Poised for Performance

Allen Theatre addition, Middough
Renovation benefit Cleveland State University, Cleveland Play House
The Middough Building was purchased from Middough, an engineering, architectural and management firm, by PlayhouseSquare in 2010, with two floors leased back to Middough and the balance of space, save for most of the first-level parking garage, leased to CSU and Cleveland Play House.

Westlake Reed Leskosky (WRL), of Cleveland, developed the preliminary planning and programming of the Middough building for Cleveland Play House and CSU, including administrative offices, the scene shop for CSU, and rehearsal space shared by CSU and Cleveland Play House. The final planning and design was performed by Middough. WRL designed the 45,000-square-foot new addition and bridge connection from the PlayhouseSquare parking garage to the new theaters and Bulkley Building. Turner Construction Co., of Cleveland, was construction manager for both the addition and Middough renovation.

**Blending into Allen Theatre**

“We looked at the connection between the parking garage and...”
Bulkley Building as a streetscape, to give people a lot to look at as they enter across the bridge,” explains Matthew Janiak, WRL’s project director. “Arriving across the bridge, patrons look down into the Lab Theatre and then are confronted by the Allen Theatre to the right, including some of its existing exterior brickwork. Above their heads, the mirrored blue flying bridge adds color and excitement. The flying bridge also connects, from an elevator bank, to Allen Theatre balconies as well as the Allen’s existing upper mezzanine lobby.”

The addition’s ending point is the light-filled Second Stage lobby, which connects to the Bulkley Building arcade. Here, patrons face the Second Stage entry, with control booths and corridors above. A lower level houses support spaces, dressing rooms and storage areas.

The 6,000-square-foot Second Stage and 4,700-square-foot Lab theaters form the bulk of the addition, inserted between the Allen and Ohio theaters and replacing a parking lot. The 150-seat Lab Theatre was developed to provide an exterior face to PlayhouseSquare to the north, with a large glass façade and the light building, while providing another entry to PlayhouseSquare, according to Janiak.

“We envisioned the Lab Theatre lobby to give patrons a personal theater experience,” he says. “A series of track-light fixtures across the lobby ceiling gives an idea of what it might be like to be an actor on the stage.”

“The Lab Theatre itself is a fairly straightforward black box,” he continues, “but we provided a bit of differentiation in the theater technical components for both theaters so that students would have different technical experiences in each one from a lighting and design stand-
properties

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point. Each of the spaces has a different lighting system."

The Second Stage theater highlights the mobility of seating units, and seats as many as 348 patrons depending upon its configuration. In the Lab Theatre, seats on platforms are brought in as needed. "We developed a series of mobile seating units, that we call ‘wagons,’ for the Second Stage," says Janiak, “designed as corner units, square seating units and staircases. On casters, this kit of parts can be manipulated and moved.”

Stabilized by floor jacks, the wagons lock together. They have been designed to assume four basic seating configurations: an arena, with patrons all around the actors; a thrust, where actors are surrounded on three sides by seating; a runway, with patrons on one side or other of the stage; and a traditional endstage. The wagons can be pushed around fairly easily using three or four stagehands, making theater layout a relatively simple and flexible affair.

Sliding walls ring the perimeter of the Second Stage, and adapt to the seating arrangement. Patrons descend into the seat system through openings in those walls, so as the seating layout changes, the openings must change, too. Docking systems allow staircases to connect to the entryway, and panels are then unpulled and moved. This arrangement creates doorways quickly and with minimal effort, according to Janiak. Second Stage also contains a trapped floor system.

The theaters require large amounts of power for sound and lighting systems, so the project included an upgrade of the electrical system, where electricity from a main enters the Allen and then redistributes to the new theaters. Power also was rerouted to help supply two existing chiller plants for the Allen complex.

The addition picks up the Allen’s chilled-water system as well as steam, with the two services providing for HVAC needs. Four air-handling units run the addition — the Second Stage and Lab theaters each have separate air handlers.

