Fall 2006

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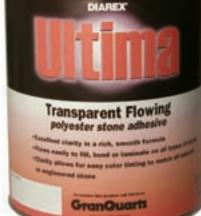
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Photo courtesy of Lawrence Halprin

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the man it honors.

Bybee Prize winner Lawrence Halprin

utilized Carnellian Granite for the Franklin Delano Roosevelt Memorial

in Washington, D.C., to exemplify the strength and optimism of

Photo courtesy of Jennie Farnsworth



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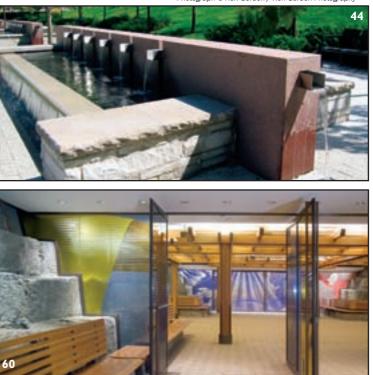
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BSI Introduction

Biennial Awards Display Extraordinary Designs with Natural Stone



Harold Roth, FAIA

HIS BIENNIAL AWARDS ISSUE of *Building Stone Magazine* celebrates the 2006 recipient of the Bybee Prize, landscape architect Lawrence Halprin and the projects receiving 2006 Tucker Design Awards.

Lawrence Halprin is only the fourth design professional to receive the Bybee Prize, given by the Building Stone Institute (BSI) in recognition of a lifetime of achievement in design excellence exhibiting the use of natural stone.

The Tucker Design Awards, founded in 1977, have over the years become an important part of the design world. Members of the BSI – quarriers, fabricators, installers and distributors – understand the significant role of architects, landscape architects and interior designers in the built environment. Designers appreciate the beauty, strength and versatility of natural stone, forming a true collaboration in the best sense of the word.

Winners of the Tucker Design Awards are chosen from among the submitted entries by a distinguished jury of design professionals. The first jury in 1977, Hugh Hardy, FAIA, and the late Richard Foster, FAIA, honored two projects. Many of America's most accomplished professionals have been asked to serve on Tucker Design Awards juries since, and that tradition will continue in the future.

The Tucker Design Awards are named in honor of the late Beverley R. Tucker Jr., who was president of Buckingham-Virginia Slate Corporation and a past president of the BSI. The Bybee Prize is named in honor of the late Daniel Bybee, who was president of the Bybee Stone Company and also a past president of the BSI.

A review of the 2006 winning projects will attest to the extraordinary creative talent and technical expertise present in the use of natural stone in a range of building types extending from San Francisco to India.

We encourage you to submit your completed projects to the 2008 Tucker Design Awards program. For more information, please visit BSI's website at www.building stoneinstitute.org. ◆

Harold Roth, FAIA, is a professional member of the Building Stone Institute serving on the Tucker Design Awards and Editorial committees. A past Chancellor of the College of Fellows of the American Institute of Architects, he is a partner in the firm of Roth and Moore Architects in New Haven, Connecticut.



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Awards Reception

BSI Tucker Design Awards Reception

Photos by Ann Jenkins / Jenkins Custom Photography Ltd.

EMBERS OF THE BUILD-ING STONE INSTITUTE (BSI) held the biennial Tucker Design Awards reception at the Palace Hotel in San Francisco on May 19, 2006. BSI members, sponsors, jury members, award winners (as well as Bybee Prize winner, Lawrence Halprin, FASLA) and others attended the reception.

The Tucker Design Awards were first presented in 1977. Named in honor of the late Beverly R. Tucker Jr., a BSI past president, the Awards honor architectural firms that exhibit excellence in the concept, design and construction with natural stone.

Congratulations to all of the Award winners! **♦**



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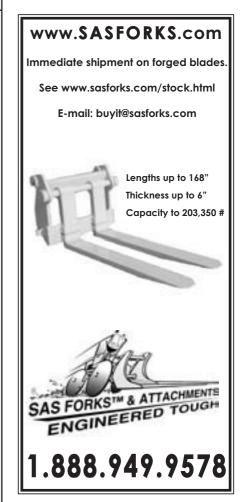


Images counter-clockwise from opposite page top: Bybee Prize winner Lawrence Halprin, FASLA, meets with BSI member Rae Price, FASLA. 2006 Tucker Award Judge Gordon H. Chong, FAIA, presents one of the award winning projects.

2006 Tucker Award Judge Richard Macias, ASLA, presents the participants of the MTA TBTA Brooklyn Battery Tunnel Ventilation Building a 2006 Tucker Award.

Edward Westbrook of Quarryhouse Inc. presents a retrospective of 2006 Bybee Prize winner Lawrence Halprin's career.

Lawrence Halprin, FASLA, accepts the 2006 Bybee Prize.



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Jury Members

2006 Tucker Design Awards Jury Members



Gordon H. Chong, FAIA *Chong Partners Architecture, San Francisco*

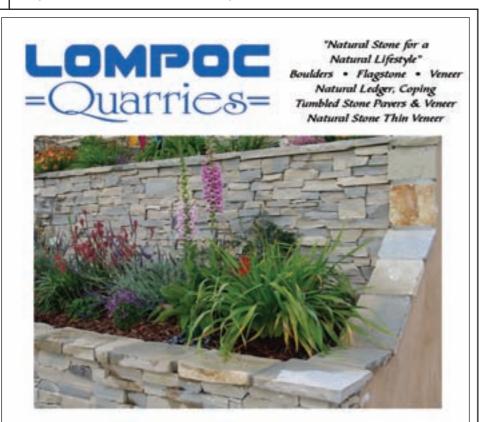
Gordon Chong is the founding partner of a 30-year-old, 185-person archi-

tectural, urban design, interiors and graphic design firm that bears his name. Chong

Partners Architecture provides design services to institutional, health care and educational clients from its offices in San Francisco, Sacramento, San Diego and London. The firm has received numerous awards for its work in health care and urban in-fill structures.

In addition to serving as the 2002 national president of the American Institute of Architects, Chong has served as a planning commissioner responsible for project design reviews and has served on national design juries from Boston to Alaska. In February 2006, he represented the United States as a juror of an international design competition in Seoul, Korea.

His work with design juries, whether of stars or students, has broadened his perspective and continues to inform the design effort of his own firm.



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Richard Macias, ASLA San Francisco State University, San Francisco

Richard Macias has focused his professional career on the

growth and development of academic institutions at the college and university level.

Following his years as a planning consultant, he joined the California State University system as campus planner for the 28,000-student campus of San Francisco State University. In this role, he is directing the preparation of the University's 2006 Comprehensive Master Plan, a study that will be a model for long-term evolution of large urban universities.

Macias has also been a guest lecturer at universities across the country. In addition to his participation in planning assignments on more than 65 campuses throughout the United States and Asia, he is also co-author of "Community Design Management," an award-winning primer for communities offering techniques in urban design, revitalization and planning.

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LAWRENCE HALPRIN:

A Legacy in Stone

By Jodi Paper

All photos courtesy of Lawrence Halprin

AWRENCE HALPRIN, FASLA, is renowned the world over for his innovative, user-friendly and community-sensitive designs, which run the gamut from his critically acclaimed Franklin Delano Roosevelt memorial in Washington, D.C., to the Ben Yehuda promenade in Jerusalem, to the more recent Sigmund Stern Grove restoration and Letterman Digital Arts Center, a part of the Lucasfilm campus in San Francisco. Given the range of his work, it is no wonder Halprin is considered a pioneer of landscape design and winner of the coveted 2006 Building Stone Institute Bybee Prize award.

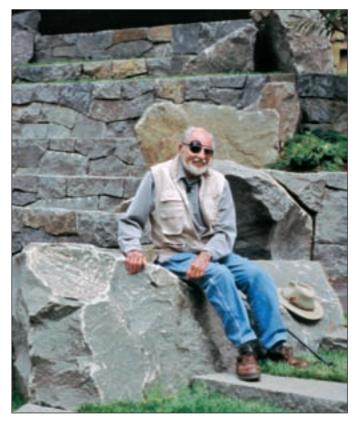
The Beginning

Halprin was born in Brooklyn, N.Y., in 1916. "As a hobby, I was a painter, which has been part of my being ever since I was a little kid," he said. Though, as a young adult, his interests came to encompass botany, which he studied at Cornell University. The artist within him remained

RIGHT: Lawrence Halprin

and came to play an important part in his career years later.

After he graduated, Halprin proceeded to the University of Wisconsin to pursue a doctorate in botany. But once there, his life changed direction. "In Wisconsin, I did two things: I met my wife [Anna Halprin] and I became a landscape architect," he said. At his wife's suggestion, the pair went to see Frank Lloyd Wright's home in Spring Green, Wis. At the time, although Halprin knew nothing of Wright – or architecture and landscape architecture for that matter – he found a new calling. "As I walked up to the house, there was a little sign over the front door that said, 'Whatever a man does, that











is who he is.' And that is the first thing that got to me," he recalled.

Halprin became fascinated by Frank Lloyd Wright. He went to a library to learn more about him, where he found books about architecture, landscape architecture and finally a book by Christopher Tunnard. The next day, Halprin went to a professor with his discovery, "and I told him, 'You know, I've discovered there is this fascinating thing called landscape architecture. Do you know anything about it?" While the professor did not, he referred Halprin to one who did. After several classes, Halprin impressed the professor to such a degree that he sent him with a scholarship to study the subject further at Harvard University, where, it turned out, Christopher Tunnard was a professor. Once in Boston, "I became so enamored with what I was doing, I didn't want to stop," Halprin said. "I was 24 years old when I got started."

After two years at Harvard and then a stint as a naval officer overseas during World War II, Halprin headed to Berkeley, Calif., where he began an apprenticeship with Thomas Church. Over the years, Halprin learned all aspects of landscape architecture, including the plant/gardening aspects, and site and street planning. "But I was mostly interested in community planning and all of the things that went along with that," Halprin said. "The design, making places of all kinds." So, he decided to branch out on his own.

ABOVE LEFT: Letterman Digital Center, Stone Belvedere with view of Palace of Fine Arts, San Francisco

BELOW LEFT: Haas Promenade, Jerusalem, Israel



RIGHT: Goldman Promenade, Jerusalem, Israel

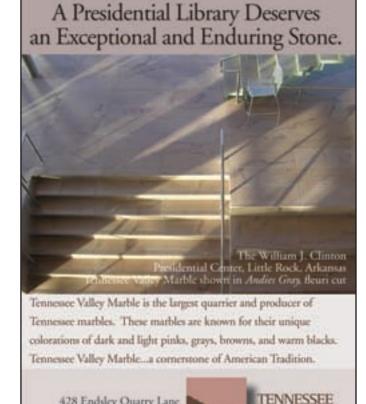
Sea Ranch

Shortly thereafter, Halprin began his career and a succession of projects that would have a major impact on landscape design and how it would be perceived. "Most importantly, I wanted to shift the idea of landscape architecture from just gardens over to communities."

Halprin's first project encompassing this new perspective of landscape architecture was the Sea Ranch, an environmentally sensitive housing community along the Sonoma/Mendocino coast of California. The idea was to create a community that would have a minimal impact on the natural landscape. To this end, Halprin incorporated into the community's design a local granite stone found on surrounding ranches and at the cliff edges.

ALLE

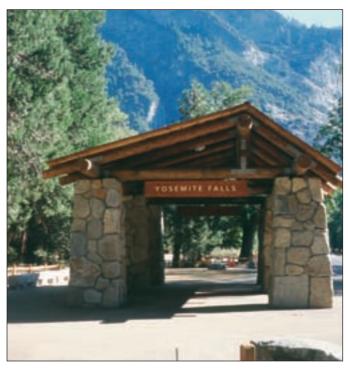
MARBI



428 Endsley Quarry Lane Friendsville TN 37737 800-786-6314 www.tenneuseevalleymarble.com He said, "I wanted to create a place of living together on the land in a way that is not a suburb or a city, but as a town, as a community of people of a like mind who wanted to live together, expanding the idea of what a place can be like."

This idea Halprin has of community stems in large part from his experience working on a kibbutz in Israel. Though he was only just out of prep school at the time, his involvement in that type of communal living and working became a huge influence on the work he would do much later, some of the most prominent in Jerusalem itself.

BELOW: Yosemite Falls Shuttle Stop, Yosemite National Park







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Ben Yehuda, Jerusalem

While it was during his work on the kibbutz that Halprin's community-oriented ideologies on landscape architecture began to take hold, it was later, as an assistant to the mayor of Jerusalem on several landscape projects, that he developed a true understanding of the significance of stone in designing for these communities. "I learned a lot about stone there," Halprin said. "I learned it is something that people use to make actual places out of – quite different from the decorative way we use it here, in the United States." He continued, "Jerusalem has this intense quality, and the city itself is almost like a sculpture."

