



# retrofit

november-december 2023 // [retrofitmagazine.com](http://retrofitmagazine.com)

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Fifth-annual Metamorphosis  
Awards Winners

**ADAPTIVE REUSE  
CATEGORY WINNER**

story on  
page 16

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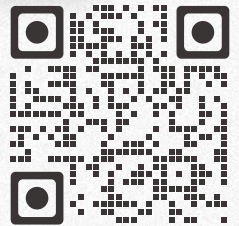
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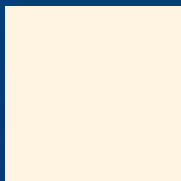
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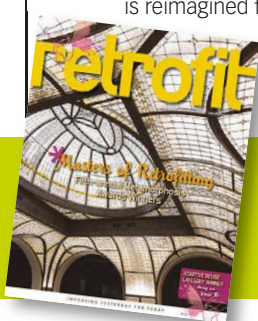
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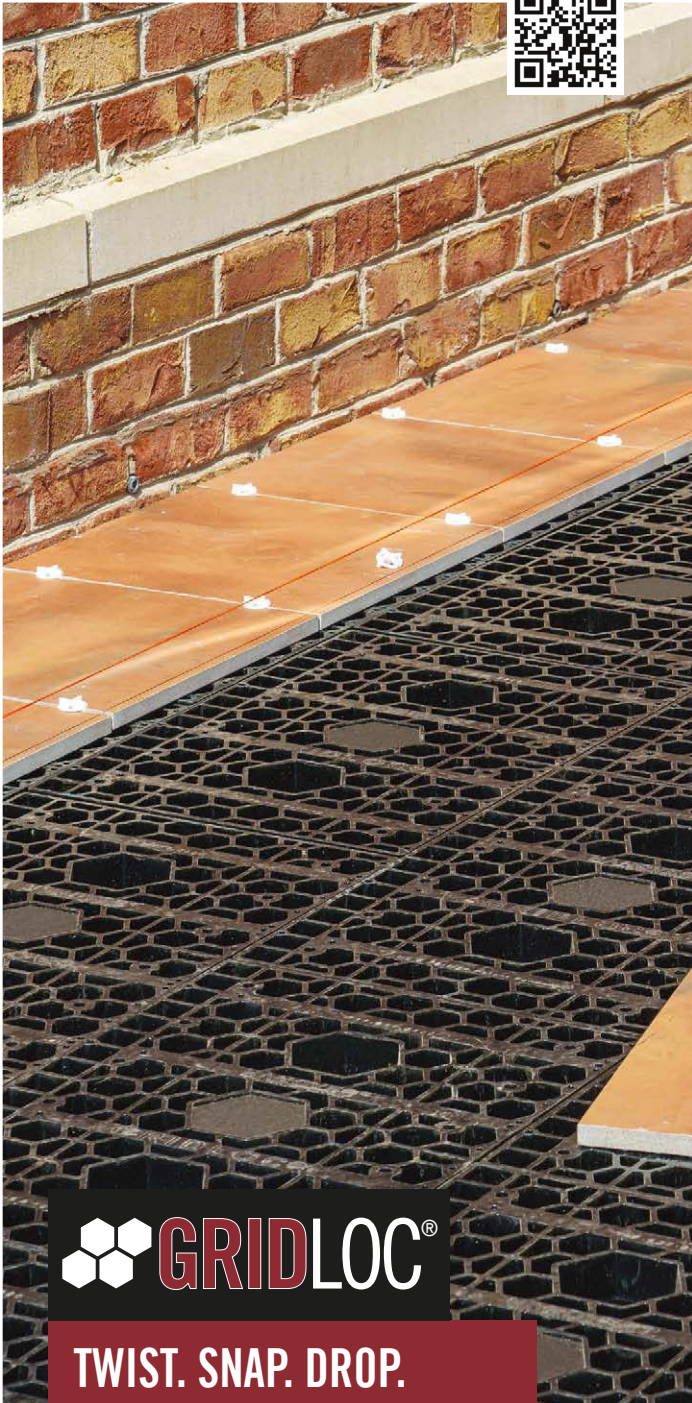


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## POWERFUL EXAMPLE

I'm not a big Facebook user, but I've recently started joining groups that speak to my interests and, coincidentally, have lured me onto Facebook more often. For example, I lived in Chicago for many years and truly enjoy editing this magazine about the transformation of existing—sometimes completely derelict—buildings, so I started following a group called “Forgotten Chicago”, which merges these two passions. There often are discussions surrounding photos of stunning homes and commercial buildings that no longer exist in the city. Participants share memories of the building or the area, the people they knew, sometimes even the food they ate inside the building. It's a wonderful page, full of history and heartfelt recollections. Although I enjoy the group, it also makes me a little sad each time I visit it. I can't help but wonder what these buildings could be today if someone had the foresight to save them.

My feelings are underscored each year during the Zoom meeting John Riester, **retrofit**'s publisher, and I host to discuss the Metamorphosis Awards finalists with the judges. The judges' passion for saving existing buildings is on full display during these meetings and their enthusiasm always encourages John and me. This year was no different; in fact, our five judges (read more about them on page 15) were very focused on the benefits saving these buildings has on their communities.

“Honoring these reused buildings in underserved communities is important,” noted Metamorphosis Awards Judge Dana L. Kelly, partner, principal with Bruner/Cott Architects, during the Zoom discussion. “We spend a lot of our time doing this and sometimes we're not even sure what the outcome is going to be, but these projects make such an impact on these communities.”

Kelly's words are exemplified in our 1st Place Wild Card winner: Steeple Square in Dubuque, Iowa. Wild Card is a new category, suggested by our 2022 judges, that includes projects that don't exactly fit into the other awards categories. Steeple Square showcases a community endeavor to save a historic three-building church complex and return it to Dubuque for use as event space, housing and childcare. During the project, approximately 30 local residents, students and those transitioning from incarceration received training in building restoration, particularly window restoration. Read the inspiring story on page 34.

A winner that speaks to what can result from the right vision and team is Book Tower, a 38-story office building opened in Detroit in 1936. Affected by Detroit's economic struggles, Book Tower was abandoned in 2009. Today, the building is a mix of public and private spaces, including offices, a hotel, apartments and event spaces, and the 1st Place winner in the Metamorphosis Awards Adaptive Reuse, High-rise, category. “The property's diversification means that Book Tower is not just a new apartment building in a historic building, but also a catalyst for the entire Washington Boulevard neighborhood,” says Brian Rebain, RA, NCARB, principal at Kraemer Design Group, the project's historic preservation consultant and the Metamorphosis Award winner. Read more about the project, including how Detroit residents are reacting to the building, on page 16.

John, the 2023 judges and I encourage you to share this issue of **retrofit**—and all your issues—when you've finished reading. You just may help someone better understand the possibilities for adaptive reuse and transformation of underused buildings in their own neighborhoods. Let's inspire more retrofitting!

“These awards are a powerful tool,” remarked James Graham, AIA, Graham Baba Architects and a 2023 Metamorphosis Awards judge, during our Zoom meeting. “They help get recognition and exposure and make these projects examples for others to emulate.”

*Christi Koch*

### CHRISTINA KOCH

Associate Publisher/Editorial Director  
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## CONTRIBUTING WRITERS



MacLac Building D in San Francisco's Showplace Square Historic District is a former paint and lacquer manufacturing facility that has been transformed into high-end speculative property by Marcy Wong Donn Logan Architects with Peter Logan Architecture + Design. **Nate M. Gillette**, AIA, LEED AP, REALTOR, director of Natura Architectural Consulting and a **retrofit** editorial advisor, writes

about the 1st Place Adaptive Reuse, Low-rise, category winner on page 22.



**Fabiola Yep** (left), AIA, and **Emily Ray**, AIA, are project architects at Wheeler Kearns Architects. They share their experience transforming a former church and brick building into a beacon of education for the Great Lakes Academy Charter School in its

South Chicago neighborhood. The project earned 1st Place in the Adaptive Reuse, Low-rise, category, and can be found on page 26.



In Dubuque, Iowa, a diverse group of individuals created a non-profit organization called Steeple Square to save a Gothic Revival former church, Romanesque Revival former school and Second Empire former rectory that had been listed on the National Register of Historic Places. **KJ Fields**, a Portland, Ore.-based **retrofit** contributor, tells the story about the 1st Place Wild Card winning project

and what it means to the community on page 34.



LAMBERT Architecture + Interiors won 1st Place in the Interiors category for Sentinel Commons, page 38, a former newspaper headquarters in Winston-Salem, N.C., turned multipurpose project, including unique office spaces for various tenants.

Clockwise from top left, **Stuart McCormick**, AIA, LEED AP, is principal and co-founder; **Peter Falk**, RA, is architect and project manager; **Heather McCanna**, IIDA, is a registered interior designer; and **Ashley Carroll-Hooker**, IIDA, is a

registered interior designer with LAMBERT Architecture + Interiors.



**Oliver Beck**, OAA, MRAIC, is principal with Architecture Counsel Inc. and was charged with creating Kingsway College School within an existing 66-story residential tower in Toronto. The interior achieves a refined level of design and earned a 1st Place in the Interiors category. Read about it on page 42.



Rivermark Towers is a mid-1970s multifamily apartment complex in Cambridge, Mass., that now stands as a national case study about successful sustainable investment for large-scale housing. Bruner/Cott Architects Partner and Principal **Jason**

**Jewhurst**, AIA, and Project Architect **Jackie Mignone** write about this 1st Place winner in the Multifamily category on page 50.



**Ken Maschke**, P.Eng., P.E., S.E., LEED AP, is a vice president with Thornton Tomasetti, overseeing the firm's Renewal and Forensics practices across Canada. As such, he explains how overcladding 1970s residential towers in Toronto revitalized the buildings' exterior, bringing them into the modern era while preserving their original Brutalist architecture. The project, page 54, won 1st Place in the

Exterior category.



The 2-story atrium of Broadway Tower, St. Louis, is the 1st Place winner in the Whole Building category. **Amanda Truemper**, AIA, LEED AP BD+C, is a senior project manager and associate at Trivers, which happens to be a tenant in Broadway Tower. On page 58, Truemper shares how the formerly dark, outdated banking center has been transformed it into a light-filled, high-tech gathering space designed for

today's workers.



**Michael E. Liu**, AIA, NCARB, is senior partner and design principal with The Architectural Team Inc., which earned a 1st Place award in the Addition category for 100 Shawmut, a Craftsman-style factory and warehouse built circa 1915 in Boston. By adding a contemporary glass and steel skin, which intentionally deviates from the original building's orthogonal geometry, the vertical and horizontal addition triples the square footage. Read more on page 64.



**Lena Dau-Ping Fan**, AIA, and **Gary Li**, AIA, LEED Green Associate, NCARB, are principals at Kostov Greenwood Architects. The pair write about New York City's James Earl Jones Theatre Annex, which is a 1st Place winner in the Addition category, page 68. By

designing a new structure with only 35 feet of street frontage, wedged between a landmarked building and new hotel, the team updated this Broadway theater for 21st century productions and audiences.



**Andrew Donaldson-Evans**, AIA, LEED AP, is a principal and regional director of design at EwingCole. On page 74, he writes about Burk-Bergman Boathouse, home to the University of Pennsylvania's three varsity rowing programs in Philadelphia. Constructed in 1874, the boathouse's upgrade takes care to respect the historic exterior while completely renovating and modernizing the interior, earning it

1st Place in the Historic category.

PHOTOS: ADRIAN WILSON





# BEHIND THE SCENES

## Meet the 2023 Metamorphosis Awards Judges

**retrofit's** fifth-annual Metamorphosis Awards program tapped four architects and a preservation expert as judges: Joel Anderson, AIA, LEED AP BD+C, design director, associate principal, Cushing Terrell; Elicia Feasel, preservation project manager, H.G. Christman Construction; James Graham, AIA, Graham Baba Architects; Dana L. Kelly, partner, principal, Bruner/Cott Architects; and Anthony Vivirito, Assoc. AIA, LEED AP, associate, The Architectural Team Inc. Each judge was gracious with his or her time and knowledge.

The jury was asked to evaluate each project on the success with which it met its own requirements. They were told to weigh projects individually—not in comparison to others—and choose as many projects as they felt deserving of winning. [Editor's Note: The judges recused themselves from judging projects in which they and/or their firms were involved.]

Through a judging platform, jurors were able to review entries and score them on their own time. John Riester, **retrofit's** publisher, and Christina Koch, **retrofit's** editorial director and associate publisher, conducted a

Zoom meeting with the judges in August to discuss highest-ranking projects, determine placements of winners and speculate about cover possibilities. Winners were notified in late August.

During the Zoom meeting, the judges underscored the importance of awards programs, like the Metamorphosis Awards. "These awards are a powerful tool. They help get recognition and exposure and make these projects examples for others to emulate," said James Graham, AIA, Graham Baba Architects.

Dana L. Kelly, partner, principal, Bruner/Cott Architects, echoed Graham's sentiment: "These awards showcase what is desperately needed all throughout the country, which is taking these underutilized historic buildings and giving them a second chance in their communities."

Consider showcasing your good work in the 2024 Metamorphosis Awards program, which will open in January 2024 at [www.retrofitmagazine.com/metamorphosis-awards](http://www.retrofitmagazine.com/metamorphosis-awards).



### JOEL ANDERSON, AIA, LEED AP BD+C

As a design architect at Cushing Terrell, Joel Anderson puts the end-product at the forefront of his work. Through research, programming, concept development, space planning, building massing, systems integration and material studies, he leads teams to uncover unique design opportunities that bring a distinct character to each project. Drawing inspiration from the environment around him, Anderson's projects often take a contextual approach, showcasing contemporary construction details and forms that use a regional palette of materials. Cushing Terrell won Metamorphosis Awards in 2022: 1st Place in the Addition category for the Alberta Bair Theater in Billings, Mont., and an Honorable Mention in the Mixed Use category for Seattle's Uwajimaya Asian Market. Read the stories online at [bit.ly/3Q3mwit](http://bit.ly/3Q3mwit) and [bit.ly/3rDsYN8](http://bit.ly/3rDsYN8), respectively.



### ELICIA FEASEL

Elicia Feasel is dedicated to the importance of historic preservation and sustainability, working as a preservation project manager for H.G. Christman Construction in South Bend, Ind. She is a founding board member of South Bend TradeWorks, a non-profit that formed to help develop tradespeople who work specifically on older building stock and to divert irreplaceable building materials from the landfill. Feasel was selected for the 2022 Harrison Goodall Preservation Fellowship, which culminated in the inaugural TradeWorks Field School last summer that connected experienced tradespeople with young adults considering career direction. At home, Feasel is the grounds superintendent for her neighborhood, a historic lake retreat founded by settlers in the 1890s, now a conservation easement.



### JAMES GRAHAM, AIA

James Graham has been working in architecture for more than 25 years and brings a keen sensitivity and relentless creativity to his projects. Graham excels at leading large collaborative teams through complex projects, and his boundless and contagious enthusiasm for each project results in a fun and exciting design process for the entire team. He seeks out-of-the-box solutions and has an exceptional ability to create social opportunities for a variety of users within an environment. He is committed to the craft of building and is active in the design, construction and craft communities. Graham Baba won in the Transformation/Adaptive Reuse category of **retrofit's** inaugural Metamorphosis Awards for Block 41, Seattle. Read the story at [bit.ly/46AtpGB](http://bit.ly/46AtpGB).



### DANA L. KELLY

Dana L. Kelly is a partner and principal, leading Bruner/Cott Architects' strategic planning, business development, marketing, public relations and communications teams. Navigating shifts in ever-evolving markets, she identifies new opportunities that generate long-term client value and foster ongoing alliances. Kelly is an active member of the National Trust for Historic Preservation, Society for College and University Planning, Urban Land Institute, CoreNet New England, Boston Preservation Alliance and Professional Women in Construction. Bruner/Cott Architects earned Metamorphosis Awards in 2022: 1st Place in the Adaptive Reuse category for The Speedway, Boston, which can be read at [bit.ly/3RLdAsw](http://bit.ly/3RLdAsw), and Multifamily 2nd Place for Frost Terrace, Cambridge, Mass., [bit.ly/3PMPJSZ](http://bit.ly/3PMPJSZ). Bruner/Cott Architects makes another appearance this year as the 1st Place winner in Multifamily for Rivermark Towers, Cambridge, page 50.



### ANTHONY VIVIRITO, ASSOC. AIA, LEED AP

Anthony Vivirito is an associate with The Architectural Team (TAT) Inc. He has more than 20 years of design and project-management expertise with a specific focus on multifamily; senior living communities; and state-of-the-art continuum care facilities for independent, assisted and memory care residents. His decisive and thoughtful management style helps achieve desired results for clients, safeguarding design quality and regulatory requirements, as well as adeptly directing schedules and budgets. TAT earned a Metamorphosis Award in 2022: 1st Place in the Multifamily category for Courthouse Lofts (read it at [bit.ly/48K00M3](http://bit.ly/48K00M3)) and was recognized again this year with a 1st Place award in the Addition category for 100 Shawmut, Boston, page 64.



# A STANDOUT AMONGST GIANTS

Detroit's Book Tower Transforms and Shines Again

WRITTEN BY | JIM SCHNEIDER

Opened in 1926, the ornate and unique 38-story Book Tower briefly held the title of tallest building in Detroit. Although the building lost that status two years later, it has remained a striking and memorable part of the city's skyline. Its restoration and renovation have re-energized a neighborhood and earned the project First Place in the Adaptive Reuse, High-rise, category of this year's Metamorphosis Awards.

Located in the heart of Washington Boulevard, a Detroit hotspot well into the 1960s, Book Tower was one of several building projects, including the Book Building and Industrial Bank Building, undertaken by the Book brothers—J. Burgess Jr., Herbert and Frank. They were the maternal grandsons of Francis Palms, one of the city's richest individuals in the early 20th century.

Book Tower's architect was Louis Kamper, whose European travels and admiration of architectural monuments of the past inspired his design,

which includes intricately carved Corinthian columns, florets, scrolls and crests. Book Tower was a successful downtown speculative office structure for decades.

## DECLINE AND RISE

As businesses began to leave Detroit in the later part of the 20th century, Book Tower largely remained occupied but eventually fell victim to economics. By 2009, it was vacant.

"The Book Tower project was an ongoing challenge for real-estate developers in Detroit for 20 years," explains Brian Rebain, RA, NCARB, principal at Kraemer Design Group (KDG). "Developers long saw an opportunity to convert the mostly vacant office space on the upper floors into multifamily residential. KDG first walked the building in the early 2000s when the owner at the time was



PHOTOS: KRAEMER DESIGN GROUP unless otherwise noted



PHOTO: KELLIN WIRTZ AND REBEKAH WITT,  
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**Book Tower Architect** Louis Kamper was inspired by his European travels and admiration of architectural monuments of the past. His design features intricately carved Corinthian columns, florets, scrolls and crests. The building's "crystal ceiling" is one of just a few remaining Keppler Glass Constructions Inc. glass domes left in the world. The ceiling is comprised of more than 6,000 amber and clear glass pieces set within a bronze-grid assembly.



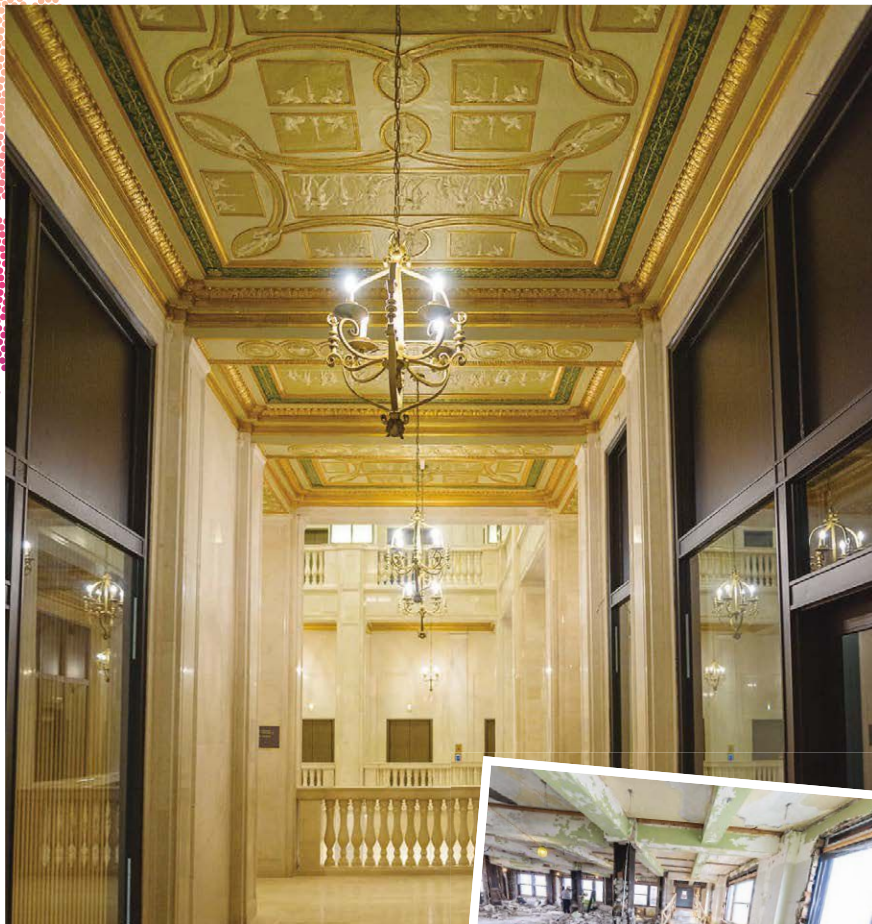


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**The historic** corridor (top photo) in the commercial portion of the project provides a view of restored plaster ceilings and the atrium balustrade. Before and bottom photos: The team typically was challenged by rough conditions on each floor. This floor now features light-filled, modern studio apartments.

looking to do some renovations. Maureen Kraemer, KDG's founding principal, fondly recalls the building engineer popping a few ceiling tiles in the third-floor office space to show off remnants of the Keppler Glass skylight hiding above, only partially intact, but unmistakable in its beauty. We knew this restoration project had loads of potential. All that was needed was a developer with vision."

That visionary developer came in the form of Bedrock Management Services LLC, which purchased Book Tower and decided to renovate it into a mixed-use property. The bulk of the building was rehabilitated into 229 multifamily residential units with the addition of 117 extended-stay hotel units. Other features of the renovation would include amenity spaces, restaurants, and retail and office space.

"The objective with Book Tower was to add a forward-looking mixed-use program to Detroit's growing downtown that will meet the contemporary needs of businesses, visitors and residents," states Eran Chen, AIA, founder and executive director of ODA Architecture and Interior Design, architect of record and interior designer on the project. "ODA designed a lively ground-floor program with retail, food and beverage, and public art to draw in the community, engaging the city center and unlocking the location's potential as a link between Grand Circus Park and Huntington Place. This is supported by the mix of public and private spaces on the upper floors with office spaces, ROOST hotel, apartments and event spaces."

"The property's diversification means that Book Tower is not just a new apartment building in a historic building, but also a catalyst for the entire Washington Boulevard neighborhood," Rebañ says. "It draws in the general public as a regional destination."

## TRANSFORM AND RESTORE

To reach these lofty goals and fulfill Book Tower's true potential, the building needed some serious work and lots of research and planning.

"Restoring, redesigning and reconstructing Book Tower was a mix between design, architecture and archeology," Chen says. "There were limited original architectural drawings and records available, and a lot of the building had been tarnished by decades of leftover furniture, soot and general disrepair."

The exterior restoration included cleaning and repair of darkly stained limestone façade, installing new storefronts and replacing all 2,483 windows with energy-efficient, historically accurate replica windows. On the inside, plaster ceilings and walls were fully restored, and more than 7,000 square feet of ornate ceiling panels were hand-painted to match the original design. The original travertine floors were restored, and 50,000 square feet of marble was installed. The atrium and dome were repaired and reconstructed to recapture the original design and materials.

"The restoration of this landmark is one of the

## Judge's Comment

“This is the project I’ve been waiting for in this awards program. Absolutely outstanding!” — *Elicia Feasel, preservation project manager, H.G. Christman Construction*

most ambitious and high-profile adaptive-reuse projects in the heart of downtown Detroit,” Chen notes. “This building means so much to the people of the city, and we took our responsibility to provide them with the highest quality of design very seriously. And since the building is nearly a century old, it was also important to bring everything up to modern building codes.”

### BALANCE OLD AND NEW

Restorations must walk a fine line between creating something new and current while honoring and even enhancing the building’s classic elements. This project’s success came from the team’s careful dedication to achieving that balance.

For example, the Greek-style caryatids—female sculptural forms on the exterior—were in a precarious condition with nearly all the structural steel corroded to the point of failure. They were taken down and many replaced with lightweight replicas. The glass dome, originally designed and built by Keppler Glass Constructions Inc., had been significantly damaged and covered with suspended ceilings. Glass pieces and panels, as well as the original transverse arch portions of the lower glass assembly, were missing. The dome was painstakingly repaired to match the original design.

“The most rewarding challenge was recreating the Keppler glass atrium from only a couple of historical photos and a hand-drawn sketch,” Chen remarks. “We discovered repeating patterns in the glass and crystal, reconstructed them and updated the geometry to fit the dimensions of the space as it is today. Working with a skylight restoration consultant, we were able to create a stunning focal point of the building, and we’re so proud of that.”

The restored dome is one of just a few remaining Keppler Glass Constructions “crystal ceilings” in the world. The ceiling is comprised of more than 6,000 amber and clear glass pieces set within a bronze-grid assembly. Bronze bars were crafted to create panels for each section of the dome. After the glass pieces were fitted into each panel, the entire panel was dipped into a tank to electroplate the frames with copper.

### GRAND REOPENING

With a celebratory grand reopening in June 2023, Book Tower reclaimed its honored status in the proud architectural fabric of Detroit. The event was attended by many local dignitaries, including the Michigan governor.

“Such a historically and culturally important



**The Greek-style** caryatids—female sculptural forms—were in a precarious condition. They were taken down and many were replaced with lightweight replicas.

building required a strong vision and an equally strong team to bring it to life,” Chen notes. “The combination of Bedrock, ODA, the historic preservation and code consulting team from Kraemer Design Group, Brinker/Christman and all the rest of the consultant team did just that. We were all fully invested in designing a building that will continue to serve as the heart of Detroit, supported by a dense, mixed-use program with entertainment, restaurants, cafés, retail and more. Each team brought much-needed expertise in their respective fields, and the result speaks for itself.”

“The community reaction has been extremely positive,” Rebañ says. “Book Tower is downtown Detroit’s newest must-see destination. Everybody in town wants to see the restored Keppler Glass rotunda in all its magnificence, and social media has been filled with photos from people taking their first steps into the building and marveling. In a city with several spectacular and world-renowned soaring lobbies from the auto-baron era, Book Tower is a standout amongst giants.”

## Retrofit Team

**ARCHITECT OF RECORD AND INTERIOR DESIGNER** // ODA, [oda-architecture.com](http://oda-architecture.com)

**HISTORIC PRESERVATION AND CODE CONSULTANT** // Kraemer

**Design Group, [thekraemeredge.com](http://thekraemeredge.com)**

**DEVELOPER** // Bedrock Management

Services LLC, [www.bedrockdetroit.com](http://www.bedrockdetroit.com)

**GENERAL CONTRACTOR** // Brinker/Christman, joint venture, [brinkergroup.com](http://brinkergroup.com) and [www.christmanco.com](http://www.christmanco.com)

**STRUCTURAL, MEP ENGINEER** //

Buro Happold, [www.burohappold.com](http://www.burohappold.com)

**CIVIL ENGINEER** // Giffels Webster, [www.giffelswebster.com](http://www.giffelswebster.com)

**SURVEY, GEOTECHNICAL ENGINEER** //

Langan, [www.langan.com](http://www.langan.com)

**AV/IT/SECURITY/ACOUSTICS**

**CONSULTANT** // ARUP, [www.arup.com](http://www.arup.com)

**MASONRY RESTORATION CONTRACTOR**

// RAM Construction Services, [ramservices.com](http://ramservices.com)

**METAL RESTORATION CONTRACTOR** //

Allen Architectural Metals, [allenmetals.com](http://allenmetals.com)

**PLASTER RESTORATION CONTRACTOR**

// Russell Plastering Co., (248) 543-6575

**STOREFRONT CONTRACTOR AND**

**CUSTOM GRILLES** // Universal Glass &

Metals Inc., [brinkergroup.com/our-companies/universal-glass-metals](http://brinkergroup.com/our-companies/universal-glass-metals)

**WINDOW CONTRACTOR** // Blackberry

Systems Inc., [blackberrysystems.com](http://blackberrysystems.com)

**ATRIUM SKYLIGHT RESTORATION** //

Femenella & Associates, [femenellaassociates.com](http://femenellaassociates.com)

## Materials

**WINDOWS** // Quaker Commercial, [www.quakercommercialwindows.com](http://www.quakercommercialwindows.com)

**FAÇADE GFRP CORNICE AND**

**ORNAMENT** // Glassline Inc.,

[www.glassline.us](http://www.glassline.us)

**FAÇADE GRANITE WALL BASE** // Custom Stone Works, [cswstone.com](http://cswstone.com)

**EXTERIOR WALL INFILL BRICK** // The

Belden Brick Co., [www.beldenbrick.com](http://www.beldenbrick.com)

**LIGHTNING PROTECTION** // Thompson

Lightning Protection, [www.tlpinc.com](http://www.tlpinc.com)

**WOOD FLOORING** // Terra Legno, [terralegno.com](http://terralegno.com)



RETROFIT MAGAZINE  
**METAMORPHOSIS  
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Winner



# A MASTERPIECE FOR ALL TIMES

Reborn as a Residential Tower, One Wall Street Brings Luxury Homes to New York's Financial District

## Retrofit Team

**OWNER //** Macklowe Properties,  
mackloweproperties.com

**INTERIOR ARCHITECT //** MdeAS

**Architects, www.mdeas.com**

**ARCHITECT OF RECORD //** SLCE

**Architects, www.slcearch.com**

**STRUCTURAL ENGINEER //** Desimone  
Consulting Engineers, www.de-simone.com

**MEP ENGINEER //** Cosentini Associates,  
www.cosentini.com

**SECURITY CONSULTANT //** ESCC,  
escc.com

**LIGHTING DESIGNER //** HDLC,  
(212) 529-7800

**ELEVATOR AND ESCALATOR**

**CONSULTANT //** VDA Consulting Services,  
vclassoc.com

## Materials

**MARBLE AND GRANITE //** Jantile,  
(718) 655-5450

**MAILROOM FLOOR PORCELAIN TILE //**  
Floortech from Florim, www.florim.com

**ELEVATOR BANKS TERRAZZO AND  
CERAMIC BATHROOMS //** Walker Zanger,  
www.walkerzanger.com

**CORRIDOR CARPET //** Sacco Carpet,  
www.saccocarpet.com

**ENGINEERED WHITE OAK FLOORING //**  
Grato, grato.es

**CORRIDOR VINYL WALLCOVERING //**  
Riva from Weitzner,  
www.weitznerlimited.com

**POOL CERAMIC MOSAIC TILE //** Nemo  
Tile, www.nemotile.com

**POOL PORCELAIN TILE, LOCKER ROOM  
WALLS AND FLOOR //** Walker Zanger,  
www.walkerzanger.com

**POOL CEILING AND WALLS GLASS  
MOSAIC //** Icemir 3 from Sisis,  
www.sisis.com

**POOL RUBBER TILE //** Ecore,  
www.ecoreintl.com

METAMORPHOSIS  
AWARD WINNER!

