

Board of Education Capital Plan FY17-FY21

PROJECT TITLE: HVAC and Plumbing Upgrades and Replacements-Various Schools

DATE SUBMITTED: 10/5/2015

DEPARTMENT PROJECT INFORMATION

Department: **Facilities**

Department Contact: **Peter Sztaba**

Fiscal Year(s) Requested: **FY12017** **FY2018** **FY2019** **FY2020** **FY2021**

Department Priority: **Critical** **High** **Medium** **Low**

Type of Project: **Vehicle** **Equipment** **Technology** **Facility** **Other**

PROJECT DESCRIPTION

Upon thorough walk-throughs with current BOE utilized mechanical contractor New England Mechanical(NEMS) the following projects should be addressed:

1. Repair of all boiler gaskets and seals on truncated lines leaving the boilers at BGP-awaiting estimate from NEMS, approx. cost \$10,000-reduce efficiency, allows air to enter the system, contaminates water, wastes energy, creates damage
2. Replacement of water treatment system at Tolland High School. Unit appears in-operable and was valved off at the time of inspection. Currently un-treated water is feeding our boilers-approx. cost \$5,000-awaiting estimate from NEMS-un-treated water shortens the life-span of the boiler, corrodes pipes, and reduces efficiency
3. Repair to the free-stats for all the RTU's at Tolland High School-(24) units need to be repaired. Current Free-stats are installed incorrectly as they are wrapped around a piece of 1" conduit. This affects their ability to be able to take accurate reading across the coil to prevent freeze-ups. -Cost \$20,000-submitted by NEMS-mitigates liability for freeze-up, improves efficiency and monitoring
4. Re-design of cold and hot water piping off of hot water heaters at Birch Grove Primary School. Current design has no check valves and there is also no expansion tank off of water heater #2. This creates cross connection issues as sometimes you get hot water when calling for cold and cold water when calling for hot-awaiting estimate from NEMS, approx. cost -\$6,000-improves efficiency, improves water comfort, facilitates better on-demand result for water
5. Re-design oil pump and feed system for hot water heaters and boilers at Birch Grove Primary School-currently there is no method to build up pressure in oil feed lines feeding the hot water heater and boiler burners as a pressure maintaining valve is absent. This forces the oil circulating pumps to run all the time which will prematurely shorten the lifespan of the pump. This also wastes electricity-awaiting estimate from NEMS-approx. cost \$4,000

Total: \$45,000

PROJECT NEED

Impact on Department if Recommended or Not Recommended: improved efficiencies, mitigation of liability for freeze-up, energy conservation, improved equipment life-span, adherence to Honeywell Performance Contract requirements

Cost to Maintain: Preventative maintenance

Describe all Benefits and/or Savings: improved efficiencies, mitigation of liability for freeze-up, energy conservation, improved equipment life-span, adherence to Honeywell Performance Contract requirements

PROJECT BUDGET AND FUNDING SOURCES

Project Cost Summary, Recommended Financing Sources, & Operating Budget Impact

Project Cost Elements	FY 2017	FY 2018	FY 2019	FY2020	FY2021	TOTAL
Feasibility Study						
Design - Engineering						
Site Acquisition						
Site Improvements	\$45,000					
Construction:						
Inspection Services						
Equipment & Furnishings						
Vehicle Purchase						
Other						
Contingency						
TOTALS-\$45,000						

