Brooklyn's Finest: From Brown

by Eric Weinstock, Shefali Sanghvi and Heather Gershen

rownfields have been defined as "property that has remained idle, abandoned or underutilized because of contamination or the threat of contamination." That definition certainly applies to the Atlantic Terrance property prior to its redevelopment. Located in urban downtown Brooklyn, N.Y., this one-third acre property was a gasoline filling station from 1939 to 1969 with multiple petroleum Underground Storage Tanks (USTs). The project, formally known as "Atlantic Terrace Cornerstone - Site 12" is part of the Atlantic Terminal Urban Renewal Area.

The Atlantic Terminal Urban Renewal Area is nestled in between the Prospect Heights, Park Slope and Fort Greene neighborhoods of Brooklyn as well as the nearby Atlantic Terminal train station of the Long Island Rail Road. Other projects within this urban renewal area include the Barclays Center, which will serve as the new home to the National Basketball Association's Nets, and the Atlantic Yards apartment buildings, a mixture of condominiums and rental units.

Urban renewal area

The property that now houses Atlantic Terrace was a gasoline filling station from the late 1930s to 1969. Due to changes in the economy, the gasoline filling station closed and the property remained vacant from 1969 until 2007. Ownership of the property was eventually transferred to the New York City Dept. of Housing Preservation and Development (NYCDHPD). Today, however, it is the home of a Leadership in Energy & Environmental Design (LEED) Gold certified, 10-story commercial and residential building and a thriving part of the redevelopment of this section of New York City.

Green design components

Atlantic Terrace was designed to meet LEED-Gold standards, as well as Energy Star and Enterprise Green Communities requirements. LEED requires that energy conservation, use of recycled materials, water efficiency and sustainable building products



be incorporated into the structure. Sustainability and environmental consciousness was part of the project from inception. Many strategies were explored, with an emphasis on providing a healthy, safe building to residents of the building.

The building has a high-performance exterior with high-performance windows. This, coupled with the high-efficiency boiler, heat pump and cooling system installed at this project, provides for an efficient building with individual tenant control.

Atlantic Terrace also used local and recycled materials, many from Brooklyn itself. In addition to recycled content in the concrete and steel used to create the building, the brick was manufactured within 500 miles of the project site. All kitchen cabinetry, countertops, and bathroom vanities were made by businesses based in Brooklyn, with ureaformaldehyde free composite woods and bamboo veneers. The flooring in all units is bamboo, a rapidly renewable and sustainable resource. Ceramic tiles in all bathrooms and public areas have recycled content, as does the carpet in the corridors.

All appliances are high-efficiency, Energy Star rated, and all light fixtures are Energy Star compliant Compact Florescent Lamps (CFL). All exterior lighting are full cut-off fixtures allowing for the project to achieve the Light Pollution Reduction credit. Ample natural daylight in all corridors reduces the needs for excessive lighting, and the rest of the lights are on occupancy sensors, to allow further reduction in the lighting load. In addition, lowflow plumbing fixtures have been utilized in all bathrooms and kitchens, allowing for a 30% reduction of water usage.

The building amenities include a green roof system on the second floor, with native and drought-resistant plantings as well as ample integrated seating areas. High-albedo pavers were utilized on the second floor, and high-albedo roofing was utilized on the main roof to reduce urban-heat island effects.

In addition to providing a high-performance, sustainable building, efforts are being made to increase awareness for residents and building maintenance staff. All tenants, including the retail tenants, will be provided with a cleaning and maintenance plan with their lease. The building maintenance staff will also have a similar plan for the whole building.

A new beginning

The development of the Atlantic Terrace Project represents part of a new beginning for this portion of Brooklyn. After having remained vacant for decades, the Fifth Avenue Committee approached the NYCDHPD with a plan to redevelop the property. Grants and financial assistance from NYCDHPD City

to Green to Gold

The Atlantic Terrace Cornerstone

LOCATION / SIZE:

Brooklyn, NY; One third acre

FORMER USE:

Gasoline Filling Station

CURRENT USE:

10-story commercial and residential property

PROJECT PARTNERS:

Fifth Avenue Committee CA RICH Consultants, Inc.

NPCR (New Partners for Community Revitalization)

Magnusson Architecture and Planning, PC

Mega Contracting, Inc.

New York City Department of Housing Preservation and Development

New York City Department of Environmental Protection New York State Department of Environmental Conservation

ENVIRONMENTAL COMPONENTS:

Source and UST removal achieved during excavation for foundation; Sub-Slab venting system incorporated below foundation; Vapor barrier incorporated into floor and walls of foundation; Post-remediation groundwater sampling completed; Petroleum spill case closed by NYSDEC;

Site Closure Report approved by NYCDEP.

SUSTAINABILITY COMPONENTS:

High performance exterior and windows; High-efficiency boiler, heat pump and cooling system; Cabinetry, countertops, and vanities made with recycled materials; Flooring in all units constructed of sustainable bamboo; All appliances high-efficiency and Energy Star rated; Low-flow plumbing fixtures; All lighting Energy Star compliant CFL; and High-albedo deck pavers and roofing.

Capital, NYC Housing Development Corp., Citibank, NYC Council Subsidies (through Council Member Letitia James and Brooklyn Borough President Marty Markowitz), NYS Affordable Housing Corp., the Affordable Housing Program of the Federal Home Loan Bank of NY, NYS Assembly Member Hakeem Jeffries, and a Cinderella Grant from National Grid, helped transform this from a plan to a reality.

The project includes 80 residential units, 59 of which qualify as affordable housing. It also includes three street-level retail units, which will help provide additional shops and restaurants for the local community. The project will also aid in reducing local parking congestion as it includes 50 spaces of underground parking.

In short, it would not be a stretch to say that The Atlantic Terrace Cornerstone represents Brooklyn's finest, from brown to green to gold. INAN

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To read an expanded version of the Atlantic Terrace case study, please visit www.brownfieldrenewal.com/atc

