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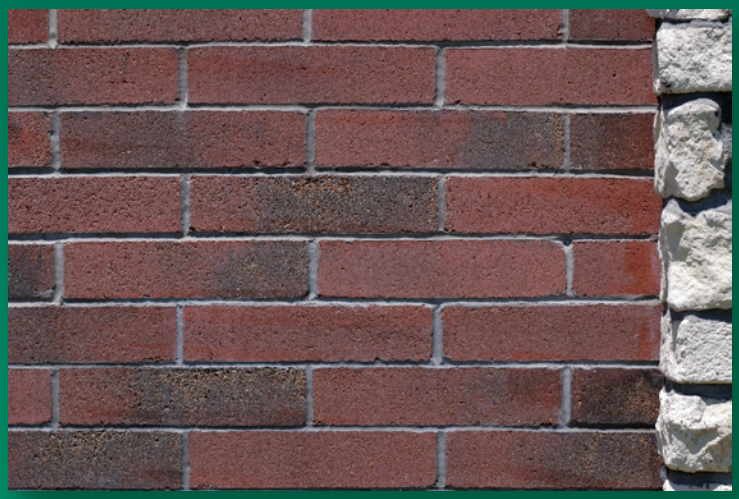

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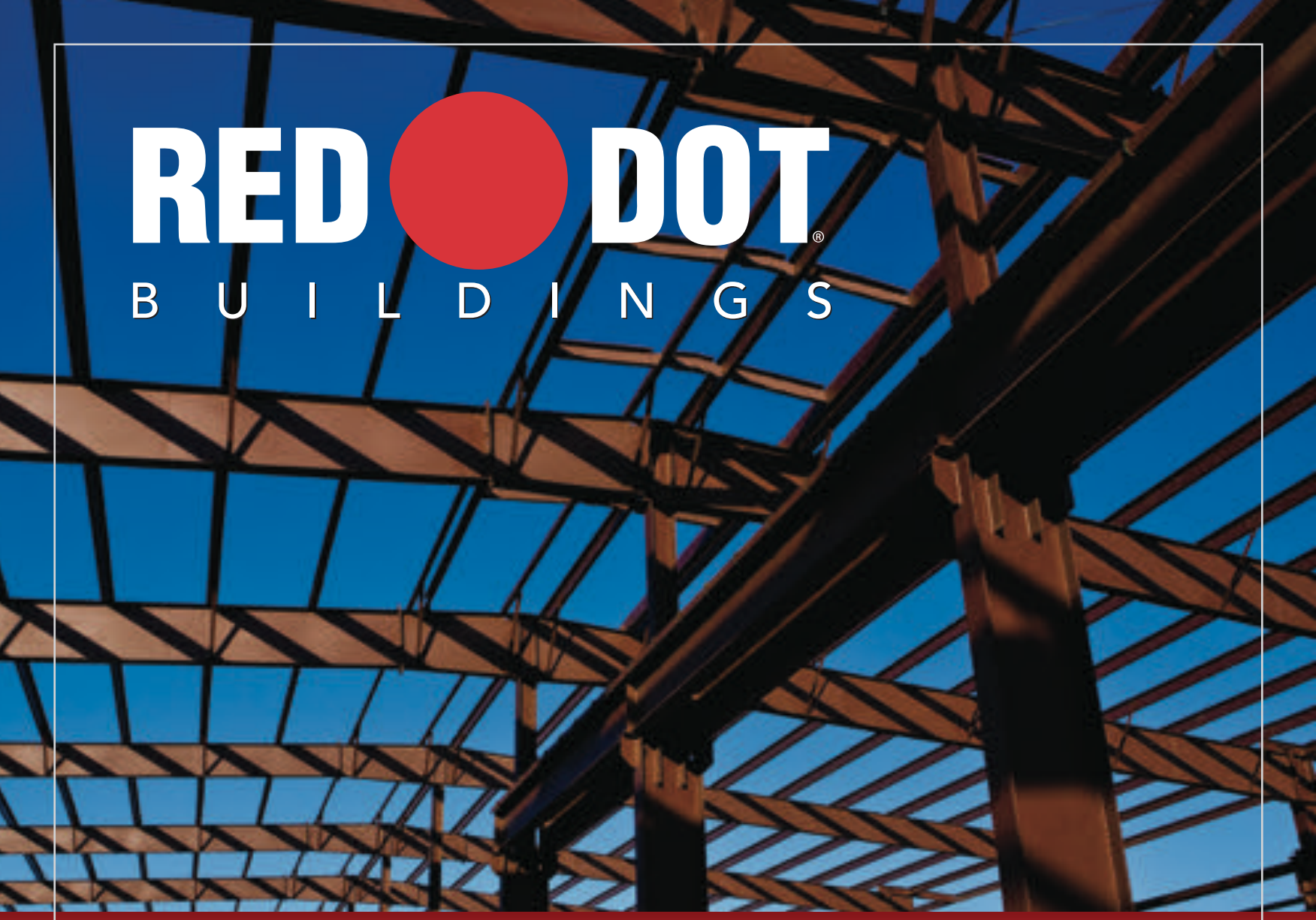

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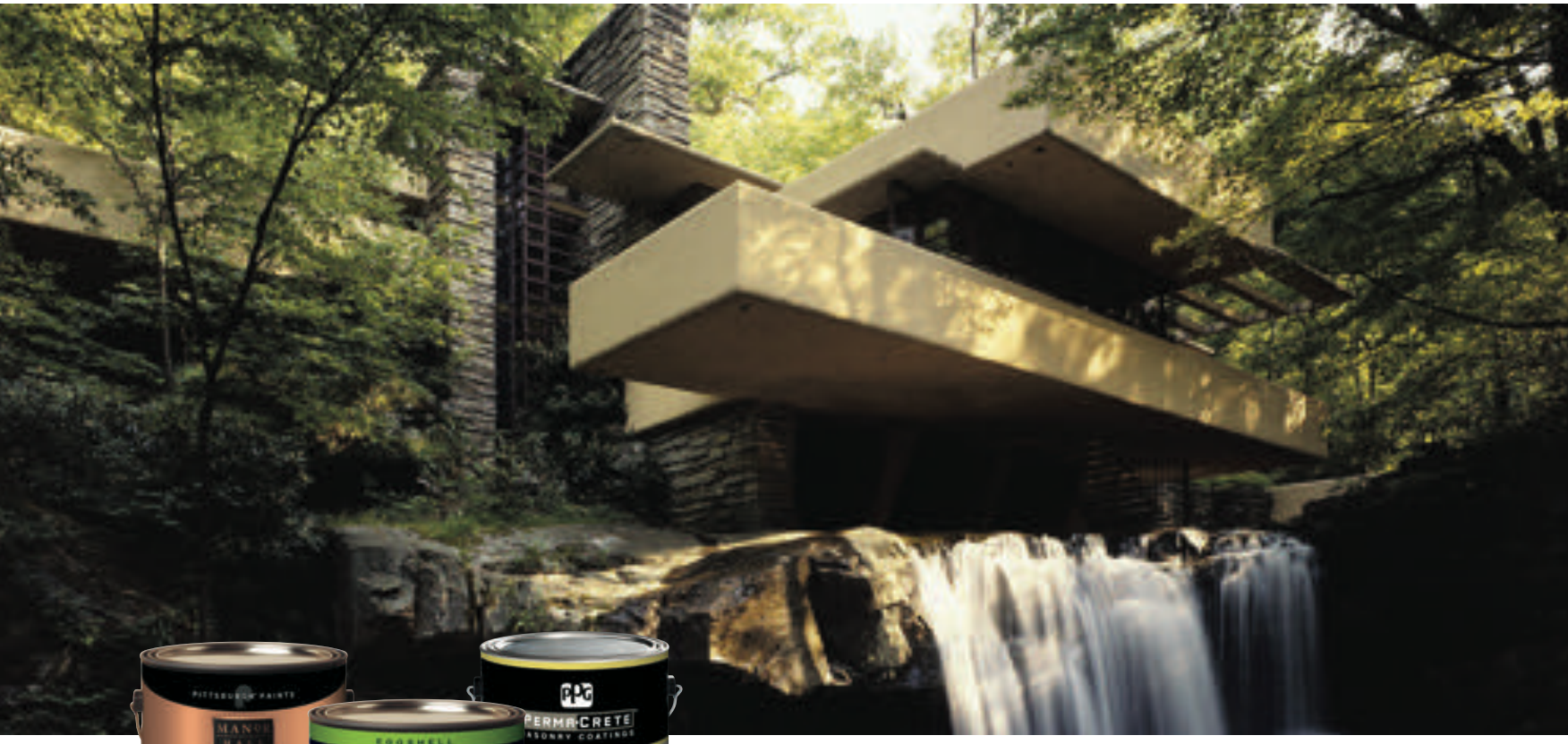

Photograph courtesy of the Western Pennsylvania Conservancy. Fallingwater is located in Mill Run, PA; 724-329-8501.

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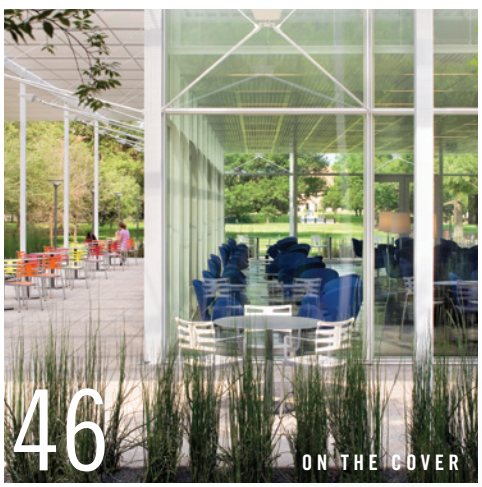

A WELL-CENTERED CAMPUS
Thomas Phifer and Partners
THOMAS M. COLBERT, AIA

MEXICAN MODERN IN AUSTIN
Cotera+Reed Architects
MARIO L. SANCHEZ, PHD

HOMEWORK YIELDS HIGH MARKS
Pfluger Associates with Chumney
CHRIS SCHULTZ, AIA

DEPARTMENTS

TexasArchitect

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Models by elementary school students were displayed Nov. 21 in UT Austin's Goldsmith Hall during a showcase sponsored by AIA Austin.

PHOTO BY JOHN CAMERON, ASSOC. AIA

FOR THE PAST FOUR YEARS, THE MEMBERS OF AIA AUSTIN have volunteered their time to teach elementary school students in their area about architecture. Their most recent efforts culminated in November with displays at UT Austin of models the kids devised to illustrate the lessons they have learned. This year's program reached more than 315 students from third, fourth, and fifth grades.

The program teaches children the importance of thoughtful planning and environmentally sensitive design, two fundamental ideas that architects are eager to present to as many people as possible. What better place to start than with youngsters?

In this edition of *Texas Architect,* examples of the issue's theme, "Campus Communities," abundantly demonstrate how architects are positively affecting the future owners and occupants – and designers – of our built environment. A few of the highlights follow.

In Dallas, the kids at the new Booker T. Washington High School designed by Allied Works are now learning the performing arts in a new $55 million building funded by a public/private partnership. *TA* contributing editor Willis Winters, FAIA, takes readers on a tour that begins on page 40.

On page 52, Dr. Mario Sanchez profiles the Southwest Key East Austin Community Development Project where the nonprofit organization sponsors educational programs for disadvantaged youth and adults. Designed by Cotera + Reed of Austin, the building is notable for its rigorous attention to mid-twentieth-century Modern antecedents from Mexico.

Another facet of this issue's theme is an article on page 68 by James Kirkpatrick, AIA, of Denton, who was part of the jury in last year's annual Exhibit of School Architecture sponsored by the Texas Association of School Boards and the Texas Association of School Administrators (TASA/TASB). As he states, the event reminded him that architects must continually educate their school clients if children are to benefit from thoughtfully designed facilities.

For this edition's "Backpage," I invited Tom Cox to write about the architecture program at Skyline High School in Dallas. Tom has taught there for 29 years, and his experience attests to the importance of teaching students about the fundamentals of architectural practice so they might make their own unique improvements to our world.

***

The "Tribute" page in the Nov/Dec edition was slipped in without my knowledge by co-conspirators Andrea Exter and Julie Pizzo (*TA*'s associate publisher and art director, respectively) to mark the issue's being my fiftieth as editor. Since I was trained as a newspaperman to keep myself out of the story, it was something of an out-of-body experience for me to read "50 Issues and Counting" by Gerald Moorhead, FAIA. The recognition is gratifying, and the notes I've received as a result of Gerald's article leave me speechless—almost. I am very lucky to have a job I love and to work with a great team to produce a new *Texas Architect* every other month. Along with Andrea and Julie, the *TA* team includes a dedicated stable of contributing editors who, like Gerald, offer their considerable talents without pay. (See the masthead on the opposite page for a list.) An additional uncompensated but uncredited member of the team is my wife, Jane Sharpe, whose creative solutions to my editorial problems frequently give me hope that all is not lost and that the next deadline just might not be my last.

***

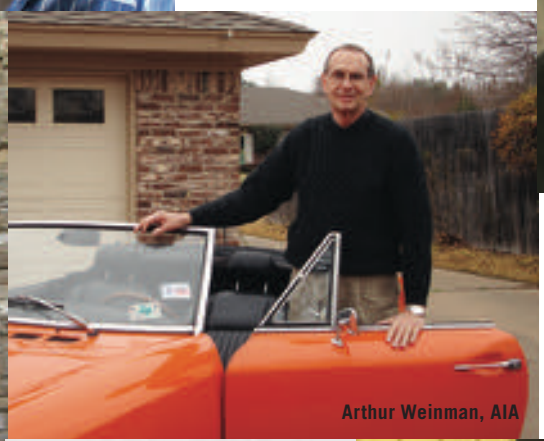
Astute readers will notice two new departments – "Commentary" and "Recollection" – preceding the feature section. "Commentary" serves as a platform for writers to present opinions about topics of interest to a design-savvy audience and "Recollection" gives the more senior members of the profession an outlet to impart some of their hard-earned wisdom. If you would like to solicit columns or ideas for columns, please contact me at *ssharpe@texasarchitect.org*.

STEPHEN SHARPE

Filo Castore, AIA

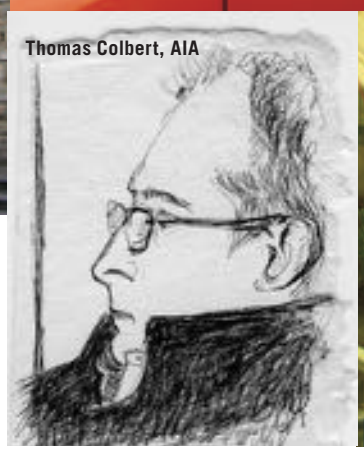
Chris Schultz, AIA

J. Brantley Hightower, AIA (lower left)



Arthur Weinman, AIA

Egan Gleason



Thomas Colbert, AIA

FILO CASTORE, AIA A native of Fiesole, Italy, Filo first visited Houston in the early 1980s when he accompanied his father who was a visiting professor at the University of Houston. In 1995, Filo moved to Houston where his professional work and community commitment have developed symbiotically to reflect values rooted in the health of people and the environment.

THOMAS COLBERT, AIA Tom comes from New Orleans. He teaches at the University of Houston's Gerald D. Hines College of Architecture and serves as director of graduate studies. He also practices architecture and sometimes writes for the competition, *Cite: The Architecture + Design Review of Houston*.

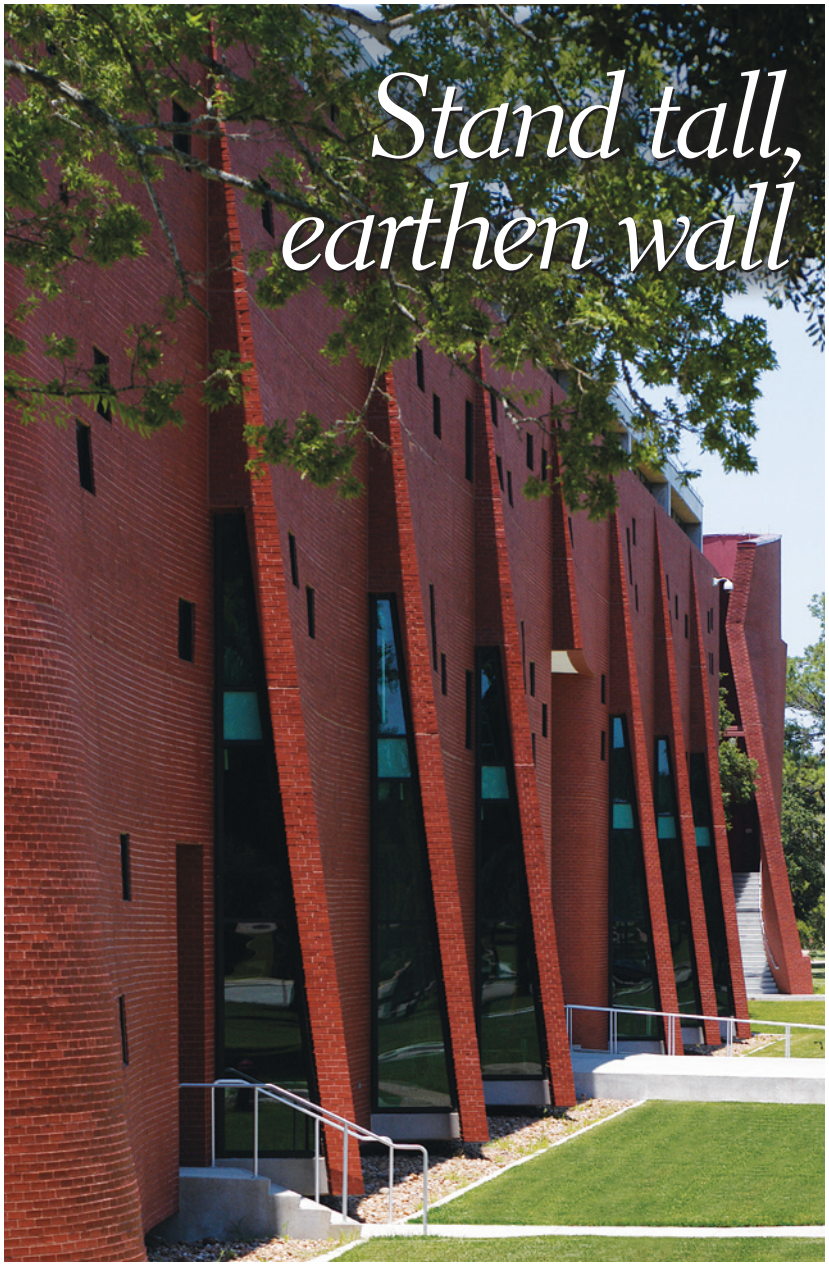
EGAN GLEASON Egan and his wife live in the national historic district of Castroville. While things architectural still interest him, his time is now more focused on exploring his long fascination with writing. But his most enjoyable and creative role these days is as grandfather to Madeleine and Kaitlyn, his remarkable granddaughters.

J. BRANTLEY HIGHTOWER, AIA Brantley began writing articles for *Texas Architect* in 2006. Since then he has taught at several institutions throughout the state, including Texas Tech, Trinity University, and UT Austin. He currently lives and works in San Antonio.

CHRIS SCHULTZ, AIA A native San Antonian, Chris is a principal at Wills-LipscomblSchultz Architects specializing in non-profit/institutional and residential work. As past president of AIA San Antonio during the busy 2007 AIA convention year, he now enjoys the luxury of visiting and reviewing projects for *Texas Architect*.

ARTHUR WEINMAN, AIA Art was first licensed in 1976. He bought his orange 124 Spider (the second-most love of his life) new in 1974. He now has 42 licenses, the restored Spider, and several other classic cars. Liz (his first-most love), manages the firm and tries to keep him out of trouble.

Stand tall, earthen wall



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More Substance on 'Audubon,' Please

"The public project cost $325 per square foot (excluding site work and exhibits), a reasonable figure considering Predock's international stature and its expected LEED Gold rating."

I found your article ("Audubon Takes Flight" in Nov/Dec 2008, p. 34) very interesting. I did however find the sentence above somewhat disconcerting on two counts.

First, I wonder why buildings by architects of great stature should inevitably be more expensive. Are the buildings not made of the same materials and built by the same contractors? What do you think this building would have cost if it had been designed by an architect of less renown? Answering that question would be a helpful addition to the article.

Second, I wonder how the decision to design for LEED Gold impacted the construction cost, and how the expected impact of the rating on the operational cost of the building will offset that initial cost. As an architect trying to encourage my company to "go green," I found little help in your article—nor in the rest of this issue of what is usually a very helpful magazine.

Don Harton, AIA
Plano

Editor's Note: According to Craig Reynolds, FAIA, principal of BRW Architects, the Trinity River Audubon Center, "as designed and documented, may have cost the same regardless of the architect," who in this case was BRW, which invited Antoine Predock Architect to join the team as design architect. The City of Dallas, he adds, wanted the Audubon Center to be notable and that objective was reflected in the bid. "Certainly if the client's expectations would have been different, a different design team would have been contracted and the design would have generated a different result," Reynolds says. "It is the client's choice in the selection process to contract with the firm whom they believe can deliver the client's project to best suit their vision and objectives."

In regards to costs associated with LEED, Reynolds says, "Achieving Gold did impact the construction cost and only time will determine the potential operational savings. However, LEED is not solely about operational savings. Many of the sustainable characteristics that were designed into the building have to do with trying to achieve a smaller carbon footprint; not necessarily a financial savings to the building but a global savings to the environment."

Time Critical to Solving RFI Issues

I'd like to add my voice in this continuing RFI debate. I am a licensed architect who has worked on the construction side for the past 20 years. The latest letter regarding the misuse of RFIs (Nov/Dec 2008, p. 9) was written from the architect's point of view, making observations that I wish to clarify from the contractor's side.

I agree with the writer that there is no perfect set of documents. Contractors know and accept this. Unfortunately, the great majority of work continues to be done by the design/bid/build process. Given the usual very short time I see allotted on bid after bid, I disagree with the entire concept that the contractor can or should be held liable for identifying potential errors or omissions. We routinely see schedules of 2-3 weeks to prepare a bid for highly complex projects. In reality, the A/E team may work with a client on a project for a year or more. Yet, it is expected that the GC can properly absorb all the information in the documents in a few days.

One example at the extreme end of this scale recently occurred with my firm: an interiors project was released on a Monday, the site precon held that Wednesday, and the bid was due on the following Monday for what turned out to be more than $300,000 worth of work on 11,000 square feet of floor space. In my opinion this was a ridiculous request by the owner.

For the contractor there are only two reasonable and fiscally sound answers to this dilemma: 1) Add hidden contingent money to the bid, guessing at how much that should be; or 2) ignore any language that suggests GC liability to examine the documents prior to bid and treat every RFI as a potential Change Order. The problem with the option one is that you lose every bid to the competing GC that has chosen option two. Consequently, we find ourselves in an RFI war in our industry, pitting contractor against architect, for the sake of an overall project schedule more likely than not set by the owner. The question is why is such little time allotted for the bid process? I do not believe that owners think this mad scramble to analyze their projects and deduce true costs is in their best interests any more than I believe that architects are confident the process will cover their liability for omissions. Time is critical for all aspects in the design/bid/build process but bidding is not the stage where I would recommend condensing the schedule.

Patrick J. Riordan, AIA
Austin

Clyde Porter Receives AIA Young Award

WASHINGTON, DC For his efforts to encourage minority, underserved, and low-income students to pursue careers as architects, the American Institute of Architects' Board of Directors has selected Clyde Porter, FAIA, as the 2009 recipient of the Whitney M. Young Jr. Award. The national honor is presented annually to an architect or architecturally oriented organization that exemplifies the profession's responsibility toward current social issues.

Porter, associate vice chancellor of facilities at the Dallas County Community College District, will receive the award during ceremonies at the 2009 AIA national convention in San Francisco, April 30-May 2.

The award honors civil rights leader Whitney M. Young Jr., a proponent of social change who directed the Urban League from 1961 until his death in 1971. In keynote remarks at the 1968 AIA annual convention, Young surprised his audience by admonishing them for complacency in helping to solve problems of urban blight and for the AIA's lackluster efforts to recruit more African Americans to train for the profession.

In selecting the 2009 recipient, the AIA Board recognizes Porter for reaching out to minority, underserved, and low-income students and encouraging them to see themselves as architects and stewards of the built environment, and for extending the fruits of higher education to these same communities through his job with the largest undergraduate institution in the state of Texas.

"To me this is the *crème de la crème* of my efforts because it recognizes what I've been trying to do for all people," Porter said recently, "especially for those who have been disadvantaged and haven't had the opportunity to participate in the architecture profession and find out how they can contribute to the benefit of mankind."

For 21 years, Porter has been employed with the Dallas County Community College District (DCCCD) overseeing its facilities, campus planning, and building efforts. In his current position as the district's associate vice chancellor of facilities, Porter oversees $700 million worth of buildings for approximately 100,000 students on seven campuses. This work has given him the opportunity to create education facilities that, as a relatively affordable community college, are often low-income and minority families' first taste of post-secondary school success.

Porter has done much more than help offer educational opportunities to disadvantaged communities. While at DCCCD (and at his previous job as chief architect of the Dallas Area Rapid Transit agency), Porter started initiatives to ensure that female- and minority-run architecture, engineering, and contracting firms were hired for greater proportions of work. Fifty percent of commissions by DCCCD have since gone to female- and minority-owned firms, proving that these drastically increased proportions of minority participation are possible in the building design and construction industry, and that good work results from them.

Porter, a cofounder of the Texas chapter of the National Organization of Minority Architects, has built a legacy of inviting emerging and minority architects into the profession beyond hiring them for work. At the DCCCD, he established an intern program, and he regularly recruits from his alma mater, Prairie View A&M University. As chair of AIA Dallas' Minority Resources Committee, Porter also began a summer internship program for minority architects. He also made it a habit to reach out to children before they reach college and encourage them to envision themselves as architects. He regularly speaks at elementary and middle school career days, explaining to minority and low-income kids the ways that architects can change and grow their own communities.

STEPHEN SHARPE

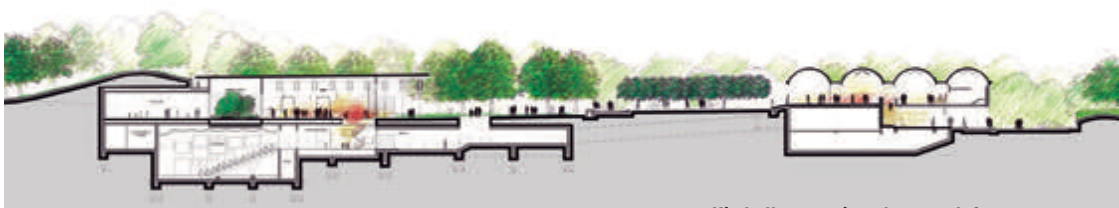
Kimbell Unveils Piano's Expansion, Future Building Sited on West Lawn

FORT WORTH On Nov. 18, the Kimbell Art Museum unveiled the eagerly anticipated preliminary design for its expansion, designed by Renzo Piano Building Workshop. The design confirmed speculation that the new addition would occupy the west lawn of the museum grounds.

By selecting the west lawn as the site for the expansion, the Kimbell has rejected another possible location across Arch Adams Boulevard to the east. The Arch Adams property, which faces the Modern Art Museum of Fort Worth by Tadao Ando, was originally purchased for the proposed expansion and offered the promise of improving the connection between the two institutions. Unfortunately, the site also posed some difficult problems—a street-blocking easy pedestrian passage and a location that would reinforce the use of the Kimbell's east entry, which was clearly not Louis Kahn's intended access to the museum. Despite the architect's intention of placing the main entry on the Kimbell's west side, the east-side door has become the primary gateway for most visitors due to its proximity to the majority of parking.

The process of entering the museum from the west is one of the singular architectural experiences in Texas: crossing the *alee* of trees

continued on page 65



Kimbell expansion shown at left.

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Recovery Efforts On Coast Continue Four Months After Ike's Devastation

GALVESTON Remediation efforts continue four months after Hurricane Ike hit Galveston Island on Sept. 13, damaging three-fourths of Galveston's structures and causing severe flooding in the city's downtown historic district. As of mid-December, a third of Galveston's residents still could not live in their homes, and only a few businesses had reopened downtown.

