01/2013



STRUCTURETONE Organization T

Organization Journal

WHAT'S INSIDE:

Interior Build-Outs

New Buildings

Landmark Renovations

for commercial offices

medical facilities campus additions

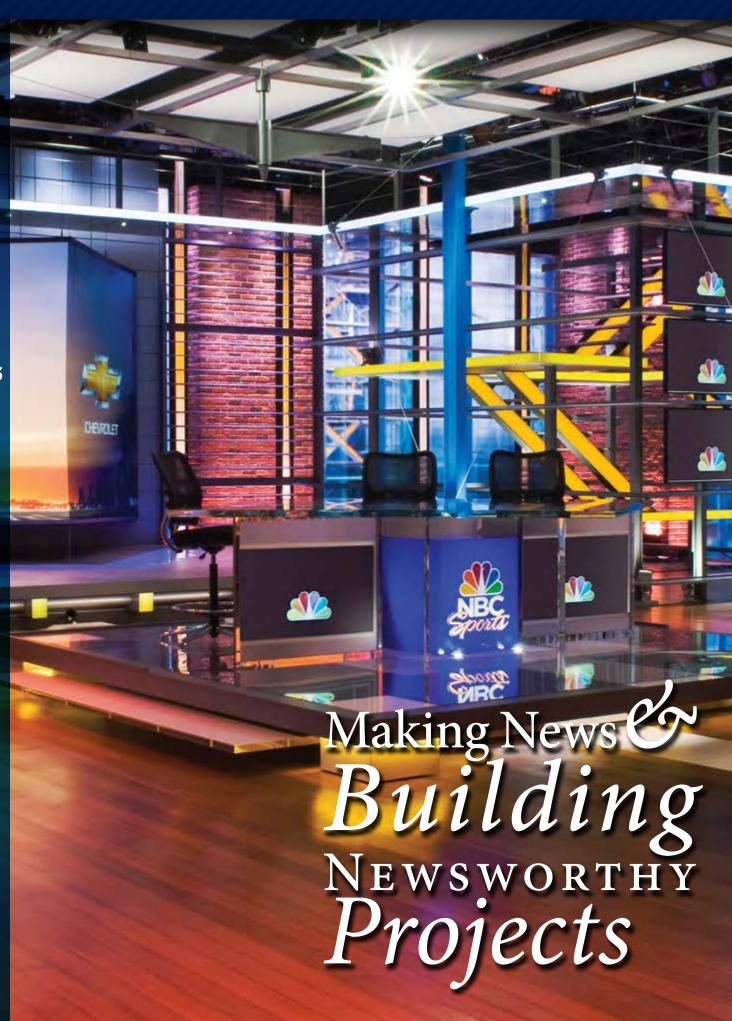
cultural icons

data centers

trendy stores

hotels...

and much more...



Reflections

As you will see on the following pages, we have been, to say the least, busy. We are excited to take this opportunity to catch you up on the incredible efforts and awesome projects that our staff has been delivering.



Set 146 - James Dangely

struction professionals have been creative, resourceful and tested in every way. Each and every challenge has been met head on and resolved with amazing results.

These accomplishments are not ours alone. The magnificent projects highlighted in this and execution by clients who are the tops in their fields and of our valued partners-industry leaders in owner's representation, project management, architecture and engineering, as well as our unparalleled subcontractors.

Never in our history have we had such a diverse portfolio. New buildings, landmark build-outs...delivering state-of-the-art med- ture Tone organization. <

ur teams of exceptionally talented conical facilities, signature campus additions, cutting-edge data centers, four and five star hotels, cultural beacons, trendy stores and, of course, premier commercial offices. You will find it all in the following pages.

Amazingly, with all of this, and a storm of the century, our staff volunteered and donated and Journal are the results of the vision, planning found ways to help those in great need. In every office, the men and women of Structure Tone embody the spirit of Sir Winston Churchill's statement, "We make a living by what we get; we make a life by what we give."

It is our great pleasure to share these stories with you. The accomplishments, ingenuity and tremendous spirit of our staff are truly awe-inspiring renovations, and one-of-a-kind interior and make us proud every day to lead the Struc-

Good Deeds & Good Fun

The spirit of community and giving runs deep in the Structure Tone organization. Throughout the Journal you will see highlights of the fun and inspirational efforts of our great staff. Here are two.



REBUILDING HOUSTON TOGETHER

ed by John Dennis, 14 of our Houston staff (and a few family recruits) volunteered a weekend of their time for the local Rebuilding ■Together—Houston event. Rebuilding Together is a nationwide organization that helps low-income homeowners improve the condition of their homes and eliminate health and safety hazards. Structure Tone partnered with Gensler, led by Laurey Lucree, to help repair a house in northeast Houston. Said Chris Talley, regional vice president, "Giving back to our community is a great virtue and I am happy to have had the chance to work with our great team."

DUBLIN ANNUAL GOLF CLASSIC

Structure Tone **Dublin** hosted their annual Golf Classic in aid of the Nicky Cleere Trust. Nicky Cleere was involved in a horrific hit and run accident and suffered a serious brain injury. Dublin chose the Trust as their beneficiary to help Nicky rehabilitate and regain full independence. Members of the construction community came together at the famed Smurfit Course at the K-Club, host of the 2006 Ryder Cup, followed by BBQ and live auction. A fantastic day was had by all and €16,000 (\$22,500) was raised through the generosity of those who attended the event. <



Nicky Cleere (putting), opens the golf classic cheered by family and James Reidy (second left)

Superb Effort for a Superstorm We cannot look back on 2012 without remembering Superstorm Sandy. Indeed, some are still addressing its impacts (both personal and professional) today. Thile no one wants events such as those that occurred, the strength and caring spirit that was exhibited by our staff, clients and partners is a tremendous affirmation of our organization as a comr nity, not simply a place to work In the days leading up to the storm we were mindful of the adage "an ounce of prevention is worth a pound of cure." Our staff worked closely with the NYC Department of Buildings' BEST Squad and the Cranes and Derricks group to secure our active construction sites. At sites such as Pavarini Mc-Govern's new mid-rise at 330 Hudson Street, staff completed the rigorous tasks required to decommission and secure cranes and exterior hoists. At another location, realizing that the water surge could be extreme at the height of the storm, we coordinated 20 laborers for the placement of 14,000 sandbags and Jersey barriers to protect a downtown building. A steel plate was placed in front of the loading dock entrance, which ultimately protected the space from 10ft of storm surge. These preventative measures protected that building and allowed its business to continue with Further, even as the storm was pounding lower Manhattan, many Structure Tone staff were feverishly working with clients to put in place recovery plans to get buildings reopened and businesses running as soon as possible. Even with no power in their own homes, our teams found ways to coordinate damage assessments, order new materials for immediate installation, ensure emergency generator and pump deliveries and mobiliz laborers and tradesmen In addition to helping our clients in lower Manhattan, Structure Tone rushed to provide relief to the residents of the Rockaways Breezy Point neighborhood. Two panel trucks filled with much needed generators, pumps, tools, warm clothes, and first aid materials were sent to assist in the community's recovery. Although the storm is long gone, the effects are not. Our Pavarini McGovern eam is still working downtown to help one of the last affected buildings re cover. With two basement levels submerged and five feet of water in the lobby, our client called upon Pavarini McGovern to demolish, decontaminate and rebuild back-of-house spaces and the lobby. We also recommended, and are currently putting in place, future flood prevention measures. Before and after the storm our staff put forth inspiring efforts throughout NYC, NJ, CT and southeastern PA. Within a day of the storm we had personnel and support resources in place to service our projects and clients. The ingenuity, resiliency and humor demonstrated was nothing short of lemonstrated was nothing short of

Welcome



Joe Chin Senior Vice President



TRISH HARRINGTON Director, Business Development



Dan Saddler Director, Safety Structure Tone Southwest



MARK STRANDOUIST Vice President, Business Development Washington, DC



CHRIS TALLEY Regional Vice President Structure Tone Southwest

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DALLAS Rocks

ossil, Inc., a worldwide designer and distributor of fashion accessories, needed to consolidate operations. Structure Tone Southwest Dallas was chosen to manage the incredibly fast-track relocation to a 537,700sf facility in **Richardson**, **TX**.

The new space, designed by Corgan Associates, is a modern, spacious environment that inspires creativity and reflects the culture and brand of Fossil. It is comprised of two buildings connected from the main reception area in one to the library in another.

North Building 432,000sf single story

- **♦** Library
- **♦** Showroom
- **⋄** Retail store for employees
- ♦ World-class fitness center
- Three mock stores to develop display window ideas

South Building 105,700sf four stories

- Open work stations and private offices
- ♦ 5,500sf Tier II data center
- ♦ 190-seat auditorium
- ♦ Kitchen, dining area with balcony seating
- Reception with two-story atrium and lounge

The original passage between the two buildings was a narrow 6ft-wide hallway. Breaking down the wall to create the larger opening revealed challenging existing conditions. "Significant structural modifications were required, as well as a new roof, a new slab and architectural steps into the library," commented Steve Gosling, project manager. "Interfacing with three different building elevations was challenging over the 40ft-span, quickly earning it the nickname Bermuda Rectangle."

Meeting the accelerated construction schedule was a challenge. In response, all floors underwent construction simultaneously.