One of Halprin's most prominent Jerusalem projects was the Ben Yehuda pedestrian mall in the heart of the city. Here, he primarily utilized Jerusalem Limestone, a very hard, pink stone used in many of the local buildings, to create a marketplace thoroughfare for the community.

Halprin views stone as a culturally and historically significant material. "A lot of what we do is to convince people that these [stones] are not decoration. They are the essence of a life of people."



ABOVE LEFT: Haas Promenade, Jerusalem, Israel

ABOVE RIGHT: FDR Memorial, Room Three, War Wall with Fountain, Washington, D.C.





Franklin Delano Roosevelt Memorial

In the case of the Franklin Delano Roosevelt Memorial in Washington, D.C., Halprin used stone to tell the story of the former president's 12 years in office. The memorial is constructed primarily of Carnellian Granite, a dark red granite out of South Dakota that exemplifies the strength and optimism of the man it honors.

The memorial consists of four outdoor galleries, representing each of FDR's terms in office. "We integrated the quotations from FDR's speeches [etched into the granite], and included sculpture and water." While the granite and the sculpture define the "rooms" themselves, water takes the forms of pools and gentle cascades.

"We wanted to make it a place people could walk around and understand what the New Deal was meant to be," Halprin said.

San Francisco

Recently, Halprin has completed projects in San Francisco – the Sigmund Stern Grove renovation and the Letterman Digital Arts Center project for Lucasfilm. Like the FDR memorial, both projects were developed with the idea that they should be spaces of maximum use and enjoyment for the community at large.

Prior to Halprin's work, Stern Grove was an area made up primarily of groves of trees and a meadow that, due to decades of use as a popular summer concert venue, was falling victim to mass erosion.

Halprin's designs incorporated a great deal of Gabbro, a granite he used in a variety of forms, including bleacher-type seating, boulders, walls, paving and entry pillars among large grassy areas. "We wanted the stone to be tough, because people were going to be sitting on it," Halprin said. "We didn't want it to get carved out by all the use."

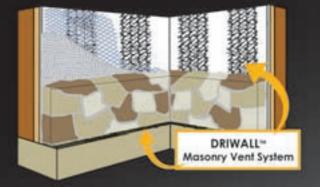
With the Letterman project, Halprin set out to create a space in which, although the buildings are occupied by Lucasfilm Ltd. for its Industrial Light & Magic and LucasArts divisions, the rest of the area could be put to public use and enjoyment. Located in the Presidio, a former military base that had been turned into a national park, Halprin's designs once again included the use of large amounts of hard sandstone, specifically fieldstones out of Redding, Calif.

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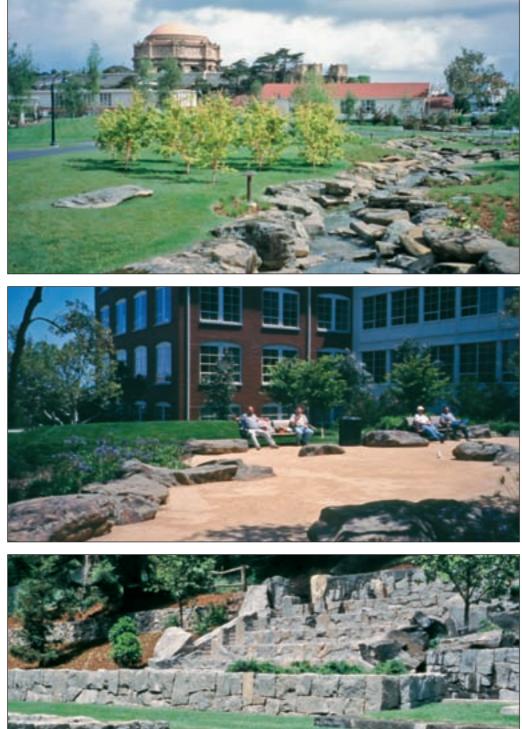
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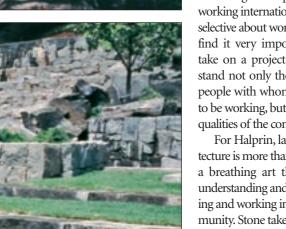
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ABOVE TOP Letterman Digital Center, Creek with View of Palace of Fine Arts, San Francisco

ABOVE MIDDLE. Letterman Digital Center, Seating Area, San Francisco

ABOVE BOTTOM: Sigmund Stern Grove, Concert Meadow Seating, San Francisco

And once again, water played a prominent role for Halprin. A 500-foot-long natural creek that runs through the site and empties into a lagoon – all of which was landscaped in stone - was modeled after a stream in Mount Tamalpais State Park in northern California.

More than 2,200 tons of stone went into the project. Mostly, the stones took the form of, as Halprin puts it, "wonderful big boulders."

"I wanted a kind of stone in very big pieces that had a quality of spirit and color," Halprin said of his choice

material, which had lichen running through it.

"We make careful decisions about what kind of stone we use based on the feelings that are true to the project."

Matera, Italy

Currently, Halprin is working on a project in Italy involving the conversion of factories into communities.

Halprin is predominantly working with Tufa stone, which has been used in the area for centuries. "There is a community called Matera, which has wonderful quarries, where a lot of the stonework is used to make buildings, as well as other things," Halprin said. He described the stone as similar to Jerusalem stone, only fairly soft. He was asked specifically to build this community out of the Matera quarry, which has been turned over for that use.

Though Halprin treasures working internationally, he is very selective about working abroad."I find it very important before I take on a project that I understand not only the land and the people with whom we are going to be working, but also the ethnic qualities of the community life."

For Halprin, landscape architecture is more than just a job. It is a breathing art that fosters his understanding and practice of living and working in and as a community. Stone takes on the role of oxygen, carrying life into Halprin's designs, and creating a firm foundation from which people all over the world can benefit.

"The foremost thing is to understand how people's cultural life affects the invisible life and how to fit the two together," he said. "That is what really gets my attention."

And quite deservedly, Halprin, along with his rock-solid legacy, now has ours. \blacklozenge







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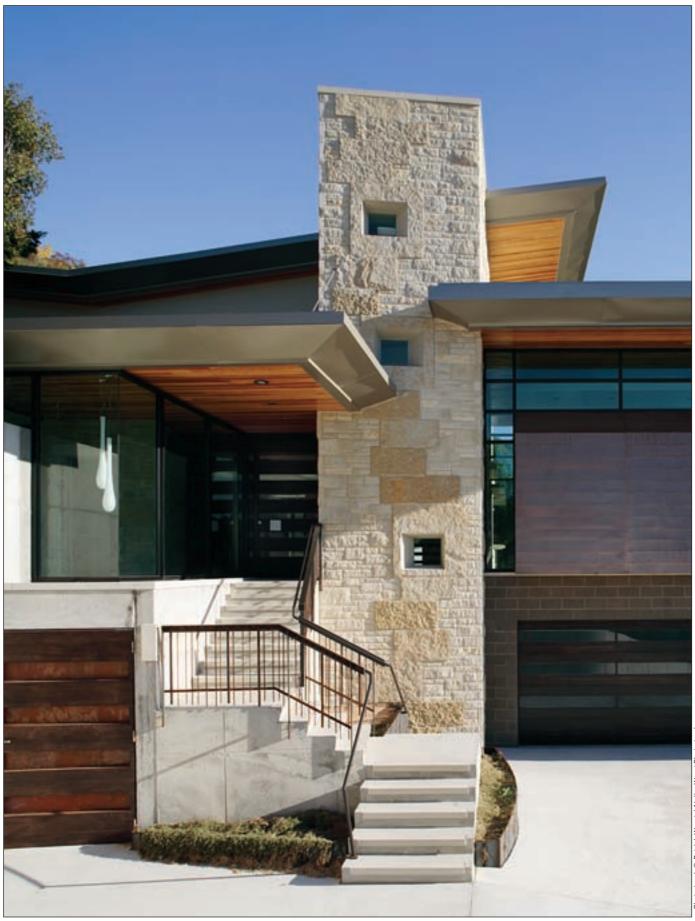


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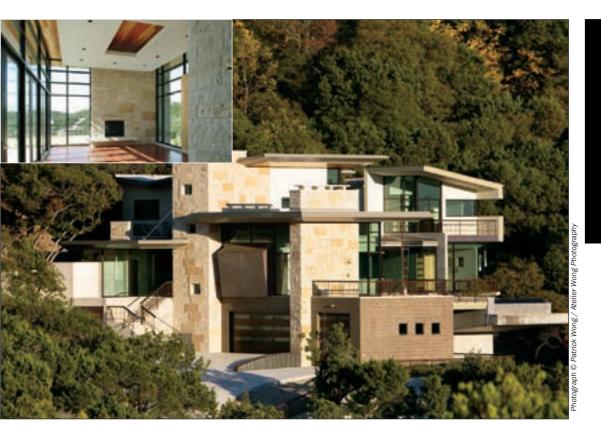
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By Mark Haverstock



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EEP IT SIMPLE AND FOCUS ON QUALI-TY, NOT QUANTITY. Think permanence. Those were the goals of the builders and designers of this modern residence constructed in the wooded hills near the central part of Austin, Texas.

All building sites contain elements that inspire an architectural design solution, and architect Jay Hargrave seamlessly matched the structure to the available site. "It's at the top because of the view," he explained. "We agreed to make sure the house was well engaged in the ground, and the foundation, as well as the components that came down to grade, were well considered as part of the design." Guests approaching from the driveway first see the underside of the building, which emphasizes the relationship between the building and the ground.

Because of the steep slope on which the house is positioned, Hargrave knew they would need to provide some outdoor space at the main living area. That's why there's a cantilevered pool and a small elevated lawn and patio on top, adjacent to the garage.

Primary living spaces are located on the first floor of the house. A centralized kitchen and living room open out to the courtyard of grass and stone that surrounds the pool and hot tub. The living room – the largest space in the house – has three exterior glass walls anchored by two stone masses, the stairwell and fireplace. A dining room is located at the rear of the house, surrounded by two textured concrete walls that wrap around the rear of the house. To the right of the kitchen and dining room is a bridge that links the master suite and an upstairs guest suite with a study.

The second floor features two bedrooms, a full bath and a media room that opens to a patio overlooking the pool. On the ground level is a three-car garage, workshop and wine room. This lower area also housOPPOSITE PAGE: Front view of stair tower and entry. The foundation is an integral part of the entry sequence.

ABOVE:

Overview of residence and features. Placement preserves tree lines and visual privacy.

Above Inset:

Living room with glass curtain walls. The fireplace at the far end also acts as a shear wall, which goes down through the garage.

TOP RIGHT:

S

Award

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T U C K

View of negative-edge pool and hot tub adjacent to house.

MIDDLE: View of house from driveway.

BOTTOM: Stair tower view from main floor.

BOTTOM INSET: Stair tower view from top floor, displaying skylight and unique window openings carved from solid Lueders block.

es a dedicated mechanical room and built-in storage areas.

"We're more involved in the construction aspect than many other local firms," Hargrave said. "It's not typical home construction, as there's very little wood involved."

With modern engineering and technology, stone is no longer limited by its traditional properties and can be applied in a variety of ways. The basic structure is a combination of concrete, reinforced CMU and masonry or th stone over a CMU backup, including structural steel with light gauge steel framing throughout. The exterior is clad in limestone veneer and stucco with copper accents. Stained concrete floors and some hardwood flooring make up the 5,500 square feet of available living area.

The masonry walls range from 18 inches to more than 40 inches in thickness, with their massiveness expressed in the detailing of the corners and openings. One example is the construction of the three windows in the stairwell. Each window is made from two 48" x 48" x 15" Lueders blocks set back to back with an opening carved into the center. The opening in the outside block is slightly larger than the one on the inside block, so the inside edge acts as a stop. During construction, glass was wet-glazed into the opening.

Because of the height of the stair tower walls, the CMU is 12 inches thick. Both sides of the wall are stone veneer and built around this CMU backup.





"Continental supplied the stone with a sawn bed face, and the masons cut and finished the head joints, in particular the corners, to keep those lines nice and crisp," Hargrave said. Details include the use of solid lintel blocks, Lueders caps throughout and a "zipper strip" of larger roughback that zigzags up the face of the stair tower.

In addition to veneer stone, some monolithic stone steps inside and outside the structure act as risers and tread, so each is a solid piece of material. Some outside stairs use solid stone slabs as well.

