# Albany Public Library Arbor Hill Branch

## ALBANY, NY ALBANY COUNTY

### Background

The Albany Public Library has constructed a new 11,486 square foot building to house the Arbor Hill branch of the library system, located at 148 Henry Johnson Boulevard, Albany, NY. The building consists of offices, meeting rooms, and stacks. The project is pursuing LEED certification.

EME Consulting Engineering Group was retained by NYSERDA to evaluate electric energy efficiency opportunities for the new building under the New Construction Program.

### Recommendations

EME analyzed the proposed energy efficient measures for the building compared to a baseline building that met the current code requirements. The results of the analysis demonstrated the integrative impact of all measures of the enhanced building for a whole building energy savings result and incentive value for the project. These measures will reduce energy costs, add to the comfort of the patrons, and will contribute to the building aesthetics.

Among the energy efficiency improvements implemented in the building were:

- Enhanced Walls/Roof Insulation
- Geothermal Closed Loop System
- High Efficiency Lighting with Occupancy Sensors
- Advanced Daylighting Controls
- Demand Control Ventilation

### Incentives and Results

NYSERDA's incentive of $42,183 helped the Albany Public Library defray a portion of the implementation cost to install the efficiency improvements. In total, the Albany Public Library's investment for the Arbor Hill branch could result in:

- Annual Energy savings of more than 63,113 kWh
- Peak demand savings of 19.8 kW in the summer
- Annual Energy Cost savings of almost $11,227
- Simple payback (after incentive) of 9.9 years for the project

The Arbor Hill branch of the Albany Public Library system is 36.3% above the ASHRAE Standard 90.1 2004 code.