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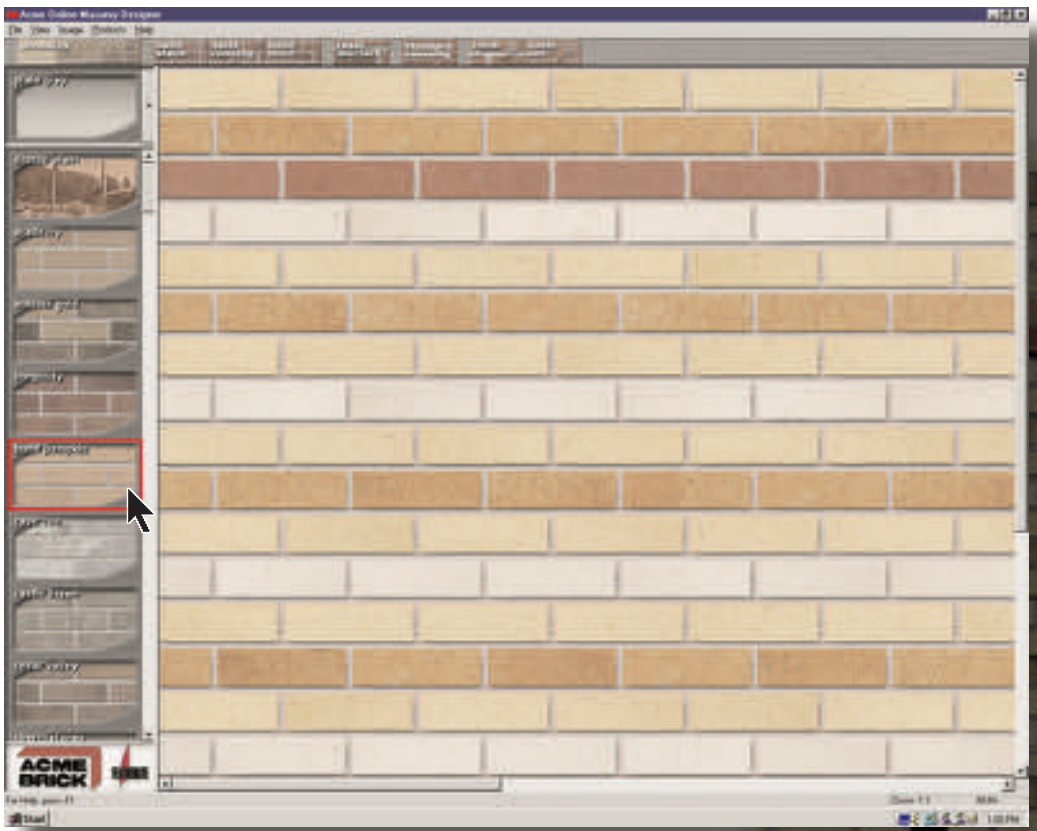

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TexasArchitect

1/2 2002

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July/August 2002 – Work
(deadline: February 15)

November/December 2002 – Urban Design
(deadline: June 3)

If you have ideas for "News" call us at (512) 478-7386, fax to (512) 478-0528, or e-mail ssharpe@texasarchitect.org.

(on the cover) Prairie View A&M University Master Plan, Prairie View; image courtesy HOK. (left) Madelyn Chafin Learning Center, DeSoto; photo by Michael Lyons

TexasArchitect

January/February 2002 **Volume 52, Number 1**

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Lessons in Sustainability

IF GRADES WERE GIVEN FOR SUSTAINABLE design, Roy Lee Walker Elementary School in McKinney may warrant an A+. Education officials nationally and statewide certainly think Walker Elementary makes the grade, particularly in the way sustainable systems are successfully integrated into its programming. Opened in August 2000, Walker Elementary has won the highest marks from the American Association of School Administrators and the National School Boards Association. Closer to home, the Texas Association of School Administrators and the Texas Association of School Boards jointly honored Walker Elementary with the Caudill Award for design excellence. (See page 43.) SHW Group in Dallas collaborated with sustainability consultant Innovative Design of Raleigh, North Carolina, to plan the school.

Roy Lee Walker Elementary, McKinney; photo by Hester + Hardaway.

The sustainable (also called "green" or "high-performance") attributes of Walker Elementary are obvious. Near the school's entry, a large cistern collects rainfall from the roof for irrigating the campus' native landscaping. Close by, a windmill stands like an antenna broadcasting the school's innovations. On the roofs sit vertical "daylight" monitors, boxy structures that reflect sunlight over cloth baffles to illuminate classrooms. Inside the school are observation centers where students witness the results of renewable resources and energy-efficient technology. A 10-foot-tall, glass rain gauge shows how much runoff is collected in the network of cisterns, and solar panels demonstrate how sunlight contributes to providing the school's supply of hot water.

As obvious as these high-performance systems may appear to the casual observer, some of the benefits only become clear over time. Current research shows that daylighting dramatically improves a child's scholastic performance, while also reducing absenteeism. "The vitamin D component of the daylight seems to be the contributing factor. Students are less anxious, better able to focus and learn," reports SHW Group CEO Gary Keep, AIA.

In addition, the students are learning subconsciously about sustainability and, more important, about design. The cultural impact of these subtle observations may not be manifest until they reach adulthood, but these youngsters will then understand architecture on a deep level.

High-performance school design is gaining popularity, not only due to heightened environmental awareness but because the buildings become teaching tools appropriate to the project-based learning system favored by today's educators. McKinney ISD's Superintendent David Anthony says a limestone-block wall, showing indentations from thousands of ancient fossils, teaches kids at Walker Elementary about biology, geology, and history. "It's a learning environment," Anthony says, pointing out other building materials intentionally left exposed. "Everything is designed so the kids will ask, 'why?'"

While researching ways to help with its project-based education system, Anthony's office learned about a U.S. Department of Energy program to assist school districts with high-performance design. Through that program, funded by the State Energy Conservation Office of Texas, McKinney ISD secured $250,000 to finance additional engineering costs to make its next school – Roy Lee Walker Elementary – comply with the state's high-performance criteria. SHW Group was commissioned to plan the district's prototype, and the state brought in Innovative Design to work with the architects.

Although the construction of Walker cost about $1 million more than a traditional elementary school, Anthony asserts, "We'll see a significant reduction in the operating costs of the school." He says the projected savings in utilities (based on the expected 40-year life of the average school building) convinced school officials and the district's taxpayers of the long-term benefits of sustainable design. The success of Walker Elementary led McKinney school officials to contract with SHW Group to design three more elementary schools based on the prototype.

STEPHEN SHARPE

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PROJECT Empire Theatre, San Antonio
CLIENT Las Casas Foundation
ARCHITECT 3D/International
PHOTOGRAPHER Paul Bardagjy
ISSUE September/October 2001

MARCH/APRIL ..... **ARCHITECTS + ARTISTS**
ADS CLOSE ..... **FEB 1**

Some very interesting things happen when architects collaborate with artists, artisans, and craftsmen. *TA* focuses on projects that illustrate this fascinating creative process.

Portfolio: Libraries
Interiors: Tile and Stone
Bonus Ad Section: Landscaping Products (bonus space for ads in this section)
Bonus Distribution: Association of Wall & Ceiling Industries Trade Show, March 14-16, San Antonio; National Glass Association Trade Show, March 20-22, Houston; National Trust for Historic Preservation, April 5-10, Fort Worth; Texas Library Association, April 24-26, Dallas

PRACTICE ANNUAL ..... **DIRECTORY OF TEXAS ARCHITECTS AND GUIDE TO TSA**
ADS CLOSE ..... **MAR 1**

This invaluable directory contains names of all members and firms of TSA, as well as TSA bylaws, a guide to the Texas Legislature, and profiles of TSA's committees.

Architects' Guide to Professional Consultants: For only $275 each, professionals who provide services to architects will be featured in this valuable directory.
Buyers' Guide to Services and Products: Manufacturers and suppliers can be a part of this section for only $275, or free if you buy a display ad in this issue.
This $50 directory and resource guide reaches clients, government officials, and more – all year long.

MAY/JUNE ..... **GOVERNMENT BUILDINGS**
PROJECT SUBMISSIONS DEADLINE ..... **DECEMBER 10, 2002**
ADS CLOSE ..... **APR 5**

From courthouses to animal shelters, *TA* explores the gamut of projects designed for use at the federal, state, county, and municipal levels.

Portfolio: 2002 Architecture for Health Award Winners
Bonus Ad Section: Roofing (bonus space for ads in this section)
Bonus Distribution: American Association of Museums, May 13-15, Dallas; Texas Hospital Association, TBA; Texas City Management Association Annual Conference, June 20-24, San Antonio; Texas Association of Builders Annual Trade Show, June 27-29, San Antonio

JULY/AUGUST ..... **WORK**
PROJECT SUBMISSIONS DEADLINE ..... **FEBRUARY 15, 2002**
ADS CLOSE ..... **MAY 31**

Design of workspace has changed drastically over the last 20 years, largely due to the impact of technology on how people perform their tasks. *TA* features innovative ways architects help Texans get the job done.

Portfolio: Recreation and Entertainment
Interiors: Office Furnishings
Bonus Ad Section: Masonry & Concrete Products (bonus space for ads in this section)
Bonus Distribution: Texas Masonry Council State Convention & Trade Show, others TBA

SEPTEMBER/OCTOBER ..... **2002 TSA DESIGN AWARDS**
ENTRY DEADLINE ..... **JUNE 14, 2002**
ADS CLOSE ..... **AUG 2**

The best in Texas is the focus of this annual issue that sets the stage for the 63rd TSA Annual Convention and Design Products and Ideas Exposition.

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NOVEMBER/DECEMBER ..... **URBAN DESIGN**
PROJECT SUBMISSIONS DEADLINE ..... **JUNE 3, 2002**
ADS CLOSE ..... **SEP 20**

The continuing surge in the population of Texas' cities and suburbs creates a great need for coherent plans to guide that growth. *TA* looks at the current state of those efforts.

Portfolio: Retail Architecture
Bonus Ad Section: Windows and Skylights (bonus space for ads in this section)
Bonus Distribution: National Association of Realtors Trade Show, November 6-11, New Orleans, LA.; National School Boards Association

Better Illustrations, Please

The graphics of the November/December 2001 issue, including photography, typesetting and general organization of the various articles, in general, are crisp, clean and commendable. The magazine presents a very professional face to the public and the profession.