As one of the largest conversions in New York City's history, One Wall Street has been reborn as a residential tower that revitalizes the Financial District and adds 566 units to the city's housing stock. Inspired by the Art Deco style of its inception in 1931, a collaborative team, including MdeAS Architects as interior architect, brought the building into the contemporary era with a bespoke lobby, robust amenities package and luxurious selection of unit designs.

The client envisioned a full restoration of this iconic building that would make it a masterpiece for all times. One Wall Street was designed by "Architect of the Century" Ralph Walker and completed in 1931. The building's impressive hand-carved limestone façade and intricate chevron detailing made it one of the great Art Deco masterpieces of New York City, in league with the Empire State Building and the Chrysler Building. The conversion would honor this history with an inspired design featuring Art Deco principles of pattern, surface texture and rich materials.


A full elevator modernization, including relocating the side elevator core to the center of the building, was critical to the success of the conversion. Additionally, the larger floors at the base of the building feature storage units around the inner core and in-home workspaces, allowing shallower residential units around the perimeter to maximize daylight. An extension was added at the northeast corner along Broadway and Exchange Place where retail previously failed to engage the street. The revitalized storefront houses a multi-level Whole Foods grocery store, enlivening the street and supporting the surrounding community.

The upper floors of the addition offer loft-like apartments with street views. Another extension was added to the top of the building where a rooftop restaurant, pool and fitness center foster

wellness for residents. Additional amenities, including a children's room, teen room and co-working suite, are intentionally placed throughout the building to allow for diversity of experience and to foster a sense of community.

The lobby and pool boast incredible Art Deco-inspired design innovation: The interiors of these spaces were manufactured with cutting-edge technology and meticulous handwork, resulting in intricately detailed finishes that give a modern twist to classic design elements. For example, the lobby's grand entrance from Broadway was recreated following Ralph Walker's original plans from 1928 and features intricate metalwork and stained-glass motifs inspired by the neighboring Trinity Church. It opens onto a custom Italian marble mosaic floor inspired by the Greco-Roman wing of the Metropolitan Museum of Art, set in a "broken teeth" style that evokes a sense of the ancient.

The lobby vestibule features a tapestry influenced by French Geometric Abstractionist Sonia Delaunay. It was designed and developed in collaboration with a collective of artisan weavers in Oaxaca, Mexico. Richly patterned Sapele Pommele mahogany walls are accented with stainless-steel motifs drawn from Geometric Abstractionism while the centerpiece sphere and fireplace were fabricated from beautifully veined Rosso Alicante marble. The custom chandelier is comprised of fluted, frosted glass pieces that echo the building's fluted façade.

Upstairs, the residents' 75-foot pool evokes the style and flair of Art Deco pools from the 1930s. An undulating ceiling is covered in individually hand-laid mosaic tile. The iridescent sheen of the turquoise tile was chosen to transform with the sun, casting a warm glow at dusk and dawn while maintaining a cool serenity during the day. 

## Judge's Comment

“Well done! New finishes/detailing very sympathetic to the original. — James Graham, AIA, Graham Baba Architects”





PHOTO: DBOX FOR MACKLOWE PROPERTIES



PHOTOS: COLIN MILLER PHOTOGRAPHY unless otherwise noted



PHOTO: TONY GARCES, ETHEREAL ARCHITECTURAL



**One Wall Street** was designed by “Architect of the Century” Ralph Walker and completed in 1931. Because it is one of the great Art Deco masterpieces of New York City, in league with the Empire State Building and Chrysler Building, the conversion honors this history with an inspired design featuring Art Deco principles of pattern, surface texture and rich materials.



PHOTO: DDREPS

RETROFIT MAGAZINE  
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# CINDERELLA TRANSFORMATION

A Former Paint Manufacturing Facility Is Reimagined as High-end Speculative Space

WRITTEN BY | NATE M. GILLETTE, AIA, LEED-AP, REALTOR

San Francisco's Showplace Square Historic District is a former manufacturing and warehouse neighborhood that has seen many changes through the years. Today, the district has less of an emphasis on manufacturing and more on architectural product showrooms and offices for new-age tech companies. Exposed brick and timber structures with large windows make these high-design and -tech companies feel right at home.

The history of the buildings in the area date to the 1906 earthquake and subsequent fire and devastation, which left entire areas of San Francisco available for redevelopment. Building D was constructed by the R.N. Nason Company and had been used since the mid-20th century to manufacture lacquer and paint by the McGlennon

Lacquer Company, affectionately referred to as MacLac.

Building D remained in operation up until the sale of the property in 2020 to Comstock Realty Partners, which closed on the building the same week San Francisco began to shut down because of COVID-19. Comstock Realty Partners enlisted the help of Marcy Wong Donn Logan (MWDL) Architects early in the consideration of the purchase of the property to perform initial studies and prepare renderings to imagine what the space could become.

Peter Logan, principal with Peter Logan Architecture + Design, design collaborator with MWDL on the project, described the building as it existed as a "rat maze" of partitions and rooms with two mezzanines and very low head heights.

"Building D is a condensed part of a larger campus of redevelopment, comprising separate structures that were built at different times with different materials," Logan says. "The overall project consists of roughly 100,000 square feet made up of three separate buildings; Building D was its own building and parcel. The development timeline was longer than anticipated—approximately two years—hampered by slowdowns due to COVID."

## SEISMIC RETROFITS

One of the most important aspects of the project was incorporating seismic upgrades and bringing all the lateral forces down to the foundation. However, many of the foundation's original construction details were unknown and had to be

PHOTOS: BILLY HUSTACE PHOTOGRAPHY



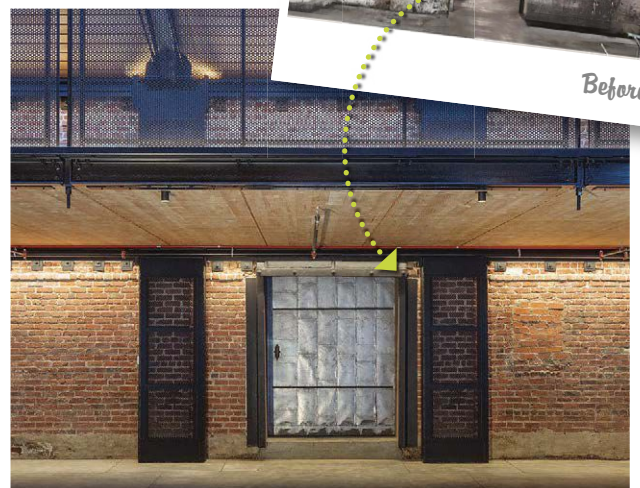
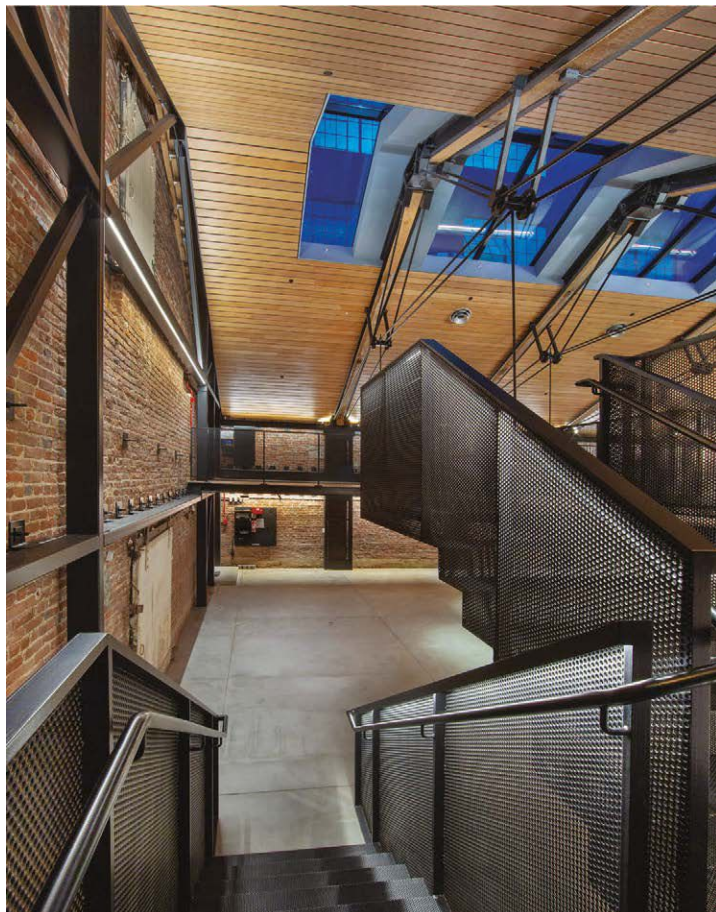
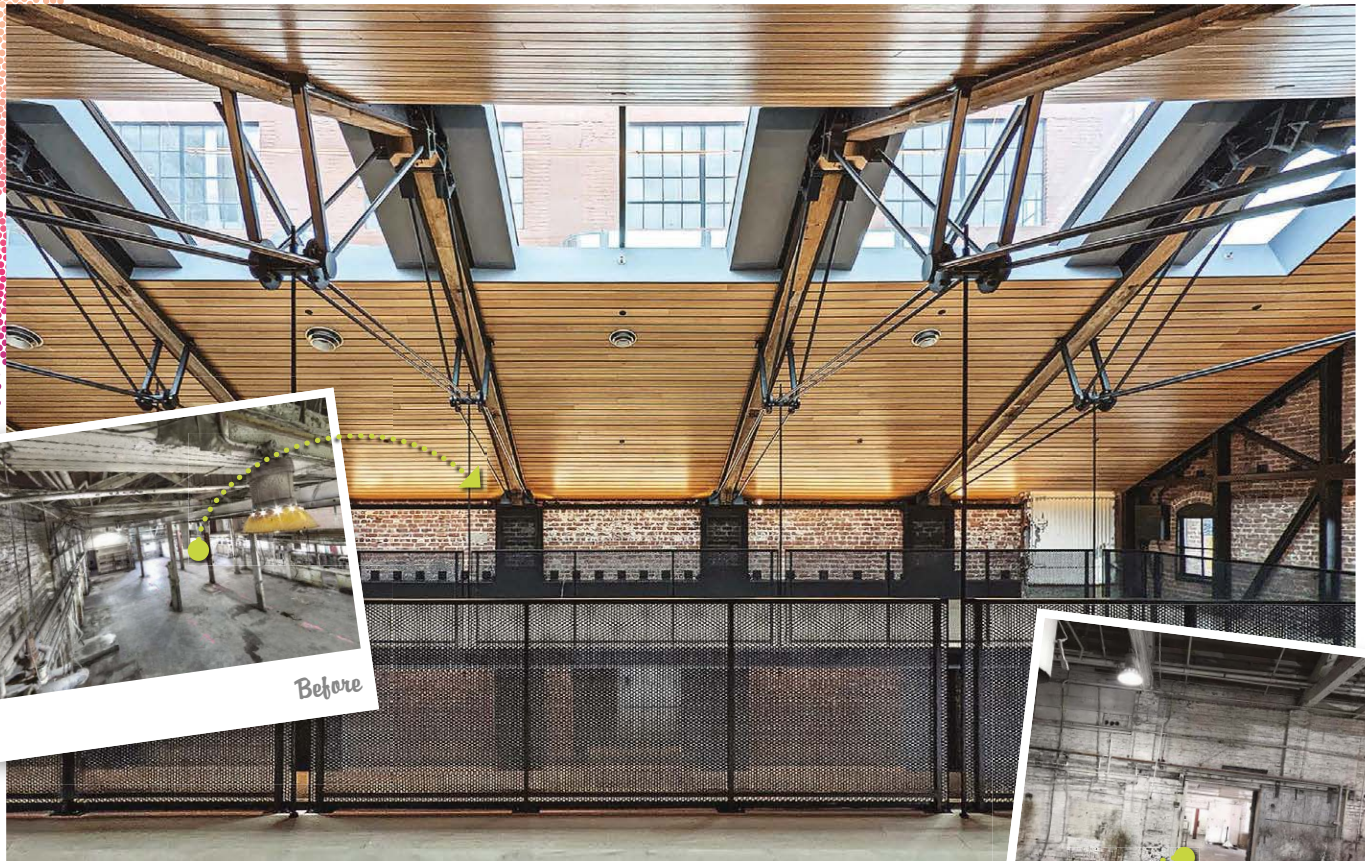




Before

***Marcy Wong Donn Logan Architects*** with ***Peter Logan Architecture + Design*** were challenged to transform a former paint and lacquer manufacturing facility, described as a “rat maze” of partitions and rooms with two mezzanines and very low head heights, into speculative space. The 60-foot-long skylight that was cut into the building brightens the space for any use.







## Judge's Comment

“Excellent adaptation. Remarkable structural solution. Love the added usable square footage of the hanging mezzanine. Gorgeous project.— James Graham, AIA, Graham

Baba Architects

determined during intrusive investigations. The surprises continued during interior demolition. “In some respects, we were designing as we went along,” recalls Kent Royle, principal architect with MWDL.

Moment-resisting frames around each of the existing pilasters were designed with perforated steel plates and thoughtfully incorporated into the design. “Something we discovered was that once the frames were installed and painted black, the perforated panel starts to visually disappear and it allows you to see the bricks beyond; it’s an interesting phenomenon,” Royle remarks.

GPLA Inc., the structural engineer for the project, allowed the mezzanine structure to hang from new trusses. GPLA accomplished this by removing the bottom chord of the old trusses and reinforcing the existing wood top chord with new steel angles, thus creating a new truss that visually appears very light and delicate. The hanging mezzanine is constructed of cross-laminated timber (CLT) with the structure exposed on the bottom surface and tongue and groove oak planks as the floor finish. The CLT structure created a very thin floor plate and maximized head space at ground level. By hanging the mezzanine from the trusses, the ground level is open and column-free.

### HIDING THE GUTS

The building felt dark inside after the interior demolition, so the designers opted to cut a 60-foot-long skylight into the building to brighten the space. In addition, the architects turned to lighting designer Darrell Hawthorne, principal of Architecture and Light, to creatively light the space. “Darrell and his team were very creative with hiding lighting in the structure to accentuate the brick walls and new steel structure,” Royle notes.

The team also wanted to hide mechanical equipment. Heating and cooling units visually were concealed on a flat roofing area out of the line of sight. “We didn’t want to visually impede the space with ductwork, so we incorporated high-velocity air nozzles into the slatted ceiling

that discharge air across the entire space,” Royle explains. “This gives us effective heating and cooling without a lot of visual clutter.”


### AMAZING TRANSFORMATION

Trying to renovate an older historical building for modern-day uses and building codes is not without its challenges. “It’s a small building, but there are infinite complexities in renovating a historic building that requires extensive seismic retrofits,” Logan explains. “If we were designing a new high-rise, we could set all the parameters and make the structural grid perfect. We don’t have to work around anything on a clean site. Here, the grid isn’t perfect; the floor isn’t perfect; there are existing conditions that we didn’t discover until later in the process; there were no existing drawings to work with; the list goes on. This small building had many complexities that added time and money and couldn’t have been foreseen.”

Consequently, for Logan, one of the most gratifying aspects of the project was witnessing the transformation. “Being in this building in the beginning and seeing what it became has been amazing,” he says. “It was a Cinderella transformation. I really appreciate the current state much more knowing what we started with.”

The end use of MacLac Building D has not yet been determined. The building was rehabbed on speculation and, though it has no tenant, the project has been used for pop-up event space and may find its next life as a design showroom, gallery or possibly even workspace for a local tech company.

“Designing without a specific end-tenant in mind and making this space workable for many possible uses was challenging, particularly in connection with the other buildings that are a part of a larger project,” Logan asserts. “There are several ways we could have accomplished that, some of which would touch into the realm of tenant preference. There are things we couldn’t design with those limitations in mind.”

Whatever the end use will be, MacLac Building D is a beautiful and unique space that is sure to draw admirers for many years to come. 

## Retrofit Team

METAMORPHOSIS  
AWARD WINNER!

**ARCHITECTS** // Marcy Wong Donn Logan

Architects, [wonglogan.com](http://wonglogan.com), with Peter

Logan Architecture + Design, [plad.co](http://plad.co)

**LIGHTING DESIGNER** // Architecture and

Light, (415) 676-3999

**STRUCTURAL ENGINEER** // GPLA Inc.,

[www.gplainc.com](http://www.gplainc.com)

**ME ENGINEER** // Bayside Mechanical Inc.,

[www.baysideinc.com](http://www.baysideinc.com)

**HISTORIC PRESERVATION CONSULTANT**

// Mark Hulbert Preservation Architecture,

[www.preservationarchitecture.com](http://www.preservationarchitecture.com)

**GENERAL CONTRACTOR AND TIMBER**

**INSTALLER, FRAMER** // RHC Construction,

[www.rodheisler.com](http://www.rodheisler.com)

**METAL FABRICATION** // Solher Iron Inc.,

[www.solheriron.com](http://www.solheriron.com)

**STEEL FABRICATOR, DETAILER,**

**ERECTOR** // Emerald Steel Inc.,

[emeraldsteelinc.com](http://emeraldsteelinc.com)

## Materials

**WOOD CEILING** // 9Wood, [www.9wood.com](http://www.9wood.com)

**WOOD FLOORING** // Madera Wood Flooring,

[www.maderasurfaces.com](http://www.maderasurfaces.com)

**RIDGE SKYLIGHT** // Velux,

[www.veluxusa.com](http://www.veluxusa.com)

**STOREFRONT** // Arcadia Inc., [arcadiainc.com](http://arcadiainc.com)

**BRASS RESTROOM FIXTURES** //

The Splash Lab, [thesplashlab.com/usa](http://thesplashlab.com/usa)

**LINEAR LED LIGHTING,**

**SURFACE-MOUNT** // Q-Tran Inc.,

[www.q-tran.com](http://www.q-tran.com)

**DOWNLIGHT AT MEZZANINE EDGE** //

HK Lighting, [www.hklighting.com](http://www.hklighting.com)

**RESTROOM LAVATORY SINK** // Cement

Elegance, [www.cementelegance.com](http://www.cementelegance.com)

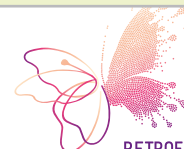
**BASALT PENNY TILE** // Complete Tile

Collection, [www.completetile.com](http://www.completetile.com)

**GUARD RAILS' PERFORATED METAL** //

McNichols, [www.mcnichols.com](http://www.mcnichols.com)

The design team took care to warm the existing industrial space while maintaining several features, including refurbishing an existing metal sliding door. In an effort to highlight the brick and new steel structure, the designers concealed lighting and ductwork.



RETROFIT MAGAZINE  
**METAMORPHOSIS  
AWARDS**

Winner



# IT TAKES VISION

An Abandoned Block in South Chicago Becomes a Community Beacon as a Charter School

WRITTEN BY | **FABIOLA YEP, AIA, AND EMILY RAY, AIA**

**F**acilitating change within existing building stock is the most important thing we can do to limit embodied carbon production. Thanks to its Great Fire, Chicago is a city now built for change: The mostly masonry building stock is resilient and adaptable, like Chicago's inhabitants. The story of Great Lakes Academy Charter School, a grassroots charter organization that revitalized an entire city block by converting a deconsecrated Catholic church into a school and community center, embodies Chicago's spirit for imagination, ingenuity, and resourcefulness.

The St. Mary Magdalene Church was the pillar of its community in the early 20th century. Back then, the South Chicago neighborhood, 10 miles from downtown, was the center of the world's steel-fabrication industry, and the workers were primarily

Polish immigrants. This parish was the gathering space for their community.

But, like all American cities, Chicago changed dramatically during the 20th century. The steel industry relocated; the government implemented redlining policies, devaluing real estate on the south side; and Black families replaced the Polish community. The deconsecrated church lot sat vacant for decades.

All it took was a singular vision to identify the potential of this city lot. Wheeler Kearns Architects' vision was to create a charter school with a 21st-century learning model and revitalize this swath of Chicago that the city had intentionally disinvested from for decades. Moreover, the design team sought to accomplish its vision in a way that honored the historical community's legacy while

## Retrofit Team

**METAMORPHOSIS  
AWARD WINNER!**

**ARCHITECT //** Wheeler Kearns Architects, [wkarch.com](http://wkarch.com)  
**CONSTRUCTION MANAGER //**

Bulley & Andrews, [www.bulley.com](http://www.bulley.com)

**CIVIL ENGINEER //** Terra Engineering Ltd., [www.terraengineering.com](http://www.terraengineering.com)

**LANDSCAPE ARCHITECT //** Kettelkamp & Kettelkamp Landscape Architecture, [www.kettelkamp2.com](http://www.kettelkamp2.com)

**STRUCTURAL ENGINEER //** Enspect Engineering Consultants, [enspectinc.com](http://enspectinc.com)

**MEP/FP ENGINEER //** IBC Engineering Services, [ibcengineering.com](http://ibcengineering.com)

## Materials

**GREEN ROOF //** LiveRoof LLC, [liveroof.com](http://liveroof.com)

**SKYLIGHTS //** Velux, [skylightspecialist.com](http://skylightspecialist.com)  
**DIRECT/INDIRECT FIXTURES, CHURCH //**

Spectrum Lighting Inc., [www.speclight.com](http://www.speclight.com)

**GYM FLOORING //** Gerflor Resilient Flooring, [www.gerflorusa.com](http://www.gerflorusa.com)

**LOBBY FLOORING //** Nora by Interface, [www.nora.com](http://www.nora.com)

**LOBBY GLAZING, NEW**

**WINDOWS IN CHURCH //** Kawneer, [www.kawneer.us](http://www.kawneer.us)

**SPORTS FIELD //** FieldTurf, [fieldturf.com](http://fieldturf.com)

**KITCHEN EQUIPMENT //** Boelter, [www.boelter.com](http://www.boelter.com)



PHOTOS: KENDALL  
MCCAUGHERTY,  
HALL + MERRICK  
+ MCCAUGHERTY





### Judge's Comment



Nice restoration of the existing volume. The repurpose was largely in plan with new open programs use. Climbing wall is cool!— *James Graham, AIA, Graham Baba Architects*





ensuring the new users believed this was built for them, by them and not simply a makeshift conversion of a leftover building.

### GROWING THE VISION

Great Lakes Academy (GLA) opened its doors to the community in 2014 with two grade levels by renting an existing school building adjacent to the vacant church, then owned by the Catholic Archdiocese. GLA's goal was to add a grade level every year until it was a K-8 school. Meeting this ambitious goal meant acquiring more space.

The design team and school considered many options for expansion, including building a new facility across the street. Ultimately, the team determined it made the most sense, financially and programmatically, to acquire the entire block from the Catholic Archdiocese and expand into the former church.

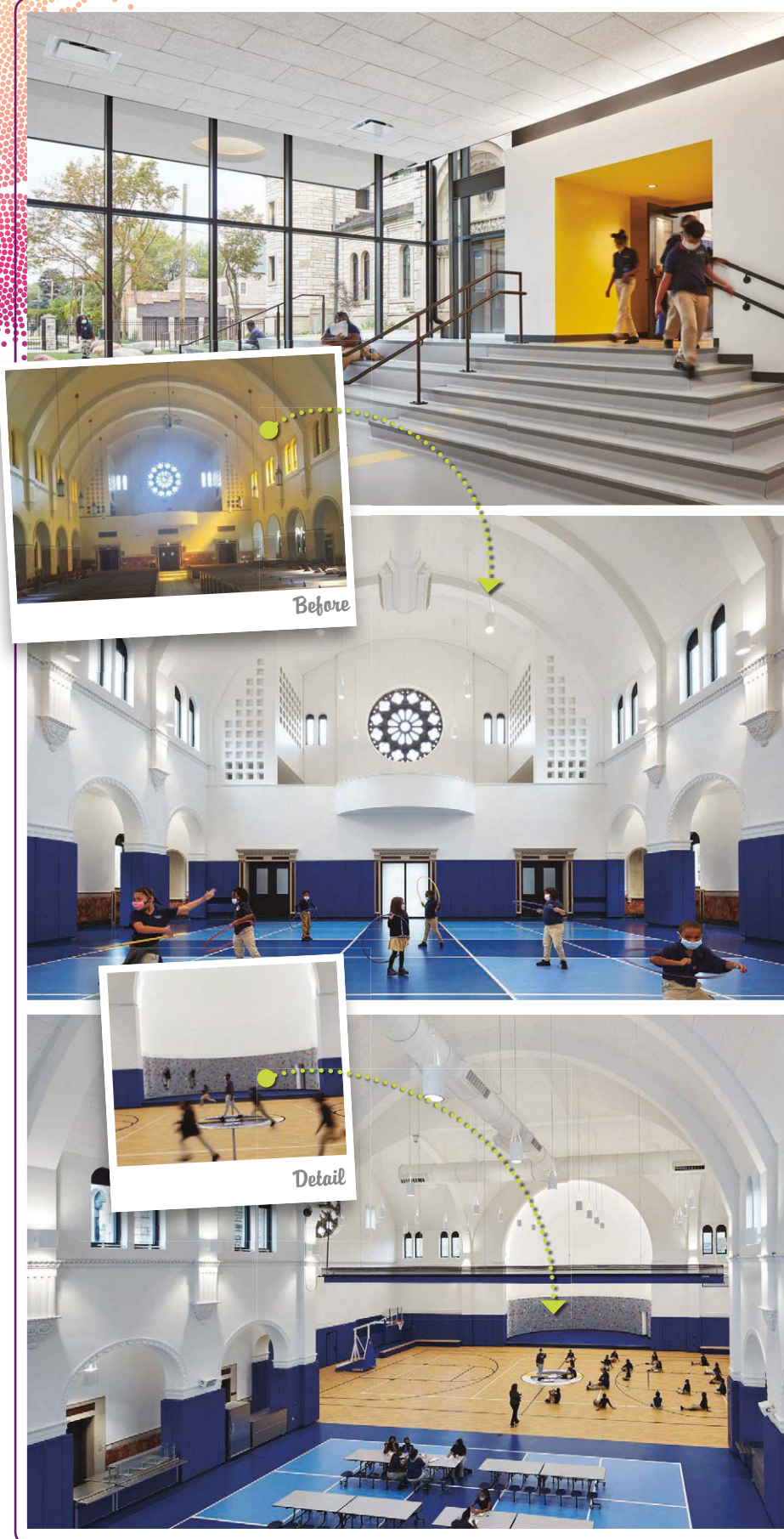
In 2021, this vision grew into a reality when GLA purchased the whole city block. In addition to the church building, which became GLA's Enrichment Center, the acquisition included the 3-story brick building the school had been renting since 2014, now known as the Academic Building, and a third building—a decrepit rectory—which was demolished to make room for a soccer field and playground.

### SEEING IT THROUGH

The Academic Building had been working well as a home for GLA's classrooms and administrative spaces. The expansion phase retained those programs in the Academic Building but made room on the main level to incorporate a Maker's Lab and Library as a new shared resource for the growing school. In Wheeler Kearns Architects' vision, the Academic Building would remain the school's educational core, and the expansion into the adjacent church would provide enrichment opportunities for young students to explore extracurricular activities.

In contrast to the Academic Building, the plans for the church completely transformed the building. The design team envisioned a dedicated place to breathe new life into the South Chicago community by providing the students, parents and neighbors access to arts programming, sports and nutrition. The architectural goal was to highlight the unique characteristics of the existing architecture while transforming it into a secular space.

Under the vaulted ceiling of the former church, students now exercise and compete on a regulation-sized basketball court and volleyball court in their new gymnasium. The former apse and raised altar now host a transverse climbing wall. When the gym is not in use, the elevated stage serves as a place for theatrical, music and dance performances. In the former sacristy, the retrofitted art room provides the school's first dedicated space for visual arts. Lastly, the north





half of the building, separated by a rolling curtain, houses the cafeteria, where staff members serve more than 600 healthy breakfasts and lunches each day, prepared in the newly fitted commercial kitchen.


Retrofitting a former church building into the Enrichment Center came with its fair share of challenges. For example, when the structural analysis indicated the existing two-way waffle slab floor structure was insufficient for the new program's live-load requirements, Wheeler Kearns Architects employed a specialty contractor to design and install carbon-fiber strapping to the underside of the concrete beams to strengthen them. The carbon fiber met the live-load requirements while avoiding traditional reinforcement that would have prevented future build-out opportunities for the basement.

Another significant challenge involved designing an accessible route to the raised church floor. Because there was ample exterior space, it was easy to provide code-compliant ramps, leading visitors to the Enrichment Center from the exterior courtyard. However, providing an accessible route inside the building proved much more challenging because of space constraints. To solve this problem, the design team nestled an elevator in one of the church's niches along the west façade. This design connects the ground level with the raised church level and its basement while not taking away from programmable spaces.