Other notable stone features incorporated into the design include granite countertops in the bathroom and kitchen. The kitchen countertops actually project outside to make an outdoor service bar. The countertop also acts as the windowsill. ◆







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Photograph © Steven Evans

Art Collectors' Residence, Toronto

By M.W. Penn



Photograph © Steven Evans

LEFT:

The limestone, from Owen Sound Ledgerock, of Ontario, Canada, is type 3 dolomite in a honed finish.

ABOVE:

The external treatment of the house explores a language of natural materials: Algonquin and Wiarton limestone, copper detailing and awnings, rift-cut oak and teak windows.

PROJECT TEAM

Designer:

Hariri Pontarini Architects, Toronto, Ontario, Canada

Stone supplier:

Owen Sound Ledgerock Ltd., Owen Sound, Ontario, Canada

Stone installer:

Mario Rotundo Stone & Masonry Inc., Concord, Ontario

AKING ITS INSPIRA-TION FROM THE OWNERS' COLLEC-TION OF GLASS ART, this hybrid of home, private spa and art gallery explores qualities of transparency, water and light. The 12,700-square-foot interior was conceived to indulge the clients' passions, showcasing a vibrant collection of art and furniture and establishing a private setting for health and wellness. The exterior, in both its massing and its construction materials.

was designed to integrate with the surrounding natural landscape. Throughout all its spaces, this very personal home blurs the boundaries between interior and exterior, building and nature, richness and simplicity, tradition and innovation.

Situated in a Toronto suburb, in an area where ranch style bungalows are being replaced by pastiche European palaces with their accompanying ornamental gardens, this house is unusual in its modernist sensibility and its sensitivity to the existing landscape. The surrounding property can be described as a two-acre room enclosed in natural walls formed by an encompassing line of tall fir trees. Couched in the center of the property, the two-story house sits lightly in the landscape. It is designed to take advantage of views of large trees that had already existed on the site. The home's L-form delineates an otherwise broad property into three exterior sectors while preserving transparency from one sector to the other.

Living quarters are at the heart of the plan, relegating the nondomestic programs of art gallery and health spa to each wing; the configuration met the challenge of achieving domestic intimacy as S

RIGHT

The overall color of the building is derived from the tones of the Algonquin stone, deep taupe to brown with added highlights of gray Wiarton from the same quarry.

INSET:

The spa zone is framed by limestone decking that forms a bridge between the interior and exterior water pools.

well as providing a private sanctum for wellness and a showcase for art. The dwelling's lower level is almost entirely transparent, holding the least private components of the building, while the top layer is almost opaque, embracing and sheltering its most secluded rooms.

The external treatment of the house explores a finely honed language of natural materials. Algonquin and Wiarton limestone, copper detailing and awnings, riftcut oak and teak windows, all dramatically couched beside cascading fountains filled with river rocks and plant life, combine to impart a sense of permanence, nature and timelessness. The limestone is from Owen Sound Ledgerock of Ontario, Canada, a product of their Wiarton, Ontario, quarry. Type 3 dolomite, the stone can achieve a high polish, but is more consistent in the honed finish used here.

The Algonquin limestone panels were all mechanically fastened using engineered stainless steel anchors. The Wiarton rockfaced limestone was installed in continuous course heights. This installation created a linear appearance, understating the vertical joints and highlighting the horizontal joints. Each stone unit was trimmed to match the adjacent piece in form and shape to give the impression that each horizontal course was continuous. Stunning shadow lines were created by larger but recessed horizontal mortar joints. The overall color



of the building is derived from the tones of the Algonquin stone – deep taupe to brown with added highlights of gray Wiarton from the same quarry.

The interior is full of unexpected surprises. Essentially one room wide, the home is almost void of doors and circulation areas. This configuration enables expansive views from one space to another, from the interior to the exterior, back in and then out again.

Spanning two floors, the art gallery is charged with diffused light from clerestory windows and skylights to simultaneously illuminate and protect the art within. A prominent circular staircase adds a sculptural dimension to the wing as it rises to the roofline.

The spa zone, which includes a fitness area, sauna, steam shower, swimming pool and whirlpool, is

framed by limestone decking that forms a bridge between the interior and exterior water pools. On the interior, water cascades from the fitness mezzanine into the swimming pool, and on the exterior it falls from one level of fountain into another, bringing tranquility and sound into all areas of the house. The sense of water is carried further with organically undulating ceilings over the art gallery and pool, suspending like heavy drops of liquid and scooping light in waves overhead.

Throughout the entire home, light is filtered in radiant veils from multiple angles through windows, skylights and floor-to-ceiling windows. Caught on a consistent backdrop of white plaster, limestone from Rossi, France, and walnut flooring, the light ignites the house with a sense of floatation, movement, spirituality and joy.

Recently recognized as one of the "World's 12 Best New Buildings" by Artinfo.com, the residence was designed by Hariri Pontarini Architects, a Torontobased architectural firm that draws on the collective skills and expertise of 20 registered and intern architects and support staff. Partners in practice since 1994, Siamak Hariri and David Pontarini value responsive, highquality design and a strong sense of place and materiality in architecture, and are known for producing designs that use a very open collaborative process to combine artistic spirit with a capacity for highly detailed, beautifully crafted execution. Their projects grow out of intensive research, sensitivity to site, a dedication to detail and craftsmanship, and an emphasis on enduring materials. ♦

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28 BUILDING STONE MAGAZINE + Fall 2006



Belvedere Gardens

By M.W. Penn

OPPOSITE PAGE:

A narrow reflecting pool on the north side of the Sunken Garden is fed by a man-made spring.

ABOVE:

Influenced by the colorful regional geology, the architects chose a blend of quarried stone milled in Tennessee.

ELVEDERE GARDENS IS LOCATED WITHIN a 110-acre cemetery in the quiet southwest Virginia town of Salem. Founded in 1928, family-owned Sherwood Memorial Park had already expanded its mausoleum facilities twice. Phase I was designed and constructed in the late 1930s, and Phase II was realized in the early 1950s. Due to an increasing demand for crypt space, in 1999 the client requested the design of Phase III: a 2,500-crypt mausoleum and columbarium.

In an effort to capitalize on commanding views of the Appalachian mountain range to the northwest, the building committee selected a 2.4-acre hilltop site for the new expansion. With the exception of a Loblolly Pine forest to the south and east, this parcel was devoid of any noteworthy land features. The architect's challenge was to elevate this nondescript site to a sacred place that would fit humbly within its surroundings and become a destination for all generations.

SMBW Architects of Richmond, Va., a 25-person architectural firm founded in 1991, was chosen to design the new expansion. The foundation of SMBW's practice is the exploration of the relationship between landform and the built environment, which is evident in their memorial work, single- and multi-family housing, corporate projects and urban mixed-use developments. The firm is dedicated to being both a responsible steward of the diminishing landscape and the redevelopment of urban fabric. Their method for every commission is rooted in thorough research, intensive analysis, thoughtful editing, and active collaboration between architect, consultant, craftsperson and client.

For inspiration for the Belvedere Gardens project, the firm looked to Erik Gunnar Asplund & Sigurd Lewerentz's Woodland Cemetery and Crematorium in Stockholm, Sweden. As a direct reaction to the prevailing approach to European cemetery design in the early 19th century, their objective was an artistic attempt to reintegrate life with death by exploiting the natural characteristics of the landscape. The result achieved an

PROJECT TEAM

Designer: SMBW Architects, Richmond, Va.

Stone supplier: Scott Stone Inc., Mebane, N.C.

Stone installer: Jim Skiles, Antioch, Tenn,

emotionally charged place that is transcendent and spiritual.

To achieve the goals of creating a sacred space, SMBW Architects chose to suppress the presence of the new mausoleum so that the land and building were in harmony. Two fundamental design moves were employed to create this new landscape. The first was a subtractive process that carved the main space out of the existing ground plane. The second was the additive use of the displaced earth to create a one-acre plinth. These two moves created three distinct outdoor rooms: the Sunken Garden, which is the lower excavated room around



ABOVE

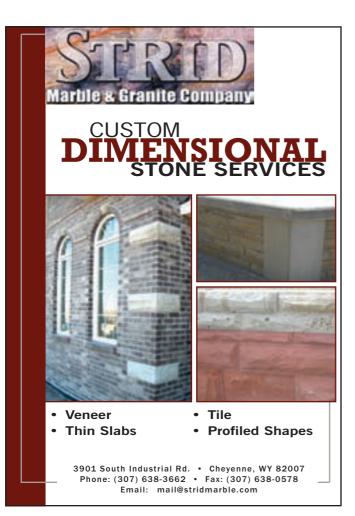
The curved roofs of the mausolea echo the landscape of the mountains in the distance.

OPPOSITE PAGE:

SMBW Architects chose to suppress the presence of the new mausoleum so that the land and building were in harmony.

OPPOSITE PAGE INSET:

A mix of irregular fieldstones defines the secondary site and retaining walls, while a more refined cut stone encapsulates the crypts.



which the entire project is structured; the Grove, an area of ground interment sites created by the plinth of displaced earth and ordered by a bosque of Osage Orange trees; and the Allée, which initiates the entry sequence by creating a promenade along the eastern edge of the property.

The Sunken Garden is an outdoor room, which is at once reverential and quiet. A sinuous crypt wall to the south and five mausoleum structures to the north act as a boundary for the 8,500-square-foot space; the curved sod roofs of the mausolea echo the landscape of the mountains in the distance. A narrow reflecting pool on the north side of the Sunken Garden is fed by a man-made spring and activates this space, simultaneously unifying and separating the lowest and highest rooms. Four bronze and cypress footbridges negotiate passageways between the mausolea and the Grove.

Influenced by the colorful regional geology, a blend of quarried stone provides a warm counterpoint to the concrete, which is the project's primary structural framework. A mix of irregular fieldstones defines the secondary site and retaining walls, while a more refined cut stone milled in Tennessee encapsulates the crypts. Scott Stone of Mebane, N.C., assembled the splitface sandstone from four different sources within the region, and Jim Skiles of Antioch, Tenn., supervised the installation of the stone to execute SMBW's vision. On site, masons blended and hand cut the various colors of stone.

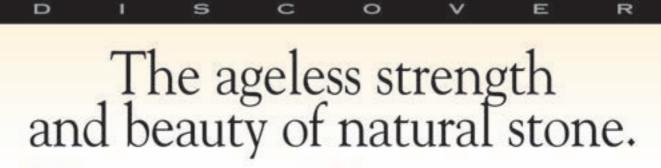
Walking surfaces are articulated with a combination of Pennsylvania bluestone paving, tan stone dust and sod. The palette is intended to engage the visitor's senses on a tactile level to reinforce a more personal relationship to the land. This relationship is further revealed on an emotional level as one moves through the passageways and rooms on a personal journey of contemplation and reflection.

To encourage introspection along the journey, perception is controlled through the suppression and extension of views to the landscape beyond. There are spaces that encourage movement and others that encourage one to pause and reflect. It is intended that each space transcend the previous, while visitors discover something beautiful and meaningful along their journey.

By emphasizing a physical and perceptual connectedness to the local and extended site, SMBW Architects created an enduring



ural order of life. Belvedere Gar-Award for Architecture: Sacred dens has received numerous Spaces. ♦





Belvedere Gardens Mausoleum, Salem, Virginia Recipient of the Building Stone Institute's biennial Tucker Design Awards for 2006. Designed by SMBW Architects PC of Richmond, Virginia. Scott Stone was proud to be a supplier of natural stone materials for this unique and extensive project.

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Factory for Synergy Lifestyles

By Jodi Paper





OCATED IN THE TOWN OF KARUR IN TAMIL NADU, INDIA, the Factory for Synergy Lifestyles is a highly innovative structure that incorporates local elements into a design that builds upon the contemporary needs of the factory itself and its workers. "As a design firm, understanding the local architecture and available materials forms our basic design philosophy," said Rakhi Modi, the architect at SJK Architects in Mumbai who designed the project's presentations and compilations.

"On one of our first visits to Karur, we came across interesting gable wall and coping details, which formed our first set of visual inspiration," he said. The designers, of course, had to adapt the features to suit the home textile factory's needs, which included modifications for climatic conditions, energy efficiency, and the factory workers' comfort. What resulted was a cocoon-like structure "developed into a streamlined, form-fitted skewed rectangular [shape]. A curvilinear thrust from the main structure breaks the formal linearity, allowing an effective integration of a courtyard."

Stone was a key ingredient in the design and structure of the factory. "The entire building has been cocooned in 18-inch thick,

PROJECT TEAM

Designer:

SJK Architects, Mumbai, Maharashtra, India

Stone Supplier and Installer: Bricksteel Enterprises, Bangalore, Kamataka, India

random rubble masonry walls that, because of it being a good insulator, help in cordoning off excess heat from the outside into the internal factory spaces," Modi said.