Unfortunately there is, however, a twin disaster in the graphics for the article by Mark Gunderson, entitled "Constellation." First, the two-page spread with the perspective of the new Modern Art Museum of Fort Worth on pages 20-21 is of such poor quality that it should never have been used. A photograph of the model from the same basic point of view would have been more appropriate to the caliber and objective of the article.

As to the site plan on page 19, in the same article, no attempt was made to amend the plan of the block found by Lancaster and Darnell streets showing the removal of the two-story FWISD office building and the attendant redesign of the parking and drives, let alone showing the trees that exist on the site. All that work was completed months ago and could easily have been redrawn for this issue of *TA*.

I regret that the issue of *TA* I have commended upon is not consistent as to quality and fails so badly in the graphics I refer to. The two items in question were used by the *Fort Worth Star-Telegram*, an institution, however, that is not held to the high standards that *TA* is expected to aspire to.

George S. Wright, FAIA
Fort Worth

The writer is dean emeritus of the School of Architecture at the University of Texas at Arlington.

CORRECTIONS In an article on Mockingbird Station in our last issue (*TA* 11/12 2001), the name of the project's MEP consultant, S. Toub & Associates of Dallas, was misspelled.

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Denison Salutes Mayes' Legacy

DENISON Most of us who grew up and "escaped" small-town living still retain a fondness for the sweet and simpler lives we imagined that we had. In October I had the rare opportunity to join with former schoolmates and neighbors in celebrating that lifestyle through the defining lens of the architecture of one man, Donald Mayes. Mayes was that rare creature, a sophisticated gentleman who chose to practice his craft of architecture largely within the confines of one town—Denison, in far North Texas, just a few miles from the Oklahoma border. In doing so, he left his mark and enriched all of our lives forever.

I grew up in a Donald Mayes house. More significantly, I watched the design and construction of the house when I was around 10 years old and by the age of 12 was firmly committed to becoming an architect myself. Was it that experience or the fact that the cul-de-sac (the "Circle") homes where we lived were almost all Mayes houses? Maybe it was the junior high which he designed and which I attended for a year. Surely, by osmosis I understood that good design does enhance a life and a community.

That community is realizing a cultural renaissance these days, propelled in part by the formation of Denison Heritage Inc. (more former schoolmates). DHI is committed to engaging interest in the historic character of the town and stimulating its growth as an arts community. The Donald Mayes Tribute weekend (Oct. 13-14) was the synergistic brainstorm of that same indefatigable band. Not only were we all treated to a tour of Mayes' homes but also we helped raise money for the rehabilitation of the old Denison High School for use as a multi-function community center.

The weekend was a grab bag of treats, including a movie screening, an alfresco dinner party in the Circle, a discussion of Mayes' work by Frank Welch, FAIA, and myself, and of course, the tour itself. With fresh eyes, we Mayes aficionados admired the calm exteriors, the perfect circulation, and beautifully proportioned spaces. Described by Welch (who interned with Mayes in the early 1950s) as "High Ranch," Mayes' houses are noted for their rangy, horizontal lines, use of natural materials, economy of means, and high quality of construction.

A native of Denison, Mayes graduated from the University of Texas in 1938 and hung out his shingle in 1948, becoming Texomaland's leading designer of commercial buildings, schools, and some 76 private residences. Among his projects were Grayson County College, First Presbyterian Church, McDaniel Junior High School, and several banks. He also was the local architect supervising the restoration of Eisenhower's birthplace. Before his untimely death in 1966, he played a key role in a major urban planning initiative in Denison.

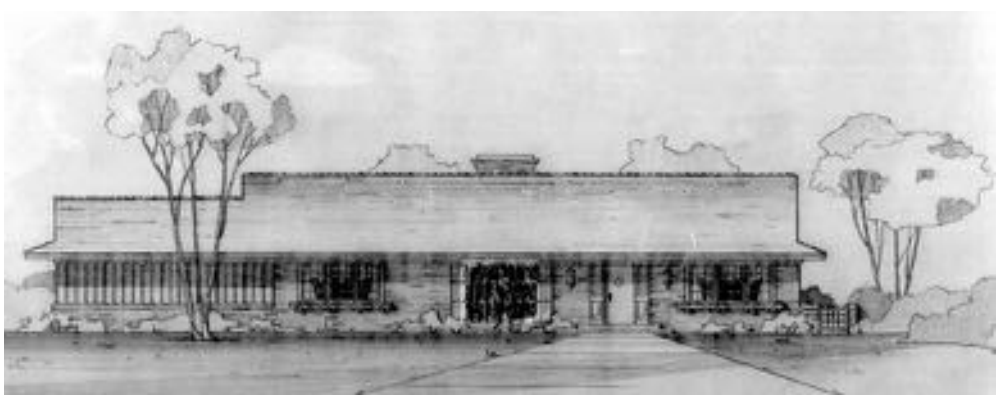
Perhaps the *pièce de la résistance* of the weekend was its coinciding with the publication of the *Donald Mayes of Denison, Texas: An Architectural Legacy* by Mavis Anne Bryant. The author is yet another childhood neighbor and Donald Mayes "child" who had sense enough to return to those roots. In her articulate and well-documented work, Bryant captures the ephemeral mood and the spirit the architect instilled in his work:

> Donald Mayes seemed to dwell at an edge where town gives up the ghost and wildness crowds in. If his houses uniformly present dignified faces to a world passing by, out of sight they reserve – and preserve – precincts where no one can predict what will occur. His best-loved designs sit where straight streets peter out and become dirt tracks. Woody lots back up to old streambeds, natural springs, cliffs, railroad right-of-ways.

There are a few lucky places in Texas that harbor an architectural time capsule. On the grand scale, there is the Galveston of Nicholas J. Clayton. On a much more modest, approachable scale, I experienced mid-century, High Ranch in Denison.

HEATHER MCKINNEY, AIA

Donald Mayes of Denison, Texas *is available through Epiphanies Book Store in Denison. For information, call (903) 327-8188 or send an e-mail query to* jbooks1@swbell.net.



(above) Mayes, pointing at map, helped develop the master plan for Lake Texoma Recreational Area in the early 1940s; photo courtesy of Melinda Mayes Penn. (below) B.A. Willis house, 1531 West Heron Street, Denison. Drawing by Donald Mayes, 1961; Courtesy of Dr. Frances C. Willis.

UTSA Accredited for Architecture

SAN ANTONIO The School of Architecture at the University of Texas at San Antonio has been granted an accreditation for its Master of Architecture degree program, making UTSA the state's eighth accredited architecture school. The decision in October by the National Architectural Accrediting Board (NAAB) is effective January 2001, and retroactively includes the initial four graduates of the program, thus making them eligible for state licensure.

The importance of UTSA's accreditation is underscored by a recent state law mandating that all registered architects in Texas hold a degree from an educational program approved by the Texas Board of Architectural Examiners. The state board now accepts only degrees from schools accredited by NAAB.

The new master's program is a first professional degree in architecture in preparation for becoming a licensed architect. UTSA's program consists of a two-year sequence of courses preceded by a pre-professional four-year degree. Building on the principles and techniques of architectural design and theory, the program offers two specializations, international practice or historic preservation, both of which benefit from the regional structure, history and character of South Texas and the Rio Grande Valley, on both sides of the river.

The School of Architecture, which also offers an accredited interior design program, has a total of approximately 440 students that includes 14 in its master's program.

STEPHEN SHARPE

De Menil House to be Renovated

HOUSTON The residence designed in 1949 by Philip Johnson for John and Dominique de Menil in River Oaks will undergo a complete renovation this year. The Menil Foundation has commissioned Stern & Bucek Architects of Houston to plan the work on the house, considered a unique architectural landmark and the city's first structure designed in the International Style.

"Our intention is to renovate so carefully that when the house is finished one would barely know that we had been there," says William Stern, FAIA, who describes the flat-roofed, single-story residence as "the idealization of a Miesian courtyard house adapted to the de Menil family." Historic preservationist Ellen Beasley will serve as a consultant on the project. Also, a painting conservatory will preserve the interior finishes, including the striking colors on walls and unique patterns on cabinets originally designed by Dominique de Menil's couturier Charles James.

Replacing the original 1950s' wiring will pose the most difficult aspect of the renovation. "We don't want to disturb the walls," Stern says. "We're going through the ceiling cavity, which is more complicated," but will preserve wall finishes that were never changed during the life of the house. Stern also says his firm will restore the woven fiberglass canopy that arches over the interior courtyard, an element added in the early 1960s much to Johnson's dismay.

Estimating the project to take 12 to 16 months to complete, Stern says the renovation will result in a house – with original exhaust fans in the bathrooms and original laminates in the kitchen – preserved for another 50 years. "Just think, in a hundred years, people will look at this and say, 'This is what bathrooms looked like in the 1950s.' "

STEPHEN SHARPE

(below) The residence's interior finishes, as shown in the master bedroom/dressing room, are original; 1998 photo by Hickey-Robertson, courtesy of the Menil Collection.

The headquarters of **Rave Motion Pictures** in Hickory Creek by **C. Cal Young, AIA**, of **dsgn associates** in Dallas has received a 2001 Design Award of Excellence from the National Concrete Masonry Association.

Brooks County Safety Rest Area by **Richter Architects** of Corpus Christi was one of six projects chosen to receive a 2001 Brick in Architecture Award, co-sponsored by the Brick Industry Association and *Architecture* magazine.

Tadao Ando, Hon. FAIA, best known in Texas for his Modern Art Museum of Fort Worth, now under construction, is the **2002 AIA Gold Medal winner**. The award recognizes an individual whose body of work has had a lasting influence on the theory and practice of architecture.

For its renovation of the historic **Mount Vernon** estate on White Rock Lake in Dallas, **WorkPlace USA** was awarded a merit award in the Associated Builders and Contractors of North Texas' annual Excellence in Construction Awards.

The Associated Builders and Contractors Greater Houston Chapter awarded first-place honors to **EDI Architecture** of Houston for the **Sbisa Dining Center** at Texas A&M University in College Station.

Work is expected to begin this year on the $5 million expansion of **The Art Museum of South Texas** in Corpus Christi. The design by **Ricardo Legorreta, Hon. FAIA**, of Mexico was recently approved by the museum's trustees, clearing the way for the first expansion since the Philip Johnson-designed facility opened in 1975.

