



## **BBS awarded LEED Gold Certification for \$3.6 million library renovation and expansion**

October 20, 2014 - Long Island

The recent \$3.6-million expansion and complete renovation of the Commack Branch of Smithtown Library just received LEED NC 2.2 Gold certification from the U.S. Green Building Council. BBS Architects, Landscape Architects and Engineers served as the architect, interior designer, and mechanical, plumbing, and civil engineer for this library and three other branches within the Smithtown Library District, one of Long Island's largest library systems that serves 113,000 members. The other three libraries within the district, all recently renovated by BBS and currently undergoing the LEED certification process, include the Smithtown Main Library, and Nesconset and Kings Park branches.

The U.S. Green Building Council (USGBC) developed the Leadership in Energy and Environmental Design (LEED) Rating System "to encourage and facilitate the development of more sustainable buildings." The Commack project was certified in the LEED for New Construction & Major Renovations (NC) category, version 2.2.

The Commack Branch library is only the second public library on Long Island to receive LEED certification. Ward Associates, a BBS subsidiary, designed the first one, the Westhampton Free Library.

The Commack Branch, located in a residential area, is one story with a basement, and now totals 13,074 s/f. The existing building was completely renovated to bring building systems, meeting areas, and technology updates to this branch library. The new library is now energy efficient, has an elegant and modern interior, and a better flow of patron traffic. As part of the ADA-required upgrades, BBS installed a hydraulic elevator connecting all levels.

The two-level, 2,784 s/f addition was built on a 1,392 s/f footprint. The new structure houses the children's library and provides a new entrance and entrance vestibule as well as new basement storage space. Both the original structure and the addition have masonry-bearing walls with steel joists for roof support and steel beams and joists supporting the floor slabs. The new structure is connected to the original building at the new main entrance vestibule and covered entry through expansion joints.

The electrical engineer was Bladykas Engineering, P.C. and Thomas D. Reilly, P.E. was the structural engineer.

### **Addressing the Needs of the Community**

BBS' Principal Roger P. Smith, AIA, LEED AP was lead architect on the project. "We worked with the client from the very beginning and understood that the needs of the community were not being met fully," he said. The facility was outdated, did not support the expanding collection, was lacking in ADA features, the mechanical system was outdated and inefficient, and its community space was insufficient. "We saw that meeting space was sorely needed, so we addressed that by adding a

782-square foot meeting room for use by local residents. In addition, there was a need for a larger, better-equipped children's section. We addressed that, too," he added. Previously, caregivers with children and strollers had to scale a half flight of stairs and walk through the entirety of the library to get to the children's section. "Now, the expanded children's area is next to the entrance, making it more convenient for families and less disruptive to adult users," said Smith. The new children's section is 1,240 square feet.

BBS' design also redefined the main entrance. When the building was originally built, in the 1960s, the front entrance was opposite the parking lot, which was in back. However, due to proximity to the parking lot, the back entrance became the de facto main entrance, but the architecture and interior layout never reflected this. "During the renovation," according to BBS project architect Gary Schiede, AIA, LEED AP BD+C, "BBS made sure the back entrance is now a fully functional main gateway with a storefront-type entryway with aluminum frame and glass. In addition, the circulation desk was moved near this entrance to accommodate patrons returning materials and accentuate the new organization of the library."

The new and existing sections feature matching exterior stone veneers. The new main entrance includes a special design element - the custom outdoor railing created using the letters "C" and "O" for "Commack. It also features a new ADA ramp.

The collection was outgrowing the old space, to the point where book stacks covered windows, blocking much-needed natural light. The expanded main stack area now, for example, at 1,960 square feet, features book stacks, a reference and information desk, and a separate circulation desk. This area features acoustical ceiling with two pyramid-shaped skylights produced by Kalwall Corporation. In the western end of the original building was a pantry and staff facilities that blocked the windows. This area was demolished and the staff facilities were moved to the basement. This section now features lounge chairs and the 600-square foot audiovisual collection.