State officials are anticipating federal money, perhaps as much as $89 million, to assist in recovery efforts, a portion of which would be distributed to Galveston for its historic buildings. A request for funds is now being considered by the U.S. Congress. Stan Graves, AIA, director of the architecture division at the Texas Historical Commission (THC), said at press time that Congress might reach a decision early in the year.

Galveston's downtown, with one of the nation's largest collections of restored nineteenth-century iron-front commercial buildings, sustained wide-spread damage during Ike when water reached up to 12 feet in some of the buildings. The Galveston Historical Foundation (GHF) is working to rebuild, with the help of national and local agencies.

A positive sign came at the end of October, when two popular tourist attractions reopened for the first time since September: the 1886-1892 Gresham House, also known as the Bishop's Palace, and the 1877 ship Elissa.

In addition to salvaging its own buildings, the GHF has helped community members assess damage to their historic buildings and has distributed building materials to low-income residents to help them make repairs in order to move back into their homes.

"It will be at least 12 to 18 months before Galveston is back to normal—meaning a viable city with commerce and a community. What that demographic will be is anybody's guess," said Antoine Bryant, Assoc. AIA, project manager for AIA Houston's Disaster Action (HDA) and principal of the Bryant Design Group.

Since the hurricane, HDA has trained volunteer architects to conduct damage assessments for those affected by Ike. As of November, HDA had completed 250 free assessments in Houston and other areas, and had helped 504 residents.

"Now we need to think about phase two — from both an architectural and a social welfare point. We need to get 20 percent of Galveston's residents back to their city," Bryant said. "There are lots of social problems because many lower income residents have no insurance, and their homes have to be torn down due to storm damage. Long-term infrastructure and relocation strategies are needed."

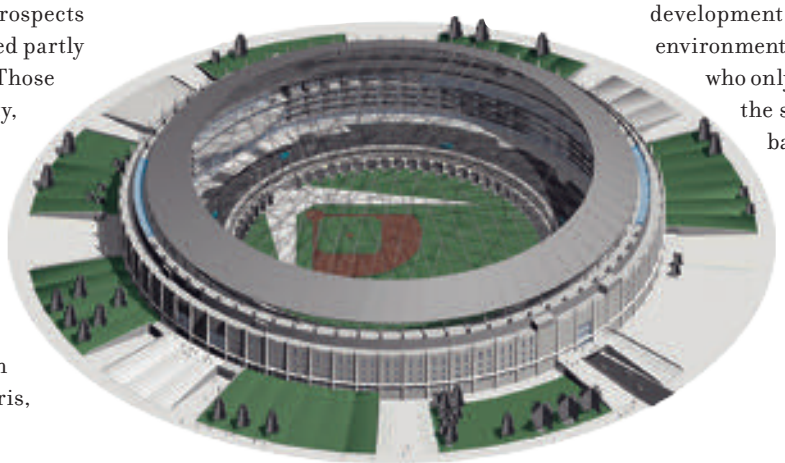
He added, "From a civic standpoint, you can rebuild a city, but how do you ensure that developers don't come in and rebuild a different city?"

NOELLE HEINZE

Tech's Students Consider Future Use Of the 'Eighth Wonder of the World'

Reconsidering the Houston Astrodome was the primary focus for the Practicum + Studio at Texas Tech University this past fall. Graduate students of the College of Architecture gain professional experience with local firms while engaging in a studio project that responds to identified community needs. The challenge, presented by the Greater Houston Preservation Alliance, was to explore possibilities for the building's re-use as a convention hotel and to reinvigorate the dialogue about its future. This is no small feat considering the tremendous amount of coverage by the local media about the fate of the Astrodome, veritably abandoned in 2003. The factors weighing on its prospects for the future are intensely complicated partly due to the number of parties involved. Those parties include its owner, Harris County, and organizations that hold leases to the surrounding site – the Houston Texans professional football team and the Houston Livestock Show and Rodeo – whose support is critical to the success of any plan for re-purposing the stadium.

The Astrodome, designed by Hermon Lloyd & W.B. Morgan and Wilson, Morris, Crain & Anderson, was completed in 1965 as the world's first indoor domed stadium. With a clear span of 642 feet, the building made engineering news by utilizing compression and tension rings in unison with a complex series of lamella trusses. The Astrodome – built as the new home for Houston's professional baseball team, the Colt 45s (later renamed the Astros), the Oilers professional football team, and the Livestock Show and Rodeo – remained an economically viable enterprise for nearly 40 years until professional sports teams began to prosper and state lawmakers established the means for local governments to creatively fund public stadiums and ball parks. Left in the wake of these changes, the Astrodome is now used largely as a storage facility for the site's tenants.



The Practicum + Studio students were challenged to review the existing federal historic preservation investment tax credit application and to develop a design that supported their position in response to the historic value of the structure.

One particularly interesting concept (below) by Jarod Fancher presented the manipulation of "inside versus outside," by removing the existing skylights and exposing the structural lamella truss system to enable more light to enter the structure and reduce the amount of conditioned space. This concept further explored the manipulation of inside/outside by opening the structure to vehicles, providing a convenient drop-off for the hotel while expanding the program to include mixed-use development with possibilities for a 24-hour environment. Much like the original spectators who only experienced the sheer volume of the space as they entered the seating bays, sightlines from the approaching vehicle are obstructed until it enters the domed space at which point the it is embraced by the vastness of the clear span.

Another student, Kyle Meason, proposed a bold approach

continued on page 65

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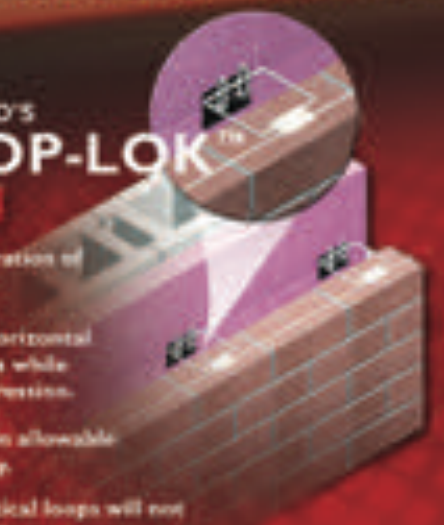

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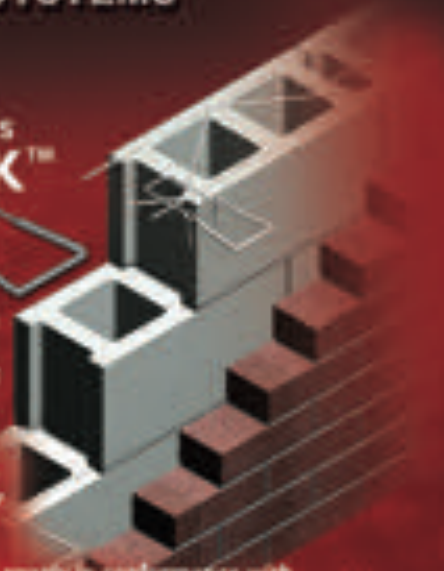

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Accessibility Exercise in Dallas Opens Eyes to New Perspective

DALLAS Have you ever wondered what it feels like to ask people in a restaurant to move from their seats so you can get to the handicapped seating area? Ever thought what a ramp looks like to a person in a wheelchair? Ever wondered if you can go with your friends or family to an event because you don't know if you can gain access?

Four years ago, AIA Dallas sponsored a day-long experiment to raise awareness about accessibility among its members. The architects were provided with wheelchairs in which they would spend an eight-hour workday to gain new insights into the way they approached the design process. The event was very successful both in the number of participants and in the impact that experience has on their work.

The architects started their morning at their own offices and let the day take them wherever they normally would have gone—except they had to get there in a wheelchair. Most went to meetings inside or outside their offices, worked at their desks, got their own coffee, all making certain that their co-workers witnessed the experiment. At noon, they left the comfort of their offices, venturing out into the world to meet at the AIA Dallas office for lunch, compliments of Thomas Reprographics, and a talk from Kent Waldrep. From first-hand experience, Waldrep sees – no, he lives – the difference between starting life able-bodied and now being dependent on a wheelchair to move around the built environment. He knows what "accessible" means from both perspectives.

On that day the architects learned many things about how we design, for whom we design, and what it means to have to take the "accessible" route. They realized how design can be executed just slightly differently – choices in floor material, for example – and how profound that difference can make in terms of accessibility and the even perception of the built environment for those in wheelchairs.

The success of that event was also evident by the unexpected response from the chapter membership for more opportunities to participate in the accessibility awareness exercise. Subsequent to that event four years ago, the chapter has repeated the exercise each year by inviting a dozen architects, interns, or designers to learn first-hand what the architectural community can do to expand on the requirements of the Texas Accessibility Standards to make the built environment not only physically accessible but truly accessible. Here are a few of the comments from those participants: "It was an eye-opening experience to try to go up or down a ramp and fight the cross slope." "Trying to get across a street with rough and unlevel pavement scared me." "I learned that a side approach door to a public restroom, for example, really doesn't work. I won't ever design one into a project again."

Last year, AIA Fort Worth joined with the Dallas chapter for the event. Architects in other parts of the state have expressed interest, as well, and they are encouraged to contact AIA Dallas for information and schedules.

The event has received some publicity from local and national media, including the National Multiple Sclerosis Society's *Momentum* magazine, the online weekly *AIArchitect*, and two articles in the *Dallas Morning News*. In addition, *Fox News* broadcast a segment that documented part of one participant's day.

Through such exposure, the architectural profession can demonstrate to the general public that we are committed to the real meaning of accessible design. But more important, the exercise gives architects a glimpse into what works and what doesn't work. Architects know what TAS requires, what ADA requires, what Fair Housing requires, and so on, but this exercise tests how they might improve lives beyond the standards set by government.

Architects have the vision to see more, to see how to make accessibility a basic part of their designs, how to make the perspective from a wheelchair as grand as from standing eye level.

WALTER KILROY, AIA

(clockwise from top) Participants in AIA Dallas' accessibility awareness exercises have included Peyton Booth; John Garcia, AIA; and Robert L. Shaw Jr., AIA. This year the chapter will hold its fifth annual program for local architects.

PHOTOS AT TOP AND BOTTOM RIGHT BY WILL RUTLEDGE; BOTTOM RIGHT PHOTO COURTESY F&S PARTNERS

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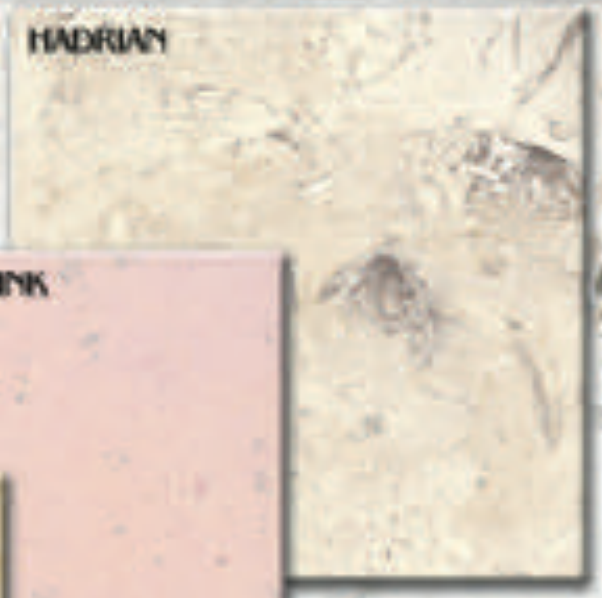

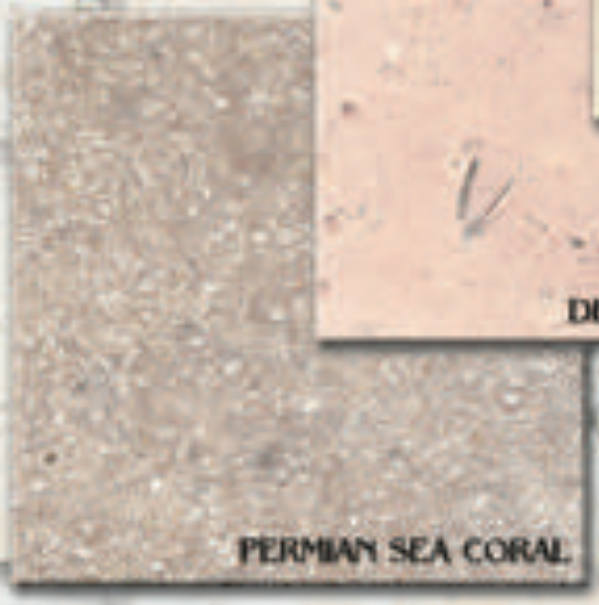

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AIA El Paso Awards 7 Projects

EL PASO The jury in AIA El Paso's 2008 awards program recognized seven projects for design excellence. From more than 25 entries submitted in four categories – commercial, interiors, residential, and future projects – the jury presented two Honor Awards, four Merit Awards, and one Honorable Mention.

Design awards were handed out during the chapter's annual awards ceremonies held Oct. 17 at the El Paso Museum of Art.

Members of the jury were Andrew Vernooy, AIA, dean of Texas Tech University's College of Architecture, and two members of his faculty, associate professors Javier Gomez Alvarez Tostado and Urs Peter Flückiger.

The two projects selected for Honor Awards were El Paso ISD Coronado Performing Arts Center by McCormick Architecture and Villa Encanto by CGN Designs.

- **El Paso ISD Coronado Performing Arts Center**, entered in the commercial category, received high marks from the jury for its successful manipulation of spaces, clean composition in plan and elevation, and its massing and integration with site.
- **Villa Encanto**, entered in the residential category, was praised by jurors for being a "successful family of forms" and for its sensitive overall design, excellent site development and landscaping, and strong traditional neighborhood design.

Merit Awards were presented to the following four projects:

- **Ysleta ISD Eastwood Middle School** (commercial category) by Alvidrez Architecture, which the jury commended for its composition of massing and elevations, "exciting" interior spaces, and thoughtful details throughout.
- **El Paso Community College Building "B" Conversion** (commercial category), also by Alvidrez Architecture, was noted for being an "incredible transformation" and exhibiting a strong entrance composition with clean, elegant details.
- **Condo Remodel–Private Residence** (interiors category) by CGN Designs was remarkable for its clean design, "elegant, very well designed" kitchen, and thoughtful details.
- **El Paso International Airport East Concourse Enhancements** (future projects) by MNK Architects was awarded for its integration with the existing structure and for being "spatially exciting."

MNK Architects' airport project also received the chapter's Mayor's Award that recognizes a public work for design excellence.

The lone Honorable Mention was presented to **Abundant Living Faith Center** (commercial category) by MNK Architects. Remarks by the jury included, "loved the theater space, innovative interiors."

FRED PEREZ, AIA

Coronado Performing Arts

Villa Encanto

Eastwood Middle School

Building "B" Conversion

Condo Remodel

Concourse Enhancements

Abundant Living

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AIA San Antonio Presents Design Awards

SAN ANTONIO After jurors carefully evaluated 53 entries from 20 local architectural firms and one individual AIA member, the AIA San Antonio chapter announced the winners of its 2008 Design Awards. A total of 13 projects were recognized with awards in early November. Kell Muñoz topped the list with five awards.

This year's presentation included the chapter's third 25-Year Design Award and the first Sustainability Commendation. Serving on this year's Design Awards jury were Merrill Elam, AIA, principal in the firm of Mack Scogin Merrill Elam Architects in Atlanta, Ga; Paul Mankins, FAIA, principal of Substance Architecture Interiors Design in Des Moines, Iowa; and Larry Speck, FAIA, former architecture dean at the University of Texas at Austin and current principal of Page Southerland Page.

The following two projects received Honor Awards, the chapter's highest recognition:

- **Edcouch-Elsa Fine Arts Center** by Kell Muñoz, a 975-seat theater and fine arts center in the Edcouch Elsa Independent School District on the Texas/Mexico border. The project supports student performance in the traditional disciplines of mariachi music and folkloric dance, with classroom and studio space. The building is the area's first important civic construction project in more than 30 years.
- **Bluffview Residence** by Lake|Flato Architects, a challenging Dallas project due to a site that slopes from the street 20 feet up to the edge of a cliff. Design elements feature stairs that rise alongside a high-stepped wall of the private wing and rooms that are stacked up in this wing as it steps up the hill to the second-story master bedroom suite that overlooks a riverbed.

Citation Awards were given to the following three projects:

- **Crockett Elementary School** by Kell Muñoz, a San Antonio Independent School District project that replaces an existing elementary school. The new design is an exploration of Tejano architecture. The visual identity is tied to regional commercial building forms and materials—clay brick, shed roofs, and metal overhangs.
- **Pearl Stable** by Ford, Powell & Carson, an elliptical, load-bearing brick building built in 1894 as a stable for draft horses for a large local brewery in San Antonio. In 2006, the entire building, including the original roof framing, was restored. A large pediment, removed in the 1940s, was reconstructed using historic documentation. Paint was stripped from the exterior, brickwork was restored, infill brick was removed, and custom wood windows were installed.
- **Shangri La Botanical Gardens and Nature Center** by Lake|Flato Architects, a 250-acre "inner city" nature preserve in Orange that had been closed for 50 years. It earned the first LEED Platinum designation for new construction in the state of Texas. The architecture responds to the two different environments of Shangri La—the manmade and the natural.

Four projects received Merit Awards:

- **Ruth Taylor Art & Music Building** by Kell Muñoz, a renovation and expansion of a 50-year-old art and music complex - situated on a rugged former quarry site - at San Antonio's Trinity University. In the spirit of the original campus master plan, the building is organized around informal courtyards and an atrium that serve as gathering places for faculty and students.
- **Visitor's Center & Plaza** by Kell Muñoz, a plaza project in Roma that resulted in the preservation of the unique hybrid of Spanish Colonial and American riverboat townscape.
- **College of Education** by Kell Muñoz, a renovation of existing two-story education buildings that are linked to a new three-story building to form a central courtyard. Located on the University of Texas – Pan American campus in Edinburg, the project embraces many cultures to create a modern, ethnically diverse place by bridging language and architecture through art.
- **Francis Parker School** by Lake|Flato Ar-

continued on page 66

Edcouch-Elsa Fine Arts Center

Bluffview Residence

Crockett Elementary School

Pearl Stable

Shangri La Botanical Gardens and Nature Center

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AIA Fort Worth Awards Nine Projects

FORT WORTH The jury for AIA Fort Worth's 2008 Design Awards convened Oct. 14 at the Modern Art Museum of Fort Worth where they sifted through 40 projects before selecting nine for distinction.

The jurors were Larry Speck, FAIA, of Page Southerland Page in Austin; Emily Summers, ASID, of Emily Summers Associates in Dallas; and Ray Armstrong of Armstrong Garden Studio in Fort Worth.

Honor Awards, the highest level of recognition given in the chapter's annual competition, were presented to the Bird Residence by Norman Ward Architect; Fischer Dining Pavilion by Gideon Toal; Acme Brick Headquarters by Gideon Toal; and Lift:Home by Bart Shaw, AIA.

The design of the **Bird Residence** began with the preservation of existing mature trees. The low profile roof design provides protection for the house, with broad overhangs allowing indirect sunlight to filter into the interior through large expanses of window wall. Raised wood decks and concrete walks extend outward into the landscape as thresholds from garden to house.

The **Fischer Dining Pavilion** is a new dining facility and kitchen serving a small private school in Fort Worth. The use of limestone and wood creates a warm and inviting environment that promotes social gathering in and around the structure. The connection between indoors and out contributes to the connectivity of the campus community and highlights the social nature of the building.

The site of the **Acme Brick Headquarters** is the first development on the historic Edwards Ranch planned development. The goal was to respond to the wooded site and river location while setting a standard for future development. The building has a concrete frame with brick/stone veneer and concrete masonry backup, a composition that allows Acme to show it's products and construction techniques.

Lift:Home is a concept for hurricane relief housing that would fulfill the need for rapidly deployable residential units in the wake of a natural disaster. Developed as an alternative to FEMA trailers, which are by their nature temporary and by their character demoralizing, Lift:Home is seen as a permanent solution to help people retain their community spirit.

Merit Awards were presented to Fort Worth Academy by Hahnfeld Hoffer Stanford; Fort Worth Water Gardens Modifications by Freese and Nichols; The Cottage at Brown's Landing by Home Architecture Interiors, LP; Woodhaven Neighborhood Redevelopment Plan by Gideon Toal; and Latitude by Norman Ward Architect.

Fort Worth Academy is a private education facility for kindergarten through eighth grade. This library and classroom addition is perched on a precipice, siting that provides children in the library a grand "window to the world" as it overlooks a valley to the north.

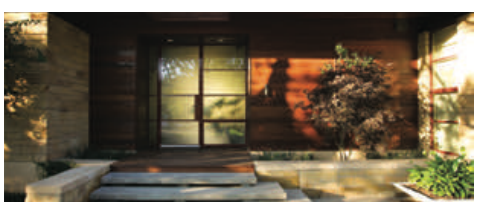
In 2004, four deaths occurred in the **Fort Worth Water Gardens**. The challenge of this project was to modify the park to address safety concerns while retaining the original design intents of Philip Johnson.

The Cottage at Brown's Landing is a 563-square-foot stone cottage on Lake Palestine in Chandler, Texas. The owner was seeking an Old World focal point to be used as a guest house and meeting place.

Woodhaven Redevelopment is a comprehensive study, analysis, and action plan that combines creative visions from the community with current market information. It sets forth a plan to redevelop a depressed area into a sustainable and livable community with a balance of mixed-use, retail, office, and single-family homes.

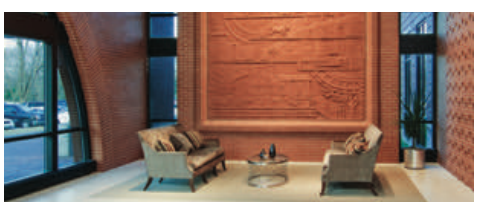
Latitude, a house designed for a yachtsman, features lines of latitude that mark its navigational position. The project includes a series of stone veneered containers separated by glass wall planes. A porch cantilevered above the ground plane is the datum for the house composition set at slightly above the 32nd parallel north.

BART SHAW, AIA



Bird Residence

Fischer Dining Pavilion



Acme Brick Headquarters

Lift:Home

Fort Worth Academy

Fort Worth Water Gardens

The Cottage

Woodhaven Development

Latitude

5 Design Awards for AIA Northeast Texas

TYLER/LONGVIEW The Northeast Texas chapter of the AIA presented five design awards at its annual Christmas party and chapter meeting on Dec. 2. The winning projects for this biannual event were selected from a field of 18 entries representing seven firms.

A panel of three jurors – Kenneth Apel, AIA, of HKS in Dallas; Gary Rademacher, AIA, of Huckabee & Associates in Ft. Worth; and Brian Griggs, Assoc. AIA, of Parkhill Smith and Cooper in Lubbock – presented one Design Award, two Awards of Merit, and three Honorable Mentions.

The lone Design Award went to **Texas Arthritis** by Fitzpatrick Butler Architects. Texas Arthritis is a 10,261-square-foot specialty clinic and lease space developed on the concept of "representing Texas through architecture." This was achieved through the creation of a "modern barn" utilizing a palette of old and new materials to create a familiar form with modern amenities and aesthetics. Clerestory windows allow natural light to penetrate the core of the building while the glass enclosed waiting room invites patients to connect with the surrounding forested landscape. A broad range of materials are carefully coordinated between the exterior and interior spaces.

Awards of Merit were presented to Gilmer ISD, Elementary School by Thacker Davis Architects and Leon County Courthouse Restoration by Sinclair and Wright Architects.

Gilmer ISD Elementary School is a new 114,000-sf building for the district's pre-K through fourth grade. Grade levels are separated in self contained wings, each with its own teacher and support spaces. The school is sited to share bus drives with the adjacent intermediate school while separating parent drop-off traffic. Natural light and playful colors accentuate interior circulation spaces.

Leon County Courthouse Restoration in Centerville, originally designed by George Edwin Dickey and constructed in 1887, is on the National Register of Historic Places. After thorough research of historic documents, interviews with local citizens, and careful physical examinations of the building, the architect was able to return the building to its original exterior and interior. Major funding came from the Texas Historical Commission.

The three projects recognized with Honorable Mentions were:

Balance Pilates Studio by Fitzpatrick Butler Architects is a 4,649-sf renovation of a 1948 department store whose original facade was lost to years of modifications and neglect. The facility's new, urban interior reflects the quality and image of a modern, client-oriented exercise facility.

Northeast Texas Community College's University Health Sciences Center by Thacker Davis Architects is a two-story, 39,120-sf educational space consisting of media classrooms, laboratories, and faculty offices that expand the college's educational offerings in nursing, dental hygiene, and other health-related curriculum.

Tatum ISD High School Coliseum by Thacker Davis Architects is 50,000-sf, multi-level competition facility with 360-degree seating for 1,400 spectators.

BRETT PATRICK, AIA

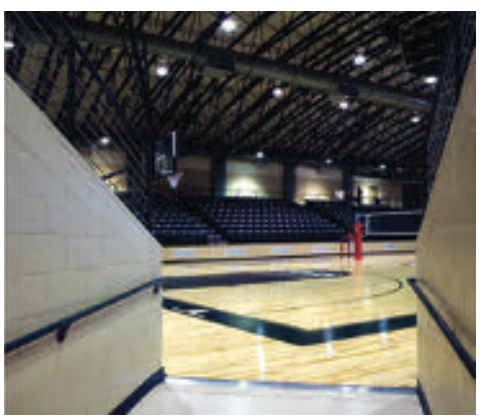
Texas Arthritis

Courthouse Restoration

Health Sciences Center

Elementary School

Balance Pilates Studio



High School Coliseum

Applications for Texas Historical Markers

The Texas Historical Commission is accepting applications for 2009 historical markers. The new application forms are available via *www.thc.state.tx.us*. Applications may be submitted via email (*markerapplication@thc.state.tx.us*). Application deadline is JAN 15

UT Austin Hosts 'Architecture in Mongolia'

The UT Austin School of Architecture presents "Architecture in Mongolia through the Ages." The exhibit is in Sutton Hall 3.128. For more information, visit *www.soa.utexas.edu*. Thru JAN 16

'Transparency: Exposing Graphic Design' at RDA

The Rice Design Alliance's Spring Lecture Series presents "Transparency: Exposing Graphic Design," the first of four lectures to discuss how graphic design as a discipline and practice embraces a wide range of cognitive, experiential, and aesthetic skills. The lecture begins at 7 pm in the Museum of Fine Arts, Houston's Brown Auditorium. Visit *www.rda.rice.edu* for more information. JAN 21

Dallas Science Museum Hosts 'Raise the Roof'

The Museum of Nature & Science, Dallas, is hosting the exhibit "Raise the Roof," Jan. 24 through April 19. An exhibition geared to children ages 7-15, "Raise the Roof" allows visitors to explore and understand the secret life of buildings. For more information, visit *www.natureandscience.org*. Opens JAN 24

HABS/HAER/HALS Summer Jobs

The Heritage Documentation Programs (Historic American Buildings Survey/Historic American Engineering Record/Historic American Landscapes Survey), a division of the National Park Service, seeks applications from qualified individuals for summer employment documenting historic sites and structures of architectural, landscape, and technological significance throughout the country. Projects last 12 weeks, beginning in May/June. Access more information at *www.nps.gov/history/hdp/jobs/summer.htm*. Applications due FEB 17

DAF Fall Lecture Series

The Dallas Architecture Forum 2008-2009 Lecture Series continues with a presentation by Elizabeth Smith, chief curator at the Museum of Contemporary Art in Chicago, who will speak on the California Case Study Houses. Preservation Dallas' Modern Committee is the affiliate sponsor of the lecture. For more details, visit *www.dallasarchitectureforum.org* or *www.preservationdallas.org*. FEB 19

PHOTO BY WAYNE BELL, FAIA

Highlight of LRGV Bi-National Tour: Visit to 'Lost' Town of Guerrero Viejo

GUERRERO VIEJO A few months before the Lower Río Grande Valley chapter of the American Institute of Architects held its sixteenth annual Building Communities Conference in September, Hurricane Dolly blew the roof off the South Padre Island Convention Center. That unfortunate event caused chapter officials to transfer the conference to McAllen. The shift made it feasible to visit destinations on the annual bi-national architectural tour that otherwise were too far from South Padre Island to be reached conveniently—the fabled abandoned city of Guerrero Viejo (shown above) in Tamaulipas and the Texas border town of Roma.