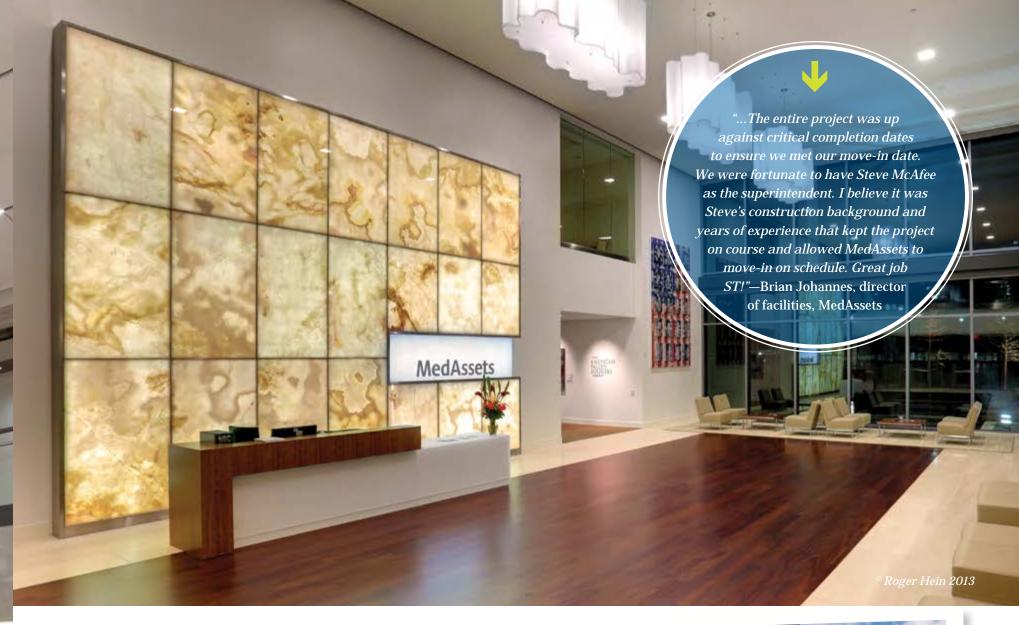
In order to accommodate the complexity of the fast-track schedule design-assist was utilized for the MEP portion of the project. The team was able to utilize the expertise of electrical and mechanical subcontractors in both the design and construction phases. This optimized the budget and led to the most efficient means and methods for construction.

BIM also was instrumental in our success. Clashes were identified early on and conflicts were resolved before they occurred in the field.

The Fossil brand is rooted in authenticity, a distinctive vintage aesthetic and sustainability. During construction we diverted over 597 tons of waste. Further, reclaimed wood from a mill in Pennsylvania was incorporated into the reception lounge area, the coffee bar and library. Also, skylights throughout the North building brighten the facility with natural light.

At the heart of Fossil's vision is a commitment to fostering creativity and delivering the best in its product design. The team translated that culture and those values into a reality with great esprit de corps by Fossil, Structure Tone Southwest, owner's representative (Jones Lang LaSalle), architect (Corgan Associates), MEP engineer (Schmidt & Stacy) and developer (KDC Real Estate Development & Investment).

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In **Plano**, **TX**, adjacent to Legacy Town Center, we created a stunning new home for **MedAssets** a leader in financial solutions for healthcare supply-chain and revenue-cycle management. Our Dallas team managed construction of 230,000sf of interiors in a pair of new four-story buildings by developer Trammell Crow. The crown-jewel of the space is a back-lit, 24ft x 19ft onyx wall in the two-story lobby that is the result of a remarkable collaboration between our team, our subcontractors and the architect, Good Fulton & Farrell. Also, glass front private offices in the core help maximize daylight for all employees. Other key project partners included brokers CBRE and Cresa Partners.



A new glass curtainwall system was a key aspect of our work for Concho's HQ



The hardscape and softscape at the Concho HQ in Midland, TX

Concho is an independent oil and natural gas company with a new HQ in **Midland, TX.** The new space is the result of the concerted efforts of Structure Tone Southwest Dallas, Transwestern Commercial Real Estate and Rhotenberry Wellen Architects. Our work for the 190,000sf project entailed base building and tenant interior improvements in two existing towers as well as underground infrastructure, hardscape, softscape, canopies and site lighting. One of the major focuses of our work was demolition and removal of the existing curtainwall and installation of over 2,000 new glass curtainwall panels within both buildings. <

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n **Dublin** our team successfully undertook leadership of a design-build challenge to complete a 20,000sf office build-out for MasterCard. Lo-Leating in Dublin was part of a strategic effort by MasterCard to get closer to its worldwide customer base.

Working closely with the owner's representative (Jones Lang LaSalle) and architect (Henry J. Lyons) we focused on delivering MasterCard's vision for its new work place. The first key issue was the 14-week schedule that was required to meet a hard relocation date. A second focus was the design intent. MasterCard was seeking a "wow" factor—a unique space that was a mix of classic design, playful elements and colors and collaborative spaces—unified by MasterCard branding. A third mandate was sustainability, from both an environmental and social perspective.

HIGHLIGHTS

- **♦** Large-scale graphics and manifestations package
- ♦ Extensive specialist joinery (millwork) installation
- ♦ Product display areas with touch screen units and video conferencing
- **♦** Lighting with Philips management system
- ♦ Wireless drop-down graphic screen in reception
- ♦ Complex ceiling installation in reception and break room
- ♦ High-end stone flooring in reception
- **♦** Telepresence room
- **♦** White noise sound dampening system
- **♦** Sophisticated security and access control system

"The project had its challenges, chief amongst them being the coordination of client-related third parties, sometimes on different continents, and ensuring that the client's very specific needs and design intent had been interpreted and accommodated," said John Atkinson, project manager. "Luckily, we had a client that was very proactive in this regard." <



Our **Dublin** team also completed full demolition of an existing space and the design-build fit-out of 12,000sf of high-end office accommodation for Jazz Pharmaceuticals' European HQ. The project was completed in 12 weeks in an occupied building and has now become the benchmark

"I think any company would be proud to have that office as its headquarters, but the best part is that you have fashioned something that's quintessentially 'Jazz Pharmaceuticals.' If we need to do any other space configurations and want to explain what we'd like, I'm just going to tell people to visit the Dublin office."—Bruce Cozadd, chairman and chief executive officer, Jazz



For Avoca, Ireland's oldest retailer and manufacturer, we completed build-out of their newest store (19,755sf) at the historic Malahide Castle

Sunday Service

or Marble Collegiate Church on Fifth Avenue and 29th Street we managed a renovation that encompassed major structural enhancements and other upgrades. The 21,000sf church is on the National Register of Historic Places and is a designated New York City Landmark.

Working with design by Helpern Architects, our work involved structural enhancements in the attic; roof replacement and truss repair; foundation reinforcement; ceiling height increase in the basement by lowering the floors; and construction of a chapel, columbarium, small data/IT room and lower level meeting rooms. Additionally, major infrastructure, life safety and ADA updates were completed.

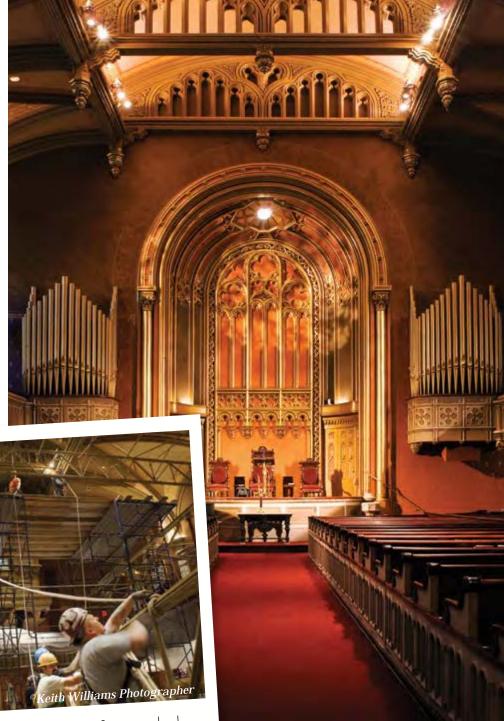
While there was no shortage of logistics and existing conditions challenges, there were three complexities that we addressed daily. One was protecting the interior of the sanctuary and church patrons. Two was securing the exterior to keep pedestrians safe. Three was preparing the sanctuary for televised service every Sunday and holidays.

Our team covered the sanctuary early on Monday mornings and then all the protection was removed on Friday nights. The site was painstakingly cleaned to be camera and congregation-ready for Sunday. We repeated this process every week for the project duration.

Our work certainly gave new meaning to "putting on your Sunday best!" <



A custom, movable work platform aided restoration and protection of the sanctuary



Special Touches



Pavarini McGovern's The Battery SeaGlass Carousel at the Battery was selected by SMPS NYC as a Best of 2012 for its positive impact on the built environment in and around New York City.



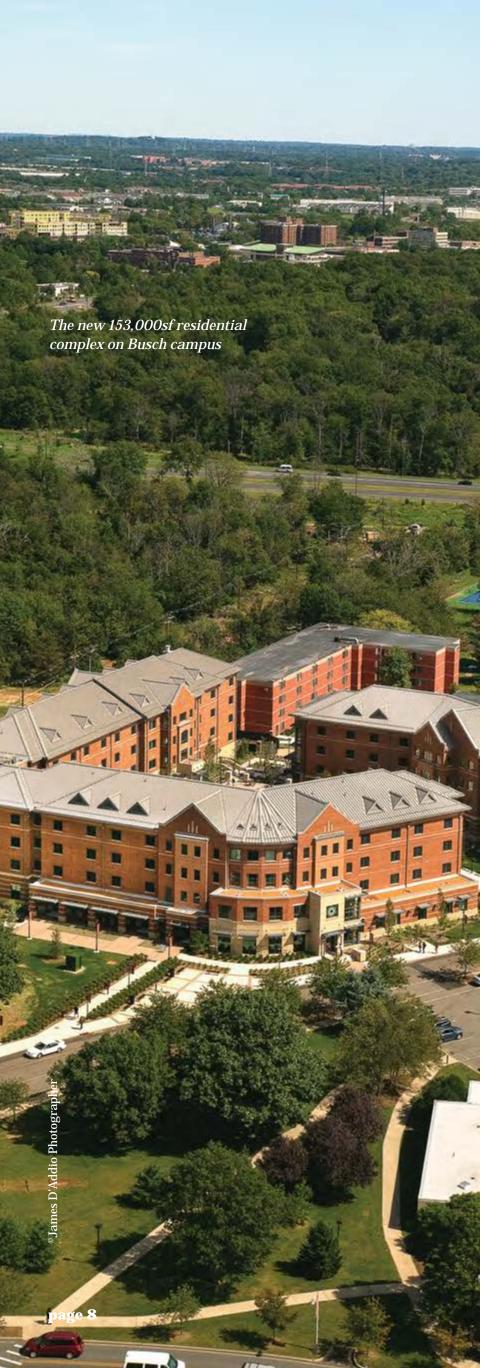
The Cathedral of Hope in Plano, TX, managed by Structure Tone Southwest in Dallas, was awarded the 2012 National Eagle Award in Construction by the Associated **Building Contractors (ABC).**



©Keith Williams Photographer

The Rodin Museum Garden & Landscape, Exterior Envelope and Interior Renovations project by L.F. Driscoll received the 2013 Preservation Alliance Achievement Award from the Preservation Alliance for Greater

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New Days for the Knights

Rutgers University is one of the oldest and most recognized institutions in the State of New Jersey. It is the birthplace of US collegiate football and the alma mater of luminaries such as NBA Commissioner David Stern, world-renowned chef Mario Batali and actress Calista Flockhart—to name a few. Founded in 1766, today Rutgers supports 58,000 graduate and undergraduate students and over 13,000 faculty.