The town of Karur is situated in a climate of extremes; fierce heat and harsh rains are typical weather trends, which required special attention in the planning of the facility, particularly for the comfort of the people working there. For this purpose, "a vaulted roof was designed as a softer version of the pitched roof typically used all over Karur, which suited the climatic conditions of that region very well," Modi said.

Three types of stone were utilized throughout the facility: an igneous rock, locally referred to as "blue granite," which is quarried in the state of Tamil Nadu; Kadappa stone, an igneous black rock also quarried locally; and the gravish-green Kotah stone. According to Modi, "The entire external cocoon of the factory was built out of stone, which constituted about 60-70 percent of the structure and amounted to about 3,400 cubic meters (4,444 cubic yards) of stone for the entire building and its compound walls."

The majority of the structure was built out of the blue granite, which - in addition to being an excellent source for internal cli-



mate control – proved to require very little in upkeep. "Since the rains wash the stone regularly, the maintenance, as is necessary in a factory environment, is almost



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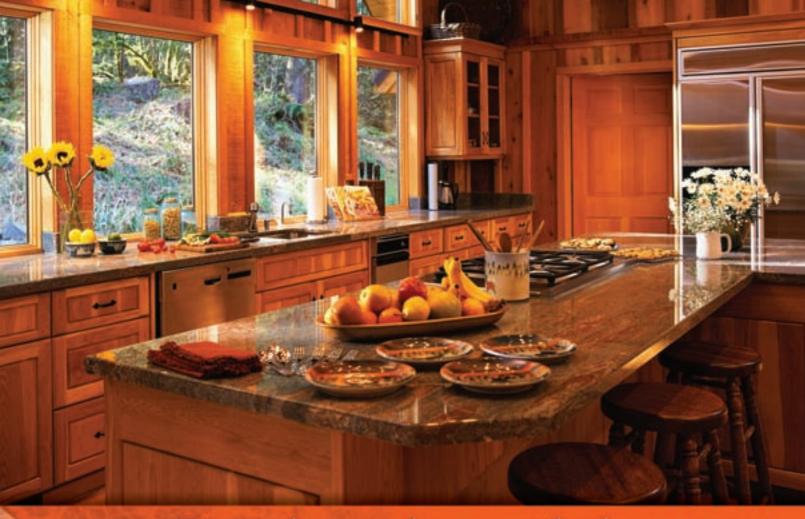
45 South Main St., Barre, VT 05641 In Vermont call 476-7121 Out of state call 1-800-451-4349 www.trowandholden.com zero," Modi said. Another bonus: "[Employing] a locally available material gave us an opportunity to explore the possibility of using locally available masonry skills, as well as [allowing us] to contribute our share in the development of the town."

A semi-polished Kadappa stone was used in slabs 38-50 millimeters (1-1/2 to two inches) thick for steps, ledges and sills throughout the building. Machine-polished Kotah stone, cut 20-25 millimeters (3/4 to one inch) thick, was used for much of the flooring throughout the factory, including in the restroom and pantry areas.

Possibly the most outstanding feature of the Factory for Synergy Lifestyles is the main courtyard to the west of the most densely occupied area of the building. Modi explained that this courtyard "becomes an anchor for the building as a green hub, cutting out the harsh west sun, and reducing the afternoon heat gain by providing a vegetation buffer."

Adding to the unique design of the structure, there are also three smaller, though no less significant, courtyards that sporadically emerge along the primary passageway, which Modi describes as "reminiscent of those featured in the local homes." Each of these "open-to-shy" courtyards serves an individual purpose: one is a water court, featuring small pool with an inner lining constructed of Kadappa stone; the second features a pebbled area with a colored wall; and the third serves as a light well. All three add to the aesthetic sensibility of the factory, as well as the comfort of its workers. "In addition to bringing temperature control, they become junctions for visual relief and [worker] interaction," Modi said.

"Our design sensibilities revolve around understanding the local architecture to derive a vocabulary and to understand materials suitable for a particular given place in combination with the client's requirements and constraints," Modi said. With its vaulted ceilings, array of stone and multiple courtyards - all in the name of factory efficiency and worker comfort - the Factory for Synergy Lifestyles truly encompasses the sensibilities of which Modi spoke and comes together in a synchronicity that adds up to a factory much greater than the sum of its parts. ♦



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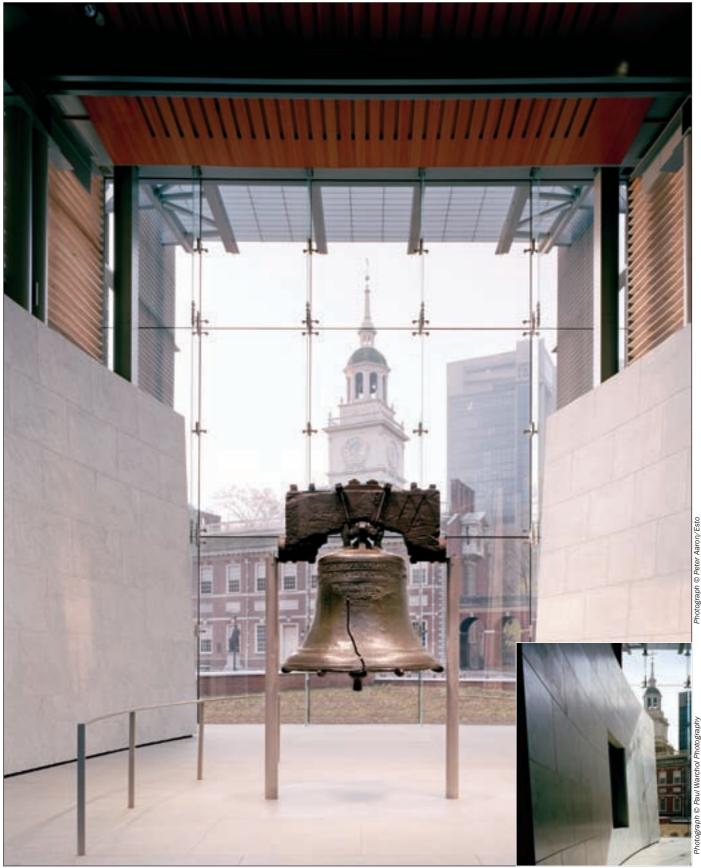
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The Liberty Bell Center

By M.W. Penn

LEFT: The Liberty Bell is displayed before an oblique view of Independence Hall.

LEFT INSET: Cupped walls of Carrera white marble in an ashlar pattern embrace the bell.

ABOVE:

Brick, stone and glass combine to form a covered outdoor interpretive area.

ABOVE INSET:

The visitor's experience unfolds along a Chelmsford granite wall reminiscent of Jefferson's serpentine wall.

N 1997, THE MASTER PLAN OF INDEPEN-DENCE MALL envisioned the creation of a "Great American Place" in the heart of Philadelphia's historic district. In keeping with this spirit, the design of a new building to house the Liberty Bell on Independence Mall demanded a distinctly American building that would be seamlessly connected to this place, the city and the collective memory of events that happened here.

Designed by the Philadelphia architectural firm of Bohlin Cywinski Jackson, the new 12,000-square-foot structure fulfills the vision and honors the bell's significance. Opened in October 2003, the \$11 million Liberty Bell Center provides both a larger home for the bell and an exciting and authentic visitor experience. Accessible during the day, illuminated at night, and featuring several interpretive exhibits that highlight the bell's history, the new center offers visitors a contemplative experience.

Contemporary yet resonating with the 18th- and 19th-century architectural traditions of the city, the brick, stone and glass building is an open, humanly scaled place of gathering and community. Glass walls and a metal-clad wood roof join a brick and stone-paved

PROJECT TEAM

Designer:

Bohlin Cywinski Jackson, Philadelphia

Stone suppliers:

Vickery Stone Company, Havertown, Pa.; Fletcher Granite Co. LLC, Westford, Mass.; Johnston and Rhodes Bluestone Company, East Branch, N.Y.

Stone installer:

DM Sabia & Company Inc., Conshohocken, Pa.

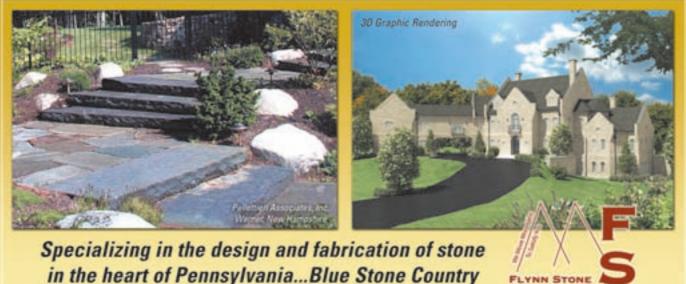


LEFT: A delicately detailed scrim of sunlightcontrolling vanes shelters the bell chamber's south-facing, glass enclosure.

arbor way and sun-shading trellises to form the building's enclosure. The stone paving is bluegray Elk Brook Bluestone from Johnston and Rhodes Bluestone Company in East Branch, N.Y., in a natural cleft finish; bluestone has historical significance as a regional material original to the mall.

The bell, its story and the visitors' personal encounters with it are enveloped in three architectural elements: a covered outdoor interpretive area, an elongated rectilinear exhibit hall and a tapered cubic volume housing the bell chamber. Those coming to see the

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bell enter a long hallway lined with an undulating granite wall on one side and a wall of glass on the other; the Chelmsford granite wall is reminiscent of Jefferson's serpentine wall, and the glass wall looks out onto the mall. Quarried by Fletcher Granite Company in Chelmsford, Mass., the granite is guillotine cut, yielding a rough, uneven surface that appears handcrafted, and the mica content of the granite sparkles when the sunlight strikes the surface.

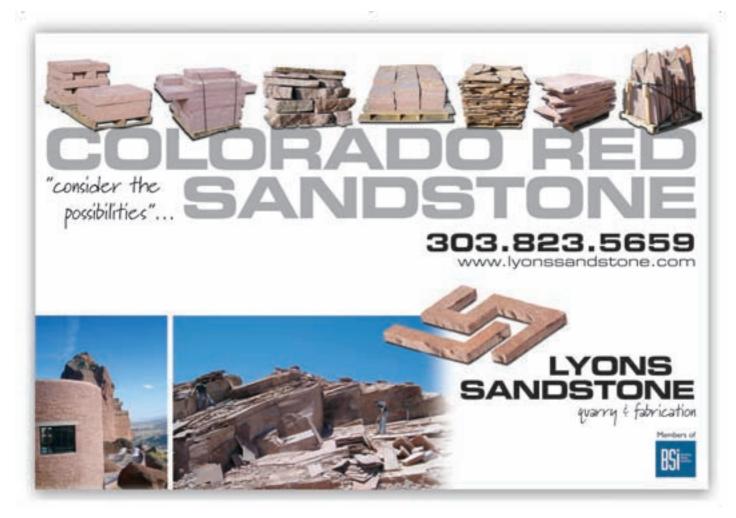
The visitor's experience unfolds along this granite wall within the transparent building. Here information on the construction of the bell, its historical role, and its universal meaning are presented through a series of interactive and informative displays. The exhibition consists of text panels, photographs, artwork and physical artifacts. There are places for foreign visitors to hear the story in their native languages and for large groups to assemble for special presentations.

The inclined floor plane of the exhibit area conforms to the contour of the exterior landscape, which is visible through the generous windows opening onto the mall. The walking path rises gently to a plateau where a glass and marble chamber houses the bell, but the top of the granite wall remains level, gradually decreasing the height of the wall from 13 to 10 feet as the visitor ascends toward the bell chamber.

The bell is displayed before an oblique view of Independence Hall – the Pennsylvania State House that was the site of the signing of the Declaration of Independence and the framing of the Constitution. The view forms a compelling backdrop. In the chamber's expansive architectural volume, the great window reminds visitors of the intimate relationship of hall and bell, making the bell's importance explicit.

Cupped walls of Carrera white marble embrace the bell, creating an intimate environment for both individuals and larger audiences to view it and reflect on its meaning. The marble has soft veining, luster and a uniformity of color that allowed these walls to be layered in a delicate ashlar pattern, lending substance and weightlessness, dignity and repose to the chamber. By splaying the exterior walls and tilting the vertical angle of the marble walls slightly, the architects also softened the ambient sound in the chamber. Location, architecture and icon join to make a moving and memorable experience.