The mezzanine area has book stacks that once covered the windows, blocking the light. Several windows in the main room were covered as well. Now, all windows are exposed, allowing sunlight into all spaces on the main floor and the mezzanine. A 782-square foot community meeting room, complete with audiovisual equipment, is now located below the mezzanine, in a space formerly occupied by the children's section. This area has smaller windows. However, since community meetings mostly take place at night, the limited natural light is not problematic. This lower mezzanine section also houses restrooms.

The stacks in the former children's area had been blocking the natural light, too. According to BBS' project designer Kevin J. Walsh, AIA, LEED AP, "The new, larger children's area is now located inside the addition that features expansive windows, so families have an abundance of natural light. It makes a huge difference."

The basement holds offices, mechanical areas, storage, and a staff conference room.

#### Finishes

"Sage green walls and cherry toned millwork, complemented by a custom manufactured carpet with a warm green and burgundy botanical pattern, set an embracing and cozy atmosphere within the library's interior," explained BBS interior designer Tracy Hansen, RA. Other surfaces include Marmoleum and Cortinastone tiles and 2'x2' Armstrong acoustical tile ceilings. In the children's section, ceiling tiles, also by Armstrong, feature ornamental images."

The children's room was designed in bold, bright colors in a medieval theme. Imagery appealing to a

child's imagination was used in the reference desk, end panels, chairs, signage, and murals. Stars and moons can even be found overhead, in the ceiling pattern. In the main room and on the mezzanine existing metal shelving was recycled and refurbished with new wood elements and caps prior to being reused in the renovated spaces.

"The expanded main room and the abundance of natural light from the new windows and skylights make the original space feel twice as big," added Hansen.

(A complete list of fixtures and finishes is enclosed at the end of the news release.)

#### Improved Energy Efficiency and Mechanical Systems

The mechanical system is energy-efficient. The original building utilizes a 20-Ton Johnson Controls split system condenser with an Innovent multi-zone air handler. A 4-Ton Johnson Controls energy recovery packaged rooftop unit was placed on the addition and an air handler was installed in the basement with a remote condenser outside the building. As part of the renovation, boilers and hot water heaters were replaced. Also, the walls and roof were insulated, with rigid insulation on the outside and a fiberglass batt insulation installed outside and inside. According to energy modeling calculation, the team achieved 32.4% cost savings versus the old building, which will save \$22,000 annually on electricity.

BBS specified a new reflective, energy efficient TPO single-ply membrane roof from Johns Manville. In addition, the team replaced all windows with energy efficient Pella units with a wooden frame and aluminum trim. The entire building received Fypon PVC trim around the doors and windows and a metal soffit ceiling underneath the overhang. In part, this was to keep the library's design cohesive with the rest of the residential neighborhood.

Site work included the reconstruction of the parking lot, new site drainage, and new site lighting using energy-efficient metal halide fixtures on light poles. Additional building-mounted exterior lighting is fluorescent.

#### 42 Points: LEED Gold Certification Achieved

USGBC judged the project in six categories. Overall, it received 42 points. The minimum for LEED Gold status is 39 points.

Specifically, nine points were achieved in the Sustainable Sites category for items that included a stormwater management system and alternative transportation. The stormwater system contains all stormwater on site through infiltration within the site's boundaries, thus eliminating any run-off.

Water Efficiency won four points for water-efficient landscaping and water use reduction. Water use was lowered by 36.4% due to the installation of low-flow water closets, lavatory faucets, and kitchen sinks.

Energy and Atmosphere earned 10 points, most for optimizing energy performance. The project achieved an energy cost savings of 32.4% due to an improved thermal envelope, improved glazing, reduced interior and exterior lighting power density, improved efficiency domestic water-heating equipment, improved efficiency DX equipment, and energy recovery.

Materials and Resources garnered seven points, in part by reusing 83.3% of the existing structural elements (walls, floors, and roofs) and also by using recycled materials whenever possible (33.83% of the total building materials content, by value, has been manufactured using recycled materials) and by recycling waste materials (at least 80%).

