## **Board of Trustees**

Washtenaw Community College

DISCUSSION

TAB E

4800 E. Huron River Drive Ann Arbor, Michigan 48105-4800

Subject

Health & Fitness Center Domestic Hot Water System Upgrade Contract

Date

November 27, 2018

## Background

This project accomplishes the replacement of portions of the domestic hot water system serving the Health and Fitness Center. This work is a Deferred Maintenance project previously identified to the board and is budgeted for execution from that fund.

The Health and Fitness Center is a key community support asset and is one of the busiest, most visible venues on the campus for customers both internal and external to the College. Since original completion, the facility has experienced difficulty with maintaining space temperatures in the facility and in providing a consistent hot water supply. Unpredictable temperatures in the showers have produced many negative comments and reviews from users with a coincident negative impact to active memberships and usage fees.

As originally constructed 11 years ago, the facility has four hot water tanks producing 140 degree hot water through a heat exchange with the facility's comfort heating system. Hot water for the restrooms and locker rooms is reduced to 120 degrees with a mixing valve. A detailed engineering investigation determined that the system is incapable of maintaining a consistent supply of hot water across all demand rates, and that producing hot water from the facility's heating system overtaxes the capacity of the two boilers. Under this project, the facility heating system and the hot water systems will be separated. Three new high efficiency gas fired hot water tanks, each capable of handling 50 percent of the peak hot water demand, will replace the existing four units. This will allow the boilers to use their full capacity for maintaining facility temperatures. In addition, the kitchen, which requires 140 degree supply water, will have an independent system installed. This will facilitate the removal of the mixing valve and avoid heating the entire loop to the higher temperature just to have most of the water reduced to a lower temperature. The new system configuration will provide a higher reliability, better control, stable pressures, increased energy efficiency, and redundant capacity for the building.

On November 1, 2018, construction bids were received for this project. John Darr Mechanical, of Ann Arbor, MI was low bidder for the mechanical contract for this project with a verified bid of \$242,500.00.

## **RECOMMENDATION**

It is the recommendation that the Board of Trustees approve a construction contract for John Darr Mechanical, of Ann Arbor, MI in the amount of \$242,500.00.

## A ROLL CALL VOTE WILL BE TAKEN

Prepared by: Title:	Mark Allen Vice President, Facilities	Recommended by:	Rose B. Bellanca, President
	Development and Operations		