Leaders of three of the world's most influential architectural firms will lead discussions at the **2002 Rowlett Conference** scheduled February 8 at Texas A&M University. **Charles B. Thomsen, FAIA, of 3D/International**; **Ronald L. Skaggs, FAIA, of HKS**; and **Harold L. Adams of RTKL Associates** will each share insights into their firm's history and ideas about their future. The annual series of lectures is sponsored by the CRS Center at A&M's College of Architecture.

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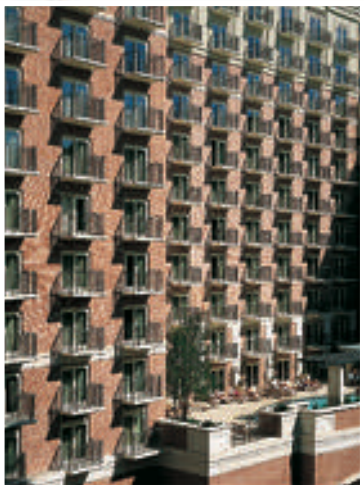

The sweeping view of the San Antonio River from the new Westin Riverwalk luxury hotel is seen through clad sliding French doors from Marvin Windows and Doors. Marvin also provided elegant mahogany interiors for swinging French doors in upper-floor suites. And with this beauty came low-E performance, convenient factory-applied brickmold casings, and commercially rated windload testing. For long-lasting, durable performance, and design excellence, it's Marvin Windows! Beautifully made to order, one at a time!

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AIA Dallas Presents Honor Awards

DALLAS Twenty-Five Year Awards went to St. Stephen's United Methodist Church (1962, by Pratt, Box & Henderson) in Mesquite and the Haggarty-Hanley Residence (1957, by O'Neil Ford) in Dallas during AIA Dallas' annual design awards program held in October. The local chapter also presented Honor Awards in the category of Built Projects to RTKL Associates (Los Angeles) and Selzer Associates (Dallas) for Mockingbird Station in Dallas; Edward M. Baum, John Maruszczak, and Oglesby-Greene Architects (all of Dallas) for the Dallas Police Memorial; and Morrison Seifert Murphy (Dallas) for Travis Street Houses in Dallas.

In all, 75 entries were reviewed in the Built Projects category. Seven projects were awarded, three with Honor Awards and four with Merit Awards. Merit Award winners were Sharon Odum Architect's 2x4x8x16 House in Avinger; Cunningham Architects' University of Dallas-Haggerty Art Center in Irving; Beck Architecture's Studio I in Dallas; and Pierce, Goodwin, Alexander and Linville's AMX Corp. (formerly Panja) Headquarters in Richardson. The Built Projects jury was comprised of Steven Ehrlich, FAIA, of Los Angeles; Isaac Broid of Mexico City; and Martha LaGess, dean of the School of Architecture at the University of Texas at Arlington.

In the category of Unbuilt Projects, from 34 submissions the jury picked five projects to receive citation awards: Omniplan's prototype design for five locations for Snack Food Manufacturing Support; a joint venture by HNTB Architects Engineers Planners, Corgan Associates, and HKS on Terminal D at DFW International Airport; Laguarda.Low Architects' renovation of the Troia Hotel Casino in Troia, Portugal; RTKL Associates' The Charles W. Eisemann Center, Richardson; and Teruya Arquitectos y Asociados' City Express, a laundry and dry cleaning establishment in Lima, Peru. On the jury for Unbuilt Projects were Joe Mashburn, dean of the College of Architecture at the University of Houston; Peter Zweig, FAIA, of the University of Houston's College of Architecture; and Mark Wamble of Rice University.

The Dallas chapter's 2001 Community Honor Awards were presented to several local individuals and organizations chosen for consistent efforts to make better architecture possible. The winners were:

Lifetime Achievement: Dave Braden, FAIA

Contractor of the Year: Rogers-O'Brien Construction Company (Preston McAfee, president)

Craftsman of the Year: Potter Art Metal Studio (Richard Potter, president)

Honorary Memberships in AIA Dallas: Craig Holcomb, executive director of Friends of Fair Park; and Deedie Rose, longtime advocate for architecture across the state.

Citations of Honor: Brad Goldberg, artist whose work fuses sculpture, landscape, and the built environment; Paul Dyer, director of the City of Dallas' Parks & Recreation Department; St. Marks School (Arnold Holtberg, headmaster); and Preservation Dallas Real Estate Seminars (Dwayne Jones, executive director).

STEPHEN SHARPE

St. Stephen's United Methodist Church

Mockingbird Station

Haggerty-Hanley Residence

Dallas Police Memorial

Travis Street Houses

Foster, Koolhaas to Design Theaters for Dallas Performing Arts Center

DALLAS The Dallas Center for the Performing Arts Foundation has chosen two Pritzker Prize-winning architects to design theaters in the downtown Arts District, both tentatively scheduled for completion in 2007. Several renowned architects vied for the two projects – a 2,400-seat lyric theater and a 800-seat multiform theater – and the announcement in early December of London-based Sir Norman Foster and Rem Koolhaas of Rotterdam was highly anticipated by this city's arts cognoscenti.

Foster and Partners' will design the 250,000-square-foot lyric theater which will be home to opera, ballet, musical theater, and other large-scale productions. Rem Koolhaas and the Office for Metropolitan Architecture will design the 150,000-square-foot multiform theater which will provide flexible stage space for theater, dance, and other performing arts. A third project – an alternate space dedicated to dance, theater, and music performances by small-size and midsize performing arts organizations – is also planned for the center but details have yet to be determined. When completed, the Dallas Center for the Performing Arts will feature productions by the Dallas Opera, Dallas Theater Center, Fort Worth Dallas Ballet, Dallas Black Dance Theatre, and other area arts organizations.

Expectations are great for the future center, to be located between Ross Avenue and Woodall Rodgers Freeway. A coalition which included the City of Dallas, the Dallas Opera, and the local performing arts community spent $13 million to acquire the land in the southeast quadrant of the Arts District. Viewed as the most ambitious building project for the arts in the history of Dallas, a reported $96 million has been pledged by individuals, companies, and organizations to build the center.

In late September, short lists for both projects were announced and representatives of the seven firms presented public lectures in late October and early November. The two other finalists for the lyric theater were Jean Nouvel and Christian de Portzamparc, both of Paris. The three other finalists for the multiform theater were UN Studio van Berkel & Bos of Amsterdam, Snøhetta of Oslo, and Daniel Libeskind of Berlin.

"Based on the first-rate short lists we constructed, it was impossible to make anything but exceptional choices," said John Dayton, co-chair of the architect selection committee and board member of the Dallas Center for the Performing Arts Foundation.

Dayton's co-chair and fellow board member, Deedie Rose, Hon. TSA, said, "This is our one chance to truly create a heart of the city. Both on and off the stages, this public space will be a place for the citizens of Dallas and its visitors to learn from and be inspired by the art presented, as well as be a place to gather and spend time."

Foster, who received the Pritzker Architecture Prize in 1999, was recently the subject of an extensive exhibition at the British Museum. His firm's most high-profile work includes the new Great Court at the British Museum in London, the world's largest airport in Hong Kong, and the new German Parliament within Berlin's historic Reichstag. Projects currently underway include a new masterplan for the Museum of Fine Arts in Boston and an addition to the Hearst Corporation's headquarters in New York City.

Recipient of the Pritzker in 2000, Koolhaas and his firm are best known for The Netherlands Dance Theatre in The Hague, the Kunsthal Rotterdam, the Lille Grand Palais, and the Guggenheim Las Vegas. Koolhaas, regarded as one of the profession's most innovative thinkers, has been intensely involved in building and urban planning projects since 1980.

Design work on the Dallas Center for the Performing Arts will begin early this year. Both firms plan to research Dallas extensively prior to beginning design work and will collaborate with a team of theater design consultants, acousticians, and other specialists. Construction of both theaters is scheduled to begin in 2004.

STEPHEN SHARPE

Kimbell Exhibits Ancient Sichuan Bronzes

Statuary, vessels, and other ancient works of bronze recently unearthed in southwestern China are part of the *Treasures from a Lost Civilization: Ancient Chinese Art from Sichuan* taking place at the Kimbell Art Museum, 3333 Camp Bowie Boulevard in Fort Worth. The exhibition features 124 works of art created by a mysterious bronze-using civilization around 3,000 years ago. Archaeologists only recently discovered remnants of the thirteenth-century B.C. culture near the modern-day village of Sanxingdui in the Chinese province of Sichuan. For information, call (817) 332-8451 or visit *www.kimbellart.org*. THROUGH JANUARY 13

RDA Presents Dutch Design Lectures

The Rice Design Alliance's Spring 2002 Lecture Series features four Dutch designers presenting the latest ideas from their country. *Dutch Surge: New Design From The Netherlands* will take place at the Brown Auditorium at The Museum of Fine Arts, Houston. All lectures begin each Wednesday at 7:30 p.m. Speakers are Joep van Lieshout of Rotterdam (JANUARY 16), Marcel Wanders of Amsterdam (JANUARY 30), Caroline Bos of Rotterdam (FEBRUARY 6), and Bart Lootsma of Amsterdam (FEBRUARY 27).

Polshek at Dallas Architecture Forum

James Stewart Polshek, architect of the Rose Center for Earth and Space at the American Museum of Natural History in New York, speaks to the Dallas Architectural Forum. Current projects by Polshek Partnership Architects of New York include the William Jefferson Clinton Presidential Library in Little Rock. Part of the DAF's annual lecture series, the 6 p.m. presentation will take place in the Horchow Auditorium at the Dallas Museum of Art, 1717 Harwood St. Admission is free for DAF members, $15 for the general public, $10 for DMA members, and $5 for students. Call (214) 740-0644 for more information. JANUARY 24

Designing for High Winds

A short course titled *Engineering for Extreme Winds 2002* directed to architects, engineers, builders, and building officials is scheduled in Lubbock at Texas Tech University. Sponsored by the Wind Science and Engineering Research Center on the Texas Tech campus, the two-and-one-half-day course will feature wind-tunnel demonstrations, a full-scale field test, and debris impact test using a tornado cannon. Contact Mary Ruth Bishop at (806) 742-7200 ext. 252 or visit *www.dce.ttu.edu*. FEBRUARY 6-8

texasarchitect.org

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by ELIZABETH DANZE, AIA

Reassessing Schindler

The Architecture of R.M. Schindler
Elizabeth A. Smith and Michael Darling
Museum of Contemporary Arts,
Los Angeles (Abrams), 2001
284 pages with illustrations

cover courtesy Harry N. Abrams, Inc.