Construction of Falcón Dam and the 115,000-acre International Falcón Reservoir by the U.S.-Mexican International Boundary and Water

continued on page 87

UH Architecture Dean Plans Departure

After 11 years as architecture dean of the University of Houston, Joe Mashburn, AIA, has announced that he will step down prior to the start of the Fall 2009 semester.

UH officials plan to form a search committee to find candidates to succeed him as dean of the Gerald D. Hines College of Architecture. Mashburn's impending departure leaves three of Texas' eight accredited architecture schools searching for a dean. Both Texas A&M University's College of Architecture and the University of Texas at San Antonio currently have interim deans in lieu of a permanent top administrator.

Mashburn's accepting the dean position in 1998 was something of a homecoming for the former UH student who earned his undergraduate degree from the College of Architecture 20 years earlier. Recalling his return to UH, he said, "When I first came here, there were students who weren't sure about me. Now, students stop me when I walk in the building, just to say hi. They call me 'Joe.' It's wonderful."

As dean, Mashburn oversaw a dramatic increase in enrollment at the college, including minority students. In 2007, *Hispanic Outlook on Higher Education* magazine ranked the college number one among architecture programs in the country for awarding degrees to Hispanic students. In addition, during his tenure the college has added programs in industrial design and is planning to add a program for interior architecture.

"This is a very appropriate time for a change," Mashburn said. "The university has new leadership and is on the cusp of reaching the next level, and this is a good time in the life of the college."

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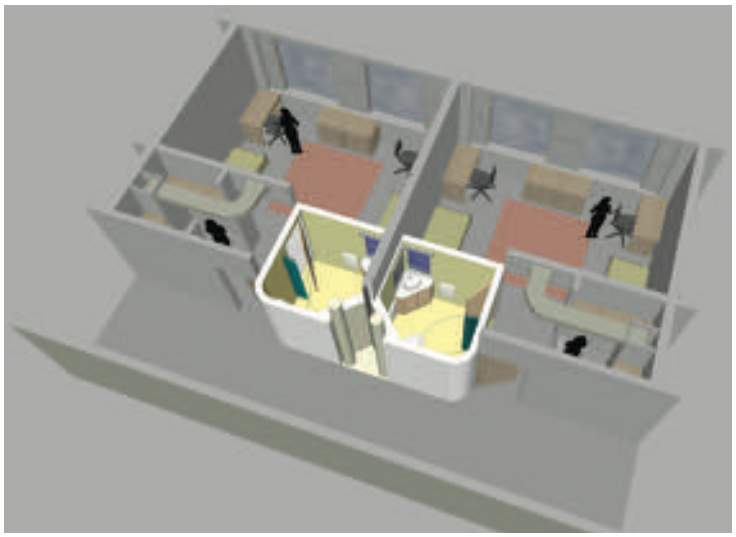

Prefabricated Bathroom Pods

Two new dormitories at Rice University will feature prefabricated bathroom pods when construction is completed later this year. The pods were designed by London-based Hopkins Architects, the lead firm for the McMurtry and Duncan residential colleges. Working with Hopkins is executive architect Hanbury Evans Wright Vlattas + Company of Norfolk, Va. The pods were featured in the recent "Home Delivery" exhibit at the Museum of Modern Art in New York City. Delivery of the 178 pods to the Rice campus began in September. Fabricated with a 6x8-foot inner shell composed of glass-reinforced plastic, the pods were transported to the construction site complete with wall-hung plumbing and light fixtures. The units were then hoisted into place by a crane for installation, including final plumbing and electrical connections. The sleek, self-finished inner shell have white walls and a 9-foot ceiling. The two new five-story, 228-room residential colleges are scheduled to open for occupancy this fall.

National Museum of the Pacific War

The 40,000-sf addition and renovation to the George H.W. Bush Gallery of the National Museum of the Pacific War (formerly known as the Admiral Nimitz Museum) is designed with direct reference to Fredericksburg's historic fabric and metaphorical reference to the Pacific theater of World War II. Recognizing the importance of the town's pedestrian experience, Richter Architects of Corpus Christi has oriented the museum store, lobbies, and certain large-scale artifacts toward the sidewalk. A series of one-story stone building facades, linked by courtyards and/or low stone walls, creates a continuous perimeter scaled and detailed to the neighborhood urban district. Inboard from this outer zone, the building design steps up to convey the national significance of the exhibits and the global magnitude of the Pacific War. Exhibits are being designed by the Douglas Group of Houston, in collaboration with consulting historian D. Wilson Dolman. The new addition is scheduled for completion in December.

Texas State University Master Plan

Developed by Broaddus & Associates of Austin with Baltimore-based Ayers/Saint/Gross as consultants, the master plan for Texas State University in San Marcos was launched in 2004 to address a projected student enrollment increase of 30,000 and a need for additional academic facilities for 2015 and beyond. A formal green space, a new fine arts and communications center, and a new undergraduate academic center will define the updated face of the university. Construction of the undergraduate academic center, designed by Marmon Mok of San Antonio, begins early this year. The historic Old Main building (1902; Edward Northcraft) will remain the university's most important symbol. A series of pedestrian paths and a network of green, open spaces will extend the intimate character of the campus. In the master plan's final phase, a pedestrian-friendly public plaza will seamlessly connect the university's 457-acre campus to San Marcos' downtown square, creating a vibrant college-town district.

The Blanton That Could Have Been

by J. BRANTLEY HIGHTOWER, AIA

WHILE STUDYING AT UT AUSTIN IN THE SPRING OF 1998, my classmates and I had the opportunity to attend a series of public lectures given by the seven short-listed architects for the Jack S. Blanton Museum of Art. The list was impressive and when Herzog & de Meuron was ultimately chosen we were thrilled by the prospect of what the Swiss firm would design. The insertion of a thoughtful work within the Spanish Mediterranean-style campus was certainly something to be eagerly anticipated.

But things did not go as planned.

There is little point in retelling what happened next other than to say that by the following year Herzog & de Meuron had walked away from the commission. The events leading up to the firm's resignation taught my friends and me that architecture is not just about design. For something different to become real, we learned, a Herculean effort is often necessary to overcome the gravitational pull of the status quo. This cynical truth was an important lesson for a naive student to learn before jumping headfirst into the realities of the professional world.

In the years that followed Jacques Herzog and Pierre de Meuron's departure from Austin, the price of their architectural stock soared. In 2001 they were awarded the Pritzker Prize. They designed the cultural landmarks of the H.M. de Young Memorial Museum in San Francisco and the Walker Art Center expansion in Minneapolis. Perhaps their widest exposure occurred this past August when the world's attention was focused on the XXIX Olympiad. The iconic bird's nest form of their Beijing National Stadium will no doubt be forever associated with that time and that event, and may very well have changed the public's view on what architecture can be.

Although some may criticize their projects as self-conscious explorations of surface effect, that effect is always deployed as a means of integrating the building with its surrounding context. That is not to say Herzog & de Meuron's buildings are contextual – certainly not in the traditional sense – but they do respond to their surroundings in subtle and compelling ways. While it is impossible to say exactly what a Herzog & de Meuron Blanton would have been (their early schemes were more evocative than explicit), it most likely would have created an entirely new type of architectural experience while engaging the historic campus without overtly mimicking its limestone walls and red tile roofs.

(above) Herzog & de Meuron's concept was far different from most buildings on the UT Austin campus. (below) The final phase of Kallmann McKinnell & Wood Architect's Blanton Museum of Art was completed in November.

PHOTO BY CHARLES DAVIS SMITH, AIA; ILLUSTRATION BY RICHARD CARMAN, COURTESY HERZOG & DE MEURON AND UT AUSTIN

As lamentable as it was to lose the Blanton that could have been, perhaps the more unfortunate result was the chilling effect the episode had on other projects at UT Austin. The Blanton was one of the first projects designed under Cesar Pelli's campus master plan in which existing campus buildings were designated as stylistic "points of departure." However, the Blanton project proved that adherence to the specifics of those precedents would be rigidly enforced. In the decade since the Blanton debacle, a host of talented and award-winning firms have done work on campus that has been limited by strict aesthetic dictates. Those projects are interesting variations on a common theme but certainly do not represent the full potential of the firms that designed them. Innovation is by definition

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All Architecture, All the Time

Thank you, Frank Lloyd Wright and Nellie Mae Hearn and Harwell Hamilton Harris and Philip Johnson and Howard Meyer

by EGAN GLEASON

IN THE LAB, WE STUDENTS ARE GATHERED IN A TIGHT GROUP around Philip Johnson listening while he tells us of his recent visit to Taliesin West for a meeting with Frank Lloyd Wright. It's almost as if we are walking with him as he describes in vivid detail his approach to the compound and begins making his way through the masterfully orchestrated series of rooms and passages; we take each turn with him, see each vista, revel at every ray of light, and feel in our viscera every quickening, every slowing through space and time. When he finally gets to the holy-of-holies, Wright's personal studio, and meets the great man—we have forgotten to breathe. Johnson looks slightly upward, a blissful glow on his face, and in an emphatic whisper croons, "It's the kind of architecture that is so great, it makes you want to weep." Oh, yes! Yes! This scene is occurring during my sophomore year in the School of Architecture at the University of Texas. It's 1951. Johnson, already a minor god to us students, is destined to go on to age 96 doing many fine, and some not-so-fine, buildings. But whatever our opinion of him as an architect, we all agree that when it comes to talking about architecture, the man is without peer. He talks a great game!

…those first affections, shadowy recollections

For those of us who came up short when the talents for hitting, throwing and catching a ball were doled out, architecture is our game. As kids, what we lacked on the playing field, we made up by being able to sketch well and build sturdy bookends and birdhouses. I loved to build. By the age of six, I had constructed an entire miniature city in the crawl space under our house. I was fascinated by the new houses being built in the neighborhood and searched their trash piles for every bit of tile or broken brick or scrap of wood that I could retrieve. That construction detritus was gold to me, I could build with it.

For my tenth Christmas, I got an encyclopedia. In the few pages dealing with architecture it had about two dozen pictures of famous buildings. Jefferson's Monticello and University of Virginia were there, and though I was impressed that our third president had been an architect, I was most impressed by the famous Hedrick-Blessing photograph of Fallingwater. I thought it the most magically stupendous structure to ever come down almost to earth. I still have somewhat that same feeling today. If there is one single thing in my life I can point to as the spark that ignited my life in architecture, it is that photograph.

An only child, I couldn't get enough of school. Every subject interested me, and having all those brothers and sisters around was fun. In high school, mechanical drawing grabbed my heart and soul. The class was all boys but it was taught by Nellie Mae Hearn, a lady who had wanted to be an architect, but because women had yet to be commonly thought of as architects, had become a teacher—a great one. She was the inspiration for several of us who became architects (Paul Kennon, to mention one). She had us design a house and do working drawings for it, in ink on tracing linen as was the standard for the day. She praised my work, and since she had attended the University of Texas, encouraged me to go and study architecture there. That photo of Fallingwater lit my flame but it was Mrs. Hearn who sent me into orbit.

A trajectory that took me through five years at UT resulting in my BArch in 1955. Simple and direct—not really. The early 1950s at the architecture school were a time of total turmoil. My arrival was concurrent with the arrival of the new dean, Harwell Hamilton Harris; but I can assure you that it was Harris's arrival, not mine, that blew the school sky high. Harris was a quiet, thoughtful, and creative man who had a vision of how architecture might best be taught. He was a huge inspiration to us students, but was anathema to the old guard in the faculty. Disagreement, factional division, rancor, and flux became the daily norm. I'm now convinced that the big rift that went on for those five years was all for the best for us students. (Probably not for Harris, who resigned the day after we graduated.) We did not get a unified front, a dogma; we got at least two sides to everything. Balance. Maybe most important of all, we were exposed to the

real world of bicker and bite we would have to deal with for the rest of our careers. Unbelievable as it might seem, I got a *better* education because of the upheaval. By graduation, we had learned an approach to design that was clean and honest, what is now called mid-century *modern*, a word we assiduously avoided. Perhaps just as important, along the way in those long charrettes and all those late night impassioned discussions we had instilled in each other a kind of indelible idealism that is still with us, still supports us.

I had received a deferment to finish my schooling, so in January 1956 my two years of military service were due and payable. I could have been sent to Korea, but instead was stationed on the west coast of France, the Bordeaux/La Rochelle area. Suddenly my history of architecture course came to life right in front of me: those cracked, blurry slides evolved into

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PHOTO COURTESY EGAN GLEASON

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Study in Renewal

Relocated to Fort Worth's Log Cabin Village, old schoolhouse again instructs kids

By ARTHUR WEINMAN, AIA

BUILT AS EARLY AS 1872, the one-room Marine Schoolhouse, 20 feet wide by 30 feet long, was donated to the community by local businessman M.G. Ellis to benefit the children of families who farmed in the northern sector of Fort Worth. Originally located near Marine Creek not far from the Fort Worth Stockyards, the building has been moved five times over its long history. The first move took place in 1879 when it was adapted for use as a residence before being re-adapted again for education after the new high school burned in 1904. Then it was moved another time and returned to residential use until the 1980s.

Structurally simple, the 600-sq. ft. building's compactness and rigidity has allowed it to endure a peripatetic existence. Its floor frame of 2x6-inch joists originally sat on bois d'arc posts, with a single layer of floorboards tying the platform together. Vertical siding of unsanded 1x11-inch boards were nailed to the outside ribbon to form the exterior face – sheathing, wall framing, and insulation all being one – and battens covered the joints. Inside walls are 3/8-inch-thick by 5-inch-wide milled tongue-and-groove siding running horizontally over the vertical siding. Interior paint helped ward off drafts. Overhead, tongue-and-groove car siding was nailed to the bottom of 2x6-inch ceiling joists, which also served as roof framing ties to keep the outside walls from spreading with the 2x6-inch rafters. The windows were simple double-hung wood with a wood prop and placed in holes made in the vertical siding. Double plank doors kept out the cold, or let in the breeze during warm days. (Tuberculosis and cholera were major urban threats, and a healthy environment was thought to consist of adequate ventilation under, through, and around all buildings.) The exterior face below probably had a lattice of branches to keep stray animals out. The entry steps were a simple series of treads and risers leading directly up to the entry doors.

In 1994, local historian Bill Pokluda found the structure sagging and bending, and feared the building would collapse. Recognizing its historic value, he built a minimal interior frame of double 2x4s. (The structural engineer for the restoration master plan proclaimed this solution "perfect for the situation" and allowed it to remain.)

Given by the owner to the newly organized "Friends of the Marine Schoolhouse" the building was offered to the City of Fort Worth for use in the Log Cabin Village, a living history museum devoted to the preservation of Texas heritage. The building, badly in need of conservation, was relocated in one piece to the Log Cabin Village and restored to complete its return to its original purpose.

The building had been on a variety of foundations. The city selected a site-cast reinforced concrete grade beam foundation as the most permanent solution and requiring the least maintenance. Lath was placed over the concrete as a reminder of the original configuration. Although the original roof may have been shiplap planks, the current cedar shakes satisfy the visitors' image of what the roof should be.

New cedar entry steps and ramp – designed to satisfy Texas accessibility regulations – are attached according to Fort Worth Parks Department requirements for compatible construction and historical separability. Owing to its transient background, the Texas Historical Commission and the National Parks Department will never consider the building for a historical marker or other designation.

The Marine Schoolhouse is a field-trip destination for local school children, who often dress in period clothes such as worn by their predecessors more than a century ago. The kids spend time in the classroom learning about life and education during those days long before. They are warmed by a wood fire from the cast-iron stove or cooled by breezes through the open doors and windows. They experience the same environment in which their great-great-great grandparents learned to write their ABCs on the painted chalkboards that remain on the walls. More than 130 years later, the Marine School house is still doing what M.G. Ellis intended—providing shelter for educating children generation after generation.

The writer, working pro bono, prepared the master plan and documentation for restoring the Marine Schoolhouse.

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Constructive Selection

Innovative evaluation process smoothes Del Mar's building program

by Stephen Sharpe

AS DEL MAR COLLEGE LOOKS TO BREAK GROUND THIS YEAR on the final major project of a $138 million capital improvements program, officials of the Corpus Christi community college point to the program's innovative procurement procedure as a singular success. The planning for the building program began in 2002, a year before the college district authorized a referendum that asked voters to approve funds to expand facilities and rebuild structures damaged by a tornado.

WKMC Architects in Corpus Christi serves as the coordinating architect for Del Mar and is managing the seven-year building program. The firm also designed the master plan that outlined the locations for improvements at Del Mar's three campuses. In addition, WKMC principal Bill T. Wilson, FAIA, working with Del Mar's procurement director Chuck Tines, developed an organizational concept whereby architects and consultants were selected for each project. Notably different to other processes for procurement of professional services was the creation of individual evaluation committees to select all parties that would work together on individual projects.

Del Mar's procurement process has received accolades from the Community College Business Officers (CCBO), a national group that recognized the evaluation committee process with a 2004 Exemplary Practices Award.

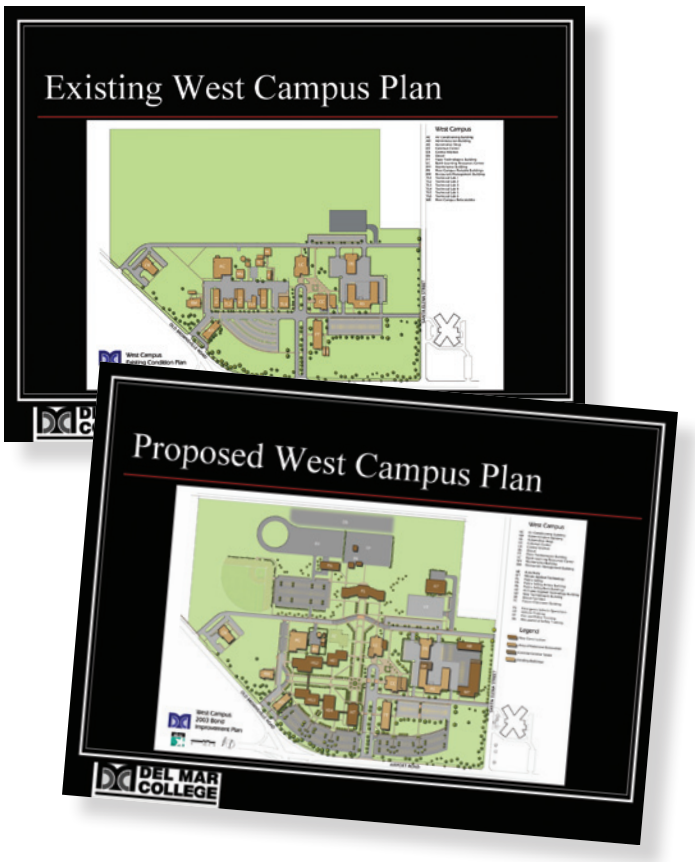
During CCBO's annual conference held in Corpus Christi in November, Wilson presented a seminar on the history of the Del Mar program as a case study. His overview concluded with a summary of lessons learned.

"Many small educational institutions have neither the in-house resources nor the internal systems in place to successfully execute a large-scale design and construction programs," Wilson explains during his presentation. "Design-focused leadership throughout the multi-year building program has kept everyone focused on achieving exceptional results, not just meeting budgets."

According to Wilson, essential to Del Mar's successful undertaking of its building program was its leadership's commitment to changing a decision-making process that had yielded disappointing results in earlier construction projects.

To effectively change the decision-making process in preparation for the May 2003 bond referendum, Wilson and Tines set out to narrowly define the goals for the building program and to research best practices by other organizations. They also developed an implementation plan to achieve the desired outcome.

WKMC helped put together a budget for a $108 million bond election that the Board of Regents authorized in January 2003. Anticipation of unforeseen circumstances caused Wilson to earmark $13.9 million in the budget for inflation and contingency. (An additional $30 million from other sources ultimately raised the budget to $138 million.) The majority of the improvements were specified for the West Campus which was hit the previous October by a tornado, killing one person and causing damage totaling $1.5 million. In addition to necessary repairs, the construction of new facilities were planned to more than double the overall size of the campus from 250,000 sf to 480,000 sf. (See presentation slides above.)



With WKMC subsequently hired to manage the entire building program, Wilson and Tines began to implement the steps they had earlier devised. To achieve Del Mar's goals, they decided that the work would achieve excellence in both design and construction, and that the firms that performed well would be considered for re-hiring on other projects within the same building program.

As part of the new process standards, they developed the organizational concept that called for assembling evaluation committees for the selection of members of the project team (including architect, engineer, contractor, and consultants) for every major project. Wilson, as coordinating architect, took a seat on all evaluation committees, along with members of the Board of Regents and the head of each department affected by that particular project. Tines served as a non-voting member of each evaluation committee. Also, the first member selected for each project was the architect, who then joined the evaluation committee—usually 10-12 people—to help select the other members of that project team.

Wilson said a key factor to the success of the selection method was the effort to "de-politicize" the process. That was accomplished through a series of measures, including the requirement that all prospective parties give interviews and statements of qualifications; the "blind" ranking of contractor applicants before competitive sealed bids were opened; and committees voting with secret ballots.

Stephen Sharpe is the editor of *Texas Architect*.

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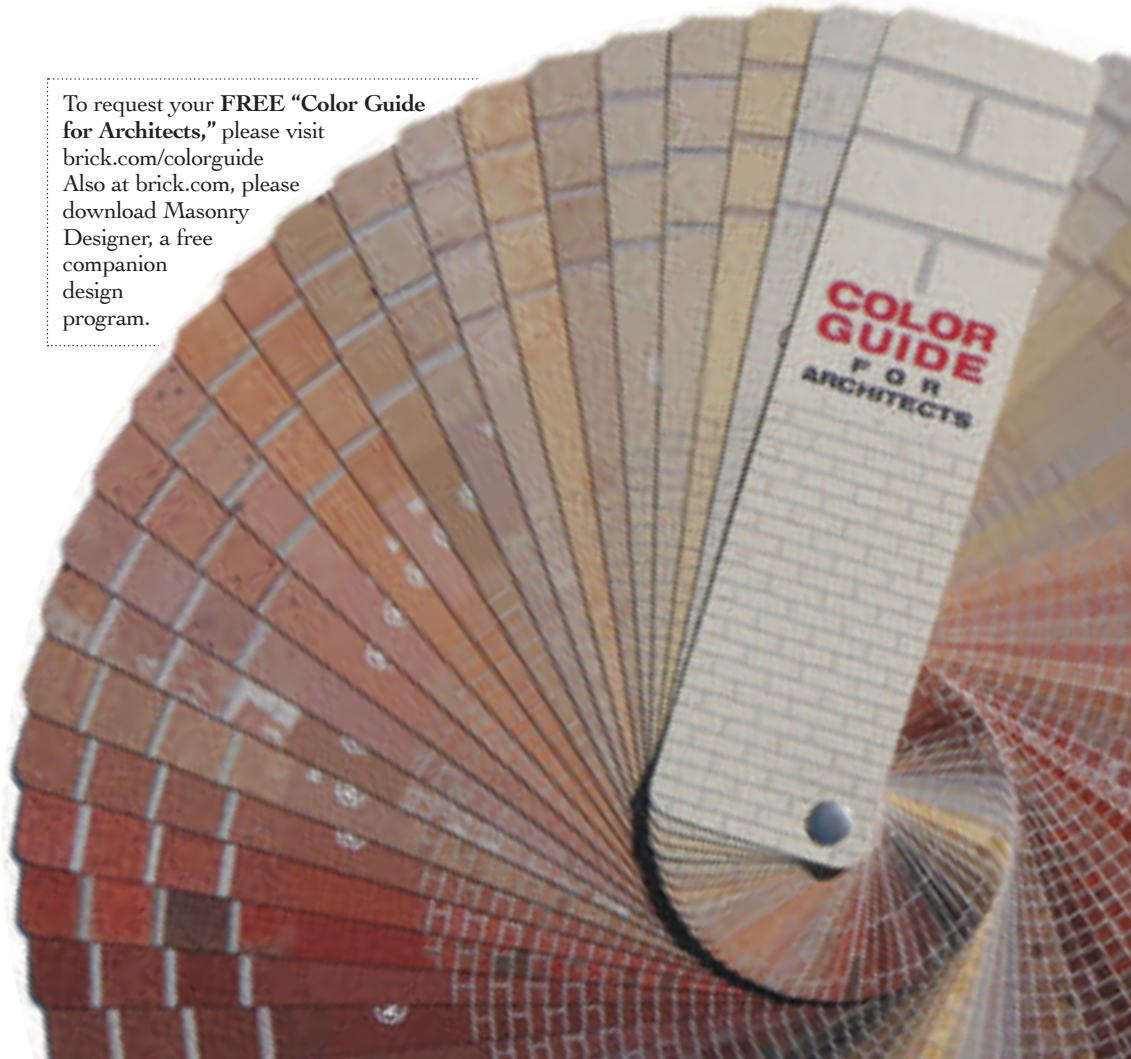

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UTEP's Bhutanese Campus Goes Modern

by ED SOLTERO, AIA

THE MONUMENTAL ARCHITECTURE of the University of Texas at El Paso, featuring cream-colored, battered walls and red clay tile roofs with sweeping overhangs, is unique yet foreign to its surrounding environs. While there have been a few instances where some design interventions on the campus have radically departed from the adopted Bhutanese-style of architecture, most of these have been reconfigured with varying degrees of success. As the institution continues to transform itself—not only in terms of the burgeoning student population but also in its ardent pursuit of tier-one status—its built environment is poised to follow suit.

UTEP officials and the UT System Board of Regents ardently embrace this unique architectural style and rightfully so—it gives the campus a cohesiveness despite its complex terrain. The classic quadrangle planning common to a majority of American campuses would have proved impractical in this type of setting. As campus planning officials embark on the newest wave of construction, they have endeavored to renew their understanding of the nomenclature that comprises the architectural character of the buildings of Bhutan rather than simply adopting the mundane approach of applied decorative elements devoid of any meaning common in years past. In fact, a concerted effort is now underway to discover the names of particular elements and their reason for being. This has been facilitated by a new Web site hosted by the Bhutanese Department of Urban Development and Engineering Services (*http://www.dudh.gov.bt*). As this new process begins to evolve, some of the zeal will be concentrated on imbibing a modern idiom into the structures as opposed to the iterative duplication of Bhutanese buildings.

Originally envisioned as a mining school nestled amongst the mountains of the Chihuahuan Desert, the small outpost of structures has mushroomed into a diverse educational village that evokes the image of the ancient Himalayan kingdom of Bhutan. The school opened in 1914, as the Texas School of Mines and Metallurgy, on land that is now part of the Fort Bliss military complex. However, that campus was completely obliterated by fire on Oct. 16, 1916.

Five prominent El Pasoans donated 23 acres of land on a mesa surrounded by mountainous terrain and the school was moved to its present location in 1917. Preference for adoption of a Southwestern style of architecture was certainly contemplated for the new campus. It was Kathleen Worrell, wife of the school's first dean Stephen H. Worrell, who persuaded him otherwise. Captivated by a series of sepia-toned images on the architecture of the Kingdom of Bhutan she saw in an April 1914 issue of *National Geographic*, she was likewise intrigued by the unique similarity of El Paso's landscape to that of Bhutan. Although the style of the architecture was adopted for no reason other than the similarity in terrain, it was embraced by all and prominent architect Henry Trost was commissioned to design the first building on campus in 1917, Old Main. Other early architects who worked on campus commissions were quite disciplined in their reinterpretation of building massing and decorative elements. (The photo at the top left shows some of those early buildings not long after completion.) Nevertheless, they mostly concentrated on applied decoration and a use of materials that would withstand the arid Southwest climate rather than the reason for the placement of these elements.