Once Wheeler Kearns Architects had a clear vision for the Academic Building and the Enrichment Center, the team knew the connection between these spaces and the exterior campus was pivotal for the project's success. A contemporary glass link was added to mediate the solidity of the two flanking masonry buildings. This link welcomes visitors from the north and south entrances and connects the Enrichment Center to the east with the Academic Building to the west. The intervention is open and lightweight with high-performance floor-to-ceiling glass and thermally broken curtainwall framing systems that connect visually to the interior lobby and the exterior courtyard. With six skylights sprinkled throughout the ceiling, the space is a perfect entry, transition and multipurpose room for the school.

Finally, the facility could only be described as a campus by its exterior development. The neighborhood had few public parks and spaces for the community to gather. Wheeler Kearns Architects installed a regulation-sized soccer field south of the Enrichment Center and state-of-the-art playground equipment along the narrow east edge of campus. The team also designed a protected north courtyard as a welcoming entry and flexible space to support outdoor learning opportunities and encourage nature exploration. A combination of designed terraced seating and boulders from a nearby Midwestern quarry provide options for social and educational activities.

## A BRIGHT NEW FUTURE

As a new beacon of education for the South Chicago community, this expansion project proves that a singular vision, coupled with perseverance and imagination, can bring about monumental change in a neighborhood striving to overcome decades of disinvestment. Nearly a decade ago, Great Lakes Academy and Wheeler Kearns Architects' dedicated team committed to providing unprecedented learning spaces for the community. Like most significant accomplishments, it did not happen overnight. This project demonstrates that with enough conviction, anyone is capable of harnessing the embodied value of a building—no matter its age or former use—and giving it a bright new future to serve its community again. 



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# CLASSIC SCHOOLHOUSE

A Late 1800s Chicago Public School Is Transformed into 23 Apartments Featuring Classic Classroom Details

The Elizabeth Peabody Public School was designed by Chicago Board of Education Architect W. August Fiedler and constructed in 1894. The 15-room, 3-story building built over a basement stands out for its intricate details, utilizing stone, brick, terra cotta, and decorative metal in the Romanesque Revival/Classical Revival style. The building is a noteworthy example of Chicago's public-school architecture in the late 1800s. Following the closure of 46 Chicago Public School buildings in 2013, Peabody School was sold through a public auction with a redevelopment plan to transform the historic structure into 23 apartments with a rooftop deck.

Now an adaptively repurposed City of Chicago Historic Landmark, the project demonstrates successful reuse of the decommissioned structure, blending modern upgrades with features of the original school to create distinctive contemporary residences. The building's outstanding preservation to conserve the memory of the building's former use serves as a model for how these seemingly

obsolete buildings can be adapted to revitalize urban neighborhoods and continue to tell an important part of Chicago's architectural evolution.

The developer aimed to preserve the school's authenticity and historic elements while creating comfortable and desirable living spaces for contemporary residents. Because the project sought City of Chicago Historic Landmark status, which paralleled preservation requirements for the Federal Tax Credit Program that ownership was also pursuing, reconciling modern code requirements with preservation goals posed a significant challenge.

Serving as architect, Pappageorge Haymes Partners preserved the expansive hallways and open stairs to maintain the building's historic character. The arrangement of classrooms along the central 14-foot-wide hallway was a defining feature of the school and incorporating a new elevator into the building program required careful consideration. In the end, the elevator was tucked away from the main corridor while offering seam-

less access to all building levels.

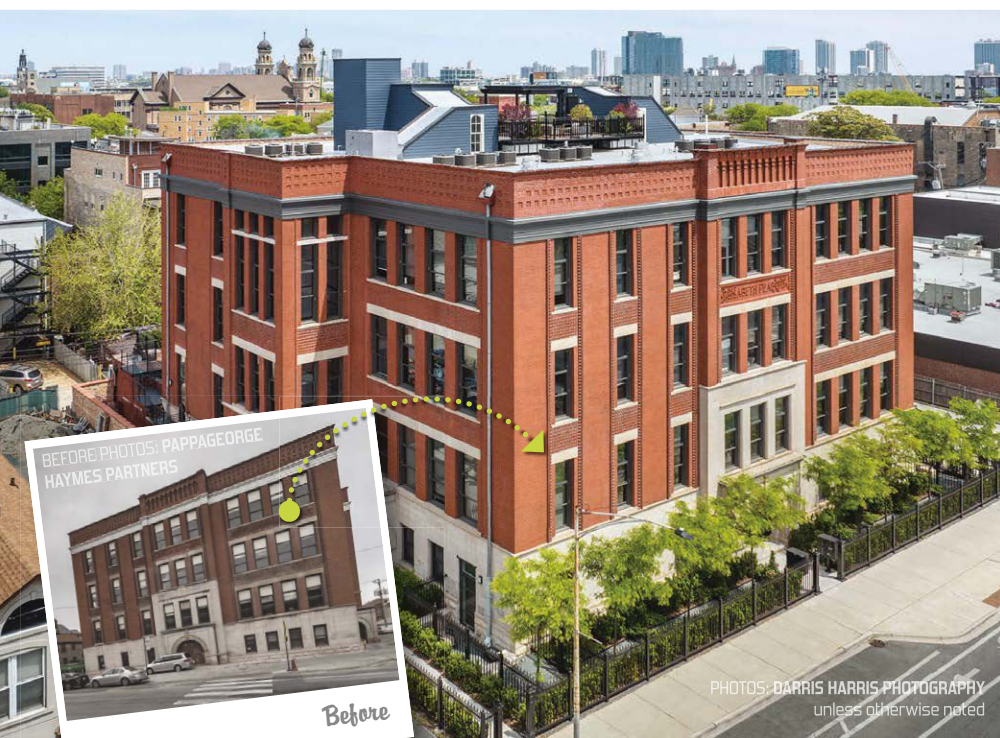
The grand staircases flanking the hallways are part of the continued sightlines from the corridor, but fire-safety regulations required closing off the emergency egress. This was resolved with a combination of fire-rated glass and protective shutters. Glazed firewalls separate the stairwells but allow the staircases to be viewed from the hallway without compromising their functionality as fire escapes. An automatic screen system also was implemented to further seal off the stairwell when necessary.

The completed Peabody School Apartments is brimming with reminders of its previous life. With most classrooms measuring a generous 1,200 square feet, their dimensions were ideally suited for two-bedroom apartments, seamlessly integrating each dwelling within the existing classroom footprint. This approach allowed each unit to retain the original features of its respective classrooms, including built-in cabinets, interior trim, doorways, windows, chalkboards, iron coat hooks and, in some cases, fire-escape landings that were turned into private balconies. The apartments are further enriched with a multitude of recycled materials sourced from the school, such as brick accent walls and repurposed wood joists that now serve as open kitchen shelving.

The developer also wished to capitalize on the panoramic views from the roof. However, to preserve the visual integrity of the historic building, the new roof deck was required to be hidden from street view. As a result, the deck was generously set back from the roofline to ensure it remains unseen at street-level.

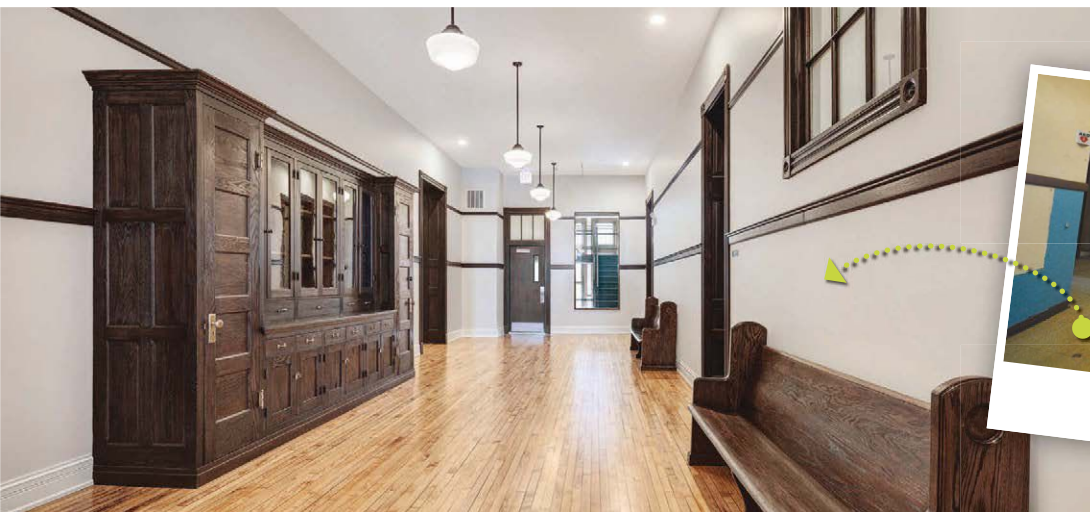
Some of the larger refurbished school furniture was placed throughout the building for all residents to enjoy. Filing cabinets from the principal's office command attention as captivating centerpieces in the hallways while an old cafeteria table has found a new purpose on the rooftop deck.

Boasting 14-foot ceilings and tall windows, purposefully designed in 1894 to flood the classrooms with abundant natural light, the apartments retain their luminosity and airy ambiance. These unique residences effortlessly capture the nostalgic essence of a classic schoolhouse, seamlessly blending vintage charm with modern comforts and energy-efficient appliances and systems expected from a modern apartment. 



PHOTOS: DARRIS HARRIS PHOTOGRAPHY unless otherwise noted





Before

## Retrofit Team

METAMORPHOSIS  
AWARD WINNER!

**ARCHITECT** // Pappageorge Haymes Partners,  
[www.pappageorgehaymes.com](http://www.pappageorgehaymes.com)  
**CLIENT/DEVELOPER AND GENERAL CONTRACTOR** // Svigos Asset Management, [svigos.com](http://svigos.com)  
**STRUCTURAL ENGINEER** // ESI, [www.engsys.com](http://www.engsys.com)  
**MEP ENGINEER** // Calor Design Group Ltd., [calordesign.com](http://calordesign.com)  
**CIVIL ENGINEER** // Doland Engineering LLC, [dolandengineering.com](http://dolandengineering.com)

## Materials

**INTERIOR DOORS** // Schaaf Window Co., [www.schaafwindow.com](http://www.schaafwindow.com)  
**ELEVATOR** // Schindler, [www.schindler.com](http://www.schindler.com)  
**KITCHEN APPLIANCES** // Bosch, [www.bosch-home.com/us](http://www.bosch-home.com/us)  
**KITCHEN AND BATHROOM FIXTURES** // Kohler, [www.us.kohler.com](http://www.us.kohler.com)  
**LAUNDRY** // LG, [www.lg.com](http://www.lg.com)  
**RANGE HOOD** // Zephyr, [zephyronline.com](http://zephyronline.com)  
**FURNACE** // Carrier, [www.carrier.com/residential/en/us/products/furnaces](http://www.carrier.com/residential/en/us/products/furnaces)  
**PAINT** // Benjamin Moore, [www.benjaminmoore.com](http://www.benjaminmoore.com)

## Judge's Comment

“ This is really great! Love adaptively reused schools. The Chicago Landmark status is celebrated. Rooftop deck is a good idea. — Elicia Feasel, preservation project manager, H.G. Christman Construction ”



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AWARDS**

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# MANUFACTORY TO MAKERSPACE

An 1890 Steam-pump Manufactory Is Reimagined for Public Use

## Read More!


To read a feature about Foundry 101, see **retrofit's** September-October issue, page 58, or visit [retrofitmagazine.com/an-1890-steam-pump-manufactory-now-is-a-vibrant-hub-for-the-cam-bridge-mass-community](http://retrofitmagazine.com/an-1890-steam-pump-manufactory-now-is-a-vibrant-hub-for-the-cam-bridge-mass-community).

The transformation of an 1890 steam pump manufactory in the East Kendall Square neighborhood of Cambridge, Mass., was spurred by rapid neighborhood changes brought on by the bio-tech boom and the related influx of high-rise office, lab and campus buildings that have dramatically changed the architectural vernacular in this former working-class area of the city. Residents and city officials were eager to preserve a pocket of the neighborhood for public use within a building that represents the area's history.

Vacant for almost 20 years, Foundry 101 is now a vibrant community hub with makerspaces, art and dance studios,

food labs, performance space, a central community hall, and a mix of non-profit and market-rate office tenants.

The planning and design of this civic hub, intended to inspire and serve residents of all ages and abilities, grew from a broadly inclusive process of city leaders, a Foundry Consortium of local university and arts partners, and a local Foundry Advisory Committee of residents and field experts, as well as collaboration with the Cambridge Historical Commission.

The renovation harnessed the architectural history of the building's masonry shell and original fenestration. The triple-height atrium, unsympathetically modified with infill floors in the 1980s, was restored to its original volume, which provides visual and physical connection among the workshops. Flanking the atrium, three new concrete-on-steel deck floors were inserted on steel framing that is structurally separated from the original granite and heavy-timber structure. A new addition clearly stands out from the original brick with corrugated, brass-colored cladding that speaks to the metalsmithing that once took place within the building. 

## Judge's Comment

“Brilliant project—from program to execution.”  
— James Graham, AIA, Graham Baba Architects



PHOTO5: ANTON GRASSL unless otherwise noted



Historic

## Retrofit Team

**ARCHITECT, INTERIOR DESIGNER  
AND COMMUNITY ENGAGEMENT LEAD //**  
CambridgeSeven, [www.cambridgeseven.com](http://www.cambridgeseven.com)

**METAMORPHOSIS  
AWARD WINNER!**

## Materials

**ACOUSTIC FLOOR ISOLATION AND NOISE**

**CONTROL //** Kinetics Noise Control,  
[kineticsnoise.com](http://kineticsnoise.com)

**WINDOWS //** Slimline from Reynaers,  
[www.reynaers.com](http://www.reynaers.com)

**VRF SYSTEM //** Daikin, [www.daikin.com](http://www.daikin.com)

**ACOUSTIC PANELS //** Unika Vaev,

[unikavaev.com](http://unikavaev.com)

**RAILING PANEL SYSTEM //** FOLD from  
VIVA Railings, [vivarailings.com](http://vivarailings.com)

**FURNACE //** Carrier, [www.carrier.com/  
residential/en/us/products/furnaces](http://www.carrier.com/residential/en/us/products/furnaces)

**PAINT //** Benjamin Moore,  
[www.benjaminmoore.com](http://www.benjaminmoore.com)

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# RIPPLE EFFECT

A Repurposed Historic Church Complex Radiates a Message of Commitment to Community

WRITTEN BY | KJ FIELDS

**R**estoring lives seems like a tall order for the renovation of a former parish complex, but Steeple Square in Dubuque, Iowa, accomplishes this lofty goal.

In 1867, St. Mary's Church opened its doors in downtown Dubuque to serve a congregation of German-speaking immigrants. More than a place of worship, St. Mary's Parish Complex provided social services and bound the community together for more than 100 years. In the early 1980s, the farm crisis and factory closures took a heavy toll on Dubuque, which had the highest unemployment rate in the U.S. by 1983. The working-class neighborhood surrounding the parish suffered steep economic decline.

"The parish had long been the neighborhood center for activity, arts and culture," says John Gronen, president of Gronen, the developer that spearheaded the rehabilitation of Steeple Square. "The parish was able to hang on during the economic upheaval, but then the demographic changed. Longtime residents left the area and many in the older population passed away."

Eventually, the buildings fell into disrepair. When the 150-year-old complex finally closed in 2010, the void it left in the community was palpable.

Interested developers believed the only financially viable option was to tear down the historic structures and build on the land. But the parish campus buildings were integral to the city's rich history and architectural heritage, and the church's 211-foot steeple was a cherished city landmark. Determined to find another way, the Archdiocese of Dubuque rallied a diverse group of individuals to chart a new future for St. Mary's. In 2013, the group formed the board of a non-profit organization called Steeple Square.

## LEAP OF FAITH

Two of the five buildings on the complex previously had been sold, and one of the biggest unknowns was what to do with the three buildings that remained under the non-profit's care. The solution arrived through open-minded thinking and community-driven discussions. To address the neighborhood's needs, the board decided

to partner with other organizations rather than duplicate public services. It donated the former school building for affordable housing and joined forces with a non-profit to provide childcare that serves low-income families. The church itself was to become an event center to serve the larger community.

Steeple Square's new mission of "restoring lives, neighborhood empowerment and community vibrancy" was ambitious, and it would require funding.

"Even though it was a volunteer effort, we were very intentional in terms of how we planned and budgeted the work," Gronen says. "Other communities often ask, 'How did you do it?' The answer is simple: one chunk at a time."

In 2015, the three buildings—the Gothic Revival former church, Romanesque Revival former school and the Second Empire former rectory—had been listed on the National Register of Historic Places. The historic designation provided essential tax-credit funding. In all, the project's funding included 40 percent from state and federal historic tax credits, 20 percent through grants and national foundations, and a significant 40 percent from local businesses and community members.

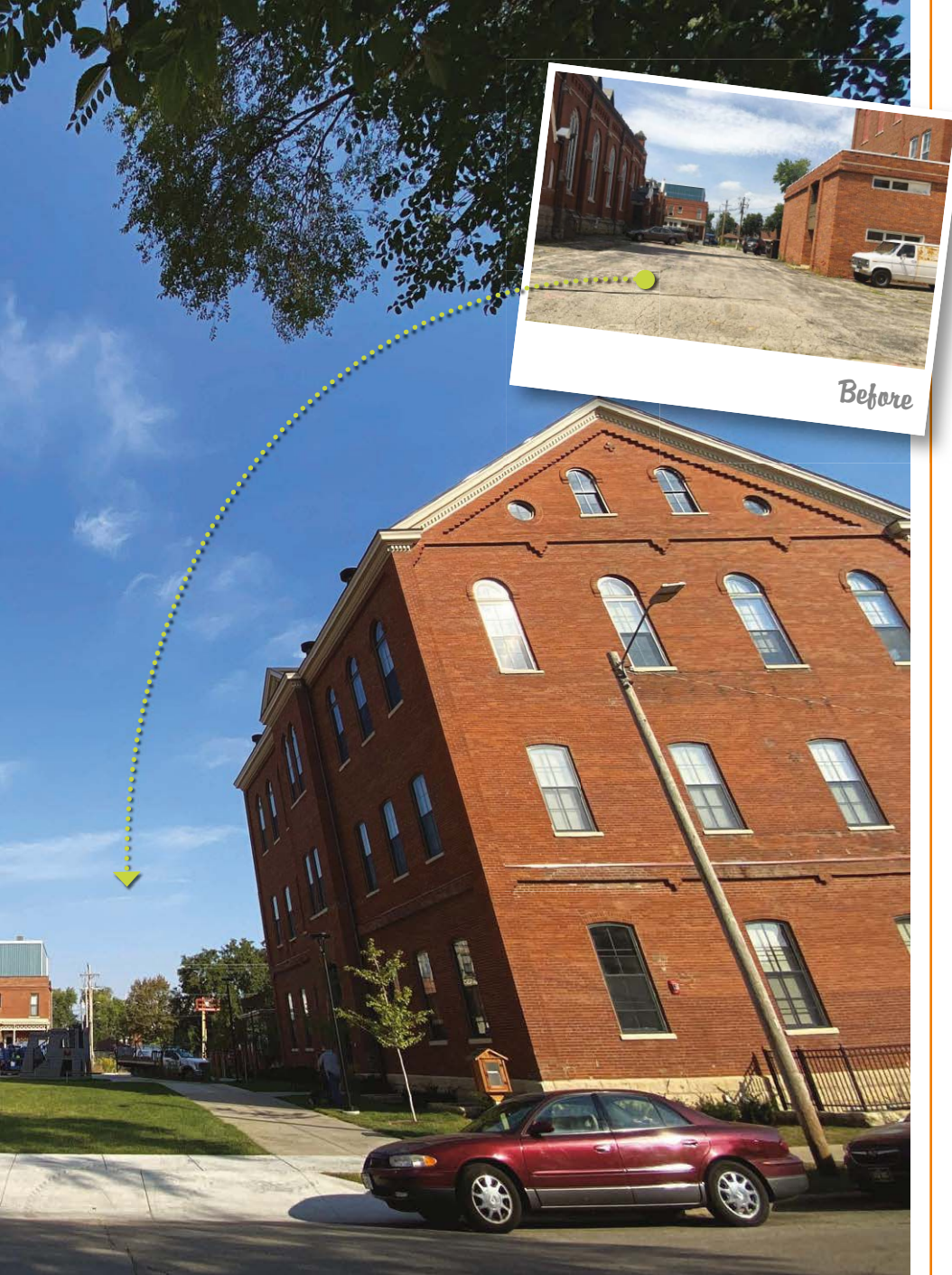
Investments in the community didn't wait for the project's completion, however. The board took advantage of the project itself to provide educational opportunities.

"We partnered with Northeast Iowa



**Today**, the church's event center has welcomed more than 70,000 people for weddings and community gatherings, and all the funds generated from events are used to support housing, childcare and training within the complex's former school and rectory.





Before

## Retrofit Team

METAMORPHOSIS  
AWARD WINNER!

**DEVELOPER //** Gronen,

[www.gronen.com](http://www.gronen.com)

**ARCHITECT //** Jeffrey Morton Architects,  
(563) 585-0043

**HISTORIC PRESERVATION //**

The Durable Restoration Co.,  
[durable restoration.com](http://durable restoration.com)

**ARCHITECTURAL SHEET METAL //**

Geisler Brothers Co., [geislerbrothers.com](http://geislerbrothers.com)

**HVAC //** Dubuque Plumbing and Heating,  
[www.pci-dbq.com/services/  
plumbing-heating](http://www.pci-dbq.com/services/plumbing-heating)

**ELECTRICAL //** Paulson Electric,  
[www.paulsonelectric.com](http://www.paulsonelectric.com)

**CONCRETE //** Manders Quality Concrete,  
(563) 583-9919

**MAKER //** Rob Droessler,  
[www.robdroessler.com](http://www.robdroessler.com)

## Materials

**SHEET METAL //** Chicago Metal Supply,  
[chicagometalsupply.com](http://chicagometalsupply.com)

**MILLWORK //** Stackis and Morrison,  
(563) 583-9305

**TILE //** Virginia Tile, [virginiatile.com](http://virginiatile.com)

## Judge's Comment

“Impressive contribution to a community fabric and culture. Thoughtful program use and restoration.”

— Dana L. Kelly, partner,  
principal, Bruner/Cott Architects

Community College and Four Mounds Foundation to train young people in construction skills, including carpentry and masonry,” says Duane Hagerty, a member of the Steeple Square board of directors and president and CEO of Heritage Works Dubuque, which preserves, promotes and protects historic architecture in the Dubuque area. “The restoration work gave us the chance to provide onsite vocational training for underserved populations, and the trainees received stipends and childcare while they were working.”

### RAISING HOPE

As one of the tallest church steeples in the region, the tower was visible across the city and a revered symbol of the neighborhood. The steeple’s

restoration began with a structural assessment, which required removing a century of pigeon and bat excrement to access the materials below. The exterior renovation’s work had to be performed from the top to rebuild the cross, and metal scaffolding was erected that supported 5,000 wood planks to create platforms for workers.

In the 1960s, the tower had been painted black with white trim. Historic photos revealed that the steeple’s original sheathing was galvanized zinc with pressed metal decorative details. Given the enormous effort to build the scaffolding, the board wanted to restore the steeple in a way that would last for 100 years without the need for ongoing maintenance. Team members went to the State Historic Preservation Office and National Park

Service with a new plan.

“We showed them the tower’s monochrome appearance in the historic photos,” Hagerty says. “We asserted copper could replicate that look and the ornate metal details while providing longevity. The preservation office agreed, but we had to replicate every detail to a T.”

New mahogany replaced aging wood components below the cone, and copper was used for the sheathing.

The team also restored three massive bells (weighing more than 1,000 pounds each) and a clock that were installed in the bell tower in the late 1800s.

On the roof, outlines of lost dentils on the cornice and eave showed the team where these former



details needed to be created and reinstated.

### RAY'S OF LIGHT

During church renovations in the early 1900s, congregation members went to Germany to procure 40 stained-glass windows adorned with elaborate biblical scenes. The windows were shipped from Munich between 1913 and 1916.

"By 1914, World War I was underway, so it was significant that the windows came here during such a tumultuous time," says Judy Wolf, president, Steeple Square board of directors. "And they just made it; the U.S. entered the war the year after the last ones arrived."

The windows had collected a century's worth of dust and grime, and their restoration gave Steeple Square another opportunity to further its mission.

"The community took a big interest in the stained glass. Faculty from the Art Institute of Chicago restored the two large windows with their students," Hagerty recalls. "We capitalized on their knowledge to create our own workshops and recruited local artisans, carpenters and a stained-glass restoration expert from Illinois to teach these skills."

Each window was carefully removed from its frame with meticulous documentation tracking its original location. The windows were soaked, cleaned, repaired and polished. Wooden window frames were repaired and cleaned.

During this process, an unexpected discovery was made: Original grease-pencil markings on the glass indicated how the windows should fit together. To preserve this unique find, the team varnished the markings to protect them through future cleanings.

From 2016 to 2020, approximately 30 local residents, students and those transitioning from incarceration received training. In addition to furthering these individuals' employment opportunities, the window restoration helped create the next generation of artisans.

### NEIGHBORHOOD SPIRIT

Today, Steeple Square is a vibrant campus that serves as a regional destination and a place of service to its community.

The church's event center has welcomed more than 70,000 people for weddings and community gatherings, and all the funds generated from events are used to support housing, childcare and training within the complex.

The lower level of the former church is a secondary, smaller event center and contains an education and vocational training center.


The former school provides eight units of permanent affordable housing for women who have faced domestic abuse and homelessness. The former rectory now serves a crucial role as the childcare center and preschool, supporting 70



Top: *The former rectory* now serves a crucial role as a childcare center and preschool. Bottom: Steeple Square created its own workshops and recruited local artisans, carpenters and stained-glass restoration experts to teach approximately 30 people window-restoration skills.

percent low-income families.

During the past six years, Steeple Square has supplied a much-needed lifeline of \$15 million into multiple low-income census tracts. It has brought vitality back to a vacated campus in downtown, provides living-wage jobs and revitalized an underserved neighborhood.

"The project reinstated a sense of hope in the neighborhood," Wolf says. "With the campus at its core, residents see their neighborhood as a safer, more community-oriented place. The investments didn't only impact this area though. The project serves as an inspiration to other neighborhoods everywhere." 






# LOOK UP TO THE SKY

A New Canopy over an Open-air Space Protects Students from Rain while Maintaining a Connection to the Sky

The open atrium of this Architecture Building at the University of Florida's College of Design, Construction, and Planning in Gainesville is arguably its defining feature. Unfortunately, the intrusion of water that migrates through it, which was never designed to occur (the building originally had plans for a canopy), has led to a plethora of maintenance and occupancy issues. Although views to the sky have become commonplace and any alternative proposed is considered incorrect/inappropriate, this opening presented serious life-safety hazards during rain events.

KMF Architects, along with Architect of Record Brooks + Scarpa, went through an exhaustive process "designing for designers" where multiple solutions were considered beyond the placement of the canopy. However, the cost impacts far exceeded the cost of a canopy; thus, a solution was sought that would balance remediation efforts and maintain a visible connection to the sky.

The opening itself is an irregular form—a combination of three trapezoids, which create interesting opportunities when designing a potential covering. The design team presented three categories of options: skylight systems, ETFE systems and solar arrays. ETFE solutions, using single or dual layers, became the preferred choice because they could provide daylight, rain coverage, wind-load criteria, self-cleaning performance, and insulated/passive cooling design options that were lightweight and could be supported by the existing structure.

Events, pin-ups and reviews now can happen in the atrium space during inclement weather. Day-lighting and passive cooling have been achieved and the user response has been tremendous. This simple, elegant solution seems as if it was always there. 



## Retrofit Team

**ARCHITECT OF RECORD** // Brooks + Scarpa, [brooksscarpa.com](http://brooksscarpa.com)

**ARCHITECT** // KMF Architects, [kmfarchitects.com](http://kmfarchitects.com)

**STRUCTURAL ENGINEER** // TLC Engineering Solutions, [tlc-engineers.com](http://tlc-engineers.com)

**GENERAL CONTRACTOR** // Stellar Construction Group, [www.stellar.net](http://www.stellar.net)

**METAMORPHOSIS  
AWARD WINNER!**

## Materials

**CANOPY** // Fluon ETFE Film from AGC Chemicals, [bit.ly/3LvBgxk](http://bit.ly/3LvBgxk)

**STRUCTURAL SYSTEM** // Birdair Inc., [www.birdair.com](http://www.birdair.com)

**COATING** // Perma-Crete from PPG, [www.ppgpaints.com/pro/ppg-building-renewal/products/perma-crete](http://www.ppgpaints.com/pro/ppg-building-renewal/products/perma-crete)

## Judge's Comment

“ I like how this open atrium was a liability but now it's usable space with a single move. — Dana L. Kelly, partner, principal, Bruner/Cott Architects ”



RETROFIT MAGAZINE  
**METAMORPHOSIS  
AWARDS**

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# HOT OFF THE PRESS

A Former Newspaper Headquarters Is Transformed into Unique Office Spaces for a Variety of Tenants

WRITTEN BY | **STUART MCCORMICK, AIA, LEED AP; PETER FALK, RA; HEATHER MCCANNA, IIDA; AND ASHLEY CARROLL-HOOKER, IIDA**

**H**ome to the iconic *Winston-Salem Journal* and *Sentinel* newspapers for nearly a century, the Sentinel Commons building is a local landmark in the heart of downtown Winston-Salem, N.C. Its rich history dates back to the completion of the oldest portion of the building in 1927.

In its original design, Harold Macklin, an English-born architect known as one of the leading members of the profession in Winston-Salem during the 1920s, adhered to a 1700s historic style and incorporated masterful Georgian Revival details modeled after Independence Hall and Congress Hall in Philadelphia. Although the newspaper continued to use the building as its headquarters and printing/distribution operations center, significant expansions were required to meet the growing demands. It underwent its first expansion in 1958, which incorporated a Mid-Century Modern style

into its historic modeling, and a second expansion in 1982 extended the property along 5th Street.