Financing Sources

Lease-Purchase

Water Enterprise Funds

Sewer Enterprise Funds

Solid Waste Enterprise Funds

Storm Water Enterprise Funds

State / Federal Grants

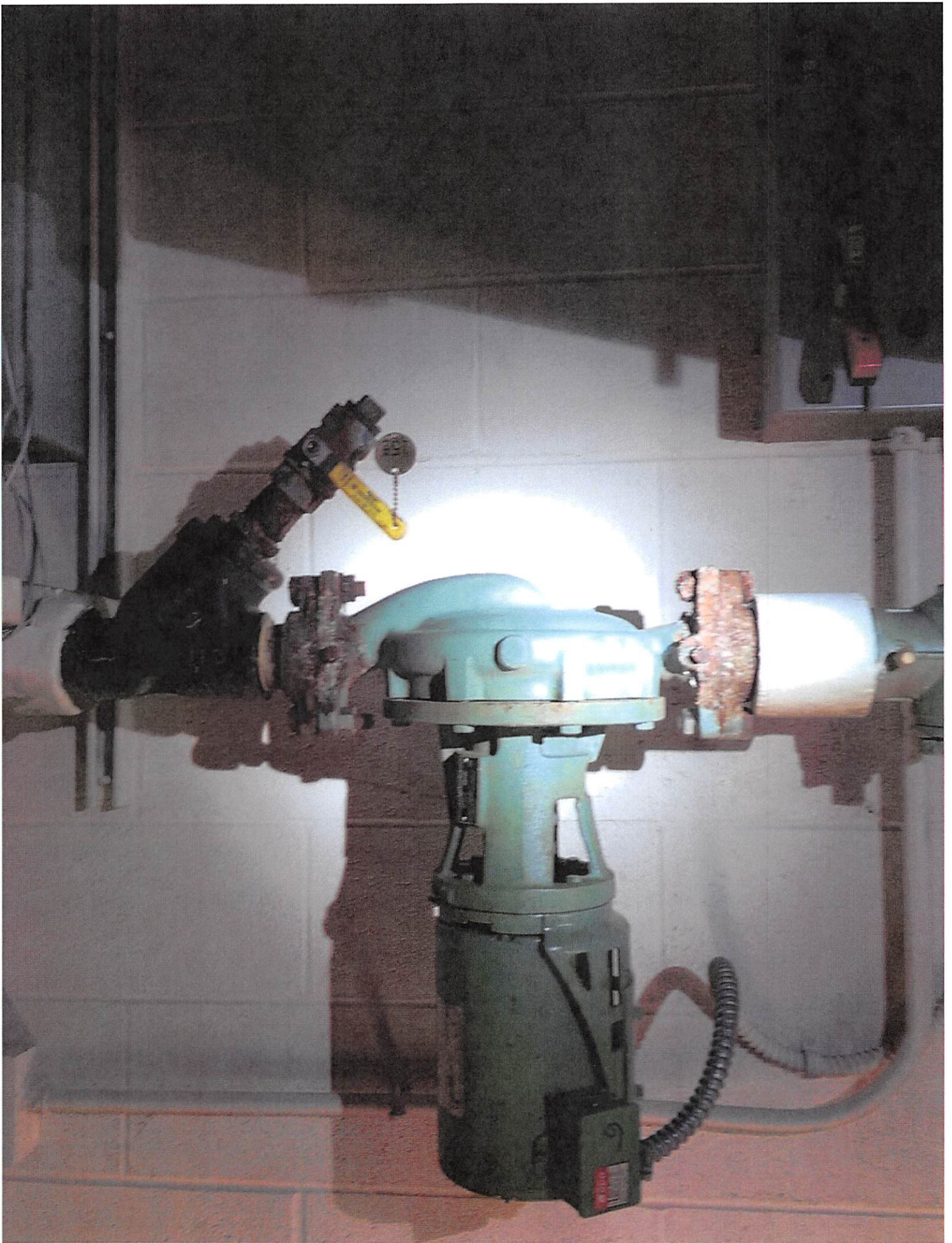
Sale of Surplus Property

CPA

Other (specify)