For the most part, the architecture of Bhutan embodies either a defensive role or a monastic one in early society. The distinctive type of fortress architecture is embodied in their *dzongs*, defensive fortifications typically constructed in strategic and difficult to reach mountainous locations or at the confluence of rivers. Dzongs served as the religious, military, administrative, and social centers of their district. They are characterized by high inward sloping walls of stone with few or no windows in the lower sections of such walls. Use of a red ochre stripe, called a *kemar*, surrounding the top of the building directly under the eaves of the roof signified a monastery. These are often decorated with *mandalas*, decorative geometric medallions used as a basis for meditation. The use of Chinese-style flared roofs was prevalent.

UTEP's Office of Planning and Construction has charged architects currently working on new commissions with the placement of design elements in their proper context yet tinted with a modern inflection. For example, the new 132,000-sf, $60-million College of Health Science/School of Nursing (COHS/SON), under the direction of the Page Southerland Page design team, incorporates a modernized version of a *nimchong rabsel*, or sunroom. Its proper placement on the building, oriented east, will effectively block the morning sun. It also provides a level of porosity on the ground level, yet allows occupants to enjoy the morning light within the entry courtyard.

The design team has aptly handled the steep site for the new building by creating a two-level courtyard in order to follow the existing ground relief. These outdoor spaces—called *gom* (upper courtyard) and *wom* (lower courtyard)—are highly utilized in Bhutan. Furthermore, design

teams have also been requested to introduce different roof designs. The COHS/SON has integrated a *lung-go* roof system, essentially a stacked double-gable roof. In Bhutan these are separated by a simple structural system to create a void allowing hot air to rise and exit thus naturally ventilating the building. In the case of the new educational building, a mechanical penthouse will be located between the roofs with air intakes strategically located between the eaves.

On a different note, the introduction of new buildings into the dense campus setting has created a myriad of residual spaces which were previously left over as barren, uninviting or unused spaces. These are now integrated, although aligned more with Western design philosophies, as shaded public courtyards and plazas.

Another building designed for the campus is the new $70.2-million Interdisciplinary Chemistry and Computer Science (shown at top right) complex designed by Kaplan McLaughlin Diaz Architects with Jacobs Carter Burgess. The massing of the 140,000 square feet of programmatic requirements was cleverly arranged to disguise the large scale of this building, yet it also incorporates a large public space for outdoor class lectures and events as a result of its placement in close proximity to an existing building.

While Bhutanese courtyards are highly porous, allowing occupants in upper levels to interact with others in the public space, in this case a glass curtainwall creates high visibility between building occupants and pedestrians in the public space. The glazed walls are interrupted by three large interpretations of a *gomang rabsel*, projections that are akin to bay windows in Western architecture. In Bhutan they extend interior spaces and oftentimes are used only by monks for meditation. In the Interdisciplinary Chemistry and Computer Science facility, they will house informal "collision" spaces for the interaction of scientists, researchers, faculty, and students. These will be clad in a combination of cream-colored stucco and brightly painted metal panels. Their projection into the volume of the courtyard space will add a visual complexity not common to their Bhutanese counterparts but will provide the sense of enclosure required for public activities.

The regular use of and juxtaposition of glazed curtainwall against opaque walls not only creates an inviting gesture for students and faculty but also imitates the wooden columns and rails of the Bhutanese courtyard loggias. Moreover, it will also be in keeping with the high-tech spirit of this new scientific research complex.

Another feature that acts as a modern deviation from the ancient architecture is the deliberate omission of roof structures over certain portions of the building. A preference for a low-sloped roof with a parapet enclosure topped by the addition of a kemar accentuated by a heavy cornice is introduced. Even though this type of building termination is more common to architecture of this Southwest region, the change results in a pleasing composition that is perhaps somewhat more contextual in this area of the world.

With these new architectural interventions, UTEP is taking the first steps toward expanding its campus with buildings that still respect the university's Bhutanese antecedents but are designed with a modern approach toward function and regional appropriateness.

Ed Soltero, AIA, is a *Texas Architect* contributing editor and the director of UTEP's Office of Planning and Construction.

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Direct from Bhutan

While some architects look askance at the seemingly strange importation of a foreign style onto the UTEP campus, the Bhutanese apparently are pleased that their architectural idiom has been incorporated into modern American buildings. During a recent visit to El Paso, His Royal Highness Prince Jigyel Ugyen Wangchuk of Bhutan cheerfully emphasized that the style was quite harmonious with the Franklin Mountains that hover over El Paso like the Himalayas that surround his tiny kingdom. UTEP's understanding of Bhutanese architecture, design elements, and construction joinery techniques will soon be further abetted by a gift from the Kingdom of Bhutan—a hand-carved wooden *lhakang* (temple) that will be erected on the campus in the near future. This exquisite architectural heirloom (shown above on display in Washington, D.C.) will give UTEP staff a more thorough understanding of the architecture of Bhutan.

by WILLIS WINTERS, FAIA

A Resonant Ensemble

PROJECT Booker T. Washington High School for the Visual and Performing Arts, Dallas
CLIENT BTW Advisory Board
ARCHITECT Allied Works Architecture; Booziotis & Company Architects
DESIGN TEAM Allied Works Architecture: Brad Cloepfil, AIA; Chris Bixby; David Suttle, AIA; Nathan Roelofs; Tenna Florian; Brent Linden; Booziotis & Company Architects: Aaron Farmer, AIA; Peter Doncaster, AIA; Kate Kosut, AIA; Don Roberts, AIA; Lois McGinnis, AIA; Maria Nadeau, AIA; Yi Yu
CONTRACTOR Thos. S. Byrne, Ltd.
CONSULTANTS Datum Gojer Engineers (structural); G&S Consulting Engineers (MEP/Fire/AV/IT); Jaster-Quintanilla Dallas (civil); PMK Consultants (AV/IT); Wrightson, Johnson, Haddon, & Williams, Inc. (acoustical); Encore Design Group (theatre); Horton Lees Brogden Lighting Design (lighting); H.G. Rice and Company (food service); Worrell Design Group (food facility); Jim W. Sealy, FAIA (code); Dallas Building & Fire Officials (code); ArchiTexas (historical restoration); Caye Cook & Associates (landscape); Accessology (accessibility); Davis Langdon (cost)
PHOTOGRAPHERS Helene Binet; Jeremy Bittermann; Willis Winters, FAIA

RESOURCES ATHLETIC SURFACING: American Harlequin Corp.; **FENCES, GATES AND HARDWARE**: Baldwin Metals; **PLANTING ACCESSORIES**: Living Earth Technologies, Cactus Canyon Quarries; **CONCRETE MATERIALS**: Southern Star Concrete; **MASONRY UNITS**: Endicott Clay Products, Featherlite Building Products; **ARCHITECTURAL METAL WORK**: Steel Construction Services, Baldwin Metals; **RAILINGS**: Baldwin Metals; **WATERPROOFING**: Grace Construction Products; **ROOF AND DECK INSULATION**: Anchor Roofing; **MEMBRANE ROOFING**: Siplast (Anchor Roofing), Suprema; **ACOUSTICAL CEILING**: International Cellulose Corp.; **ARCHITECTURAL PANELS**: Umicore; **ENTRANCES AND STOREFRONTS/GLASS/GLAZING**: Alliance Glass; **TILE**: DalTile (Spectra Contract Flooring); **WOOD FLOORING**: Spectra Contract Flooring; **ACOUSTICAL WALL TREATMENTS**: Wall Technologies; **PAINT**: Sherwin-Williams, PPG; **STAGE FLOORING**: Woodwright Company; **WIRE MESH PARTITIONS**: Acorn Wire & Iron Works; **AUDITORIUM SEATING**: Seating Concepts (J&S Equipment); **THEATER RIGGING, LIGHTING, ORCHESTRA SHELL**: StageLight; **MUSIC STORAGE AND CASEWORK**: Wenger Corp.; **SOUND SYSTEM AND INTERCOM**: Communications Concepts; **SHADES**: Mechoshade (Quiltcraft); **SOUND CONDITIONED ROOMS**: Wenger Corporation; **DESIGN SOFTWARE**: Vectorworks

It is early afternoon at the new arts magnet school in downtown Dallas. Classes are in session and there is considerable activity in the building's loft-like corridors. Students can be found working on class projects, but these are not the kinds of activities and assignments typically encountered in a high school curriculum. One girl practices her lines in preparation for theater rehearsal, a pair of students dressed in tights are engaged in stretching exercises, and around the corner an impromptu cello performance is in progress. These artists-in-training attend the Booker T. Washington High School for the Visual and Performing Arts, which recently completed an ambitious $55 million restoration and expansion by Allied Works Architecture. Brad Cloepfil's 170,000-square-foot addition to a historic 1922 high school creates a "raw and visceral" building that addresses a daunting architectural program in an equally exigent setting.

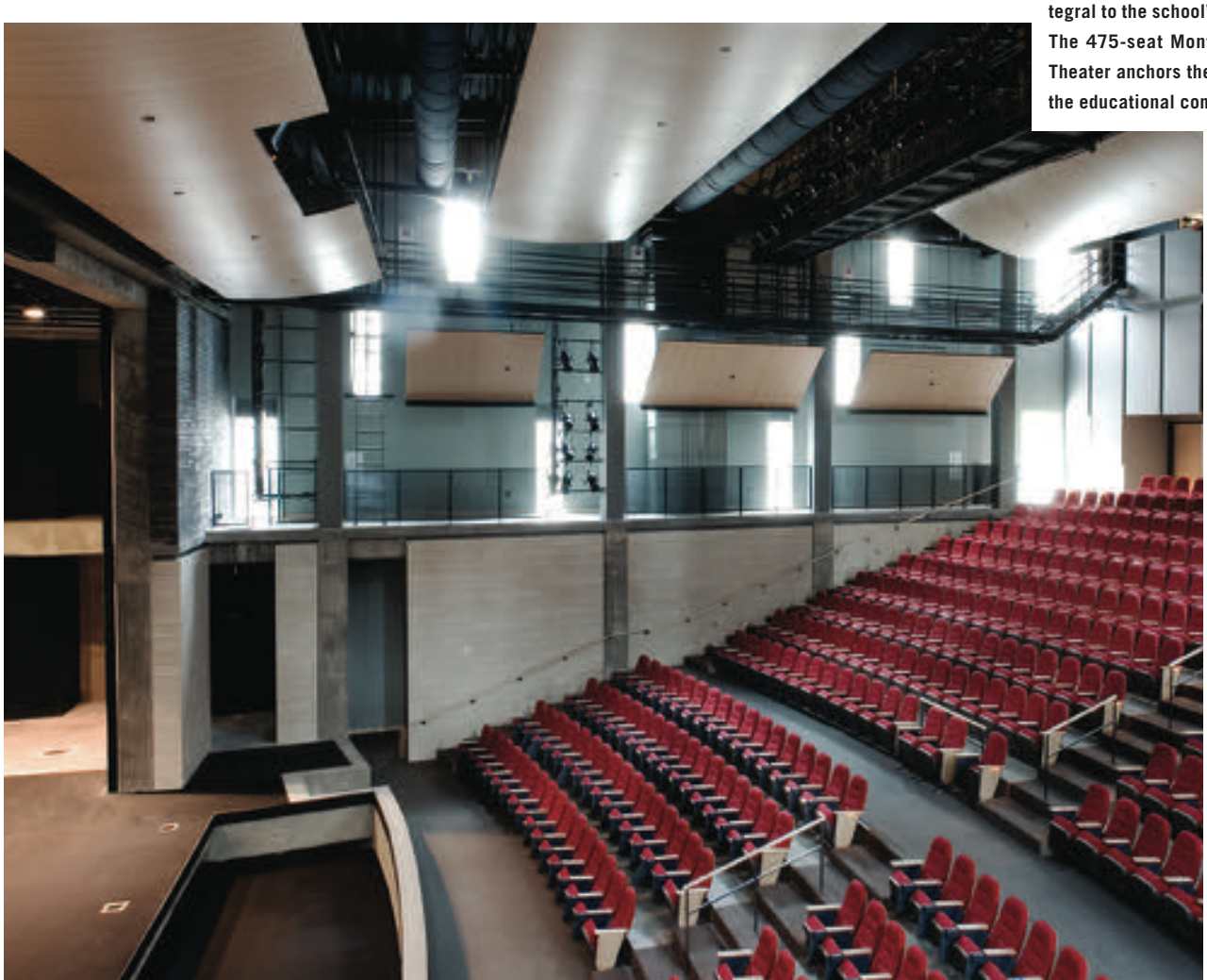
Built in a neighborhood settled after the Civil War by freed slaves, Booker T. Washington High School (BTW) was the first secondary school in Dallas to serve black students. After a mid-50s conversion and expansion into a technical school, the facility was designated by the school board as an arts magnet in 1976, at which time it received another significant building addition. This innovative, new school – one of the first of its type in the nation – pre-dated the idea of an arts district in the city's central core by two years, and ultimately established a conceptual beachhead for the arts among the area's empty parking lots and vacant car dealerships.

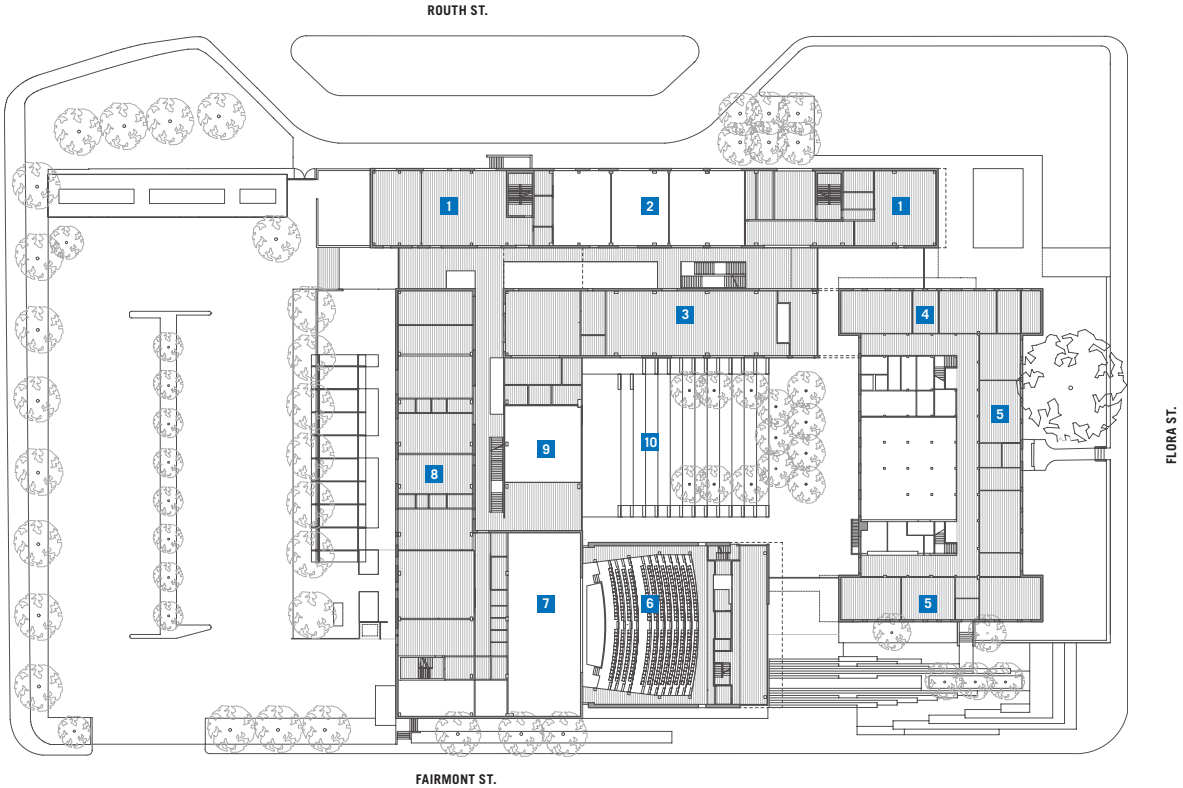
By the late 1990s severe overcrowding and significant infrastructure deterioration caused the school district and the high school's advisory board to consider a dramatic, and long-overdue, physical transformation to bolster Booker T. Washington, which had developed into one of the premier arts education institutions in the United States. An international design competition, funded in part through a grant from the National Endowment for the Arts, was organized by the advisory board and chaired by Larry Speck, FAIA. Eighty-four competition entries were submitted, eventually leading to the selection of Allied Works' scheme, which strived to "compress and hold the creative energy of the school, while simultaneously expanding out and connecting to the surrounding community with the production and presentation of new ideas and possibilities." Cloepfil's winning design effectively captured the spirit and energy of the school and provided the advisory board with the spark to undertake a fundraising campaign that would ultimately yield over $33 million in private money, with matching funds of $22 million provided by a DISD bond program.

As completed in 2008, the new Booker T. Washington High School comprises over 202,000 square feet, serving 700 students in grades 9 through 12, in addition to 88 full- and part-time teachers. The architectural program called for the renovation of the historic school to accommodate BTW's basic academic curriculum, in addition to providing space for administration, exhibition and performance. Associate Architect Booziotis & Company carefully restored the classrooms, hallways and stairwells to their original volume and character, while the building's historic auditorium was "re-discovered" and transformed into a black box theater. On the ground level, in the center of the old building, the school cafeteria

(preceding spread, clockwise from left) Allied Works' expansion emphasizes the creative energy of the activities taking place every moment during the school day. Loft-like corridors encourage chance encounters to intermingle artistic disciplines. Located in the Dallas Arts District, the project included the renovation of Booker T. Washington High School, built in 1922 to serve black students.

(this spread, from far left) The new building's four-story circulation 'canyons' provide strong visual connections between floor levels and ample views into rehearsal spaces. Studios are integral to the school's curriculum. The 475-seat Montgomery Arts Theater anchors the west side of the educational complex.

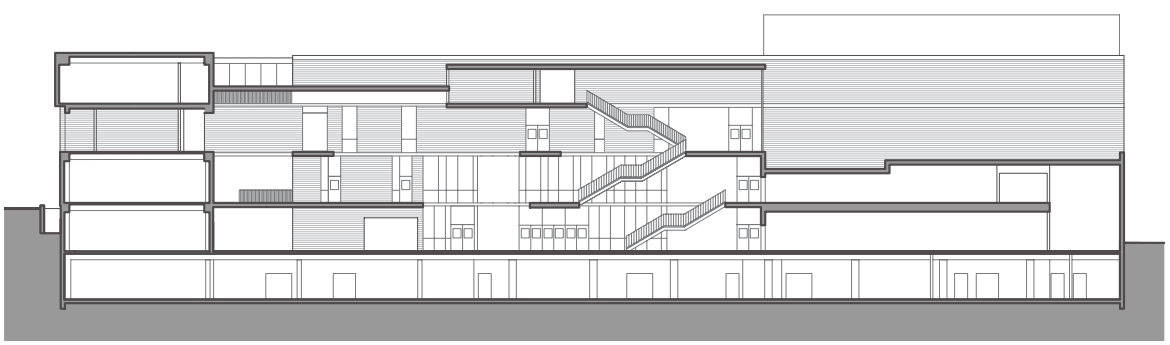




FIRST FLOOR PLAN

1 DANCE
2 DANCE REHEARSAL (STAGE)
3 LIBRARY
4 ADMINISTRATION
5 ACADEMICS
6 THEATER
7 STAGE (BELOW)
8 VISUAL ARTS
9 CAFE (BELOW)
10 COURTYARD

NORTH ATRIUM



(this page, from top) Dark iron-spot brick plays off the cladding of the historic school. The theater's zinc panel skin further pushes the contrast of exteriors. At the center of the new school is a terraced courtyard that functions as an outdoor auditorium.

was converted into an exhibition space. This multi-purpose gallery opens directly onto an outdoor performance courtyard, which serves as the focal point of the campus and is the principal organizing element of Cloepfil's design.

This tiered courtyard is bounded on three sides by the school's new addition, which is organized into a series of interlocking "suites" that accommodate the highly specialized needs of BTW's arts curriculum clusters (dance, music, theater, and visual arts), as well as science and computer labs, a library, and a student commons area. The clusters are ingeniously arranged in a spatial framework that harkens back to the architect's early competition sketches. Four-story circulation "canyons," activated by natural light entering through clerestory windows and glass walls at the end of each corridor, change in width and sectional profile as they thread through the building. Balconies, floor openings, staircases, and bridges are utilized by the architects to foster dynamic movement along and across these atrium spaces and to achieve a strong visual connection between the floor levels by allowing views into the studios and rehearsal spaces. These interior streets provide ample opportunity for chance encounters and spontaneous interactions among the students, in the process encouraging the cross-fertilization of artistic disciplines.

On the exterior, Cloepfil's addition reads as a stratified geological formation: each floor level composed of dark iron-spot brick separated by thin lines of the exposed concrete floor slabs. The masonry walls are a blend that reverses the subtle color mix of the historic high school, while the concrete slab edges reflect the width of the original building's parapet coping. It is an aesthetic strategy that works well in expressing the addition's complicated program. Windows, randomly sized and spaced relative to the various functional spaces within the clusters, are treated as minimal, vertical slits elegantly interspersed between the thin strips of concrete. Setbacks and minor cantilevers accentuate the layered effect of the new building – both inside and out – as if fractures have occurred along a sedimentary fault line, causing horizontal slippage highlighted by subtle variations of shadow.

The project's major deviation from this utterly consistent masonry and concrete palette is the zinc panel-clad Montgomery Arts Theater, a 475-seat performance hall that anchors the west side of the complex and nestles up against the Arts District's two newest venues. Foster and Partners' Winspear Opera Hall and OMA's Wyly Theater – both under construction – are the closest neighbors to Booker T. Washington and have the inherent capacity to overwhelm the comparatively low-scale campus through their sheer size and ostentation. Cloepfil avoided this potential scale disparity by pulling the new building back from Flora Street at the southwest corner of the site and by placing the performance hall – the addition's largest and most sculptural component – next to the Winspear. The architect also grasped the opportunity to forge a vital physical connection with the Arts District by opening the campus to the proposed Grand Plaza, which will be located across the street. Through these critical urban gestures, the Arts District community is invited to share in the life and vitality of Booker T. Washington and the students of this remarkable school are inspired to share their art with the world.

Willis Winters, FAIA, is a *Texas Architect* contributing editor.

A Well-Centered Campus

by THOMAS M. COLBERT, AIA

PROJECT Rice University Brochstein Pavilion, Houston
CLIENT Rice University
ARCHITECT Thomas Phifer and Partners
DESIGN TEAM Thomas Phifer, AIA; Don Cox, AIA; Eric Richey; Ryan Indovina
CONTRACTOR Linbeck Group
CONSULTANTS Walter P Moore (civil); Ulrich Engineers (geotechnical); The Office of James Burnett (landscape); Altieri Sebor Wieber (MEPF); Haynes Whaley Associates (structural); Construction Specifications (specifications); Fisher Marantz Stone (lighting); Rolf Jensen & Associates (fire protection)
PHOTOGRAPHER Scott Francis

RESOURCES ARCHITECTURAL WOODWORK: Brochsteins; **MEMBRANE ROOFING**: Johns Manville; **GLASS**: PPG (Viracon); **GLAZED CURTAINWALL**: Haley-Greer; **GYPSUM BOARD FRAMING**: Drake Interiors; **METAL CEILINGS**: Lindner USA (Clunn Acoustical Systems); **PAINT**: Benjamin Moore; **CEILING PANEL FABRIC**: Mechoshade; **RESTAURANT AND BAR FURNITURE**: Republic of Fritz Hansen

Located near the geographic center of Houston's frenetic urbanism, just below the crosshairs of its freeway system, the Rice University campus harbors an almost monastic quiet and tranquility. Rice, with a lot more land per student than at most urban universities, affords quite a bit of distance between students as they wander between the staid *allees* of shade trees and colonnaded brick buildings. Even at mid-day in the middle of fall semester the quads seem sparsely occupied. But all this may be changing. Under the leadership of President David Leebron, Rice plans to expand its student population and bring "greater dynamism and vibrancy" to the campus. The first physical manifestation of these changes may be the university's newest building, a 6,000-square-foot coffee house designed by Thomas Phifer and Partners working with landscape architect James Burnett.

The Brochstein Pavilion, named after the owners of Houston's nationally renowned manufacturer of custom architectural woodwork and furniture, grew out of an earlier proposal to locate a "cyber" café in the adjacent Fondren Library. Ultimately, the renovation of the library did not include a café, but it did include a new west entrance, an entrance that extended the east-west axis of the campus through the library, linking the well-known Academic Quad to the east with the nascent Central Quad to the west. According to campus officials, President Leebron himself determined both the program of the coffee house and its site just outside the west entrance to the library. Upon his arrival at Rice, Leebron is said to have observed that the west end of campus was underutilized and particularly dark at night, and that the campus was sorely in need of a convivial social center. He imagined a place where students and faculty could gather informally, an animated center of campus.

The scheme devised by Phifer is a simple square in plan with floor-to-ceiling glass on all four sides. Glass framing, structure, perforated metal ceiling, overhead shading devices, and interior elements are all white. The only enclosed element of the plan is a white rectangular core containing restrooms and mechanical equipment. The core is set slightly off center on the south side of the building, leaving the newly extended east-west axis of the campus unobstructed and creating a large dining and social space to the north and a smaller lounge and reception area to the south.

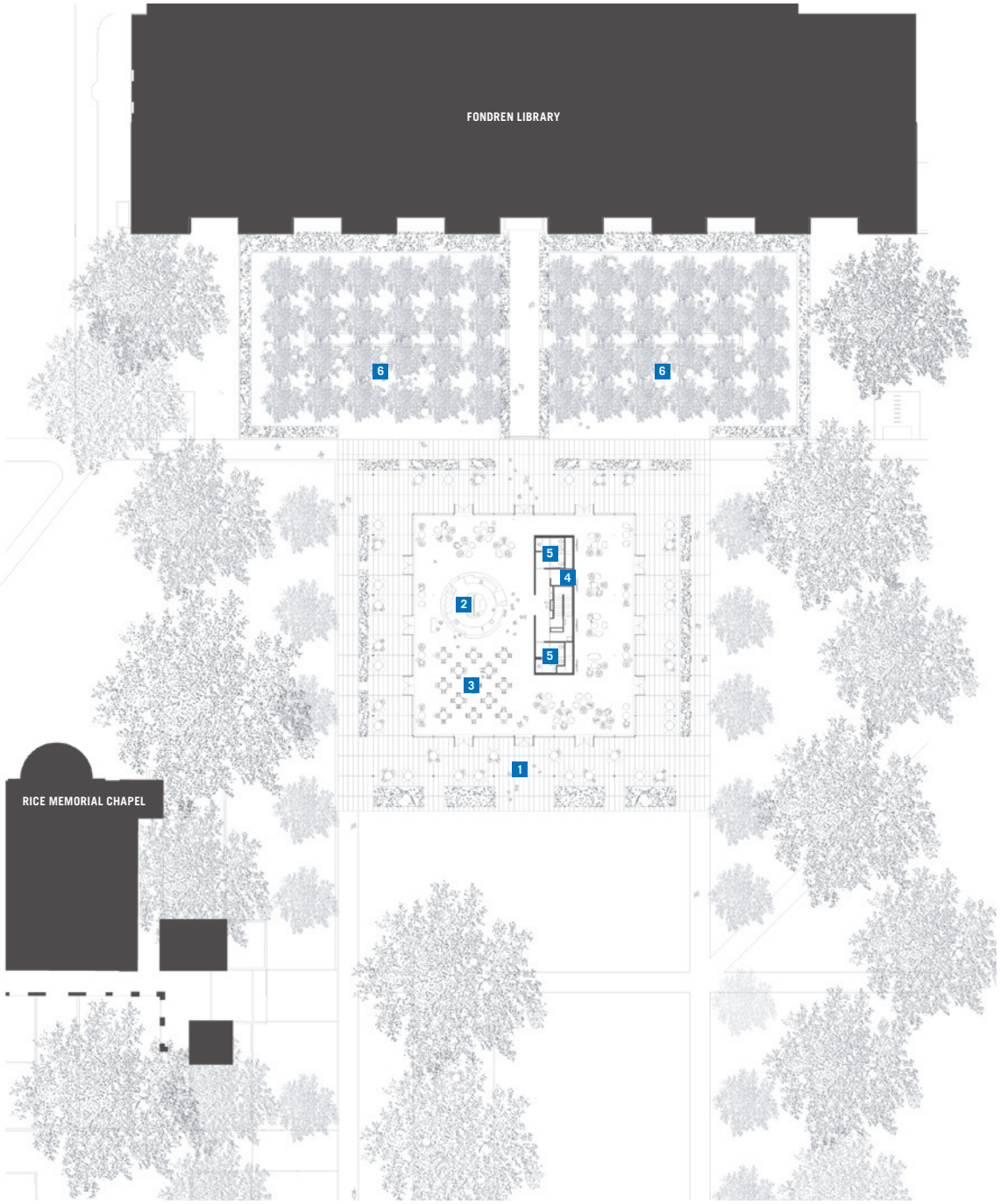
In describing the initial concept for the building, Phifer says, "We didn't want it to be closed off like a fortress, but open and inviting. The building was to blend in with the landscape so you can see right through it." Indeed, one can see through the building. But more important, the interior blends almost seamlessly with the landscape—one feels intimately connected with the garden while inside the building and a part of the life of the interior while outside. This results in part because the interior flooring is flush with the surrounding garden. Other contributing factors are the transparency of the skin and the subtle layering of space and light between the interior and exterior.

