

Chilmark School HVAC Project Outline

When complete, the school will have an up-to-date HVAC system based on heat pump electric heat, with the existing oil-fired circulating water system as backup for heating (and the domestic hot water source). Controls will be distributed for the classroom and office spaces. Ventilation will be energy efficient, using energy recovery systems. Heat pumps will supply air conditioning for spring and fall hot weather.

Project outline:

1. Insulate all attic spaces at the roofline, to at least code level.
2. Complete the upgrade of existing oil-fired boiler system (variable speed circulating pumps, appropriate controls compatible with addition of heat pumps, potential extension of some baseboard units).
3. Removal of defunct boiler and obsolete air handlers
4. Design and equipment selection for heat pump system.
5. Installation of heat pumps external units, air handlers, and refrigerant coils.
6. Move ERVs to attic space as originally envisioned (addresses noise problem).
7. Upgrade control system.
8. Ensure integrity of fire suppression system.
9. Procure and install backup generator.