TO MANY OF US WHO STUDIED ARCHITECTURE in the 1970s, R.M. Schindler (who practiced from the late 1910s to the early 1950s) was just being reintroduced. As an architect he was something of an enigma, not easily classified. Was he a modernist? A California regionalist? Or an idiosyncratic experimentalist? What distinguished Schindler from his colleagues and how he had developed such an mystifying legacy?

The Architecture of R.M. Schindler by Elizabeth Smith and Michael Darling, goes a long way in helping us understand Schindler's work in the context of his time, and ultimately its relation to ours. (As curator for the Museum of Contemporary Art in Los Angeles, Smith organized the exhibit of the same name. Darling was assistant curator for the exhibition.) The book is comprised of five diverse essays, each one depicting a slightly different Schindler—but recognizable personal and professional characteristics eventually overlap to provide full illumination of his work and its evolution. Darling's and Smith's essays, placed at the beginning and the end of the book, bracket the discussion admirably. Essays by Kurt G.F. Helfrich, Robert Sweeney, and Richard Guy Wilson offer information necessary to better understand Schindler's work and methods, including the sociological and political forces that shaped the era in which he flourished.

Schindler's approach to design and construction combined the pragmatic with the intuitive, and, as Smith reminds us, was rooted in a sensibility both experimental and hybridized. The house at Kings Road, which Schindler designed for himself and his wife, Pauline Gibling Schindler, in Southern California in 1922, was not just his ideal house but a vessel designed to complement his ideas on living and social interaction. The couple's decidedly bohemian lifestyle collaborated with the house's decidedly radical design to demonstrate their "progressive attitudes and associations." The political interests and attitudes of Pauline and R.M. reveal the social context of their lives and work, and illuminate their impact on Schindler's architectural concerns. Sweeney, in his essay, describes Schindler's Kings Road House as "an informed distillation of many sources and influences – architectural, structural, and philosophical – that resulted from the union of two free spirits: a gifted Modern architect and his socially conscious wife."

In Wilson's essay, "Schindler's Metaphysics: Space, The Time Machine, and Modernism," he too looks at the Kings Road House and sees it as a clear "departure from orthodox modernism (and a building that Hitchcock and Johnson would have found appalling because of its rough, primitive quality)." The reference is, of course, to critic and historian Henry-Russell Hitchcock and Philip Johnson, then director of the Museum of Modern Art, who co-authored *The International Style: Architecture since 1922*, the MOMA exhibit of 1932 and its companion book. Hitchcock (who also had described Schindler's work as "extreme Expressionist and neo-Plasticist") and Johnson pointedly excluded Schindler – yet included Neutra – in their discussions of the architects whose work defined and exemplified the tenets of the International Style.

Schindler's methods called into question those ideals: his use of rough concrete, untreated redwood, and exposed timbers are consistent with his manifesto of what a modern house could be—essentially a primitive proletarian shelter, a cave. What may not have set well with Hitchcock and Johnson was Schindler's theorizing that the power of the machine in society necessitated that people return to the cave, to nature.

According to Darling, Schindler's architectural stance was "by definition dynamic, permeable, and alive, allowing all manner of external factors to guide his design solutions. His architecture changed each time he learned about its site, climate, culture, and client needs; the resulting buildings range from adobe compounds to log houses, Spanish-style haciendas to fantastical desert huts."

As critiques of canonical modernism began to mount during the 1950s and 60s, Schindler's prolific and widely varied work offered an historical alternative to the International Style. Defectors from the International Style – including Charles Moore, Hans Hollein, and Frank O. Gehry – gravitated toward Schindler's ideas which they found to be a non-dogmatic, highly flexible approach to design that took cues from real life as much as from established ideals.

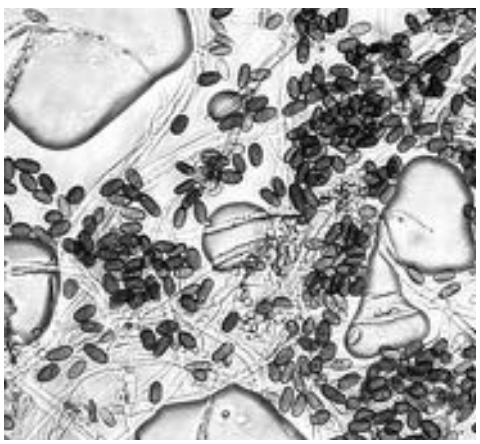
As Smith so aptly states, "while it is not exactly understood from a critical perspective during the first half of the century, the role of invention and intuition in Schindler's work can be more readily appreciated not only in terms of today's sensibility of pluralism in architecture, but also in light of developments in architectural history that have broadened the understanding of the parameters of modernism, particularly in regard to architecture in regional centers manifesting more expressionistic and more hybridized characteristics."

Elizabeth Danze, AIA, is a principal of Danze Blood Architects in Austin.

by JOHN P. BROOKS, AIA

Mold and Indoor Air Quality

High moisture levels, often from unseen leaks, create ideal conditions for mold contamination that can pose health risks for building occupants



Stachybotrys chartarum

MOLDS HAVE RECENTLY ATTRACTED A GREAT deal of media attention as parents have expressed growing concern over the indoor air quality of schools. At the same time, news reports have focused on dangerous black molds that can cause serious health problems. Some experts believe that this apparent increase in the number of mold contaminations is the result of more energy-efficient building design in which airtight structures limit natural ventilation that would normally reduce moisture levels and limit mold growth. Other specialists believe the problem is one of perception, that recent media coverage of mold contaminations have the public more fearful of mold than the facts actually warrant. Whatever the reason, the result is that people across Texas are increasingly focusing attention on mold contamination and remediation.

At least 1,000 mold species are commonly found throughout the United States, including many types known to proliferate in buildings. The most common – and relatively less hazardous – indoor mold species include *Penicillium*, *Cladosporium*, *Aspergillus*, and *Alternaria*. For example, the mold typically found growing in tile grout joints of bathtubs and showers is *Cladosporium*.

But it's a less common species, *Stachybotrys chartarum*, that is receiving most of the attention because it can cause adverse – sometimes life-threatening – health effects in humans. Though the greenish black *Stachybotrys* is not rare, it is notorious. According to the the Centers For Disease Control (CDC), *Stachybotrys* is believed to have played a part in the deaths of several infants in Cleveland in the early 1990s. The CDC reports that *Stachybotrys* may cause shortness of breath in infants, and that children are particularly susceptible to mold-related illnesses because their internal organs and immune systems are not fully developed.

While every species is not necessarily deadly, all molds have the potential to cause detrimental health problems when their spores become airborne. Common mold strains – such as *Cladosporium* and *Penicillium* – can trigger a wide range of allergic reactions, including asthma, sinus infections, headaches, coughing, and eye and throat irritation. More dangerous are possible reactions to *Stachybotrys*, *Memnoniella*, and *Aspergillus versicolor*, including chronic fatigue, loss of balance and memory, irritability, and difficulty speaking.

Mold growth is likely to occur at exterior walls and corners in heating climates. In cooling climates poorly insulated or improperly designed walls may be more susceptible to mold. Due to differences between inside and outside air temperatures, condensation forming within wall cavities can provide the moisture source required for mold growth. A common condition in cooling climates can be found where air diffusers blow cool air over the interior finishes of exterior walls. Vinyl wall covering or other impermeable finishes on the interior side of exterior walls can create a perfect environment where mold can grow—because moisture is trapped in the wall between the building's exterior vapor barrier and interior vinyl wall covering, which has created an unintended vapor barrier.

Mold can grow on almost any surface, as long as there is moisture and a source of organic nutrition. Mold growth does not require standing water and can occur as a result of high humidity levels in the air or the hygroscopic properties of many building materials. The moisture often comes from condensation on exterior walls, leaking roofs and pipes, faulty HVAC systems, or uncontrolled humidity. At the same time, many materials commonly used in buildings contain nutrition sources ideal for mold growth. These materials include products high in cellulose content, such as wood, paper, carpet, and gypsum wallboard. However, mold can also grow on dust, dirt, paints, carpet, fabrics, and upholstery.

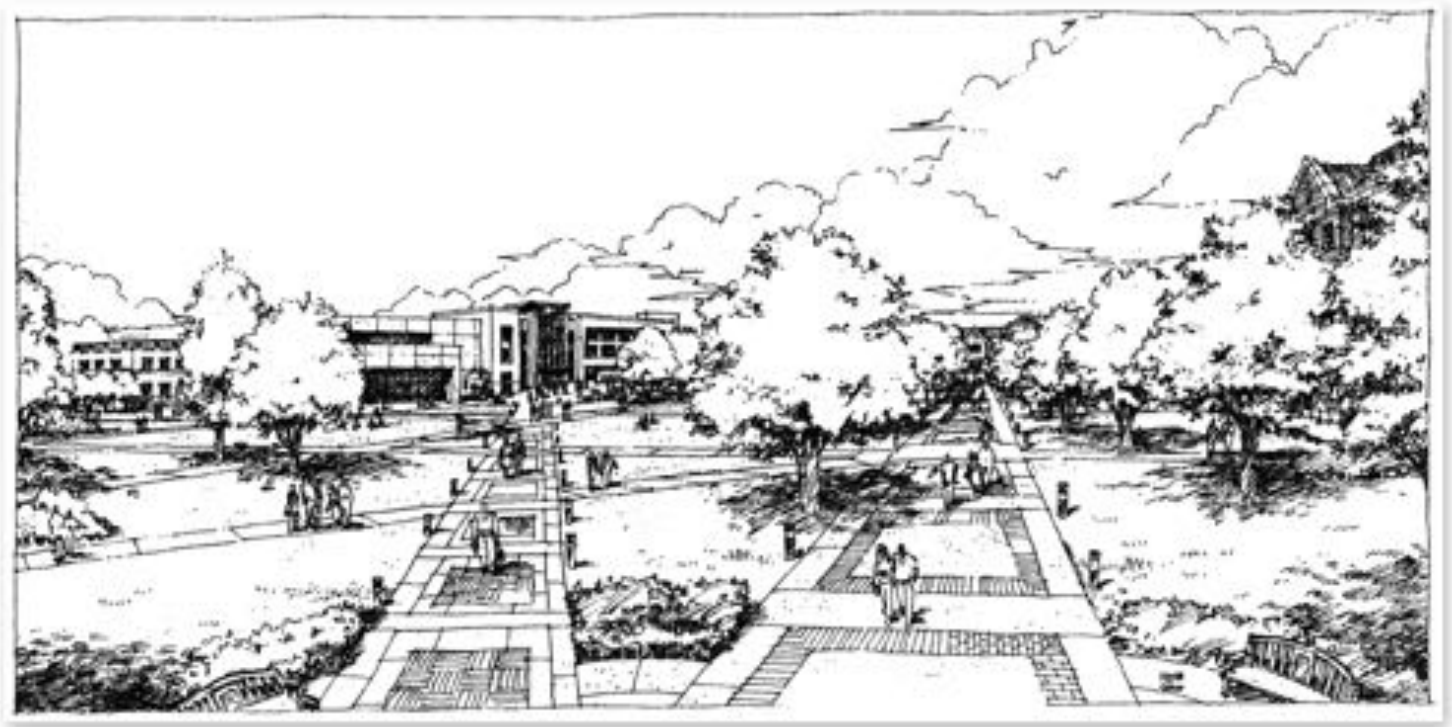
Tightly sealed buildings with inadequate ventilation or exhaust – combined with the presence of building materials that limit the ability of moisture to evaporate or escape – provide a suitable environment for mold growth. This growth may be visible or it can be hidden within walls, mechanical chases, or behind impermeable wall coverings. Mold buildup can often be detected by a musty smell. Discoloration of fabrics and finishes may also reveal mold contamination.