The center provides an urban edge along Sixth Street to the west and a cornerstone to the newly reconfigured Independence Mall, a public square where lunching office workers mingle with visitors from afar and schoolchildren exploring history. The stunning landscape redesign of the mall by Philadelphia's Laurie D. Olin is an inviting respite from a busy city, and the Liberty Bell Center, with its walkways and trellis, provides a sylvan pavilion at the edge of the park. Visitors exit the bell chamber along the final segment of the granite serpentine wall, emerging near the southwest corner of the mall, well positioned to continue their visit to the park's other important sites and the surrounding historic city. 🔶

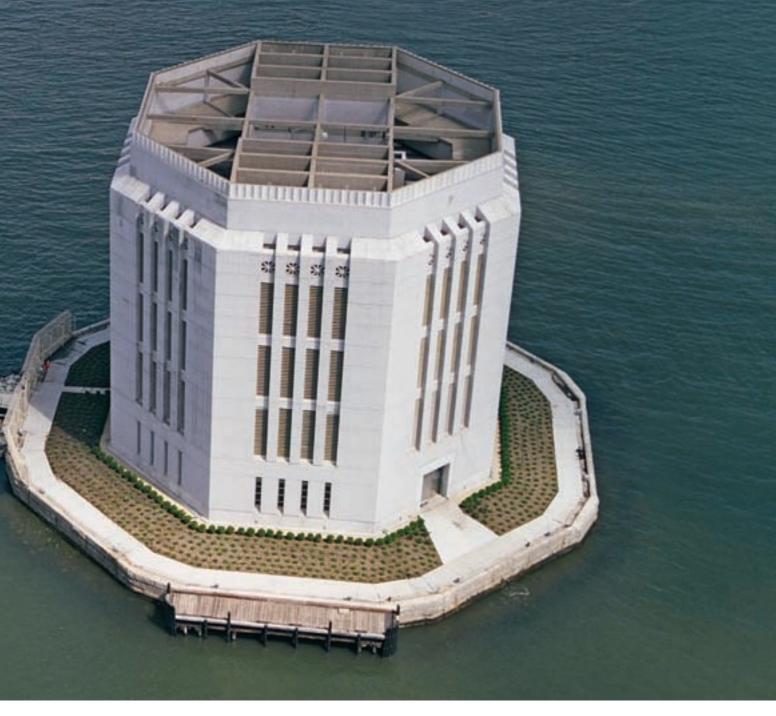




Photograph © Suzanne DiGeronimo

MTA TBTA Brooklyn Battery Tunnel

By Mark Haverstock



ABOVE:

Aerial view of the exterior of MTA TBTA Brooklyn Battery Tunnel Governors Island Ventilation Building after renovation.

RESH AIR IS EXACTLY WHAT MOTORISTS NEED while traveling though the Brooklyn Battery Tunnel, which - at 9,117 feet in length - is the longest continuous underwater vehicular tunnel in North America. The Brooklyn Battery Tunnel Governors Island Ventilation Building – along with three others, two in lower Manhattan and a third near the Brooklyn portal - provide a complete air change in the tunnel every 1-1/2 minutes to help remove the carbon

monoxide and other emissions created by the numerous vehicles that travel this stretch of Interstate 478.

A breath of fresh air is also what the exterior of the Governor's Island Ventilation Building needed after years of exposure to the elements. The original facade began as a glazed brick finish that did not weather well in the harsh location – over the years it disintegrated, cracked and failed. In 1975, the Metropolitan Transportation Authority (MTA) Triborough Bridge and Tunnel

PROJECT TEAM

Designer:

DiGeronimo PC, Paramus, N.J.

Stone supplier:

North Carolina Granite Corporation, Mt. Airy, N.C.

Stone installer:

Millennium Stone, Tile and Masonry, Flushing, N.Y., under subcontract to contractor Kiewit Constructors



CLOCKWISE FROM ABOVE LEFT: Preparation of wall surface for mounting granite panels.

Detail of failure of acrylic stucco panel facade.

Failure of acrylic stucco panel facade.

Authority (TBTA) decided to strip the glazed brick surface and replace it with acrylic stucco panels; however, after approximately 30 years of service, the stucco panels also failed and began falling off the facade. MTA TBTA decided that a different design approach would be required to provide a long-lasting and durable facade. It was also important that the renovations were compatible with the existing architectural concept.

MTA TBTA selected DiGeronimo PC and a team of specialty subcontractors to provide architectural and engineering services to renovate the structure. Initial tasks before the project began included a thorough investigation, document research, digital photography of existing conditions, and material for sampling and testing. This project also included underwater investigation and documentation, giving the designers a complete assessment of the current condition of the structure.

Two significant challenges were associated with the project. First, the Governor's Island Building is located on a man-made island that is largely vacant and has no direct connection to New York City. Access to the project was limited to an eight-story climb from a stairway at the midpoint of the tunnel or via water taxi or ferry from Lower Manhattan. When the 9/11 security measures were in effect, access was severely limited from both the tunnel and by water. The New York City Department of Transportation instituted restrictions on the tunnel as it had been identified as a vulnerable target. Additionally, all waterborne traffic was initially suspended and only reinstated under the supervision of the U.S. Coast Guard and the Port Authority of New York and New Jersey.

The second challenge for the DiGeronimo team members was to understand the nature of the previous facade failures. They needed to come up with the best solution for a successful and durable face-lift, while keeping the project on schedule through heightened security conditions.

They found the best approach was to treat the structure as a lighthouse, since it is exposed to similar marine and weather conditions that would affect the durability of the materials used on the external structure. DiGeronimo selected natural stone as the best choice for two important reasons: to match the original finish of the other tunnel ventilation buildings and to provide a durable surface with lower maintenance costs than the acrylic stucco panels or glazed brick. The design team ultimately selected Grade A Mt. Airy Granite from North Carolina Granite Corporation for its look, low maintenance and permanence.

Prior to the stone installation, the DiGeronimo design called for the removal of the stucco panels and the cleaning, waterproofing and sealing of the exposed backing surfaces. To make the building's new "skin," the team designed a floating panel facade. Working with a German manufacturer, they devised a suspension system created from stainless steel and marine aluminum on which the granite panels were attached. These stone panels measure approximately three feet long, four feet wide, and 1-3/16 inches thick. This framework floats on the surface of the building, providing protection against the elements, while eliminating opportunities for weathering to occur between the panels or against the subsurface.

Though common to construction in Europe, this is the first time such a suspension system for stone panels has been implemented in a structure built in the United States.

"The result is a stone facade that acts as a shield, a first barrier in the harsh marine environment," said Louis A DiGeronimo, AIA, of DiGeronimo PC. ◆

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The Park at Lakeshore East

By Mark Haverstock

BELOW: A close-up of the pool shows the waterfall disappearing into decomposed granite at the base.

UILD A PARK AND THEY WILL COME. That's what the Lakeshore East develproject completed, created with

opers had in mind for the area that once served Chicago as a port and warehouse facility for the Illinois Central Railroad. The six-acre Park at Lakeshore East is the centerpiece for the development of this 28-acre site in the heart of downtown Chicago. The park was the first part of the



the intention of drawing interest to the area.

Architects at Site Design Group set up six distinct zones within the park at Lakeshore East: the grand stairway, the great lawn, the children's playground, water gardens, ornamental gardens and the dog park, along with a variety of seating options. Designers even took into account the variety of activities that would take place in the park and their proximity to each other. For example, the playground is adjacent to the site planned for a future public school. Although the development is private, the park is a public area. Both pedestrians and residents living in the nearby high-rise buildings can experience the beauty of the park's modern design.

Two main park paths, constructed of a specialty pavement, mark the east and west entries. At each of these entry points, visitors are greeted by a series of five pool basins that progressively narrow along the path to the center of the park. Each of the lannonstone basins is divided by a series of evenly spaced, solid red gran-



ite walls. Steel scuppers seem to "float" between the large masses of granite and pour water into the pools lined with rugged black boulders. Water flows over the front ledge of the pool into a grated reservoir designed to re-circulate the water. Also, water from scuppers at the end walls of each pool seems to mysteriously disappear into a bed of decomposed granite that separates the pools.

"Chicago has a very long history of parks using stone and we saw these water features as an opportunity to bring in more contemporary forms and to still use classical





ABOVE: This fountain is one of five located at the end of the park paths.

LEFT: Stairs form a grand entrance into the center of the park.

ABOVE INSET: Steel scuppers releasing water into the pool appear to float in the massive granite blocks.

PROJECT TEAM

Designer:

Site Design Group Ltd., Chicago; The Office of James Burnett, Houston

Stone suppliers:

Aspen Valley Landscape Supply, Park City, III.; Buechel Stone Corporation, Chilton, Wis.; Cold Spring Granite, Cold Spring, Minn.; Halquist Stone Company, Sussex, Wis.; Meno Stone Company, Lemont, III.

Stone installer:

John Synko, Mark 1 Restoration Company Inc., Chicago RIGHT: Aerial photo of the park.

materials in a modern way," said Michelle Inouye, project manager, Site Design Group. "The way we've incorporated the natural stone materials and introduced new materials, like the metal scuppers in the pools, give it a more urban and contemporary feel."

Additional water features appear at opposite ends of the park. The playground is composed of three exterior play pods, connected by pergolas constructed of both steel and cedar wood. In the center of the main circle is a spray pool. At the west end is a dog park, where they incorporated more of the lannonstone for a small fountain. Water pours from the fountain to a basin, flows into a cavity that goes to the low end of the slope, and then it falls into a drainage basin at the other end.

"It wasn't only the fountains that have the stone. We tried to carry that same material in different ways throughout the park, namely the stairs at the main entry," Inouye said. This entry capitalizes on the grade change toward the park – a 40-foot drop over a 340-foot length. Lannonstone clad walls follow the same coursing patterns as the fountains, set horizontally in specific 2-1/4 inch and five-inch increments with random vertical



joints, offsetting angling stair lines and slope changes. The rough-cut wall faces the finish of the wide capstone pieces that provide ideal seating at the top, middle and lower landings. Wall breaks generate further interest and draw attention to the more formal coursing of the stone.

The Park at Lakeshore East has truly become a focal point for the development of this new urban neighborhood within Chicago. Currently, two high-rise buildings that tower above the park area are fully occupied, with two more buildings nearing completion. Plans for the near future include covering the entire perimeter of the park with threeto four-story residential town homes that would act as a transition between the scale of the park and the taller buildings. ◆

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48 BUILDING STONE MAGAZINE 🔶 Fail 2006

Petco Park – San Diego Padres Ballpark

By Mark Haverstock

LEFT: Main concourse overlooking Home Plate Plaza.

OU CAN SEE IT ALL, WHETHER IT'S AN ACTION-PACKED BASEBALL GAME OR

a breathtaking view of downtown San Diego and the surrounding areas. Petco Park, home of the Padres, provides a window to the best of this southern California community. It's located just a few blocks away from the Gaslamp Quarter and the convention center, and completes the connection between Balboa Park and the bay.

Petco Park isn't your typical sports stadium. "The thing that's really different and exciting about the park is the way the building doesn't have an urban façade, a vertical façade," said Antoine Predock, design architect for the project. "Instead of that, the functions that are normally absorbed underneath the grandstands, such as team offices and club lounges, are pulled out almost like drawers to create these natural stone, garden terraces. In doing so, there's a space created between the garden terraces and the grandstands, which is open to the sky concourse. We've created a ballpark with an outer terrace building, inner garden, ballpark and playing field itself."

The towers are another feature that makes Petco Park unique, giving it an iconic presence on the downtown skyline. These towers support the field lighting, as well as contain special suites and viewing platforms. They act much like anchors for the back of the seating bowl, which is light and skeletal in composition, allowing natural light and breezes to enter the concourse spaces.

HOK Sport+Venue+Event provided the know-how for

PROJECT TEAM

Designer:

Antoine Predock Architect PC, Albuquerque, N.M.

Executive Architect:

HOK Sport+Venue+Event, Kansas City, Mo.

Stone suppliers:

Stone A.V., USA, Plano, Texas; and Modern Builders Supply, San Marco, Calif.

Stone installer:

Klaser Tile, Chula Vista, Calif.

designing the house seating plan and amenities for spectators. The seating bowl is divided into distinctive neighborhoods, with all 42,000 fixed seats providing ample legroom and built-in cup holders. Seats down the first- and third-base lines are angled toward the infield. The two upper levels are built on extended cantilevers. with the front of the terrace level situated only 34 feet above the field. This gives fans the sense of intimacy of a smaller venue and a great view of the action, no matter where they sit. "They really are experts at determining the perfect



TOP LEFT:: Night view of lighting tower and Third Base Building.

