TO: Mayor and City Council

SUBJECT: Hess Pump Station Site Valve Replacements and Repairs (All Districts)

INITIATED BY: Department of Public Works and Utilities

AGENDA: Consent

Recommendation: Approve the budget and adopt the resolution.

Background: The Hess Pump Station was constructed in 1974 and is a vital component for delivery of water throughout the entire distribution system. The ages of the reservoirs and yard piping providing potable water to Hess Pump Station are 20 to 80 years old. There are approximately 21 valves that control water from the Water Treatment Plant (WTP) via the Chlorine Contact Basin to Hess underground storage reservoirs in various needs of replacement, repair or maintenance. Recent reservoir maintenance, which required isolating the reservoirs for cleaning substantiated that many of valves are inoperable. Reservoirs which could not be isolated by inoperable valves, were cleaned by use of divers.

Analysis: Subsequent to the number of inoperable valves encountered from reservoir maintenance operations, a valve condition assessment was conducted. Of 18 accessible valves included in the report, 11 valves were determined inoperable, one valve was semi-operable (will not close fully) and six valves were operable with noted cleaning and maintenance recommended. Three additional valves (one buried 80 year-old valve and two of the newest 20 year-old valves) were excluded from the report.

Staff recommends that the valves associated with control of water to the Hess Pump Station be evaluated by a consulting firm. The firm will be tasked to perform a cost analysis to determine valves requiring replacement and valves that may be cost-effective for rehabilitation. The analysis will include consideration of age and the location of valves in the system required for vital use. Staff also recommends the valve analysis include considerations for the proposed connections from the new Northwest Water Treatment Plant (NWWTP) and determine the need for possible additional valves to facilitate future connections to be performed as part of the NWWTP project.

The actual scope of work will be developed as preliminary design and cost-estimating progresses. A final design supplemental agreement for competitive bidding and request for construction funding will be brought back to the City Council at a later date for approval.

Financial Considerations: Funding of $500,000 for preliminary and final design work for WTP and Hess Valves is programmed in year 2021 of the Adopted 2019-2028 Capital Improvement Program (CIP). Funding for construction is currently being programmed in the upcoming 2021-2030 CIP and will be requested at a later date. State statute (K.S.A. 10-1210) and City Charter Ordinance 211 require a 2/3 majority vote to issue utility revenue bonds to fund utility improvements.

Staff requests approval of $500,000 for design and development of a cost estimate. The cost estimate for a supplemental contract for final design is included in the $500,000 budget requested at this time.

The full cost of the project was accounted for in the most recent cost of service analysis and will not impact rates. The project will be funded from future revenue bonds or Water Utility cash reserves. If revenue bonds are issued, 8% will be added for financing and administrative costs.
**Legal Considerations:** The Law Department has reviewed and approved the resolution and notice of intent as to form. State statute (K.S.A. 10-1210) and City Charter Ordinance 211 require a 2/3 majority vote to issue utility revenue bonds to fund utility improvements.

**Recommendations/Actions:** It is recommended that the City Council approve the budget, adopt the resolution and authorize the necessary signatures.

**Attachments:** Resolution and Notice of Intent.