

Green Bond Framework

Whitney Museum of American Art

INTRODUCTION

The Whitney Museum of American Art (the "Whitney" or the "Museum") is a not-for-profit corporation, founded by Mrs. Gertrude Vanderbilt Whitney in 1931. The mission statement of the Museum encompasses the following goals: The Museum seeks to be the defining museum of 20th and 21st century American art. The Museum collects, exhibits, preserves, researches and interprets art of the United States in the broadest global, historical and interdisciplinary contexts. The Museum is located in New York City. In May 2015, the Museum moved from the Breuer Building on Madison Avenue to its newly constructed building at 99 Gansevoort Street (the "New Building"). The New Building was the first purpose-built museum to pursue LEED® (Leadership in Energy & Environmental Design) Gold status.

As one of the preeminent advocates for American art, the Museum fosters the work of living artists at critical moments in their careers. The Museum educates a diverse public through direct interaction with artists, often before their work has achieved general acceptance. In addition to its work with artists, the Museum's educational programs create opportunities for diverse Museum visitors to challenge themselves and their views and to think creatively and embrace new ideas, by experiencing the complexity of American art and culture. The Museum is currently in partnership with nine New York City public schools and continually evaluates the impact of arts education on student learning. The Museum also partners with local community organizations and senior centers to provide free tours and workshops for these populations. See "APPENDIX A" for further detail on the Museum.

DESIGNATION AS GREEN BONDS

The Museum is issuing the Bonds as "Green Bonds" based on the use of proceeds of such Bonds, which will be used to refinance the Series 2011 Bonds, which funded the construction of the New Building. The designation is designed to track the generally accepted Green Bond Principles, updated as of June 2018 and as promulgated by the International Capital Market Association ("ICMA"). By reference to the ICMA's "Green and Social Bonds: A High-Level Mapping to the Sustainable Development Goals" (June 2020), The Foundation has determined that the Social Bond designation reflects the use of proceeds of the Bonds in a manner that is expected to be consistent "Goal 9: Industry, Innovation, and Infrastructure," and "Goal 11: Sustainable Cities and Communities" (referred to as "UNSDGs" generally and "SDG 9," and "SDG 11" specifically). See "SECURITY AND SOURCES OF PAYMENT OF THE BONDS."

USE OF PROCEEDS

The Series 2021 Bonds will be used to refinance the Series 2011 Bonds, which were used to fund the costs of acquiring, constructing and equipping of a new museum facility in the Meatpacking District of the City, named the Leonard A. Lauder Building for the former Whitney board chairman and major Museum benefactor. The New Building was designed by architect Renzo Piano and constructed at a cost of \$422 million by the Turner Construction Company. Construction of the New Building began in July 2011, was completed on time and on budget, and opened to the public on May 1, 2015.

The New Building contains approximately 220,000 gross square feet and includes approximately 50,000 square feet of indoor galleries and 13,000 square feet of outdoor exhibition space and terraces facing the High Line Park. An expansive gallery for special exhibitions is approximately 18,000 square feet in area, making it the largest column-free museum gallery in the City. Additional exhibition space includes a lobby gallery (accessible free of charge), two floors for the permanent collection, and a special exhibitions gallery on the top floor. The building also includes an education center offering state-of-the-art classrooms; a multi-use black box theater for film, video, and performance with an adjacent outdoor gallery; a 170-seat theater with views of the Hudson River; and a Works on Paper Study Center, Conservation Lab, and Library Reading Room. In addition to the new exhibition space, the New Building features a cantilevered entrance along Gansevoort Street which shelters an 8,500-square-foot outdoor plaza or "largo," a public gathering space steps away from the southern entrance to the High Line Park. A retail shop and restaurant are located on the ground-floor level.

The New Building was the first purpose-built museum to pursue LEED Gold status. LEED is a green building certification program offered by the U.S. Green Building Council. Projects submitted for LEED certification are reviewed by the Green Building Certification Institute, a third-party organization, and assigned points based on the project's implementations of strategies and solutions aimed at achieving high performance in various areas. The Museum registered for LEED certification in 2011 and received LEED Gold certification in 2016 on the basis of the LEED for New Construction & Major Renovations (V2009) based on, but not limited to, the following sustainable features. Certain descriptions have been updated for current performance or elements that have been improved since 2016.

