ITEM # \_\_\_<u>19</u> DATE: 09-11-12

## **COUNCIL ACTION FORM**

## SUBJECT: CITY HALL HEAT PUMP REPLACEMENT PROJECT

#### **BACKGROUND:**

On December 14, 2010, Council approved plans and specifications for the replacement of the heat pumps in City Hall. The project included the purchase of 166 new heat pumps; with 137 units being installed now and 29 units being put into storage for future use during planned remodeling of the Police Department and basement. The surplus units were purchased now to ensure that all units in the building are from the same manufacturer and to gain from the economy of scale. The original heat pumps were installed in 1989 during renovation of the building from a school to City Hall. The life expectancy of the original units, as with the new units, is 12 to 15 years; with the existing ones now being 21 years old.

The approved Capital Improvements Plan for fiscal years 2010/11 and 2011/12 included an estimated cost of \$880,000 for this project. Funding includes \$500,000 from an EECBG federal stimulus grant and \$380,000 from G. O. Bonds.

The project design engineer proposed that the new heat pumps be a minimum of 14 SEER rating to retain energy efficiency. The new heat pumps operate on the chilled water system currently in place. They were also designed to operate on a geo-thermal loop water system, should that option become economically feasible in the future.

After installation, the new heat pumps presented several challenges for the contractor and the architect to resolve and overcome. Numerous modifications were made to the units' controls by the manufacturer and to the duct work by the contractor to obtain the desired performance requirements. The contractor has been patient during the research by the equipment manufacturer, but ultimately has resolved the issues to be compliant with the City's performance requirements.

The central control system for the thermostats provided by Johnson Controls, which is <u>not</u> part of this project, continues to create challenges in programming and controlling the system as we desire. Fortunately, Johnson Controls continues to actively work on solving those challenges.

A Certificate of Substantial Completion for the Drees project was issued by the project engineer on April 4, 2012, with final completion done on August 27, 2012. The final cost of the project is as follows:

Engineering – Shive-Hattery, Inc.	\$ 46,254.86
Construction – Drees Co.	<u>\$737,695.00</u>
Total Cost	\$783,949.86

## **ALTERNATIVES**:

- 1. Accept completion of the City hall Heat Pump Replacement Project project carried out by Drees Co. of Carroll, Iowa.
- 2. Delay acceptance of this project.

# **MANAGER'S RECOMMENDED ACTION:**

Drees Co. has now satisfied their contract obligations for this project and the heat pump portion of City Hall's HVAC system is functioning properly.

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, thereby accepting completion of the contract with Drees for the City Hall Heat Pump Replacement Project.