

SCOPE OF WORK
Library Chiller Replacement
IFB # DPW-22-B-020

PROJECT OVERVIEW

The Town of Westwood Board is seeking proposals for the replacement of a 100 Ton Smardt Chiller to include Safe Ventilation Optimization

The Town determined that the Chiller must be replaced with a more energy efficient chiller that includes an integrated ventilation optimization system. The reduced size chiller would ideally be in the size range of 70 Tons. The new solution will also entail integration into current BAS control system.

The chiller to be replaced is currently a 110 Ton Smardt Chiller Model # SAA035-1EG12-4A3V which has become non-functional as a result of many control and operational failures.

There is currently no supplemental filtration system to safely optimize ventilation and conditioning, including efficiently meeting ASHRAE indoor air quality requirements.

Additionally, the current HVAC mechanical system includes an ERV that is not properly functioning and this situation will need to be rectified as a part of the project.

The installation would be at the Westwood Public Library, 660 High Street, Westwood, MA 02090. The facility is approximately 30,000 sq. ft. with hours of operation as follows:

Sunday:	2:00 PM - 5:00 PM
Monday – Thursday:	10:00 AM – 9:00 PM
Friday:	10:00 AM – 6:00 PM
Saturday:	10:00 AM – 5:00 PM

The Town seeks to purchase and install the integrated Chiller and Ventilation equipment, resolve the ERV functionality problem and the remove the existing equipment that will be replaced.

1. REQUIREMENTS FOR TOTAL SYSTEM DESIGN, SIZING AND ENERGY EFFICIENCY/GHG IMPACT RESULTS DETERMINATION

1.1 Provide calculations to assure ventilation optimization efficiency contribution results in enabling the reduction of the CHILLER RETROFIT sizing to a 70 Ton System from the current 100 Ton System.

1.2 Provide assessment of energy efficiency and GHG reductions delivered by the system redesign and deployment.

2.0 REQUIREMENTS FOR CHILLER RETROFIT

- 2.1 Provide reclaim service, disconnection and removal of the existing Smardt water chiller.
- 2.2 Provide and install (1) new high efficiency chiller.
- 2.3 Provide crane service for all rigging of equipment.
- 2.4 Provide reconnect of the existing electrical. (Controls by others).
- 2.5 Provide reconnect of the existing chiller water piping.
- 2.6 Provide start up, commissioning, and registration of equipment.
- 2.7 Provide a minimum one year parts and labor warranty with standard limited parts warranty.
- 2.8 Provide all required permits with the Town of Westwood.

3.0 REQUIREMENTS FOR CORRESPONDING, INTEGRATED VENTILATION SYSTEM

- 3.1 Provide design assurance of ERV system functionality resolutions.
- 3.2 Provide assurance of ventilation optimization system satisfying ASHRAE indoor air quality requirements.
- 3.3 Provide and install ventilation optimization system.
- 3.4 Provide all crane service for lifting equipment.
- 3.5 Provide roofing contractor for the installation.
- 3.6 Provide an electrical contractor for all the wiring of the ventilation equipment.
- 3.7 Provide and install all associated ductwork for a complete, integrated chiller and ventilation system.
- 3.8 Provide start up, testing, commissioning, and applicable registration of equipment.
- 3.9 Provide a minimum one year parts and labor warranty.