TOP RIGHT: Home Plate Plaza entry for Petco Park.

BOTTOM RIGHT: Aerial view of Petco Park, looking toward Coronado Island.

site lines at the perfect distances," Predock explained.

Today's baseball fans cruise around a lot, and when you cruise Petco Park, you're always in touch with the game because of the open area under the grandstands. "You can go out to the terraces and still keep track of the game while looking out over the harbor or looking toward Coronado Island, toward Balboa Park or the downtown skyline," Predock said. "There are numerous paths you can follow." There is also a park enclosed within the ballpark-literally a city park on a grassy hill just beyond the center field bleachers seating area. On nongame days, it's a city park; during the game, you can picnic and watch the game from this location, aptly named Park at the Park.

Sandstone used for this project, dubbed "Padre Gold," was chosen to be in harmony with its surroundings – the color of the local soil and the color of the cliffs at Torrey Pines along the San Diego coastline. The owner, architects and contractors traveled to India to select the stone with the perfect color and hardness from a large range of samples. A year of quarrying produced the 150,000 square feet needed for the project. The bulk of the stone was provided in cut pieces approximately 2'x1' to 2'x2' for installation.

Outside walls, including the towers, are stone-facing panels hung from walls. "The stone was used extensively on the garden terraces," Predock said. "We wanted the building to have in its perimeter conditions a very strong relationship to its location." Some stone was used in combination with stucco, because stucco is a very commonly used material in the region. Stucco color also related very well to the stone color."

An added touch was the incorporation of a historic building, the Western Metal Supply Company, into the ballpark on the left-field side. This renovated 96-year-old building houses the Padres Team store on the first level, the second and third levels contain party suites, and the fourth floor features a restaurant with terrace dining and a superb view of the field. The left-field foul pole is attached to its southeast corner. "In fact, the Western Metal Supply nestles in very nicely with the modern building that encompasses it," Predock added. ♦





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Prothro House Addition and Remodel

By Mark Haverstock

PROJECT TEAM

Designer:

Lawrence W. Speck, FAIA, PageSoutherlandPage, Austin, Texas

Stone supplier:

Mezger Enterprises, Lampasas, Texas

Stone installer:

J.P. Castelline Masonry, Austin, Texas

RESERVE OR DEMOL-ISH? THAT'S THE QUESTION.

This house occupied a valuable parcel of land near downtown Dallas, featuring green spaces and large mature trees. The size was right, but the layout didn't suit all the needs of its owners. The house was built in the '70s by noted architect Bud Oglesby, but it was not one of his better works. "They wanted to keep at least some pieces of it," said architect Lawrence W. Speck of PageSoutherlandPage. "If it had not originally been done by Oglesby, they would have probably chosen to bulldoze it." Instead they chose renovation, incorporating some of the existing structure into the new plans.

Speck looked at the project as kind of a joint effort between the old and new architects, though the late Oglesby could only contribute in spirit with his existing work. "We kept the general attitude and the plan, including the midsection of the building, but we completely cut off both ends," Speck explained. "We had Bud's input through the general skeleton of the house, but we altered both ends of the building structurally and changed just about all the exterior materials and finishes from the original." Speck worked with the bones, adding new flesh and blood to the residence.

The decision to remove both ends of the house was made because of severe deterioration to the original structure. This major change proved to be a plus - it opened up the house to extraordinary views of Turtle Creek and the Dallas Country Club. On the Turtle Creek end of the house, the removed section was replaced by an open, glass living room, with the glass being enclosed in a steel frame on the inside. "That wall is actually hung from the top - the structural system is a blade of steel 3/8-inch thick and about 18 inches deep," Speck said. "The

glass panels are slid between them. It's very thin so, when you're inside, it's as transparent as it can possibly be looking to the outside. You can really enjoy the open landscape." At the opposite end, they built a singlestory wing containing an indoor family room and an outdoor living area.

In both the original and renovation, zones are delineated throughout the house for different functions. The first are "servant" spaces, a term Oglesby used to describe stairwells, closets, bathrooms and storage. Other zones are "served" spaces – living areas such as bedrooms, the living room and the dining room.



ABOVE: Front of the Prothro house at night. The main stairwell is located in the tower on right side of the main entrance.

RIGHT: The front of original house prior to renovation and remodeling.



Photograph © Timothy Hursley / The Arkansas Office

RIGHT: Glass walls in the living room provide a spectacular view of Turtle Creek.

BOTTOM LEFT: Rear of house, featuring tower of antique Lueders limestone.

BOTTOM RIGHT: The inside of the stairwell with a stainless steel divider and walls of antique Lueders.



"As you can see in that front portion, there are three solid stone volumes. They contain all the servant spaces," Speck said. "In Oglesby's original plan, the servant spaces weren't very strong, but we went back and really reinforced them." Reinforcing the servant spaces included the construction of stone tower structures evenly spaced, which contrast with the served spaces of glass, steel and wood that join them.

Walls of the servant spaces were constructed of sawn and sandblasted antique Lueders limestone, laid in long horizontal planks. Stone is mounted inside and outside the structure, with an inner cavity between for insulation. Slabs of Lueders comprise the steps and patios that surround the structure.

The limestone walls that contribute solidity and warmth to both the exterior and interior are complimented by the extensive use of stone inside for other applications in the house. Countertops and lavatories also utilized a finely polished version of the Lueders limestone. Shower enclosures were also limestone – a very dense French limestone – that complimented the Lueders used throughout the rest of the house.



Both inside and out, tactile surfaces are made even more vivid by a variety of light sources. For example, in the primary stairwell located to the right of the entrance, the thick limestone walls are counterbalanced by a delicate stainless steel screen that hangs from top to bottom and acts as a guardrail for both flights of stairs. Both the surface of the stone and the shimmering metallic surface of the screen are enhanced by the natural light introduced at the top of the stairs through a translucent lantern and by a fiber optic artificial light source at night.

Overall, this extreme makeover not only honors the work of a noted local architect, but also incorporates a favorite regional stone to provide a natural and timeless appearance.

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Sigmund Stern Grove Renovation

By Jodi Paper

www.buildingstonemagazine.com



HE SIGMUND STERN GROVE IS A LONG-STANDING LAND-MARK in the Sunset District area of San Francisco. The 33-acre park is home to an amphitheater, which for years has been used as a venue for free concerts and even the local ballet. As well as being selected as one of this year's Tucker Design Awards recipients, the Sigmund Stern Grove renovation is a winner for the community.

After almost 70 years of use, primarily in this public entertainment capacity, Stern Grove was in desperate need of reconstruction. The moody San Francisco climate and the popularity of the beautiful tree- and meadow-filled space left the site weather-beaten and eroded. In 1999, the Stern Grove Festival Association hired landscape architect Lawrence Halprin to redesign the park, giving him a budget of \$15 million. Halprin then enlisted the help of Quarry-House Inc. and allotted \$3 million of the budget for stonework alone.

"It is a project built to last for decades or longer," said Ed Westbrook, the founder of Quarry-House and longtime collaborator with Halprin.

With the hallmark of Quarry-House being "The Art of Legacy,"

it's no wonder Halprin selected the company, which Westbrook described as "an all-service traditional stone masonry company that works with clients sourcing materials worldwide and collaborates with guarries to help them incorporate old-world techniques of cutting stone." This includes hand-splitting and chiseling the granite with hand tools. Given that Stern Grove is such a historically, culturally and environmentally significant space in the middle of the city, QuarryHouse seemed the perfect fit for just such a restoration.

Westbrook, for his part, was thrilled to work again with the landscape architect. "Halprin has a real thing about stone," Westbrook said. "He likes to use it and work with it." Westbrook went on to further describe Halprin as highly collaborative. "He builds wonderful teams on projects. He works intuitively with lots of sketching and likes to work onsite in the field, directly with the people." The Halprin-QuarryHouse collaboration was certainly a match made in heaven for the project that lay ahead of them.

The two main elements of the renovation are grass and granite. Westbrook searched quarries all over the world, from Canada to Mexico to Italy, before finally

PROJECT TEAM

Designer:

Office of Lawrence Halprin, San Francisco

Stone supplier: Chen-Ragen LLC, Seattle

Stone installer:

QuarryHouse Inc., San Anselmo, Calif.

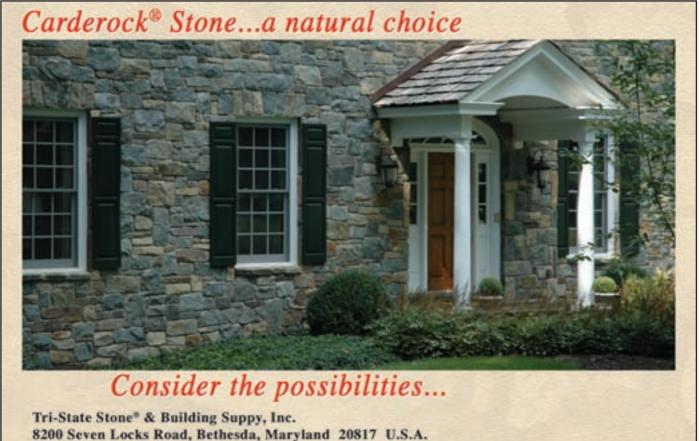


selecting a stone out of North Central China, called Gabbro. "While the stage itself is built of wood and steel, the entire amphitheater is built out of this one stone," Westbrook said. "It's a tough, very strong granite."

Westbrook worked with 75 local villagers at the quarry, which is located in the Shandong province. Together they selected 326 boulders. "We wanted the boulders to be sculptural," he added. "Each had to be a unique and beautiful piece in itself."

Logistics were a very big part of the project. After locating the stone in China, where it was also fabricated, QuarryHouse had to make sure the material arrived at the San Francisco site on time. "We had to get it all done after the concert season, which runs from June to late August," Westbrook explained. "We transported 84 container loads over five months." That translated into a total of 1,700 tons of semifinished and raw stone. "Given the quantity and that fact that we had one winter to build, we had to weigh and balance [all aspects of the project]."

Back in San Francisco, QuarryHouse hired a crew of 30



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people to hand carve the stone. In sticking with the company's "oldschool hand-chiseling methods," they used ancient tools like feathers and wedges.

"Structurally and artistically, the amphitheater had a lot of requirements for public access," Westbrook said. The overall timeline for the project was eight months, during which they sought to accomplish three things: "provide improved seating and sightlines through an amphitheatre of stone tiers gradually rising along the hillside; stabilize the hillside erosion; and improve handicap access." The final result: tiers of stone create a bleacher-like layout throughout the amphitheater, which seats 10,000 people. Long, grassy knolls punctuate the space, in which large groupings of boulders separate the different areas, including banked terraces and short walls that intersect with paved walkways. Pillars 15 feet tall mark the entrance to Stern Grove and welcome the public into their new play space.

And the public certainly enjoyed it. On June 19, the newly renovated Stern Grove began its 68th concert season – the first of many seasons to come. \blacklozenge



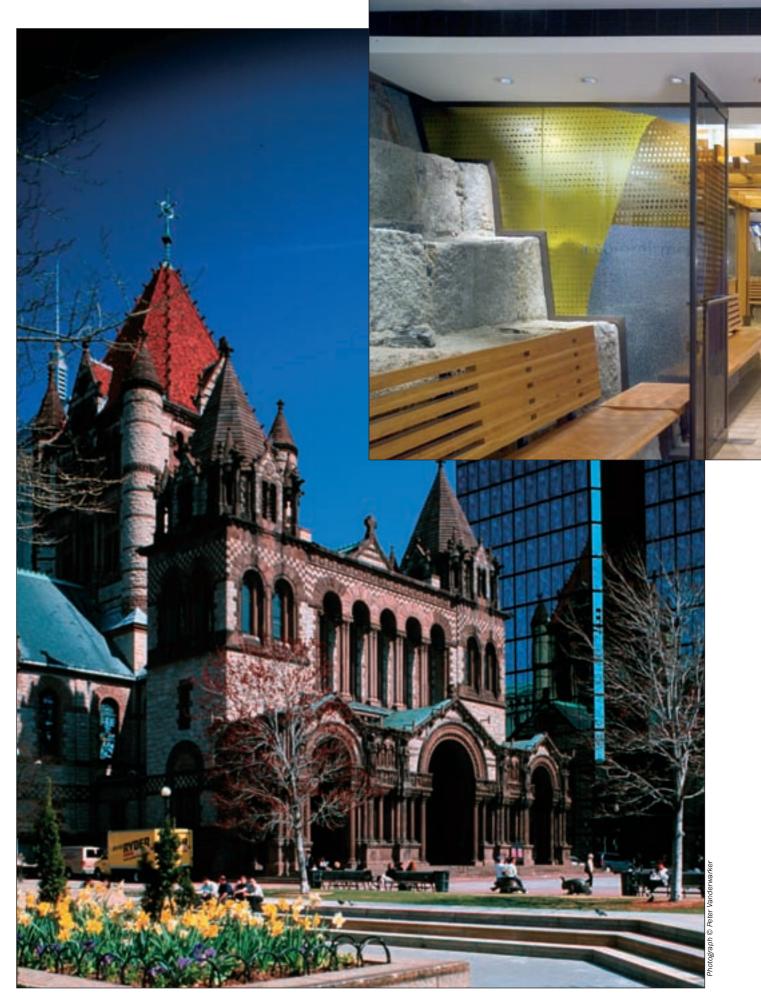
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Trinity Church in the City of Boston

By M.W. Penn

LEFT:

Boston's Trinity Church is regarded by many as the single most commanding building in the city.