City Appropriation \$45,000

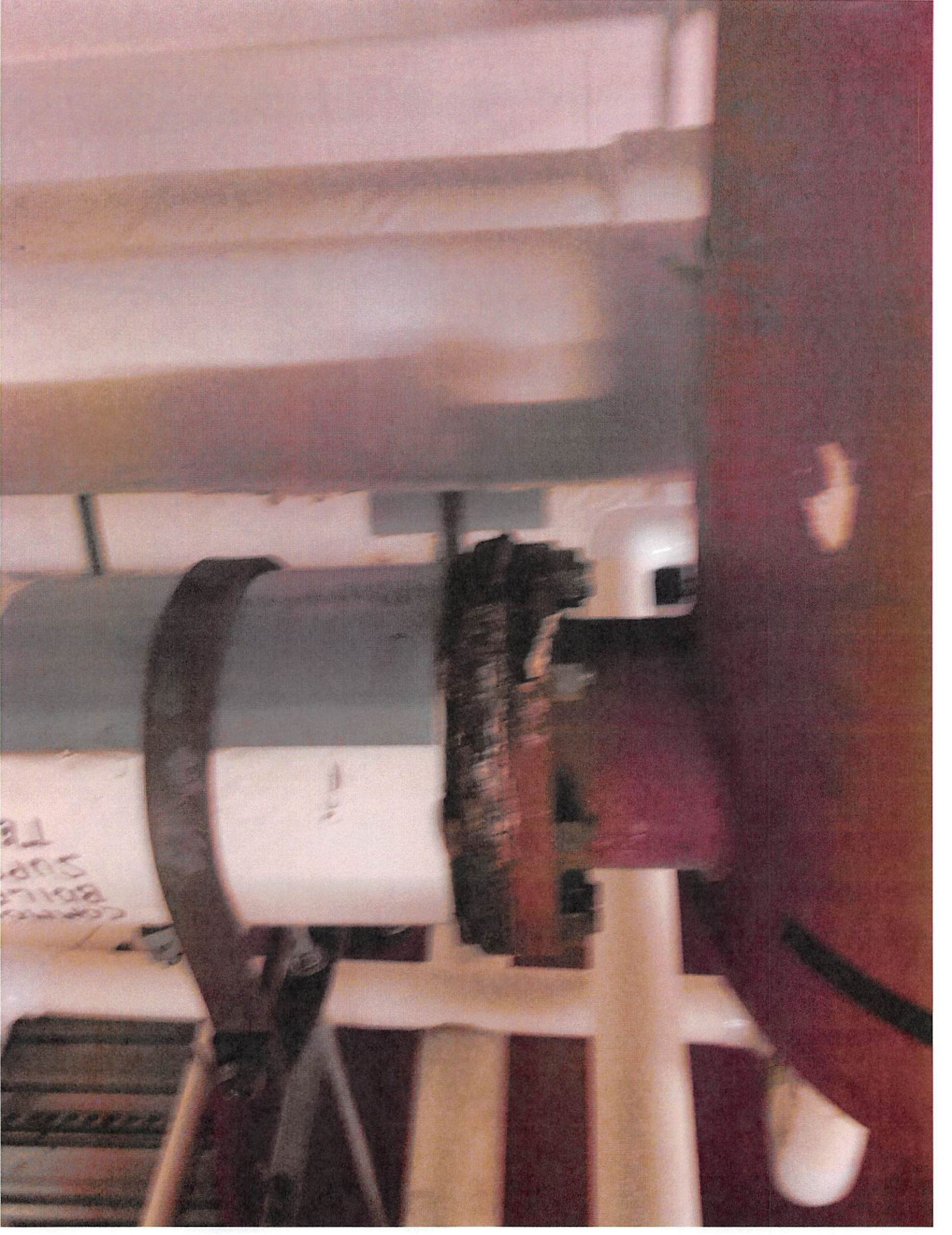
TOTALS-\$45,000



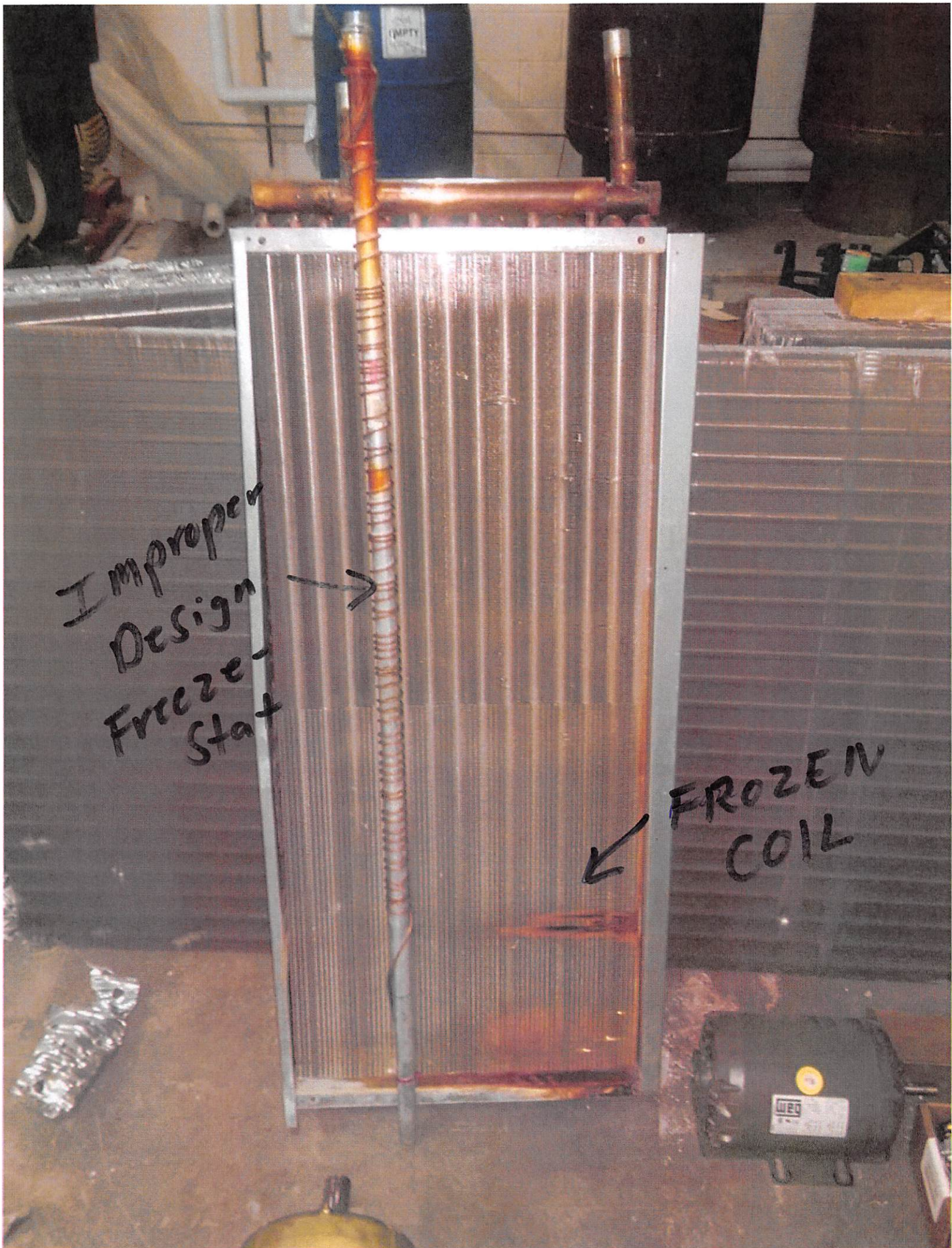








Center
Bottle
Sup
Lg



Improper
Design
Freeze
Stat



FROZEN
COIL





Freeze
Stat
TMS



EPI
16, 18, 20

WATER
TREATMENT
TMS