After gaining sole ownership of the building in 2016, the owner's goal was to transform the 137,000-square-foot building from a predominantly vacant and underutilized property into a multipurpose project, offering unique office spaces, coworking opportunities, and arts and entertainment options.

## CHALLENGES

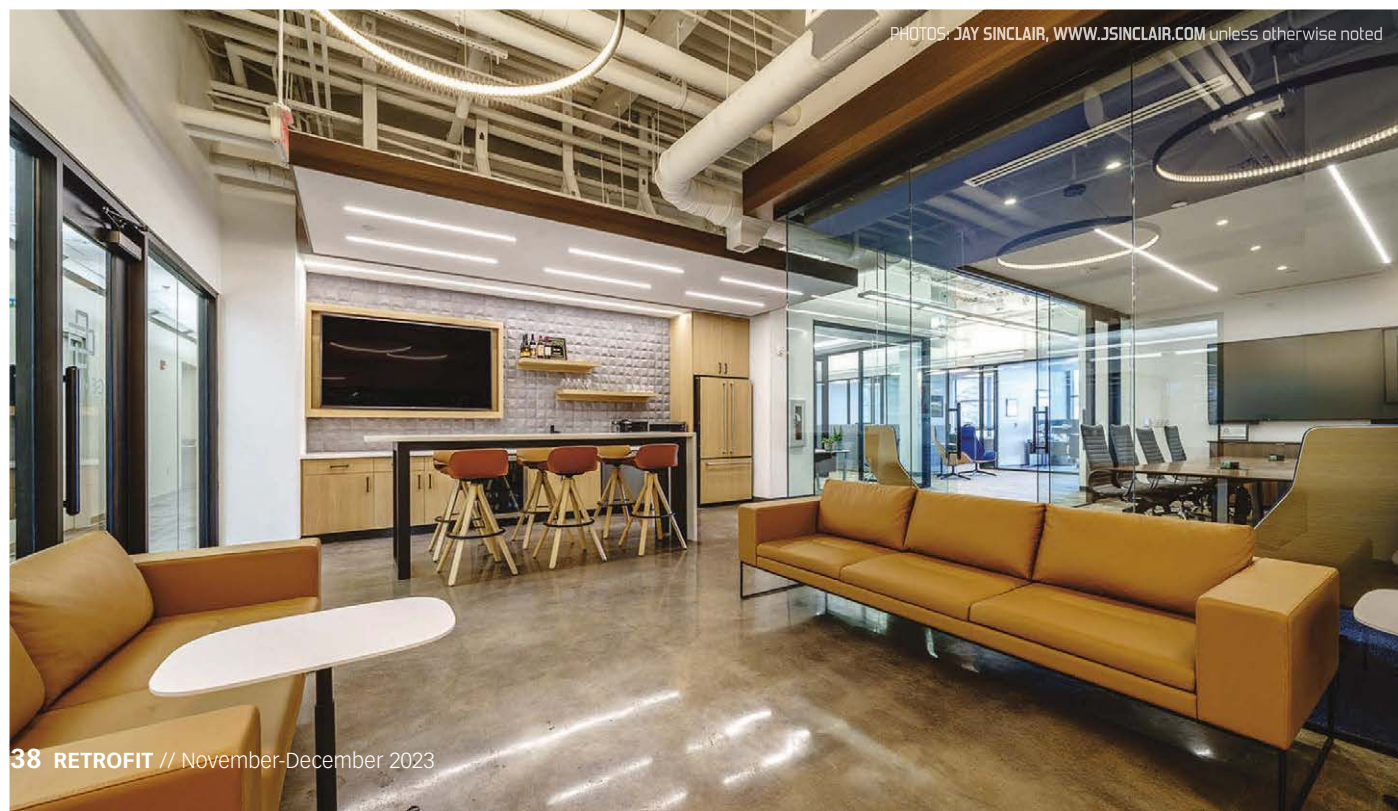
Having been constructed in three sections over 60 years, the building structure and services had different characteristics that needed to be overcome. Variant electric service and mechanical systems failed to work well together and required significant overhauls and replacements to meet current standards and allow for future planning. Low floor-to-floor heights in the older sections

of the building made equipment placement and ductwork routing a challenge. LAMBERT Architecture + Interiors worked closely with the mechanical designers to specify and locate equipment, ductwork, and piping around the building structure while not sacrificing tenant needs or usable space.

The building owner noted that many internal spaces were dark and felt like being in three separate buildings. The team opened numerous exterior walls and multistory spaces and provided energy-efficient glazing that brought natural daylight into the building. New interior finishes and modern lighting throughout the building resulted in a light, vibrant, colorful cohesiveness that didn't exist previously.

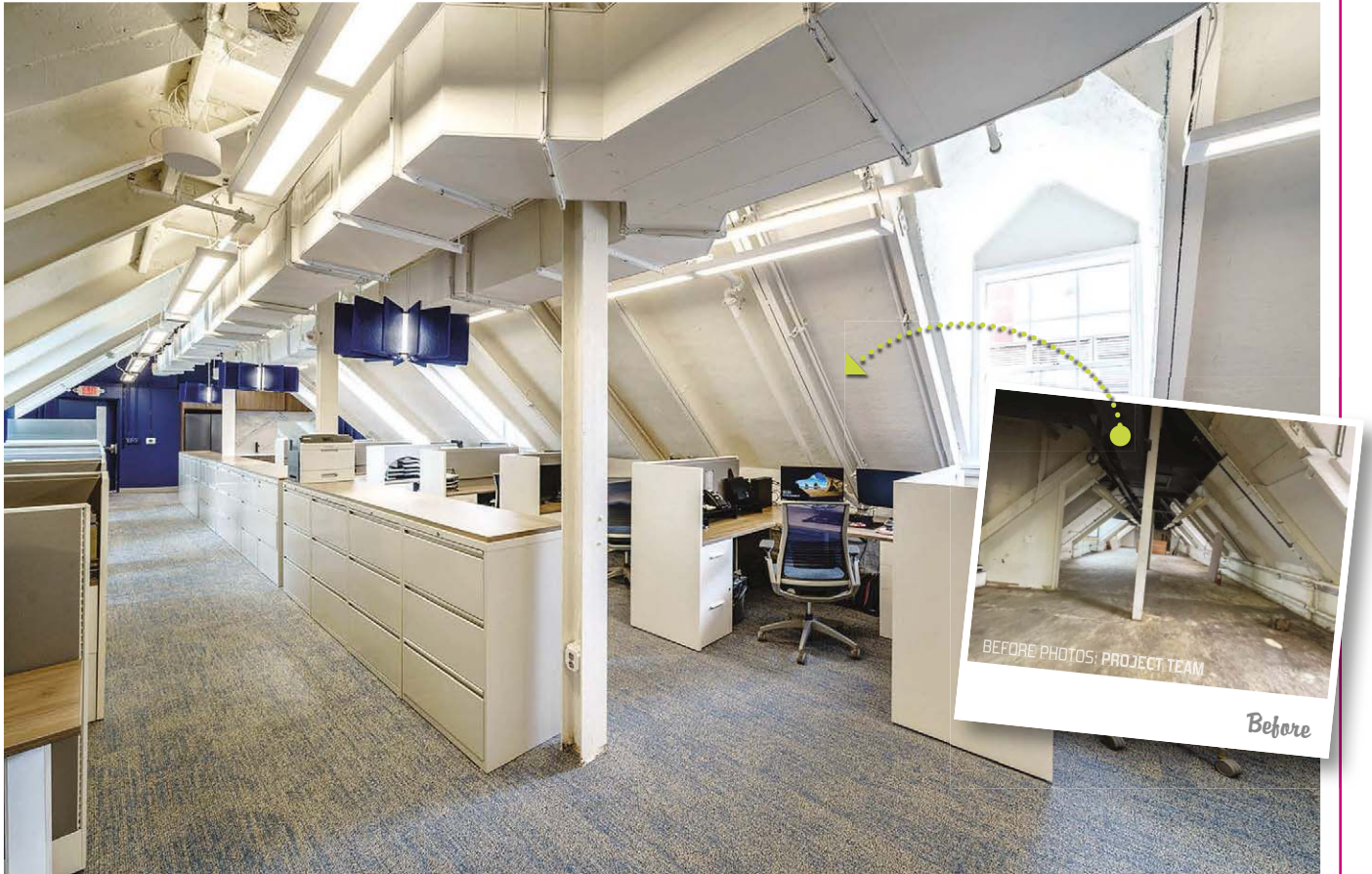
## UNIQUE SUITES

LAMBERT Architecture + Interiors was among the first tenants to relocate its headquarters upon



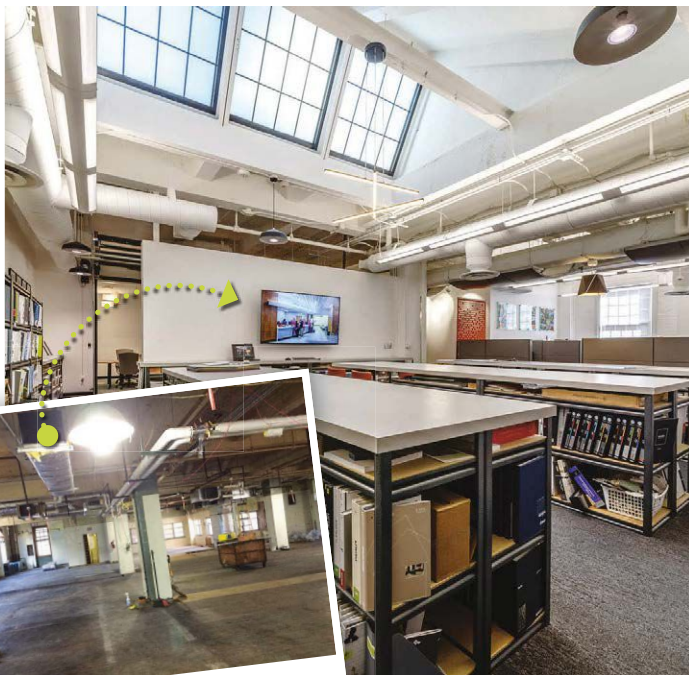
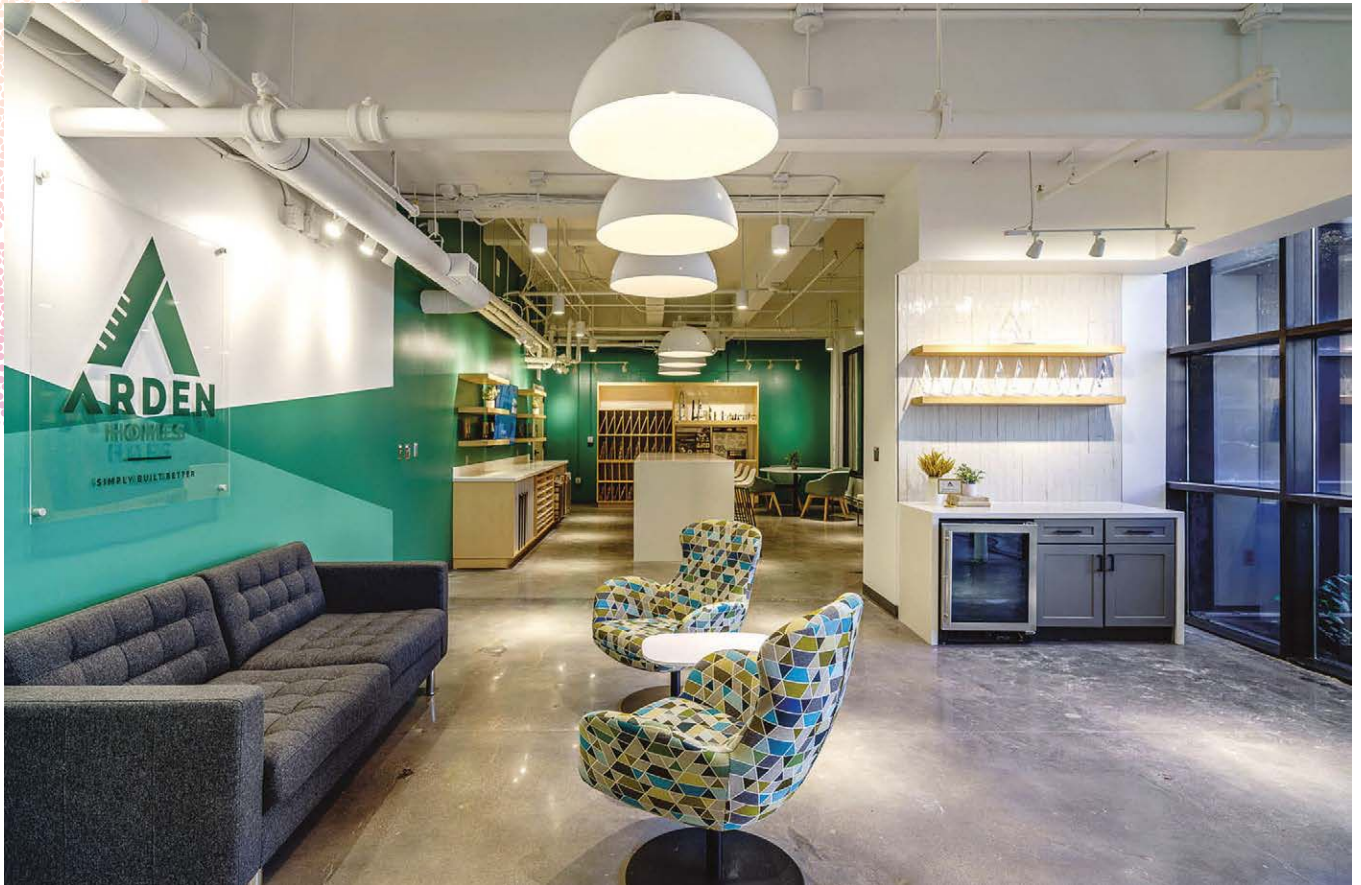
PHOTOS: JAY SINCLAIR, [WWW.JSINCLAIR.COM](http://WWW.JSINCLAIR.COM) unless otherwise noted





*Each tenant's suite* is designed specifically around its business needs. For example, Parks Automotive Group (top photo) houses its accounting department in this unique and quiet fourth-floor space. Prominent business-law firm Blanco Tackabery located its entrance and reception lobby on the ground floor of the historic building (bottom photo). The space features restored original paneled wainscot.





Before

Top: **Home builder** Arden Homes' first-floor suite features its brand color, green, throughout the space. Bottom left: A skylight brightens LAMBERT Architecture + Interiors design library/interactive meeting space on the third floor. Bottom right: Parks Automotive Group's branded conference room is located on the third floor.



## Judge's Comment

“ Smart integration of art and branding to create a unique experience. —Joel Anderson, AIA, LEED AP BD+C, design director, associate principal, Cushing Terrell ”

seeing the potential of the location. The firm's conference room features a rolling glass garage door, transforming the room beyond a meeting space of four white walls into a multifunctional workspace. It also gives a subtle nod to the design firm's origins, which began in a garage more than 30 years ago.

Recognizing the importance of collaboration, the suite features thoughtfully designed collaborative zones, incorporating comfortable seating arrangements and interactive whiteboards, encouraging spontaneous discussions and idea generation among team members. Above, a captivating skylight enhances the sense of space and lighting while seamlessly connecting the interior to nature. The original 1927 vertical 2 by 4 flooring remains throughout the suite, minimizing noise disruptions as it once did for the newspaper when printing.

Prominent business-law firm Blanco Tackabery moved to Sentinel Commons in mid-summer 2021, creating a dynamic boost to the much-anticipated redevelopment project. Blanco Tackabery's entrance and reception lobby occupy the ground floor of the historic building. The space features restored original paneled wainscot and 13-foot-tall arched windows. Three conference rooms, convenient for client meetings, are located behind the lobby waiting area. Most of the attorneys' and legal staff's offices are housed on the second floor of the building complex. Glass fronts encase office spaces, allowing natural light to permeate the interior and provide a modern office environment with branded elements, luxe furniture, and custom luxury designs.

Home builder Arden Homes' first-floor suite features exceptional branding that incorporates Arden's brand color, green, into the space. In addition to the beautiful interior finishes, the working area is spacious and comfortable, allowing prospective home buyers to feel at ease during their appointments. With the removal of the concrete panels from the façade, glass curtainwalls enhanced visibility, allowed for more daylight and gave the suite a modern look. Each element, from the color scheme to the furniture selection, has been created to reflect the company's vision to create a cohesive and visually stunning space that is truly its own.


Specializing in private equity and real-estate development, the Trust Foundation's second-

floor suite provides a professional industrial vibe that elevates functionality and aesthetic appeal. Sleek glass doors at the entrance welcome visitors into a world of elegance. Layered illumination, created by combining ambient and accent lighting, enhances the ambiance and deepens the design while highlighting the architecture. With versatile furniture pieces that are functional and stylish, this renovation embraced innovation and creativity while adding artistic flair and attention-grabbing statement pieces for visual appeal.

Also on the second floor, commercial real-estate developer GemCap moved into Trust Foundation's neighboring suite. The space seamlessly blends contemporary design with timeless elegance crafted to inspire and invigorate its workplace. Floor-to-ceiling windows allow natural light to flood the space, emphasizing the details of the carefully curated furnishings and accents. Using glass partitions as an alternative to traditional walls or office cubicles offers transparency for employees while maintaining privacy. It also allows natural light to permeate workspaces and creates an atmosphere of openness. A vibrant kitchen with bar-style seating serves as a central hub for informal meetings and casual conversations.

Parks Automotive Group relocated its accounting staff into the building in 2022. The upfit included two suites, occupying a portion of the third and entire fourth floors of the 1920s portion of the building along with a new rooftop outdoor dining area. A modern branded environment encompasses both suites, not only meeting operational needs for staff but maintaining the historical elements of the previous newspaper by showcasing memoirs. Acoustic paneling was added to the walls to limit sound traveling throughout the space and enhance branding; the panels feature Parks Automotive Group's signature blue, and its "Parks Promise" mission is displayed in the executive board room and throughout signature offices.

### NEW HOME TO MANY

Today, *The Journal* remains a tenant in the complex, but Sentinel Commons houses several other companies and is eager to welcome more who will appreciate its historic architectural features and crisp, modern transformation. 

## Retrofit Team

METAMORPHOSIS  
AWARD WINNER!

**ARCHITECT // LAMBERT Architecture + Interiors, [www.lambertai.com](http://www.lambertai.com)**

**GENERAL CONTRACTOR // FL Blum, [www.flblum.com](http://www.flblum.com)**

**MEP ENGINEERS // Brite Engineering Consultants Inc., [www.briteengineering.com](http://www.briteengineering.com), and Beekman Point Engineering LLC, [www.bpe-eng.com](http://www.bpe-eng.com)**

**STRUCTURAL ENGINEER // Moorefield Engineering P.C., [mepc-consultants.com](http://mepc-consultants.com)**

**ACOUSTICS // Thorburn Associates, [ta-inc.com](http://ta-inc.com)**

**INTERIOR SIGNAGE // Sharpe & Co. (fabrication/installation), [www.sharpeco.net](http://www.sharpeco.net), and Elephant in the Room (design), [elephantintheroom.com](http://elephantintheroom.com)**

## Materials

**PAINT // Sherwin-Williams, [www.sherwin-williams.com](http://www.sherwin-williams.com)**

**FAUCETS // Delta, [www.deltafaucet.com](http://www.deltafaucet.com)**

**LIGHTING // Lithonia Lighting, [lithonia.acuitybrands.com](http://lithonia.acuitybrands.com)**

**WALL BASE // Roppe, [roppe.com](http://roppe.com)**

**LOBBY CARPET TILE // Bentley, [www.bentleymills.com](http://www.bentleymills.com)**

**LOBBY METAL CEILING // USG, [www.usg.com](http://www.usg.com)**

**BLANCO TACKABERY MULTI-SLIDE POCKET DOOR // Pella, [www.pella.com](http://www.pella.com)**

**BLANCO TACKABERY QUARTZ COUNTERTOPS // MSI, [www.msifaces.com](http://www.msifaces.com), and Wilsonart, [www.wilsonart.com](http://www.wilsonart.com)**

**PARKS AUTOMOTIVE GROUP LAMINATE // Wilsonart, [www.wilsonart.com](http://www.wilsonart.com)**

**ARDEN HOMES LAMINATE // Formica, [www.formica.com](http://www.formica.com), and Wilsonart, [www.wilsonart.com](http://www.wilsonart.com)**

**ARDEN HOMES AND PARKS AUTOMOTIVE GROUP ACOUSTIC CEILING TILE // Armstrong World Industries, [www.armstrongceilings.com](http://www.armstrongceilings.com)**

**BLANCO TACKABERY, GEMCAP, TRUST FOUNDATION AND LAMBERT ARCHITECTURE + INTERIORS LAMINATE // Formica, [www.formica.com](http://www.formica.com)**

**LAMBERT ARCHITECTURE + INTERIORS**

**GARAGE DOOR // ASSA ABLOY, [www.assaabloyentrance.com](http://www.assaabloyentrance.com)**

**LAMBERT ARCHITECTURE + INTERIORS DIVIDER SCREEN // FitzFelt, [www.fitzfelt.com](http://www.fitzfelt.com)**

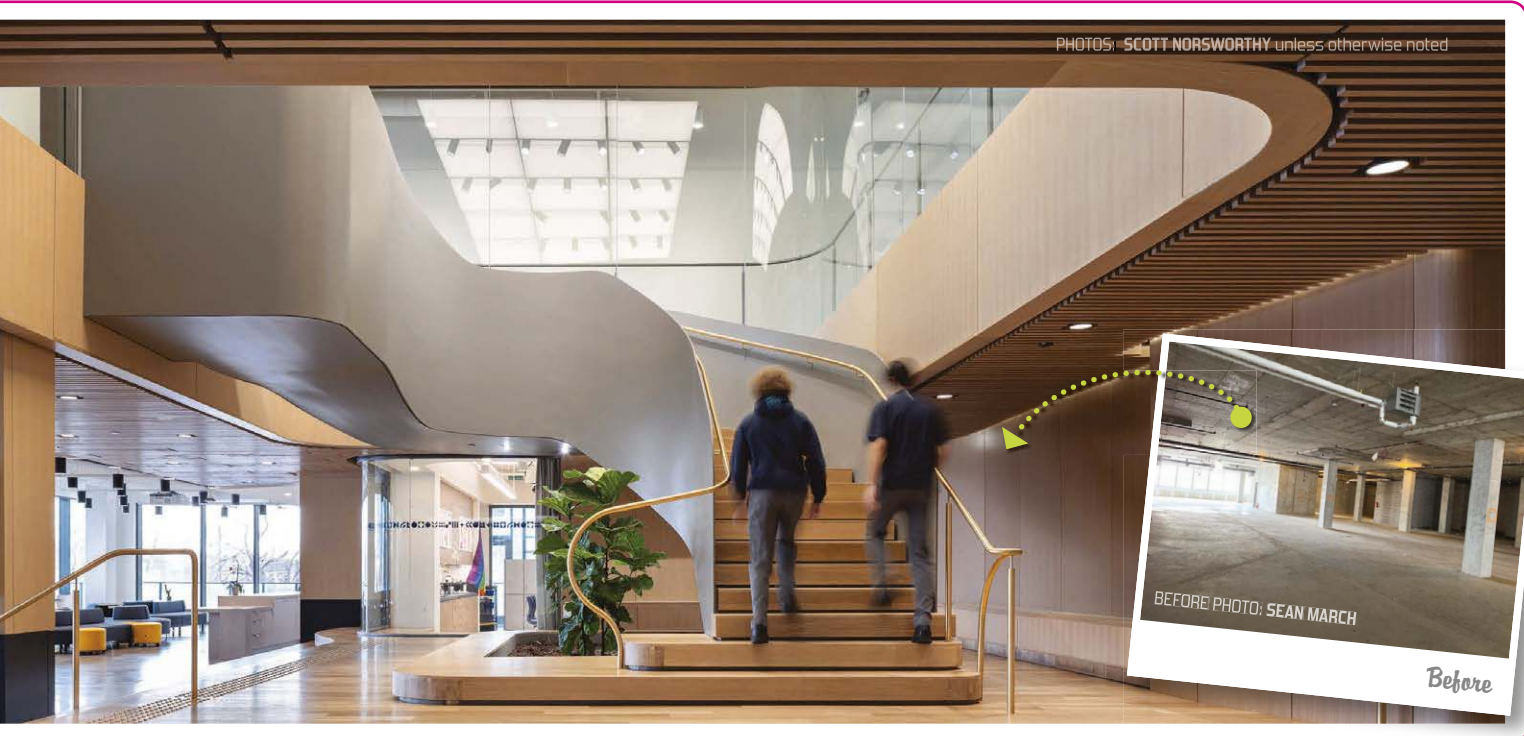




# SECONDARY SCHOOL REIMAGINED

Toronto's Kingsway College School Creates a New Paradigm for the High-school Experience

WRITTEN BY | OLIVER BECK, OAA, MRAIC



When representatives of Kingsway College School (KCS) decided to expand to include grades nine through 12, Architecture Counsel Inc. was engaged to create an ambitious, phased master plan that would reflect the school's unique vision and ambition. The first phase, which comprised the fit-out of 40,000 square feet to accommodate grades nine and 10, was completed in September 2022; the second phase now is underway.

The new senior school for Kingsway College School creates a new paradigm for high-school students and breaks with conventional school architecture in several unique ways. Firstly, the school uses the city as its laboratory and campus. In contrast to a traditional high-school model where most, if not all, teaching and learning activities are expected to take place within the walls of the school, KCS blurs the distinction between its facilities and the city. It aims to forge partnerships with other institutions to expand student opportunities by using arts, athletics and media-based spaces at clubs, organizations and other

educational facilities. This progressive approach to learning offsite adds a depth of experience and a sense of enduring learning not typically available to high-school students and is intended to inspire students to become life-long learners.

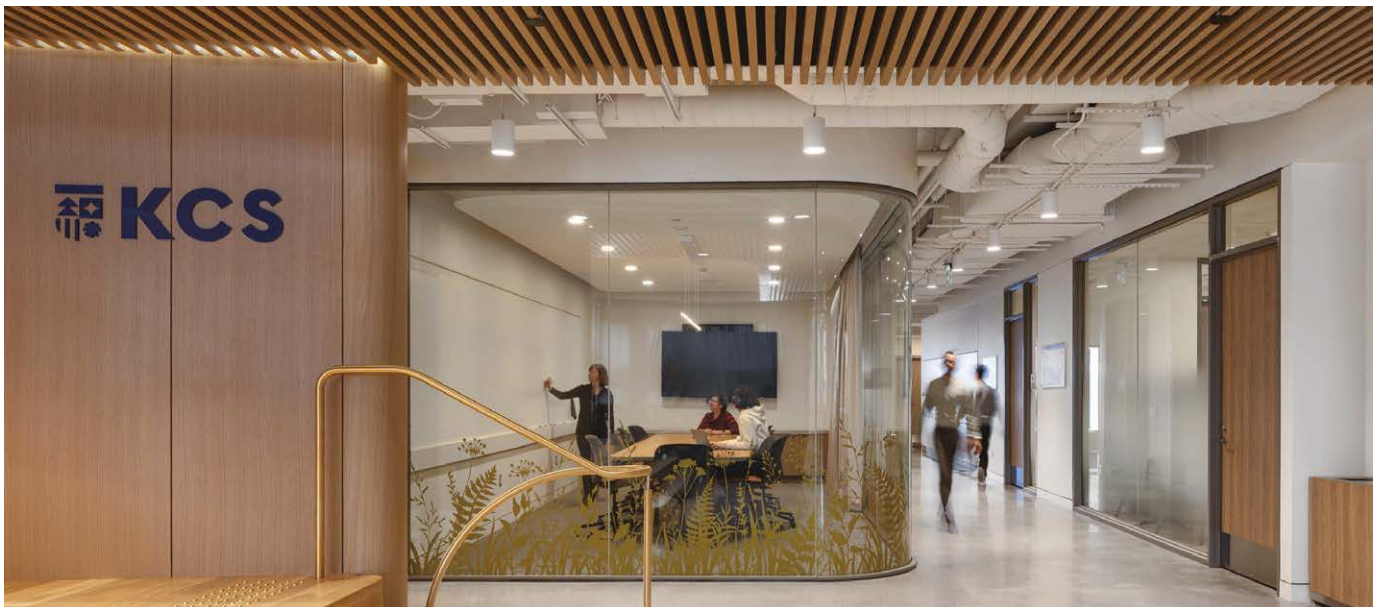
Secondly, KCS is the only independent high school in Toronto to occupy space within an existing high-rise building (in this case, a 66-story residential tower). With Toronto's continued population growth and densification, available land is becoming increasingly scarce. Architects are challenged to rethink the traditional North American secondary-school typology (a low-rise horizontal model on an unoccupied site with a sports field and parking lot). Globally, it has become almost commonplace to make the most of existing built space by inserting a school within a vertical structure. In Toronto, this concept is only recently entering public imagination. The choice to capitalize on existing infrastructure is reflective of KCS' ethos, which focuses on innovation, good citizenship and environmental stewardship.

## INTERIOR SELECTIONS WELCOME STUDENTS

The interior achieves a refined level of design in terms of finish selection, treatments and furnishings. Curved glass, wood floors, wood ceilings and wood-veneered walls were used to convey a timeless, elegant aesthetic not typically found in high schools. These components underwent a rigorous testing and approval process to assure the client they would be durable, long-lasting and able to withstand the daily rigors of school life.

The school occupies the podium level of the high-rise residential tower and is accessed on the second level. Upon entering the grand, double-height reception area, visitors immediately feel as though they are in a distinctive space. Greeted by an abundance of natural light, with an elegant feature stair anchoring the reception area, the effect is one of great spatial release. The generous width of the stair organizes the space and adds drama to the entry sequence; its ample dimensions allow the stair to function as one of the many social spaces where students can gather to talk









*An elegant feature* stair organizes the space and adds drama to the entry sequence. Its ample dimensions allow the stair to function as one of the many social spaces where students can gather. The stair leads to a classroom and social area with views of the developing cityscape.





and collaborate. The stair also serves as a podium/lectern for speakers.

