GEATAIN ENGINEERING CASE STUDY - 2451 Webb Avenue



BACKGROUND

2451 Webb Avenue, at University Heights, is a 130,218 square foot co-op residential building located in the Bronx, New York. Constructed in 1950, the building houses 124 units across 16 stories. Heating and domestic hot water are provided by four low-pressure dual fuel, 400 HP steam boilers from A.L. Eastmond & Sons Inc. and Easco, located in the basement. These four boilers are fueled by #2 fuel oil from a 15,000-gallon oil tank. The tank is controlled by an Oil Tank Monitor MSI Network by Heat-Timer. There are eight exhaust fans on the roof, four of which ventilate bathrooms and the other four ventilate hallways.

HOW GEATAIN ENGINEERING HELPED

- Communicated with owner to understand significant property concerns and limitations.
- Quantified thermal capacity of building envelope to retain more winter heat and summer air conditioning.
- Input from Property Engineer proved invaluable to streamline assessment, evaluation and recommendations.

BENEFITS

- Provided all-encompassing funding package to decrease initial capital outlay.
- Achieved significant reduction in carbon emissions through adoption of cleaner electricity.



CHALLENGES

- Lack of heating controls
- Pipe insulation in poor condition
- Manual light switches lack dimming capability

SOLUTIONS

- Annual Boiler Tuning
- Night Setback
- Pipe Insulation
- Smart Strips
- Heat Pumps
- Unit LEDs
- Wall Occupancy Sensors
- Plug Outlet Controls
- Window AC Replacement
- Bi-Level Lighting

FIVE YEAR SAVINGS \$303,550

For more information, email tjm@geatain.com