NOMADIC NEWARK SCHOOL GETS A LESSON IN OFFSITE CONSTRUCTION

SCHOOLHOUSE BLOCK

For its first 14 years, the Lady Liberty Academy Charter School of Newark occupied several temporary sites, a condition that not only inconvenienced its population of 450 kindergarten through 8th-grade students, but also put the institution’s viability at stake. Without a permanent home, Lady Liberty faced losing its charter. Not-for-profit developer BuildWith Purpose turned to New York firm GLUCK+ to conceive a design solution that could beat the clock within a constrained budget.

The chosen block comprised a modernist, 26,000-square-foot former Ukrainian Catholic Church day school in need of renovation and a detached 1970s grocery store turned gymnasium. The school also needed more than 50 percent of additional space. A gasoline station across the street raised fears about groundwater contamination.

“We originally thought we could build traditionally, but the site was hampered with prevailing wage constraints,” said project architect Charlie Kaplan. “Because GLUCK+ does both design and build, we were able to look at other methodologies and reformulate the building after having drafted construction documents.” Kaplan and his team took a field trip to modular building plants across Pennsylvania, where several tours yielded the solution of offsite construction. GLUCK+ had previously employed the method in their Manhattan residential project, The Stack, but the same concrete and steel framework didn’t fit the school’s ledger. The team developed 65-by-60-foot units with a hybrid structure of rigid steel frames paired with cost-effective wood infill.

The foundations for a 17,400-square-foot new building were cast in Pennsylvania and situated with a crane at the construction site—a technique more common in tract housing than charter schools. Classrooms, a cafeteria, and offices were also crafted with interior finishes at the factory and dismantled for transportation. Back in Newark, pipes and fans forming an active vapor mitigation system were installed to remediate any potential soil contamination.

The addition wraps around the pre-existing building, creating a courtyard for the once-itinerant campus. Besides providing protected space for organized play, the void acoustically separates the school from the surrounding community. In deference to the scale of its residential neighbors, the southern massing recedes from two stories to one, which also allows extra light into the enclosure. Faculty offices and single-loaded corridors face the courtyard.

“Everyone is always passing around or going through the courtyard,” said Kaplan. Unlike the academy’s penultimate location at a vertically oriented four-story building in nearby Harrison, the new site also allows for interaction between grade levels. The pre-fab construction created a distinctive school on a single neighborhood block. The project also met its 10-month construction deadline under-budget.

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