Remediation

For existing facilities, remediation efforts may be needed if an indoor air quality (IAQ) problem is suspected. Remediation is necessary to prevent exposure to humans and damage to building materials and furnishings. In addition to eliminating the mold growth, it is necessary to thoroughly clean the contamination site, as dead spores may remain toxic and may cause allergic reactions in sensitive individuals.

Remediation begins with investigation and evaluation to determine the magnitude of the mold and indoor air quality problem. The assistance of a consultant specializing in indoor air quality problems may be necessary; both the Environmental Protection Agency (EPA) and the American Industrial Hygiene Association (AIHA) recommend specially

"Mold" continued on page 52



PROJECT Prairie View A&M University Master Plan, Prairie View
CLIENT Prairie View A&M University
ARCHITECT Hellmuth, Obata + Kassabaum (Houston, Dallas, and San Francisco offices)
CONSULTANTS Nathelyne A. Kennedy & Associates; WSBC Civil Engineers

Planning to Grow

by THOMAS HAYNE UPCHURCH, AIA

SEEN FROM U.S. HIGHWAY 290, ALONG A NEWLY relocated 30-mile stretch from Hockley to Hempstead, Prairie View A&M University is noticeably growing. A construction crane rises over what will become the student center. The university's new multi-story library is also visible, along with new student housing.

Situated on the rolling pastures of rural southeast Texas, Prairie View A&M University is 40 miles northwest of Houston. It is this rural context which has quietly surrounded, maybe even buffered, the university since the first students arrived in 1878. But the landscape is changing with increasing momentum, spurred by the expansion of Houston's northwest corner. Similarly, the campus is experiencing a rapid transition from a small, well-kept secret to one reflecting its designation by the State of Texas as an "institution of the first class."

The school's origins are significant. Prairie View A&M is the state's second-oldest public institution of higher education; established by the Texas Constitution of 1876 to parallel what is now Texas A&M University in College Station. Because the

latter originally exempted black students, the Prairie View school was designated as a separate school for African-American youth. (The 1876 legislative mandate called for "impartial provisions" to be made for the two agricultural and mechanical colleges.)

Recognizing the need to respond to the demands of change, Prairie View A&M University President Charles Hines, Ph.D., initiated the 2000 Master Plan. HOK Planning Group was hired to study the campus and determine the needs and goals of the university. The result is a document which outlines a responsive, flexible master plan for growth and development of the main campus through the year 2015. It brings into focus the means to achieve the university leadership's vision for academic programs, facility improvements, operations, and image.

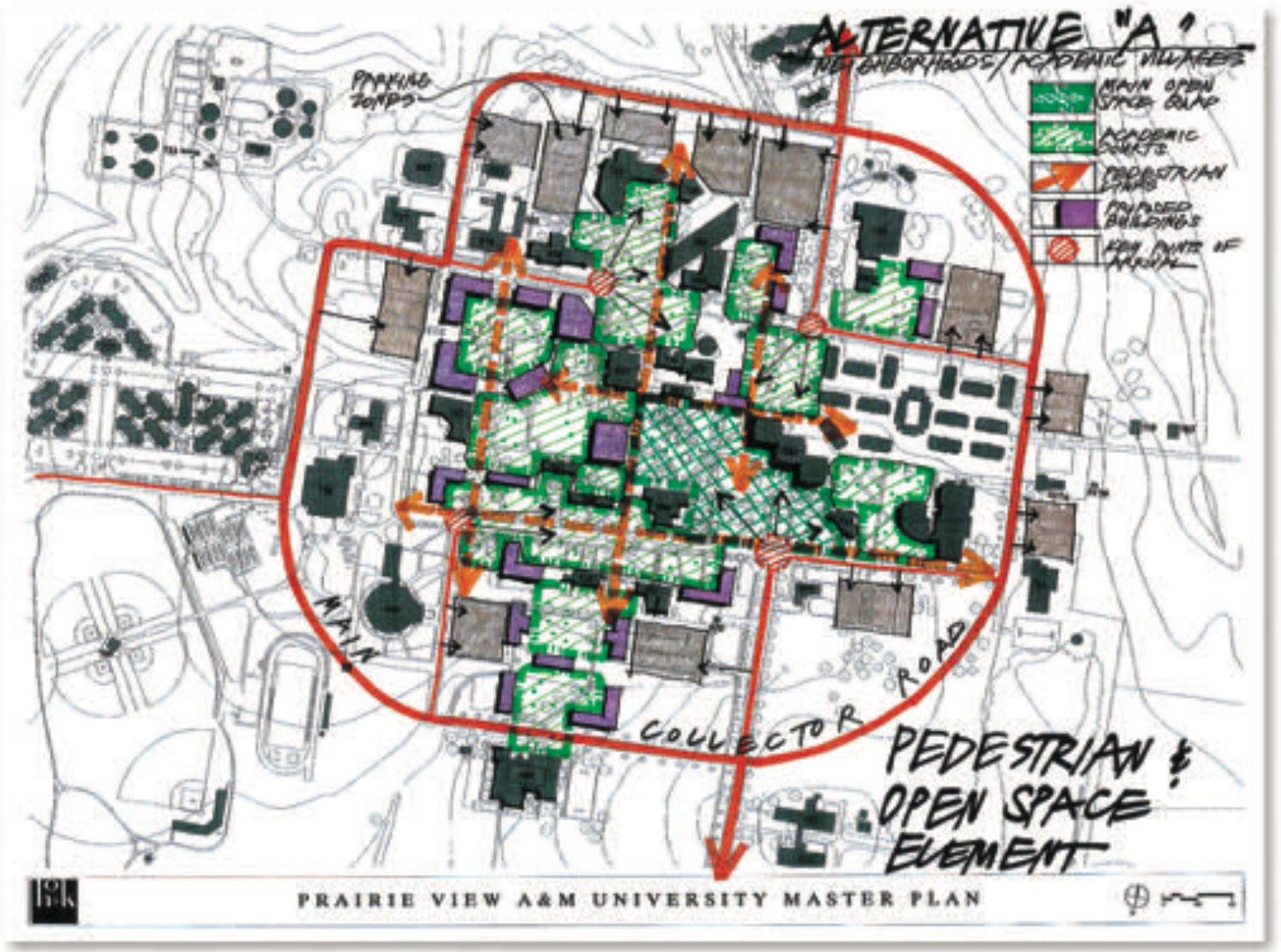
In drafting the master plan, HOK first had to recognize the realities of existing conditions. The second step was determining the possibilities created by those conditions and formulating new ways of defining the campus.

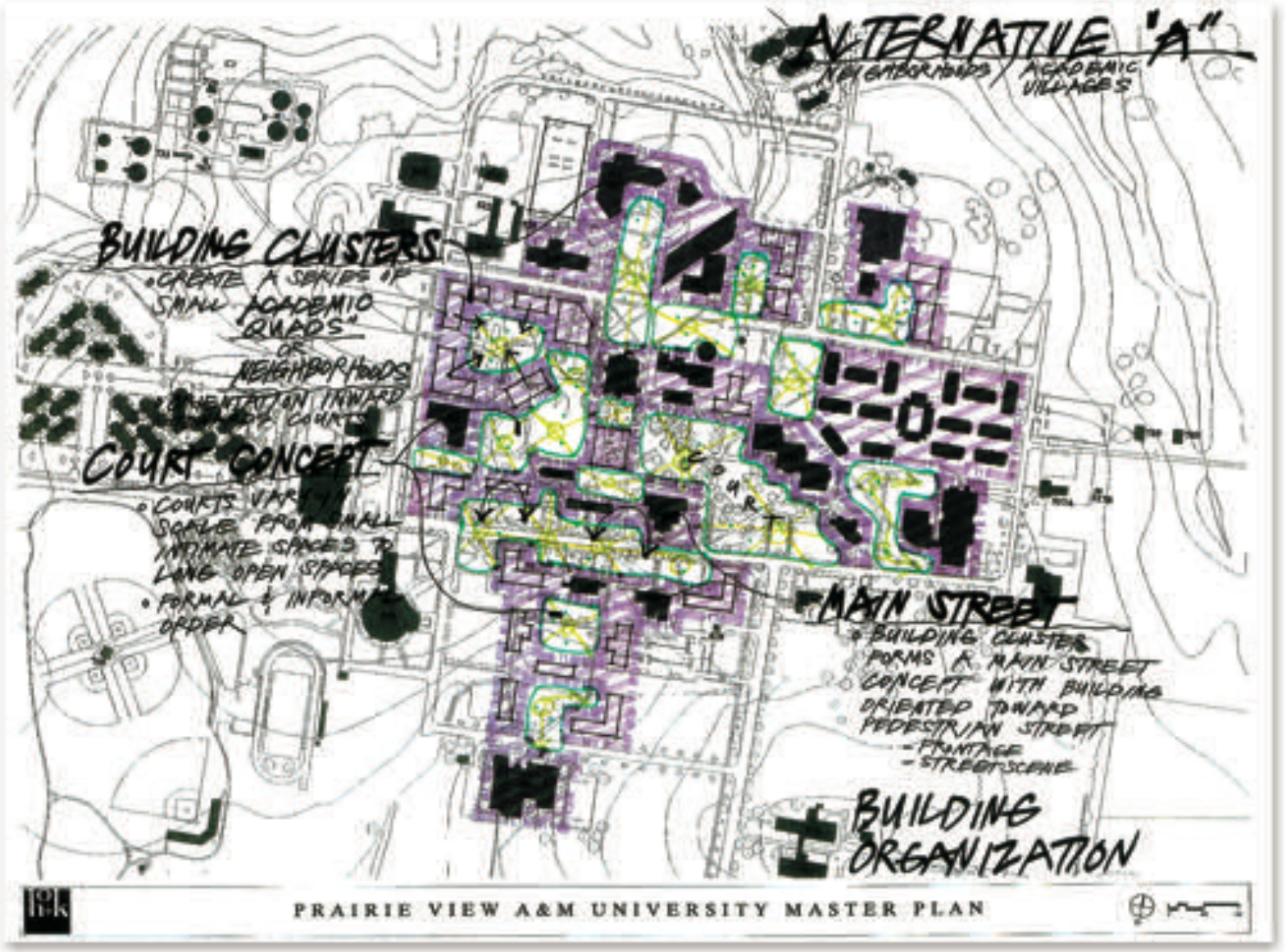
Responding to the first challenge, HOK's planners acknowledged the natural beauty of the campus grounds and its rural setting. Mature live oaks grace streets and shade quad areas defined by historic academic structures of a red brick blend. Beyond the perimeter drives are pastures and woodlands which are part of the 1,500-acre campus. Sheet-metal barns in university-owned pastureland to the east are reminiscent of the school's past and present roots in agricultural studies.