Rutgers is not resting on those laurels, however. A new Business School building, 500-bed dormitory complex and solar and geothermal systems are just a few of the University's recent accomplishments in its pursuit of excellence. Structure Tone New Jersey managed construction and delivery of all three—monitoring all on-site construction, reviewing complete design documents, overseeing bidding, reviewing the schedule daily, coordinating progress meetings and managing close-out and commissioning.

BUSINESS SCHOOL GATEWAY

The new building is located on the Livingston campus (north of the 'Banks of the Old Raritan'). Planned as a gateway to Livingston, it is an iconic glass and steel structure designed by internationally renowned architect Enrique Norton of TEN Arquitectos. The building was recently recognized by *Financial Times* as among the most noteworthy business school developments around the world. It also reflects the burgeoning prominence of Rutgers Business School.

The 155,000sf, five-story Gateway will accommodate 240 classes for 4,000 students. Major interior features are a 500-seat stadium-style lecture hall and two 200-seat lecture halls.

Chris Mills, project executive, noted, "This has been a really fascinating project. There are so many diverse elements. One was the signature architecture, which has resulted in a stunning building, but that result was not achieved without challenge. To create the gateway there are four-story-high splayed columns that span the roadway. The columns are two feet in diameter and are angled. That required extremely precise engineering and erection planning."

Mills further noted that, as a result of the Business School project, we also managed a campus roadway re-alignment. That project took place during the school year and required coordination with Rutgers' bus network, which moves nearly 8,000 students daily! And last, but not least, there was the geothermal system.



RESIDENTIAL COMPLEX

The Busch campus (adjacent to Livingston) is home to a fabulous new 500-bed residential complex. Three 50,000sf dorms and a mechanical building comprise the 153,000sf residential facility. A central courtyard connects the three residences. The LEED® Silver facility was designed by G. Niles Bolton Architects and was completed in a fast 20 months from selection of the architect to completion of the dorms. With Structure Tone's vigilance throughout the RFI and bidding process, the construction cost was approximately 10 percent under original budget.



The new Rutgers Business School will be a gateway to the Livingston Campus



Bird's-eye view of the 31,000 solar panels

GEOTHERMAL AND SOLAR SYSTEMS

The new building is not only a bold statement for both the Livingston campus and the Business School, it is a strong reflection of the University's commitment to sustainability. A closed-loop, 500-well geothermal system will heat and cool the building. It will also be powered by a solar photovoltaic canopy system comprised of 31,000 solar panels providing 8MW of power. The solar system was installed on structural canopies over two existing parking lots that had to remain in service throughout construction. The lots were also expanded to provide 2,935 parking spaces. <



BIG HEARTS & BIG EFFORTS for the Tiniest Patients

ne of the main reasons **Penn State Hershey Children's Hospital** selected **L.F. Driscoll** to manage construction of its 263,000sf

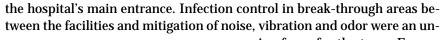
addition was the team's experience building highly specialized children's hospitals. Jim Carpenter, senior project manager, and Mike Fredette, lead superintendent, had worked together on children's hospitals for 16 years prior.

"This is my sixth children's hospital," says Jim Carpenter. "It's pretty cool at the end of the job seeing the kids go into their rooms knowing they will be getting better treatment than they did before. It's just really heartwarming."

Designed by Payette Architects, the ultra-modern hospital exclusively focuses on the unique aspects of pediatric care. It features facilities and equipment specifically created for infants and children. Also, each of the 72 private in-patient rooms includes family zones to fully integrate parents and other family members into the care team. Lastly, the hospital includes child-focused touches such as different color lighting on each floor, nature themed murals on transport elevators, cloud/sky theme on ceilings throughout the surgical core, small tubs in bathrooms, play areas for siblings and art boards in each room for a child to personalize his/her space.

In addition to clinical excellence the building features extensive use of natural light as well as offers a rooftop garden, outdoor courtyard, meditation room and a secret garden viewable only by hematology/oncology patients. The hospital was designed and constructed to LEED® Silver standards.

The main issue addressed by L.F. Driscoll's construction team was the proximity of the existing hospital; the construction site was 15ft from



wavering focus for the team. For example, 80–90 piles, each 90ft–110ft deep, could only be driven in 5ft–6ft increments. "It was a long process," notes Mike Fredette.

"I get goose bumps when we are close and I can see what we will deliver for the kids," observed Mike Fredette. "It makes the end result well worth the challenges."

The construction site was also between the existing hospital and the parking garage. Vehicular and pedestrian access and safety were key logistics concerns. Deliveries were not permitted during morning and evening shift change periods and subcontractors had contractually obligated curfews. <



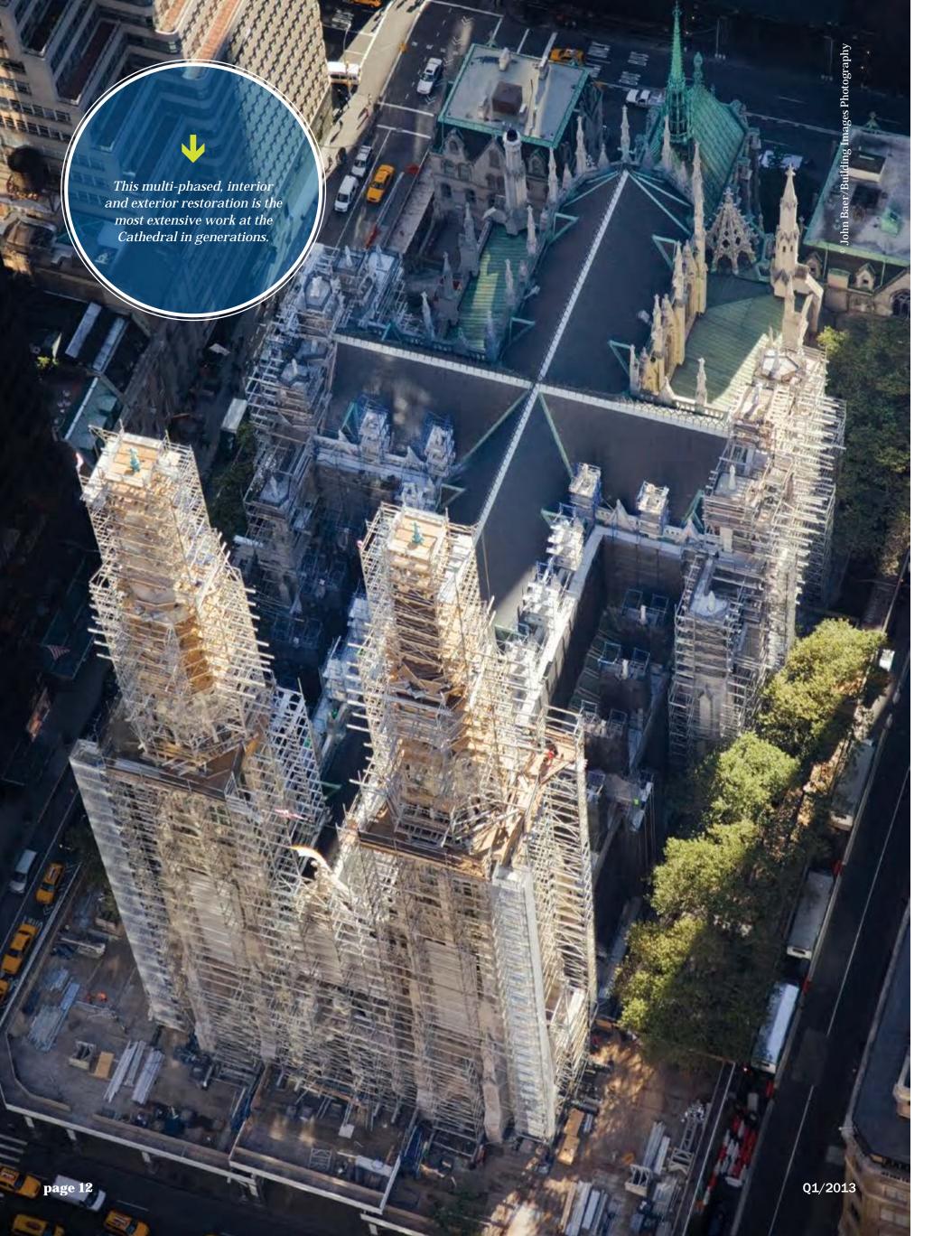
AT-A-GLANCE

- ♦ 263,000sf, six floors
- ♦ 72 in-patient rooms
- ♦ Entire building HEPA filtered
- **♦** Five pediatric-only surgical suites
- **⋄** Pre and post (recovery) areas
- **♦** Two procedure rooms
- ♦ Hematology/oncology out-patient clinic
- ♦ 11 infusion rooms
- **♦** Pediatric intensive care
- **♦** Pediatric radiology
- ♦ Stem cell lab
- Blood bank
- **♦** Pharmacy
- ♦ Lobby, atrium, café, store
- ♦ Cardiac catheterization and electrophysiology lab
- ♦ Private, HEPA-filtered play rooms for immune-compromised
- ♦ Scalable, adaptable electronic communications infrastructure



Members of the L.F. Driscoll team at the topping-out ceremony

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For the Ages

rom the tops of its 330ft-high spires to 10ft underground, Structure Tone is managing a \$177M, three-year restoration of St. Patrick's Cathedral. It is a complex, delicate and highly visible effort that requires great flexibility from

"Every day thousands of people visit the Cathedral," notes Ron Pennella, project manager. "From international tourists looking for that treasured travel memory, to local faithful seeking prayer and solace, to media following world events, this church is open 24/7/365. While the work we are doing is critical for the future of the structure, nothing is more important than ensuring that each person who comes here is able to meet his or her personal needs in a safe, comfortable, reverential atmosphere."