To further animate the entry space, views are provided into the Market Place, the heart of the school where students, staff, and learning partners can meet, collaborate, enjoy lunch, present, perform, create and even sell products via entrepreneurial ventures. Views also are available into the food kiosk, art studio, glazed meeting rooms, classrooms and breakout spaces, as well as of the developing cityscape and Lake Ontario.

## CHALLENGES

To transform this raw commercial space into an innovative learning environment, the Architecture Counsel design team faced many hurdles, typical of working with existing building systems and infrastructure. The mechanical and electrical systems were suitable for commercial use but not adequate for a school. The team had to find the space to design and install a new air-handling system and bring in fresh makeup air to ensure code compliance with this occupancy type. Washrooms had to be placed closer to existing sanitary lines. Careful consideration was paid to how interventions would affect adjacent commercial and residential units.


The school occupies levels 2 and 3 (podium) of the condominium, and construction materials, oversized equipment, structural steel members, etc., had to be brought in during working hours without the benefit of

a loading dock, which posed logistical challenges. As an example, to install the large connecting staircase in the main reception, it was necessary to remove sections of the existing curtainwall. The team worked with the base building structural engineer to open the floor to create the dramatic double-height lobby.

Program adjacencies were carefully assessed in relation to student safety, privacy and acoustics. Flooring, insulation, ceiling treatments and strategic partitions were installed to ensure noise did not migrate to other spaces. In the second-floor fitness center, it was important to mitigate percussive noise caused by gymnasium equipment.

Repurposing space within an occupied condominium required the team to work closely with the KCS board of directors and condominium board to ensure residents remained undisturbed and the construction process was in compliance with the condominium's rules and regulations.

## THE FUTURE OF LEARNING

The new senior school has been widely embraced by KCS students, staff and educators. Although originally slated for use by a major grocery chain, through innovative design and careful configuration of spaces, Architecture Counsel was able to transform the space to appear purpose-built. Hopefully, other developers and school boards will look to KCS as a prototype for future schools and pave the way for a more sustainable future for our city. 

## Judge's Comment

“Innovative from the point of traditional schools. The clean streamlined interior doesn't distract from the use as a learning environment and turns a staircase into a community plaza. — Elicia Feasel, preservation project manager, H.G. Christman Construction”

## Retrofit Team

METAMORPHOSIS  
AWARD WINNER!

### ARCHITECT // Architecture

Counsel Inc.,

[www.architecturecounsel.com](http://www.architecturecounsel.com)

### STRUCTURAL ENGINEER // Jablonsky

Ast and Partners, [astint.on.ca](http://astint.on.ca)

### MECHANICAL/ELECTRICAL ENGINEER

// Crossey Engineering, [www.cel.ca](http://www.cel.ca)

### CODE CONSULTANT // Arencon,

[www.arencon.com](http://www.arencon.com)

### ACOUSTICS // Thornton Tomasetti,

[www.thorntontomasetti.com](http://www.thorntontomasetti.com)

### SIGNAGE // Andrew McTavish Design,

[www.andrewmctavish.com](http://www.andrewmctavish.com)

## Materials

### EPOXY FLOORING // Sikafloor Morritex

Broadcast System from Sika Canada, [can.sika.com](http://can.sika.com)

### RUBBER FLOORING // Geniemat Fit70,

Fusion Series, Ocean Blue, from Pliteq, [pliteq.com](http://pliteq.com)

### LUXURY VINYL // #2112 Natural Oak, from

True North Luxury Vinyl, [truenorthlvt.com](http://truenorthlvt.com)

### STAIR FLOORING // White Oak with

Custom Color by Barwood Flooring,

[www.barwoodflooring.com](http://www.barwoodflooring.com)

### WALL PANELS // White Oak Veneer

with Custom Color/Finish by Woodlogix Interior, [www.woodlogix.com](http://www.woodlogix.com)

### WOOD ACOUSTICAL CEILING //

Geometrik, [geometrik.com](http://geometrik.com)

### INTERIOR LIGHTING // LD4B, Neo-Ray

and Metalux from Eaton, [www.eaton.com](http://www.eaton.com); Beam 4 Series from Axis Lighting, [www.axislighting.com](http://www.axislighting.com); S ST Series from Pioneer Lighting, [pioneerlighting.com](http://pioneerlighting.com); Orex from Kelvix, [www.kelvix.com](http://www.kelvix.com); Pop Core Square 44 LED from Lumenwerx, [lumenwerx.com](http://lumenwerx.com); IYO Small and Large Series from Ferro Light, [www.ferrolightdesign.com](http://www.ferrolightdesign.com); C4 Cylinder Calculte from Signify, [www.signify.com](http://www.signify.com); TT Top Tier from Cooper Lighting, [www.cooperlighting.com](http://www.cooperlighting.com); and Basik and Studio Series from Sistimalux, [www.sistimalux.com](http://www.sistimalux.com)



RETROFIT MAGAZINE  
**METAMORPHOSIS  
AWARDS**

Winner




# WORK HARD, PLAY HARD

A Corporate Headquarters Embraces a Work-Life Balance

In response to the company's growth, Cincinnati-based Divisions Maintenance Group (DMG) partnered with architectural firm Luminaut to create a dynamic corporate headquarters. DMG representatives aimed to build a space that fosters an immersive environment, inspiring employees to work hard while embracing a vibrant work-life balance. The reimagined workspace spans three large floors of an existing building and is more than 100,000 square feet.

With a team of more than 650 individuals, the headquarters accommodates diverse work styles, tasks and needs, seamlessly integrating collaborative areas and dedicated zones for focused work. Spacious

training rooms prioritize flexibility and adaptability. To amplify the company's high-energy and ambitious culture, Luminaut strategically designed cafés throughout the headquarters; each café offers a distinctive vibe with unique styles of seating. These areas allow employees to choose the ambiance that best suits their current needs and preferences. Additionally, Luminaut conveniently located print and coffee stations near workstations to ensure easy accessibility.

DMG's workplace radiates the boldness, sharp energy, and intensity that define the company's work-hard, play-hard culture. 

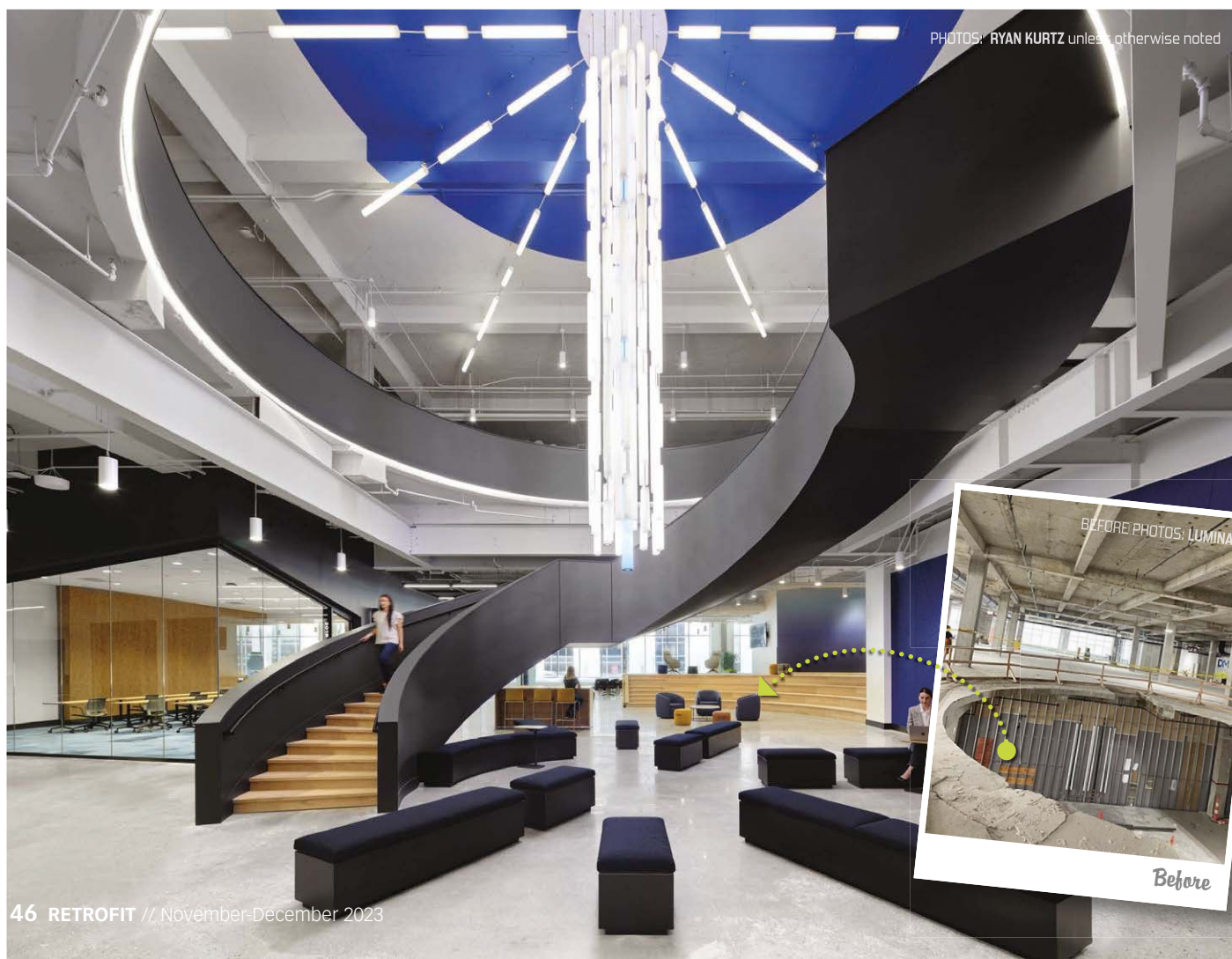
## Retrofit Team

METAMORPHOSIS  
AWARD WINNER!

**ARCHITECT** // Luminaut,  
luminaut.com

## Materials

**WALLCOVERING** // Wolf Gordon,  
www.wolfgordon.com; Knoll, www.  
knoll.com; and Koroseal, koroseal.com  
**CARPET** // Interface, www.interface.com  
**LEATHER** // Edelman, www.edelman.com

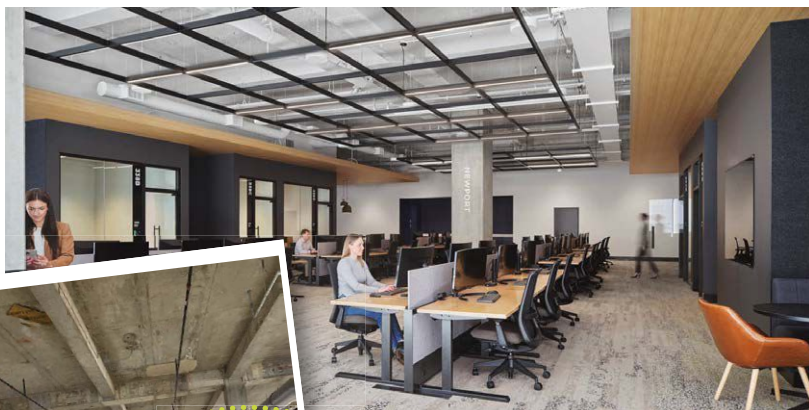


PHOTOS: RYAN KURTZ unless otherwise noted

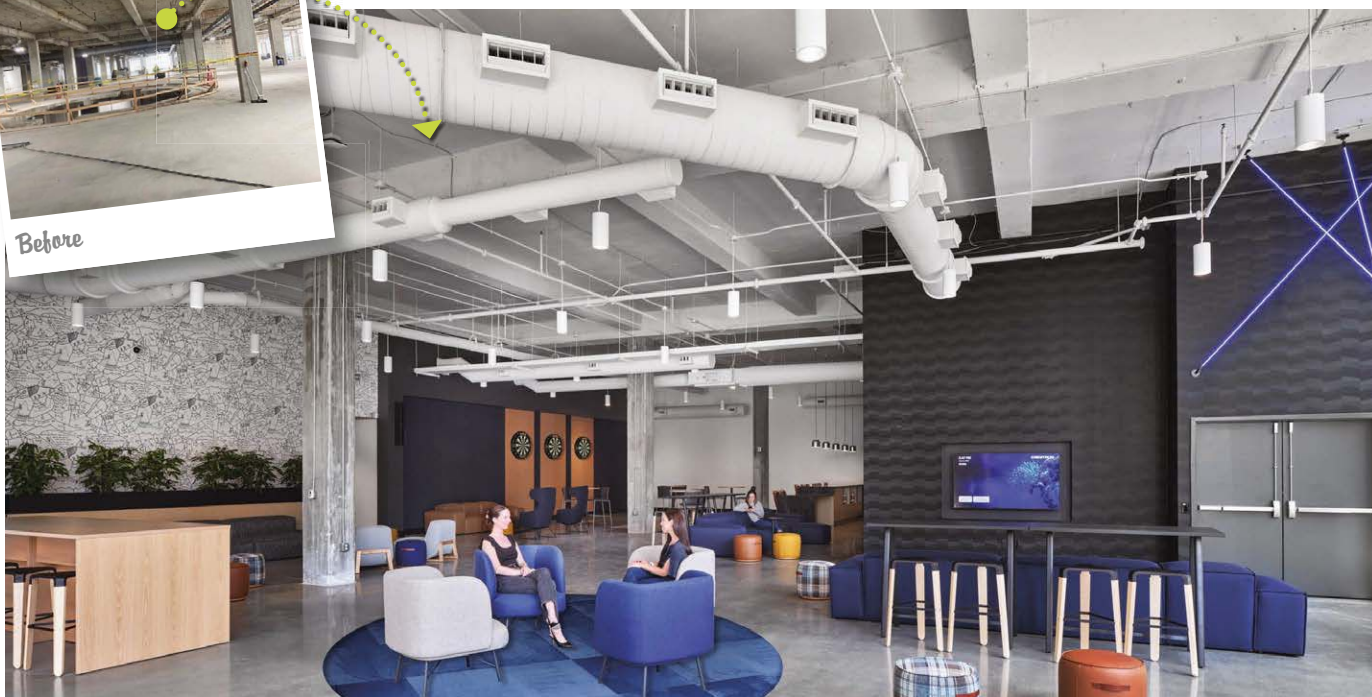
BEFORE PHOTOS: LUMINAUT

Before





Before



### Judge's Comment

“ Clear effort in touching the building lightly and responding with contrast to the roughness of the existing structure. — Joel Anderson, AIA, LEED AP BD+C, design director, associate principal, Cushing Terrell ”





# A RECLUSE NO MORE

A Mid-block Office Building in San Francisco Refreshes Its Ground Floor and Basement to Better Connect to Tenants and the Neighborhood

**W**hat started as a proposal to refresh the exit lobby of 45 Fremont, a mid-block office in downtown San Francisco, evolved into a complete reimagining of the ground floor and basement with a tenant experience that meets the needs of a post-pandemic world.

Constructed in 1978, the classic, Modernist office building lacked street presence with an original arcade that wrapped the building. The recessed glass compromised visual connectivity into the ground-floor spaces and the small dueling lobbies were dominated by security thresholds, leaving little room for activation. Underutilized spaces were primed for programming and the opportunity to add amenities that could meet the expectations of the San Francisco office market.

By fusing retail, co-working space and an inviting outdoor experience, the design brought the building's ground floor to life and repositioned it as a warm, appealing addition to a bustling urban corridor.

With a focus on reinventing underutilized spaces, the Gensler design team employed a hospitality-oriented approach to elevate the tenant experience at 45 Fremont and increase programming on the ground floor. The lobby area was increased by pushing the glass-line out, capturing the arcade and decentralizing security for a more expansive and welcoming experience.


To further activate the ground floor, a variety of amenities were introduced, including spaces for retail. A rejuvenated courtyard is an extension of the lobby and is designed to support events and future food and beverage retailers. The courtyard planters double as seating and a stage, and the space serves as an outdoor lounge with updated landscaping, overhead lighting and a gas fireplace. Open to the public, the courtyard contributes to a thriving streetscape while forging a greater connection between the building and neighborhood.

A once-cavernous 4,400-square-foot area,

formerly used solely as the building's rear exit, was transformed from a pass-through space into a sought-after place for working, gathering and relaxing. This new tenant lounge provides a variety of focus areas, such as phone nooks and a semi-enclosed room with banquette seating for individual and private work, as well as respite. A communal table supports collaborative work while hospitality-infused lounge settings are dispersed throughout the space to support social gatherings, informal meetings and leisure time. The space is also designed to flex for events, which is complemented by its easy access from street level and courtyard adjacencies. A customized wood ceiling and fireplace add warmth to the space.

As the future of the workplace unfolds and the return to offices continues, employees are seeking greater flexibility and choice in their work environments. They're also looking to bring a sense of home and comfort into the office and make coming to work worth the commute. The tenant lounge successfully accommodates these shifting preferences and offers a unique blend of home and hospitality.

The tenant-only basement level is adorned with bright, colorful environmental graphics, and employee wellness is supported by modern locker rooms equipped with showers and health-club-like offerings, including towel service and toiletries. The basement also boasts ample scooter and bike storage, acknowledging San Francisco's strong biking community and promoting sustainable commuting.

The team collaboratively tackled the design and technical challenges associated with transforming the building's ground floor and basement. Technical hurdles included engineering the new frameless glazing to enclose the arcade, waterproofing throughout the courtyard and building perimeter, sloping the terrazzo floor to accommodate existing-level changes, engineering the custom sliding partitions that demise the lobby retail and coordinating the customized ceiling, to name a few. 

## Retrofit Team

**METAMORPHOSIS  
AWARD WINNER!**

**ARCHITECT // Gensler,**

**www.gensler.com**

**GENERAL CONTRACTOR //**

Richlen Construction,  
**www.richlen.com**

**MEP ENGINEER // Amit Wadhwa & Associates,**

**www.awasf.com**

**STRUCTURAL ENGINEER //**

Simpson Gumpertz & Heger,

**www.sgh.com**

**LIGHTING DESIGNER // Banks Landl**

Lighting Design, **bankslandl.com**

**GLAZING SYSTEMS // Novum**

Structures, **novumstructures.com**

**CUSTOM MILLWORK //**

Design Workshops,

**www.design-workshops.com**

## Materials

**SPECIALTY CEILING // Ceilings Plus**

from USG, **www.usg.com**

**CARPET // Shaw Contract,**

**www.shawcontract.com**

**FLOORING // American Terrazzo,**

**www.americanterrazzo.com**

**SPECIALTY GLASS // McGrory**

Glass, **mcgrory.com**, and Pulp Studio,

**www.pulpstudio.com**

**SPECIALTY METAL // Pohl,**

**www.pohl-facades.com**

**HIGH-IMPACT WALLCOVERING //**

Acrovyn from Construction

Specialties, **www.c-sgroup.com**

**BIKE RACKS // Dero,**

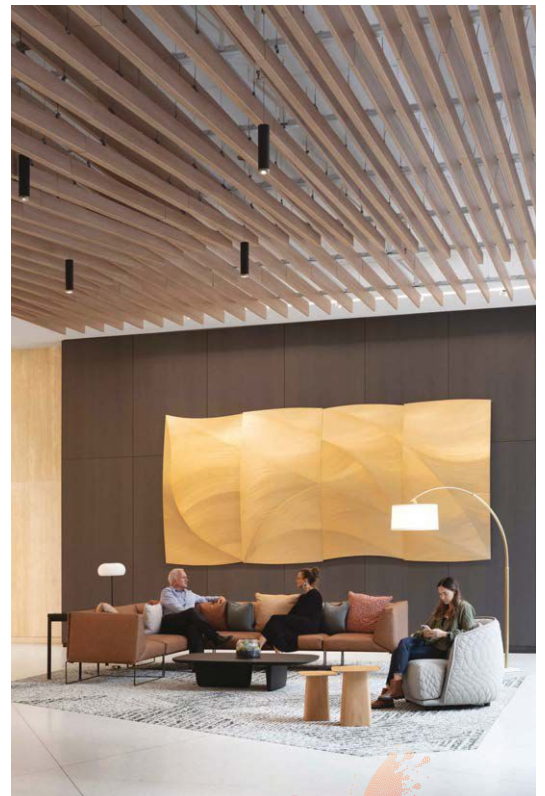
**www.dero.com**

## Judge's Comment

“Delicate and subtle touch to bring organic references and purpose to lobby space.” — Joel Anderson, AIA, LEED AP BD+C, design director, associate principal, Cushing Terrell



PHOTOS: JASON O'REAR unless otherwise noted



*With a focus* on reinventing underutilized spaces, the Gensler design team employed a hospitality-oriented approach to elevate the tenant experience at 45 Fremont and increase programming on the ground floor.

RETROFIT MAGAZINE  
**METAMORPHOSIS  
AWARDS**  
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# NO PLACE LIKE HOME

An Affordable Housing Complex in Massachusetts Sets a National Precedent for Sustainable Investment in Large-scale Housing Communities

WRITTEN BY | **JASON JEWHRST, AIA, AND JACKIE MIGNONE**

**R**ivermark Towers is a mid-1970s multifamily apartment complex along the Charles River in Cambridge, Mass. Built as part of HUD's Section 236 program, it houses 212 affordable and 88 market-rate apartments of various sizes, as well as approximately 38,000 square feet of commercial space. Apartment amenities serving the towers' close and welcoming community include access to five levels of parking, courtyard space, a daycare, computer lab, laundry, and multiple community rooms.

In 2013, the towers' owner determined the buildings needed a full restoration/renovation to ensure the complex's ongoing affordability and commissioned Boston-based Bruner/Cott Architects to design and implement it. The overall goals of the design team's rehabilitation project were to improve the thermal performance of the building, provide healthy spaces and support community resiliency through placemaking. The towers remained fully occupied during construction to avoid the displacement of residents while their spaces were transformed.

## FAÇADE REPLACEMENT, ENERGY AND WATER CONSERVATION

Overcladding the 490,000-square-foot exterior façade and concrete structure was central to the architectural firm's vision for the complex. The goal of the deep-energy retrofit and façade replacement was to significantly improve occupant comfort; modernize the towers' identity; and maintain residents' access to private balconies, as well as large operable windows that provide fresh air, daylight, and sweeping views of the Charles River and the city of Boston.

After thorough structural analysis, the design team determined the exposed-concrete slab edges had the capacity to support façade anchors for the new high-performance insulated panelized system. "The new envelope is comprised of unitized components prefabricated off-site in a local fabrication facility. Once completed, the panels were shipped and installed onsite," recalls Bruner/Cott Architects Principal Lawrence Cheng. This progressive wall assembly system provided three major benefits:

**1**] The unitized panels spanned floor to floor, and multiple panels could be installed daily, making for an efficient process of assembly and construction.

**2**] Because insulated panels were fabricated and assembled off-site in a controlled environment, assembly work done outdoors across winters of construction was minimized.

**3**] The towers remained fully occupied throughout 30 months of construction, including during the COVID-19 pandemic. The innovative design approach achieved minimal noise disruptions to residents during construction.

Insulated metal panel cladding was not only designed to improve the identity of Riverside Towers, but also to improve the buildings' thermal performance. The 12-inch-thick overcladding assembly was detailed to reduce thermal bridging, substantially decrease air infiltration, eliminate water infiltration and improve tenant comfort. The high-performance cladding paired with mechanical-system upgrades not only improved indoor air quality, but also reduced energy and water consumption, as well as utilities costs. Large operable windows and private terraces were

maintained for each apartment; access to fresh air, daylight and views are critically important to the community.

## PROVIDING HEALTHY SPACES

Bruner/Cott Architects worked closely with the maintenance team at Rivermark Towers to analyze the state of each apartment unit to create specific renovation plans. To start, all unit windows and blinds were replaced, and restrooms were updated with low-flow fixtures, low-VOC finishes and LED lighting. Additionally, all ventilation ductwork was cleaned and sealed to support new make-up air units. Work included new entry doors, air-conditioning and fan-coil units, flooring and ENERGY STAR appliances.

All common areas and community spaces onsite were fully renovated. Lobbies, elevators, and corridors were refreshed with modern and vibrant finishes, flooring, lighting and wayfinding signage. Tenant spaces, including the community room, activity room, leasing office, gym, and computer lab, were also renewed with LED lighting, low-flow fixtures and low-VOC finishes.

The complex's landscape and outdoor community areas were reworked to enhance lighting, circulation and accessibility. The daycare program was supplemented with a new playground; the activity room was extended outdoors with a patio and planters for gardening; and the courtyard was refreshed with upgraded lighting, custom seating and non-invasive plant species.

## SUPPORTING COMMUNITY RESILIENCY

Rivermark Towers sets a new standard for the

## Judge's Comment

“The 12-inch insulated metal panel overcladding makes significant improvements in the long-term energy use of the building and was tactfully used to enhance the outdoor experience for all in the community. — Joel Anderson, AIA, LEED AP BD+C, design director, associate principal, Cushing Terrell”





PHOTO: RICHARD MANDELKORN PHOTOGRAPHY



Before



PHOTOS: OVAL ROOM GROUP unless otherwise noted



**All common areas** and community spaces onsite were fully renovated. Tenant spaces, including the community room, activity room, leasing office, gym, and computer lab, were renewed with LED lighting, low-flow fixtures and low-VOC finishes.



## Retrofit Team

**CLIENT** // Homeowner's Rehab Inc.,  
www.homeownersrehab.org

**METAMORPHOSIS  
AWARD WINNER!**

**ARCHITECT** // Bruner/Cott Architects,  
www.brunercott.com

**GENERAL CONTRACTOR** // NEI General  
Contracting, www.neigc.com

**STRUCTURAL ENGINEER** // Thornton  
Tomasetti, www.thorntontomasetti.com

**MEP/FP ENGINEER** // Petersen Engineering,  
www.petersenengineering.com

**CIVIL ENGINEER** // Nitsch Engineering,  
www.nitscheng.com

**SUSTAINABILITY** // New Ecology,  
www.newecology.org

**ENVELOPE** // Curtainwall Design Consulting,  
www.cdc-usa.com, and Building Evolution Corp.,  
buildingevo.com

**CLADDING CONSULTANT/FABRICATOR** //  
Sunrise Erectors, sunriseerectors.com

## Materials

**INSULATED METAL PANELS** // Optimo  
and Designwall 2000 from Kingspan,  
www.kingspan.com

**ALUMINUM COMPOSITE METAL PANELS,  
BACK-UP INSULATION** // Vitrabond ACM from  
Valcan, valcan.co.uk/product/vitrabond, with  
KarrierPanel from Kingspan, www.kingspan.com

**CURTAINWALL AND STOREFRONT** //  
ES-UN625 Unitized and ES-WN625 Unitized  
from ESWindows, eswindows.com

**BALCONY DOORS** // ES-SD450 Sliding Door  
and ES45T Terrace Door from ESWindows,  
eswindows.com

**BALCONY COATING** // Sikalastic 720 One Shot  
from Sika, usa.sika.com

**RAILINGS** // Kane Innovations Aluminum  
Railings, kaneinnovations.com

**ACRYLIC COATING AT CMU WALLS** //  
Sikagard 550W from Sika, usa.sika.com

**AIR VAPOR BARRIER** // WaterArmor AWB from  
T. Clear Corp., tclear.com, and 705FR-A from  
Carlisle Coatings & Waterproofing,  
www.carlisleccw.com

**FIRESTOPPING** // Cavityrock from Rockwool,  
www.rockwool.com

**ROOF** // RubberGard EPDM from Elevate,  
www.holcimelevate.com

**MAKE-UP AIR UNIT** // Weather-Rite,  
www.weather-rite.com

**AIR-SOURCE HEAT PUMPS** // Mitsubishi  
Electric, www.mitsubishicomfort.com

**KITCHEN APPLIANCES** // Whirlpool,  
www.whirlpool.com, and GE Appliances,  
www.geappliances.com

**LIGHTING** // Acuity Brands, www.acuitybrands.  
com, and Spectrum Lighting Inc.,  
www.speclight.com

**INTERIOR DOORS** // JELD-WEN,  
www.jeld-wen.com



## Bruner/Cott Architects

worked closely with the maintenance team at Rivermark Towers to analyze the state of each apartment unit to create specific renovation plans. Work included new entry doors, air-conditioning and fan-coil units, flooring and ENERGY STAR appliances, including high-efficiency dishwashers.

rehabilitation of occupied multifamily buildings in historic urban neighborhoods and is uniquely positioned as a national model for adopting healthy building materials criteria in affordable housing.

The project achieved Enterprise Green Communities certification, a program aimed at transforming the quality of housing in the U.S. The interventions met criteria related to integrated design, site improvement, resource conservation, operational energy considerations and more. Achieving this certification was a result of the project's sustainable design approach and tenant involvement during design phases. "Residents provided feedback on early design schemes, as well as input regarding their needs as a community, helping to inform our approach to renovating the massive complex," notes Project Manager Shaun Dempsey.

Energy and water savings were critical components of the project's success, as well. Conservation measures include the exterior façade replacement with integration of air sealing and increased insulating performance, replacement of the central heating and domestic hot-water systems with high-efficiency condensing boilers and fan coil units in residences, a new cogeneration plant, new LED lighting, new central ventilation and more efficient ENERGY STAR appliances. Refurbishment of bathrooms and kitchens in the

units involved replacement of all toilets, faucet aerators, showerheads and dishwashers with high-efficiency models to reduce annual water consumption.

The estimated annual savings from energy- and water-conservation measures comprise:

- 2,970,120 gallons of water.
- 141,659 kWh of electricity.
- 7,053 THERMS of natural gas.
- \$92,500 in utility cost savings for residents.

Upon completion, Rivermark Towers was recognized in a national case study by the Boston Local Initiatives Support Corporation in partnership with the Massachusetts Department of Energy Resources, Massachusetts Clean Energy Center and RMI. The aim of the study was to broaden public awareness about successful sustainable investment models for large-scale housing, including transformative new energy- and water-conservation strategies that provide residents with lower costs of living while improving their comfort, health, and wellbeing.



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PHOTO: © OVAL ROOM GROUP

BRUNER/COTT  
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RIVERMARK TOWERS  
Cambridge, Massachusetts



For information and inspiration about how to use our products as you build the future for your customers, check out our state-of-the-art technical bulletins on our association website, [www.epdmroofs.org](http://www.epdmroofs.org).