Indoor Environmental Quality points added up to eight, and included items such as indoor air quality and increased ventilation as well as the use of low-emitting materials such as adhesives and

sealants, paints and coatings, carpet, and Composite Wood and Agrifiber. All systems processing outside air and serving occupied spaces are provided with MERV 13 filtration.

Innovation and Design Process won four points for a green housekeeping program, along with some design innovations.

Fixtures and finishes:

Lighting:

Main room pendants: Renaissance Collection by SPI Lighting, Drum Series of surface mounted, pendant mounted, and chandelier configurations

Main room and office 2'x2' and 2'x4' recessed: Class R2 shallow direct-indirect luminaires by Cooper Lighting

Stack Lighting: Straight and Narrow Pendants by Neoray

Childrens pendants: Options pendants by SPI Lighting

Children's stack lighting: Prime 23 Indirect pendant by Icon International

Young Adult section: Semi-recessed Mondana by Focal Point

Furniture - adult:

Shelving: MJ Industries

Circulation desk, end panels, tables, chairs: Palmieri Furniture, custom designed

Public computers: Hale Manufacturing, custom designed

Lounge seating: KI

Office furniture and task seating: Global Total Office Furniture

Signage - Takeform

Furniture - children:

Shelving, tables and chairs, circulation desk: Brodart Contract Furniture, custom laser cut designs and stains

Signage: Sign-O-Rama Huntington, custom entrance and stack signage

Finishes:

Broadloom Carpet: Milliken

Carpet tile: Milliken and Tandus Flooring

Paint: Sherman Williams 0 VOC paints

Resilient flooring: Marmoleum composite tile by Forbo and Cortinastone by Azrock

Porcelain flooring and ceramic tile: Daltile

Rubber tile, treads and base: Roppe

Acoustic ceilings: Armstrong Ceilings

BBS Architects, Landscape Architects and Engineers

Headquartered in Patchogue, NY and established in 1975, BBS Architects, Landscape Architects and Engineers is a leading Long Island and NY/NJ/CT Tri-state area designer of sustainable educational, commercial, institutional, public and athletic facilities. The firm designed the first LEED-certified public school in New York State, the Hampton Bays Middle School in Hampton Bays, N.Y., which received a LEED Silver certification as well as the 2012 Green Ribbon School designation from the White House and the U.S. Department of Education. Over the last decade,

BBS has designed educational facilities valued at nearly \$2 billion. The firm's services include architecture, interior design, and landscape architecture as well as civil, mechanical, electrical, and plumbing engineering.

BBS' current and recent work includes the new \$26-million, 60,000-square-foot Life Sciences Building at the Suffolk County Community College Ammerman Campus in Selden, N.Y., which is targeting LEED Gold certification; the 100-room Hyatt Place East End hotel in Riverhead, N.Y.; Long Island University's \$1.6-million Mullarkey Hall renovation in Brookville, N.Y.; the \$78-million Riverhead Central School District Capital Program in Riverhead, N.Y.; the new, three-story, 25,500-square-foot addition at the Southampton Elementary School in Southampton, N.Y.; the Holy Sepulchre Cemetery Administrative Building in Coram, N.Y.; the 24,000-square-foot Brown's Fiat dealership in Medford, N.Y.; and the new Sacred Heart Roman Catholic Church in North Merrick, N.Y.

\*\*\*

Photo captions and credits:

FILE: Commack Library exterior 06.jpg

The recent \$3.6-million expansion and complete renovation of the Commack Branch of Smithtown Library just received LEED NC 2.2 Gold certification from the U.S. Green Building Council. BBS Architects, Landscape Architects and Engineers served as the architect, interior designer, and mechanical, plumbing, and civil engineer for this library and three other branches within the Smithtown Library District.

Photo by Tracy Hansen/BBS Architects, Landscape Architects and Engineers

FILE: Commack Library Childrens section 02.jpg

The Commack Branch Library's addition houses a new children's section, which features expansive windows and medieval-themed murals.

Photo by Tracy Hansen/BBS Architects, Landscape Architects and Engineers

New York Real Estate Journal - 17 Accord Park Drive #207, Norwell MA 02061 - (781) 878-4540