Addressing project challenges is a concerted team effort. Our on-site team works in close collaboration with the Archdiocese and its owner's representative (Zubatkin), as well as the architect (Murphy Burnham & Buttrick), conservationist, (Building Conservation Associates) and structural engineer (Robert Silman Associates).

Erecting the scaffolding that ensconces the Cathedral was a six-month endeav-

or culminating in a topping-out. The exterior scaffolding covers the entire Fifth Avenue façade, all the way to the top of the spires. It continues along the nave, on both sides, and the north and south transepts. There is comprehensive interior scaffolding also.

To work, or even step foot, on the scaffolding requires four-hour NYC Department of Buildings training and certification. This applies to the entire design and construction team, subcontractors and press-no exceptions. We even certified priests (who expressed the interest) so they can climb the scaffold.

The first, and most obvious, improvement that visitors will see is the original beauty of the façade. It is being cleaned with a low-pressure stream of swirling air, water and micro abrasive powder known as Rotec vortex. It is a procedure gentle enough for human skin.

The Cathedral remains open to more than five million annual visitors. In addition, there are between five and 15 masses per day, many televised, and more than 150 weddings a year. <



Timothy Cardinal Dolan performed a blessing for all workers restoring the Cathedral. (L to R:) Eileen McCarthy, Ed King, Cardinal Dolan, Peter Sales, & Ron Pennella

RESTORATION OF THE NATIONAL HISTORIC LANDMARK WILL ENCOMPASS:

- **♦** Exterior stone and interior surfaces
- ♦ Stained glass windows, including the masterpiece 26ft
- ♦ Main bronze doors, each 20,000lbs and 22ft x 8ft
- ♦ 300 wood pews
- ♦ Organ and over 9,000 pipes
- **♦** Rectory
- **♦** Cardinal's residence
- ♦ Life safety systems
- **♦** New central utilities plant
- **♦** New additional program space



"Since beginning the project

in March of 2012, Structure

Tone management and crew

have been a wonderfully

respectful presence in a

sacred space. On average

we have about 2,400 Masses a year, countless

concerts, and millions of

worshipers and visitors-

Structure Tone has carried

out work efficiently and with

minimal interruption to our

hectic schedule. We are

happy to have them."—Msgr.

Robert T. Ritchie, Rector of

* Future issues of Structure Tone Jour-

nal will provide in-depth looks at key

St. Patrick's Cathedral

aspects of the restoration

The restoration continues inside with scaffolding reaching the 85ft-high ceilings

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olumbia University, widely touted for its academic prowess, recently opened the **✓** Campbell Sports Center at Broadway and 218th Street. The new center is a gateway to the Baker Field Athletics Complex. Men's and women's outdoor teams will be based there setting the stage for the Lions' athletic roar to match that of their academic achievements.

Our New York staff managed construction of this unique, new 48,000sf building. Designed by Steven Holl Architects, the Center makes an architecturally iconic statement. It is a modern. angular, aluminum-clad structure that reflects the neighborhood it sits so snuggly in. It also creates a sense of movement, harkening its function as a sports center.

The signature design presented many challenges. Given that, and the importance of budget and schedule, the University utilized BIM to deliver the project. Utilizing 3D modeling, we were able to work with trade contractors to verify the unique dimensioning and geometry of the façade and also the structural steel and precast plank structure that supports it.

While modeling was a significant part of the preconstruction effort, it was not the only part. Our team also provided preconstruction services such as constructability analysis, value management recommendations, and budget and schedule updates to assist Columbia with programmatic decisions that accommodated

their budget but still enabled the overall goal of creating a state-of-the-art facility that highlights the University's commitment to its Stu-

During construction, our efforts focused on logistics, safety and security. The Campbell Sports Center is located in a busy, densely populated

neighborhood as well as on the University's active Baker Field Athletics Complex. We rigorously adhered to the plan, which included numerous safety activities and extensive communications and outreach programs.

> "This project had it all, working on a tight site surrounded by an active urban campus, utilization of BIM technology, the goal of obtaining LEED® Gold certification, and keeping work moving during some challenging weather conditions, all while being a good, proactive neighbor for Columbia and the surrounding neighborhood," said Marc De-Paul, project executive.

As the New York Times said, the new Center "shows both its brains and its brawn" heralding a new era in Columbia University athletics through the welcoming gateway of the Campbell Sports



The double-height gym in the Campbell Sports Center

London Calling

While the city of **London** was often in the spotlight last year, Structure Tone London also had a busy year. Our team has completed a diverse range of assignments for both first time and long-standing clients.

ne of our new clients is **Bank of China.** We completed a 70,000sf refurbishment of a partially occupied building, including the IT/comms floor that serves the Bank's entire UK and European operations. The existing space was stripped to the shell and core. Our fit-out then encompassed a new reception area and ground floor retail, three floors each of CAT A and CAT B, and all major building infrastructure services.

Thomson Reuters, a leading business intelligence and information provider, is a firm we have been serving for several years. Recently, our London team completed a very fasttrack (six weeks) 8,000sf office fitout. One key challenge was balancing the speed of construction with signing-off on subcontractor fabrication drawings and controlling the budget. Another challenge was that the building was occupied. We focused on noise mitigation, managing material movement through the occupied space and just-in-time deliveries as no storage was available on-site.



Thomson Reuters at Canary Wharf, London

The international law firm Latham & Watkins LLP is another client that

we've had the privilege to work with over many years. In addition to our Hong Kong office's work (pg.36), our London office also built-out space for them. The 20,780sf project entailed strip-out of all existing finishes, new high-end fit-out and installation and commissioning of new mechanical, electrical and life safety systems.

The London team is also managing works for transformation of **Aldwych House**, the Landmark building in the Aldwych and Strand area of London. Through a phased programme, Aldwych House is being transformed to a world-class workplace that uniquely blends modern style and vintage structure.



Our 70,000sf refurbishment for Bank of China was in a partially occupied building at 90 Cannon Street, London

Another unique assignment is the development of the **Great** Sutton Street data centre. Our London mission critical team is managing construction of this cutting-edge data centre facility. <

*Future issues of Structure Tone Journal will provide in-depth looks at key aspects of the Aldwych House and Great Sutton Street projects

It hasn't been all work in London. Staff have taken time to participate in events and raise funds for several deserving charities including: **♦** The Children's Trust

- **♦** The Whitechapel Mission
- ♦ Sparks for Children's Health
- **♦** Help for Heroes
- **⋄** Saint Joseph's Hospice

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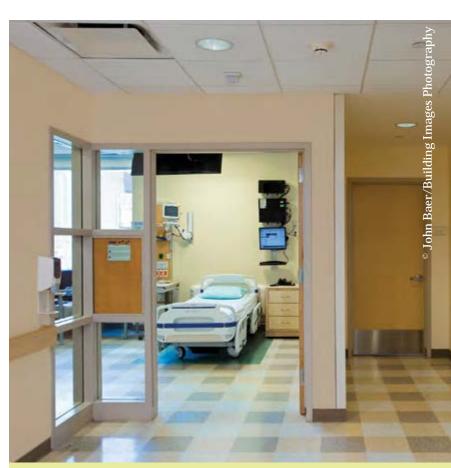
Prescriptions for Success

DELICATE PROCEDURE

n **New Jersey** we managed the conversion of an existing nursing unit to a new neuroscience care facility at Somerset Medical Center. The ▶ 14,000sf space is dedicated to patients suffering TBI, stroke or other neurologic issues. It features 18 private patient rooms, rehab gym, colloidal prep and isolation room, and nurses' station with state-of-the-art patient care telemetry.

The project was characterized by two main challenges: an aggressive 16week schedule and patient-occupied, fully functioning care floors above and below our work space. The floor below was further complicated by same day surgery and required very careful coordination for medical gas shutdowns.

"Maintaining a clean, negative pressure environment was priority one, as well as eradicating noise or other disturbances," noted Greg Hewitt, project manager. "We never lost our focus on the critical nature of the work space. It's definitely a specialized approach, but very rewarding work."



For the Children's Hospital at Montifiore (CHAM) in New York City we managed a 1,100sf renovation that encompassed lab space in the epilepsy wing; six two-bed patient rooms; nurses' station; and support spaces such as charting and hook-up rooms, clean-hold, medical supply storage and monitoring station.



WINNING FORMULA

chemistry labs in five months. Our **Boston** team is not among that majority. They not only made it possible, they made it seamless and cost efficient for **Biogen Idec.**

The key to our success was advanced application of BIM, or virtual construction. Through precoordination we integrated with the design team (Signer Harris Architects and Integrated Project Services) at the 60 percent design stage.

During month one, we utilized virtual construction to create a very lean set of construction documents (CDs). Our modeling team coordinated details, such as routing of pipe and duct, or identified unnecessary materials, such as 2,000lf of pipe and 75 percent of seismic hangers.

Precoordination model for duct and pipe with structural steel

Most would say that it is impossible to convert 18,000sf of office space to Month two we were able to release documents for bid. Because of the precoordination effort and the resulting lean documents, bids were very cost efficient.

> By month three subcontractors were two weeks into installation of key items, such as racks. Virtual construction provided a level of accuracy such that ducts could be fabricated in the shop rather than the typical, linear field process.

> As we reached month four, rough-in was 95 percent complete. Systems were tested and the architectural fit-out began.

> In month five, the new lab space was completed with the lab casework, fume hood installation and start-up and commissioning.