On all four sides, an overhead scrim – a parasol of aluminum rods and light steel framing – shades deep verandas. Designed to minimize solar gain on the glass walls it covers, this device may not be entirely successful. Sitting underneath for an August lunch, one wishes it filtered a good bit more of the sun. Still, it very effectively holds the space of the veranda and eases the transition into the build-

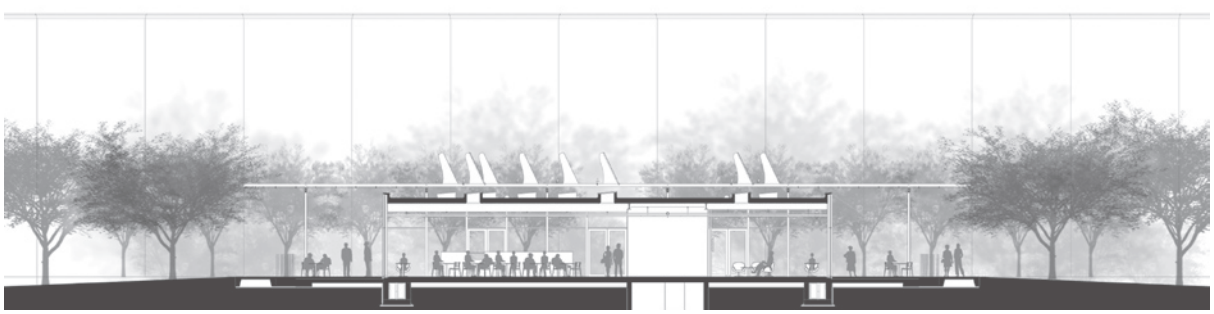
(preceding spread, clockwise from left) Phifer's design is characterized by meticulous detailing and realized by flawless construction. Due to the acoustic qualities of the interior volume, indoor activities do not interrupt more casual uses in the outdoor spaces. The layout of building components rigorously adhere to an expressed planning grid.

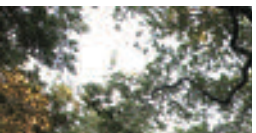
(this spread, clockwise from left) The creative alliance between Phifer and landscape architect James Burnett seems to have inspired many of the project's most memorable aspects. The overall feeling of the architecture is that of a smooth, neutral minimalism. The east side of the pavilion opens to a newly landscaped pedestrian connection to the Fondren Library.

FIRST FLOOR PLAN
1 PLAZA
2 FOOD KIOSK
3 SEATING
4 FOOD STORAGE
5 RESTROOM
6 TREE GROVE



WEST SECTION LOOKING NORTH





(this page, from top) Phifer's north-facing skylights punctuate the roof. The subtle graduation of light between inside and outside is critical to the integration of the building into the landscape. The Raymond and Susan Brochstein Pavilion opened its doors last April.

ing. It also softens the harsh Texas sunlight around the building during the day and provides a reflective surface for upward-directed exterior lights at night. The interior is illuminated by a combination of natural light entering though lyrically shaped north-facing skylights and miniature fluorescent fixtures neatly integrated into a perforated metal ceiling system.

The integration of interior and exterior spaces is meant to be literal as well as phenomenal. When Houston's weather permits and air conditioning is not necessary, the many large double doors are supposed to be left open to allow a continuous flow of space from the interior out to the veranda and into the surrounding landscape.

To the west of the new building, the West Quad has been redeveloped to include gravel-paved areas equipped with underground electrical service to accommodate temporary facilities for outdoor events. This allows the west veranda to serve as either stage or seating area for performances on the lawn. To the east, the building embraces and celebrates a newly important north-south pedestrian path. This walkway links a growing collection of residential colleges to the south with science buildings to the north (where a new physics building by Kieran Timberlake Architects is soon to be built). Also to the east, two groves of semi-mature Drake elms have been planted to shade seating areas on either side of the new library entrance. Beneath the leafy canopy, French café tables surround raised reflecting pools from which water flows to cool the area, a particularly popular outdoor gathering spot, even in the middle of summer.

Just as there is a gently layered transition between the interior and the exterior of the building, there is also a gentle transition between landscape and veranda. The roof shading system reaches out over adjacent circulation zones, engaging them without drawing passersby too deeply into its social sphere. Here the paving opens up, yet Equisetum plantings delineate pedestrian through traffic from outdoor seating areas. Working in concert with the slender columns that support the parasol above, these plantings hold the space of the terrace without obstructing the view to and from its surroundings.

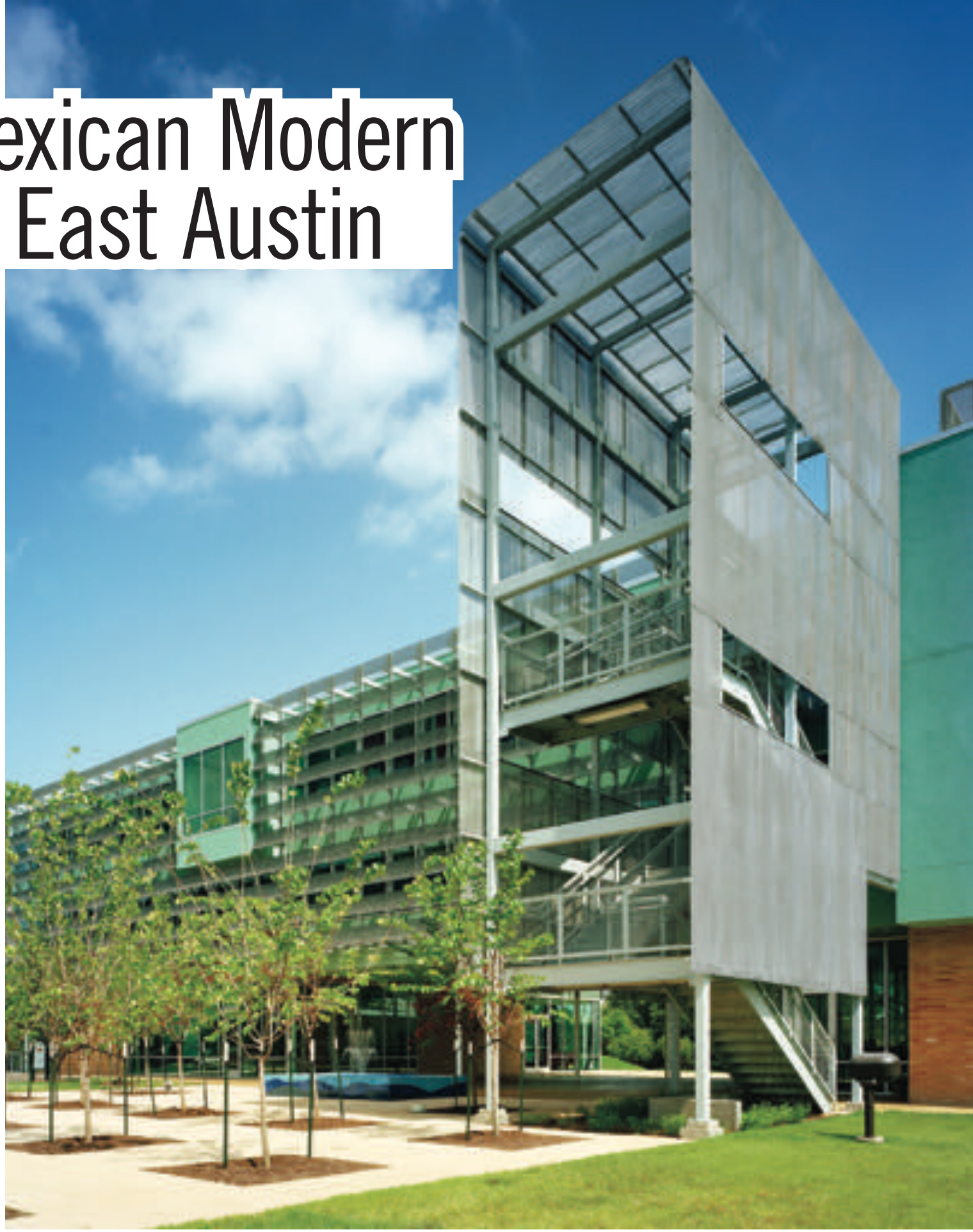
The Brochstein Pavilion engages the campus at a larger scale as well. At night, through the extensive use of outdoor lighting, the pavilion brightens up a part of campus that formerly was very dark. During the day, as the only white building on campus – and almost the only one not clad in brick – it marks the intersection of two new and important pedestrian axes, as well as enhances an otherwise undistinguished entrance to the Fondren Library. It also provides a visual center to the western half of the campus, a focal point that makes the relatively small size of the West Quad evident for the first time. Most important, situated at the heart of the campus, it serves as a place where one can go to read or work at a laptop, wait for friends, and easily fall into conversation with strangers.

Rice University is changing, but in a civilized way. President Leebron has brought to the campus its most outstanding social facility and its first unabashedly modernist architecture. This is a genteel building, part of a sophisticated project that weaves together context, site, landscape, and architecture in the creation of a thoughtfully developed communal space.

Thomas M. Colbert, AIA, is an associate professor and director of graduate studies at the University of Houston's Gerald D. Hines College of Architecture.

Mexican Modern In East Austin

by MARIO L. SANCHEZ, PHD



PROJECT Southwest Key, Austin
CLIENT Southwest Key Programs
ARCHITECT Cotera+Reed Architects
DESIGN TEAM Juan Cotera, AIA; Phillip Reed, AIA; Matt Catterall; William Hodge, AIA; Mary Franzosa
CONTRACTOR Gilbane Building Company
CONSULTANTS Datum Engineers (structural); Urban Design Group (civil); ACR Engineering (MEP); Carolyn Kelley (landscape); Parking Planners (parking); BAi (AV/IT)
PHOTOGRAPHER Mike Osborne

RESOURCES UNIT PAVERS: Pavestone; **FOUNTAINS:** Choate USA; **MASONRY VENEER:** Clay Brick of Mexico; **METAL MATERIALS:** Construction Metal Products; **ARCHITECTURAL METAL WORK:** Wade Architectural Systems; **WATERPROOFING:** Sonneborn, Carlisle Coatings, Grace Perm-A-Barrier; **BUILDING INSULATION:** Owens Corning; **ROOF AND DECK INSULATION:** Georgia Pacific; **MEMBRANE ROOFING:** Carlisle Syntec; **ROOF PAVERS:** Wausau Tile; **WOOD AND PLASTIC DOORS:** Marshfield DoorSystems; **ENTRANCES AND STOREFRONTS:** Arch Aluminum and Glass; **GLASS:** PPG; **GYPSUM BOARD FRAMING AND ACCESSORIES:** Clark Western, USG; **CERAMIC TILE:** Clayworks Studio/Gallery; **ACOUSTICAL CEILINGS:** USG; **PAINT AND HIGH PERFORMANCE COATINGS:** PPG; **WALL BASE:** Roppe; **EXTERIOR STUCCO:** TEIFS; **STUCCO ACCESSORIES:** Niles Building Product Co.; **DESIGN SOFTWARE:** DC CADD

Founded in 1987, Southwest Key Programs, a national non-profit group based in Austin, manages a variety of social programs to benefit disadvantaged youth and their families. Intending for its new headquarters to act as a tool for neighborhood revitalization, the organization selected a site in a traditionally underserved area of the city to locate the Southwest Key East Austin Community Development Project.

To convey an architectural image that reflects its interest in Mexican heritage, Southwest Key (SWK) selected Cotera + Reed, a local design firm intimately familiar with East Austin's social, cultural, and development issues. Cotera + Reed also offered its extensive experience in public projects, knowledge that helped the client obtain a necessary zoning change, guided the process for community involvement, and assisted in developing the public/private financial partnership for the $7.2 million complex.

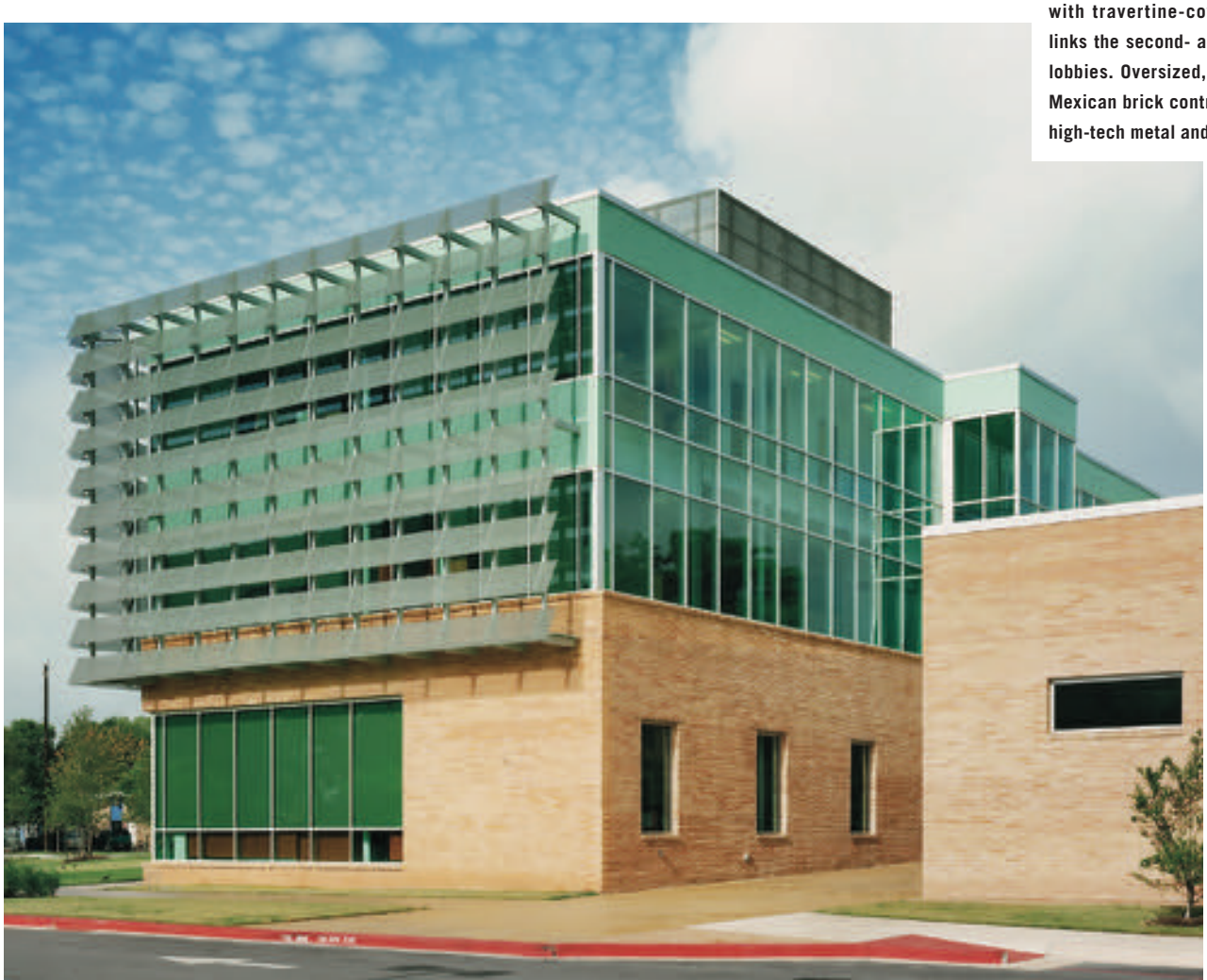
Although unfamiliar with building design and construction, SWK eagerly participated in "a charged instructional process that enhanced creativity," says firm principal Phillip Reed, AIA. The intense dialogue between the architect and client focused on "how best to interpret traditional Mexican architecture in modern terms," according to firm founder Juan Cotera, AIA. From that exchange emerged an organizational concept where urban fabric is "woven through a series of structures that wraps public space," says Reed. Fundamental to the architecture of ancient Mexico, this same urban design principle was essential to the planning of mid-twentieth century Mexican modern architecture—most notable in the site plan for Mexico City's Ciudad Universitaria (1952) by Mario Pani and Enrique del Moral. Cotera + Reed used Ciudad Universitaria as precedent, interlacing the SWK complex with the surrounding neighborhood, the site, and its adjacent woodland. Notes design team member Matt Catterall: "The building forms reinforce the logic of weaving," allowing the program to grow like the urban geometries and patterned friezes of pre-Columbian Mexico.

Similar to the Ciudad Universitaria, Modernist principles stylistically guided Cotera + Reed's architectural design for the Southwest Key project with an emphasis on transparency, horizontality, and articulation of function. The design thus captures the vibrancy of a period at mid-century when a new Mexican identity advocating social change was being forged, in part, through its architecture. Strongly endorsed by SWK as an image ideally suited to reflect its progressive mission and goals, the project's composition and style display Mexican culture in a "subtler, abstract way, as opposed to a clichéd, commercialized design," says Cotera.

A master plan by Cotera + Reed laid out a phased design process calling for future expandability. The plan, completed with the participation of residents and SWK's culturally diverse staff, identified first-phase programmatic requirements for a 30,000-square-foot multi-use complex to provide space for the organization's offices, educational programs, and community outreach activities.

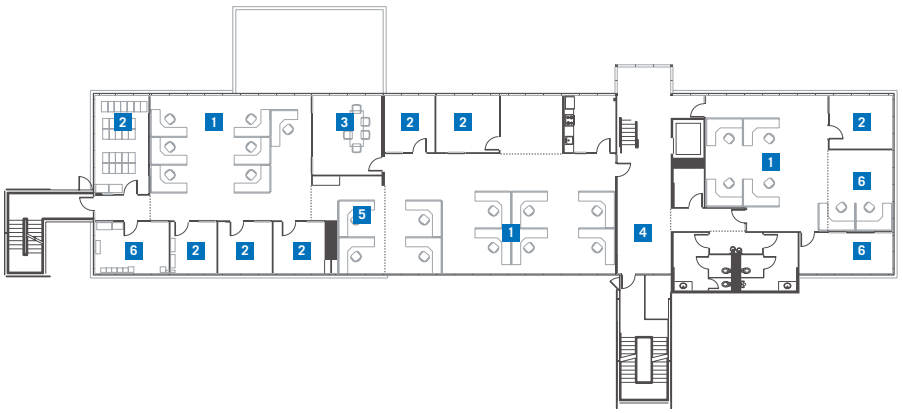
The triangular seven-acre site, fronted by a residential street and undeveloped municipal parkland to its rear, allowed the architects to optimally shape and situate two building forms on relatively flat topography. By setting the complex deep into the site, the architects reduced its scale to better fit within the low-rise residential context.

(preceding spread, clockwise from left) Zinc screens on the vertical stairway and brise-soleil shade the south elevation. Facing west, one of two large light wells interrupt the low profile of the one-story educational wing. Glass walls along the three-story administration wing's north elevation open offices to views and natural light.



(this spread, clockwise from far left) Daylighting also cuts daytime energy costs. A striking set of dark blue metal stairs with travertine-covered treads links the second- and third-level lobbies. Oversized, hand-formed Mexican brick contrasts with the high-tech metal and glass.

THIRD FLOOR PLAN
1 OPEN OFFICE
2 OFFICE
3 CONFERENCE ROOM
4 LOBBY
5 COPIER ROOM



SECOND FLOOR PLAN
1 OPEN OFFICE
2 OFFICE
3 CONFERENCE ROOM
4 LOBBY
5 COPIER ROOM
6 STORAGE

FIRST FLOOR PLAN
1 CLASSROOM
2 OFFICE
3 CONFERENCE ROOM
4 LOBBY
5 EQUIPMENT
6 STORAGE
7 PATIO
8 PUBLIC MEETING ROOM
9 BREEZEWAY

(this page, from top) Facing south and inward to the courtyard, the educational wing displays a sedate appearance with its brick cladding. Outdoor performances take place on the courtyard's plywood-decked stage. The architects set the building back from the neighborhood street to reduce its scale.

Situated diagonally to the street along an east-west axis, the long and narrow three-story administrative wing is configured to maximize daylighting and exterior views for all its users, a notion well suited to SWK's egalitarian principles. To the rear, the one-story L-shaped educational wing wraps a courtyard.

The expansive site allows for a formal public entrance sequence inspired by the pedestrian spaces of the Ciudad Universitaria. Inviting the neighborhood to partake of the facility, the Heroes Walkway (the initial portion of that sequence) is delineated by cedar elms and irregularly edged concrete paving. The walkway extends from the street to a square plaza lined with redbud trees planted in a rigid grid. The plaza, a forecourt to the administrative wing, opens to a central breezeway that takes up a third of the building's ground level and enables the ground plane to flow through the structure in a manner reminiscent of Le Corbusier. "The Creek of Life," an art installation by Rosalinda Toro of blue mosaics embedded in the breezeway's stained concrete floor, leads to a large, solitary pecan tree placed at the center of the rear courtyard.

At its ground level, the administrative wing is clad with an oversized, hand-formed Mexican brick "to add texture and to warm the building up," says Reed. The earth-tone brick contrasts with the lightweight transparency of the wing's two floors above, which are covered by a glazed curtainwall topped by a narrow, continuous band of stucco in a greenish color reminiscent of the agave cactus.

The upper floors are shielded from direct sunlight on the south, east, and west sides by perforated, corrugated, and naturally oxidized zinc screens that filter natural light to the building's interior spaces. Supported by a steel tube assembly that is cantilevered from the main building frame, the screens enabled Cotera + Reed to maintain a clearer glass in the curtainwall than otherwise would be required by code, thus enhancing the building's transparency. The flood of natural light into the interior also cuts daytime energy costs.

Recalling the *brise-soleil* that captivated the Modern movement, the angled screens emphasize horizontality and streamline the structure's presence in the site. This linear flow is broken by a projecting third-floor conference room and a set of exterior egress stairs that express vertical circulation in Modernist terms. Set perpendicular to the structure, the stair tower, supported by an exposed tubular steel armature, is partially veiled by large panels of the perforated metal screen, thus enhancing the modern, industrial look of the south elevation.

At the north elevation, the glazed curtainwall envelops the structure without interruption, allowing it to be read as a single horizontal volume—a seamless linear canvas animated by reflections of clouds, sky, and greenery.

Expressing a Mexican connection without overt historicism, Cotera + Reed's design ideally suits its site, client, and community. The refurbishing of nearby residences since the project's completion evidences its success at revitalization, and SWK's satisfaction is signaled by the current update of the master plan to expand the complex. Modern yet local, contextual yet contrasting, and welcoming yet challenging, this thoughtful building design will enable Southwest Key to ultimately reach its goal of weaving itself into the community.

Mario L. Sanchez, PhD, is an architect with the Texas Department of Transportation.

by CHRIS SCHULTZ, AIA

Homework Yields High Marks

PROJECT José M. Lopez Middle School, San Antonio
CLIENT North East Independent School District
ARCHITECT Pfluger Associates Architects; Chumney & Associates
DESIGN TEAM Pfluger Associates Architects: Michelle Dudley, AIA; Kent Niemann, AIA; Brad Pfluger, AIA; Chumney & Associates: Frank Amaro, AIA
CONTRACTOR Joeris General Contractors
CONSULTANTS Pape-Dawson Engineers (civil); Alpha Consulting Engineers (structural); HMG & Associates (MEP); Cooper+Lochte Landscape Architecture (landscape); Combs Consulting Group (technology); Wiss, Janney, Elstner Associates (roofing); Robert Simpson & Associates (food service)
PHOTOGRAPHER Chris Cooper Photography

RESOURCES **RECREATIONAL FACILITY AND PLAYGROUND EQUIPMENT**: The John F. Clark Company; **METAL MATERIALS**: Trans-Tex; **RAILINGS AND HANDRAILS**: York Metal Fabrication; **LAMINATES**: Pionite, Formica; **SOLID POLYMER FABRICATIONS**: Corian; **TILE**: DalTile; **ATHLETIC SURFACING**: Roppe Tuflex Sports Flooring; **WALL COVERINGS**: Lanark Wallcovering (TRI-KES Wallcovering Source); **PAINT**: Benjamin Moore; **SIGNAGE AND GRAPHICS**: ASI Modulex; **STAGE EQUIPMENT**: Texas Scenic Company; **SOUND CONDITIONED ROOMS**: Wenger Corp.

The North East Independent School District set several lofty learning objectives for the designers of its new prototypical middle school, José M. Lopez Middle School, in the fast-growing Stone Oak area of far-north San Antonio. Not only must the school be innovative in its design, but it should also incorporate state-of-the-art teaching philosophies and technologies, while allowing for additional enrollment growth without physical expansion. In addition, it should create distinctive learning communities for each grade level and allow after-hours use by the surrounding community while providing the control and security mandatory in today's educational environments. And, of course, the building and associated site improvements must fit on a restrictive site with challenging steep terrain, topography typical of the Hill Country.

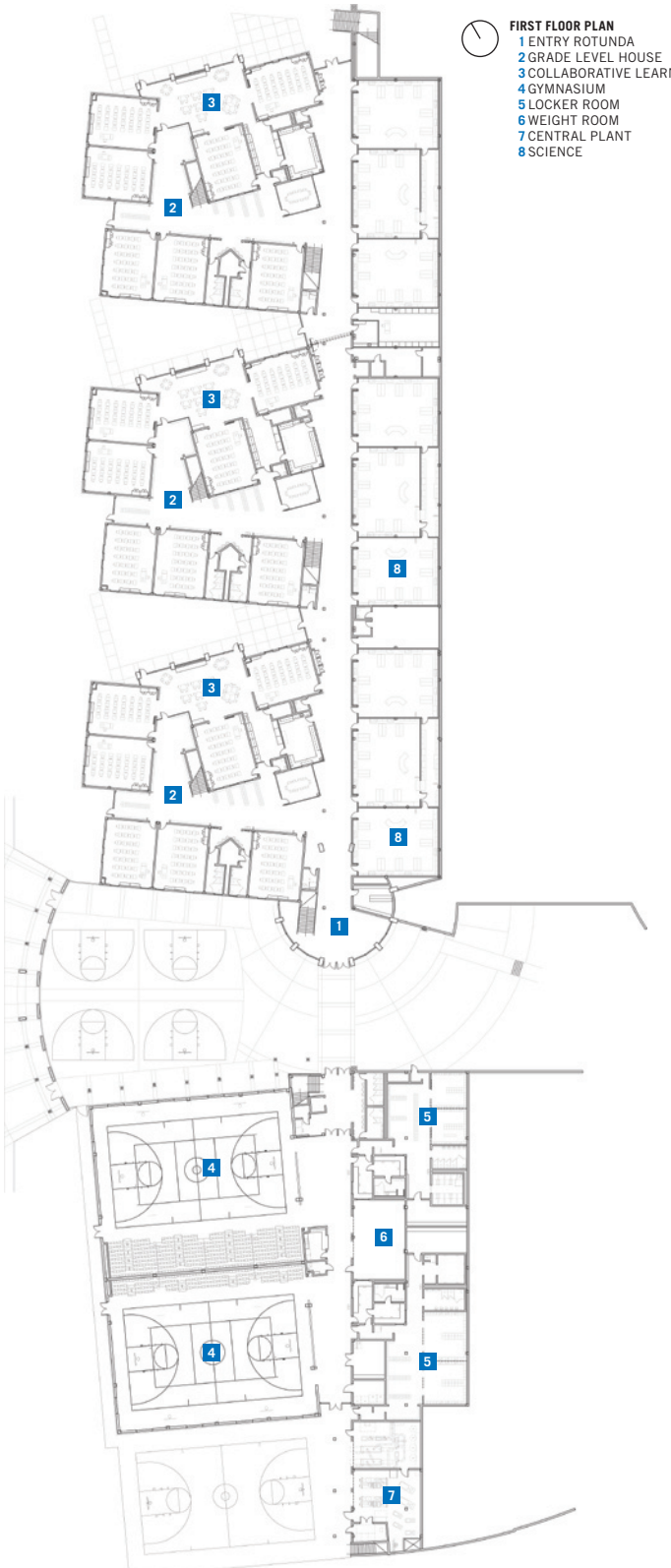
Pfluger Associates Architects, along with associate architect Chumney and Associates, certainly did their homework. Prior to beginning design work, the architects analyzed other exemplary schools, curricula, schedules, and technologies. Two key concepts—team teaching and school-within-a-school—emerged. Team teaching brings together five core curricula (English, reading, math, social studies, and science) within a seven-period school day, leaving each teacher two periods for individual planning and team planning. The school-within-a-school concept aims to provide distinctive grade-level experiences within this 200,000-square-foot structure, a large facility that has been divided into a variety of individualized "places" as opposed to "spaces" for education. Although designed for 1,260 students, Lopez Middle School can accommodate a maximum of 1,600 pupils within its existing layout through creative scheduling and an additional floating team of teachers.