Built in tight space

The task fell to Turner Construction Co. to oversee construction of the new theaters and a walkway from the parking garage. That addition replaces a surface parking lot and elevated walkway, according to Jack Kellogg, Turner Construction Co. project manager for this portion of the work. A tight worksite in the midst of old structures and smack dab in the middle of bustling PlayhouseSquare provided a major project challenge.

“The building site was surrounded on three sides by 1920s-era buildings so we installed vibration monitors to check the condition of the existing buildings to make sure we didn’t damage those,” says Kellogg. “And because the addition frontage was only 100 feet, we had to carefully schedule all of our deliveries with the subcontractors, using just-in-time delivery methods.”

The theaters serve as the core structural elements of the addition, and the rest of the building cantilevers out from that core to lightly touch the Allen.
“The Allen is not hard-connected to the addition — all soft connections,” says Janiak. “The buildings are structurally independent.”

This design, besides minimizing potential damage to the older existing structures, also minimizes the potential for noise and vibration to impact performances in adjoining theaters.

“We placed acoustical isolation joints throughout the addition, installed multiple layers of drywall on top of concrete-block walls, and even isolated the foundation slabs,” says Kellogg.

Constructors had to close Dodge Court, which runs parallel to Chester Avenue from East 13th Street, to install seven-ton girders that support the new pedestrian bridge from the parking garage to the addition. Also, installing the foundation for the addition required excavation below the water table.

“Prior to the excavation, we installed an extensive sheeting and shoring system along the site perimeter,” Kellogg says. “That provided a safe and dry work environment for the foundation installers.”

Middough Building reworked

Following a just-completed renovation, the 300,000-square-foot, five-story Middough Building on East 13th Street now incorporates space for CSU and Cleveland Play House.

Besides an existing parking area, the building’s first floor also houses the CSU scene shop, including a two-story-high bay to house larger scenery. The second floor contains the CSU Dance and Drama offices, CSU Art Department offices, Cleveland Play House administrative offices and shared classrooms, as well as space for disciplines within CSU’s Art Department such as Graphic Design, Photography and Art Education.

CSU programming for the fifth floor includes drawing and painting studios, wardrobe space and dance studios. The Cleveland Play House costume shop also resides on the fifth level as well as classrooms and collaborative space for Case Western Reserve University. The fifth floor also contains three large, shared rehearsal spaces.

Technology design provides a high performance data network for Cleveland Play House and CSU staff and students, connecting them to the CSU Campus network. Data network serves several computer labs, including a photography computer lab and a graphics design computer lab, according to Tom Gilliland, RCDD, associate director of technology.
with Karpinski Engineering, which designed technology and audio/visual systems for the renovation of the first, second and fifth floors.

Middough leases the third and fourth floors for its own offices, and with the exception of a new fire-suppression system, these floors did not undergo major renovation as part of this project.

**Early convention center**

The Middough Building was built as a concrete two-story structure in 1913. Called the Wigmore Coliseum, it served as one of Cleveland’s first exhibition halls. Its initial event, the Cleveland Electrical Exhibition of 1914, featured a ribbon-cutting by Thomas A. Edison.

In 1923, three more floors were added, two of concrete, then topped by a steel-frame fifth floor to allow greater interior clear spans, according to Tom Einhouse, vice president of real estate development at PlayhouseSquare. Thereafter, it served as a public parking and recreation center, then as a Navy finance center. Following its use as a banking operations center, Middough purchased the building in 1998 as its Cleveland headquarters.

**CSU comes calling**

As plans for CSU student housing along Chester Avenue took shape a few years back, the university needed a new home for its Art Department.

“CSU originally had an interest in the Middough Building with an eye on the parking levels on the first and second floor,” recalls Charles Krzysiak, Middough vice president and general manager. “This building is a natural extension of the CSU campus to East 13th Street.

Ultimately, negotiations would bring CSU, Cleveland Play House and PlayhouseSquare together in a collaboration known as the Power of Three. PlayhouseSquare bought the building and master-leased it back to CSU, with Middough becoming a tenant. Thus the Allen/Middough project proceeded.

