

# Priority Capital Improvement Projects

## 2016-17

### **GHS VFDs and Secondary Pumps (3)**

The Taco pumps are fifteen years old and reaching the end of their expected service life. Several parts are no longer available for these pumps and the remaining option is to replace the entire pump. The lead time to order and receive this pump is typically six weeks. This becomes a problem when a pump breaks down and we only have one backup pump. I am recommending replacing three of them this year and adding Variable Frequency Drives (VFDs) so we have a new pump as the lead for all of the hot water zones. Next year, I would like to replace the three backup pumps and add VFDs so all of the equipment is reliable, efficient and parts are readily available in the event of a failure.

### **GMSN/GMSS "A" and "B" HLS Repairs**

DLA Architects conducted the 10- Year Safety Survey at Geneva Middle School North and Geneva Middle School South. The "A" and "B" repairs that were documented on the survey have been sent to ISBE and we are required to repair all code violations in the proper time frame.

### **WAS Chiller, VFDs and Secondary Pumps (3)**

The 200 ton chiller and pumps that serve Western Elementary School are 27 years old and have exceeded their estimated service life as per ASHRAE. The chiller has had excessive refrigerant leaks for the last several years and we have come to a point where the EPA requires us to repair or replace this piece of equipment under the Clean Air Act. This project will need to be completed to ensure compliance. This project would include a new chiller, chilled/hot water pumps (3) and Variable Frequency Drives (VFDs) (3) for added efficiency.

### **MCS Replacement of VFDs on Air Handling Units (6) and Secondary Pumps (2)**

The Graham Variable Frequency Drives (VFDs) (6) are original to the building and were discontinued after being installed. The VFDs are very unreliable and we are unable to get parts for the repairs. The VFDs operate the supply and return motors in all of the buildings air handling units. I am recommending replacing all six to ensure proper operation and reduced down time during the critical winter months. The secondary hot water pumps (2) are also original to the building and nearing the end of their service life. I would like to replace these motors with VFDs to ensure proper operation of the heating system without failures.

### **FES Terrazzo Floor Tile Replacement**

The District received money from a Performance Bond of \$138,000 to repair all Terrazzo flooring issues. The floor tile has been replaced in phases over the course of three years. On the first and second floors tile has been replaced with carpet. The final phase of tile replacement on the ground floor will need to be completed the summer of 2016. We are required to do this replacement with the money we received

from the Performance Bond. The project was originally scheduled last year and was delayed due to budget constraints.

**CESC/ Bus Garage Emergency Generators**

There is no emergency back-up generator for Coultrap Educational Services Center or the Bus Garage. I am recommending the installation of two emergency back-up generators for each location. The generators would operate the District servers (CESC), heating systems, fire alarm systems, lift station ejector pumps (BG), emergency lighting, and access controls in the event of a power loss.