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# CONCRETE RESTORATION

Overcladding Meets the Needs of Contemporary Housing in Toronto

WRITTEN BY | **KEN MASCHKE, PENG., P.E., S.E., LEED AP**

**M**any of the buildings constructed to meet the post-World War II population boom in North America are now in deep need of a retrofit. Typical residential towers of the era, like 191 and 201 Sherbourne in Toronto, included exposed structural concrete walls and single-pane windows. As a result of the buildings' long-term exposure in an urban environment, their concrete exteriors were in poor condition with cracks and loose spalls. To compete with newer rental properties, maintain structural safety, and align with Toronto's sustainability goals, the owners decided to revitalize the buildings' exterior and update the heating and cooling systems.

In collaboration with Zeidler Architecture Inc., Thornton Tomasetti's Building Science, Façade Renewal and Engineering teams helped to develop a plan that would bring the early 1970s vintage towers into the modern era while preserving their original Brutalist architecture. The project scope was generally divided into two main categories: concrete restoration and overcladding and window replacement.

## CONCRETE RESTORATION

Thornton Tomasetti initially performed a visual review of the exposed concrete from grade and a representative number of balconies. During this examination phase, the team selectively utilized an artificial intelligence algorithm developed in-house to identify and quantify spalled concrete areas. Upon identifying multiple falling hazards, a near-hand investigation and loose spall removal program encompassing the entire building façade was performed from swing stages.

With the information from this investigation, Thornton Tomasetti prepared drawings and

estimated quantities for concrete repairs to the balconies, exposed walls, and architectural roof structures. Elastomeric coatings were specified to coat and protect the balcony slabs and exposed walls to increase the long-term durability of the structure. The team also checked all balconies for slope away from the building and adjusted the coating buildup as required.

The repair project began as COVID-19 restrictions were in full effect. The contracting team, led by Buttcon, followed strict health and safety protocols but also had to navigate a nearly full house because many residents were required to work from home. Early into construction, the owner sought ways to reduce the noise and vibration caused by the concrete chipping, particularly at the balcony edges. The concrete restoration contractor, SST Group, secured a German-made pneumatic crushing device to demolish the deteriorated balcony edges. This equipment significantly reduced noise to the tenants and accelerated the restoration schedule.

Although portions of the plaza between the buildings were slated for redevelopment, Thornton Tomasetti participated in several efforts to identify and resolve leaks. This involved performing limited test pits in the plaza overburden and tracing water ingress. Fixes included a variety of waterproofing systems, crack injection technologies, mastic asphalt overlay on parking ramps and concrete patching.

## OVERCLADDING AND WINDOW REPLACEMENT

The envelope re-cladding consisted of a hybrid system with a curtainwall assembly in front of the existing masonry knee walls and a double-glazed,

argon-filled window above it. This strategy improved the buildings' thermal efficiency and protected the masonry knee wall and exposed slab edge from continuing deterioration. Overcladding and window replacements approximately halved the expected heat loss of the typical bedroom and living-room bays.

The two-part solution also considered that the building would be fully occupied during the renovation process and minimized the amount of time tenants would need to be displaced from their units. The curtainwall overcladding was installed from swing stages on the building exterior, reducing the need for entry into the tenant suites. Additionally, most of the window assembly was also hoisted into place using swing stages.

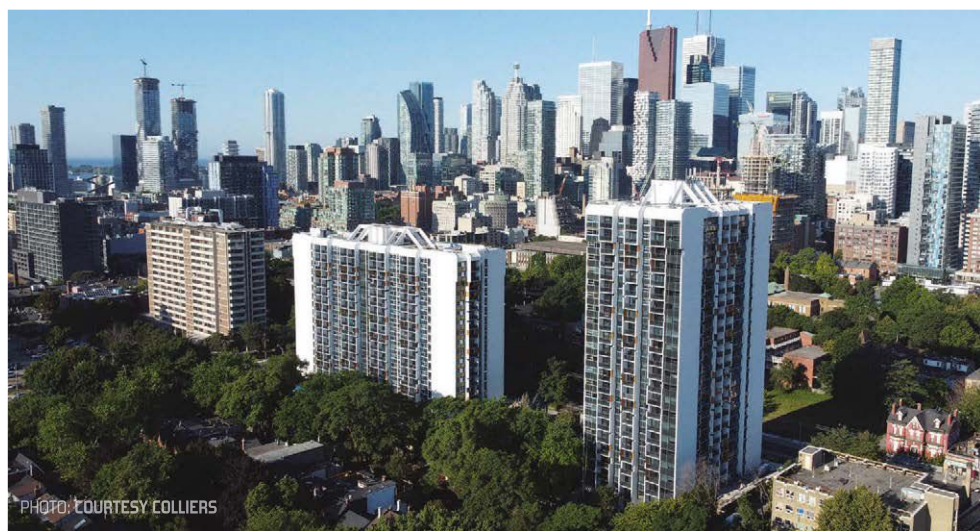
The existing windows were single-pane glass with operable sliders just above the knee wall. They had long since outlived their service life, exhibiting poor innate thermal performance, damaged seals and deteriorated sealant. Likewise, the original knee wall construction did not meet contemporary standards for cavity wall construction. The collar joint was filled with loose mortar, and there were no weeps above the slab edge. Upon removing the existing window, the team observed inconsistently applied mortar placed below the existing sill. In many locations, the knee wall masonry was badly deteriorated. However, reconstructing the knee walls would have been extremely costly and would provide little thermal benefit. Overcladding was a better solution.

The new curtainwall overcladding spans over the brick, protecting it from continued weathering without imparting any new loading and without creating negative changes in the hygrothermal performance of the assembly.

## Judge's Comment

“Great technical solution for an aging post-war product. The thermal updates were done not just with building preservation and energy efficiency in mind, but with a design aesthetic that reimagines the building for the next 50 years.” — Anthony Vivirito, Assoc. AIA, LEED AP, associate, The Architectural Team Inc.





Top: **201 Sherbourne Street**'s south elevation following concrete restoration and overcladding. Bottom: 191-201 Sherbourne Street with concrete restoration complete and overcladding in progress. Temporary plywood sheets provided at architectural balcony wall openings protected tenants from active swing stages.

## Retrofit Team

**METAMORPHOSIS  
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### STRUCTURAL ENGINEER AND BUILDING ENVELOPE CONSULTANT //

**Thornton Tomasetti,**  
[www.thorntontomasetti.com](http://www.thorntontomasetti.com)

**ARCHITECT //** Zeidler Architec-  
ture Inc., [zeidler.com](http://zeidler.com)

### GENERAL CONTRACTOR //

Buttcon, [www.buttcon.com](http://www.buttcon.com)

### CONCRETE RESTORATION

**CONTRACTOR //** SST Group, [www.sstgroup.ca/concrete-and-garage](http://www.sstgroup.ca/concrete-and-garage)

### WINDOW SUPPLIER, INSTALLER

// Stouffville Glass Inc.,  
[www.stouffvilleglass.com](http://www.stouffvilleglass.com)

## Materials

### ELASTOMERIC CONCRETE WALL

**COATING //** SIKa 550W from Sika  
USA, [usa.sika.com](http://usa.sika.com)

### ELASTOMERIC BALCONY

**COATING //** SIKa Sikalastic 735 AL  
Topcoat and Sikalastic 710 NP Base  
Coat from Sika USA, [usa.sika.com](http://usa.sika.com)

### ANTI-CORROSION COATING

**AND BONDING AGENT //** SIKa  
Sikatop Armatec 110 EpoCem from  
Sika USA, [usa.sika.com](http://usa.sika.com)

### CEMENTITIOUS REPAIR MORTAR

// SIKa Sikacrete-211 Flow Plus;  
MonoTop 623 (Overhead and Vertical  
Patch); and MonoTop 721 (Reprofiling  
Mortar) from Sika USA, [usa.sika.com](http://usa.sika.com)

### PUNCHED WINDOWS //

FeatureLine 990 from Alumicor,  
[alumicor.com](http://alumicor.com)

### CURTAINWALL //

VersaWall MidLine  
2200 from Alumicor, [alumicor.com](http://alumicor.com)

### GLAZING //

SunGuard AG50 and  
Crystal Gray from Guardian Glass,  
[www.guardianglass.com](http://www.guardianglass.com)

### SLIDING GLASS DOORS //

7000 Series from Clearview,  
[clearview.on.ca](http://clearview.on.ca)

### STOREFRONT //

FlushGlaze BF  
3400 from Alumicor, [alumicor.com](http://alumicor.com)

### EXTERIOR SEALANTS //

DOWSIL  
795 from Dow, [www.dow.com](http://www.dow.com)

### WEATHER BARRIER //

Blueskin  
SA from Henry, henry.com, and  
ExoAir 110 from Tremco,  
[www.tremcosealants.com](http://www.tremcosealants.com)

### GLASS GUARDRAILS //

Alugard,  
[www.alugard.ca](http://www.alugard.ca)



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The interface between the new windows and the curtainwall required unique detailing. To dissuade pigeons from resting on the ledge without using spikes, the design called for 45-degree sloped exterior flashing. A high-performing insulating blanket ensured the continuity of the insulation line within the tight space available at this joint. A weather barrier laps over the re-surfaced knee wall ledge and continues to the new curtainwall extrusion, creating a continuous barrier below the sloped transition. The window blocking was slightly recessed to permit a continuous sealant bead to tie the sill to the waterproofing without blocking the weeps. On the back side of the windowsill, a backing angle assisted with field positioning and provided structural fastening into the prepared concrete masonry unit substrate.

The designers iterated these flashing details with the window fabricator, Stouffville Glass Inc., through multiple mock-ups to ensure a constructible design. The process included developing a two-component exterior flashing that would accommodate deviations in elevation and plane exhibited in the existing construction.

The successful execution of this project required a holistic approach to evaluating envelope performance, including heat-transfer analysis; hygro-thermal analysis; evaluation of weighted thermal transmittance; and practical knowledge gained from coordination with the window fabricator, installer and product manufacturers.

The overcladding and concrete coating solutions significantly reduce future repair-cost exposure. The holistic design balances envelope performance with budget and constructability concerns to breathe new life in mid-century towers with long future life cycles. Overcladding Toronto's post-war apartment towers is an efficient, carbon-sensitive way to reduce operational emissions from the city's existing building stock.

Extending the lifespan of aging multi-unit residential buildings, using high-performing overclads, reduces the need for extensive demolition; it can be scaled to ensure the long-term livability of dense vertical communities. 



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# BUILDING A SIGN

A Bank Showcases Its Unconventional Ethos via Design of Its Building

**C**limate First Bank is a financial institution that challenges the status quo. In an era of rising sea levels, record-breaking heat days and increasing storms, Climate First Bank is taking our future into its own hands. The Winter Park, Fla., branch, designed by KMF Architects, has broken new ground in the banking, finance and client services world.

The newly renovated 2,000-square-foot location will be net zero and LEED certified. The concept is “building a sign”—using the architecture of the building to showcase the unconventional and inspirational ethos that is Climate First Bank.


The original brick façade is painted white to deflect the sun and reduce solar heat gain. Sixty bifacial panels of varying opacity wrap the building and act as a double skin that passively cools the building. The modern

clean lines seamlessly integrate panels into the existing context and become a metaphor for how sustainable living can be integrated into everyday life.

The existing roof has been re-covered with a highly reflective material and an additional 42 solar panels, further maximizing the bank's solar production.

Newly added ATMs are shaded with solar canopies, adding 12 more panels to the project.

Inside the building, the climate-focused concept continues with low-embodied energy, high-recycled content, long-term durability and renewable materials. Plants bring the outside in and help to eliminate air pollutants, boost moods and relieve stress. The open teller and lobby area contain modular furniture, which allows the space to be reconfigured.

This project is just one of the many impacts Climate First Bank is bringing to its central Florida community. 



Before



PHOTOS: KMF ARCHITECTS

## Judge's Comment

“Innovative use of technology for the now ubiquitous single-story community bank. Love that their team is forward-thinking about net zero and building in general. — Anthony Vivirito, Assoc. AIA, LEED AP, associate, The Architectural Team Inc.”

## Retrofit Team

METAMORPHOSIS  
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**ARCHITECT** // KMF Architects,  
kmfarchitects.com

**DESIGN BUILDER** // Collage  
Companies, www.collage-usa.com

**CIVIL ENGINEER** // Tri3 Civil  
Engineering Design Studio,  
tri3-eng.com

**STRUCTURAL ENGINEER** //  
Premier Structural Engineering,  
(407) 227-7416

**INTERIOR DESIGNER** //  
Ted Maines Interiors,  
tedmainesinteriors.com

**MEP ENGINEER** // SGM Engineer-  
ing, www.sgmengineering.com

## Materials

**SOLAR PANELS** // Lumos,  
lumossolar.com

**METAL PANELS** // Alfrex,  
alfrexusa.com

**ACOUSTIC CEILING TILES** //  
Armstrong World Industries,  
www.armstrongceilings.com

**RESILIENT WALL BASE** //  
Johnsonite and Tarkett,  
commercial.tarkett.com/johnsonite

**CERAMIC TILE** // Daltile,  
www.daltile.com

**LIGHTING** // Tech Lighting,  
v1.techlighting.com

**PLUMBING FIXTURES** //  
American Standard,  
www.americanstandard-us.com,  
and Just Manufacturing Company,  
www.justmfg.com/us/en.html

**STUCCO** // Titan America,  
www.titanamerica.com

**BELOW ROOF DECK OPEN-CELL  
SPRAY FOAM INSULATION**

// Huntsman Building Solutions,  
huntsmanbuildingsolutions.com

**DRYWALL** // Certainteed,  
www.certainteed.com/drywall

**PAINT** // Sherwin-Williams,  
www.sherwin-williams.com

**TUBULAR DAYLIGHTING  
DEVICES** // Solatube,  
solatube.com



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# COME IN AND STAY AWHILE

An Atrium Transformation Redefines a St. Louis Tower as a Premier Office Building

WRITTEN BY | AMANDA TRUEMPER, AIA, LEED AP BD+C

**T**he 2-story atrium lobby of the Broadway Tower—a 21-story office building constructed in 1975 that occupies an entire city block in downtown St. Louis—used to be a dark, outdated banking center with waiting areas and a wall of teller windows. A recent renovation has transformed it into a light-filled, high-tech gathering space designed for today's workers.

After acquiring the largely vacant building in 2020, Larson Capital Management invested \$16

million to revitalize the atrium and surrounding site. The company tapped Trivers, a St. Louis architecture, planning urban design and interiors firm—and longtime Broadway Tower tenant—to make interior and exterior upgrades to the building's atrium and the surrounding plazas. Known for its thoughtful renovation and adaptive-reuse projects, Trivers and the design team set out to reposition the structure as a premier office building destination.

## DESIGNING FOR THE FUTURE OF WORK

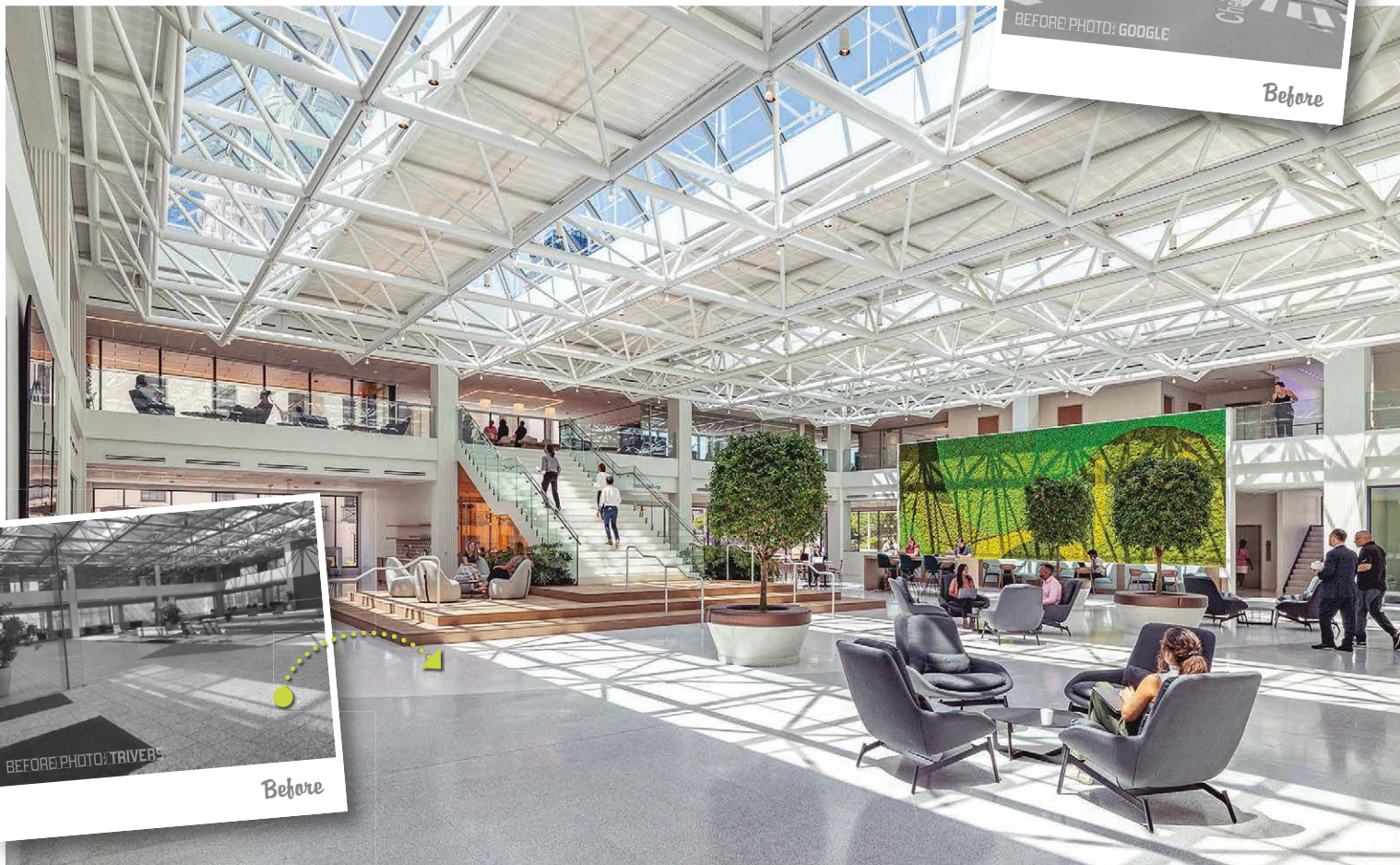
By the time planning for the Broadway Tower redesign began, the COVID-19 pandemic had already upended the way many Americans work. The number of people primarily working from home tripled between 2019 and 2021, according to the U.S. Census Bureau.

The sudden shift to remote work prompted many organizations to rethink the importance

PHOTOS: SAM FENTRESS unless otherwise noted









## Retrofit Team

METAMORPHOSIS  
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**ARCHITECT** // Trivers, [trivers.com](http://trivers.com)

**GENERAL CONTRACTOR** // Paric,  
[www.paric.com](http://www.paric.com)

**STRUCTURAL ENGINEER** // KPFF  
Consulting Engineers, [www.kpff.com](http://www.kpff.com)

**LIGHTING DESIGNER** // Reed Burkett  
Lighting Design, [rblldi.com](http://rblldi.com)

**LANDSCAPE ARCHITECT** // Arbolope  
Studio, [www.arbolope.com](http://www.arbolope.com)

## Materials

### EXTERIOR

**TERRA COTTA** // NBK, [nbkterracotta.com](http://nbkterracotta.com)

**EXTERIOR WOOD CEILINGS/  
PANELS** // Parklex Prodema,  
[parklexprodema.com](http://parklexprodema.com)

**DECORATIVE METAL** // Parasoleil,  
[www.parasoleil.com](http://www.parasoleil.com)

**PAVERS** // MBRICO,  
[www.mbricotiledecks.com](http://www.mbricotiledecks.com)

**STOREFRONT AND CURTAINWALL  
SYSTEM** // Tubelite, [tubeliteusa.com](http://tubeliteusa.com)

**ENTRANCE CANOPIES** // Kingspan Light  
+ Air, [www.kingspan.com](http://www.kingspan.com)

### INTERIOR

**MONUMENTAL STAIR** // Wausau Tile,  
[wausautile.com](http://wausautile.com), and Missouri Terrazzo,  
[www.missouriterrazzo.com](http://www.missouriterrazzo.com)

**PRESERVED MOSS WALL AND  
PLANTINGS** // Ambius, [learn.ambius.com](http://learn.ambius.com)

**WOOD FLOORING AT STAIR  
PLATFORM** // Teka Hardwood Flooring,  
[tekahardwoodflooring.com](http://tekahardwoodflooring.com)

**WINDOW SHADES** // Mecho,  
[www.mechoshade.com](http://www.mechoshade.com)

**INTERIOR COLUMN WRAPS** // Interlam,  
[www.interlam-design.com](http://www.interlam-design.com)

**ORANGE GLASS** // McGrory Glass,  
[mcgrory.com](http://mcgrory.com)

**DEMOUNTABLE PARTITION  
SYSTEM, SECOND-FLOOR**

**CONFERENCE ROOMS** // V.I.A. with  
Casper Cloaking Technology from Steelcase,  
[www.steelcase.com](http://www.steelcase.com)

**CARPET, INTERIOR WALKING TRACK** //  
Shaw Floors, [shawfloors.com](http://shawfloors.com)

**CARPET, CONFERENCE ROOMS** //  
Milliken, [www.milliken.com](http://www.milliken.com)

**WOOD FLOORS** // Boardwalk Hardwood  
Floors, [www.boardwalkhardwood.com](http://www.boardwalkhardwood.com)

**WOOD SLAT CEILING,  
SECURITY DESK** // Certainteed,  
[www.certainteed.com](http://www.certainteed.com)

**ACOUSTIC-TILE CEILINGS** // USG,  
[www.usg.com](http://www.usg.com)

of having physical space for their employees. In the wake of this uncertainty, it became imperative for Larson Capital Management, Trivers and the design team to create an environment that would tempt both companies and workers to return to the office. Envisioning what employees in a post-pandemic world would want and need in their workplaces—flexibility, best-in-class technology, connection to the outdoors and opportunities for wellness—informed the exterior and interior renovations that were made.

## ENTICING EXTERIOR

Trivers updated the atrium's façade and site to make it more attractive from the street and increase its compatibility with nearby landmarks, like the Old Courthouse and Gateway Arch National Park. First, greenhouse-like projections were removed from the building to increase the amount of natural light flowing into the space. Obtrusive, granite egress staircases were also cleared away from the site's south and southwest corners. Getting rid of the greenhouses and staircases added much-needed buffer space between the building and streets, creating room for outdoor areas for pedestrians and tenants, as well as more native plantings. To make the exterior even more inviting, contemporary and responsive to its context, the design team re-clad the atrium structure with a glazed terra-cotta rainscreen and new storefront glazing.

Before the renovation, just the building's west entrance was accessible at grade level. The only way to reach the east entrance was by climbing a set of stairs. To improve accessibility for tenants and visitors, the design team regraded the entire east plaza with a wide, sloped walkway and terraced landscaping.

Additionally, new glass canopy structures were incorporated into the east and west entrances. The design team added frosted glass curtainwalls adjacent to the entries to enhance visibility from the inside and outside of the building, exposing the existing egress stairways to natural light and making them more inviting for everyday use. These also provide a dynamic illumination opportunity for the exterior with color-changing façade grazing lighting.

## ACTIVATED INTERIOR

While the exterior is designed to attract people, the interior welcomes them and invites them to stay awhile. Huge, existing skylights and new windows not only provide enhanced urban views, but also an abundance of natural light, enabling people and interior plantings throughout the space to thrive. The atrium's preserved moss wall—the largest in the region—can be admired from far away or up close thanks to five large seating areas directly below it. Updated lighting is functional and decorative and

illuminates the building's newfound energy from the inside out.

A new, terrazzo-clad monumental staircase connects the first and second floors and leads to numerous opportunities for social interactions. A hospitality space for events, like happy hours and company lunches, sits at the top of the staircase. A nearby door leads to a new, covered outdoor terrace with stunning views of the Old Courthouse and Arch. With a mind toward tenant wellness, an indoor walking track wraps around the entire second floor of the atrium and leads to several best-in-class conference rooms and co-working lounges outfitted with the latest technology. A small conference room enclosed in orange glass is located directly beneath the staircase. In addition to offering a more intimate setting for meetings, it contributes an energizing pop of color.

Those who step onto the atrium's gleaming white floors will find plenty of plush furniture for relaxation or socializing. Individual tables act as dining areas or desks and provide space for tenants who need to focus on their own work or have a casual meeting away from their office in the tower above. There also is an area to purchase fresh, grab-and-go food and drinks and room for a new café with indoor and outdoor seating. This additional social and gathering space was made possible by moving the central security desk from the middle of the first floor to a location next to the elevator bays.

Like the outside, the inside responds to its context. Column finishes emulate the Old Courthouse next door, and natural materials, such as wood and stone, as well as the textiles' nature-inspired color palette, complement the atrium's indoor and outdoor features.

Attention to equity and accessibility completes the interior transformation. All-gender restrooms were added, and elevators on the east and west sides of the building were updated for improved visibility.

## WORTHWHILE INVESTMENT

The renovations were finished in late 2022, but they have already started to pay off for Larson Capital Management. Urban redevelopment innovators McCormack Baron Salazar recently moved into the building after years occupying another space only a few blocks away. As a longtime client, McCormack Baron Salazar entrusted Trivers with the design of its new 45,000-square-foot corporate office, now located on the first and second floors of the tower with direct access to the atrium's new amenities, which helped attract the firm to the building. Attention to sustainability, budget and design make its workspace an exceptional example of what now is possible within the reimagined Broadway Tower. 





**Broadway Tower** tenants will find plenty of plush furniture for relaxation or socializing in the redesigned atrium. Individual tables act as dining areas or desks and provide space for tenants who need to focus on their work or have a casual meeting away from their office in the tower above.

### Judge's Comment

“ Love the forward-thinking of this project. Reimagining the atrium into a modern-day we-work setting hits all the right notes in this prominent urban location. Clever, resourceful and imaginatively designed, this project has all the elements of a masterful transformation. — Anthony Vivirito, Assoc. AIA, LEED AP, associate, *The Architectural Team Inc.* ”

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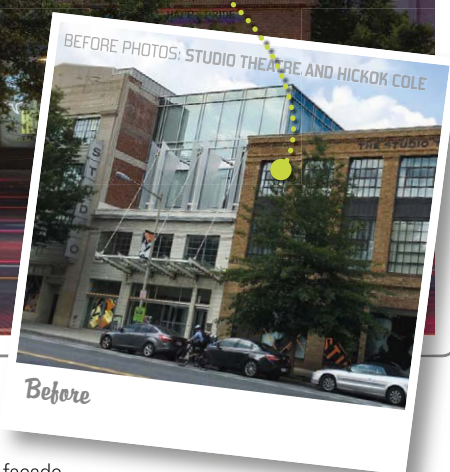


# A TRIUMPHANT RETURN

With a Limited Budget, a Contemporary Theater Becomes More Flexible and Welcoming



PHOTOS: SAM KITTNER  
unless otherwise noted



Studio Theatre is Washington, D.C.'s premier venue for contemporary theater and one of the most respected mid-size theaters in the country, serving nearly 75,000 people each year. Comprised of three connected structures, Studio Theatre was founded in 1978 and was due for a refresh. The organization sought to make significant upgrades that would activate its street presence and better support its long-term programming and production goals while visually uniting its three façades. The 14,859-square-foot renovation transforms the building's entry sequence, public spaces, and one of four theaters to deliver a branded and inviting visitor experience reflective of Studio Theatre's mission to foster a connected community.

With a limited budget achieved through a D.C. arts grant and a substantial portion of funds allocated to necessary mechanical and structural

upgrades, Studio Theatre and the project team underwent several rounds of value analysis to identify the most impactful solutions without compromising the original design intent. Because of its location in a historic district, the design process also required approvals from multiple local entities, including Historic Preservation Office, Advisory Neighborhood Commission, and Historic Preservation Review Board, to ensure the ultimate design changes respected the original building character and neighborhood context.

From the outset, Studio Theatre's owner's core objective was to engage the streetscape with a direct connection to the interior public space, which previously felt dark and mysterious. Composed of three several-hundred-year-old buildings, the renovation creates a more inviting visitor experience while preserving the raw character of the original design. A brilliant yellow, branded

façade, a 6-foot-tall marquee logo sign, and an 18-foot-high blade wayfinding sign at the corner of 14th and P Streets puts Studio Theatre back in the community spotlight. On the ground floor, an illuminated and customizable poster system replaces the static, etched window graphics.

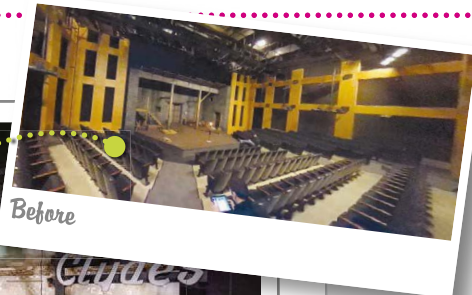
New glazing at the main entrance allows natural light to reach deep into the building's core. Paired with reconfigured programming, a brighter, more spacious lobby and reception area were created.

A freshly painted feature stair adorned with new display space for branded graphics invites guests to the second-floor lounge. Renovations to the lounge embrace the original, industrial



## Judge's Comment

“What is most notable is the tasteful rebranding of a community asset. In this way, elements of the past are seamlessly fused to this new expression.— Anthony Vivirito, Assoc. AIA, LEED AP, associate, The Architectural Team Inc.”



