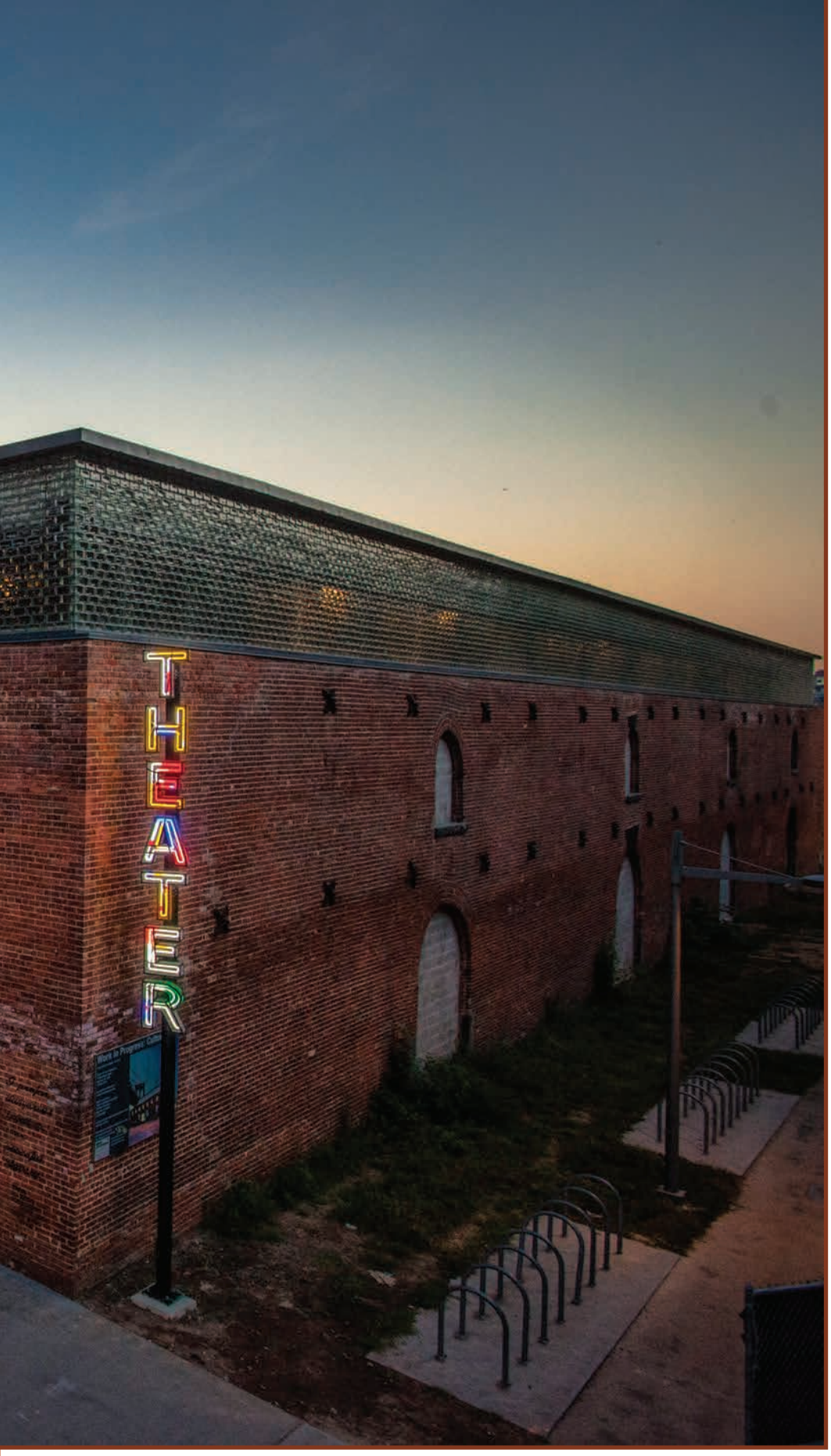


On the Waterfront

After years of wandering, St. Ann's Warehouse finds a permanent home

By: David Barbour



The theatre is located on the edge of Brooklyn Bridge Park with that storied structure towering over it.

Photo: Pavel Antonov

Many of New York's theatre companies have undergone periods of wandering—making do with donated or rented space—before finding permanent homes, but few have endured as many years on the move as St. Ann's Warehouse. Beginning in 1980 as a classical musical program, Arts at St. Ann's, located at the Church of St. Ann and the Holy Trinity in New York's Brooklyn Heights, it has gradually evolved into an international presenting organization with a highly eclectic program that includes new plays, conceptually imaginative revivals of classics, new operas, and all sorts of indescribable programming combining music, text, visuals, and performance.