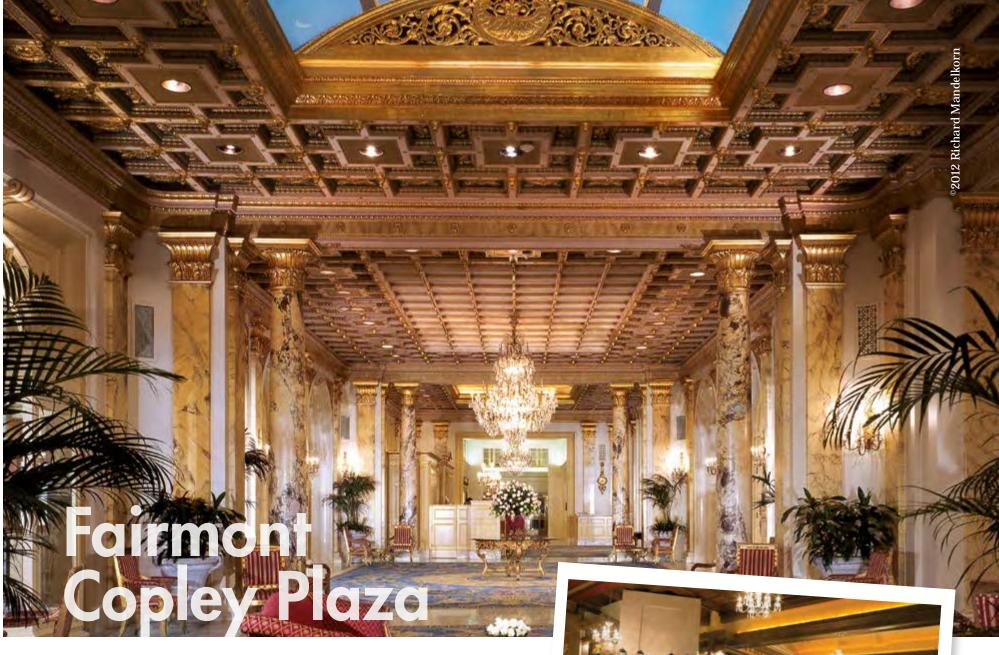
> The new lab space included 38 fume hoods, supporting lab casework, high pressure hydrogenation lab, flammable chemical storage and office support space.

Move-in took place in month five—far surpassing everyone's expectations. <

"Converting office space into a high-density chemistry lab is a challenging project even when schedule is not confined. However, Structure Tone was able to take more than a month off competing CMs schedules by incorporating their virtual construction expertise allowing off-site fabrication of many MEP assemblies that dramatically reduced field construction duration. Structure Tone's collaboration with our design team and leadership throughout the project was exemplary—they constructed a top quality lab, with no safety incidents—and delivered the project on schedule and on budget based on very early design documents."-Peter Esselstyn, project manager, Biogen Idec

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Renovating an (occupied) iconic symbol is one challenge. Completing \$20M of work in four and a half months is another. But, racing to meet the Boston Marathon takes pressure to a whole other level.

This is what our **Boston** team faced when managing the multi-phase renovation of the **Fairmont Copley Plaza.** The face-lift was the centerpiece of the hotel's centennial anniversary celebration. Our work encompassed the main lobby, 383 guest rooms, 18 suites, elevator lobbies on six floors, and the Oak Room Bar and Restaurant.

Meeting the schedule and having the hotel ready for the Marathon was the Fairmont's primary concern. Yet, in our zeal to complete work we still had to pay meticulous attention to patron comfort and enjoyment of the property. In public spaces we erected temporary walls to contain noise, dust and debris and we found alternate routes through the hotel to remove trash. Our team adopted an "out of sight, out of mind" mentality and rigorously adhered to it each day. <





COURTYARD NEWARK MARRIOTT

Structure Tone successfully delivered the Courtyard Newark Downtown for Marriott. Adjacent to the Prudential Center, this 140-room/10-suite hotel occupies a very compact site. The mixed-use building is set atop 15,000sf of retail space.

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Our relationship has expanded to Asia where we are managing construction of a 164,000sf purpose built flex data center in Hong Kong. The new facility will support six pods built in three phases. Phase one is underway and consists of 5.7MW of capacity. <

> "Your team is amazing! Along with the important work you perform daily, you manage to weave in the Property Manager's...request! I truly appreciate the Structure Tone team and their commitment to Digital Realty and the onsite team. Thank you!!!"-Kay Weber, real estate manager, property management, Digital Realty Trust

EAST, WEST, & In Between

Two things are constant in mission critical construction—every data center facility is different and every owner/operator has unique needs. There is no 'one size fits all' solution and each requires a one-of-akind approach.

CRITICAL CARE

o support their current and long term data needs for over one million patients, as well as medical and support staff, a preeminent worldwide leader in medical research and care turned to Structure Tone Mission **Critical** to deliver a new, 64,000sf, Tier III data center. The two-story facility has day one power of 1.8MW, positioned for and expandable to 2.4MW via a two-phase addition, as necessary.

Delivery of the new data center was a study in team work. Structure Tone Mission Critical integrated with the architect, Gensler, and engineer, AKF, as well as many diverse stakeholders who were part of the healthcare provider's team. Decisions were made and challenges resolved in a collaborative, consensus driven atmosphere.

A major focus of the team's effort was preconstruction planning. During this phase, the team utilized 3D virtual construction to test constructability, streamline mechanical and electrical systems and eliminate clashes prior to construction.

They also engaged in formal value management, ultimatemonths, while ensuring original

design intent for functionality and aesthetics. This was no minor feat given that construction took place throughout a harsh winter!

Energy efficiency and sustainability were also primary goals for the healthcare provider. The new data center is able to be cooled with 100 percent outside air, when climatic conditions allow, and it operates at a PUE of 1.5.

A MATTER OF TRUST

Over the past several years, Structure Tone has become a full service provider to **Digital Realty Trust** in **Texas**. Our mission critical expertise and unblemished record for quality delivery has led to our evolution from general contractor to design-build and BIM manager. Digital Realty is a leading worldwide provider of data center facilities for enterprise businesses.



A new 164,000sf data centre for Digital Savvis ly reducing the budget by nine Investments in the Hong Kong Science and Technology Park

DIGITAL REALTY TRUST—TEXAS AT-A-GLANCE

- ♦ 19 turn-key data center pods
- ♦ 400,000+sf
- ♦ Design-build and IPD project delivery
- **♦** Building and engineering solutions, emergency response, facilities repair, commissioning
- ♦ New construction, tilt wall, renovation, mechanical/electrical infrastructure
- ♦ BIM, laser scanning, LEED®



ur **NYC** staff is carrying out a 190,000sf, \$100M renovation of the world-famous Macy's flagship at Herald Square, a National Historic Landmark. The work is being performed while the store is fully open to shoppers-50,000 daily, increasing to 75,000 per day during holidays. This requires extensive phasing, logistics and safety planning.

The current phase will also add approximately 30,000sf of selling space with additional floor space in future phases. The iconic interior is going fashion-forward with design by Highland Associates, Charles Sparks + Company and Studio V Architecture. And, a little less glamorous, but no less significant, infrastructure and life safety systems are being completely upgraded. <

> Said Kevin Mulvey, project manager "One thing that is unlike any project I have managed before is that it's like having 30 or 40 clients. In addition to the Macy's flagship itself, we have all the individual luxury designer shops—Louis Vuitton, Burberry, Gucci, and many others. We build the shell and provide MEPS infrastructure, slab openings and stairs, and the designer provides the finishes. Each of those comes with its own owner and consultant team. It's a huge coordination effort."

To enable work to proceed while shoppers patronize the store, we devised the "dance floor," a 15,000sf suspended platform that creates a false ceiling above the active retail floor. It serves as a work space for renovation efforts. It is sealed and a negative air system ensures that by-products of the renovation do not affect clientele.

PHASE I World's Largest Shoe Floor

- ♦ 63,000sf comprised of 39,000sf of selling and 24,000sf of stock room space
- ♦ 280,000 pairs of shoes
- 274 mobile, iTouch scanning devices
- Herald Square Café, a stylish 45-seat, 1.435sf eatery with rare varieties of Starbucks Reserve coffees, Moët & Chandon champagne and exquisite chocolates by Vosges Haut-Chocolat

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^{*} Future issues of Structure Tone Journal will provide in-depth looks at key aspects of the Macy's renovation



Lapa'au

n February we celebrated the blessing of the new, state-of-the-art **University of Hawai'i Cancer Center**, a research and patient care facility that our firm built with local partner A.C. Kobayashi, Inc. The complex is the only National Cancer Institute designated cancer center in Hawai'i and the Pacific.

Winner—Award of Excellence

Design-Build/Design Assist Construction Over \$35M

General Contractors
Association of Hawai'i

L.F. Driscoll/Structure Tone and A.C. Kobayashi managed construction of the 150,000sf cancer center. Located in Kaka'ako, HI,

the \$119M project was slated for completion in January 2013. But, with the hard work, dedication and ingenuity of our project team, the project was completed three months ahead of schedule, in October 2012, and \$16M under budget, at \$103M.

"Through precoordination and modeling, on several occasions the L.F. Driscoll/Structure Tone team was able to identify conflicts or develop alternate solutions that would have had significant cost and schedule impacts if encountered in the field. Their BIM expertise was a tremendous asset in completing this complex project early, with savings, and achieving a tremendous state-of-theart healthcare facility."—Jeffrey Nakamura, AIA, principal, Shimokawa+Nakamura

Designed by local firm Shimokawa+Nakamura, the Center's architecture beautifully incorporates Hawai'ian cultural and LEED® design elements. It is a free-flowing facility with a very unique open-air lobby connecting two towers and a central stair providing access to all building levels. A glass and

steel exterior with large windows maximizes daylight to interior spaces and highlights the spectacular views. Gardens and landscaping feature native plants and sacred stones known as pöhaku.

The Center achieved LEED® Gold certification. Sustainability initiatives focused on reducing potable water and electricity usage. For example, a sustainable roof provides insulation and reduces air-conditioning needs. Ten percent of all building materials are recycled content and an additional 10 percent were extracted and manufactured from within the Hawaiʻian Islands. <

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"John Baer/Building Images Photography

(L to R:) Mike Delaney, Bob Mullen and Russell Young
(A.C. Kobayashi) celebrate at the blessing ceremony





Campus Diversity

SACRED HEART UNIVERSITY

new 46,000sf McMahon Commons building for Sacred Heart University. This year marks the 50th anniversary of Sacred Heart's percent reduction in overall cost. founding and the McMahon Commons, located at the crossroads of the campus, will host many celebratory events.

