113 Hamilton Avenue 1510 Broadway Drycleaner Atlantic Chestnut Broome Street Development

2023

Eagle + West

Marcus Garvey Extension - Building F

The Taystee Lab Building



INNOVATIVE REMEDIATION 113 Hamilton Avenue

The 2023 Big Apple Brownfield Award for Innovative Remediation is presented to the 113 Hamilton Avenue project located in the Columbia Street Waterfront District in Brooklyn, for its improvement to public health and the environment using creative logistical strategy. The project team was comprised of Advanced Site Restoration, a division of Laurel Environmental Geosciences, Renaissance Realty Group, Friedland Law and ExxonMobil Oil Corporation, which funded the project and provided technical assistance through Groundwater and Environmental Services, Inc. (GES).

The 113 Hamilton Avenue Site is located in a coastal zone boundary near the Brooklyn Battery Tunnel entrance, and historically operated as a gasoline service station from 1959 to 1998. A NYSDEC spill was reported in 1989 in association with petroleum contamination. Remedial activities included the removal of 20 petroleum tanks, several hydraulic lifts, and a dispenser island in 2014. Excavation activities were provided with complications based on the proximity to the Brooklyn Battery Tunnel. Excavation was completed to between 6 and 15 feet below grade across much of the site, which required a cofferdam to be installed to depth and hydraulic monitoring to ensure the recovery of 2,805 tons of contaminated soil and 7,630 gallons of petroleum-contaminated groundwater could be achieved without structural disruption.

Pre-development

Prior to backfilling, RegenOx was applied to the excavation's sidewalls and bottom to address residual VOC contamination. An active sub slab depressurization system, later approved by OER for conversion to a passive system, was installed beneath the newly developed one-story slab-on-grade restaurant.

INNOVATIVE REMEDIATION 1510 Broadway Drycleaner

The 2023 Big Apple Brownfield Award for Innovative Remediation is presented to the 1510 Broadway Drycleaner project, located in the Bedford-Stuyvesant neighborhood of Brooklyn, for its improvement in public health and environment using creative remedial technology. The project team included SESI Consulting Engineers and MacQuesten Construction Management, LLC.

Former operations at this Site date back to at least 1908 and included dry cleaning, printing, and dress manufacturing. Remediation activities consisted of the excavation and disposal of 18,867 tons of soil, including 644 tons of hazardous waste, the removal of underground storage tanks discovered during excavation, and the treatment of chlorinated volatile organic compound (CVOC) contamination in groundwater. In-situ chemical reduction (ISCR) treatment using 7,500 pounds of zero-valent iron (ZVI) injections into the subsurface was performed across 48 injection points installed throughout the site. This method involves the transfer of electrons from a reductant such as ZVI to the contaminant, which converts the molecule into a harmless compound. A vertical permeable reactive barrier (PRB) was installed along the upgradient and downgradient boundaries of the Site to eliminate CVOC contamination migration on or off-Site. Initial downgradient sample results demonstrated a 45-100% reduction of CVOC mass on site.



The redevelopment consists of a new eight-story building containing ground-floor commercial retail space, as well as 108 affordable housing units with an outdoor courtyard and other amenities. The project provides permanent sustainable housing for families and single adults who want to remain in their community but whose incomes have not kept up with the cost of living. A total of 3% of units are fully accessible and adapted for persons with vision impairment. This innovative remediation strategy was a highlight of this project that has created a valuable community asset.



ENVIRONMENTALLY RESPONSIBLE BUILDING Atlantic Chestnut

The 2023 Big Apple Brownfield Award for an Environmentally Responsible Building is presented to the Atlantic Chestnut project located in the East New York neighborhood of Brooklyn for its integrity and awareness of environmental impacts. The project team was comprised of AKRF, Dattner Architects, Monadok, and Atlantic Chestnut Associates.

A once blighted and burnt-out group of buildings associated with chlorinated solvent contamination in the sub-surface is being transformed into a multi-story mixed use building that features 403 affordable apartment units, 21,000 square feet of commercial and community facility space including a supermarket, and green outdoor spaces accessible to residents.

Remedial efforts included addressing off-site impacts of chlorinated solvents through groundwater monitoring and the installation of a soil vapor extraction system around the entire City block. Approximately 34,000 tons of hazardous and non-hazardous soil impacted with chlorinated solvents were excavated and disposed of, in addition to in-situ groundwater treatment. Existing and ongoing engineering controls include a soil vapor extraction system and sub-slab depressurization system (SSDS).

The project is participating in the Enterprise Green Communities Initiative with Housing Preservation and Development (HPD) overlay, which requires achievement of a new standard for design and construction that addresses the changing climate, improves health and well-being of residents, and is economically viable for the long term. The building features a rooftop solar array, energy-efficient heating and cooling systems and appliances, and double paned windows. An intensive green roof system is slated for installation in accordance with LEED requirements and will be capable of supporting a variety of vegetation including grasses, perennials, shrubs, and small trees within a thick substrate. The green roof will reduce heating and cooling costs and capture rainwater.

COMMUNITY ADVOCACY, OUTREACH, AND ENGAGEMENT Broome Street Development

The 2023 Big Apple Brownfield Award for Community Advocacy, Outreach, and Engagement is presented to the Broome Street Development project, located in the Lower East Side neighborhood of Manhattan, for its innovative approach to community engagement, involvement, and education to the community. The project team included Gotham Organization, the Chinese-American Planning Council (CPC), Dattner Architects, Monadnock Construction, and Langan Engineering.