Concurrent with this educational modeling study, the design team undertook an extensive site analysis. Typical of many schools in the growth perimeter of San Antonio, the parcel was anything but flat. The site sloped more than 70 feet from its highest point at the southeast corner to a drainage easement along its northwest boundary, mirroring the contours of the adjacent arterial street. Since the steepest slopes lay to the east, the athletic fields were necessarily relegated to the western edge of the property. Topography further limited the amount of southern exposure and essentially mandated an extensive east-west orientation for the building.

The *parti* that sprang from these analyses clearly illustrates the lessons learned. A central circulation spine runs parallel to the slope and stretches across almost the entire width of the site. Located to the east of the spine are the public spaces (a parking lot, the library, and the cafetorium) that can be accessed directly after hours, while to the west are the academic spaces (classrooms, gymnasiums, staff parking, school bus loading zones, and athletic fields). Near the spine's mid-point, the main entry lobby occupies a glass-enclosed cylinder with adjacent administrative offices as well as one central, secured activity court—an eloquent composition proving that security need not be aesthetically cumbersome or obtrusive. In the terraced courtyard, which follows the fall of the site, the circulation spine creates one of the school's most innovative and dramatic features—a transparent skybridge linking the classroom wing to the fine arts/athletics/cafetorium complex. Together, this composition of entry lobby, courtyard, and skybridge creates the signature look for

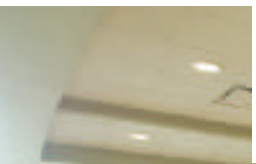
(preceding spread, clockwise from left) The architects devised a two-story entry rotunda in response to the topographic challenges of the hilly terrain. Adding drama to the composition, a glass-enclosed skybridge spans the courtyard. The single-story entrance obscures the 70-foot fall of the site.

(this spread, clockwise from far left) Clerestory along the corridors illuminates the interior. The transparent skybridge connects the classroom wing to the fine arts/athletic/cafetorium complex. On the lower level, the circulation spine opens directly to the boys and girls gyms.



FIRST FLOOR PLAN
1 ENTRY ROTUNDA
2 GRADE LEVEL HOUSE
3 COLLABORATIVE LEARNING CENTER
4 GYMNASIUM
5 LOCKER ROOM
6 WEIGHT ROOM
7 CENTRAL PLANT
8 SCIENCE

SECOND FLOOR PLAN
1 ENTRY ROTUNDA
2 GRADE LEVEL HOUSE
3 ADMINISTRATIVE OFFICES
4 CLASSROOMS
5 LIBRARY
6 BRIDGE
7 CAFETERIA
8 KITCHEN
9 MUSIC
10 ART
11 INDUSTRIAL TECHNOLOGY
12 FAMILY & CONSUMER SCIENCE
13 SPECIAL EDUCATION



(this page, from top) The cafetorium's protruding corner further brightens the day for students, faculty, and staff. Seen from the inside, the glass walls of the dining room look over the central courtyard. The library is among the after-hours public spaces open to the surrounding community.

Lopez Middle School. Furthermore, the decorative CMU-clad wall denoting the circulation spine also functions as a virtual retaining wall—science laboratories, locker rooms, mechanical spaces, and other areas not requiring natural lighting are burrowed into the hill behind the wall and under the library and cafetorium spaces above. Thus to the east of the spine, the school appears to be a one-story structure while to the west it is clearly two stories.

The *parti* also clearly illustrates the school-within-a-school concept by creating three distinctive classroom settings, here known as "academic houses," one for each grade level. With its own unique color scheme both inside and out, each house contains classrooms for three teams, has a central conference, workroom, and resource area, and provides another innovative feature—a collaborative learning center. This double-height space – surrounded by three lower-level classrooms opening directly into it and four more upper level rooms with interior windows – is available to each team for individual discovery and group projects essential to middle school learning styles. Computer stations, specialized lockers for laptops, and audio-visual aids, as well as an adjacent computer classroom, all provide advanced technology capabilities for any team needing assistance. The learning center also has direct exterior access, with a small courtyard for alternative educational settings. In order to feel more self-contained, each academic house has ample circulation space with its own stairway and restroom facilities as well as an abundance of natural lighting and unique exterior views.

Across the skybridge, the arts/athletics complex offers similar clearness in organization. The cafetorium overlooks the central courtyard and has an after-hours entrance for use by the public. The fine arts complex – consisting of stage, drama, band, orchestra, choir, and arts classrooms – occupies the upper level to the east of the circulation spine while the double-height volumes of the boys and girls gymnasiums occupy the area to the west of the spine. On the lower level, the circulation spine becomes a flexible space opening directly into locker facilities, weight room, and gyms alike.

Stylistically, each programmed area has its own distinctive material palette and color scheme, which though clearly emphasizing its uniqueness and the school-within-a-school concept, does create an amalgamated exterior composition. And although the decorative CMU-clad wall of the circulation spine is very clear in plan graphics, in the third dimension it becomes less so and may have been used more effectively as an organizational datum for the various assemblages fronting it. These are relatively minor quibbles, and further refinement of this prototype may yield even stronger visual cohesiveness. The central courtyard does however suffer from a lack of landscaping, particularly the shading of trees and pendulant growth of shrubs and vines along foundation walls, though this may well have been limited by the project budget. On the interior, color manipulation, ample daylighting, and a relatively clean aesthetic yield spaces which indeed are more place-like and inviting than many other schools with seemingly endless, lifeless corridors and perfunctory classrooms.

All told, José Lopez Middle School proves that doing one's homework does result in very high marks.

Chris Schultz, AIA, is a principal of Wills-Lipscomb/Schultz Architects in San Antonio.

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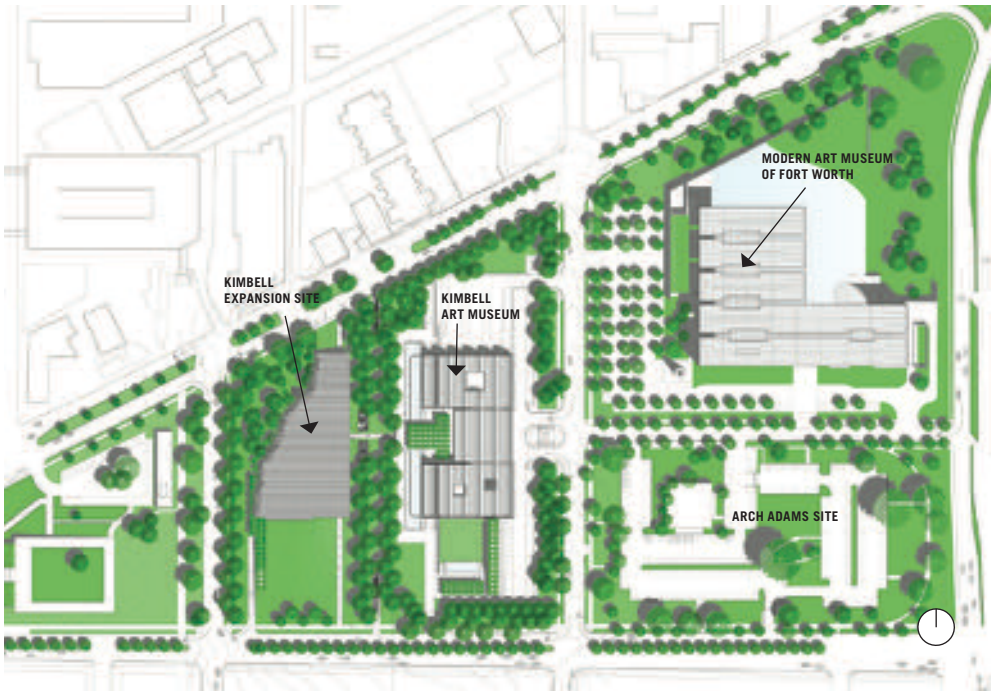
that mark the vestiges of a former street, the sound of the fountains, and the soft crunch of footfalls on the decomposed granite beneath the yaupon grove. So perhaps it is not surprising that Piano has proposed locating the addition on the great lawn directly across from Kahn's revered portico. It can also be said that the new building is not really an addition at all, since there is no visible physical connection to the original Kimbell—the two buildings will share an underground service corridor for staff use only.

While the visual connection between the two structures is buffered by the aforementioned *alee* of trees, the front of the Kimbell becomes the main attraction of the glazed circulation space in the new building. In plan the Piano structure is the exact same length as its neighbor, but based on the early drawings it seems to be organized differently inside. The western edge of the building gently burrows into the existing topography beneath an earthen berm, diminishing its presence towards the Amon Carter Museum. There are suggestions of an east-west alignment to the roof structure, which is in keeping with Piano's continually refined methods of introducing north light into museum galleries.

While there is a modesty to the approach that is very deferential to Kahn's building, one expects that as the scheme develops there will be more of a dialogue between them. Kimbell's staff states that the defining materials – concrete and travertine – will be continued in the expansion. The staff also stated that the use of photovoltaic panels on the new building's roof is a possibility.



The new building features much needed temporary exhibition galleries, a larger auditorium, new education space, and underground parking. It is highly laudable that the museum leadership has not insisted on a hermetically sealed passage between the two buildings. True, the new building can never just disappear, but it mitigates the loss of the great lawn by restoring the primacy of the entry experience and leaving the original museum untouched. So now auto-borne visitors will ascend into the Piano building and, by design, make the iconic passage to Kahn's masterpiece as intended.

GREG IBAÑEZ, AIA

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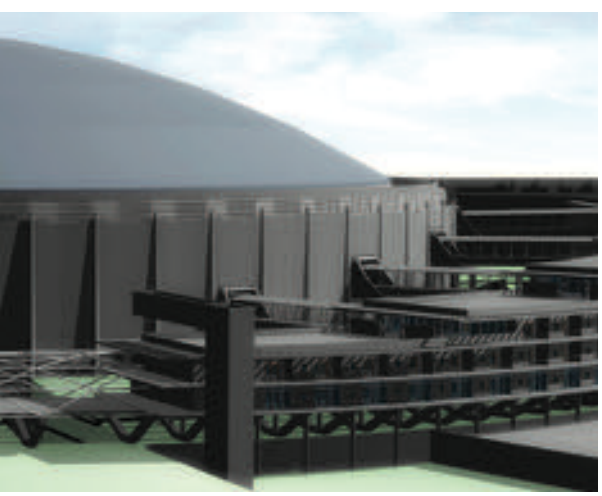
by integrating an entirely new structure (below) that wraps itself around the Astrodome while connecting to the existing building with a series of elevated skywalks more commonly seen in Houston's downtown district. The proposal calls for the re-use of the domed structure as large convention and support space, while using the new building for hotel accommodations. Careful consideration of the vertical articulation was a response that respects critical view corridors to the original building while addressing environmental responses to Houston's climate.



Other designs included: redeveloping the building as a transit-oriented development integrating the nearby light rail directly through the building; the celebration of the exterior star columns through the removal of the existing concrete lattice work back-lit through the use of and the integration of a restaurant/retail promenade shaded by individual canopies; and the integration of translucent polycarbonate panels (to back-light the original concrete lattice panels) with the original color scheme used in the stadium seating.

Today, the Astrodome sits waiting for viable options. There are no easy solutions. Harris County currently spends nearly $1 million in annual maintenance costs and owes roughly $50 million in bond debt. Further complications include abatement issues that are likely to open a myriad of additional costs that will greatly impact the economic feasibility of any option. One thing is clear, the exploration of possibilities presented by students is a welcome diversion from the harsh realities of the uncertain economics of our time, and who knows, perhaps through this process a viable project will evolve giving due respect and celebration to this remarkable structure.

MARYALICE TORRES-MACDONALD

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chitects, an excellent model for creative sustainability, these new buildings on an existing San Diego campus outperform California's Title 24 energy performance requirements by 33 percent. The classrooms are constructed in tilt-up concrete, poured with high fly-ash content, and animated by recycled glass.

The Sustainability Commendation was awarded to the **Prindle Institute For Ethics at DePauw University** by Lake|Flato Architects. The commendation is announced annually, singling out projects that contribute to a more sustainable community. Located in Greencastle, Ind., the project was the first new building to achieve LEED Gold certification in Indiana. Constructed of natural, regional materials in a landscape of restored native habitat, the design allows a maximum amount of natural daylight into the interior spaces, thus decreasing energy use.

One of AIA San Antonio's newest awards, the Divine Detail Award, gives an opportunity to all members of the chapter – architects, associates, and students – to submit an entry. The award recognizes a noteworthy feature in a built project and is independent of the overall project's submittal status. The award can be conferred upon a firm or an individual. The 2008 award went to the **Homeless Assistance Center** by Overland Partners. The project is located in Dallas. Said one juror, "The architect was able to see the opportunity to use artwork to enrich the lives of people who are often overlooked."

The **John Igo Branch Library** in San Antonio by RVK Architects was recognized this year with the Mayor's Choice Award. The award honors outstanding work on publicly funded architectural projects. In his notes, Mayor Phil Hardberger said he loved the interplay of light and how the interior blended to outdoor space. Additionally, he appreciated the incorporation of San Antonio's great trees and a water feature that drew the outdoors inside.

Thomas Jefferson High School, one of the most famous high schools in the United States, designed by the architectural firm Adams and Adams, received the AIA San Antonio 25-Year Award, which recognizes architectural projects of significant cultural importance that were completed at least 25 years ago and that were designed by an architect who, at some time in his or her career, was a member of the San Antonio chapter.

Since 1932, the high school has been one of San Antonio's most illustrious architectural landmarks. It has appeared in numerous international magazines and multiple feature films and is listed in the National Register of Historic Places. At the time it opened, Jefferson was a state-of-the-art facility featuring majestic architectural work combining the Spanish Colonial Revival style with Moorish and Aztec influences. It features a 2,000-seat auditorium with an inclined floor, sunken orchestra pit, projection booth, and a stage with an ornate proscenium arch 50 feet wide and 28 feet high. It was the first million-dollar high school in the United States with a total cost exceeding $1.2 million in 1932 dollars.

AIA SAN ANTONIO STAFF

Ruth Taylor Art & Music Building

Visitor's Center & Plaza

Francis Parker School

Homeless Assistance Center

UT Pan Am College of Education

Prindle Institute For Ethics

John Igo Branch Library

Executive Director Of Facilities & Planning

The University of Houston System (UH) currently has an opening for an Executive Director of Facilities and Planning for the four campus system located in Houston and Southeast Texas.

The selected executive will direct, coordinate and monitor activities associated with long-range planning and development of facilities, including construction of buildings, utilities, site work and remodeling projects on all campuses. Additional duties include recommending awards of construction bid packages, change orders, contracts for consultants, and contracts for furniture and equipment; assist in assessing & requiring real properties; selecting and directing the work of architects, engineers and other related consultants employed by the University; preparing and administering long-range capital plans, campus development plans, and expenditure budgets; and perform other duties as required. This position will also serve as the UH Representative on numerous campus & statewide committees.

Qualifications: *Bachelor's degree and a minimum of seven (7) years of directly job-related experience required; nine (9) years experience preferred including experience in managing a major department that performs complex multiple duties.*

Executive Director Of Facilities Maintenance

The University of Houston (UH) currently has an opening for an Executive Director of Facilities Maintenance at their main campus located in Houston, Texas.

The selected executive will direct the administration and operations of all campus buildings and utilities, making effective use of budgets, personnel, and other resources in support of the University's operational objectives. This includes the overall management of Building Maintenance, Utility Services, Residential Maintenance, and Custodial and Grounds Services activities.

Additional duties include providing expertise and coordination for all other Facility Maintenance departments at UH and UHS campuses; overseeing managerial and supervisory staff; enforcing standards for the hiring, training, evaluation and discipline of all facilities maintenance personnel; inspecting work sites, facilities and buildings to ensure work is progressing as scheduled and meets established quality standards; developing and managing annual and project budgets for facilities maintenance; coordinating facilities maintenance, renovation and small projects; developing and enforcing operational procedures and best practices; establishing and maintaining a priority system for emergency responses; directing effective preventive maintenance and maintaining a priority system for deferred maintenance; and implementing and maintaining quality assurance programs. This position will also serve as the UH Representative on numerous campus & statewide committees.

Qualifications: *Bachelor's degree and a minimum of seven (7) years of directly job-related experience required; nine (9) years experience preferred including experience in managing a major department that performs complex multiple duties.*

Senior Project Managers

The University of Houston (UH) invites applications for the position of Senior Project Manager; five positions are available. The selected individuals will coordinate and manage capital projects in accordance with established policies and procedures.

Additional duties include supervising the activities of subordinates including outside consultants; preparing requests for proposal for outside consultants; writing advertisement based on bid calendar, reviewing bids, conducting the consultant selection process and making recommendations for award of contract. Will assist project managers with the technical areas of their projects, program preparation and presentation, and the policies and procedures of the University. Will also coordinate project activities; assign tasks and provide guidance to personnel; oversee assigned projects to ensure that implementation and prescribed activities are carried out in accordance with specified objectives; monitor project costs and schedules; review the work of consultant(s) to ensure that University standards and contractual requirements are met, and perform other duties as required.

- One out of the five Senior Project Managers we are specifically looking for must possess experience in planning.
- Two out of the five Senior Project Managers we are specifically looking for must possess experience in transportation and planning.

Qualifications: *Requires a Bachelor's degree and a minimum of seven (7) years of directly job-related experience.*

Salary is highly competitive and commensurate with experience and qualifications.

For more information or to apply for these positions, visit our website at

http://jobs.uh.edu

Complete the online application and include a letter of interest and a resume.

UNIVERSITY *of* HOUSTON

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Minorities, women, veterans and persons with disabilities are encouraged to apply.

Educating the Educators

by JAMES KIRKPATRICK, AIA

Who knew that homework was still being assigned so many years after completing school? In preparation to sit on the jury for the 2008 TASA/TASB Exhibit of School Architecture, I spent about 30 hours studying the 96 entries prior to the meeting in Austin. I combed through all of them at least four times, all the while keeping in mind the criteria—design, educational appropriateness, innovation, process of planning, sustainability, and value.

Having designed facilities for multiple school districts, I always kept in mind how children are likely to experience that particular school and how that experience will affect their education. I know how challenging school design can be for an architect who must also focus on form and function. Among this year's jurors were three architects. The other two architect jurors were Lee Burch, AIA, of Jacobs Carter Burgess in Houston; and Barb von der Heydt, district architect for Fort Worth ISD. I served as an alternate member. The facilitator was Keith Hickman, AIA, of KAHickman Architects and Interior Designers in Round Rock.

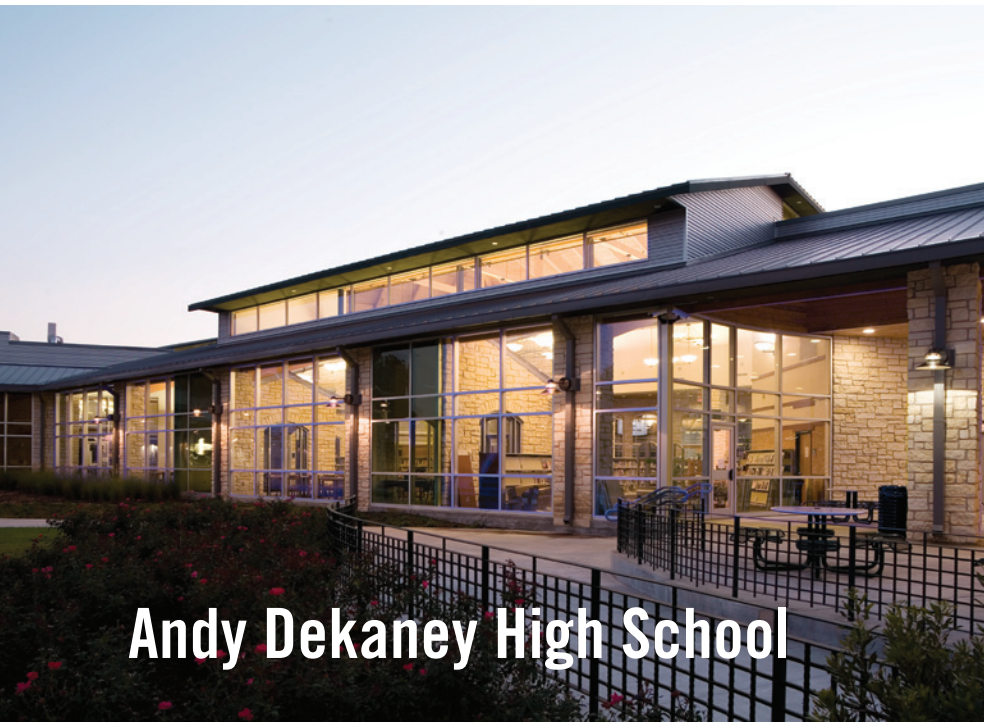
Overall, this year's entries were exceptional. There were a few clunkers though, especially with what some architects call innovation. For example, using recycled materials in a building is not innovative architecture. That's responsible architecture. And entering the same design twice – for schools in two different districts, changing the facade only slightly – is not innovation. I find it hard to believe that two school districts would come up with the same exact programming needs simultaneously.

Credit is due though to all the firms implementing sustainability into their designs. With the population booming all across the state, any energy savings will go a long way.

Even more credit is due to those firms – and to their clients! – that did their homework to design with children in mind. I give an A+ to Coppell ISD Superintendent Jeff Turner who believes school design should meet educational programming needs, thus meeting the needs of the students, above all else. His attitude was like a breath of fresh air compared to another member of the jury who favored the cheapest building cost over all other options.

The opinions expressed by this year's jurors were indeed diverse. I arrived in Austin with what I thought was the best of the best, but it's funny how educators and architects don't always see eye to eye. My top 10 didn't even make it into the top 20 of the jury's list. Like most people, school administrators and school board members see buildings differently than architects. But because our children's futures are at stake, it should be up to us – the architects – to share our knowledge with the people charged with making many of the critical decisions about the schools we design. We must inform them so they can ask the right questions, to make sure that their building is making the grade.

James Kirkpatrick, AIA, is the principal of Kirkpatrick Architecture Studio in Denton.



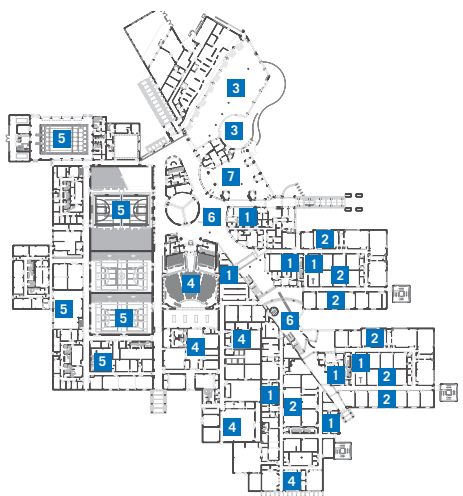
Andy Dekaney High School

PROJECT Andy Dekaney High School, Houston
CLIENT Spring Independent School District
ARCHITECT SHW Group
DESIGN TEAM Mark Lam, AIA; William Wadley, AIA; Stuart Campbell, AIA; Frank Kelly, FAIA; Jody Henry
CONTRACTOR Gilbane Construction Company
CONSULTANTS Brooks & Sparks (civil); DBR Engineering Consultants (MEP); Millunzi & Associates (food service); Dan Pope Associates (irrigation); Jones Borne Inc. (structural)
PHOTOGRAPHER Richard Payne, FAIA

RESOURCES MALL FURNISHINGS: Landscape Forms; **CONCRETE MATERIALS**: Headwaters; **MASONRY UNITS**: Acme; **STONE**: Alamo Stone; **CAST STONE**: Stone Castle Industries; **GLUE-LAMINATED TIMBER**: R.M. Rodgers; **WATERPROOFING**: Grace Construction Products; **ROOF AND WALL PANELS**: MBCI, MCT Sheet Metal; **METAL ROOFING**: Berridge; **GLASS**: Visteon Versalux; **GLAZED CURTAINWALL**: Vistawall; **GYPSUM BOARD FRAMING**: Dietrich Metal Framing, USG; **TILE**: DalTile, Casa Dolce Casa; **ACOUSTICAL CEILINGS**: Armstrong; **WALLCOVERINGS**: Walltalkers; **PAINT**: PPG; **GRILLES AND SCREENS**: Ruskin; **OPERABLE PARTITIONS**: Kwik-Wall (Hudson Building Systems); **MARKERBOARDS**: Best-Rite; **THEATER EQUIPMENT**: Texas Scenic Company; **INSTRUMENT STORAGE CABINETS/SOUND CONDITIONED ROOMS**: Wenger Corp.

Andy Dekaney High School recently received the 2008 Caudill Award, the highest honor given in the TASA/TASB Exhibit of School Architecture. Based on findings that students perform better in small groups, "Instruction Should Drive Construction" was the guiding philosophy for SHW Group's design of the 486,000-square-foot high school sited on 80.7 acres in Houston's Spring Independent School District. Completed in 2007, the school supports a capacity of 2,500 students and is divided into four academic houses of approximately 600 students. The houses draw from the same palette of building materials but derive individual identities through the use of different colors on doors, trim, and wainscot. A main spine with two-tier clerestory windows brings in natural light and connects the houses to other areas. A 900-seat auditorium is centrally located in the school and can be subdivided into three spaces -- two 150-seat teaching theaters and one 600-seat auditorium. The facility's location on a wooded site creates a nature preserve-like atmosphere that is reinforced through the use of materials including timber-framed site signage, natural stone, handmade brick exterior, and native landscaping. Interior materials include low-maintenance durable finishes, such as no-wax porcelain tile, galvanized handrails, and high-performance glazing. In the main commons, a prominent granite merit wall to identify academic achievement and rustic metal signs with inspirational words convey the educational intent of the facility. The project was completed on time and on budget at approximately $114.81 per square foot.

