indexes:** District 3, WR Contracts  
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**Attachments:** 1. Agenda 160621 Hazen Sec State, 2. Agenda 160621 RawWaterPipingProposalRev05232016, 3. Agenda 160621 MWBE Raw Water Transmission Mains Evaluation, 4. 16-0482 Resolution Raw Water Transmission Main Evaluation.pdf

Date	Ver.	Action By	Action	Result
6/21/2016	1	City Council	adopt	Pass
6/15/2016	1	Infrastructure Committee	refer	
6/14/2016	1	Infrastructure Committee	recommend for approval	Pass

Resolution Approving a Contract with Hazen and Sawyer P.C. for the Evaluation of the Mitchell Water Treatment Plant Raw Water Transmission Mains

Department: Water Resources  
Council District: 3

Public Hearing: N/A  
Advertising Date/By: N/A

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Contact 2 and Phone: Michael Borchers, 373-2494

### PURPOSE:

The City of Greensboro Water Resources Department is requesting approval of a professional services contract with Hazen and Sawyer, P.C. to perform an evaluation of the raw water transmission mains serving the Mitchell Water Treatment Plant (WTP). The evaluation will identify transmission main vulnerabilities and deficiencies in order to develop a prioritized rehabilitation strategy that ensures system integrity and a reliable piping system for conveying raw water to the treatment plant.

### BACKGROUND:

The professional services of Hazen and Sawyer, P.C., will be utilized to investigate and inspect the condition of the raw water line transmission mains using Pure Technology's robotic platform to perform electromagnetic, sonar, visual inspection and data analysis. The project will determine the internal condition of the lines and will help determine if future replacement of the lines is necessary.

The raw water transmission lines are critical to the operation of the Mitchell WTP as they provide the raw water needed for treatment. The raw water lines are approaching their anticipated design life based on materials and installation dates. The Lake Brandt Pumping Station pumps water from Lake Brandt to the Air Harbor Reservoir, which is used for flow and equalization storage. The water drains from the reservoir by gravity to the Mitchell WTP for treatment where it is subsequently pumped to supply drinking water to the City of Greensboro. The currently known issues, potential for failure, and risk assessment of the raw water transmission mains prompted Water Resources to investigate the reliability, condition and operation of the lines.

The Department contacted Hazen and Sawyer to determine the feasibility of performing this evaluation based on their experience with the operation of the City's treatment and distribution system. The proposal submitted by Hazen and Sawyer includes a technical evaluation of the current condition of the pipelines and appurtenances, as well as modeling of potential pressure surges and recommended improvements to the raw water transmission mains to support direct pumping operations. The anticipated WBE utilization for this design services contract is 6% of the total contract amount.

**BUDGET IMPACT:**

Funding for this project is budgeted in Water Resources Capital Water Resources Operations Fund account 501-7081-01.5413 in the amount of \$285,440.

**RECOMMENDATION / ACTION REQUESTED:**

The Water Resources Department recommends City Council approve the Raw Water Transmission Mains Evaluations with Hazen and Sawyer PC, in the amount of \$285,440.

**COMMITTEE ACTION:** This item was referred to Council by the Infrastructure Committee.