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Urbahn and Hollister top out BelovED school

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Jersey City, NJ Friends of BelovED Community Charter School 2, Inc. (Friends 2) and the project team of Urbahn Architects and construction manager Hollister Construction Services have reached the construction milestone of “topping out” – or completing the structural steel frame – for the new BelovED Community Charter School’s Middle School building. The new school will be situated on a half-acre parcel of land located at 535 Grand St. New Jersey Community Capital and Provident Bank have provided construction financing of $12.5 million for the project.

The topping out celebration is a tradition in the construction and real estate industries. This is when the uppermost steel or wooden beam is put into place, which means that the structure has reached the highest point. The last steel beam of the BelovEd Charter Middle School’s structure was decorated with an American Flag prior to being lifted and installed.

BelovED Community Charter School is named in honor of Martin Luther King, Jr.’s vision of the “Beloved Community.” The school currently serves 1080 students.

“Friends 2, a non-profit organization that was established in 1995 under the name The Jersey City Scholarship Fund, has been supporting the expansion of educational options for Jersey City children for over 20 years. In its early years, our organization was supporting its goals by providing scholarships, and today through the provision of facility space for BelovED and other charter schools,” said Peter Wasinger, a professional with the Global Banking Division of American Express, who serves as President of the Friends 2 Board of Trustees.

According to Urbahn Architect’s principal Marty Stein, AIA, “The new 53,000-square foot, four-story middle school will serve students in grades six to nine. The building will feature an open first floor with outdoor recreational facilities for students and a parking lot. 20 full-sized classrooms, 4 half-classrooms, a gymnasium, a multi-purpose room, and a large cafetorium will be located on higher floors. Upon opening in the second half of 2019, the new school will welcome its first 360 students.”

“The upcoming middle school supports Jersey City’s and the Jersey City Housing Authority’s balanced development effort to create quality affordable housing and neighborhoods, in addition to the many luxury multi-family properties currently being developed in Jersey City. The BelovED campus is located within a moderate and affordable housing section of the city and serves children from local families,” said Bret Schundler, a former Jersey City Mayor and New Jersey Commissioner of Education.

“We are very excited to once again be collaborating with BelovED and Urbahn Architects on the delivery of this new middle school. We love being part of these projects because we know how important it is for families and their children to have access to a great educational facility. The children are our future and there is no better feeling than to know that new leaders are being raised in the schools we build,” said Chris Johnson, Head Coach of Hollister.

In addition to Urbahn and Hollister, the project team includes structural engineer Consulting Engineers Collaborative (CEC); mechanical, electrical, and plumbing (MEP) engineer Partner Engineering and Science; civil engineer Derosier Engineering; and food service design consultant Schiavone Designs.

Design

The small size of the site means that Urbahn had to be particularly creative in developing and maximizing a functional program. “It’s a very dynamic design, in which many functions are incorporated,” explained Stein, who spearheaded the design of the original BelovED K-5 school and led the design of the new middle school. “The program includes 18 general classrooms, one art classroom, a 750-square foot music room to serve as the central public space of the school, a 3,600-square foot cafetorium with a warming kitchen, a gymnasium, a 750-sf multi-purpose room, a special education resource room, and several half-classrooms and administrative offices,” he added. In addition, the school will include a parking lot for 29 cars and outdoor assembly/recreation space. The building will be fully accessible to users with physical disabilities.

The parcel is within a FEMA-designated flood zone, which added another challenge for the design team. According to Urbahn principal Donald E. Henry, Jr., AIA, LEED AP, “We have specified all programmed space and critical systems on the second through fourth floors. The ground level is dedicated to parking, building access, recreation, and the entrance lobby. The upper floors are structurally cantilevered above the parking lot.”

The building will be energy efficient. “The new school will meet stringent requirements of the State of New Jersey’s energy efficiency code by utilizing a high-efficiency HVAC system, LED lights, and increased thermal insulation,” said Henry.

The building will feature several innovative spaces. “The school will include an elevated Ecology Deck – an outdoors ecology and biology teaching space, where students will perform experiments with plants and observe various microenvironments within an urban setting,” said Urbahn project manager Martin Kropf. The deck will be adjacent to the biology teacher’s office on the second floor.

The school’s grounds will be elevated above the current FEMA flood zone level and feature a play yard with concrete pavers, ornamental steel fence, benches, and planters. The ground floor of the building will house a parking lot and an entrance lobby with and elevator and a security desk, as well as a loading dock with a 20-foot-wide overhead coiling gate.

The second floor of the structure, cantilevered above the parking lot, will house a cafetorium and an 850-square foot kitchen, an office suite, a nurse’s office, classrooms, and two sets of double stairs in addition to the elevator. The kitchen will be equipped with three reach-in refrigerators, dry food storage, a commercial stove, two convection ovens, and fiber reinforced panels (FRP) walls. The kitchen floor will be quarry tile. A walk-in freezer will be located on the ground floor.

The third floor will feature classrooms, a multi-purpose room, a gymnasium, an art classroom, locker rooms, and a main distribution frame (MDF) room. The fourth floor will house a music room with a stepped stage for rehearsals and performances, classrooms, a special education classroom, and a teacher’s lounge room/break room.

The classrooms will feature vinyl composite tile (VCT) flooring with ornamental color patterns, while the gymnasium will be equipped with an athletic flooring system. The kitchen’s floor will have quarry tile finish.

Construction

According to Hollister Project Executive Robert W. Sander, P.E., “Due to the low-bearing soil at the site, the team will install 150 concrete-filled, 100-foot deep steel piles with pile caps and piers, which will support the foundation system of concrete grade beams and the building’s structural steel frame with lightweight concrete on galvanized composite metal deck.”

The building’s façade will feature Exterior Insulation and Finish System (EIFS), a non-load bearing, exterior wall cladding on steel studs, with Batt insulation. Energy efficiency will be also improved by thermally- proficient low emissivity (or low-e) windows with high visible transmittance (VT) properties that will allow increased amounts of natural light into the school’s interiors.

The construction team will address several logistical and technical challenges, including working on a small site with almost full lot coverage by the building and elevated playground, which prevents storage of materials on site. Hollister will carefully pre-plan and schedule deliveries of all materials to be trucked in as needed for immediate installation. In addition, the crews will work in close proximity to existing townhouses. In order to eliminate any impact on the neighboring properties, construction workers will pre-auger all piles, removing the need for prolonged, vibration-inducing pile driving.