Its central campus location was a construction challenge, particularly given that a majority of work took place during the academic year.

"Working on an active campus is a very unique circumstance," said Hank Holdner, project manager. "Fortunately, we have a good deal of experience in this area. We go to extremes to ensure the safety and security of students, faculty and visitors and to not disrupt academic activity." Another complexity that Hank noted was utilities. "We relocated lines, installed new service and coordinated extensively with the utilities companies."

Many of the logistics details were resolved during a comprehensive preconstruction phase. It was also during this time that we worked very closely with the University and Sasaki Architects to

promising the vision or ultimate built product. Our collaboration was successful resulting in a 12 crepancies were immediately identified. Struc-

A sophisticated exterior of glass and natural Italian stone creates an important visual tie to nearby buildings. The glass creates a transparent, open sensation throughout the building and maximizes daylight. This is a key sustainability feature; the University is seeking LEED® Silver certification. The interior is equally striking with elegant finishes, terrazzo floors and a monumental stair at

the building's core. A 250-seat dining area, bookstore, lounge, presentation room and state-ofthe-art kitchen are just some of the functions of the interior space.

FORDHAM UNIVERSITY

Point cloud and laser scanning 3D technologies enabled successful installation of two new pipe organs in Fordham University's historic church. Since the church was not being altered, the new instruments, which contained pipes over 20ft high, had to fit within the confines of the original structure. Our **New York staff** devised a plan to take point cloud measurements every centimeter. We then adapted the

avarini was construction manager for a achieve the most efficient budget without com- 2D organ drawings and developed 3D documents that were blended with the 3D laser scan. Disture Tone's virtual construction staff worked closely with Fordham, its architect, Matthews Moya Architects, and the organ company to develop a solution. The magnificent new pieces were installed seamlessly, with no impact to the historic structure, and the church and its new organs are once again a Fordham University showpiece.



The restored organ at Fordham University



CULINARY INSTITUTE

Pavarini has also managed construction of a broad range of projects for **Culinary Insti**- including removing brick walls and columns to tute of America (CIA) for over 10 years. Assignments have ranged from residences to test kitchens and from (award-winning) plazas to geothermal systems.

Our most recent effort was the 5,000sf, \$3M Bocuse Restaurant, both a public dining venue and a learning lab for CIA students. Work en-

tailed gut demolition of the existing restaurant, create an open, elegant new dining experience. Black walnut floors, light leather wall paneling, sprawling windows, open kitchen and all-glass wine room contribute to the new ambiance. The venue seats 105 and is half restaurant half kitchen. As one would expect, the kitchen is state-ofthe-art with dedicated stations and advanced culinary technology. <

"This space is very creative and unique," says Mike Melanophy, project executive. "Some of the custom fixtures include wall sconces that look like chef hats and a one-of-a-kind chandelier made of soup bowls!"

Continuing Education

n exclusive training opportunity that Structure Tone offers is a Rotational Project Engineer (RPE) program. This program is open to entry-level college graduates with backgrounds in architecture, engineering, construction management or interior design.

Through formal rotation in several departments, the RPEs are exposed to a well-rounded professional experience in construction management. The RPEs are also required to complete customized non-field, course work. At the end of the program, RPEs graduate to become superintendents, estimators or engineers, continuing the evolution of their careers at Structure Tone with a solid foundation in all aspects of construction.

Because the RPEs are exposed to all the core functions that comprise project delivery, graduates of the program possess a broad understanding of and appreciation for the flow of a project from planning through close-out. The RPEs learn first-hand how each facet of a project affects another. Thus, regardless of their ultimate path, our RPE graduates bring greater understanding and more problem solving creativity to their roles because of their exposure to the "big picture." <



RPEs from Boston; Washington, DC; New York and New Jersey toured the St. Patrick's Cathedral restoration site

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Ready for Our Close-Up

The white hot spotlight of the demands of broadcast studio construction shone brightly on Structure Tone in 2012.

BC Sports Group debuted a new broadcast facility. With the assistance of Pavarini in Stamford, a former manufacturing facility was transformed into a remarkable new broadcast, production and administrative complex for NBC Sports.

The 220,000sf Mancini Duffy-designed space encompasses several studios as well as production, make-up and green room facilities. Massive 24ft-high ceilings ideally accommodate lighting and sound. To further support studio functionality, load bearing beams were removed to allow camera movement required for multiple broadcasting angles. Structural reinforcement (in the form of 15-ton, 90ft-long girders) was installed on the roof to compensate for the beam removal.

Brian Boyce, project manager, noted that it was a tremendous team effort. "What we accomplished in less than a year was impressive. It was a real collective effort with NBC, Mancini, AMA, Gensler, our team and our subcontractors. We designed and built as we went. The end result is spectacular. Watching TV will never be quite the same."

In addition to the magnificent broadcasting complex, construction of NBC Sports' new Stamford home encompassed a new metal and glass curtainwall, office space, 40,000sf mezzanine, significant MEP infrastructure to support the studios, a core data center and land/hardscaping around the facility.

Like many of the athletic events covered by the network, the action was fast. All work for the challenging 200,000sf repurposing was completed in less than a year. This aggressive construction schedule was achieved with the help of creative, detailed preconstruction planning. Also during preconstruction we were able to help NBC realize almost \$4M in savings.

In **Houston**, Structure Tone Southwest delivered a new, 32,000sf state-of-the-art broadcast studio and production facility, as well as office support space, for **Comcast SportsNet**. The facility is located in the heart of downtown in Houston Pavilions—a high-end premier entertainment, dining, retail and office hub.

Since television is all about viewing, a key feature of the new studio is the full-length windows that allow passersby to see into the newsroom and watch live broadcasts. Designed by Gensler, aluminum and glass storefronts were added to the first and second levels overlooking public walkways to assimilate with the prevailing aesthetic.

One of the most challenging aspects of the project was the schedule. Work was completed in a mere 13 weeks ensuring an on-time go live date.

The TV studio can accommodate wireless or wired broadcast of television (HD and non-HD), radio, motion picture, internet and other programming. The space includes news/live broadcast areas, editing rooms, and pre and post production facilities. Complete infrastructure to support broadcast and production work, including redundant systems to ensure no down time, was also part of our work. In addition to the broadcast facility, the project encompassed construction of general office space.



Comcast SportsNet in Houston is home to the Rockets, Astros and other local teams

"...When I say we could not have done it without you, I really mean it!! Thanks again for the terrific support you two (Neel Watts and Aaron Gafford) and your company have shown us. Much appreciated."—Matt Hutchings, president and general manager, Comcast SportsNet

For **CBS** in **New York**, we managed the build-out of the new home of CBS This Morning. Dubbed Studio 57, the magnificent new space (by Meridian Design Associates) was completed in 12 weeks to meet the on-air debut of the new morning program.

The open broadcast studio features an anchor desk at its center, a green room for intimate interviews and several workstations for support staff. A wonderful loft-like look was achieved with 15ft-high ceilings and by stripping walls to their original brick. Other highlights include an open plan newsroom with A/V truss behind a street-front glass window, all glass office walls and a nuanced LED lighting grid in the studio.

Harkening back to the grand history of CBS, the finished space features a memorabilia wall with old-fashioned cameras, radios and microphones, as well as pictures of former CBS radio announcers and anchors. One wall of the studio features the original map that was behind Walter Cronkite's desk during the icon's broadcasts, and 60 flat-screen televisions line another wall and project the images seen in the control room.

Out of the camera's eye, our team constructed new office support space and talent offices on the second floor and mezzanine level. The new complex was constructed over three existing buildings along $57^{\rm th}$ Street, requiring a new interconnecting stair between buildings and structural reinforcement of floors and roof. <

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Impressive Numbers in Houston

ur **Houston** team delivered a total of 300,000sf—nine floors—for **Shell's** trading group all in 120 days. The project was in an occupied building (One Thousand Main) in the heart of downtown. Our work for this world-leading energy solutions firm included demolition of the existing space and build-out of the new floors. Major components included a 55,000sf trading floor; a new, two-floor interconnecting staircase; five telepresence rooms; and new restrooms, break areas, reception area and support and amenities spaces.

The project included a total of 181 rooms with state-of-the-art A/V. Coordinating this A/V with the power and data and furniture installation required significant collaboration with Gensler's design team, furniture vendors and our subcontractors. In addition to the conference, meeting, telepresence and huddle rooms, the trade floors and the open bench workstations all required cutting-edge technology.

When it came to movement of materials, manpower and furniture the numbers were lower but no less imposing. Because the building was occupied during construction, only one loading dock and one freight elevator were available for the entire building to use, including our team. At the height of construction that was over 180 trade workers. <

"What we accomplished in the construction phase was really made possible through successful communication," noted Carl Frank, project manager. "Our team worked very hard with the building management and with Shell to develop a synchronized logistics plan for the delivery of materials and furniture and the movement of workers. Working on all floors simultaneously was very challenging but our team was able to step up to the task.'



The Shell Trading One Thousand Main team in Houston, TX

On another Houston note, congratulations to our Oklahoma and Houston Phillips 66 teams for safety excellence. At the inaugural Phillips 66 Annual Safety Summit last fall, Structure Tone Southwest took home two awards—one for zero incidents in 2011/2012 and one for improvement in our safety record for these two years.

Congratulations



Mack Stulb President & CEO L.F. Driscoll

Appointed: Chairman of the

General Building Contractors Association – Philadelphia



David Snyder (right) Executive Vice President Structure Tone Southwest

Recipient: Michael P. Hickey Award

Industrial Asset Management Council (IAMC)



Mike Neary Chief Operating Officer Structure Tone New York

Recipient: Victory Award Friends of Saint Dominic's **Chaz Steiner** Senior Project Manager, L.F. Driscoll

of the Year Award

Recipient: Project Manager

Subcontractors Association of Delaware Valley



Then **Visionworks** needed a construction manager to achieve a fast-track schedule for construction of its new 105,000sf HQ, our San Antonio office was the clear choice. The fast-track 67-day construction schedule required around-the-clock work and the highest level of team work to deliver a state-of-the-art space for the eye care services provider.