The Broome Street Development project is a two building project constructed on a 0.75 acre lot on Broome Street between Norfolk and Suffolk Streets in the Lower East Side. The project was entitled via the City's ULURP process receiving final approval in February 2020. The project team met with the community in advance and throughout the rezoning process starting in 2017. The project garnered significant community support including from local community groups, community board members, and elected officials for its community oriented program and significant affordability levels. The two buildings consist of the 390,000 square foot Suffolk Building and the 90,000 square foot Norfolk Building. Overall, the project provides nearly 500 new residential units at 43% affordability including 115 new affordable homes for seniors, community facility, and neighborhood retail space. Areas of the footprints of both buildings were remediated via the NYS Brownfield Cleanup Program including soil remediation and soil vapor mitigation.

The Suffolk Building is constructed on a formerly underutilized parking lot accessory to an existing senior housing building on the block owned and operated by an affiliate of the CPC. The new Suffolk Building began construction in February 2021 and opened for leasing in the Spring of this year. The project contains 378 residential units including 95 affordable units, 40,000 sf of community facility space for CPC's new headquarters which will allow CPC to continue to empower immigrant and low-income Asian Americans in NYC, and neighborhood retail space along Broome Street.

The Norfolk Building is constructed on the site of the former Beth Hamedrash Hagadol (BHH) Synagogue. Construction began in April 2021 and opened in December 2022. The project includes 115 affordable homes for seniors and a 4,000 sf of community space for a new BHH cultural heritage center. The new community facility space allows BHH to maintain its presence on the Lower East Side, a history that goes back nearly 200 years.

As a whole, this project is the result of significant community outreach and engagement ensuring that those in the existing community had a voice in the planning process.

OPEN SPACE Eagle + West

The 2023 Big Apple Brownfield Award for Open Space is presented to Eagle + West, located in the Greenpoint Section of Brooklyn, for its remarkable and valuable open space features and community contribution. The project team was comprised of Brookfield Properties, Park Tower Group, OMA New York, Beyer Blinder Belle Architects & Planners LLP, Langan, James Corner Field Operations, Marmol Radzinger, New Line Structures, DeSimone Consulting Engineers, McLaren Engineering Group, Cosentini Associates, Thornton Tomasetti, Cerami Associates, and others.

Located on reclaimed land just off the East River, remediation for this project included disposal of 44,680 tons of soil/fill, including over 3,000 tons of hazardous waste. Approximately 20,000 tons of granular fill, virgin aggregates, and topsoil was imported for the foundation, new site utilities, bringing the Site to grade, and construction of the clean soil cover. Eagle + West revitalized over three acres of underutilized waterfront property by constructing three multi-story residential buildings over a shared cellar with a new waterfront park, and an esplanade with a new, stabilized shoreline. This development brought 1.1 acres of public open space to the community and constructed segment of West Street that had been missing for decades. The buildings contain their own dedicated open space, with green roofs, an outdoor kitchen, sun deck and lawn, play area and bocce ball courts, as well as an outdoor swimming pool. Site elevations were raised upwards of 17 feet to mitigate flood risk and the continuous lower-level waterfront promenade included a salvaged navigational buoy as an art piece.

The project transformed an underutilized waterfront property into a residential community which substantially increased the neighborhood's connectivity to adjacent outdoor recreation areas, city parks, and greenways.







COMMUNITY SPACE AND SUPPORT SERVICES Marcus Garvey Extension - Building F

The 2023 Big Apple Brownfield Award for Community Space and Support Services is presented to the Marcus Garvey Extension – Building F development, located in the Brownsville neighborhood of Brooklyn, for its outstanding benefit to the local neighborhood and quality of support services. The project team included, L+M Development Partners LLC, L + M Builders Group LLC, Roux Environmental Engineering & Geology and the Osborne Association.

Building F at the Marcus Garvey Extension development is an integrated affordable and supportive housing development and its first to provide supportive housing and services to people over 50 who are re-entering the community from incarceration. The project is a model for socially responsible, community-based development that extends beyond housing to provide support to residents within the Brownsville community. This underutilized former commercial property underwent remediation to prepare for the new eight-story residential building that includes 174 affordable apartments, 52 of which are reserved for supportive housing. The Osborne Association operates an office on the ground floor where they provide workforce development programs, relationship coaching, health literacy education, cognitive behavioral therapy groups, and other services.



ECONOMIC DEVELOPMENT The Taystee Lab Building

The 2023 Big Apple Brownfield Award for Economic Development is presented to the Taystee Lab Building, located in the Manhattanville section of West Harlem, for its significant benefit to local economic development through job creation. The project team was comprised of The Janus Property Company and VHB Engineering.

The Taystee Lab Building is the center of a new economic development hub in a low-income minority community where jobs are of critical importance. Built on the site of a former bakery, the project remediation included the removal of construction and demolition debris, the removal of seven underground storage tanks, the removal of a coal ash deposit, achievement of Track 2 SCOs which included NYSDEC spill closure, and the installation of a composite cover system. The project team worked closely with the Community Board (CB9) to understand and implement the community's highest priority: job creation.

The newly-constructed, Class-A LEED-certified 11-story building boasts spaces used for academic and research purposes, as well as community facility and commercial space. The building also contains a landscaped courtyard for use by tenants and community members. Each tenant will be asked to use good faith efforts to hire under the Hire NYC program for job openings to low-income residents. The building is expected to generate a total of 1,500 to 1,800 direct new permanent jobs with retention, advancement, and

training support available through Hire NYC.