- The building is powered by a cogeneration plant with a reciprocating cogeneration engine at 75KW. Cogeneration, or combined heat and power, utilizes the by-product of electricity generation for heat. This excess heat from the buildings co-generation plant is recovered for heat in winter, for reheat in summer, and for service hot water year round. The Whitney Museum was able to achieve a 22.2% reduction in energy cost savings and a 35.6% reduction of water use relative to its prior building, which exceeds the minimum reductions required by LEED.
- The building has an enthalpy economizer and Variable air volume ("VAV") system for the galleries, auditorium and offices to supply free cooling when the outdoor conditions allow. The airside economizers utilize outside air when indoor conditions are close to the outdoor conditions which means that in economizer mode, the system turns to 100% outside air and does not need mechanical ventilation.
- A Building Management System has been installed, which controls the building system and makes the actual usage data readily available to the building operations staff.
- The building uses high performance Insulating Glass Units with argon filled cavities with warm edge spacers to resist condensation and insulated metal panels for most of its enclosure instead of the typical 2-4 inches of insulation that might be employed in commercial buildings.
- A green roof, plaza level planters with plant materials reminiscent of those used at the neighboring High Line Park and a stormwater retention tank to reduce site runoff, which lessens the building's reliance on storm sewers. Between the ground level planters, vegetated roof areas, and pedestrian hardscape areas, the amount of open space provided is 26% of the total site area.
- The Museum is within ¹/₄ of a mile from the M11 and M14 city buses, within ¹/₂ of a mile of the A, C, E, and L Subway lines and within several thousand feet of a CitiBike station. There are no parking spaces.
- Over 20% of the cost of construction materials came from recycled materials and over 10% of the cost of construction materials came from regionally sourced and manufactured products.
- Low emitting interior finishes and comprehensive indoor air quality tests contribute to enhanced indoor air quality. An air quality testing agent has been engaged to take air samples at various points throughout the building and test for various particulates and contaminants.
- A green housekeeping plan has been implemented to reduce harmful impacts from cleaning materials and supplies and an ongoing training and feedback process has been established to maintain the effectiveness of the plan.

PROCESS FOR PROJECT EVALUATION AND SELECTION

In 1963, the Museum acquired a site on Madison Avenue at 75th Street, and constructed a building designed by Marcel Breuer, which opened to the public in 1966 (the "Breuer Building"). The iconic Breuer Building housed the Museum from 1966 through October 20, 2014. In order to increase the accessibility of the permanent collection, increase patron engagement and provide more opportunities for special exhibitions and contemporary art, the Museum elected to build a new facility to house the permanent collection, its temporary exhibitions and educational programs. The Breuer building did not offer the classrooms, theater or study center spaces that the New Building offers.

In 2006, the City of New York approached the Museum to offer the Gansevoort Street site. At the time, the High Line was in the early planning stages, and the City sought a cultural anchor at the base of the High Line. The Museum signed a "Conditional Designation Letter" with the City in 2006, and in 2009, Museum's Board of Trustees approved entering into a Purchase Agreement with the City. In May 2011, the Whitney purchased the site at 99 Gansevoort Street in the Meatpacking District. The location was chosen in part due to its surrounding neighborhood's concentration of art, entertainment and commerce. Within a fifteen block radius are leading educational institutions and art galleries, world-class restaurants, hotels, clubs and music venues and the headquarters of top creative firms in design, architecture, fashion and technology. Given the New Building's location at the base of the High Line, the location offered a significant site for community and tourist engagement.

The Museum engaged Renzo Piano Building Workshop as Design Architect and Turner Construction Company as Construction Manager. From the outset, the Museum was intent on incorporating sustainable design into the building, and assembled a team that was aligned with that approach. Renzo Piano Building Workshop, in association with Cooper Robertson Partners, as well as Turner Construction, all embraced the Museum's commitment to sustainability, and incorporated a number of green design features into the new building, including advanced approaches to mechanical, electrical and plumbing plant infrastructure, exterior envelope performance, and interior controls. The Museum approached the site and the new building in close partnership with the City of New York which also provided the Museum with critical funding for construction. In achieving LEED Gold, the Whitney elected to exceed the green standards set by the City. Additionally, the Museum worked closely with Vidaris and ARUP as the team which developed the green strategies.

The total cost of the building was roughly \$422 million, with proceeds coming from the Series 2011 Bonds, the Museum's capital campaign, funding from the City and the State of New York and the proceeds of the sale of certain real estate assets.

MANAGEMENT OF PROCEEDS

Upon receipt of the net proceeds of the Bonds, the Museum will direct the trustee to redeem the Series 2011 Bonds.

REPORTING

The Museum is actively evaluating ways to further reduce its environmental footprint. The Museum is also subject to the City of New York Local Law 97 (LL97) as part of the 2019 Climate Mobilization Act, which places carbon caps on buildings larger than 25,000 square feet beginning in 2024. The Museum expects to provide voluntary updates on its progress toward organizational sustainability goals and in relation to LL97 once available, and the Museum aspires to use LL97 in order to put sustainability at the forefront of its Strategic Plan.

EXTERNAL REVIEW: FRAMEWORK OVERVIEW AND SECOND PARTY OPINION ("SPO")

The Museum has engaged Sustainalytics US ("Sustainalytics"), a provider of environmental, social and governance research and analysis, to provide an opinion regarding compliance of the Series 2021 Bonds with the Green Bond Principles. Sustainalytics evaluated the planned use of the Series 2021 Bonds and the alignment thereof with relevant industry standards and provided views on the compliance of the planned use of the Series 2021 Bonds regarding "Goal 9: Industry, Innovation and Infrastructure of the Green Bond Principles".