In 2001, the company moved to 38 Water Street in DUMBO (Down Under the Manhattan Bridge Overpass), a neighborhood located on the East River and consisting mostly of warehouses, many of which being converted to apartments and loft spaces. As young people, priced out of the Manhattan real estate market, poured into DUMBO, new apartment buildings went up, and restaurants, bars, and bookstores followed. With a schedule that included productions by the Wooster Group, Mabou Mines, and London's Royal Court Theatre, plus appearances by Lou Reed, David Bowie, Aimee Mann, and many others, St. Ann's Warehouse found itself right at home in the area. By then, it had become one of New York's major arts presenters; in 2004, the theatre and Susan Feldman, its artistic director, were given the Ross Wetzsteon Memorial Award, administrated by the Obie Awards committee, "for inviting artists to treat their cavernous DUMBO space as both an inspiring laboratory and a sleek venue where its super-informed audience charges the atmosphere with hip vitality." "We were only going to be there for nine months," Feldman once publicly

The theatre under construction; great care was taken to ensure the integrity of the orignal warehouse structure.

stated. “We were there for twelve-and-a-half years.”

Indeed, for all its acclaim, finding a permanent home in a fast-growing neighborhood proved to be a mighty challenge. When the company was awarded a former tobacco warehouse in Brooklyn Bridge Park, it was opposed by certain members of the community, leaving the project tied up in litigation.

By the early 2000s, the 1861 tobacco warehouse was a roofless collection of walls that formed a trapezoidal footprint made up of a rectangle and an adjacent triangle. Another arts group wanted to put a pyramid inside the warehouse’s walls, a plan that was rejected, and St. Ann’s Warehouse was given the go-ahead, with a building initially designed by H3 Hardy Architects.

This plan was nearly terminated when a federal judge, reacting to a suit filed by historic preservation groups, ruled that the National Park Service, which administered the parcel of land, had improperly downgraded it from its original status as a protected Civil War-era landmark. This was a blow to St. Ann’s Warehouse; the company’s future in the neighborhood became so clouded that Feldman said it might have to move elsewhere.

After a year of litigation, an agreement was reached that appeared to be something of a win-win. St. Ann’s Warehouse won the parcel of land, and preservationists were mollified by a plan to add 38,000 sq. ft. of land to expand Brooklyn Bridge Park. During the above process, St Ann’s lost its venue and had to move to a temporary location on Water Street.

The company also had a new architect: Working with Marvel Architects, St. Ann’s proposed erecting an 18,000-sq.-ft. building within the warehouse’s original and preserved brick walls. The triangular portion of the original footprint was to be left open. “It was a given that we were building inside that existing shell,” says Zachary Griffin, of Marvel Architects. “Our approach was to respect that. The portion inside the triangle was designed to be a garden. The building is in unique condition and we wanted to leave it the way it was.” The original building, Griffin says, “was five stories tall.”

In creating a program for the building, it helped that the company had a clear sense of its mission and how to

Photos: Courtesy of St. Ann’s Warehouse

An interior view of construction. The theatre's support columns are next to, but do not touch, the original walls.

achieve it. "The vision was an expanded version of St. Ann's warehouse space at 38 Water Street," says Andrew D. Hamingson, the company's former executive director, who left, after the building opened, to become president of the Lower Manhattan Cultural Council. That space, and the temporary one that followed, had a no-frills lobby that opened into a flexible space with raked bleacher seating and the ability to reconfigure the open performance area. The idea was to be as flexible as possible for a company that, by its artistic choices, takes on all comers.

Working with Charcoalblue, the UK- and Australia-based theatre consulting firm that had recently opened a New York office, Hamingson says St. Ann's staff looked at a number of Charcoalblue-designed spaces, including the temporary Courtyard Theatre for Royal Shakespeare Company, and, in London, the Young Vic, Siobhan Davies Dance Studio, and the Roundhouse, all of which applied the flexible space ideal in different ways. "It was all about the ability to put on vastly different productions," says Griffin. (Other key participants included BuroHappold engineers, Silman structural engineers, Yorke Construction, and a team of project managers led by David Belt and DBI Consultants.

The Charcoalblue team included Andy Hayles handling the strategic setting out, Gavin Green handling auditorium design, Jon Stevens doing technical design, Byron Harrison in charge of acoustics, Jerad Schomer as team leader, and John Owens, head of the New York office, in charge of project delivery. The overall team included Paul Franklin, Steve Roberts, Ian Stickland, Peter Ruthven Hall, Ben Hanson, Bruno Cardenas, and Alex Wardle.

