



Seven Locks Elementary School Modernization Achieves LEED Gold Certification



Client: Montgomery County Public Schools

Cost: \$17,400,000

Area: 66,700 square feet

Status: Completed 2012

The building is a partial two-story steel-framed structure with brick, and ground face block patterned masonry. The building is conceptually segmented into public and educational classroom areas. The public area, located at the front of the school, includes the administrative suite, multi-purpose room, gymnasium, art, music, and support spaces. The educational classroom area at the rear of the building includes the classroom wings and the instructional media center with its support spaces.

The school design achieved significant credits in all six categories of LEED for Schools 2007 Edition. Under sustainable sites, credits included site selection, brownfield redevelopment, public transportation access, bicycle storage, designated parking for low emitting and fuel efficient vehicles, maximizing open space, stormwater design, reflective roof, light pollution reduction, site master plan, and joint use of facilities. Under water efficiency, credits included, water efficient landscaping, and water use reduction. For energy and atmosphere, credits included energy optimization at 28% above baseline, enhanced commissioning and green power. Under materials and resources credits included, construction waste management, materials with high recycled content, use of regional materials and certified wood. For indoor environmental quality, credits included, IAQ management plan, use of low emitting materials, lighting and thermal controls, and thermal comfort verification. The innovation and design credits included, a green cleaning program, energy efficient elevator, and maximum use of green power. The design features a geothermal heating and cooling system and use of sunscreens and interior light shelves on the southern exposures.

The building design celebrates the history of the C & O Canal with many references. Facsimiles of lock gates greet students at the main entrance to the building. These are repeated inside. The central hallway is accented with blue tile representing the canal and terminates with a photo mural of the canal. The red stone used on the exterior references the Red Seneca Stone quarried nearby and used for sections of the canal. The architects, teachers and parent volunteers worked with the National Park Service to establish exhibits that further celebrate the history of the canal. The Park Service has been so impressed with the effort to incorporate this history that they selected Seven Locks as the only elementary school in Maryland for a new canal curriculum.

