SULTAN CITY COUNCIL
AGENDA ITEM COVER SHEET

ITEM NO: A – 4 – Attachment A

DATE: August 13, 2015

SUBJECT: Water Booster Pump Station

CONTACT PERSON: Mick Matheson, P.E., Public Works Director

ISSUE:
The issue before the City Council is acceptance of the Energy Service Proposal for process and efficiency improvements for the City of Sultan's Potable Water Booster Pump Station, and to authorize the Washington State Department of Enterprise Services (DES) to generate contract documents for Energy Conservation Measure 5.

Attachment A - Energy Services Proposal is a 283 page document and is available for review at City Hall. Staff has provided the Executive Summary for review.

Energy Services Proposal

August 6, 2015

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1. EXECUTIVE SUMMARY

1.1 PROJECT OVERVIEW

Trane is pleased to provide the following Energy Services Proposal (ESP) for process and efficiency improvements for the City of Sultan's Potable Water Booster Pump Station. The scope and costs herein reflect our work to date and are proposed as the guaranteed maximum (GMAX) project cost and guaranteed minimum savings per the State ESPC contract.

The City of Sultan selected Trane US Inc. to complete an Investment Grade Audit (IGA) of the City's wastewater treatment plant and potable water booster pump station through the State's Energy Savings Performance Contracting (ESPC) program. The ESPC program is administered by the Department of Enterprise Services.

The key objectives the City indicated they wanted to achieve with this project are:

Potable Water Booster Pump Station (BPS)

- Avoid imminent capital costs the City will incur should existing equipment and building remain in service
- Improve potable water system infrastructure and reduce risk of failure creating health and safety issues for the City
- Bring the BPS up to current code
- Increase capacity to meet peak demand events
- Reduced energy cost by using more efficient equipment
- Specified equipment maximizes operational efficiencies and requires less routine maintenance
- Reduce purchased water from Everett, reducing cost for the City
- Maximize system life and reliability
- Maximize energy conservation incentives from Snohomish County PUD (SnoPUD)

Trane has completed the Investment Grade Audit (IGA) of the existing booster pump station (BPS). Through this IGA, Trane has presented the City of Sultan with a project solution that maximizes utility incentive dollars, improves system operation, addresses capital improvement needs and maximizes energy efficiency.

This project includes upgrades and renovations to various processes and systems within the booster pump station as outlined in Section 1.2. Several ECMs were studied during the course

of the IGA. ECM's 1-4, located at the wastewater treatment plant, are currently being constructed and are expected to be complete by September 2015.

1.2 SELECTED ENERGY CONSERVATION MEASURES (ECM) SUMMARY

ECM-5 Potable Water Booster Pump Station (BPS)

Install 5 booster pumps and an above-grade metal building that will house the electrical, control, and pumping equipment. Provide a new emergency generator located outdoors, adjacent to the proposed BPS building. The intent of this measure is to replace aging equipment and maximize energy efficiency while meeting the water demand to zone 632 and 447, as well as supplement flows required to be conveyed to the 323 Zone via PRV #3 during a fire flow event.

1.3 PROJECT COST

Based on our IGA, Trane has identified a 2,061,885 initiative that, via the State of Washington's Energy Services Contract, will generate the following benefits for the City of Sultan:

- Achieve utility cost reductions totaling $2,743 per year
- Qualify for energy conservation incentives from SnoPUD totaling approximately $6,800
- Achieve maintenance and operational cost reduction of $12,500 per year for 3 years

1.4 CONCLUSION

Trane appreciates the opportunity to present this ESP. The project described in this proposal demonstrates that the City is actively working towards leveraging resources and revenue streams to optimize operation and minimize energy and operational costs. Trane looks forward to working with the City of Sultan and the Department of Enterprise Services on the implementation of this project.