### Retrofit Team

ARCHITECT  
AND  
INTERIOR  
DESIGNER //

METAMORPHOSIS  
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Hickok Cole, [hickokcole.com](http://hickokcole.com)  
GENERAL CONTRACTOR //

Forrester Construction,  
[www.forresterconstruction.com](http://www.forresterconstruction.com)

MEP ENGINEER // James Posey  
Associates, [jamesposey.com](http://jamesposey.com)

STRUCTURAL ENGINEER //  
Silman, [www.silman.com](http://www.silman.com)

ACOUSTICS AND THEATER  
CONSULTANT // Charcoalblue,  
[www.charcoalblue.com](http://www.charcoalblue.com)

BRANDING // Pentagram,  
[www.pentagram.com](http://www.pentagram.com)

### Materials

MASONRY COATINGS // Keim  
Soldalit, [www.keim-usa.com](http://www.keim-usa.com)

ALUMINUM-FRAMED  
STOREFRONT // Frame from  
Kawneer, [www.kawneer.us](http://www.kawneer.us), and  
Glass from Viracon,  
[www.viracon.com](http://www.viracon.com)

METAL CEILING PANELS //

Armstrong World Industries,  
[www.armstrongceilings.com](http://www.armstrongceilings.com)


FLOOR TILE // Porcelanosa,  
[www.porcelanosa-usa.com](http://www.porcelanosa-usa.com)

WALL TILE // Daltile,  
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design by introducing modern finishes in high-traffic areas. The raw concrete floor has been exposed and underpinnings and I-beams are left visible. Exposed ceilings, preserved factory windows and uncovered fire-brick walls nod to the building's history. A new shelving system, white marble countertops, and seating banquettes rehabilitate the bar and lounge spaces.

The renovation transformed a former fixed-tier seating and stage arrangement into a flexible and agile black box theater—renamed the Victor Shargai Theatre—designed to support a variety of programming and theater types. The 2,750-square-foot theater was relocated to a larger space on the first floor for better visibility and accessibility. The new theater features a seating capacity of 215 and more than 300 standing—nearly double the capacity of its former design. Perforated screens surround three sides of the box, hiding acoustic and installation equipment, with the fourth, northern-facing side left raw.

Part of the renovation objective was to better accommodate the theater's impressive collection of equipment and make the back-of-house easier to navigate. Hanging 20-feet overhead, a new full-tension wire grid, supporting new lighting, sound, and projection technology replaces an outdated rigid and narrow catwalk system.

Mitigating acoustics was a core priority from the outset. In addition to eliminating street noise from the bustling 14th Street corridor, it was crucial to isolate noise inside the building, so multiple performances and events could occur simultaneously. Because the three buildings are connected, any movement in one would reverberate through the others. As a result, sound-absorbing and vibration-management solutions were implemented between and within buildings' structures while maintaining intended exposure of existing historic brick, terra cotta and plaster. 





# BUILDING GEOMETRY

In Boston, a Bold Addition Enhances an Existing Building's Look without Imitating It

WRITTEN BY | MICHAEL E. LIU, AIA, NCARB

Cities derive their identity and sense of place largely from their architecture. This is particularly true of historic cities, such as Boston. Attention is typically focused on landmark buildings associated with historic events or those best examples of the ornamented past. Often forgotten or thought of as expendable are the workaday industrial or office buildings or indigenous residential building forms that collectively create the fabric that gives historic cities their character and distinguish one neighborhood from the next.

The existing structure at 100 Shawmut, a 6-story Craftsman-style daylight garment factory and warehouse built circa 1915, was just such a building. The site is located in the northwest corner of a section of Boston now known as the Ink Block, a collection of contemporary high-rise office and residential towers, which transformed a formerly industrial area. The new neighborhood is vibrant and attractive but interchangeable in character with any contemporary urban neighborhood in any number of American cities.

This is why The Architectural Team Inc., the designers for the redevelopment of the 100 Shawmut site, resisted some voices in the architectural community that suggested yet another tear-down. The existing building was, the designers believed, a familiar local icon, an important punctuation of the easterly termination of the Ink Block and a gateway marker to the low-rise residential neighborhoods of the historic South End.

## NEIGHBORHOOD IDENTITY

When Davis, the developer, proposed site rede-

velopment, preservation and reuse of the existing building was not necessarily a consideration. In fact, Davis' track record of sophisticated and contemporary new development would suggest a tear-down and continuation of the new and forward-looking architecture of the Ink Block to the east.

However, Davis recognized The Architectural Team's argument that this site was different: The existing structure on the site was different; it played an important urban-design role in neighborhood identity. Nonetheless, an addition was required because the building could not provide sufficient square footage to support the new residential program and, from an urban-design standpoint, the development of lots to the east had changed and increased the scale of Herald Street. Something more substantial was called for at the corner, which an addition would provide.

Incorporating the existing historic structure into the design represented an opportunity to distinguish it from its contemporaries to the east while the extreme visibility of the site from the Massachusetts Turnpike presented an opportunity to showcase the architectural sophistication with which the client was associated. The challenge was how to preserve and reuse the existing building, as well as combine it with a modern, dramatic and eye-catching addition—a pairing that would honor the past while reflecting the future.

Simply repeating the form and fenestration of the existing structure, perhaps with some minor modification to subtly distinguish the new from old might have been a default approach to such an addition—an approach that might interpret any addition as an outgrowth of the existing

building. However, such an approach would lack the dramatic visual impact for which the location called. Instead, the solution developed a clearly contemporary glass and steel skin—the massing of which intentionally deviates from the orthogonal geometry of the 1915 building.

The addition is vertical and horizontal, tripling the square footage of the original structure. With the vertical addition of seven new floors over the existing 6-story building, plus an architecturally integrated mechanical penthouse, the combined 14 stories continue the height of the new neighborhood to the east.

The geometry of the addition creates angles which, when seen from the street, accentuate its perspective and make its profile more dramatic, providing a striking contrast between the old and new textures. The 1915 building, now framed in glass and steel stands out in a way it didn't previously. The delicacy of the glass and steel addition is likewise enhanced by its juxtaposition to the muscular brick façades of the 1915 structure. While each provides a foil to the other, they are also subtly, mutually referential with the façade of the new construction overlain with a simple rectangular window grid echoing the façade organization of the existing.

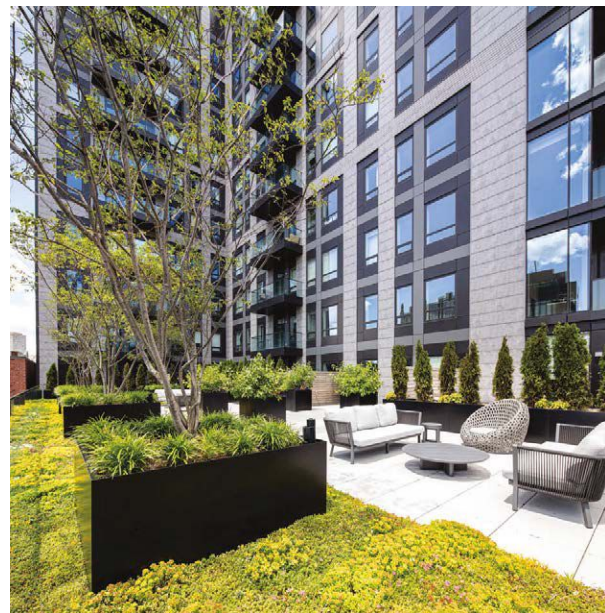
## MASTER PLAN

Aside from imagery, massing and textural considerations, 100 Shawmut was designed as the first phase and a key component in a three-parcel masterplan for the city block in which it sits. Approvals for the massing of the other two parcels—one the site of a future Chinese Evangelical Church and the other a future 300-unit

## Judge's Comment

“Phenomenal addition that encompasses a building that otherwise would have been landfilled. The envelopment of the original building was intentional throughout all aspects of this addition. The views of the building and from the building make a dramatic impact.— Elicia Feasel, preservation project manager, H.G. Christman Construction”





*A clearly contemporary* glass and steel skin intentionally deviates from the orthogonal geometry of the 1915 building. The addition is vertical and horizontal, tripling the square footage of the original structure.



## Retrofit Team

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**INTERIOR DESIGNER // Embarc Studio,**  
[embarcdesign.com](http://embarcdesign.com)

**GENERAL CONTRACTOR // Suffolk,**  
[www.suffolk.com](http://www.suffolk.com)

**LANDSCAPE ARCHITECT // Copley Wolff,**  
[copley-wolff.com](http://copley-wolff.com)

**CIVIL ENGINEER // Howard Stein Hudson,**  
[www.hshassoc.com](http://www.hshassoc.com)

**STRUCTURAL ENGINEER // McNamara Salvia,**  
[www.mcsal.com](http://www.mcsal.com)

**MEP/FP ENGINEER // WSP,**  
[www.wsp.com](http://www.wsp.com)

**ENVELOPE CONSULTANT // Simpson Gumpertz & Heger,**  
[www.sgh.com](http://www.sgh.com)

**GEOTECHNICAL ENGINEER // McPhail Associates,**  
[www.mcphailgeo.com](http://www.mcphailgeo.com)

## Materials

### Architecture

**REPLACEMENT BRICK // Stiles and Hart,**  
[www.stilesandhart.com](http://www.stilesandhart.com)

**THIN BRICK FOR PARAPET**

**RECONSTRUCTION // Thin Tech from Glen-Gery,**  
[www.glengery.com](http://www.glengery.com)

**MASONRY RESTORATION HELICAL TILES // Thor Helical,**  
[thorhelicalusa.com](http://thorhelicalusa.com)

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### Interiors

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**RECEPTION AND ENTRY CORRIDOR DECORATIVE LINEAR PENDANTS // Winston, Large, in Antique Brass from The Urban Electric Co.,**  
[www.urbanelectric.com/winston.html](http://www.urbanelectric.com/winston.html)

**COUNTERTOP // Silestone in Miami White from Cosentino,**  
[www.cosentino.com](http://www.cosentino.com)

**MAIL/RECEPTION AREA AND LOBBY FLOORING // Metropolitan Caliza from Porcelanosa,**  
[www.porcelanosa-usa.com](http://www.porcelanosa-usa.com)

**GREEN WALL // Cityscapes,**  
[bostoncityscapes.com](http://bostoncityscapes.com)

**CLUBROOM DECORATIVE CHANDELIER // Moonlight Murmuration from Ochre,**  
[ochre.us/Products/moonlight-murmuration](http://ochre.us/Products/moonlight-murmuration)

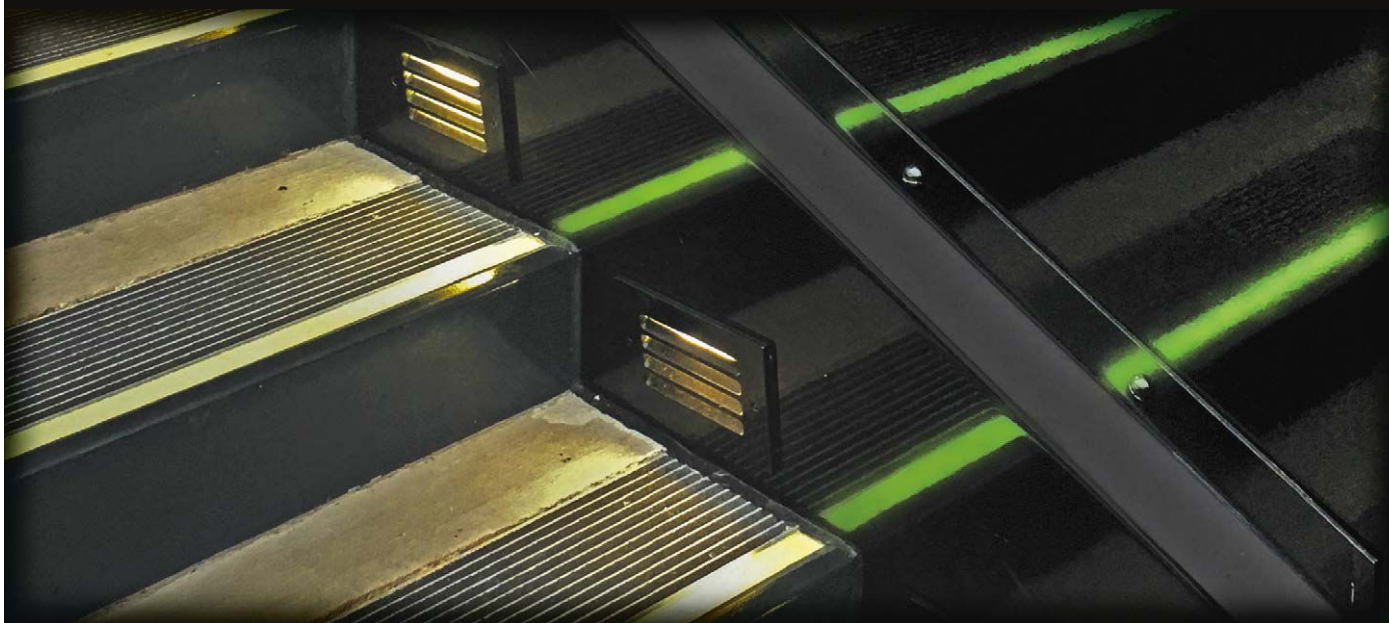
**CLUBROOM ACCENT COLUMNS // Sculptural Fluted Panel, Painted Finish, from Armourcoat,**  
[armourcoat.com](http://armourcoat.com)

**CLUBROOM COLUMN SCONCES // Covet Wide Clip Sconce in Antique Burnished Brass with Alabaster Shade from Visual Comfort & Co.,**  
[www.visualcomfort.com](http://www.visualcomfort.com)

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affordable housing and retail development—were sought and obtained along with approvals for the 100 Shawmut site. Together, the design of the three buildings provide a system of pedestrian promenades across and through the block linked to an interior public landscaped open space and sculpture garden.

Although the project did not seek federal historic tax credits, the zoning process required approval by the local historic commission, which was particularly concerned that any addition avoid blurring the reading of the 1915 structure, particularly its parapet profile. Such concerns were greatly alleviated by the contrast provided by the contemporary skin and geometry of the addition.

Some selective demolition of the existing structure was required to accommodate and idealize the residential building geometries, though such demolition is not visible from any public way. The vertical addition is supported by steel columns threaded through the 6 stories and basement of the existing building with a new concrete stair and elevator core providing lateral stability. Replacement windows in the 1915 building were designed such that vertical mullions could receive interior partitions to accommodate unit space planning.

The redevelopment of the 100 Shawmut Avenue site and the 1915 historic building, which occupies it, provided 138 new residential condominium units and 111 parking spaces. The

architectural solution combines a contemporary new-construction addition with the adaptive reuse of an early 20th century manufacturing building in a way that celebrates both in the contrast of architectural expressions. 



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# ON BROADWAY

PHOTOS: WHITNEY LOX AND ADRIAN WILSON  
unless otherwise noted

## A Beloved Theater Is Equipped for a New Era of Performances

WRITTEN BY | LENA DAU-PING FAN, AIA, AND GARY LI, AIA, LEED GREEN ASSOCIATE, NCARB

One of the oldest Broadway theaters in Manhattan, the landmarked James Earl Jones Theatre (formerly Cort Theatre), designed by Thomas Lamb in 1912, was struggling to meet the needs of a 21st century audience and theatrical productions. By acquiring a 25-foot-wide adjacent property, rezoning a series of nearby lots with the city's Uniform Land Use Review Procedure application and securing a Theatre Rehabilitation Bonus, a once-in-a-lifetime opportunity became possible for The Shubert Organization, which owns the theater.

Kostow Greenwood Architects' design goal was to improve the theater-going experience for the patrons and performance experience for the cast and crew by enhancing theater functionality. The challenge was to design and build a new structure with only 35 feet of street frontage, including the adjacent property and an alley, and extending back 100 feet, wedged between a landmarked building to the south and new hotel construction to the west of the property.

Ultimately, The Shubert Organization completed a \$47 million major restoration and expansion project for the James Earl Jones Theatre. In addition to historic refurbishments to the interior and rehabilitation of the NYC historic landmark's façade, the venue now includes an annex, which greatly adds to the modernized experience.

### ANNEX DETAILS

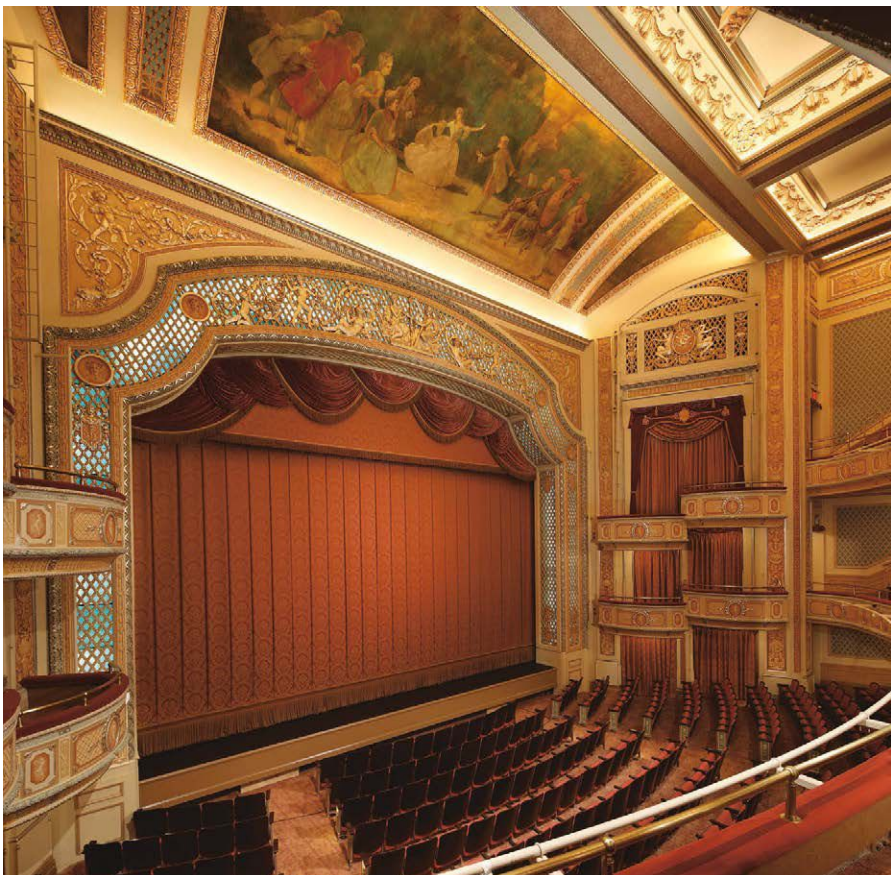
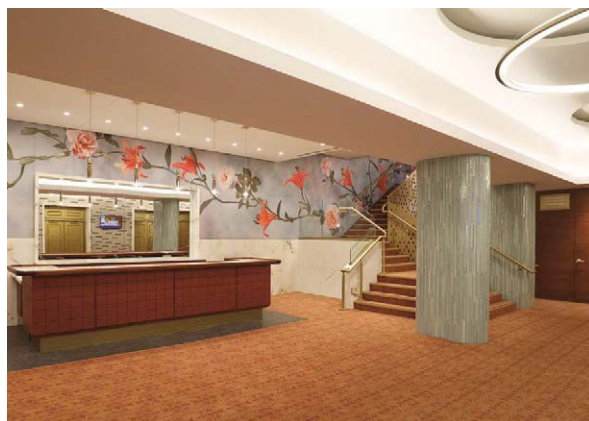
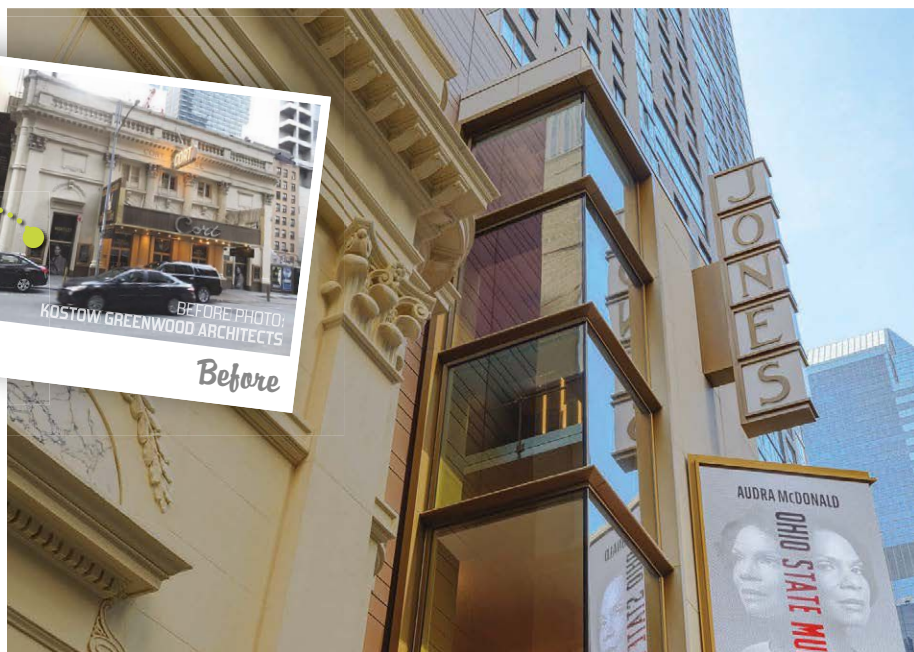
Alongside the historic main theater, the new annex was intentionally designed to complement and showcase the historic façade of the existing building.

The intention was to refresh the historic theater finishes, relocate program elements (audience amenity functions and back-of-house support spaces) into the new annex and upgrade the stage technology. One of the largest design challenges was the need to structurally stabilize the historic theater, minimizing the available space on the annex lot. However, by working hand-in-hand with

The Shubert Organization, optimal program sizing was determined to maximize usage and efficiency. Overall, there was a 400 percent increase in audience amenities, 50 percent increase in front-of-house support and 135 percent increase in back-of-house support square footage.

Because the 1912 structure is a landmarked building, it was critical to design a façade for the new annex that would highlight and take cues from the historic façade. Many meetings were held with the local community board to generate a design that respected the historic theater and integrated with the surrounding context. The annex is set back along the original property line to create a clear distinction between the historic and new. The lifted volume is designed with a proportion to match one bay of the existing façade where new floor-to-ceiling windows provide views, highlighting the historic corner detail of the original structure. The annex's terra-cotta finish was selected as a more sustainable material and matched the historic stone façade finish.





### Judge's Comment

“ Great sneaky contrast of old and new. Integration with the sidewalk and old façade is excellent. — Joel Anderson, AIA, LEED AP BD+C, design director, associate principal, Cushing Terrell ”



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The views from the annex to the street scene are dynamic, even with the limited footprint. Five strategically placed corner windows, measuring 8 feet in height and width, and a through-block pedestrian courtyard across the street allow for views in between neighboring buildings. The windows are strategically located so the elements of the historic façade can be seen closeup when traversing the internal monumental Grand Staircase that connects all levels of the annex.

### MARRYING THEMES

Marie Antoinette was the theme and inspiration for the existing building, so it was fitting to create a custom-designed, 5-story mural around the annex's Grand Staircase with a fleur-de-lis-inspired guardrail and a custom-designed, tensioned linear tube chandelier. The mural features a Marie Antoinette cameo at the base along with her favorite flowers spiraling upward. There is a continuous link between the two buildings from a Marie Antoinette bust in the ticket lobby, to the blue backlit proscenium glass, to a mural in the garden above the proscenium, to the 5-story mural in the annex. The light blue-sky background recalls the theater frescoes that depict the gardens of Versailles, alluding to the fact that the Petit Trianon at the Palace of Versailles inspired the classic exterior of the historic theater, and architecture from the period of Louis XVI inspired its interior.

Complementary materials were introduced in the annex to echo the interiors of the historic theater, including bronze/brass, marble, brick, carpet, acoustic wood paneling and upholstery. Energy-efficient light fixtures were placed throughout and dim for different scenes and intermission warnings. Signage was specially designed to add historic character to the more modern lounge area.

The reopening of the James Earl Jones Theatre, in recognition of Jones' lifetime of immense contributions to Broadway and the entire artistic community, represents The Shubert Organization's first major theater expansion project in decades.


Jones' Broadway career began in 1957. In 1958, he played his first role at the Cort Theatre in "Sunrise at Campobello". During the next six-and-a-half decades, Jones rose to star in countless stage and screen productions, including 21 Broadway shows, becoming one of a small number of lifetime Emmy, Grammy, Oscar and Tony winners. His Broadway career has culminated in the renaming of the Cort Theatre as the James Earl Jones Theatre.

### BACK OF HOUSE

The back-of-house spaces were designed for flexibility. The star dressing rooms are linked by common doors, allowing rooms to be combined into a single suite. The wardrobe and chorus rooms are larger open areas that can be adapted and reconfigured for future show needs. The rehearsal space is sized to match the stage but also can be used as an event or meeting space.

Two new, dedicated HVAC systems were included to service the stagehouse and back-of-house spaces. These upgrades, along with a new accessible elevator and modern AV equipment, allow for the presentation of more modern, technically demanding productions with larger casts.

The project's approach to sustainability was to offset the energy inefficiencies of the existing theater and improve on the human comfort and wellbeing of the occupants. By maintaining and upgrading the existing 100-plus-year-old theater, the overall potential carbon footprint of the project was reduced greatly and allows the building to survive for another 100 years as a state-of-the-art venue. However, because of its age and landmark status, energy improvements proved difficult. New dedicated mechanical systems were installed, but adding insulation to its uninsulated walls was not feasible. As such, the new annex is designed to be a high-performance shell with efficient building systems and materials.

The transformed James Earl Jones Theatre is now home to a multi-functional facility capable of accommodating new performance types. The landmark also is a great addition to the neighborhood and Broadway theater community as a whole. 



## Retrofit Team

### ARCHITECT, INTERIOR ARCHITECT AND MURAL DESIGNER //

**Kostow Greenwood Architects,**  
kostowgreenwood.com

**RESTORATION ARCHITECT //** Francesca  
Russo Architect, www.francescarusso.com

**M/P/FP ENGINEER //** Pavane & Kwalbrun  
Consulting Engineer, (212) 727-3408

**FA/E ENGINEERS //** Omnitech Engineering,  
(347) 233-2767, and M. Chetrit Consulting  
Engineers, (212) 764-5637

**STRUCTURAL ENGINEER //** McLaren  
Engineering Group, www.mgmclaren.com

**GENERAL CONTRACTOR //** JRM  
Construction Management,  
www.jrmcm.com

**ACOUSTICAL ENGINEER //**  
Acoustic Distinctions,  
www.acousticdistinctions.com

**LIGHTING CONSULTANT //** Schuler Shook,  
schulershook.com

**THEATER LIGHTING, CONTROLS //**  
Barbizon Lighting Company,  
www.barbizon.com

## Materials

**CARPET //** Bloomsburg Carpet,  
bloomsburgcarpet.com

**BAR PENNY TILES //** Nemo Tile,  
www.nemotile.com

**LIGHTING //** Santa & Cole,  
www.santacole.com, and Lee Broom,  
www.leebroom.com

**ACOUSTIC CEILING TILE //** Decoustics  
from Certainteed, decoustics.com

**GLASS-TILED COLUMNS //** Walker Zanger,  
www.walkerzanger.com

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## ARCHITECT AND INTERIOR DESIGNER //

Hickok Cole, [hickokcole.com](http://hickokcole.com)

## GENERAL CONTRACTOR //

Davis, [www.davisconstruction.com](http://www.davisconstruction.com)

## ENGINEER //

Arup, [www.arup.com](http://www.arup.com)

## Materials

## MASS TIMBER //

Mercer International, [mercerint.com](http://mercerint.com)

## CURTAINWALL //

Frame from Erie Architectural Products, [www.erieap.com](http://www.erieap.com), and Glass from Viracon, [www.viracon.com](http://www.viracon.com)

## TERRA COTTA //

Terreal, [www.terrealna.com](http://www.terrealna.com)

## ELEVATOR //

Otis, [www.otis.com](http://www.otis.com)

## GREEN ROOF //

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## NEW IN TOWN

## Mass Timber Sets a D.C. Office Building Apart, Is a First for the Code Authority

**80** M Street is the first-ever mass timber renovation of a commercial office building in Washington, D.C. Located in the Navy Yard, the project adds 107,000 square feet, or three floors, constructed primarily of mass timber and glass curtainwall to the existing 7-story, 265,000-square-foot building.

At 128-feet-tall, 80 M Street fell below D.C.'s height limit, and owners of the high-performing building sought to maximize its vertical density. The decision to use mass timber was driven by multiple factors, chief of which was its light weight. Recognizing its value as a differentiator within the highly competitive D.C. office market, the owner and project team entered an exploration period.

Given mass timber's novelty, the extension design underwent a thorough vetting process before it was approved by D.C. code authority. A critical focus was the structure's connections

because of a lack of fire-tested connections on the market. The structural and fire engineers developed new concepts for custom-concealed, two-hour-rated mass timber connections, a consideration not addressed prescriptively within code. The timber design-assist contractor further detailed and tested the custom connections to secure final approval. Close collaboration with local code officials helped establish an alternate compliance path to allow mass timber to be used within the current permitting process. As a result, CLT was accepted as floor panel under IBC 2021. A hybrid solution combined construction types IV-C and IV-B to address the project's unique position of only being 3 stories of timber but exceeding the allowable 85-foot height limit for construction type IV-C.

The result is a one-of-a-kind office experience. Terra-cotta wall panels and painted metal exterior elements complement the existing brick façade of



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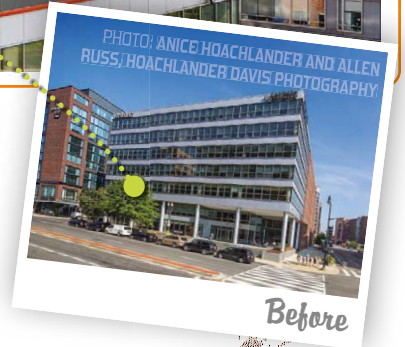


the original floors while adding a pop of color that ties in with the neighborhood's bold design aesthetic. A new canopy structure hangs above the top floors to shield the interior from southern sun exposure. The building's faceted aluminum soffit battens, visible from street level, are designed to look like wood while adhering to fire-safety protocols.

Two new levels of Trophy Office space feature exposed natural wood and 16-foot-tall slab-to-slab

heights, improving depth of light penetration by almost 200 percent. On the new eighth floor, a portion of the exterior glass line steps back to create a private tenant terrace. A third penthouse level offers a combination of private office and shared amenity spaces.