TOP LEFT:

The undercroft after excavation and restoration. The exposed granite foundations and piers met the congregation's requirement for warm and inviting finish materials.

TOP RIGHT:

A view of the new bookstore, showing cherry wood pergola and granite foundations.

ANY REGARD BOSTON'S TRINI-TY CHURCH AS THE SINGLE most commanding building in

the city. Built between 1872 and 1877 – and designed by one of the greatest architects who lived and worked in Boston, Henry Hobson Richardson – Trinity is the only building to be twice honored as one of the 10 most significant buildings in the United States by the American Institute of Architects (AIA). After 125 years of the physically demanding onslaught of weather and pollution, the colors had become muted and stones in the façade had to be repaired. In addition, the church – a parish church of the Episcopal Diocese of Massachusetts and a thriving center of worship – had outgrown its activity space.

When the congregation decided to restore and expand the national historic landmark, they turned to Goody Clancy of Boston for full architectural and

PROJECT TEAM

Designers: Goody Clancy, Boston

Stone suppliers/installers:

Kenneth Castellucci & Associates Inc., Lincoln, R.I.; Port Morris Tile & Marble Corp., Dorchester, Mass.; Restoration Preservation Masonry Inc., Northborough, Mass. RIGHT: Exterior stone mortar joints after cleaning and repointing.

RIGHT INSET: Exterior stone mortar joints before restoration.

interior design services and to Shawmut Design and Construction, also of Boston, for construction management.

Lisa Howe, director of preservation at Goody Clancy, said, "We were very fortunate to work with a client that deeply cares about the building. The Preservation Guidelines, set at the beginning of the project, informed our work, from conception through construction."

Due to Richardson's stringent requirements, the quality of the stone to be restored as part of the tower restoration was excellent. In fact, the outstanding quality of the stone, as well as the entire building when it was originally constructed, acted as a guideline for the team completing the restoration. Restorers mimicked the techniques of the 19th-century builders, matching the exact stonework, mortar and terra cotta that were originally used. Crews repaired or replaced the Dedham granite and East Longmeadow sandstone of the central tower exterior, and carefully matched the color and texture of the original mortar. The result is a stunning red hue for the sandstone joints, a restored example of the original structural aesthetics and the original grandeur envisioned by Richardson.

Trinity Church is located on a public plaza that occupies one full city block. The building is flanked by major streets and surrounded by skyscrapers and historic structures, like the Boston Public Library, leaving no space for lateral expansion abovegrade. The only space available for the needed expansion was in the undercroft within existing foundation walls.

Adding to the complicated scenario, the church is built on the landfill of the Back Bay, which was originally a mud flat. To avoid sinking into the marshy wetland, Trinity rests on approximately 4,500 wooden piles driven through 30 feet of gravel fill, silt and clay and wetted by a pump so they won't rot when exposed to air. As a growth spurt of skyscrapers hit the Back Bay neighborhood, the groundwater beneath the buildings dropped, leaving wooden piles at the neighborhood's foundations exposed to air. This allowed the wood to begin rotting, threatening the structural integrity of many buildings.

The situation made any excavation of the undercroft an especially intricate procedure. In the words of Carl Jay, director of historic preservation, Shawmut Design and Construction, "The operation was so delicate that it required our workers to dig out portions of the undercroft by hand in order to avoid disturbing the wood pilings and the four elephantine "feet" [the granite piers] upon which Trinity Church rests. In many cases, we used the same methods to restore and expand the church as were originally used to build it." Crews repaired the few damaged pilings with steel supports, and engineers installed a system to regulate the water level and keep the wood submerged to prevent further damage.

The space below the sanctuary, which had been unfinished crawl space, was carefully excavated four feet to a new elevation, and 13,000 square feet of new space was created for a lecture and gathering area with a support kitchen, a visitor area and a bookstore. Improvements were made

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for circulation, handicap access, life safety, and mechanical and electrical systems.

The original granite foundation walls and piers were incorporated into the new design maximizing square footage. The piers are four, thick granite shafts that rise from under the floor of the undercroft and continue up through the church to support the dome. The existing stone was so beautiful, the owner and architects decided during construction to expose even more than originally planned. The exposed granite foundations and piers met the congregation's requirement for warm and inviting finish materials. \blacklozenge





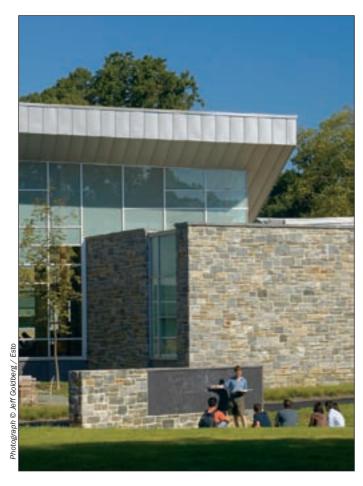
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Unified Science Center, Swarthmore College

By M.W. Penn



ABOVE:

Local schist laid in an ashlar pattern ties the Unified Science Center into the fabric of the campus.

OPPOSITE PAGE TOP:

In respect for the scale of the campus, the Science Center was broken down into separate masses, with heights of only two and three stories.

OPPOSITE PAGE LEFT:

Because outdoor teaching is popular on campus, honed black granite walls were installed adjacent to terraces or lawns to act as chalkboards.

OPPOSITE PAGE RIGHT:

The green strategy included a zerorunoff environment. V-shaped roofs direct water back into the earth through waterfalls, stone water channels and reabsorption pools.

HE SWARTHMORE COLLEGE CAMPUS, adjacent to renowned

Crum Creek and Crum Woods, is also on the site of the Scott Arboretum. Established in 1929, the arboretum contains more than 3,000 different kinds of ornamental plantings, displaying some of the best trees, shrubs, vines and perennials hardy in the climate of eastern Pennsylvania. Encompassing more than 300 acres, Scott Arboretum is also an integral part of the college landscape.

Swarthmore had existing science facilities that were outmoded and located in six separate buildings. In 1999, the college committed to a major overhaul of these facilities with a \$48 million project. A primary goal of the project was to consolidate the science programs into three adjacent buildings and add a new connecting building to create an improved environment for the study of the sciences.

Two architecture firms were involved in the project and designed the Science Center through a collaborative process. Einhorn Yaffee Prescott brought experience with science education and research buildings to the project. They are an integrated architecture and engineering design firm, specializing in education, government, science and technology, and historic preservation projects. The second firm, Helfand Architecture of New York, contributed to the overall arrangement of

PROJECT TEAM

Designers:

Einhorn Yaffee Prescott Architecture and Engineering P.C., Boston; Helfand Architecture P.C., New York (Architects in Association)

Stone supplier:

Media Quarry Co., Media, Pa.

Stone installer:

Davis-Giovinazzo Construction Co., Plymouth Meeting, Pa.

the complex and the design of public spaces. Many of Helfand's projects involve the merging of new uses with old architecture and new architecture in a historic context.



ABOVE:

The V-shaped roof over the commons area is echoed in a connector element to bring architectural unity to the structure.

BELOW:

Views of the surrounding woods are available from a majority of the laboratories.

The Unified Science Center is composed of 80,543 square feet of new construction, as well as 55,124 square feet of renovated space. The center is placed at the north end of the campus and forms the fourth edge of the academic quadrangle. The new elements wrap around the existing buildings to link the existing individual science buildings and library, and the connector elements share details, such as soaring, V-shaped roofs, to link together the large building.

The facility includes classrooms, labs, faculty offices and social spaces. It brings together biologists, chemists, computer scientists, mathematicians and physicists in one 140,000-squarefoot structure, whose components are each small enough to not overwhelm campus neighbors, but still provide physical connections between all science disciplines.

The new center actively engages and utilizes the quality of the campus and arboretum; the design incorporates both physical and visual connections between interior and exterior spaces. Views of the surrounding woods are available from a majority of laboratories and through transparent sections of the building. In the commons - the center's most spectacular and inviting gathering area - walls of glass face both north and south. Outdoor teaching, popular on this campus, is made possible in multiple locations by using honed black granite paneled walls as chalkboards adjacent to terraces or lawns. A sheltered, Asian-inspired garden centers the facility; the garden has walks and seating areas made of natural cleft Pennsylvania bluestone accented with fossilized bluestone pavers. The LEEDcertified building expresses and celebrates Swarthmore's commitment to the natural environment.

Building materials include local granite, wood and Pennsylvania mica schist, a local stone chosen to clad the exterior walls of the Unified Science Center. Schist is the dominant material in the majority of Swarthmore's buildings, as well as many of the homes surrounding the campus; the vernacular use of this material in local buildings encouraged the architects to incorporate the stone into their design.

The Pennsylvania mica schist used in the center is from Media Quarry; it ranges from blue to gray to brown and is usually separated by color, though it is sometimes used full range. The blend chosen for the science center is 50 percent gray and 30 percent blue, highlighted by 20 percent brown. Pennsylvania mica schist is a durable stone with the gray and blue varieties containing quartz, and blends beautifully with the native Pennsylvania cherry wood used throughout the Science Center.

The schist was field dressed by the master masons of Davis-Giovinazzo Construction to create the designated ashlar pattern. Davis-Giovinazzo set the plasma finish granite paving and curbs and the Chappel stone used to veneer the mechanical sheds. John Giovinazzo said that the incorporation of so many different types of stone in complimentary finishes made this project unique.

The success of the planners and architects is evident. The Unified Science Center provides Swarthmore with a beautiful and functional space as friendly to the environment as a science building can be and an enhanced environment that will assist the college in achieving their long-term goals for the study and profile of the sciences. It is imaginative and engaging, and has set a new standard on campus. ◆



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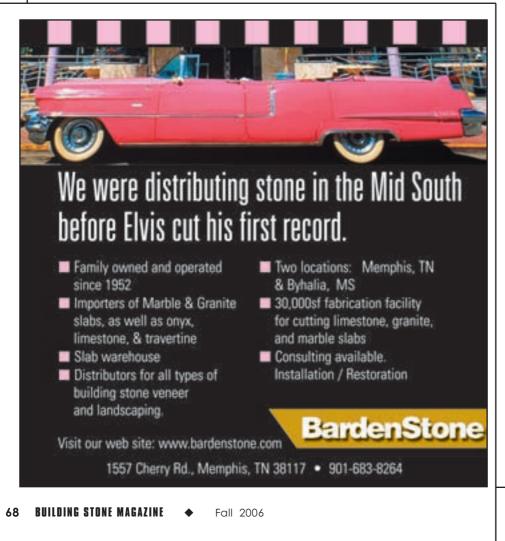
SkillsUSA will be offering new national college competitions for the following programs of study that support fast growing occupations: landscape architecture, civil engineering and geospatial technology.

SkillsUSA is offering the newly designed post-secondary only program at the community college level. This program would provide colleges with a mechanism to validate their college's technical education programs and measure them against national standards. The new SkillsUSA program will allow interested individuals to join SkillsUSA and enter competitive events at the national level and outside the traditional SkillsUSA boundaries. In order to enter a national skills competition, students would have to meet a qualifying score via online testing developed by industry professionals. More than 280,000 student and instructors join SkillsUSA annually, organized into more than 14,700 sections and 54 state and territorial associations. SkillsUSA is an applied method of instruction for preparing America's high performance workers in public career and technical programs. For more information, visit www.skillsusa.org.

Global Granite Offers New Precision Tools

Global Granite & Marble, a St. Louisbased wholesale importer and distributor of natural stone products, is expanding its imports to include two new pieces of equipment for small- and mid-size fabricators.

The Global Vanity Master[™] and the Global Easy Edger[™] are the latest precision instruments for fabricators who want to keep pace with orders for natural stone applications specified by architects, designers and custom homebuilders. The tools are



available in North America, exclusively through Global Granite & Marble.

