

## Energy Audit – Office Campus New York City Economic Development Corporation Brooklyn Army Terminal Brooklyn, New York

### Program

NYSERDA FlexTech Feasibility Study

### Scope of Services

- Review Utility Bills
- Perform Building Surveys
- Identify O&M Procedures
- Analyze Energy Efficiency Measures
- Investigate NYSERDA/KeySpan Funding
- Prepare Final Report

### Level of Involvement

Prime Contractor

### Facility Size

4,000,000 sq. ft.

### Facility Type

Commercial including biotech research, light manufacturing, warehousing and back-office services

### Project Results

- Replace Common Area Lighting
- Install Day Lighting Controls
- Install Bi-Level Lighting
- Insulate Bare Hot Water Piping

### Projected Annual Savings

Electric Demand: 66.1 kW

Electric Consumption: 646,517 kWh

Thermal: 568 Therms

Energy Cost Savings: \$100,563

The Brooklyn Army Terminal (BAT) is a 90-acre site located in the Sunset Park section of Brooklyn. The site is owned and managed by the NYCEDC and sublet to light industrial and manufacturing tenants. The site includes two large warehouse type buildings (designated A and B) that total 4-million sq.ft. in floor area. Electricity use is master-metered and NYCEDC sub-meters tenants for their electric consumption through an internal sub-metering system. The facility's annual electric charges are approximately \$6-million, of which the tenants contribute nearly \$5-million.

Space heating for Building A is provided by a central boiler plant. The boiler plant, comprised of gas-fired modular



### Aerial View of Brooklyn Army Terminal

units, provides heating hot water for both the developed tenant space and common area. HHW is distributed to finned radiation located beneath windows in tenant spaces. Tenant space heating in Building B is the responsibility of the tenant and provided by heating hot water. Heating for Building B is generated by multiple boilers including 72 located in five boiler rooms and an additional 32 boilers in 32 separate boiler rooms. Cooling is predominantly provided by split-system air-conditioning units.

EME Group performed an energy audit of the following spaces:

- Four main lobbies
- Common area basement spaces
- The Atrium in Building B and the Main Hallway in Building A
- Elevators and motor rooms including 11 passenger cars, 20 freight cars
- 4 parking lots and all loading docks and exterior loading dock lighting
- All roof and American flag lighting
- Two management offices including HVAC systems
- 160 boilers and boiler rooms
- 30 staircases including electric 277-volt heating plus heat tracing on piping
- Pier 4 lighting
- All guard booths and entrance gates