NOELLE HEINZE



FIRST FLOOR PLAN
1 ADMINISTRATION
2 CLASSROOM
3 DINING
4 FINE ARTS
5 PHYSICAL EDUCATION
6 SUPPORT AND COMMONS
7 MEDIA CENTER

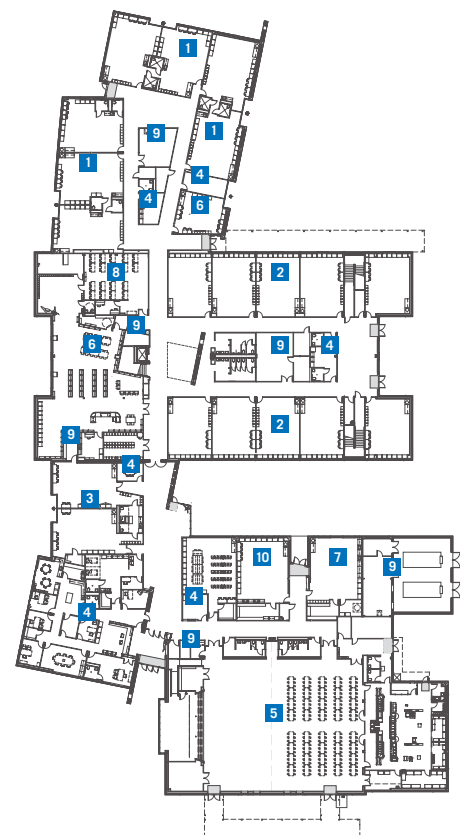
Walnut Bend Elementary School

PROJECT Walnut Bend Elementary School, Houston
CLIENT Houston Independent School District
ARCHITECT VLK Architects, Inc.
DESIGN TEAM Steve Aloway, AIA; Todd Lien, AIA; Kenneth Hutchens; Will Faber; Tracy Loftin; Molly Rall
CONTRACTOR Drymalla Construction Company
CONSULTANTS Henderson+Rogers (structural); Landtech Consultants (civil); Marshall Engineering Corp. (MEP); Jarreau & Associates (landscape); Amtech Building Sciences (roofing); Busby & Associates (cost); Frank Clements Associates (food service)
PHOTOGRAPHER G. Lyon Photography

RESOURCES UNIT PAVERS: TXI; **MASONRY UNITS:** Acme (Upchurch Kimbrough); **GLAZED MASONRY UNITS:** Elgin Butler (Upchurch Kimbrough); **WATERPROOFING:** BASF; **WATER REPELLANTS:** The Barry Group; **VAPOR RETARDERS:** Stego Industries; **MEMBRANE ROOFING:** Grace Construction Products; **ENTRANCES AND STOREFRONTS:** Vistawall; **GLASS:** PPG; **PAINT:** PPG; **OPERABLE PARTITIONS:** Kwik-Wall (Hudson Building Systems); **FLOOR MATS:** Balco (Architectural Sales)

Walnut Bend Elementary School in the Houston Independent School District received the 2008 TASA/TASB Exhibit of School Architecture's "Special Recognition for Outstanding Primary School" commendation. From start to finish, green design played a key role in the upgrade to a high-performance building, which was selected as a case study for utilizing LEED on the district's future projects. After an assessment of renovation and addition costs versus new construction, VLK Architects proposed rebuilding the 1960s school for $9,457,755. A more efficient building envelope, lighting, and HVAC systems were used in the design of a two-story 84,553-square-foot structure that is 15 percent more efficient than the baseline building. The school's original bricks were salvaged and used in several areas, and 82 percent of construction waste was recycled. Building materials emphasize local and regional products, and low-emitting adhesives, sealants, carpet, and paint were selected for interior materials and finishes. Other green strategies reduce the school's C02 emissions equal to planting 93 acres of fully mature trees. To provide shade for the school, a majority of existing trees were preserved on the five-acre site, and native plants were selected for other areas. A loop drive removes traffic from the street, and three playgrounds, a nature center, and a pond grace the grounds. A main corridor and organizing wall create a simple transition into the school and join interior zones. A cafeteria, multipurpose room, and library are separated from academic areas, allowing after-hour community use while the rest of the facility remains secure.

NOELLE HEINZE



FIRST FLOOR PLAN
1 PRE-K & K CLASSROOMS
2 CLASSROOMS
3 SPECIAL POPULATION
4 ADMINISTRATION
5 CAFETORIUM
6 RESOURCE
7 FINE ARTS
8 COMPUER MEDIA LAB
9 MECHANICAL & SUPPORT
10 SCIENCE

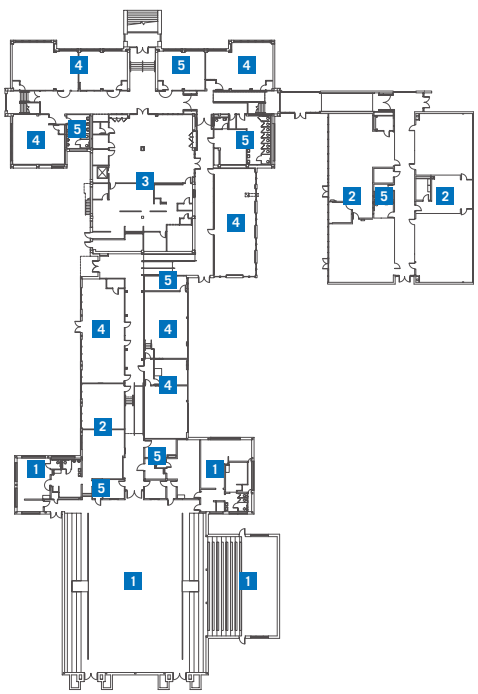
Waxahachie Global High School

PROJECT Waxahachie Global High School, Waxahachie
CLIENT Waxahachie Independent School District
ARCHITECT Huckabee & Associates
DESIGN TEAM Thomas G. Lueck, AIA
CONTRACTOR Buford Thompson Company
CONSULTANTS Estes McClure & Associates (MEP); Huckabee & Associates (structural, interiors, technology); C&C Engineering (energy code)
PHOTOGRAPHER Paul Chaplo

RESOURCES **ARCHITECTURAL WOODWORK**: Cabinets Crafters; **LAMINATES**: Wilsonart; **ENTRANCES AND STOREFRONTS**: AGC Flat Glass (Manko Window Systems); **ACOUSTICAL CEILINGS**: US Gypsum ; **PAINT**: Sherwin-Williams; **LETTERS AND PLAQUES**: Mohawk Sign Systems, Gemini Inc.; **LABORATORY CASEWORK**: Advanced Lab Concepts, Durcan Lab Tops; **SHADE**: Bali, MechoShade

Waxahachie Global High School received the 2008 TASA/TASB Exhibit of School Architecture "Special Recognition for Outstanding School Renovation." Huckabee and Associates restored the three-story, 1917 T.C. Wilemon building, transforming the 79,356-square-foot space into a high-tech campus equipped with the latest technology. The school's academically rigorous environment prepares traditionally under-served students for post-secondary education and successful high-tech careers. As part of the design process, Huckabee worked with the school's planning team to discuss an "out of the box" concept. The facility renovations included classrooms for math, science, engineering, computer technology, and foreign languages, as well as a gymnasium, locker rooms, faculty lounge, studios, computer labs, and a cafeteria. Because the high school is a team-based learning environment, Huckabee incorporated spaces that naturally allow opportunities for collaboration, such as a large lecture hall, a commons/forum area, and student alcoves for studying and gathering. The school features the original hardwood floors and exposed ceilings. In addition, the design team researched the historical architecture of the building and was able to match the original paint color and windows. The restoration was completed in 2008 at a cost of $6,274,000.

NOELLE HEINZE



FIRST FLOOR PLAN
1 GYMNASIUM
2 SCIENCE LABS
3 CAFETERIA
4 CLASSROOMS
5 SUPPORT SPACES

Neglected Territory

Notes on the architectural potential of tilt wall construction

By JEFFREY BROWN, AIA

IGNORED BY MANY ARCHITECTS and most academics, tilt wall construction is nonetheless widespread. It is prevalent in the marketplace and ubiquitous on the landscape, yet tilt wall construction is considered a "low" form of building methodology utilized in commercial construction by "mainstream" architects and their co-conspirators in the building trades. As a result, tilt wall construction has been overlooked as an area for more extensive architectural exploration. There are several reasons, including: 1) Its history and development has largely occurred outside of the traditional realm of architecture; 2) it is seen as a commodity-oriented approach to construction; 3) it does not fit the current research agenda of architectural academics; and 4) it lacks a clear categorization as an activity—is it mere building, a technique, or a technology, and is there a distinction between these categorizations?

Obscure Origins

The history of tilt wall construction is in many ways what retards it from architectural interest. It lacks the pedigree of material developments such as concrete, which it simply exploits. Unlike "Chicago frame" or "balloon frame" construction technologies, which both are far more integrated with architectural history, it has more in common with parochial methods of building, such as "barn raising"—at least as a commercial application of the technique rather than as any kind of communal activity—which have little traction in architectural literature. A number of sources record a very small amount of information regarding the development of tilt wall construction. These sources tend to be professional trade organizations, affiliations of the concrete industry or, in one case, a brief foray into tilt wall construction from an amateur history on Irving Gill.[1] Tilt wall construction receives only notational mention in Ford's Details of Modern Construction and is not addressed in Frampton's recent Studies in Tectonic Culture, arguably two of the more dominant history/theory works that circumscribe construction's role in architecture.

Tilt wall was apparently invented as a result of early nineteenth-century developments and experiments into reinforced concrete. Robert Aiken, an army engineer, pioneered the technique of pouring walls on slabs and tilting them into place as rifle range target abutments. He translated the procedure to that of producing free-standing walls and eventually buildings from circa 1906. Aiken's innovations were arguably more focused on the technology for actually tilting the panels into vertical position than in the material, reinforcing, and/or aesthetic aspects of the method. Other significant practitioners were limited, but interestingly Thomas Edison created a cluster of tilt wall buildings in 1908 at Union Village, New Jersey, that still exists today.[2] As is the case with many innovations from banking to manufacturing, World War II and its economic aftermath sponsored great interest in utilizing the technique as it reduced construction time in the creation of

large warehouse and factory facilities. In the 1920s, tilt wall construction interested Irving Gill who experimented with it in several projects, none of which was significant in his opus, with the possible exception being the La Jolla Woman's Club and Clubhouse.[3] Some would argue that it has been the tilt wall industry that has revived Gill on this subject, not Gill who pushed it forward in history.

Commodity vs. Cultural Expression

The relatively meager interest exhibited by leading-edge architecture practitioners[4] is caused by the historical development of tilt wall construction as largely the by-product of engineering efficiency, not as the medium of any desirable cultural repository. Certainly other methods of building and engineering obtain to efficiency and economy but apparently none are as aesthetically unexploited as tilt wall construction. Tilt wall construction does not, upon first glance, appear to be a reasonable method for constructing a museum. Yet do we place more value on the complexity of the spatial experience a building provides or on the appearance of complexity in the construction?[5]

Tilt wall construction is boldly driven by its economy. At first glance it is a commodity with almost no pretension to any kind of "meaning." This, of course, is both its attraction – globally, because it is "cheap" and easy to perform in low-tech labor pools – and its challenge. It is not an "indigenous" or for that matter local, traditional, or any other culturally pre-loaded approach to building. It evolved as a method of building almost completely outside of accepted cultural expression and certainly in the very shadows of traditional architecturally relevant technologies. Implementation of tilt wall construction was driven by the engineering impulses of expediency and simplification.

Technique, Technology, and Tectonics

Proposing just how tilt wall construction can have more import to designers requires it to be defined more precisely as a technique, a technology, tectonics, or some amalgamation of all three concepts. Tilt wall construction is not by its nature "material dependent," although it is almost ubiquitously executed utilizing conventional formulations of concrete. It could presumably be executed in structural polymer should one be invented. Simply defined, it is the method of site-casting concrete panels, reinforced with steel or fiberglass, that are subsequently tilted into their permanent vertical location. These panels can be utilized as load-bearing walls or simply as cladding/enclosure. It differs from pre-cast construction, among other things, as it does not require transportation to the site. It also can achieve much larger panel sizes and can be, in most cases, completed more expeditiously than pre-cast structures. The basic process can be summarized as follows:

> ... the issue of tilt wall construction's potential expressivity comports with the notion of tectonics as the combination of structure and construction as a vehicle of intention and meaning. Architecture exists in the entirety of its productive processes.

A tilt-up construction project begins with job site preparation and pouring the slab. During this phase of the project, workers install footings around the slab in preparation for the panels. The crew then assembles the panel forms on the slab. Normally, the form is created with wooden pieces that are joined together. The forms act like a mold for the cement panels. They provide the panels' exact shape and size, doorways and window openings, and ensure the panels meet the design specifications and fit together properly. Next, workers tie in the steel grid of reinforcing bars into the form. They install inserts and embeds for lifting the panels and attaching them to the footing, the roof system, and to each other. The slab beneath the forms is then cleaned of any debris or standing water, and workers pour concrete into the forms to create the panels... Once the concrete panels have solidified and the forms have been removed, the crew connects the first panel to a large crane with cables that hook into the inserts. The size of the crane depends on the height and weight of the cement panels, but it is typically two to three times the size of the larg-

(opposite page) The design of the K.J. McNitt Construction building by Elliott + Associates Architects results in a living illustration of the concrete panel construction process. (below) A structural concrete skin made of crudely stained tilt-up panels gives subtle expression to the Texas Utilities Customer Service Center by Cunningham Architects. The building's skin fits in with the surrounding rural and industrial landscape.

K.J. MCNITT PHOTO COURTESY ELLIOTT + ASSOCIATES ARCHITECTS;
TXU CUSTOMER SERVICE CENTER PHOTO COURTESY CUNNINGHAM ARCHITECTS

(above) Tilt wall construction was used in the design of the ImageNet Houston building by Elliott + Associates Architects. The project emphasized economy and expandability. (below) The Pickle Elementary School/Virginia Brown Community Center, designed by TeamHaas Architects now Nelsen Partners, incorporated concrete tilt-wall panels which form the spine of the building. Window and door openings were created by the edges of the panels, simplifying formwork and fabrication time.

est panel. The crew also attaches braces to the tilt-up panel. The crane lifts, or "tilts up," the panel from the slab into a vertical position above the footings. Workers help to guide the concrete panel into position and the crane sets it into place. They connect the braces from the tilt-up panel to the slab, attach the panel's embeds to the footing, and disconnect the cables from the crane. The crew then moves to the next panel and repeats this process.[6]

There are literally hundreds of variables and adaptations to this process that make tilt wall much more flexible than other "low" forms of construction, such as pre-engineered metal buildings. Those variables include finishes, forms utilized in the casting face, the ability to cast curved panels, penetrations, integrally casting other materials both translucent and natural, and so on. But as outlined above, does it have the desirable attribute that current academic trends require of research subjects? That is to say, is it a technology? Many have argued that technology is not to be used to measure the correctness of form without offering parameters within which technology is to be understood. I will offer that if tilt wall remains a mere technique, it is limited to being understood as only an aspect of building—a distant cousin to "pargeting"[7] or running bond. So we must define the difference between technique and technology. The matter is a simple one: technology relates in most sources to the "system"[8] of an activity, while technique is used to describe the execution of a "part"[9] of a system. Thus, tilt wall qualifies as a technology insofar as it is a system that results in a construct. However, can a building technology convey meaning or contribute to it in so far as architecture aspires to provide an experience or to tell a story? Does it carry cultural import?

If we accept that there are styles of design and styles of building in architecture,[10] tectonics becomes the logical destination for the positioning of tilt wall as a viable modus for design exploration. Frampton offers a compact thesis for his work in Studies in Tectonic Culture that captures the sense in which tilt wall might be considered tectonically: "Without wishing to deny the volumetric character of architectural form, this study seeks to mediate and enrich the priority given to space by a reconsideration of the constructional and structural modes which, of necessity, it has to be achieved. Needless to say, I am not alluding to the mere revelation of constructional technique but rather to its expressive potential."

While I acknowledge Frampton's rather indiscriminate use of technique rather than technology as posited here, the issue of tilt wall construction's potential expressivity comports with the notion of tectonics as the combination of structure and construction as a vehicle of intention and meaning. Architecture exists in the entirety of its productive processes. This is not an apology for a return to the nostalgia of craft, structural determinism, or Semperian cladding rhetoric. Rather, it is a call for a more

IMAGENET HOUSTON PHOTO COURTESY ELLIOTT + ASSOCIATES ARCHITECTS; PICKLE ELEMENTARY SCHOOL PHOTO COURTESY TEAMHAAS ARCHITECTS

The MNP Corporate Headquarters in Houston, designed by Powers Brown Architecture, utilized tilt-wall construction to achieve a skin that suggests a billowing surface.

tectonic consideration of tilt wall's potential contribution to the integration of what Colin Rowe coined as the "physique and morale" required for meaningful architectural manifestations.

Tilt wall is an untapped source of architectural potential. It needs to be positioned as something other than the route to expedient construction. It has to be seen as a contributor to meaning both as a technology and a culturally significant process. A building that is "clear" or honest in terms of its structure has always been an attractive myth but never the guarantor of anything beyond mere construction. If tilt wall construction is to contribute meaning and thus become a source of more intense research, what it offers has to have a value of acceptable currency. Cheapness is not enough. Beyond economy, it has great flexibility in how it potentially "represents," in how it is positioned and manipulated as a matter of a larger tectonic argument in the scheme of a given solution. That is where the rich territory for exploration lies.

Jeffrey Brown, AIA, is a founding principal of Powers Brown Architecture in Houston and teaches at the University of Houston Gerald D. Hines College of Architecture.

ENDNOTES

1. These include but are not limited to The Tilt Wall Concrete Association, *www.tiltup.com*, The Precast Institute

2. *Concrete Construction*, August, 2002 by Maura Johnson

3. *www.irvinggill.com* - "Aiken Process Used for first Time in San Diego"

4. Recently there has been, due to the sheer ubiquity of the method, some limited engagement of Tilt Wall Construction by notable architects- Steven Holl utilized it once in his Seattle Chapel, Scogin, Elam and Bray employed it on a public library in Atlanta, Rand Elliott and Associates used it to create a well published design for a Tilt Wall Contractors office in Oklahoma, Gary Cunningham Architects have completed a few buildings utilizing Tilt Wall in the Dallas Metroplex- one of which has made the national press and Carlos Jimenez in Houston has also experimented with it in a nationally published project for Cummins Corporation.

5. Sam Mockbee and the Rural Studio explored this relationship.

6. *www.tiltup.com* - commercial construction articles

7. Common plaster finishing technique in England by my observation

8. OED

9. ibid

10. "The Details of Modern Architecture" Edward R. Ford introduction

PHOTO COURTESY POWERS BROWN ARCHITECTURE

Noble Simplicity

by FILO CASTORE, AIA

PROJECT Co-Cathedral of the Sacred Heart, Houston
CLIENT Archdiocese of Galveston-Houston
ARCHITECT Ziegler Cooper Architects
DESIGN TEAM R. Scott Ziegler, AIA; Kurt Hull, AIA; Rafael Feinstein; Chris Petrash, AIA; Charles Middlebrooks, AIA
CONTRACTOR Linbeck Group
CONSULTANTS CHP & Associates (MEP); Walter P Moore (civil); CBM Engineers (structural); Lighting Design Alliance (lighting); Kirkegaard Associates (acoustical); Peter Muller, Inc. (curtainwall); Caton Consulting (code); Persohn/Hahn (elevator); Ulrich Engineers (geotechnical); Martin Martinsen (specifications); SWA Group (landscape); Coastal Environmental Services (environmental)
PHOTOGRAPHER Aker/Zvonkovic Photography

RESOURCES MASONRY UNITS: Headwaters, Hohmann & Barnard, Chemical Lime; **METAL MATERIALS**: Nucor Vulcraft; **METAL FABRICATIONS**: Merchants Metals; **RAILINGS AND HANDRAILS**: Berger Iron Works; **ROOF MATERIALS**: D.R. Kidd Company; **WATERPROOFING**: Polyguard Products; **VAPOR RETARDERS**: Vapor Block; **ALUMINUM FRAMES/GLAZING**: PPG; **UNIT SKYLIGHTS**: Skyline Sky-Lites (Haley-Greer); **GYPSUM BOARD**: National Gypsum, GP Gypsum, Owens Corning (Clark Western Building Systems); **PAINT**: ICI; **ELEVATOR**: ThyssenKrupp; **AIR DEVICES/EXHAUST FANS**: H.D. Grant Company; **FIRE PROTECTION**: Reliable Automatic Sprinkler; **LITURGICAL DESIGNERS**: Rohn & Associates Design; **SACRED HEART AND IMMACULATE CONCEPTION MARBLE STATUES**: Roberto Pedrini; **RESURRECTION, ROSE AND CLERESTORY WINDOWS**: Mellini Art Glass and Mosaics; **APOSTLE DOME WINDOWS AND HOLY SPIRIT OCULUS**: Peters Glass; **CRUCIFIX AND NAVE SAINTS**: Edmund Rabanser; **TABERNACLE, HOLY OIL VESSELS, BRONZE APPOINTMENTS**: Sister Angelica Ballan; **ALTAR, AMBO, FONT AND MARBLE FURNISHINGS**: Alberto Bufalini; **STATIONS OF THE CROSS**: Julian and Victoria Christina; **CARILLON OF BELLS**: The Royal Eijsbouts Bellfounders; **LITURGICAL FURNITURE AND APPOINTMENTS**: Michael Dobbins; **PEWS**: Dakota Church Furniture

How do you draw together more than 18,000 tons of masonry into a timeless cathedral in the crux of a kaleidoscopic metropolis? Start with a team effort that transcends cultural and ethnic distinctions, and creates an ageless, unadorned, and solemn house of worship for the whole community, a space of spartan simplicity that is at once soothing and inspiring.

Following a lengthy selection process, on All Saints Day in 2000, Ziegler Cooper Architects (ZCA) in Houston received a call from Archbishop Emeritus Joseph Fiorenza commissioning the design team to "build a church that is beautiful, prayerful, reflecting noble simplicity, conductive to lifting the mind and heart to God, and become recognized as the soul of the city." While not quite comparable to the Papal Conclave, the task at hand was no small feat.

A Romanesque building embodies strength and solidity, a grounding massive structure to impart a sense of security. Through research and site visits in the U.S. and abroad, the client and architect agreed that the Italian Romanesque architecture of the 11th and 12th century exuded the strong sense of sanctification they wished to capture. The massive qualities of thick walls and simple lines and forms, and the Latin cross T-plan layout (with semi-circular chancel) could best express the archbishop's vision. This new building would include an entry narthex, nave, sanctuary, and transept areas.

In order to enmesh the church in the modern and dynamic fabric of the City of Houston, an urban site in downtown was selected. The design's linear interplay of large intersecting volumes and the clever use of glazing and masonry optimizes daylight access while maintaining overall massive features. The building seems at once solid and graceful. Although the orientation of the structure is not aligned with the traditional east-west axis, in the final scheme the main entry faces southwest and skillfully relates to the existing site boundaries and structures to allow for future expansions, including an urban plaza.

The United States Conference of Catholic Bishops (USCCB), Committee on the Liturgy issued the guidelines that state, "the church building is destined to endure, parishes and the professionals who assist them should ensure that the components of the building, especially the building materials, are sturdy and substantial enough to stand the test of time." Scott Ziegler and his team sought to keep in mind both the needs of client's 500-year planning vision and the spiritual desires of the congregation as they visit a cathedral. A design emerged according to three fundamental aspects: the use of only the finest and enduring materials, the inspirational and evocative emphasis on vertical scale and proportions, and capturing the marvelous qualities of light and space interaction.

Masonry clearly captured the intent.

The purity, texture, and consistency of limestone dimension stone exemplify the monastic simplicity and somber spirituality the client requested. Different sources were evaluated based on budget and schedule. Texas limestone was first examined for its proximity and not pursued for its inconsistency, lack of control, cost, and the uncertain capacity to handle the scope of the commission. Indiana limestone was chosen because of consistency, purity, and a 100-plus year tradition seen in timeless successes such as the National Cathedral, the Pentagon, and the Empire State Building. Indiana limestone

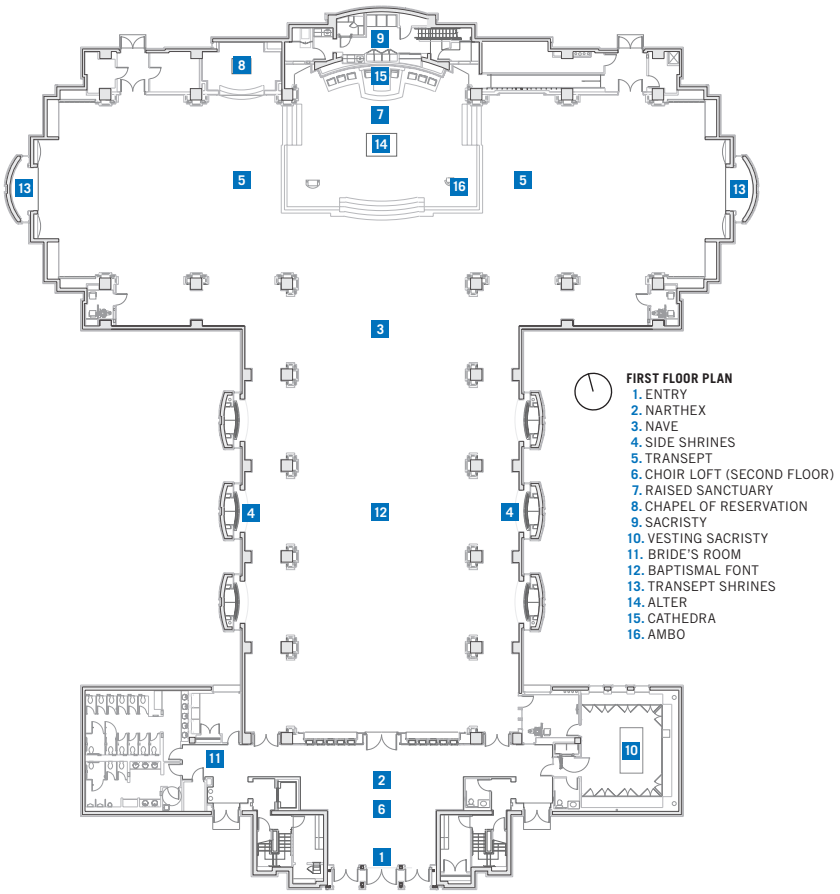
(above) The $40 million Co-Cathedral of the Sacred Heart replaces the Sacred Heart Church built in 1912. (opposite page) Constructed using more than 70,000 square feet of Indiana limestone, the exterior of the Cathedral is built to withstand the Houston climate for 500 years.

brings many benefits to the Co-Cathedral project. It is light colored, and therefore responds well to the stresses of heat gains on the structural envelope in the Houston climate. It is versatile, cut-to-size at the factory, minimizing job site modifications. The consistency of deposits makes it very homogenous as it ages through future phases and site expansions. It is very durable, almost maintenance free, and therefore cost effective.

Linbeck Construction, the general contractor, joined an integrated group of experts who met to evaluate the material choices. ZCA's final choice reflected the client's timeless vision; Linbeck provided an accurate cost estimate, and the masonry subcontractor (Dee Brown in Dallas) was responsible for a realistic assessment of the installation process.

After selecting the blocks, control samples were kept on site, and a series of mockups were assembled to verify stone transitions, caulking colors, and other details. Approximately 18,000 stone pieces were shipped according to a rigorous sequence with most of the staging happening in Dallas.

Installation proceeded counter-clockwise from north to south for almost ten months. Thousands of pieces of limestone on the exterior are individually supported by custom anodized aluminum anchors developed by Dee Brown, in addition to stainless steel anchors for special conditions. Some of the exterior 8-inch thick concrete walls (up to 80 feet tall) had to exceed the ACI tolerances in order to comply with the anchors construction tolerance to maintain a straight facade profile. Limestone elements are typically 3 inches thick (thicker at trim and copings) and are durable. The scale of the structure is reduced by adding pillow-cut limestone horizontal bands in addition to a series of side shrines that float along the perimeter, adding a rhythmic layer of light and shadow.



Complementing the "strength" of stone (or *firmitas* according to Vitruvius), the strategically located "functionality" (or *utilitas*) of glazing through the clerestory stained glass and the front facade veil by Pilkington brings an overall balance of simple "beauty" (or *venustas*). A cast-in-place concrete structural roof has been topped by a dome weighing about 80,000 lbs, which was constructed on the ground and lifted into place, where it stands 117 feet tall. The shallow copper dome (inspired by the Pantheon proportions) is a testimony of the overarching noble message, free of glimmer and ornaments.

Overall, there are more than 70,000 square feet of Indiana limestone on the exterior of the cathedral, weighing almost 3 million lbs—approximately the size of two football fields. One thousand square feet of Calcutta Gold marble, and 9,000 square feet of Fatima beige limestone have been also incorporated, serving as accent elements.

