

Cayuga-Onondaga BOCES LEED Silver

The new \$42.1 million, 200,000-square-foot, state-of-the-art Area Vocational Center for Cayuga-Onondaga BOCES became the first LEED certified public school in New York state in fall 2009 when it was awarded LEED Silver certification.

The campus is built on 64 acres of land previously owned by the Cayuga County Industrial Development Agency once used as farmland.

The Leadership in Energy and Environmental Design (LEED) green building rating system was established by the United States Green Building Council. LEED measures and ranks a building's environmental performance in terms of six general categories: Sustainable Sites, Water Efficiency, Energy & Atmosphere, Materials & Resources, Indoor Environmental Quality, and Innovation & Design.

The project was designed by local architect Samuel J. Cichello, C&S Companies served as the construction manager, LEED coordinator and building commissioning authority for this project.

In all, 35 LEED points were achieved at the new campus.

In the Energy and Atmosphere category, the building is generating a minimum of 20 percent of its energy from a renewable energy source. Two hundred 125-foot-deep geothermal wells have been drilled in a corner of the campus. They circulate water into the ground in a closed loop to chill air conditioning water to 50 degrees or to warm heating water to 50 degrees.

For the Materials and Resources category, it is a condition of the construction contracts that at least



90% of construction-related waste is diverted from landfills through recycling. The project has diverted more than 95% of waste, totalling approximately 130 tons. The materials included waste concrete, waste concrete block, waste bricks, waste wood products (dimensional lumber, pallets, plywood), waste asphaltic concrete, and gypsum drywall was ground up and mixed in as a soil amendment.

A Materials and Resources credit was earned by making sure that a minimum of 20 percent of the construction materials were locally manufactured (within 500 miles of the site). At the BOCES project, more than 20 percent of all materials were locally produced, including all concrete, masonry, structural fill (stone), and wood products, and a majority of the HVAC equipment.

In the Energy and Atmosphere category, a credit was achieved through installation of monitoring devices with feedback on all building systems. Monitors on mechanical systems give facilities managers feedback on how efficiently and safely the buildings are operating. Systems that are monitored include carbon monoxide sensors, fresh air intake, temperature sensors, efficiencies of motors, fan data for air handling systems, boiler data, cooling tower data, power demands for electrical systems, and more.