The master plan's evaluation also notes the ad-hoc manner in which campus buildings were constructed over the last 50 years. Because many of these buildings – of varying architectural styles and materials – have suffered from "deferred" maintenance and no longer function well for current academic programs, they are in line for demolition. This reality has provided HOK some latitude to reshape portions of the internal campus and restore the original character of the open spaces, masonry structures, and connecting walkways. Future buildings will be clustered around open areas and view corridors. In addition, pedestrian malls will be opened to connect the inner campus with the surrounding rural landscape.

One of the significant features of the 2000 Master Plan is the development of the Campus Mall that will become the heart of the campus. Located in the southwest quadrant of the campus, running east-west, the mall will be lined with buildings relating to student services, including the Memorial Student Center currently under construction. This area of campus is also zoned for student activities

(opposite page) The future Prairie View A&M campus will encourage walking between buildings. (below) HOK rerouted roadways to improve pedestrian circulation.





(above) HOK reconfigured the formerly "ad-hoc" organization of the campus. (opposite page) As shown fully realized, the master plan groups buildings in a simplified grid.

which can be louder and celebratory in nature. An existing vehicular street is being removed and re-landscaped for pedestrian walks. The existing student center has also been demolished to open a north-south axis and reunite historic Hobart Taylor Sr. Hall with the campus to its north.

Removing vehicular traffic from the inner campus is also key to the 2000 Master Plan. Existing roads will be terminated with new roundabouts, which roughly define four corners to the inner-campus core. In addition, existing perimeter roads are being extended to create a loop drive around campus, restricting vehicular traffic and parking lots to the campus perimeter.

Beyond creating a framework for growth, the 2000 Master Plan recognizes the changes in how "campus" is being defined. One of Prairie View's goals is to significantly enhance student life, mainly by housing a high percentage of students on campus. The school has responded by building privatized housing on campus, a strategy designed to encourage a strong academic focus. (Initial results show a 12-percent increase in retention of sophomores.) Other elements of that strategy have added terms such as "laptop university" and "distance learning" to the administration's vocabulary.

In addition to the main Prairie View campus, the 2000 Master Plan addressed improvements and enhancements for future off-campus extensions, namely the university's College of Nursing and the H.S. Estelle 4-H and Youth Camp. The College of Nursing, located in Houston's downtown Medical Center, is seen by the administration as serving as the university's ambassador to this urban center. University officials note that these new facilities must be well planned and designed to successfully reflect Prairie View A&M's consistent "world class" vision.

A successful planning document must recognize the inevitability of change and provide the flexibility necessary for adapting to future conditions, but the 2000 Master Plan also provides Prairie View A&M with an essential tool for securing future funding that will allow the university to attain its goals. The leadership is quite focused on being "world class," and the master plan has provided the desired spark which those leaders have been seeking. As articulated in the 2000 Master Plan, the university's message is one of great pride in its past and a determined aspiration for its future. T

Thomas Hayne Upchurch, AIA, is principal of Upchurch Architects in Brenham.

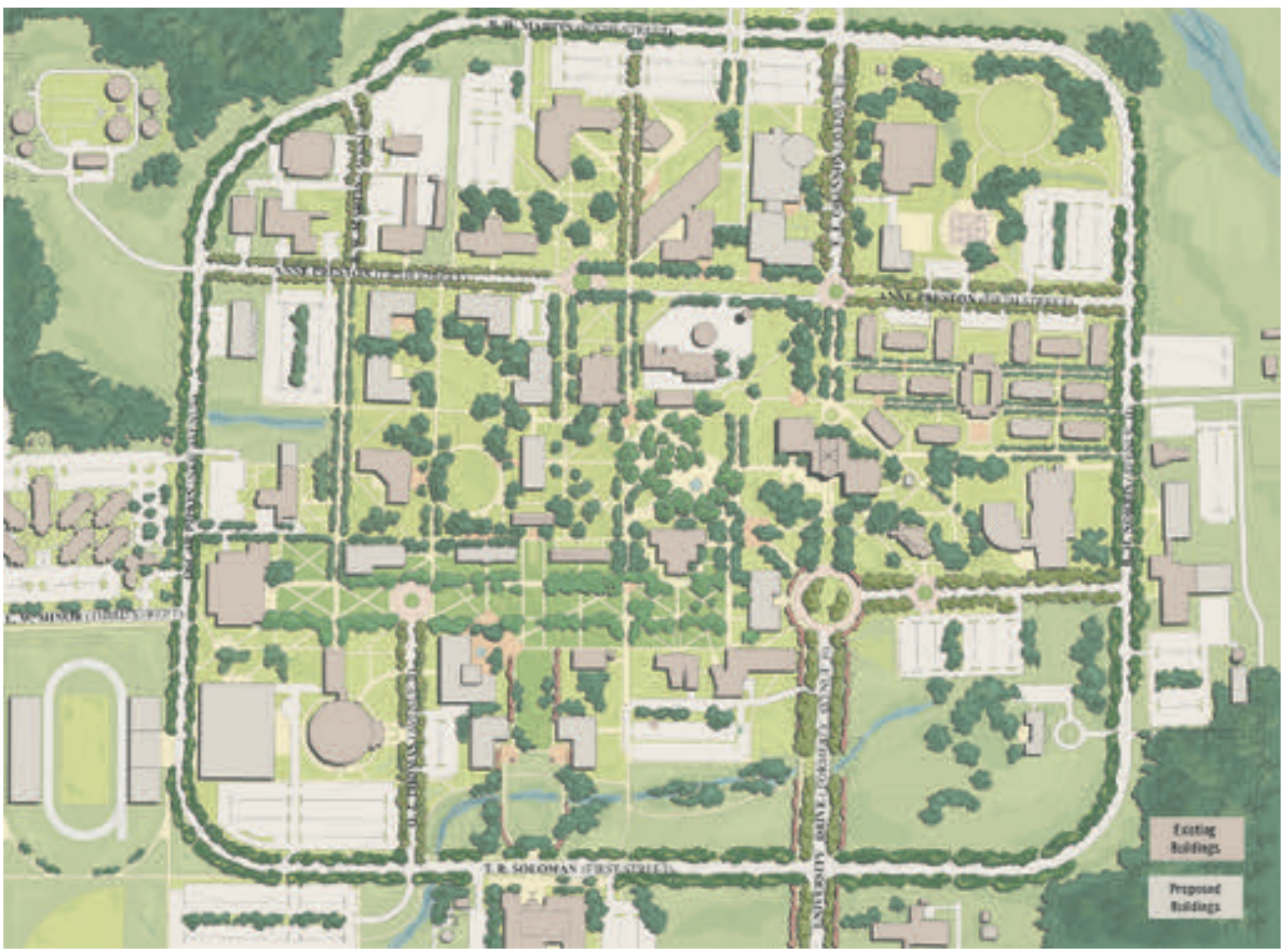
Prairie View A&M to Build a New Architecture School

Determinedly focused on achieving "world class" stature, the leadership at Prairie View A&M has chosen Michael Rotondi, FAIA, to design the campus' School of Architecture in collaboration with HKS of Dallas.

A founding partner of Morphosis with Thom Mayne in 1976, Rotondi established RoTo Architects of Los Angeles with Clark Stevens in 1991.

Late last year, Prairie View narrowed its search to a list of five architectural teams for the project. Along with Rotondi, the short list included Carlos Jimenez, with Hermes Architects of Houston; Antoine Predock, with Cotera Kolar Negrete and Reed Architects of Austin; Charles Gwathmey, with Barnes Gromatzky Kosarek Architects of Austin; and Michael Graves, with Ray Bailey Architects of Houston.

One of eight accredited architecture programs in Texas, Prairie View offers a five-year Bachelor of Architecture degree.



Gentle Geometry

by MELINDA KOESTER POSS, AIA

PROJECT The Madelyn Chafin Learning Center, DeSoto
CLIENT The Canterbury Episcopal School
ARCHITECT Douglas Hildinger, AIA
CONTRACTOR Tegrus Construction Company
CONSULTANTS Charles Gojer & Associates (structural and civil); S. Toub and Associates (MEP)
PHOTOGRAPHER Michael Lyons

THE CANTERBURY EPISCOPAL SCHOOL IS BLESSED with a marvelously expansive, bucolic site. Its rolling 36 acres, situated in a fast-growing Dallas suburb, is a luxury most schools can only dream of. The first building visitors see when entering the grounds is a traditional hipped-roof, one-story brick vernacular, opened in 1992, which provides no clue to the surprises hidden in the campus interior. Fortunately, this first building was placed on an outer corner of the site, which enabled the school to master-plan the rest of the property properly. For this, Canterbury turned to Douglas Hildinger, AIA, of Dallas (now with Hillier Dallas). He designed both the master plan and the Madelyn H. Chafin Learning Center—the first building of the 10-year master plan.