A design-assist approach between our San Antonio team and Carson Design Associates (architect) was utilized to meet the demanding timeframe. While we were completing demolition, Carson was finalizing the design.

The design-assist approach was most beneficial when the ceiling height turned out to be lower than expected. What could have been a schedule-changer didn't fluster our team. As soon as the height issue was identified, the team was able to quickly modify the design and keep the schedule intact.

The renovation included construction of several executive offices, conference rooms, stylish coffee/break rooms, a luxurious boardroom, elevator lobbies and all public and ancillary spaces. Custom work in the boardroom and lobbies was comprised of glass, wood and stainless steel. Ceiling soffits and lighting were selected to reflect Visionworks' specialty, eyeglasses.

Right from notice-to-proceed completion of the project hinged on total cooperation between the architect, Structure Tone and the subcontractors. Delivering the space on time and on budget—with plenty of camaraderie the Visionworks headquarters project was a success for the whole team.

Also in San Antonio we managed construction of new downtown corporate headquarters for **Argo**, a global insurance company. The work included renovations to the top four floors of the International Bank of Commerce building overlooking the San Antonio River Walk.



A dramatic feature in the atrium staircase exemplifies

the unique interior

at Argo.

quiet respite from the day's activities

The 74,000sf project was completed in 13 weeks. Argo was very clear from the onset that meeting the scheduled deadlines was critical to their business. "We knew it was going to be a push," said Mark Jones, vice president in charge of the San Antonio region. "But, I had an outstanding team with a 'no problem' attitude. Anthony Roberts, Tommy Crenwelge, Derek Chadler and Mark Wilson all really came through for us."

Designed by Ford, Powell & Carson the four floors maximize natural daylighting and capitalize on the strong views of downtown. The top floor includes the main reception, executive offices and meeting spaces. The reception area, employee break room, and boardroom are aligned with

an outdoor terrace to encourage activity outside. An exterior canopy was added to the existing balconies to give the building an extension of the roof line. The conference spaces are organized with movable walls and screens so that large group functions can be accommodated. The use of minimalist modern materials complements the regional clay tile and an impressive artwork collection. <

Earlier this year our Argo project was also a winner... namely Project of the Year from American Subcontractors Association (ASA) San Antonio Chapter

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A Signature Performance

The had the distinct pleasure of bringing to life the newest jewel in the City's arts crown—the Signature Theatre Company's **Pershing Square Signature Center on West 42**nd **Street.** The stunning new arts venue is the design of renowned architect Frank Gehry and H3 Hardy Collaboration Architecture LLC as Architect of Record.

Structure Tone built out the theatre complex while the base building was still being completed. The 70,000sf Signature Center is located on the second and mezzanine levels of a new mixed-use Related Development property. One of the major project challenges was that all fit-out of the facility, and accommodation of the Center's 25 elevations, had to work within the cast-in-place structure. In addition, mechanical systems for the development's hotel and residences pass through Signature Center's space.

Noted Paul Keosayian, project manager, "BIM was an invaluable tool for coordination of this complex project. Using laser scanning, we created a point cloud of the interior spaces, leading to a 3D model. This enabled all consultants and trade subcontractors to work from a common, dimensionally correct 3D model, which significantly reduced clashes in the field between design elements. Perhaps even more important, it facilitated achieving the tolerances and quality mandated by the Gehry design and helped us ensure minimal acoustic intrusion in the space, which is critical for a performance venue."

Signature Center includes three theatres; two rehearsal studios; comprehensive back-of-house; administrative and artist collaboration offices; and a lobby with bookstore, café and concierge desk. Each theatre has a dedicated mechanical system, light grids, fly towers with catwalks and rigging.

In addition to its cutting-edge design, Signature Center is quite eco-friendly. It is pursuing LEED® Gold certification. The Center includes other innovations and challenges. The unique Gehry design features substantial use of raw finishes with traditional materials being used in new ways. "It was a very special project to be a part of," notes Keosayian, "really unique, which is saying something in New York City." <



Signature Center's exterior glass and steel canopy makes a distinct first impression The grand staircase at Signature Center page 31

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The STI Philadelphia team at its Day of Service clean-up of Penn Treaty Park



"This was a fast-track build-out," noted Dermid Kelly, vice president of the Philadelphia region. "The team's commitment, not just Structure Tone, but Jones Lang LaSalle, the owner's rep, and Gensler, the architect. Together, our planning and attention to detail ensured that our client's strong mandate for quality and excellence was met at every turn and phase of the project."

Building Relationships in Philadelphia

tructure Tone's **Philadelphia** team provided preconstruction planning and construction services for a 75,000sf interior fit-out for a **premier financial services firm.**We have an established history successfully meeting our client's construction needs having completed previous assignments for them in Boston, Dallas, London and New York.

The new space included reception area, conference and training rooms, private offices and open workstations, pantries and support areas. In addition, we installed a new server room and IDF closets.

The work took place on three floors. During preconstruction planning we concentrated on movement of trades and materials because there would be multiple floors of construction happening simultaneously. We worked closely with the building manager and other consultants to carefully plan and coordinate freight time and materials loading.

Custom architectural woodwork and decorative stone and glass figured prominently in the design and were integral to achieving the desired personality for the workplace. Recognizing this, we were extremely diligent in coordinating finish selections between fabricators and the project architect. <



A new 8,000sf Bright Horizons

New in Jersey

n Iselin, NJ we managed construction of Ansell Healthcare Products' new 53,000sf HQ designed by Posen Architects LLC. The project was recently awarded the 2013 New Good Neighbor Award from the New Jersey Business & Industry Association (NJBIA). The award acknowledges built, expanded or renovated commercial/industrial buildings that improve the economy and the landscape of New Jersey and our staff is delighted to have contributed.

Bringing to life a Francis Cauffman design, our NJ team also oversaw construction of **Fox Rothchild's** 46,500sf law office renovation in **Law-renceville**, **NJ**. The two-floor interior fit-out was completed in three phases over 30 weeks and included new offices, open areas and conference rooms, an interconnecting staircase and MEP upgrades. <



We have managed build-outs for Fox Rothschild LLP in Philadelphia and Stamford, as well as Lawrenceville, NJ



More Good Deeds & Good Fun



Our Brain Games team, a previous two-time winner!! The Brain Games is a fabulously fun, smart annual industry event that benefits the NYC-Southern NY Chapter of the Multiple Sclerosis Society.



Structure Tone Boston collected over 200lbs of canned goods for the bostonCANshare food drive to benefit the Greater Boston Food Bank.



Our NJ team with Hugs From Home gift tubes prepared for our troops overseas.

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Masterpiece

Once the decision was made to move the famous Barnes Gallery from Merion to Philadelphia—and once lauded architects Tod Williams and Billie Tsien were entrusted with the new design—an equally stellar builder was needed to make it all a reality. That builder was **L.F. Driscoll.**

THE ART OF CONSTRUCTION

ust like the works-of-art housed there, the new **Barnes Foundation** is a completely custom space with virtually every component hand crafted, fabricated and produced. Our team worked tirelessly to source, test or create the products necessary to achieve the design. Often utilizing a design-assist approach, we successfully balanced design intent with construction reality to successfully create a truly one-of-a-kind space.

"While the art is the main attraction," noted Matt Trey, project manager, "the façade is the first thing visitors see. And, everything they see is unique. The main components of the façade are fossilized Israeli limestone with non-directional stainless steel reveals and the glass curtainwall Lightbox." Trey further notes, "For the Lightbox, the intent was for the structural elements to be virtually invisible and there just to be a single large box of light. To ensure the final product met the original intent, we completed mock-ups to scale and lifted them into place to confirm before fabricating."

The 93,000sf, two-story Barnes Foundation achieved LEED® Platinum certification. The Collections and Main Galleries were recreated with unrelenting fidelity to the original Merion museum in scale, configuration and proportion. Additional features include an indoor garden; class/meeting rooms; indoor/outdoor café; gift shop; conservation lab; 150-seat auditorium; library; and high-end landscaping on the four-and-a-half acre site, including stone steps, reflecting ponds and fountains.

In many instances, finishes were hand applied—from concrete to stone to woven fabric panels. For highly specialized trades such as plaster, millwork and wood-flooring, foremen and trades-people were individually interviewed and samples of their work were scrutinized to confirm that our expectations would be met.

The Williams-Tsien design called for the entire structure to be concrete. However, looking ahead to the aggressive opening date and the time required for stabilization of the Gallery, senior superintendent, Jack Garrett, proposed an alternative. "I recommended a steel structure for the Gallery," commented Garrett. "This allowed us to accelerate completion of the structure, which facilitated stabilization." Stabilization is the process by which building temperature and humidity levels are monitored and MEP systems are fine-tuned. "This is a three-season process and we were able to test and commission while the remaining areas were under construction."

ORIGINAL COMPOSITION

A point cloud laser scan of the existing Merion building was utilized to assist in replicating the exact measurements and curvature of the lunettes and ceiling for Matisse's *La Dance*. Since the original archways were constructed in the 1920s and hand plastered, each lunette varied in size, shape and contour...and that was the easy part! Planning for installation of *La Dance* took over a year due to the large size of the crating that held the mural, the vigilance required to install it in the new building and the protection required for the balance of construction.



We created a 3D model that included all architectural, structural and MEP elements. This was particularly beneficial for the MEP systems, which were state-of-the-art 21st Century in a building mimicking dimensions of an early 20th Century structure.

"The most memorable element of the Barnes project was the team work...and the commitment to producing a lasting icon for the City of Philadelphia that we are very proud of," observed Jeff Hutwelker, project executive.

The MEP space was extremely limited. The team met weekly for a year to review placement and conflicts were addressed moving valves or pipes as little as a ¼ inch to fit. Further, these systems could not run above the ceiling, as they usually do, because of the potential impact to the priceless art if there was a failure. The hydronic portions of the HVAC systems were isolated to the lower level.

Modeling also enabled off-site fabrication of exact amounts of piping, ductwork and wiring. Prefabricated materials the correct size/length were delivered as required saving time and space on-site and reducing waste.

Ultimately, our model was populated with specifications, user manuals and other product information. This is being used by the Foundation in the operation and maintenance of the building.