80 M Street incorporates approximately 1,400 tons of mass timber, which took just eight weeks to install. 



### Judge's Comment

“ Innovative use of CLT to blend with a more traditional non-descript glass office building. The corner façade is cleverly peeled back from the rectilinear massing to create a moment. The façade transition is done simplistically but effectively to maintain the rhythm of the fenestration and city block. — Anthony Vivirito, Assoc. AIA, LEED AP, associate, The Architectural Team Inc. ”



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# FOSTERING EXCELLENCE

A Boathouse Rehabilitation Underscores the University of Pennsylvania's Values while Showcasing Its Legacy

WRITTEN BY | **ANDREW DONALDSON-EVANS, AIA, LEED AP**

**B**oathouse Row, located along a scenic stretch of the Schuylkill River, is one of Philadelphia's most cherished landmarks and includes the Burk-Bergman Boathouse, home to the University of Pennsylvania's three varsity rowing programs. Constructed in 1874, it is one of the oldest boathouses in the country. However, the facility has not been able to keep pace with the program's demands and needed a comprehensive renovation to help Penn Rowing meet its full potential.

The rehabilitation and reuse of the boat-house represents the most significant individual

investment by the university in preserving and augmenting a key cultural structure. At the start of the project, EwingCole's design team, working with the university's leadership in Facilities and Athletics, recognized the outsize importance of its success. It would bolster Penn athletics and recruiting, but—just as importantly—it would also help protect Boathouse Row's legacy and affirm Penn's past, present and future contribution to the sport of rowing in Philadelphia.

**MAINTAINING THE SPIRIT OF ROWING**  
In many ways, the historical significance of the

## Retrofit Team

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AWARD WINNER!**

**ARCHITECT // EwingCole,**  
[www.ewingcole.com](http://www.ewingcole.com)

**STRUCTURAL ENGINEER //**  
Keast & Hood, [keasthood.com](http://keasthood.com)

**HISTORIC PRESERVATION CONSULTANT**

// SBK + Partners LLC, [www.sbkpartners.net](http://www.sbkpartners.net)

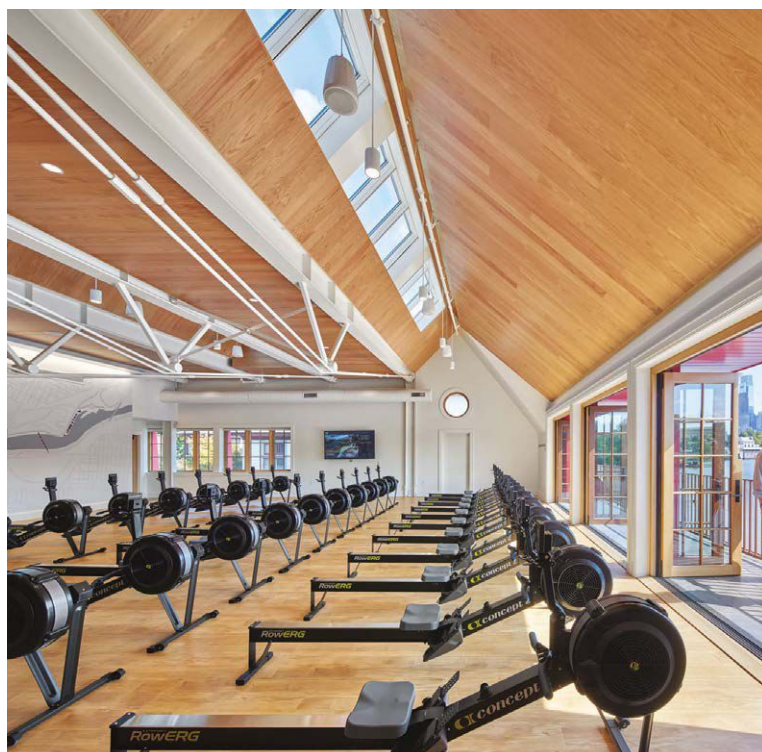
**CONSULTING ENGINEER //** Pennoni,  
[www.pennoni.com](http://www.pennoni.com)

**GENERAL CONTRACTOR //**

Target Building Construction,  
[www.targetbuilding.com](http://www.targetbuilding.com)

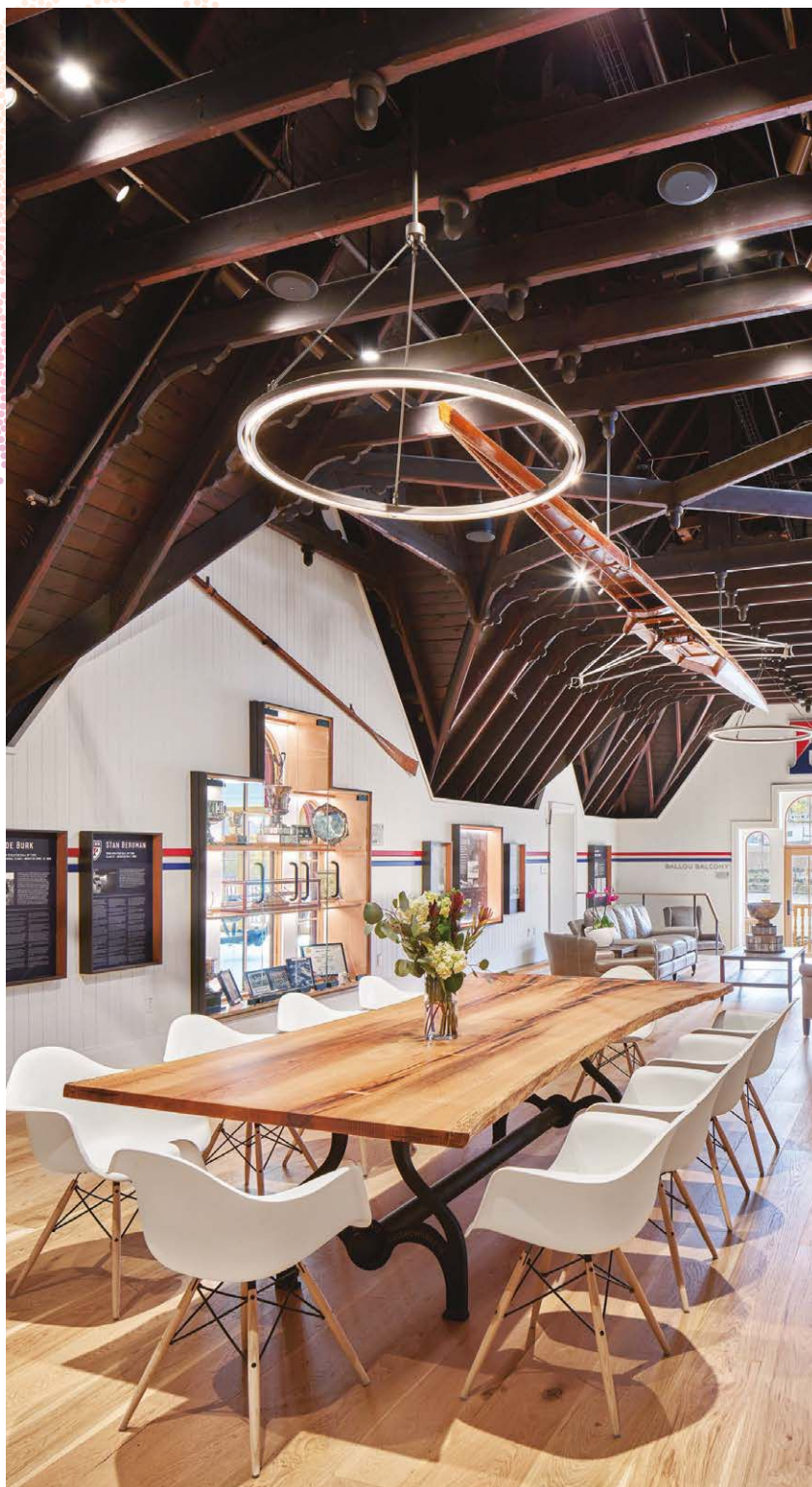






*Several elements* of the renovation are given new purpose and become focal points of the design. For example, the grand hall features the historic vaulted ceiling and a massive team table made from a stout oak tree that had been in front of the boathouse on Kelly Drive but couldn't be saved. The new ERG room (bottom left) has been expanded to accommodate larger workouts and host special events.





project site along Boathouse Row in Philadelphia needs little explanation. Boathouse Row provides an indelible experience for visitors and residents alike as part of a continuum of scenic points of interest along the river. Not only are the image and experience of the place remarkable, but it also is the spiritual heart of the sport of rowing in America.

Beginning with a feasibility study in 2018, EwingCole explored myriad planning and design options that met Penn's programmatic needs for a modern rowing facility within the site's constraints and historic fabric. Penn's boathouse was built in 1874, with additions constructed in 1920, circa 1930 and 1980. The study and subsequent project design were based on the university's wide array of goals: increase functionality and usable space, bolster recruiting and showcase Penn Rowing, balance the amenities allocated for men's and women's rowing programs, improve accessibility for all occupants, provide space for socializing and special events, remediate deterioration of the structure and create a resilient facility for future use, and preserve and rehabilitate a historic landmark.

The boathouse design itself visibly demonstrates Penn's commitment to equity and inclusivity in several ways. The owner's desire to create an equitable facility was not window-dressing; it is deeply reflected in the design, impacting the plan configuration and the technical resolution of the reimagined boathouse interior. The message this creates is a refreshing update within the historical context of the building.

## HISTORIC ELEMENTS

The design takes care to respect the historic exterior of the structure while completely renovating and modernizing the interior. Various features were replaced or reconstructed with interpretations based on historic photographs and drawings yet designed to meet modern requirements. The shed dormers facing the river, for example, on the 1930 and 1980 additions were modified to create discrete, inset balconies, thereby giving occupants a chance to step outside and survey the dock and waterway from the second floor—an amenity that each of the other 15 historic boathouses along Boathouse Row has. The boat bay garage doors facing the river were replaced with new overhead doors made of fiberglass, which will protect against weather and flooding. They were designed to reference the three-panel wood doors evident in early photographs.

The balconies facing Kelly Drive on the original structure were lost or replaced several times from 1874 to 1930 and had long since been absent. The balcony element was reconstructed because the façade was being upgraded with wood windows to replace aluminum inserts from the 1980s and the masonry was being repaired and repointed.

## Judge's Comment

“ Love the simplicity and elegance of this one. An emphasis was given to keeping the existing structure and form and working with these materials. The effect is similar to what one imagines would be like inside the hull of one of the boats themselves!— Anthony Vivirito, Assoc. AIA, LEED AP, associate, The Architectural Team Inc. ”



## Materials

**WINDOWS, DOORS //** Marvin, [www.marvin.com](http://www.marvin.com)

**GARAGE DOORS //** Fimbel Garage Doors, [www.fimbel.com](http://www.fimbel.com)

**ROOFING //** GAF, [www.gaf.com](http://www.gaf.com)

**WOOD CEILING //** Certainteed, [www.certainteed.com/ceilings-and-walls](http://www.certainteed.com/ceilings-and-walls)

**FLOORING //** Urbba, [www.urbba.com](http://www.urbba.com), and Mannington, [www.mannington.com](http://www.mannington.com)

**LOCKERS //** Hollman, [hollman.com](http://hollman.com)

**BOAT RACKS //** Focus Rack Systems, [www.focusracks.com](http://www.focusracks.com)

**TILE //** Garden State Tile, [gstile.com](http://gstile.com)

**INTERIOR DOORS //** VT Industries, [www.vtindustries.com](http://www.vtindustries.com)

**COUNTERTOP //** Wilsonart, [www.wilsonart.com](http://www.wilsonart.com)

**DECORATIVE LIGHTING //** Restoration Hardware, [rh.com](http://rh.com), and Louis Poulsen, [www.louis poulsen.com](http://www.louis poulsen.com)

**STAIR //** Crescent Iron Works, [www.crescentironworks.com](http://www.crescentironworks.com)

**LIVE EDGE TABLE, BENCHES //** Walnut Road Hardwoods, (833) 492-5688

**Reconfigured** program spaces include a soaring entrance lobby, featuring trophies and memorabilia.



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AWARDS**

*Winner*

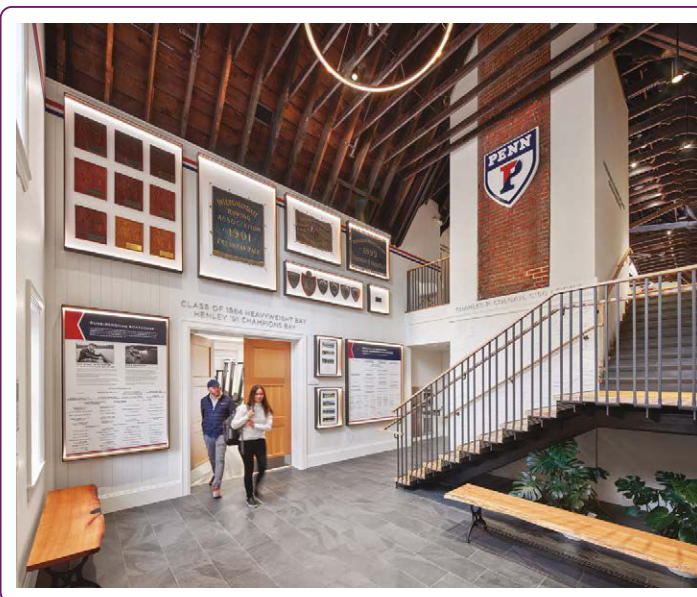
The design team leveraged scant photographic evidence and some rudimentary digital forensics to design a new balcony in a manner sympathetic to the style of the earliest balcony. Reconstructed balconies on both sides of the 1874 building were fashioned out of mahogany and steel for longevity but designed to meet modern code requirements for life-safety and structural performance.

While much of the interior renovation involved significant reconfiguration of partitions, finishes and even structural framing, little was original to the boathouse and its additions. The design team recognized the importance of preserving historical elements wherever possible, adapting the design to incorporate them. Several elements of the renovation are given new purpose and become focal points of the design. Reconfigured program spaces include a soaring entrance lobby and grand hall, featuring trophies and memorabilia, lounge and meeting area with integrated AV, historic vaulted ceiling and a restored balcony overlooking the river. Expanded to accommodate larger workouts and host special events, a panoramic view of the river enhances the new ERG room and skylights provide ambient daylight. An exposed structural system reinterprets the building's historic king post trusses.

Improved boat storage, a maintenance room and modernized locker rooms, coaches' rooms and additional support space create a true home for Penn Rowing. Equal space for men and women athletes and a new elevator providing ADA access to the second floor make the building a reflection of Penn's values and mission of inclusion and opportunity and a showcase for its legacy. The design team replanned access to the ERG room, restored and transformed the damaged exterior façade into a dynamic remnant of the old boathouse, and turned the windows into a two-sided display case for trophies and awards.

## CIRCLE OF LIFE

Other examples of adaptive reuse of historic fabric, while unconventional, include three natural-edge oak benches and a substantial natural-edge oak slab conference table. Prominently occupying the entry hall and grand hall, these furniture pieces are made from swamp oak, a subspecies of red oak. The source of this wood was a stout oak tree in front of the boathouse on Kelly Drive, which was intended to be saved during early iterations of the design process. After an examination of the root system by arborists, it was determined that disease and soil conditions put the tree at risk of falling. The tree's caliper width, following rules of the Fairmount Park Commission, was replaced with an equivalent dimension of new trees planted elsewhere in the park. Still, a large section of the oak's trunk was able to be salvaged, kiln-dried and cut into large slabs suitable for use as furniture. Thus, the stately oak tree, which once provided shade and a place to rest outside the entrance to the boathouse, finds new life as a massive team table, a centerpiece within the boathouse and a hub for activity and community.



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# BACK TO SCHOOL

An Apartment Community for Active Seniors Is Built within a Former School



Listed on the National Register of Historic Places, Mary E. Wells School was designed by the renowned Boston-based architectural firm Peabody and Stearns and built in two major phases between 1916 and 1923. A modest addition was constructed to the rear of the building in the 1980s.

As the first public high school in Southbridge, Mass., it functioned continuously as an educational resource for nearly a century until it was vacated in 2012. The historic structure sat dormant until 2020 when WinnDevelopment began the adaptation of the 117,655-square-foot building into Residences at Wells School, a \$25.3 million mixed-income community comprised of 62 one- and two-bedroom units for active seniors 55 and older.

The portion of the building constructed in 1916 featured classic Peabody and Stearns architectural details, including brick and double entrances and ornamental cast-stone door surrounds. The 1923 U-shaped addition created a generally rectilinear plan with a lightwell at the center of the building, providing light and air to interior spaces. The western addition, completed in 1985, contained the gymnasium, auditorium and cafeteria.


Recognizing historic schools are well-suited for adaptation to residential use with minimal structural changes, the design team strategically optimized:

- Open classroom spaces, comparable in size with standard apartment units.
- Large, oversized windows, providing ample natural light.
- Double-loaded central hallways, creating design efficiencies for multifamily programming.
- High ceilings, which provide daylight and generous room for ductwork.
- Thick walls offer much-needed insulation and a strong structural barrier.

The school's historic character was thoughtfully restored, preserved and replicated. For example, the windows prior to renovation were not original and were replaced with ENERGY STAR-certified, insulated, frosted glass panels, designed to replicate the windows featured in historic images of the building. The building's doors were replaced with historically accurate paired doors with wide rails and stiles framing central glazed components. Other original details are featured throughout the building, including exposed brick

walls, school lockers, gymnasium floor in the resident lounge and fitness spaces, and the sports scoreboard is an ornamental fixture. A robust suite of amenities includes a fitness and yoga studio, library with private work pods, a children's play area and a generous interior courtyard.

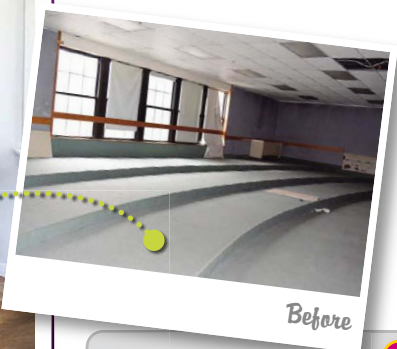
Through intentional design strategies, the project achieved Enterprise Green Communities Certification, a U.S. standard for the design, construction, and operation of healthy, energy-efficient and environmentally responsible affordable housing. The sustainable design program improved the building's thermal structure, envelope density and air infiltration system through various approaches.

Older populations face numerous housing challenges, including those related to affordability, physical accessibility, and access to medical and other services. The adaptive reuse of the Residences at Wells School is a promising redevelopment and design strategy aimed at addressing this problem. The property has an annual budget for resident services, including a part-time onsite service coordinator to engage residents around medical care, education, socialization and community participation. 





PHOTOS: GREGG SHUPE unless otherwise noted



Before

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AWARD WINNER!**

## Retrofit Team

**DEVELOPER //** WinnDevelopment,

[www.winncompanies.com](http://www.winncompanies.com)

**CO-DEVELOPER //** Arch Street

Capital, [archstreetcapital.com](http://archstreetcapital.com)

**ARCHITECT //** The Architectural Team  
Inc., [www.architecturalteam.com](http://www.architecturalteam.com)

**GENERAL CONTRACTOR //** Keith  
Construction, [keithconstruction.net](http://keithconstruction.net)

**HISTORIC CONSULTANT //** MacRostie  
Historic Advisors, now Ryan, [ryan.com](http://ryan.com)

**ENGINEER //** Loureiro Engineering,  
[www.loureiro.com](http://www.loureiro.com)

## Materials

**RESILIENT FLOCKED FLOORING //**

Forbo, [www.forbo.com](http://www.forbo.com)

**VINYL BASE AND RUBBER STAIR**

**TREAD //** Johnsonite,

[commercial.tarkett.com/johnsonite](http://commercial.tarkett.com/johnsonite)

**PAINT //** Sherwin-Williams,

[www.sherwin-williams.com](http://www.sherwin-williams.com)

**WALL TILE //** Nemo Tile,

[www.nemotile.com](http://www.nemotile.com)

**LAMINATE //** Formica,

[www.formica.com](http://www.formica.com)

**ACOUSTIC CEILING TILE //**

Armstrong World Industries,

[www.armstrongceilings.com](http://www.armstrongceilings.com)

**FIREPLACE //** Heat & Glo,

[www.heatnglo.com](http://www.heatnglo.com)

**WIRE MANAGEMENT, GROMMET //**

Mockett, [www.mockett.com](http://www.mockett.com)

**APPLIANCES //** GE Appliances,

[www.geappliances.com](http://www.geappliances.com)

**FIXTURES //** Moen, [www.moen.com](http://www.moen.com);

American Standard, [www.americanstandard-us.com](http://www.americanstandard-us.com);

and Elkay, [www.elkay.com](http://www.elkay.com)



**The modern units** feature ENERGY STAR-certified, insulated, frosted glass panels, designed to replicate the windows featured in historic images of the building. Original details, like the gymnasium floor in the resident lounge and the sports scoreboard, were maintained.

## Judge's Comment

“Discussion of aging school conversion into housing should be a narrative in itself. Well done. — Joel Anderson, AIA, LEED AP BD+C, design director, associate principal, Cushing Terrell”



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## HISTORIC Honorable Mention



PHOTOS: GARRETT ROWLAND unless otherwise noted



BEFORE PHOTO:  
ALICIA HEMMELGARN, GENSLE

Before

# REMEMBERING THE PAST

The Dallas County Records Building Complex Recalls Its Moment in History while Being Transformed into a Modern Workplace

**T**he Dallas County Records Building Complex Renovation and Addition is composed of three buildings, boasting a storied history, which includes housing Clyde Barrow's jail cell, overlooking the assassination of President John F. Kennedy and hosting Jack Ruby's trial.


Built from 1915 to 1955, the buildings included an abandoned jail, aging courtrooms and outdated offices, which together formed a complex puzzle of misaligned floors and interior layouts. A super-core-fill solution has fused these three separate buildings together to transform them into a modern workplace for the employees of Dallas County while maintaining the buildings' historic significance.

With skill and a respectful approach to enhance the character, the design exposes interior elements, integrates modern and historic, and maintains a visual connection between new and old. One of the major design drivers was offering equal access to daylight to create a healthier work environment. With an older building façade with punched window openings instead of more modern ribbon windows, moving perimeter and corner offices to the core of the building became important. This solution greatly improves the amount of daylight that reaches the interior workspaces.

Additionally, the design focuses on preserving the architectural integrity of the buildings' exterior to 1963 with expressive elements, such as restored aluminum window frames and sashes; single-pane window sashes were upgraded to insulated glass for improved efficiency and comfort. The anchoring systems for the Indiana limestone veneer were secured, and the historic terra-cotta detailing was refurbished.

Many important historic details remain. For example, a "whites only" sign once associated with a public drinking fountain was uncovered 10 years ago. The sign has been artistically interpreted as an interactive public artifact in the complex's new lobby space.

The grandest of spaces, the lobby and second floor of the 1915 Criminal Courts Building were restored to their former glory. Layers of paint were removed from the white marble walls and the grand marble staircase. Meanwhile, intricate tile flooring and ornate plaster ceilings were restored.

Because of the buildings' designation as a Recorded Texas Historic Landmark and inclusion in the Dealey Plaza National Historic Landmark, the Texas Historical Commission reviewed planned changes to the buildings' exterior. 

## Retrofit Team

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**ARCHITECT** // Gensler,  
[www.gensler.com](http://www.gensler.com)

**GENERAL CONTRACTORS** // 3i Contracting LLC, [www.3icontracting.com](http://www.3icontracting.com); Manhattan Construction Group, [manhattanconstructiongroup.com](http://manhattanconstructiongroup.com); and Thos. S. Byrne Inc., [tsbyrne.com](http://tsbyrne.com)

**STRUCTURAL ENGINEER** // Datum Engineers Inc., [www.datumengineers.com](http://www.datumengineers.com)

**STRUCTURAL ENGINEER (Traffic, Transportation)** // Walter P. Moore, [www.walterpmoore.com](http://www.walterpmoore.com)

**CIVIL ENGINEER** // RLG Consulting Engineers, [www.rlginc.com](http://www.rlginc.com)

**MEP ENGINEER** // MEP Consulting Engineers, [www.mepce.com](http://www.mepce.com)

**LIGHTING DESIGN** // Lang Lighting Design Inc., [www.langlighting.com](http://www.langlighting.com)

**ACOUSTICS** // Wrightson, Johnson, Haddon, Williams, [www.wjhw.com](http://www.wjhw.com)

## Materials

**ROOFING** // Sika, [usa.sika.com](http://usa.sika.com)

**GLAZING** // Solarban from Vitro Architectural Glass, [www.vitroglazings.com](http://www.vitroglazings.com), and Trulite, [www.trulite.com](http://www.trulite.com)

**CEILING** // Armstrong World Industries, [www.armstrongceilings.com](http://www.armstrongceilings.com); Hunter Douglas, [www.hunterdouglasgroup.com](http://www.hunterdouglasgroup.com); and Certainteed, [www.certainteed.com/ceilings-and-walls](http://www.certainteed.com/ceilings-and-walls)

**ACOUSTIC CEILING** // Navy Island, [navyisland.com](http://navyisland.com)

**FITNESS FLOORING** // Ecore, [www.ecoreintl.com](http://www.ecoreintl.com)

**CARPET** // Shaw Contract, [www.shawcontract.com](http://www.shawcontract.com), and Totally Enterprises, [totallycarpet.com](http://totallycarpet.com)

**WALLCOVERINGS** // Designtex, [www.designtex.com](http://www.designtex.com)

## Judge's Comment



The display of restraint and detail is nice to see. — Joel Anderson, AIA, LEED AP BD+C, design director, associate principal, Cushing Terrell





# TREASURED HOME

An Iconic Home in Central Florida Is Meticulously Restored as a Museum

Listed on the National Register of Historic Places, the Leu House Museum and Harry P. Leu Gardens have become a cultural icon in central Florida. Passed down from generation to generation, this house became a narrative, stamped with each passing era, solidifying its personality from when it was owned by Harry P. and Mary Jane Leu from 1936-61.

During Hurricane Irma in 2017, an oak tree fell through the house and destroyed the east wing's roof and damaged parts of the envelope. This breach of the exterior envelope allowed severe rains from multiple subsequent storms to infiltrate the home. Moreover, the Florida heat, standing water, and porous historic plaster ceilings and walls led to an almost instantaneous bloom of various molds and fungi. The City of Orlando relied on KMF Architects to develop a plan for emergency enclosure and structural bracing. The architects also helped the city coordinate with various mitigation teams while they investigated, analyzed and prepared a design restoration package.

It was apparent after analyzing the conditions that significant portions of the historic plaster would need to be removed down to and including the cypress lath because of the extensive water damage and hazardous organic materials. Plaster that tested clean was preserved. Exposed lath was resecured and replaced with cypress where required.

Additionally, much of the existing wood flooring was damaged by standing water, which caused severe cupping and board separation. KMF Architects

worked with mitigation teams to remove water and run a drying process to quickly address the damaged floorboards. This process reversed almost all cupping and settled the boards. The architects specified a rejuvenation process that removed all the water staining without making the floors look new.

Another essential feature of the Leu House is the wallcoverings. Each wallcovering is distinct in its execution, so much so that guests frequently reference a room by its unique finishes—"the Red Room," for instance. KMF Architects designed the main living space to retain its "Red Room" status with a hand-painted custom-color damask pattern.

Through skilled architectural archaeology, the team uncovered the house's oldest finish: a hand-painted Cameo print wallcovering located in the Leu bedroom. Years of layered paper were delicately removed to expose this distinct Victorian Cameo, depicting two women tending a garden and collecting bouquets in separate poses. Because of this discovery's historic significance, the city and KMF Architects teamed with multiple artisans and fabricators to replicate the scene. Using traditional (hand sketching, block printing and painting) and modern (scanning, color correction, digital printing) methods, the team was able to depict what would have existed in the early 1900s. The museum now exhibits an original salvaged piece of the historic plaster wall with attached wallcovering alongside details regarding its restoration and the city's commitment to the museum's renewal.



PHOTOS: KMF ARCHITECTS



Before & After

## Retrofit Team

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**ARCHITECT** // KMF Architects,  
kmfarchitects.com

**STRUCTURAL ENGINEER** // Bowen  
Engineering, www.bowen-corp.com

**GENERAL CONTRACTOR** // Tyrell  
Enterprises LLC, (407) 344-0334

## Materials

**EXTERIOR MOLDINGS** // Florida  
Custom Mold, www.flmold.com

**JOINT SEALANTS** // Sika,  
www.sika.com

**PAINT** // Sherwin-Williams,  
www.sherwin-williams.com

**SHINGLES** // Owens Corning,  
www.owenscorning.com

**PLASTER MOLDS** // MasterMold from  
Abatron, www.abatron.com

**PLASTER** // Hydrocal White Gypsum  
Cement from USG, www.usg.com

**FIBERGLASS MESH** // USG,  
www.usg.com

**RED ROOM DAMASK**

**WALLCOVERING** // Farrow & Ball,  
www.farrow-ball.com

**WALLCOVERINGS** // Bradbury &  
Bradbury, bradbury.com, and  
Schumacher, schumacher.com

## Judge's Comment

“Fantastic restoration project that preserves a prominent local piece of history. — Anthony Vivirito, Assoc. AIA, LEED AP, associate, The Architectural Team Inc.”

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AWARDS**  
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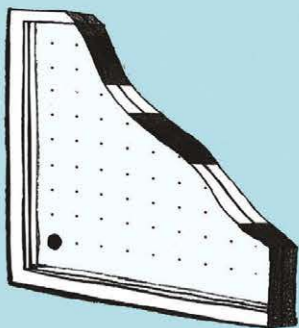
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Archibald Place (left) was able to maintain its existing building appearance while upgrading its monolithic glass to modern IGU performance.



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**Uninterrupted Transitions:** Only ADA-compliant sill with a water rating and a high heel resistant feature.

**Acoustical Privacy:** Range of unit STC options from STC 32 up to STC 45.

**Proven Durability:** Air, water, structural, and forced entry tested. Swing door tested to 500,000 and bi-fold panels to 20,000 open/close cycles.

Available in  
three different  
material choices:



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