The seamless integration of master plan, landscaping, and architecture rewards the campus visitor. Leaving behind the pinkish brick mini-mansions of suburbia springing up around the school, the visitor enters a realm where the natural environment takes over, dictating the routing of the roads and the placement of the buildings. Much of the master plan's vision stems from headmaster Ron Ferguson's educational philosophy—that the physical learning environment matters, that the natural environment must be a part of the learning environment for all students, and that staff benefits from enriching surroundings as much as the kids. Also, Ferguson insists that abundant natural light be present and that the outward view vary from classroom to classroom. Ferguson rejects what he calls the "shopping mall" mentality, where the building turns in on itself.

The curved roof of the administrative wing mimics the Chafin Center's arced plan.

Hildinger's master plan nestles the buildings in the downward southern slope of the land, linking them with open, uncovered walkways. Vehicular traffic follows the contours of the land and keeps to the perimeter of the property, retaining as much as possible of the natural landscape and separating pedestrians from cars. Planned in five phases, the master plan is meant to carry the fast-growing school's building program through the year 2008.

The Madelyn H. Chafin Center, the school's architectural centerpiece, appears gradually as the visitor drives up the winding entrance road. The road swings around, drops slightly to a lower grade, revealing the geographic and spiritual center of the school—a 55-foot-tall steel cross, embraced by the curving building. The Chafin Center is a composition of simple, gentle geometries rising from an intriguing amphitheater-like open space. The use of building materials is a study in contrasts – wood, split-faced block, glass, and metal – with the interior reflecting the same desire for textural variation. The structure itself echoes the master plan, with circulation kept to one side of the sunny glass arc.

In plan, the Chafin Center resembles a stubby hand with five extensions, or finger-like projections, called pods. The "thumb" contains the administrative functions. Between the thumb and forefinger is the main entrance—an arching space graced with a curved roof that mimics the curve of the plan. The pods contain classrooms and the multipurpose assembly room, arraying off of the arcing main hall. Clerestory windows bathe the pod entrance alcoves in sunlight. The light is colored by the rich hues of each pod's identifying color—deep

(opposite page) All interior spaces benefit from intelligent placement of windows.

tones of green, purple, or yellow on walls, furniture, and accessories. In more conventional thinking, the single-loaded windowed corridor might be considered wasteful. But the corridor's curving amble around the outdoor spiritual space unifies the exterior and the interior, bringing a sense of sunny joy to the business of changing classes. The corridor also serves as a commons area, with planned gathering points for students, so that crowd control is not an issue as in traditional pass-through school design. The curve and window walls also function as a safety device—from his office at the tip of the "thumb," the headmaster has a commanding view of the whole building, both inside and out.

Currently in the midst of its next building phase, Canterbury is trying to maintain the master plan's integrity while modifying the scheme to suit the school's changing needs. The new program brings two phases into reality sooner than planned: playing fields, a regulation-size gymnasium, and fine-arts classrooms which are housed in a "dumb box"—a pre-engineered, manufactured building. Due to new budgetary considerations, this phase is not under the watchful eye of architect Hildinger. It is too early to tell whether the new additions will mar the peaceful beauty of the site, or enhance it by becoming a plain backdrop that offsets the uniqueness of the Chafin Center.

Melinda Koester Poss, AIA, is principal of Studio C in Dallas.

RESOURCES **CONCRETE PAVEMENT:** Go-Crete; **CONCRETE MATERIALS:** Go-Crete; **MASONRY UNITS:** Featherlite; **METAL DECKING:** Vulcraft; **LUMBER:** Frisco Lumber; **LAMINATES:** Wilsonart, Formica; **BUILDING INSULATION:** Owens Corning; **ROOF AND DECK INSULATION:** Owens Corning; **SHINGLES:** GAF; **SIDING:** Frisco Lumber; **METAL ROOFING:** Berridge; **ROOF HATCH:** Bilco; **METAL DOORS AND FRAMES:** P-W Metals; **WOOD AND PLASTIC DOORS AND FRAMES:** Marlite; **ENTRANCES AND STOREFRONTS:** YKK-AP; **METAL WINDOWS:** P-W Metals; **GLASS:** PPG; **GYPSUM FABRICATIONS:** USG; **TILE:** Daltile; **ACOUSTICAL CEILINGS:** Armstrong; **PAINTS:** Sherwin-Williams; **CONCRETE FLOOR STAIN:** Kemiko

FLOOR PLAN
1 CLASSROOM
2 CLASSROOM FOYER
3 ENTRANCE FOYER
4 OFFICE
5 ADMINISTRATION
6 CONFERENCE
7 REST ROOMS
8 STORAGE
9 FOYER
10 MULTI-PURPOSE ROOM
11 SERVERY
12 SCIENCE
13 LECTURE ROOM
14 EXTERIOR PLAZA

High-School Village

by BOB COTTON, AIA

The clock tower, which rises above the library, is the focal point of the central plaza.

PROJECT Sandra Day O'Connor High School, Helotes
CLIENT Northside Independent School District
ARCHITECT Marmon Mok, L.L.P.
CONTRACTOR Lyda, Inc.
CONSULTANTS Cude & Associates (civil); Danysh & Associates (structural); Silber & Associates (HVAC and electrical); Place Collaborative (landscape); Marmon Mok (plumbing)
PHOTOGRAPHERS Paul Bardagjy, Leigh Christian

SANDRA DAY O'CONNOR HIGH SCHOOL IS AN academic village set in the pastureland and gently rolling terrain northwest of San Antonio. Consciously designed to avoid overpowering the nearby town of Helotes, the school's plan distributes more than 334,000 square feet into fourteen one- and two-story buildings arranged around a central plaza. The overall plan, building forms, and materials selected by the school's architects, Marmon Mok of San Antonio, reflect the rural Texas setting, while recognizing the economic constraints facing school construction.

The village concept that frames the organization of the school is in part the result of community meetings held prior to the beginning of the design process. Though the school was intended to serve a regional population, local residents expressed a desire to avoid a massive building that would seem out of place in their small community. Concerns about increased traffic on the highway adjacent to the site influenced the placement of the school on its 72-acre site. Vehicular access is off of the primary cross street rather than the highway.

In arranging the school's functions, the architects chose a literal interpretation of a pedestrian village concept. The focal point of the central plaza is the library, complete with a clock tower serving as the primary landmark. Other functions are distributed around the plaza in separate buildings connected by a covered walkway. The Northside school district's Agriculture Magnet Program is sited a short distance away from the building core, in an almost rural location relative to the academic village. Athletic practice fields and tennis courts are similarly placed outside the core. And though the campus has been opened for only three years, the inevitable portable classrooms have appeared in pre-planned locations in a sort of suburban zone along the core's perimeter. Designed for a target student population of 2,400, and a maximum of 2,700, the school now serves 3,100 students.

Parking is located on the southwestern edge of the building core. During school hours, all visitors

enter through the administration building. Other buildings with public activities such as the fine-arts building (with its 990-seat auditorium) and the physical education building's gymnasium are located along the edge near the parking area. Classroom buildings and other less public functions are located farther away.

Given the school district's ongoing growth and need to build several new schools on a limited budget, economy of construction and long-term value were of paramount importance during the design process. Material selection of limestone-colored split-faced masonry units, galvanized metal panels, and standing-seam metal roofs were cost-effective while meeting aesthetic desires. After careful evaluation of a variety of structural system alternatives, the architects determined that a pre-engineered metal system was most economical, though innovative applications were sometimes applied. For example, the two-story classroom buildings feature load-bearing CMU for the ground-floor structure while pre-engineered metal is used for the second floor. Excavation costs were minimized by running utilities from the central plant through the attic of the covered walkway that serves each building.

Yet for all the budget-consciousness of the design, the school delivers an effective learning environment with a variety of specialized functional spaces supporting state-of-the-art teaching activities. The fine-arts building, in addition to the auditorium, houses a black-box theater for drama instruction, separate rehearsal halls and libraries for choral and band students, and a visual-arts center supporting photography, drawing, sculpture, ceramics, and video. The physical-education building includes one of two district-wide competition gyms. The agricultural center draws students from across the district to extensive facilities for woodworking, landscaping, agriculture, and animal

The cafeteria is among the two-story buildings in the school complex.

The fine-arts auditorium seats an audience of 990.

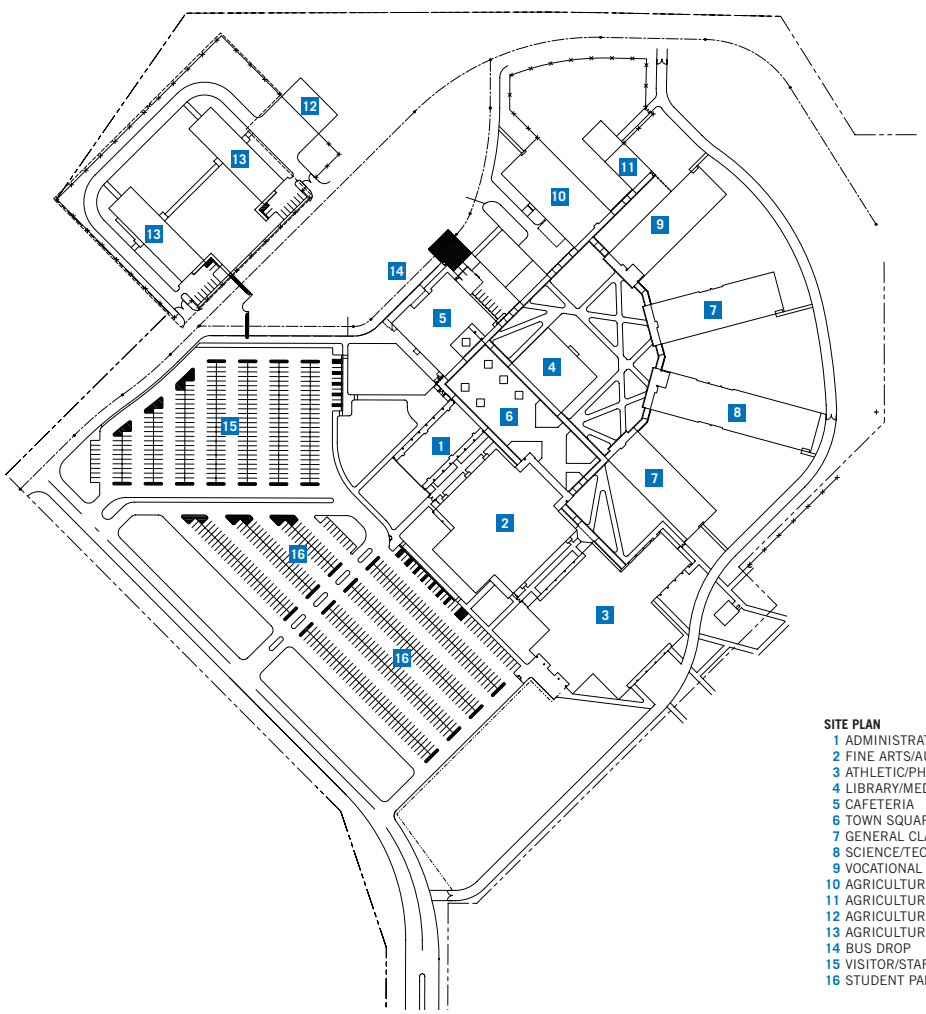
husbandry. Each classroom building includes a remote office center to allow teachers to use copiers, computers, and small conference spaces when not in the classroom. The entire campus is fully networked, with more than 750 computers in use.