ENLIGHTENED

Patrons often ask if the paintings have been cleaned since they are easier to see and look so fresh—they haven't. The illusion is in the lighting.

The windows, clerestories and lighting control system in the Gallery have been customized for each room. An exterior solar-veil shade reduces natural light, while an inte-

rior black-out shade can be deployed to eliminate more daylight, as needed. A replica of the rooms sits on the roof and photo sensors measure exterior light levels to prevent a constant up-and-down of the shades.

After the art, the most striking feature of the new building is the Lightbox, a 300ft x 45ft x 27ft acid-etched glass box. The interior sculpts natural light through large vertical windows bathing the Lightbox with soft, indirect light. The west end of the Lightbox cantilevers 60ft over a planted terrace.

ART FOR EVERYONE

Fresh Artist, a Philadelphia-based organization that seeks to include children in philanthropy and art, created art work inspired by the collection. Their work adorned the construction fence.

Thursday evenings were tour night. Over the course of the project our team conducted over 300 tours for local schools, members of the

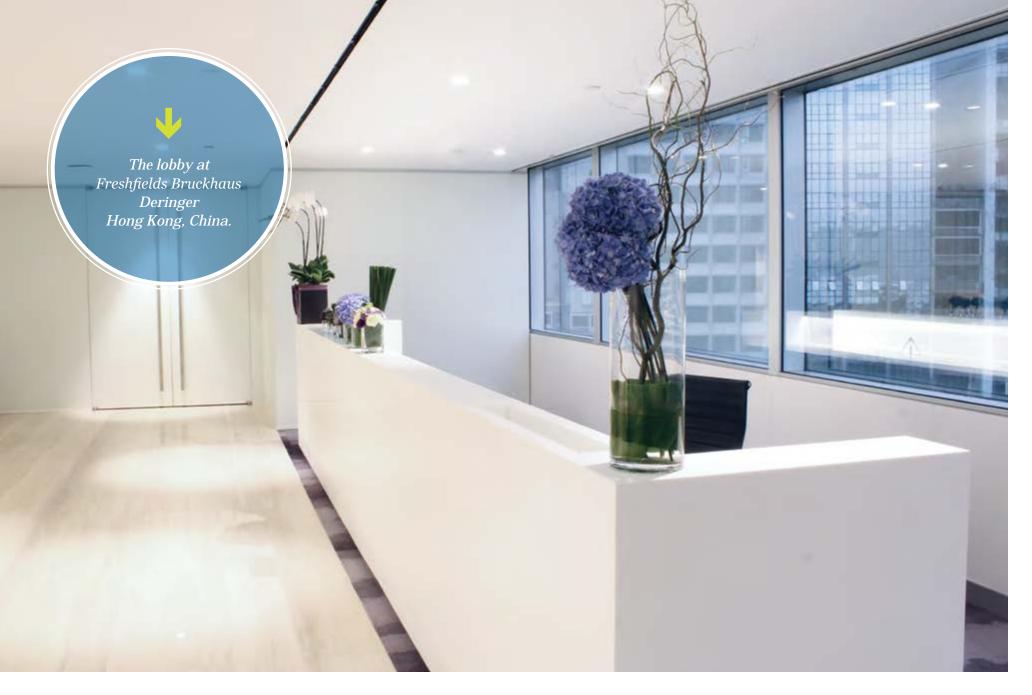
A/E/C community, art historians, curators and others. A key partner in this effort was the ACE Mentoring Program.

The Main Gallery, featuring Matisse's

custom-commissioned La Dance

Jack Garrett initiated an effort with the Foundation to arrange weekly seminars about the collection. Art appreciation sessions were conducted by John Gatti, painter and education director at Barnes Foundation, in the tight (very inartistic) confines of the construction trailer. <

"L.F. Driscoll provided a top quality management team with experienced people in every discipline throughout all phases of the project. This provided us with the ability to achieve all our goals regarding cost, schedule and budget—a great outcome for a complex and high profile project."—William McDowell, project executive, Barnes Foundation



New Jersey on the Move

ecently we made an exciting move to Woodbridge, NJ consolidating our Lyndhurst and Hamilton offices. Our new home is 10 Woodbridge Center Drive.

We also managed construction of the 20,000sf, LEED® Silver (target) space over 12 weeks. The build-out featured six conference/training rooms, open plan work stations, glass front private offices, lobby, cafe and plan room.

> "We're very excited about this," said John White, senior vice president. "Woodbridge is centrally located, with highways going north, south, east and west. The building is a newer environment with technological improvements and plenty of conference space. Being under one roof, there is one message. All of our managers are together and marching to the same tune."

Nearly 140 employees from the former two offices will work out of Woodbridge. Structure Tone, in New Jersey since 1987, is one of the state's largest contractors putting in place \$453M in construction value last year. <





Hong Kong Going Strong

tructure Tone Asia is experiencing strong Our first Asia project for global insurance broker Last year we also completed our first project for China portfolio. In addition to the new fice build-out was a continuation of a long-stand- one-floor office fit-out with a fast-track schedule. data center assignment for Digital Realty Trust ing relationship built in the US and London. (pg.20), we completed a number of benchmark projects over the past year.

We managed construction of three new stores for retailing giant Marks & Spencer. The stores ranged from 14,000sf to 26,000sf and were located in Baoshan, Changzhou and Wen**zhou, China.** Each was fast-track and required coordination with a number of Marks & Spencer direct vendors.

At Exchange Square in central Hong Kong, we completed a 40,000sf refurbishment of four floors for the law firm Freshfields Bruckhaus Deringer. This was Structure Tone Asia's second prominent law firm project at Exchange Square over an 18 month period, the first being a three-floor build-out of the offices of Latham & Watkins LLP.

growth in its Hong Kong and mainland Willis Group was in Beijing. The 13,500sf of- China Everbright Bank. It was a 10,000sf,



Our Asia team enjoying its annual Chinese New Year celebration

The Bank is located in the East Finance Centre in Hong Kong. <

"...we have successfully moved in our new office...after close to two months renovation with key contribution and participation from Structure Tone. This serves to express our sincere gratitude and thanks to your team including Franky and Sing. Their relentless support during and after our office renovation work is deeply appreciated...We look forward to our future partnership and collaboration."-Fanny Chan, head of human resources and corporate administration, China Everbright Bank

BRIGHT Future

right Horizons Family Solutions has a very special and precious mission and Structure Tone Global Account Ser**vices** is delighted to be in the unique position to help them achieve it. Bright Horizons is a leading provider of employer-sponsored child care, early education and work/life solutions in more than 750 locations on three continents.

Structure Tone's Global Account approach is the ideal match for Bright Horizon's mandate for superlative quality and consistency regardless of project location. Our unique service offering specifically meets the robust needs of clients, like Bright Horizons, seeking strategic ways to support global real estate portfolios.

We have had the pleasure of managing construction of 15 child care centers ranging from 4,500sf to 28,000sf. The facilities typically include classroom/learning areas, a kitchen and pantry, offices, staff lounge, reception area, mechanical room, teacher resource room and restrooms. Playgrounds are constructed outside, when feasible.

"We are pleased to have a partner like Structure Tone that brings the sophistication of a large company and the personal service of a small one to our projects across a

broad swath of the country. Structure Tone has shown their commitment to our satisfaction and business welfare time and time again. Their interest in our success is genuine."-Dan Lenyo, vice president facilities design and construction, **Bright Horizons**

The child care facilities are typically built within an existing, occupied commercial office or residential buildings. Site safety is paramount for these projects, as the facility is surrounded by residents, tenants or

other businesses. Communication and coordination between our team and building management is also critical for life safety system testing and accommodating movement of vendors and trades without affecting occupants in and around the building. <



Wherever feasible, a playground is part of the Bright Horizons build-outs

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CAPITAL Connections

private offices, several conference rooms, open schematic design. Part of this entailed value mansystem and custom lighting modifications. One of the design intent. the most unique aspects of the work was construction of a SCIF room.

provided Lilly with preconstruction planning and debris containment efforts. <

ur **Washington**, **DC** office managed conservices. This was a team effort with Lilly, the arstruction of an office renovation for world- chitect (Gensler) and the owner's representative wide pharmaceutical giant **Eli Lilly.** The (CBRE). Our collective focus was the preparation project was completed in two phases and included of construction budgets and schedules throughout work areas, pantry and a new reception area. In- agement to maximize the budget...without ever frastructure work included upgrades to the HVAC losing sight of the need to maintain the integrity

During construction, one of our primary tasks was mitigating any disruption to tenants. We imple-Prior to the two-phase construction effort, we mented, and carefully monitored, rigorous noise



The pantry at Eli Lilly on 12th Street

Even More Good Deeds & Good Fun



Supporting the ACE Mentor Program of Greater NY at the Sportsmen for Charity Sporting Clays Event. The mission of ACE is to "engage, excite and enlighten" high school students to pursue careers in our industry.



Our team participated in the annual Damon Runyon 5K run at Yankee Stadium. The Damon Runyon Cancer Research Foundation provides today's best young scientists with funds to pursue innovative cancer research.

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Still More Good Deeds & Good Fun





For the 4th consecutive year, our **Boston** staff helped to support a very special Christmas for children from the **Berkshire Children and Families Organization.** In **New York**, toys were gathered to support children and families living in **HELP USA** housing.





A beautiful day and a shiny trophy, not to mention the USGA Pynes putting course, were the lure for the **NJ** real estate and construction industry to come out in support of **March of Dimes.**



Our 2013 Climb to the Top Team—66 flights of stairs to benefit **National Multiple Sclerosis Society.** Whew!



Our **Boston** team raised over \$21,000 to support **Make-a-Wish** and grant the wishes of four very special children.

"I cannot thank you enough for your generous support of the **North Texas Food Bank**...On behalf of the countless names and faces of those in our community you are helping today and tomorrow, thank you so much."—Jan Pruitt, president and CEO, North Texas Food Bank





Thirteen miles, 22 obstacles, lots of mud...and superhero costumes! Nothing was too much to ask of our **L.F. Driscoll** Tough Mudders (otherwise known as the Rodino team) in support of the **Wounded Warrior Project.**