The genius of the $31.6 million project—which is, depending on how you look at it, both a renovation and a new building—is that an entirely new structure was erected inside the rectangular portion of the 1861 structure; the theatre's support columns are next to, but do not touch, the original walls. The original arched openings were returned to their original status as doors and windows; those in the theatre are covered with solid acoustic doors. Griffin adds that extra height was needed to accommodate the theatre's catwalk system, so the building was extended with glass brick, an attractive look that doesn't

Such materials as brick and plywood give the theatre's interior a raw-space quality that echoes St. Ann's earlier venues.

The building's original windows were restored; those in the theatre are covered with solid acoustic doors.

The catwalks are placed every 10' and extend into the lobby.

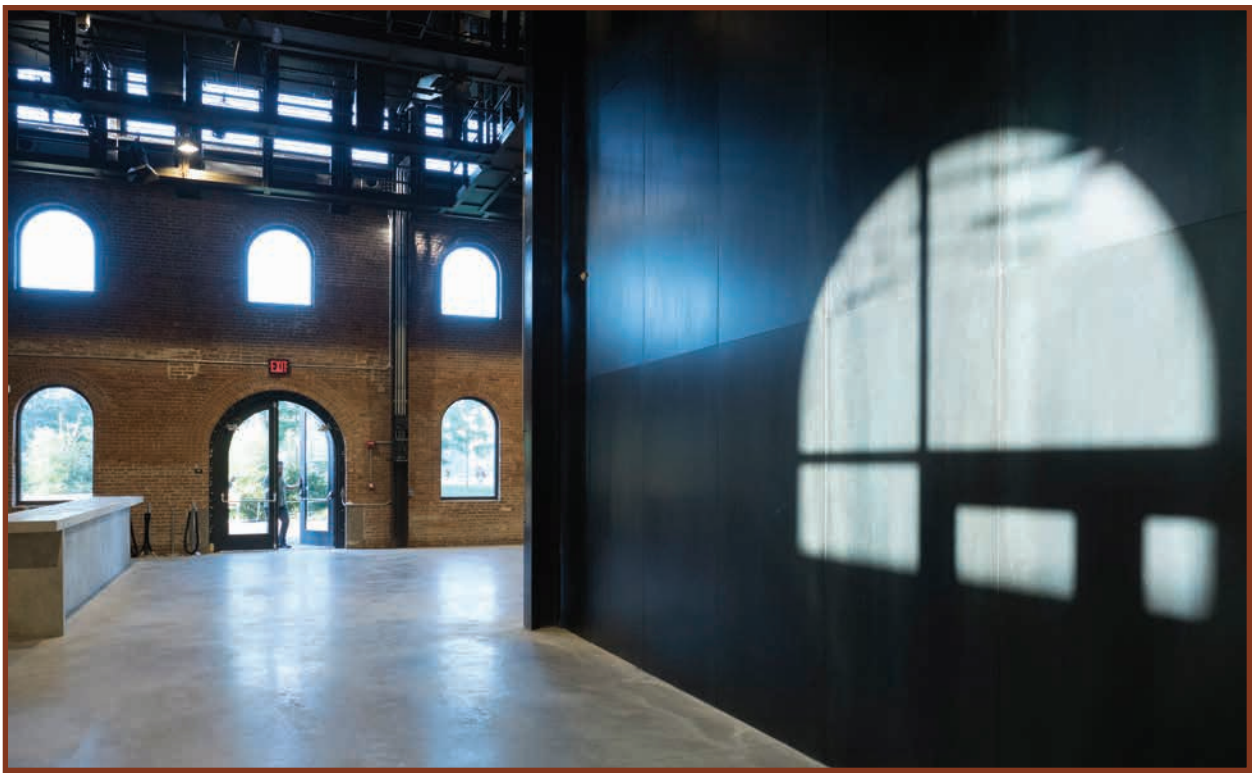
compromise the building's industrial essence. Hamingson refers to them as "the clerestory windows," adding that they are a very "green" choice: "They're thermal and acoustic."

"The biggest challenge was contending with the existing building's condition," Griffin says. "We wanted to respect it and incorporate it, but the walls were constructed during the Civil War—they were warped and in deteriorating condition. It wasn't easy to make our insertion into that shell without damaging it." To deal with this, he says, "Nothing touches the walls. The new steel frame cantilevers out over the brick and makes a water-tight acoustic seal."