As you proceed through the narthex transition between urban and worship spaces, you are immediately drawn upward within a majestic yet simple space. Once inside, the architecture remains simple and uncomplicated by allowing light, sound, and space to celebrate the vibrancy of materials and sculptural elements.

On the interior, the liturgical consultant (Rohn & Associates Design) joined the team a year into the project and suggested numerous changes to the stones that took six months to implement. At the end, the interior stone subcontractor (the Lucia Group) was wisely charged to coordinate the entire masonry scope with great results.

The nave center aisle includes marble inlays that continue around the central baptismal font, carved from Ethiopian rosa diaspro marble, which is the same as the altar. At the convergence of the central nave and the two transepts, and the sanctuary, blood-red marble is flooded with natural light from all directions including the dome soaring above. The dome recalls San Giorgio Maggiore in Venice by Andrea Palladio for its size, proportions, and play of light and space. Walking through the Co-Cathedral on a late November afternoon, light pours through the well-positioned stained glass, making this massive space serene and comfortable. The linear design that runs from exterior to the interior is modulated by the three dimensional addition of several sculptural elements along the walls, including the 12-foot-tall, 12,000-pound white Carrara marble shrines of the Sacred Heart of Jesus and the Immaculate Conception sculptures at the end of each transept.

The Archdiocese of Galveston-Houston's new $40 million Co-Cathedral of the Sacred Heart (co-equal in status with St. Mary in Galveston) was funded through the 2000 archdiocesan Jubilee capital campaign. The construction of the 1,820-seat structure lasted almost three years from February 2005 until March 2008 and truly demonstrated a successful collaborative process. The main difference between now and the time of San Giorgio Maggiore is that this project took 36 months instead of 50 years.

The project expresses a spartan nobility and unadorned simplicity that acts to counter some of the showmanship associated with faith and worship in the 21st century. In some ways, the church is a blank canvas, a personal space for each worshipper to project himself as if gazing into a deep and still reflecting pond.

Filo Castore, AIA, is associate principal, director of architecture and sustainability at Abel Design Group in Houston.

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RENDERING COURTESY CO ARCHITECTS

The Norman Hackerman Building, a research and teaching laboratory, is under construction on the UT Austin campus at the corner of 24th Street and Speedway. The project, designed by CO Architects with Taniguchi Architects, is scheduled to be completed in late 2010.

stifled when an on-campus precedent must be found to rationalize every architectural move.

In late 2005, UT introduced an advertising campaign tagged with the slogan "What Starts Here Changes the World." The new motto, while perhaps a bit hyperbolic, states unequivocally the university's intention to be an institution with global influence. As a UT graduate, I am naturally of the opinion that the University of Texas fulfills that charge academically. As an architect, however, I believe that the environment in which academic studies occurs is irrevocably linked with the quality of those studies. If the university wants to deliver on its boast, its leadership must recognize that innovative design is part of what makes an institution itself innovative.

There are reasons to be optimistic. In the years that have passed since Herzog & de Meuron and UT parted ways, procedural changes have improved the process that undermined the original Blanton design. Additionally, the idea of creating a new master plan that would more explicitly encourage functional and climactic innovation over rote mimicry is currently gaining momentum. The new Norman Hackerman Building by CO Architects (formerly Anshen + Allen) of Los Angeles with Taniguchi Architects of Austin promises to be an example of the campus that could be. While its massing and materials clearly reference other campus buildings, the project expands the existing idiom with fenestration that responds rationally to internal functions rather than aesthetic needs and a high-performance planted roof in lieu of the previously mandated red tile.

I remain cautiously optimistic that my fellow classmates and I were not the only ones who learned a hard lesson from the Blanton saga. There are hints that UT's leaders seem to now recognize that for UT to be a world-class institution, they must be willing to embrace the future rather than continue to reference the past. After all, the world is a big place and changing it is no small task.

J. Brantley Hightower, AIA, practices architecture in San Antonio and recently taught a design studio at UT Austin's School of Architecture.

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Commission (IWBC) in 1950-54 doomed the 203-year-old Mexican town of Guerrero Viejo as well as the oldest ranchsteads in Zapata County, which were inundated by water impounded behind the dam. Texas A&M University Press has just published *Lost Architecture of the Rio Grande Borderlands* by W. Eugene George, FAIA, which documents the architectural heritage on both sides of the border sacrificed to construction of the reservoir.

The first stop was in Nueva Ciudad Guerrero, built by the Mexican section of the IWBC on the south shore of the reservoir to replace the eighteenth-century townsite. Today, "new" Guerrero's predecessor, Guerrero Viejo, is accessible only by a bumpy, unpaved ranch road. Although founded in 1750, the townsite of "old" Guerrero was not laid out by Spanish colonial authorities until 1767. Use of local sandstone to build the houses of Guerrero Viejo accounts for their survival after more than half-century of abandonment. Because of the advocacy of citizens of Guerrero Nuevo, Mexico's National Institute of Anthropology and History administers Guerrero Viejo, which is owned by the Mexican section of the IBWC. The National Institute has installed a *vigilante* (caretaker) in a rehabilitated stone house to watch over the townsite and greet and escort visitors.

Guided by Mexican preservation architect Carlos Rugerio Cázares (with informal commentary by Dr. Mario L. Sánchez, an architect with the Texas Department of Transportation; Manuel Hinojosa, AIA, a local practitioner with wide-ranging knowledge of the region's architectural heritage; and Wayne Bell, FAIA, whose long career has been dedicated to historic preservation), tour participants spent several hours wandering through the center of the town. The newest houses in Guerrero Viejo have wood roof beams branded with inscriptions that date them to the 1870s. These houses are one-story sandstone shells, built flush with the street line and opening through interior archways to spacious patios and walled gardens. In one house, double-layered interior wood shutters still open rooms to the street, the daylight, and the breeze while preventing unauthorized entrance.

The parish church, Nuestra Señora del Refugio, facing the main plaza has been repaired, re-roofed, and secured with iron bars and gates by the preservation group, Amigos de Guerrero Viejo. The church is one of only two structures in Guerrero inundated by the reservoir that still stands. Another important civic building, the *parián* (the public market), recently sustained the collapse of its arcaded north wall. The market is located in the part of Guerrero elevated above the reservoir's high water line. It is here that most of the town's surviving buildings stand. But as new tree growth in the street right-of-way at one corner of the plaza indicates, nature's cycles continue to chip away at Guerrero Viejo.

The remains of eighteenth-century buildings in Guerrero Viejo, Tamualipas, have re-emerged from the Falcón Reservoir in recent years due to extended drought. A recent tour of the abandoned town was sponsored by AIA LRGV.

PHOTOS BY WAYNE BELL, FAIA

The emotional intensity compressed in Guerrero's ruined houses, its grid of streets outlined by collapsed stone walls, and the profile of the church's arched bellcote figuring against the sky stir profound responses in visitors. In Guerrero Viejo the present has receded, leaving the town to exist in a dream-like state of suspension that radiates what the late architectural writer J.B. Jackson described as the "beauty of ruins."

From Guerrero Viejo, the group traveled down river along Mexico's Highway 2 through Ciudad Mier, Tamaulipas, founded in 1753. Mier gives some sense of what Guerrero Viejo might look like today had it not been abandoned. Crossing the border at Ciudad Miguel Alemán, the group arrived in Roma where it took a twilight walking tour of the town center.

The energy released by Hurricane Dolly propelled the AIA LRGV into finding new conference destinations that re-emphasize the extraordinary richness of the lower Río Grande border's environment, architecture, and culture.

STEPHEN FOX

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the full-color 3D of the real thing. My drive to the post each morning was by several Roman signal towers that had been there since the turn from B.C. to A.D. Parts of the town where I lived dated from 100 B.C. In the two years I was in Europe, I was able to study first-hand many of the great buildings of the past—Chartres, Versailles, the Pantheon, Hadrian's Villa, etc., as well as a lot of the modern structures I had used as cribs for my school designs—Corbu's Unite d'Habitation, Aalto's works in Finland, Dudock's Hilversom Town Hall, etc. I was itching to launch my life as an architect; the delay was bearable only because I was constantly living and breathing great architecture.

…the rainbow comes and goes

Life regained orbital stability in January 1958. I was 26 and had landed a plum of a job in Dallas with Harwell Hamilton Harris. He was designing an American embassy for Finland and some big projects for Trammel Crow. A blue-sky future lay ahead. Two years later, the sky fell—the projects were cancelled. Harris moved to Chapel Hill and I, now jobless, came face-to-face with the downside of construction: it ran in cycles – up and down, boom and bust, feast and famine – thus it has always been and thus it will always be, world without end, amen.

My two years with Harris made me shockingly aware of one thing: my schooling was just that—schooling. As good as it had been, I soon came to see as I worked next to Harris each day, that I knew a little but had a gargantuan amount to learn if I were to become an architect. In school we students looked upon design as some kind of light from heaven that shines down on us causing us to vibrate in sync with the universal rhythm; the design then flows effortlessly from our fingertips. I was sure Harris was a great designer because he had found out just where to sit to get that celestial light beam directly aimed at his head. I came to see that Harris was good because he put massive effort into developing his designs. I was shocked at first how unsure he seemed to be; how every possibility was weighed, judged, and then included or excluded. He was searching, but without a heavenly light, just his own intelligence, experience, and patience. Hard work far outweighed intuition. It became clear why Corbu said *creation is a patient search*. I took a few steps down the endless path of design. I remain impressed how many steps you can take and still cover only a small part of it.

…the years to bring the inevitable yolk

For the first 30 years of my career, I worked for small offices, less than eight people. (George Dahl was the only large office in Dallas, maybe 30 people.) Most offices were one or two principals with a handful of draftsmen *if they had work*. Offices bulked up when work came in and, because they were then very busy, they had no time to beat the bushes for new jobs. When the in-hand jobs were finished, their hands were empty and the employees had to go out and find an office that had work—which, except for the fallow times when construction lay dormant, was not all that hard. The new office then turned out its job and if things were in your favor, your old office once again needed you. I did that dance three times with some offices

For five years in the late '60s, Nick Glazbrook and I had our own practice next door to Howard Meyer in a building he had designed. From his reputation I knew him as an architect's architect, but I also came to know him as a friend and as a great gentleman with a towering intellect. In the late '70s, Howard called me into his office and asked if I could come to work for him. He was having a renaissance in his career; two new projects and a large addition to his masterpiece, Temple Emanu El, had come in. I was in my early forties; Howard was in his early eighties. I accepted the job with some sense of missed opportunity; too bad I hadn't had this job 15 years before. I no longer had anything to learn from Howard. Little did I know. Once again, working day by day at a master's side, my capacity for learning was challenged. I saw that Howard, after some 55 years of experience, approached each design as his first. Like Harris, he arrived at a solution to a design only after many hours of trial and error, endless testing of an endless number of proposals, followed by endless improvements to the best proposal. At his advanced age, Howard's patience far exceeded mine. We argued every nuance of the design until I would give up. But Howard was having none of that. He told me the one thing he would not tolerate in any associate was capitulation; I must speak my opinions. So I would take a deep breath and put voice to my concerns. At the end of some of our design development harangues, I was totally exhausted; Howard was ebullient. But what I ultimately came to see was that the design was always much improved. For me, he is the best architect I have worked with, the best architect that has ever done work in Texas. I told him one day he had ruined me for ever working for any other architect. When the jobs were done and no new work came in, he told me that he probably had been too insistent on quality, too inflexible to compromise. He had done Raymond Nasher's house but had been denied his Northpark Center. "But I will go to my grave knowing I have never done a bad building," he added. A few years later he went to that grave and Texas lost its star.

…the little actor cons another part

In 1960 I became the 2,613th architect registered in the Texas. Forty-four years later I retired that number and can now no longer call myself an architect. But I saw the world with architect's eyes long before I was registered and will continue to do so for quite some time to come. I don't spend much time thinking back over the offices where I worked and the buildings that I worked on, so I won't go into that here. The people and the dynamics between them are more interesting. Perhaps two scenes from those 44 years will best give a feeling for the depth and breath and height my soul can reach, when feeling out of sight for the ends of Being and Ideal Grace. Yes, I'm totally overboard by evoking Elizabeth Barrett Browning's passion in support of my rather spectacularly average career. But, understand, I have always been glad and proud to be an architect. I like the vast spread of interests it demands of me, the sheer number of talents that I must dredge up and hone to remain in the game, the marriage of artist and scientist that might seem bipolar to some but seems in complete harmony with my view of things. I thrive in an atmosphere where no day is a typical day, every day is unique. Cool may be the rule of today, but for me passion is still in fashion.

Scene One: Late on a Friday afternoon, I am making the final presentation of an immunology lab building to the CEO (my ultimate boss) of one of Dallas's largest corporations. The lab is to be built for Dr. Jacques, a French biologist who is moving here to head the research. The planning phase has gone on for almost two years and Jacques has proved to be all I could want in a client. When he first saw my sketches for the final design, he said he had dreamed for years of having his own laboratory facility and my sketches were of the building in his dreams. The CEO is not even faking interest in my presentation: my salient points are not registering with him. Finally he asks a question, what style is the building? Alvar Aalto had been my inspiration, but I know better than to say that, so I give him the standard

song about the building not *being* a style, but *having* style—timeless style, I add. His right hand flunky asks me what that means, and before I can reply, the CEO says, "Oh, that's just something architects say." With that, he recommends approval of the design, the flunkies dutifully agree, and I am elated that we have escaped with the design intact.

Scene One-and-a-half: Early Monday morning, I get a call that we are to be in the CEO's office ASAP. Once there he tells us that he took the rendering of the lab home over the weekend (Damn! I knew we shouldn't have left it), and his wife decided it was "contemporary," a word I instantly recognize as ultimate damnation. She is sure we'd agree that some columns and arches and "pretty" moldings would dress it up. I stand stunned. Jacques, whose English is flawless, is muttering something in French in the background that sounds more like de Gaulle than Proust. That scene in *The Fountainhead* flashes before me, the one where Howard Roark has just received approval from the board to go ahead with his first major project, whereupon the chairman reveals the approval is contingent on some "minor" revisions. He whips out some Greek pediments and colonnades and sticks them on to Roark's model. "Now that's what it should look like." My brain is spinning. While my mouth is saying in Gary Cooper's voice, "We'll make some new sketches of the exterior," I'm thinking, *I learned how to use dynamite while in the Corps of Engineers, but where am I going to find enough of it to blow up this hideous, mutant bastard!*

Scene Two (two years later): I'm in Austin attending an awards banquet at the TSA annual convention. I'm there to accept an award our office has won for the interiors of the immunology lab building. After the exterior was nixed by Mrs. CEO, Jacques's temper had flared. Even more animated than usual, he growled, "The outside can be traditional if it has to be, but it will stop at the front door. The interior will be cutting-edge modern. *Absolutement!*" In order to keep the building from complete schizophrenia, I redesigned the exterior in a very simple granite cladding and tempered the public spaces inside with the use of lots of wood which pleased Jacques immensely as he had always insisted the laboratory casework must be all wood. Apparently it had equally pleased the awards jury. I get a good feeling as I go up and shake hands with the presenter and walk back to my seat with the certificate in my hands and the sound of applause in my ears. But no outside award can ever replace the genuine feeling that comes from a fine design, flawlessly constructed for a satisfied client. I will always have that Aaltoesque design filed away in a mental folder labeled: "Close, but no cigar."

. . . where is it now, the visionary gleam?

To grasp what Renzo Piano is getting at when he says, "This separation between thinking and doing appears in all the artistic disciplines, but in our field it is a catastrophe," all you need do is build some things by hand yourself, which is what I've been doing since 2004. I design a thing and then as I build it, it evolves, becomes better. We used to talk of "paper architecture" to describe designs that were all theory and no craft. My last job was with a man who hid behind a computer in his office all day never leaving to visit the construction site. Our profession grew out of the master builders who were ever present conducting work on building sites in ancient Egypt and Greece. Those times are gone. Gone too are the medieval craft guilds that worked together under the master craftsman. But to some extent some version of this architect/craftsman alliance went on until the late 1800s when Daniel Burnham surrendered the architect's ability and knowledge to the client. Over the last century we've gradually retreated, many times voluntarily conceding to others details that no longer interest us, but should. Into the void stepped the contractors, engineers, banks, developers, and building codes. I see remarkably fine work done by prescient architects, but a lot of the stuff ballyhooed in the press is superficial and silly. Much is made of celebrity "form givers." The last form giver I can think of was Louis Sullivan who realized that architects do not give form to anything. Form comes on its own when a complete understanding of the true form givers (gravity, sun, rain, aging, and available materials) is put into play with the project's proposed function. Function then shows form the way. The designer allows these elements to do their work by initiating that immemorial circular process that Harris, Meyer, and Piano understand so well—design, test, design again. In no other profession have things gone so far astray; composers still play musical instruments and physicians still wield knives and take pride in their suturing ability.

. . . years that bring the philosophic mind

The life we live is only one-tenth the life we plan, the life we dream maybe one-one-hundredth. Our hour is played out on a stage littered with unrealized plans and roads not taken, shadowed by the mist of dreams, most of them forgotten only minutes after we wake—the bad ones for sure. I think I chose to be an architect, but even that is a deception: architecture chose me. For which I am grateful even though it is a profession that is too wonderful when it goes right and too hurtful and crushing when it goes wrong. I have felt my most self actuated when a project that I was a part of has ascended to that ideal of being well designed, well detailed, well built, with a well satisfied client. But in a life in architecture of half a century, it hasn't happened all that much. But it does happen. And when it does, I am exalted. For a moment I live the kind of life that is so great it makes me want to weep, but not just now.

Egan Gleason lives in Castroville.

PHOTO BY JULIE PIZZO

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Peterson Named to Texas Women's Hall of Fame

The Governor's Commission for Women recently chose Carolyn Peterson, FAIA, a principal at Ford, Powell & Carson, as an inductee into the Texas Women's Hall of Fame. During ceremonies in October at Texas Women's University in Denton, she joined a select group of past recipients to be so honored since the Hall of Fame was founded in 1982. Capping a 40-year career in historic preservation, Peterson's work includes the Spanish Colonial missions of San Antonio, the Alamo, nineteenth-century buildings in the Strand area of Galveston, and several county courthouses across Texas. In addition, she was the firm's principal-in-charge for the six-year restoration of the Texas State Capitol, one of the nation's most ambitious rehabilitation efforts.

Sprague Recognized as Changemaker

Joseph G. Sprague, FAIA, principal and director of health facilities at HKS, was presented with the Center for Health Design 2008 Changemaker Award at a recent ceremony during the Healthcare Design Conference at the Gaylord National in Washington, D.C. The Changemaker Award is bestowed annually by the Center's board of directors upon an individual or organization that has demonstrated exceptional ability to effect change in healthcare facility design. Sprague was recognized for his contributions to healthcare design through his leadership and continued dedication to the Facility Guidelines Institute and Guidelines for Design and Construction of Health Care Facilities.

Walter P Moore Receives Top Rankings by ZweigWhite

Walter P Moore's structural and civil engineering groups received top rankings in the 2008 ZweigWhite Best Firms to Work For competition. In the "Best Civil Engineering Firm to Work For" category, the firm's Civil Engineering group was ranked number one out of all civil engineering firms and was ranked number one out of all mid-size civil engineering firms. In the "Best Structural Engineering Firm to Work For" category, the firm's Structural Engineering group was ranked number two out of all structural engineering firms and was ranked number one out of large structural engineering firms. Eighty-three structural engineering firms and 162 civil engineering firms competed this year from across the nation. Company rankings were based on the quality of the workplace environment determined by a management questionnaire and confidential employee satisfaction surveys. Walter P Moore will be featured in ZweigWhite's monthly, business-to-business magazines *CE News* and *Structural Engineer*.

Del Monte Named DFC Honorary Senior Fellow

The Design Futures Council has named Betsy del Monte, AIA, director of sustainability for The Beck Group, as an Honorary Senior Fellow for her significant contributions toward the understanding of changing trends, new research, and applied knowledge leading to innovative design models that improve the built environment and the human condition. The Council annually recognizes individuals who have shown outstanding leadership in advancing the field of design. In addition to her role as director of sustainability for The Beck Group, del Monte is an adjunct associate professor at SMU where she teaches courses in sustainability. She was the 2006 chair of the North Texas Green Building Council and is a past president of AIA Dallas.

James, Harwick+Partners Receive *MFE* Awards

James, Harwick+Partners was recognized with three awards in the 2008 Multifamily Executive Awards competition for the following projects and categories: Columbia MLK Senior Residences, Atlanta, Ga., Grand Award, Project of the Year, Mixed Income; Columbia Mechanicsville, Atlanta, Ga., Merit Award, Project of the Year, Mixed Income; and Erickson Wind Crest, Highlands Ranch, Colo., Merit Award, Project of the Year, Senior. The annual awards are sponsored by *Multifamily Executive* magazine and recognize achievement in multifamily housing design, planning, management, and marketing. Award recipients were recognized at an awards gala in Las Vegas in October, as part of the annual Multifamily Executive Conference.

Studio RED Named 'Best Church Architect'

Studio RED Architects in Houston was named "Best Church Architect" for their work on the Fellowship of the Woodlands, during the Soloman Awards presented by *Church Production* magazine and *Worship Facilities* magazine in November. The firm provided full architecture services for the design of the 117,000-s.f. Children's Education Center, along with a prayer garden and 450-seat Chapel in the Woods. The Solomon Awards recognize churches across the nation with recognition for their excellence in facilities design, operation, use, and A/V production.

Gensler Receives 'Judges Award' from Texas Construction

Gensler's Walter P Moore office in Houston was recognized with a Judges Award, a top honor in *Texas Construction* magazine's Best of '08 awards competition. The annual competition recognizes construction and design excellence completed in the past year from across the state. An independent jury of industry experts judged 153 nominated projects in early September and recognized 63 with awards. The award-winning projects were featured in the December issue of *Texas Construction*. For a complete list of design winners, visit *www.texas.construction.com*.

Survey: Workplace Design Critical to Performance

Workplace design plays a pivotal role in overall business performance by supporting the new work modes of a knowledge economy, according to a nationwide study of office workers recently released by Gensler. The *2008 Workplace Survey* reveals that top-performing companies are embracing a fundamental restructuring of work through workplace design that emphasizes collaboration, learning, and socialization. According to the survey, companies providing workplaces that are more effective for work benefit with profit growth up to 14 percent greater than those with less effective work environments. Survey results are available at *www.gensler.com*.

Gulf Coast Green Announces Keynote Speakers

Gulf Coast Green, April 16-17, at Reliant Park in Houston, will feature three specialists in sustainable design—Alex Steffen, co-founder and executive director of the online magazine *Worldchanging*; Doug Farr, an architect who heads Farr Associates Architecture and Urban Design in Chicago; and Steve Mouzon, an architect who founded the New Urban Guild in Miami Beach. The symposium's theme is "Creating Sustainable Communities" and is hosted by the AIA Houston's Committee on the Environment in partnership with the Greater Houston Area Chapter of the U.S. Green Building Council, the Houston chapter of the American Society of Heating, Refrigerating, and Air-Conditioning Engineers, and the Houston District Council of the Urban Land Institute. For more information, visit *www.gulfcoastgreen.org*.

'Gypsum and Sustainability' Web Site Launched

The Gypsum Association in Hyattsville, Md., has developed a new Web site that describes the sustainable characteristics of gypsum-based building materials and conveys the commitment of its members to environmentally responsible recycling, waste management, and land reclamation programs. The Gypsum and Sustainability site (*www.gypsumsustainability.org*) offers a brief history of the use of gypsum products, a description of the chemical composition of natural gypsum ore, and a discussion of the introduction of synthetic gypsum as a by-product of the desulfurization of flue gasses in fossil-fueled power plants. A section called "Building Green with Gypsum" addresses green building credits awarded for achieving specific compliance targets during the planning, design, build-out, and commissioning stages of a residential or commercial construction or renovation project.

NRCA Offers Online Program on Vegetative Roofs

The National Roofing Contractors Association University has launched an online educational program called "Vegetative Roof Systems." The program focuses on vegetative roof system types, components, accessories, design, installation, maintenance, and safety concerns.The program will benefit roofing contractors, architects, building owners, manufacturers, roof system designers, and other roofing professionals interested in an introduction to vegetative roof systems. Vegetative Roof Systems is the first module in NRCA University's Roofing, Energy and the Environment series. The series was developed to help roofing professionals and end users understand how roof systems can contribute to energy conservation and environmental protection. Access more information at *www.NRCA.NET* or contact Jeanne Schehl, NRCA University's director of education program development, at (800) 323-9545, ext. 7566 or *jeaschehl@nrca.net*.

National Precast Concrete Association Hosts Convention

The National Precast Concrete Association hosts its annual convention in Houston Feb. 20-21. The association is an AIA registered provider and is offering an education session that will allow architects to earn 2.5 LUs at no cost. "Architecture and Precast: Amazing Possibilities" is an introductory session devoted to addressing the key fundamentals of the precasting process. The second session of the morning, "Precast and Veneer: Discovering New Possibilities," will focus on the practice of veneering precast with common cladding materials such as granite or brick, as well as using precast concrete as a veneer material. Design basics and considerations when using veneer will also be addressed. The event will be held at the George R. Brown Convention Center. For more information, visit *www.theprecastshow.org*.

Francisco Barron puts finishing touches on a class project. A 2008 graduate, he is now studying architecture at SCI-Arc.

PHOTO BY TOM COX

Building Careers

Skyline High School's architecture cluster sets students on path to profession

by TOM COX

THE ARCHITECTURE CLUSTER AT SKYLINE HIGH SCHOOL began in 1972 as one of the magnet career programs offered by the Dallas Independent School District to help prepare students for a variety of professions. From the outset, the objective was to provide students with the essential concepts of the practice of architecture.

Much more than a traditional high school drafting class, the program allows students to create projects intended to nurture problem solving, develop visual communication skills, and enhance their academic classes. Also important to their preparation for the workplace is interaction with local professionals.

AIA Dallas was instrumental in an advisory role from the beginning, and direct involvement by practitioners has ensured the relevance of the curriculum. Students have interned at the AIA Dallas, received AIA-sponsored scholarships and grants, served in a number of roles at local AIA events, and have had their work critiqued by AIA members. The Texas Society of Architects awarded the cluster a Citation of Honor in 2002.

Four years ago, the architecture cluster piloted the ACE (architecture, construction, engineering) mentor program in Texas. Professionals from these three disciplines work with students after school to encourage them to continue their education and provide them with an understanding of careers in the fields of architecture, engineering, and construction. Students have received summer internships through the program and scholarships to pursue college degrees.

The cluster also enjoys working relationships with the schools of architecture at UT Arlington, Texas A&M, UT Austin, and Harvard. Representatives from a host of universities visit the cluster on a regular basis and encourage students to pursue college degrees.

Senior cluster students have the option of taking a co-curricular architecture freehand drawing course at El Centro College. They spend half their school day taking academics at Skyline then travel downtown to the El Centro campus to take their architecture courses in the afternoon. Skyline graduates have attended all eight schools of architecture in Texas, as well as architecture programs at Syracuse, Cornell, Columbia, and SCI –Arc to name just a few.

Since 1972, approximately 1,600 students have been enrolled in Skyline's architecture cluster. Of the 110 students currently enrolled in the program in grades nine through twelve, 67 percent are males and 33 percent are female. This year, 86 percent of those students are Hispanic, 11 percent are African American, and 3 percent are Anglo. They come from across the city to attend the program, some 20 percent traveling an hour or more one way.

To date, faculty working with the Cluster have included Dr. Terry Lunsford; Dee Swope, AIA; Woody Mosbey; Robert Batson; Lynne Cagle; Peter Goldstein, AIA; Arnie Radman, AIA; Doug Aldridge, AIA; and Tom Cox. Faculty hold degrees in architecture from Yale, Tulane, UT Arlington, Harvard, UT Austin, Texas Tech, Texas A&M, and the University of Oklahoma. Several are practicing architects.

For students interested in the built environment, Dallas itself offers physical proof of where a professional career can lead. The city is fortunate to have outstanding architecture, and in the near future will have buildings by six Pritzker Prize-winning architects. And the dynamic nature of the city's built environment – its uses, people, and densities – presents evidence to students about what is possible to achieve if they prepare for a professional career.

Tom Cox is currently in his twenty-ninth year on the faculty of Skyline High School's architecture cluster.

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