



MEMORANDUM

DATE: February 22, 2019
TO: Dan Duchniak
FROM: Kelly Zylstra
RE: 2019 Boiler Replacement – 115 Delafield/132 North Street

Requests for quotations for replacement of the boiler system that serves the main office of the Water Utility were sent to four firms on January 7th and received on February 11th.

Funds for this purchase will be taken from Account #3900 which has \$55,368 to be used for this work.

Contractor	High Efficiency Model	Standard Efficiency Model
Dillett Mechanical 21625 Doral Rd Waukesha, WI 53146	\$57,336.00	\$42,583.00
Heiden Plumbing, Heating & Cooling 1100 W. Bruce St Milwaukee, WI 53201	No Bid	No Bid
Hennes Services, Inc. 4100 W. Lincoln Ave West Milwaukee, WI 53215	No Bid ⁽¹⁾	\$30,719.04
First Choice Heating & Cooling S30W24698 W. Sunset Dr. Waukesha, WI 53189	No Bid	No Bid

(1) No bid was submitted as the Contractor does not recommend this option due to the amount of maintenance that would be required.

The above bids include removal and replacement of the three-boiler system, associated valves, pumps and some piping; all of which have reached the end of their service life.

The contractors were asked to provide a recommendation on manufacturer and the use of the standard or high efficiency units. The contractors were split on their recommendations for standard vs high efficiency.

From a pure financial standpoint, boilers are said to last 15 years, the average annual gas cost over the last four years for this building of \$6,386 using a 10% efficiency increase between standard and high efficiency, and a cost difference of \$26,646.96 between the bids, the pay back of the more costly high efficiency unit will exceed 20 years.



Waukesha Water Utility

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From a maintenance standpoint, high efficiency boilers require more maintenance than standard efficiency units. While corrosion affects all boilers, often the design of the high efficiency boilers might actually impair the operation of the heat exchanger, resulting in higher maintenance costs. High efficiency boilers also have much higher water flow rates than conventional boilers do so to maintain proper operation, the pump must be sized correctly to meet the boiler's need for a higher water flow rate. In addition, regular maintenance for a high efficiency boiler includes changing out the parts that either wear out through use, or that become unsuitable for use when a technician disassembles the combustion chamber. Higher efficiency units do have more fans, sensors, switches, relays, and electronics hence their failure rate is higher both because the more items there are the more there are to fail and also because the computers/circuit board are far more prone to failure than the older electrical/relay controls.

The water utility has worked with Dillett Mechanical and First Choice in the past. Heiden expressed interest initially when contacted however, opted to not submit a bid. Hennes reached out to us after hearing of the project and has successfully completed work for the City of Waukesha (City Hall, Library and Police Department), Rogers Memorial Hospital and Rockwell Automation.

Following review of the bids, recommendations, equipment brochures, and contractors, staff is recommending award to Hennes Services, Inc. for the Standard Efficiency Boiler System which comes with a 1-year labor warranty, 7-years parts warranty, lifetime warranty on heat exchanger in an amount not to exceed \$30,719.04.

Recommended Motion: Move to approve the 2019 Boiler Replacement project to Hennes Services, Inc. in the amount not to exceed \$30,719.04.