As the project got underway, Hurricane Sandy hit New York and, given the building's proximity to the river, it became obvious that flooding would be a threat in the years to come. Therefore, says Griffin, the decision was taken to put the building's power infrastructure on the new upper level. "Given that we were working with the existing brick walls, we couldn't raise the floor level to accommodate power underneath. By putting it all above the theatre offices and support spaces, in case of a flood there will be damage but not to the equipment."

The interior of the building, which covers 25,000 sq. ft., features an expansive, airy lobby space with plenty of sunlight during the day; a studio and community room, accommodating 200, that can be used for smaller performances, readings, rehearsals, and a variety of other uses; dressing rooms; administrative offices; and a 10,000-sq.-ft. theatre with capacity for 300 — 700 audience members, depending on the configuration. Permanent walls separate the theatre and lobby and the dressing room/administrative offices. With the brick walls and use of plywood and CMU (concrete masonry unit walls), the interior has a raw-space quality that echoes St. Ann's earlier venues and reflects its work-oriented ethos. Hamingson adds, "Susan also took us on a walking tour of the Turbine Hall at the Tate Modern, which is done in blackened steel. From the beginning, our emphasis was on the warehouse concept, with brick, concrete, and steel as

Photos: Teddt Wolff



Permanent walls separate the theatre from the lobby. The latter gets plenty of sunlight during the day.

the primary elements. We didn't want to overdesign. We wanted to keep an industrial feel." Griffin, concurring, says, "We wanted a somewhat minimal palette, so that we weren't competing with the existing brick walls. We also wanted to embrace what St. Ann's is about as an organization. They're used to being in raw, rugged spaces."

The Joseph S. and Diane H. Steinberg Theatre

Sizing up the task at hand, Hayles says, "Because so little of the original building was left when we began—really, just a 24'-high perimeter wall—every column, beam, and interior wall had to be perfectly placed and carefully considered, not only for its immediate structural impact, but also for its impact on the next production, which might turn the playing area and the audience by a full 90°!"

A major task for Charcoalblue, which also acted as the project's acoustician, was to isolate the theatre space. Harrison says, "St. Ann's Warehouse has made its home in a neighborhood between two of the noisiest transport thoroughfares in the city—the Brooklyn and Manhattan Bridges—which presented a challenge. While the existing walls are very thick masonry, they don't provide the acoustic separation that typical contemporary cavity wall constructions provide. Therefore, new specialty acoustic windows and doors have been fitted into the existing openings, but largely without the vestibules we'd normally expect in a theatre and certainly between a performance space and the exterior

"A much-considered design decision was putting concrete on the roof of the performance area. A minimally thick concrete slab was included to combat the helicopters of the East River and the Brooklyn Bridge traffic noise, which is almost overhead. We also installed a distributed ventilation system with cooling. Contending with continuous background noise due to air movement is not something St. Ann's Warehouse has encountered before. While low noise levels were needed for dramatic performance, we've opted not to go too low to help disguise low levels of intrusive noise from outside the building. It was a particular delight that, at the opening gala, Susan Feldman picked out the sound of the room as the star of the show." The underside of the roof in the theatre is also covered with absorptive acoustic materials. During the theatre's inaugural production, *Henry IV,* from London's Donmar Warehouse, in the production's many tense silences, one could have heard a pin drop in the theatre.

The theatre has an extensive catwalk system, designed to look like it has always been there; the catwalks are placed 10' apart and are meant to echo the rhythm of the building's structure; they extend to the lobby, allowing

Photos: Pavel Antonov

The theatre, here seen in an end-stage configuration, can accommodate between 300 — 700 patrons, depending on how it is set up.

performances and other events to be staged there. The theatre has no fly tower, but, Hayles says, "There is space to fly scenery from 28', which is the underside of the ceiling. It's 20' from the floor to the catwalks." Except for the one permanent wall, curtains separate the theatre from the lobby.

Shannon Sullivan, of the firm iWeiss, which supplied the rigging and drapery package, says, "There's a small decorative grid in the lobby; in the community room, there's a full pipe grid and perimeter track and drape. In the main space, we installed a significant amount of drapery and track. The design intent was for the drapery to aid the space's versatility. It is double-faced, so it can be moved around as needed. In the theatre, we also have eight trolley rigging points and very large-diameter pipe points that are movable along the structural steel. It is engineered to take a one-ton load; it was a fun engineering challenge to come up with the right materials for that—something with the right aesthetic appeal that could also take the weight. Everything had to be ceiling-suspended; we couldn't touch the original structure.

