

# GEATAIN ENGINEERING

## CASE STUDY- 136-20 38<sup>th</sup> Ave



### BACKGROUND

136-20 38<sup>th</sup> Avenue is a luxury leasing property located in Flushing, Queens, New York City. Built in 2005, the 424,747 square foot property contains 12 floors that average a typical floor size of 29,994 square feet. The building contains two different heating systems, the six Lochinvar boilers and Trane Voyager forced air system. The main source of heating comes from six Lochinvar gas boilers that are controlled by a Lochinvar Harmony Sequencer.

### HOW GEATAIN ENGINEERING HELPED

- Provided three stages for construction, to focus on most immediate returns first, then higher capital cost measures.
- Proposed the replacement of the boiler.
- Proposed replacing the roof.
- Suggested the variable pumping of the chilled water loop.

### BENEFITS

- Increased asset value of the entire building.
- Decrease in greenhouse gas emissions.
- Decrease in pump usage, extending equipment life.
- More consistent occupant temperature and condition.

**geatain**  
SIMPLE LL97 COMPLIANCE  
PAID BY OTHERS

### CHALLENGES

- Cooling inefficiencies.
- Heating inefficiencies.
- Energy wasted from equipment not in use.

### SOLUTIONS

- Heat Pump Alternative.
- Roof Replacement.
- Variable CW Loop Flow.
- Boiler Replacement.
- WSHP Replacement.
- Wall Occupancy Sensors.
- LED Lighting.
- Equipment sleep modes.

### SAVINGS

\$455,960 over 5 years

\*Savings with returns less than five years over the next five years.

For more information,  
email [tjm@geatain.com](mailto:tjm@geatain.com)