Working with Middough, CSU and PlayhouseSquare finalized programming for the space, according to Einhouse. Turner Construction Co. served as construction manager and Panzica Construction, of Cleveland, provided site management as the Middough Building was reconfigured to its new use.

**Fast-tracking to meet tenant needs**

Einhouse and Krzysiak detailed development of the Power of Three partnership and the path to the Middough Building conversion, with Krzysiak leading Properties on a tour that included Matt Bort, project manager from Turner Construction, and David Faller, project manager at Middough, who provided
design drawings and construction administration for the project.

With planning underway, PlayhouseSquare concluded the building’s purchase in January 2011. Construction began immediately, as CSU needed the space in time for its fall 2011 semester. Cleveland Play House moved in on November 1, 2011. To expedite the $14 million (construction cost) Middough renovation, bids for major project components went out with 50% of the drawings complete, according to Bort. Crews began demolition and construction in April 2011, and completed all but punchlist work by this past December.

**A concrete fortress**

The complexities in repurposing the Middough Building were many. Project financing included historic and new-market tax credits, which, of course, impacted design and construction. And, as true with many older buildings, old drawings did not always accurately portray what crews would uncover. As mentioned, except for the steel-framed top level, the Middough Building is essentially a concrete fortress.

“The building is filled with rebar, so it was challenging to find room to route the major services needed for the renovation,” explains Faller. “Also, each floor differed in its construction, with so many walls throughout and so many different kinds of programming for the space. All of that proved challenging from design and construction standpoints.”

Constructors employed technology to determine the best utility pathways.

“We used sonar to see through the concrete and find the rebar,” says Bort, “so we could develop plans for pipe and line placement.”

Designers and contractors also employed building information management (BIM) software, which greatly aided in avoiding spatial conflicts.
Second-floor work entailed asbestos abatement of the existing waterproofing on the floor, which crews completed one-quarter of the floor at a time, according to Bort. The second-floor exterior plaster also contained asbestos, so floor enclosures were extended to the walls to provide seals for abatement work. With the second and fifth floors essentially wide open, interior-wall demolition was minimal.

As a complicating factor, Middough’s 300 employees continued to occupy the third and fourth floors throughout construction, so routing new services through those floors to upper and lower levels required work during the company’s off hours.

**Making the space work**

The Middough’s fifth floor proved ideal for location of the large rehearsal studios, as steel trusses spanned the space to provide expansive open areas. No more is there a need to choreograph ballets to account for the columns dotting previously used rehearsal space in the Idea Center, as was the case for the Cleveland Ballet, according to Einhouse.

To provide extra vertical space in the first-level CSU scene shop, crews cut two large openings in the 11-inch-thick second-level concrete.

“Previously, CSU had to build sets on the stage,” says Bort. “Now, students can assemble a set in the scene-shop high bays, then disassemble it and take it down the street to the actual play stage. This gives students training in stage assembly and disassembly, an important task to learn.”

Crews also built over a ramp leading to the second level from a garage entrance on East 13th to add second-level classroom space.

Originally, planners envisioned an enclosed bridge for transport of scenery to the Allen complex, but that was discarded during value-engineering processes. To further improve cost-effectiveness, concrete floors in the Middough Building simply have been sealed, allowing for a durable surface without the added costs of floor coverings. This assists in giving the building an arts campus feel, according to Einhouse.

Crews lifted two air handlers through windows to install on the fifth level, with two more placed on the second, according to Bort. Electrical upgrades and new whole-building sprinkler systems necessitated after-hours access to occupied floors.

“We scheduled major power interruptions during nights,” says Bort. “We had to be mindful of Middough’s computer servers and their work needs.”

Interestingly, in keeping with historic-preservation requirements, the project had to maintain the existing hard ceilings on the second and fifth levels within 15 feet of exterior windows to allow the building to preserve the building’s traditional appearance from the street level. Crews also replicated some fifth-level decorative column plaster as well as some wood molding.

Exterior work was minimal, but later this year the west elevation will receive new windows and a new storefront as well as new exterior lighting, according to Bort.