

**TOWN OF PLYMOUTH CAPITAL IMPROVEMENT PLAN REQUEST
FY26 SPRING ANNUAL TOWN MEETING**

Department: Plymouth Public Schools	Priority #: 2
Project Title and Description: District Wide HVAC Repairs	Total Project Cost: \$500,000.00

Department/Division Head: **School Facilities - Matt Durkee**

Check if project is: New Resubmitted Cost estimate was developed: Internally Externally

For project re-submittals, list prior year(s):

List any funding sources and amounts already granted:

Basis of Estimated Costs (attach additional information if available)			If project has impact on 5 Year Plan and future operating budgets, insert estimated amounts.		
Capital:	Cost	Comments	Fiscal Year:	Capital	Operations & Maintenance
<i>Planning and Design</i>			<i>FY23</i>		
<i>Labor and Materials</i>	\$500,000.00		<i>FY24</i>		
<i>Administration</i>			<i>FY25</i>		
<i>Land Acquisition</i>			<i>FY26</i>		
<i>Equipment</i>			<i>FY27</i>		
<i>Other</i>					
<i>Contingency</i>					
Total Capital	\$500,000.00				

Project Justification and Objective: With (13) schools in the Plymouth Public School District the HVAC repairs are extensive. The Plymouth School Facilities Department

has met with our HVAC Contractors and have identified district wide HVAC repairs to be completed. The repair list far exceeds the \$500,000 request but we'll make repair decisions on a priority basis.

For Capital Project Requests:

Will this project be phased over more than one fiscal year? If yes, enter it on the 5 Year Plan

Can this project be phased over more than one fiscal year?

Yes No

Yes No

For Capital Equipment Requests:

Check if equipment requested is replacement and enter the year, make & model, VIN and present condition of existing equipment

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What is the expected lifespan of this new/replacement equipment: _____

Attach backup information, estimates, or justification to support this request.

Town of Plymouth Public School Systems (9/26/2024) Immediate Needs

1. **Federal Furnace Elementary School**

- a. ERU-4
 - i. Exhaust fan bearings are loud.
- b. HV-1
 - i. Does not run in heat
- c. ERU-6
 - i. Exhaust fan motor bearings noisy
 - ii. Possible condenser fan motor needs to be replaced.
 - iii. Supply fan bearings are loud.
- d. Boiler #2
 - i. Loss of flame during ignition.
- e. ERU-2
 - i. Circuit #1 – off on low pressure.
 - ii. Supply Fan Loud Bearings.
 - iii. Would not run in high fire for heating attempted to work with ENE.
- f. ERU-5
 - i. Gas cock is off to the unit.
 - ii. Exhaust fan bearings are loud
- g. RTU-7
 - i. Supply Fan belt loose

2. **Indian Brook Elementary School**

- a. ERU-1
 - i. Compressor vfd screen periodic visual distortion
- b. ERU-2
 - i. Circuit #1 tripped on low pressure.
 - ii. Energy Wheel has no belt.
 - iii. Return fan has loud bearings.
- c. ERU-3
 - i. Airflow screen not functioning.
 - ii. Energy recovery wheel needs to be tightened
- d. ERU-4
 - i. Compressor vfd screen not working
 - ii. Excessive vibration from compressor
 - iii. Burner fan motor is running during cooling operation.
- e. ERU-5
 - i. Compressor vfd screen not working.
 - ii. Circuit #1 site glass is flashing but condenser coil needs to be cleaned before evaluation.
- f. ERU-6
 - i. Compressor vfd screen not working.
 - ii. Burner was in fault mode at time of evaluation.

3. **Plymouth Admin Building**

- a. RTU-4
 - i. Evaluate the unit for heating operation.
 - ii. Check with James for BMS operation of the boiler.

4. Plymouth South Middle School

- a. Create a service call for a building wide evaluation.
- b. AC-9
 - i. Replace the entire unit
- c. AC-4
 - i. Condenser coil is deteriorated beyond repair.
- d. AC-1
 - i. In need of replacement
- e. AC-2
 - i. In need of replacement
- f. Evaluation of water coil valves and pressure for the system.

5. Hedge Elementary School

- a. No problems present. No Cooling in this school.
- b. There is only cooling in the gym. This is a portable cooler.

6. West Elementary School

- a. ERU-1
 - i. Evaluate operation
- b. ERU-2
 - i. Circuit #1 has high superheat and no subcooling.
 - ii. Circuit #2 is out of refrigerant.
 - iii. Energy Wheel belt is broken.
 - iv. Supply fan motor has oil and failed bearings.
 - v. Return Fan has oil on the end bell.
- c. ERU-3
 - i. Circuit #1 suspected leak and condenser fan vfd issue.
 - ii. Circuit #2 is off due to a refrigerant leak.
- d. ERU-4
 - i. Circuit #1 switch is off.
- e. ERU-5
 - i. Circuit #1 copeland digital scroll in alarm for locked rotor.
 - ii. Circuit #2 subcooling is low and superheat is high
 - iii. Energy recovery wheel covered in oil and bearings are clicking.
 - iv. Supply fan bearings are clicking.
- f. ERU-6
 - i. Circuit #1 TXV Replacement
 - ii. Circuit #2 is low on refrigerant. Hot gas is constantly active.
 - iii. Energy Recovery Wheel bearings are clicking.
- g. HV-1
 - i. Supply Fan belts loose

7. North High School

- a. Chilled Water Pump (Possibly 3)
 - i. Locked out and tagged out. Need to figure out why.
- b. Check the glycol percentage of both hot water and chilled water loops
- c. 2 – boilers are off. Need to address during the pm.
- d. Look at adding side stream filtration for the condenser water loop.
- e. Service Call for the athletic directors office. Condensate issues. Work with John from facilities to provide permanent solution. Possibly adding ductless split system.
 - i. Possibly use the carrier equipment that's in the maintenance
- f. MDF Closets. Revisit the Samsung quotes from Ed Mattos for this project.

8. Cold Spring Elementary School

- a. \$40k Cooling Station Project.
- b. Exhaust Fans for the building need to be replaced. Work with matt on the procurement process for this school. 5 or 6 fans total.

9. Nathaniel Morton Elementary School

- a. Cooling Station – \$100k
- b. Kitchen Exhaust fan operation. Need to evaluate.

10. Manomet Elementary

- a. Outside air damper issues for combustion air.
- b. Univent Actuation. Look at loop pressure and valve/actuator issues.
- c. Look into rooftop replacement for main office.

11. Plymouth Community Intermediate School

- a. Paid for (5) Compressors.
- b. Paid for two of the above compressors to be installed.
 - i. Matt to decide Diamond Mechanicals involvement
- c. Multiple (19-20 Condenser Fan Replacements)
- d. Look into differential pressure for chilled instead of the paddle style flow switch.
- e. RTU-25 Trane said there is nothing they can do and it needs to be replaced.