The Global Easy Edger can grind, shape and polish up to 21 edge profiles, from 3/4inch to 2-1/2 inches thick, and up to 78 trim details up to four inches wide. The machine can accommodate up to 10-inch blades that can make rips up to eight inches wide. A rear-loading table allows a fabricator to handle a slab as big as 48 inches wide and 123 inches long. The head of the machine has a 90-degree rotation capability to increase flexibility for the fabricator.

The Global Vanity Master has a freemotion articulating arm that can route, shape and polish slab edges up to 78 inches long and 48 inches wide. It will help a fabricator create precision edges for sink and vanity bowls as well as the popular curved-end countertops found in kitchens, bars and offices.

Bonstone Releases Touchstone™ Accessories

Bonstone Materials Corporation has released a DVD that provides an extensive look at the Touchstone family of products. The DVD begins with a brief history of the company. Then it features a menu where specific products can be chosen for in-depth technical information, as well as video demonstrations on uses, mixing and application. Not only is this DVD the perfect tool for installers and fabricators, but also industry professionals who are seeking product knowledge and training on Touchstone products.

Bonstone has also introduced the Touchstone Quik Set fabrication shop heat lamp for cold and wet stone needs. This heavyduty, moveable lamp is designed and tested to work with Touchstone epoxies to improve cure speed and quality.

OSHA Moves to Prevent and Reduce Injuries

The U.S. Labor Department's Occupational Safety and Health Administration (OSHA) launched a new outreach and enforcement effort aimed at preventing and reducing injuries, illnesses and fatalities among workers in New England's cut stone products industries.

The new regional emphasis program focuses on workplaces that cut, shape, finish, handle or distribute granite, marble and other natural, engineered or other stone products. The industry, primarily made up of smaller employers, has grown rapidly in the past few years, prompted by an increased demand for countertops and other stone products.

During the summer months, OSHA offices in Connecticut, Maine, Massachusetts, New Hampshire and Rhode Island conducted outreach activities to inform industry employers and employees of the program, promote their awareness of the hazards common to their workplaces, and provide information on possible abatement methods. This included contacting employers to encourage them to schedule a free safety and health audit by their state consultation service.

Adirondack Natural Stone Opens Two New Quarries

In addition to its current six quarries, Adirondack Natural Stone announced the opening of two new granite quarries. With this addition, Adirondack will be offering some new colors, including: Hawthorn, a blend of gray, white and black striations, with pink colored crystalline mixed throughout; and Heritage, a mixture of black, gray and white striations. Both granites have mica mixed in, making it sparkle in the sunlight. These will be offered in mosaic veneer, roughly squared and rectangular, ashlar, uniwall and wallstone.

Luck Stone's Augusta Plant Celebrates 30 Years of Safety

Luck Stone Corporation celebrated 30 years without a lost-time injury at its Augusta plant in Staunton, Va.

Almost 100 people attended the safety ceremony, which was held at the Holiday Inn Golf and Conference Center in Staunton. Attendees included county board of supervisors; officials and inspectors from the Mine Safety and Health Administration (MSHA); the Department of Mines Minerals and Energy (DMME), including its director of mineral mining, Conrad Spangler; the Virginia Transportation Construction Alliance (VTCA); and the National Stone and Sand Gravel Association (NSSGA). Additionally, Spangler presented a letter and certificate on behalf of the governor's office congratulating the plant on its safety record.

Luck Stone Corporation is one of the largest, private, family-owned and -operated aggregate companies in the United States, and is the 12th largest of crushed stone in the nation.

WALKER ZANGER Introduces New **Bathroom Vanity** Collection

As homeowners have discovered the pleasures of spas and boutique hotels, they have often dreamt of bringing these experiences home. The WALKER ZANGER Bathroom Vanity Collection allows them to do just that, for it is the world's first collection of vanities, washstands and consoles that are designed to perfectly complement natural stone.

With 12 designs available in a total of 22 different variations, the collection embraces a wide variety of cultural and stylistic influences, ranging from American Neoclassicism and Hollywood Regency to Art Deco.

Park Industries Introduces New **Products**

The Park Industries® has introduced a new traveling bridge saw and a thin stone veneer machine.

The PYTHON II traveling bridge saw is extremely simple to operate. The simple, touch-screen interface allows operators to program the saw with no previous computer control or software experience. It's that easy. The program guides operators through setups and cutting cycles faster than manual processes available on the market. In addition, the PYTHON II can run unattended, resulting in significant labor savings for owners.

With the capabilities of handling a 78" to 100" diameter diamond blade, the PYTHON II can saw stone up to 42" in depth. The arbor drive is available in a 50- or 75-horsepower motor with soft start to assure high produc-

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tion sawing. The variable, cross head travel speed of five to 40 feet per minute allows operators the flexibility in determining the blade travel speed based upon various stone types.

The bridge, cross travel, and raise and lower assemblies are rigid structures utilizing high-precision, round slide bearings on replaceable, case-hardened chrome shafts resulting in precision cutting, lower diamond cost and vibration-free sawing. The gantry travel drive has a variable-speed, dual-drive motor with speed reducers, rack and pinion drive, and brakes on both sides. This system secures the gantry position to achieve accurate stone thickness. The laser light on the bridge shines a consistent width across the entire slab length, displaying where the blade will traverse. This allows for a one-person set-up because it simplifies cut location alignment. In addition, the primary load carrying bearings and shafts on the cross travel are submerged in oil and protected by solid way covers, which

results in lower maintenance costs and few mechanical adjustments.

The all-new ThinStone® TXS-4500 stone veneer fabrication system creates thin veneer corners and flats from processed sandstone or limestone, either from split-face or natural-finish materials. This remarkable, revolutionary system is designed to dramatically reduce production costs as well as significantly increase production capabilities.

This revolutionary system can process soft limestone to the hardest sandstone. The ThinStone TXS-4500 can cut stone up to 12 inches high, two to 24 inches long, and up to 12 inches thick. The system has the flexibility to provide finished product 12 inches high, two to 24 inches long, and 1/2-inch to two inches thick.

Park's new ThinStone TXS-4500 is a revolutionary approach to improving and increasing the production of thin stone veneer corners. By giving fabricators a better, more profitable method of creating finished prod-

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ucts, the ThinStone TXS-4500 system is helping to make natural veneer stone become more affordable and more available for residential and commercial construction uses.

Superior Stone Products Introduces New Stone Protection

As the stone industry is being forced to provide solvent-free stone sealers to meet VOC requirements, several companies have developed solvent-free products to comply with these new regulations. However, there have not been any products created that perform as well as the original solvent-based products...until now!

Superior Stone Products is proud to introduce ZERO-Ultimate Stone Protector. ZERO will erase any doubts you may have regarding VOC-compliant stone sealers.

ZERO is manufactured using materials specifically designed for use with natural stone. Our "competitors" use off-the-shelf products that are mass-produced for other industries. Superior is a true chemical company manufacturing our own fluoropolymers, designed to actually bond with natural stone. Utilizing our exclusive fluoropolymer technology, ZERO provides unequaled protection against staining and is VOC compliant. ZERO is water-clear, has a fresh scent and provides ultimate protection against oil- and waterbased stains. Used annually, ZERO will protect your natural stone investment by allowing you enough time to safely wipe up spills preventing your stone from staining. ZERO is available in 24-ounce spray bottles, quarts, gallons, and five- and 55-gallon containers.

Global Granite & Marble Names New Sales Engineer

Jialin Qi has joined Global Granite & Marble as a sales engineer.

Qi brings seven years of sales, marketing and engineering experience, both domestic and international, to the Global Granite & Marble team. His newly created position will support sales of two types of machinery he helped introduce to the U.S. market: the Global Easy Edger[™] and the Global Vanity Master[™].



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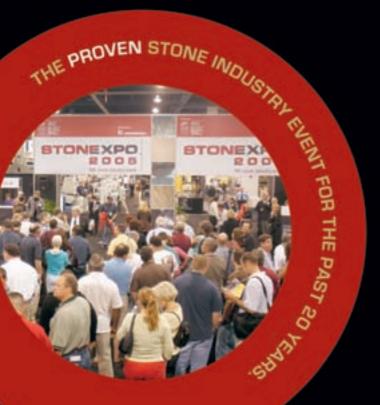
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As sales engineer, Qi will offer technical advice to customers and help the machinery manufacturer improve design and quality. His responsibilities include machine demonstration, customer assistance with problem-solving and post-sales technical, and training support.

Prior to joining Global Granite & Marble as a full-time employee, Qi worked as a summer intern for the company during graduate school, communicating with Chinese suppliers, developing the company website, and implementing new methods of inventory control. He's also worked as a consultant with Allsteel Inc. of Muscatine, Iowa. Qi also brings experience from his work as marketing manager for Guiyang Tristar Machinery Co. Ltd., Guiyang, Guizhou, China; and founder, president and project manager for Shanghai Wudai Digital Technology Co. Ltd., Shanghai, China.

Qi received a bachelor's degree in mechanical engineering from Zhejiang University, Hangzhou, China. He also earned a master's degree in operations management from the Henry B. Tippie School of Management, Iowa City, Iowa.

Valders Stone & Marble Receives MSHA Award

Valders Stone and Marble Inc. is proud to be a recipient of a second consecutive "Certificate of Honor" awarded by Mine Safety and Health Administration (MSHA) in Washington, D.C. The award honors the employees and the company for more than 203,000 manhours of quarry operation without any fatal accidents or permanent total disability injuries. These consecutive certificates of honor span a period of time from 1999 to 2004. The latest honor was bestowed in April of 2006.

Valders Stone and Marble, Inc., a division of Eden Stone Company is a quarrier and manufacturer of dimensional cut limestone building products used for residential, institutional, commercial, and governmental facilities, both nationally and internationally. The quarry also produces rip-rap stone for public and private projects that is used for shoreline and harbor protection, primarily for projects located on the shores of local lakes and waterways.

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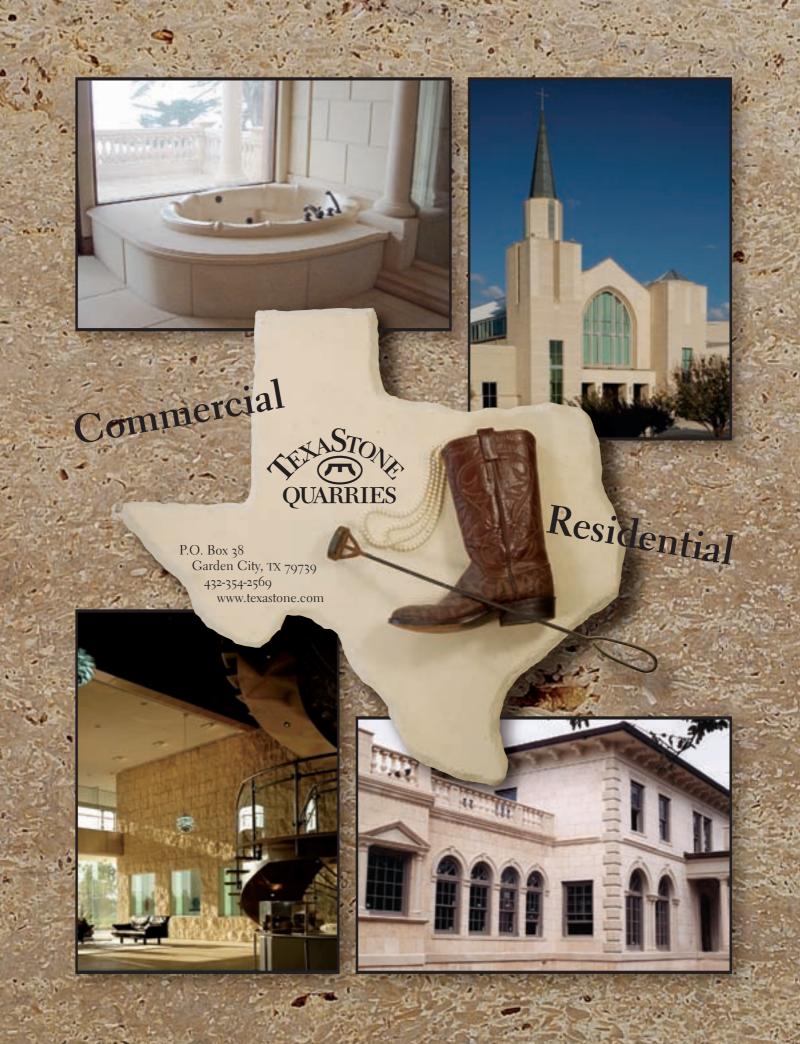
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