"We also have 12 chain motors—eight in the performance space and four designed for the lobby," adds Sullivan. "We worked with Applied Electronics [based in Newport News, Virginia] to meet the design requirement. Charcoalblue wanted a redundant E-stop installed at several points. It was a great opportunity to work with Charcoalblue, making sure that we provided the best value system to meet the owner's needs. "

Working with the seating company Kirwin and Simpson, Charcoalblue developed a custom seating solution that is meant to be comfortable while standing up to the rigors of a constantly changing environment. The back portion of the seating rake is semi-permanent; the front area consists of a series of trucks, supplied by Steeldeck, that can be moved reasonably quickly and easily, plus some seats that bolt to the floor for concerts. (Under the permanent seating section is the main storage room.) Hayles says that he mapped out a variety of possible uses of the space, based on previous productions. He says, amused, "*Hell House* was very challenging." He's referring to a production that was a literal recreation of reverse funhouses, produced each year at the time of Halloween by evangelical groups; young people wander through them and see tableaux of sinners dying horribly from sexually transmitted diseases and drug addiction. The production, which was presented verbatim from a guide published by a Christian group, was acclaimed; it gives one an idea of the lengths to which St. Ann's goes to accommodate its artists.

This season's *Henry IV* was staged as if performed in a women's prison, with a rectangular playing area and

seating on all four sides. The most recent production, the comedy *Nice Fish*, featured an end-stage configuration, with an unusually deep stage to contain Todd Rosenthal's set, which depicted a frozen lake. Coming up is a production of *A Streetcar Named Desire,* which will also be done in the round, on a constantly moving revolve. Other productions will require vastly different configurations. This is not a company that settles for an end-stage configuration season after season.

The lighting package for the theatre, supplied by Barbizon Lighting, includes approximately 72 ETC Source Fours, 14 ARRI T2 Fresnels, 20 Altman Lighting PAR 64s, two City Theatrical DMX-controlled irises, two Rosco I-Cue moving mirrors, one Look Solutions Unique 2.1 hazer. Lighting is controlled by the theatre's existing ETC Ion console. (More is rented on a per-production basis.)

The backbone structure for the AV system was supplied by Masque Sound, including the wire pull and terminations for all low-voltage AV wire. This included the main infrastructure of wire runs from individual panel locations to the main rack room. Masque Sound also installed custom-fabricated panels and the 70V system for paging and programming. All told, Masque supplied 68,000' of THHN wire for speakers, 20,000' of West Penn 4246F shielded data cable, 28,000' of Gepco DS401 wide-bandwidth, single-pair audio cable, and 17,000' of additional cable, 25 miles in all. Masque also supplied 39 custom panels from Entertainment Metals, a GDS CueSystem with 12 outstations, a Cloud Electronics paging system, a Williams Sound assisted–listening system, and a Clear-Com intercom system.

The rest of the AV package includes a Yamaha CL3 digital audio mixing console plus Yamaha Rio 3224D and Rio 1608D stageboxes, Yamaha DME 64N rack-mount digital mixer, and Yamaha Dante MY 16-AUD, MY-ADDA96, and MY16-AE audio cards. A Soundcraft M8 analog console is used for the studio space. The loudspeaker package in the theatre includes, from Meyer Sound, four UPA-1Ps, four UPJ-1Ps, four UPMs, and, from d&b audiotechnik, 12 E5s and three D6 amps. Mics include an AKG 414 XLS large diaphragm condenser mic, an Audix DP5A drumkit mic, and a Radio J48 DI box. For video, there's a Panasonic PT-DZ8700 projector and Da-Lite projection screen.

The exterior sign, seen above, was designed by Anita Merk, of Flyleaf Creative, and executed by metal sculptor Tom Fruin.

Photo: Pavel Antonov

Outdoors in the triangle

The 7,800-sq.-ft triangle is being designed as a walled series of groves by Michael Van Valkenburgh Associates, a firm that serves as the landscape architect for Brooklyn Bridge Park. The exterior also features an illuminated sign, saying "theatre" in various colors, which was designed by Anita Merk, of Flyleaf Creative, and executed by metal sculptor Tom Fruin. David Weeks Studio also did custom lighting installations in the theatre's bathrooms and elsewhere in the building.

Just outside the theatre, located close to the river, is Jane's Carousel, a Brooklyn landmark, built in 1922 in Youngstown, Ohio, and now enclosed in a glass pavilion designed by Jean Nouvel.

In any case, St. Ann's years of wandering are over. At the theatre's ribbon-cutting ceremony, Feldman said, "It's a dream come true and a blessing to know that culture will play a leading role in perpetuity as part of Brooklyn Bridge Park and the New York waterfront. We won't be trading in goods, as in the tobacco warehouse's industrial past, but, thanks to our board, the city, the park, and the many friends who shared this dream, we will be trading in arts and performances for years to come."