

April 16, 2018

## **CITY COUNCIL AGENDA MEMORANDUM**

### **SUBJECT**

Resolution authorizing execution of a professional services agreement with CH2M HILL Engineers, Inc. - a Jacobs Engineering Group Inc. Company (CH2M) for Water Distribution System Seismic Vulnerability Assessment, in an amount not to exceed \$500,000, plus all applicable taxes.

### **FISCAL IMPACT**

This contract authorizes the City to spend up to \$500,000, plus all applicable taxes, for contract services. \$250,000 is included in the 2018 water utility operating budget and the remaining \$250,000 will be requested in 2019 as part of the proposed 2019-2020 budget. Available water utility operating reserves will be used to fund this contract and will have no impact to water utility rates.

### **STAFF CONTACTS**

Nav Ota, Director, 452-2041

Paul A. Bucich, Planning Manager, 452-4596

*Utilities Department*

### **POLICY CONSIDERATION**

Comprehensive Plan Policy UT-41:

“Provide reliable water service for domestic use, fire flow protection, and emergencies.”

Water System Plan policies:

- Emergency Preparedness: “The Utility will prepare and periodically update an Emergency Management Plan. The plan will include provisions for an organized response to the most likely kinds of emergencies that may endanger the health or safety of the public, or jeopardize the operation of the public water system. The plan will also address issues related to long term system recovery for orderly and complete restoration of the water system after an emergency.”
- Service Reliability: “The Utility shall invest resources as necessary to construct, maintain and renew water system infrastructure and equipment such that Utility customers are provided consistent, reliable service, except during maintenance activities. Where practicable, the distribution system shall have operational redundancy. Connections with adjacent water systems should be encouraged to improve reliability and reduce vulnerability to loss of water service or improve distribution capability.”
- Water Shortage Response: “The Utility will maintain a local response plan for water supply shortages caused by a drought or supply interruption as part of its Emergency Management Plan for emergency preparedness. The Plan will be consistent with other regional purveyors’ planned response(s), and with contractual agreements. The Plan’s objectives will include ensuring that, to the extent possible, the essential needs of its customers are met.”

City contracting policies:

- Bellevue City Code section 4.28.040 requires the City to competitively bid public works in accordance with the Code and state law. Council approval is required to award the bid where the cost exceeds \$90,000.

## **BACKGROUND**

The Puget Sound Region is home to several geologic faults, which make us susceptible to large earthquakes. These events can be expected to cause water main breaks and potentially widespread service interruptions that could threaten life and property for days, weeks, or even months.

Bellevue Utilities has identified a need for a robust analysis to guide operations practices and our Capital Investment Program to improve water system earthquake resiliency. Site-specific (reservoir) retrofits have been performed through CIP W-85, and a limited evaluation of supply pipeline seismic vulnerabilities was conducted in 1996, but the City has never evaluated customer impacts (extent and duration of service interruptions) or prioritized specific sections of pipe for improvement. In recent decades, Bellevue's system has changed significantly, mapping has been updated, and the industry's understanding of seismic performance has evolved. Portland, Seattle, Tacoma and the Central Puget Sound Water Supply Forum all recently conducted seismic vulnerability assessments, and Bellevue's recent investments in technology position us to take advantage of better tools and more recent methods of evaluation. The scope of this project is commensurate with Bellevue's specific needs and the relative complexity of our water system.

This project will evaluate the water distribution system's seismic vulnerabilities, customer service risks, social and economic impacts following an event, and prioritize potential system improvements based on customer-focused return on investment and service restoration. The project will focus on operational improvements, mitigation strategies and construction standards in addition to capital investment. It will take advantage of recent efforts made by the Central Puget Sound Water Supply Forum's Resiliency Project, and leverage the City's investments in updated GIS mapping data and a calibrated hydraulic model. It will also be coordinated with the City's current work to optimize water rights for an emergency supply of water.

CH2M was selected through a competitive process. Request for Qualifications (RFQ) #17060 was advertised August 1 to September 14, 2017. Six consultants submitted statements of qualifications (SOQs). A five-member selection committee was formed representing the Utilities Department's Director's Office, Engineering, and Operations & Maintenance divisions. The selection committee selected two of the firms to interview (CH2M and Carollo Engineers, Inc.), based on how well the SOQs addressed the specific scope items in the RFQ. CH2M was then selected based on their interview performance, which augmented and clarified the SOQ and demonstrated specific experience and superior technical proficiency relevant to Bellevue's needs.

As required by state law relating to contracts for architectural and engineering services, the City selects the consultant deemed to be the most highly qualified for a given project. State law precludes using cost as a basis for selection of engineering firms.

## **EFFECTIVE DATE**

If approved, this Resolution becomes effective immediately upon Council adoption.

**OPTIONS**

1. Adopt the Resolution authorizing execution of a professional services agreement with CH2M HILL Engineers, Inc. - a Jacobs Engineering Group Inc. Company (CH2M) for Water Distribution System Seismic Vulnerability Assessment, in an amount not to exceed \$500,000, plus all applicable taxes.
2. Do not adopt the Resolution and provide alternative direction to staff.

**RECOMMENDATION**

Option 1

**MOTION**

Move to adopt Resolution No. 9402 authorizing execution of a professional services agreement with CH2M HILL Engineers, Inc. - a Jacobs Engineering Group Inc. Company (CH2M) for Water Distribution System Seismic Vulnerability Assessment, in an amount not to exceed \$500,000, plus all applicable taxes.

**ATTACHMENTS**

Proposed Resolution No. 9402

**AVAILABLE IN COUNCIL DOCUMENT LIBRARY**

Consultant Contract