Savings resulting from economical approaches to building systems and the overall design allowed additional square footage to be incorporated where needed. The typical classroom averages 100 square feet larger than similar classrooms at other Northside campuses. In addition, hallways were widened to ease congestion during class changes.

Reaction to the new school has been universally positive, with broad approval of the "village" approach rather than all facilities being consolidated in a single big building. The school's administration cites advantages in management and control with smaller, individual buildings. Teachers appreciate the natural light that pervades virtually every classroom while students enjoy the quality of the facilities and a setting that is often compared to that of a junior college rather than a high school.

Bob Cotton, AIA, is an architect practicing in San Antonio.

RESOURCES **CONCRETE MATERIALS:** Alamo Concrete Products; **UNIT PAVERS:** Alamo Concrete Pavers; **FENCES, GATES, AND HARDWARE:** Cyclone; **PLANTING ACCESSORIES:** Palmer; **MASONRY UNITS:** Featherlite; **MASONRY VENEER ASSEMBLIES:** Featherlite; **ARCHITECTURAL WOODWORK:** Classic Casework & Countertops; **WATER REPELLENTS:** ChemProbe Corporation; **ROOF AND DECK INSULATION:** US Intec; **METAL DOORS AND FRAMES:** Door Pro Systems; **OVERHEAD DOOR:** Overhead Door Company; **ENTRANCES AND STOREFRONTS:** TRACO; **METAL WINDOWS:** TRACO; **GLASS:** AFGD, Inc.; **TILE:** Daltile; **ACOUSTICAL CEILINGS:** Armstrong; **SOUND PANELS:** Eckel Industries; **METAL CEILINGS:** Armstrong; **SPECIAL CEILING SURFACES:** Armstrong; **WOOD FLOORING:** Robbins; **RUBBER TILE/VCT FLOOR:** Azrock; **RESILIENT FLOOR BASE:** Roppe; **CARPET:** Collins & Aikman; **WALL COVERINGS:** Karaston; **PAINTS:** Sherwin-Williams; **CLOCK:** Campbellsville Industries; **PHOTO LAB EQUIPMENT:** Kreolab



SITE PLAN
1 ADMINISTRATION
2 FINE ARTS/AUDITORIUM
3 ATHLETIC/PHYSICAL EDUCATION
4 LIBRARY/MEDIA CENTER
5 CAFETERIA
6 TOWN SQUARE
7 GENERAL CLASSROOM
8 SCIENCE/TECHNOLOGY
9 VOCATIONAL
10 AGRICULTURAL MAGNET CLASSROOM
11 AGRICULTURAL MAGNET GREEN HOUSE
12 AGRICULTURAL MAGNET EQUIPMENT
13 AGRICULTURAL MAGNET LIVESTOCK BARNS
14 BUS DROP
15 VISITOR/STAFF PARKING
16 STUDENT PARKING

The Next Big Thing

by DARWIN HARRISON

PROJECT Library and Lecture Center, Odessa
CLIENT The University of Texas of the Permian Basin
ARCHITECT Kell Muñoz Wigodsky Architects
ASSOCIATE ARCHITECT Parkhill Smith & Cooper
CONTRACTOR Cooper Construction
CONSULTANTS Parkhill Smith & Cooper (civil & structural); KDC Landscaping (landscape); Shah Smith & Associates (MEP); BAI (acoustical/audio visual); Philip D. Leighton (library consultant)
PHOTOGRAPHER JQT Visual Productions

AT THE UNIVERSITY OF TEXAS OF THE PERMIAN Basin, the singular presence of the Mesa Building has for years dominated the campus. The massive size of the Mesa, UTPB's main academic building under whose roof most functions of the university are consolidated, has negated the need for most new construction during the last quarter century—that is, until recently, when UTPB officials decided to expand campus facilities.

Several newly completed projects highlight the challenges architects and planners face when designing around the Mesa Building. In addition, those same projects illustrate how the university's 1996 master plan has determined a course of action for future construction. The master plan specifies methods of responding to the unique conditions found on the UTPB campus and outlines goals that new projects should achieve.

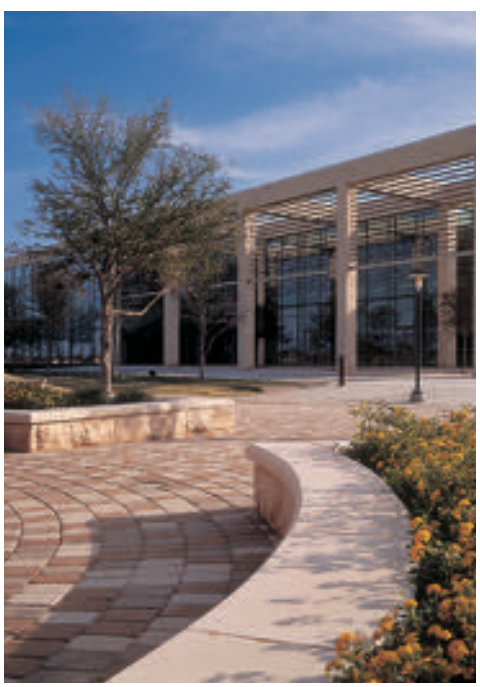
The commons area is finished with three varieties of locally-quarried limestone. The entrance to the library is in the background.

Completed as a joint venture between prime architects Kell Muñoz Wigodsky (now Kell Muñoz) of San Antonio and associate architects Parkhill Smith and Cooper of Midland, the 85,000-square-foot Library and Lecture Center is one of the new buildings that successfully demonstrates the benefits of following the master plan.

As outlined in the master plan, any new project being planned for the campus must first come to terms with the hulking monolith that is the Mesa Building. The master plan mandates that new buildings will not be as large as the Mesa, but states that they must hold their own against its powerful massing. The new Library and Lecture Center achieves this dictate by way of its long, linear shape—its perimeter layout is extremely simple and straightforward while maximizing the building's physical impact. Due to its linear stance, coupled with its siting, the library seems larger than it actually is. Both long facades provide a dramatic presence that gives the library an elegant exterior but that does not defer to the Mesa Building nor hide in its shadow. The south entry facade is largely a solid stone mass with bright, well-lit fire-stair volumes which act as beacons to the off-campus territory it faces. The long north facade defines a new quadrangle also outlined in the master plan. Such as it is, the austere yet animated composition of curtain wall construction creates a screen that allows uninterrupted outside views from most of the interior spaces. The rigorous layout of the windows along the north facade complements the strict geometry of the campus' existing buildings and plazas but the subtly random placement of mullions helps keep the facade from being overly severe. Inside, the low-emissivity glass and the soft northern light create a pleasant atmosphere for reading and studying. The highly visible sight of the library's two levels filled with students actively involved in their education will serve as a wonderful backdrop to the quadrangle as it develops over the course of future growth.

Another goal of the master plan is a campus designed on a more human scale than the Mesa, and with a better response to pedestrian concerns. Therefore, the new library is sited in a manner to create more walkways and spaces between buildings that offer vistas not possible on a single-building campus. The library has, in fact, completely realigned a new major entry to the campus. Before, one was likely to park on the west side of the Mesa Building and walk across a large parking lot into a dark, covered service/parking space. That previous entry into the Mesa seemed like a subterranean procession. Now the entry is a nicely landscaped area between the two buildings, animated with intelligent landscaping and aesthetic features such as outdoor sculpture and an understated yet dramatic water fountain. Visitors now headed to the Mesa will approach from the east through either its lower-level courtyards or possibly via its large upper-floor deck. Either way, the Mesa Building benefits greatly from the realignment of approach.

The library is a striking example of how a master plan can be utilized for its finer points as well. The library design responds to many of the challenges



(clockwise from top) The building's rigid structural bays are apparent from inside the library's upper-level reading room. The building's two lecture halls are equipped for multimedia presentations. A landscaped seating area around a fountain creates a pleasant outdoor space in front of the new facility.

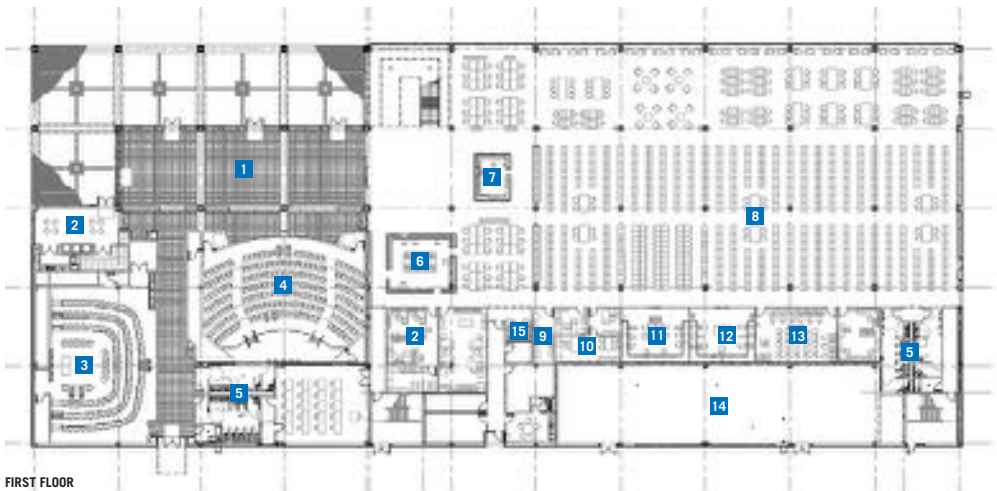
prescribed within the master plan yet does so without being too referential or dogmatic. The materials of the library were carefully chosen to coordinate but not mimic the Mesa. The stone is from a nearby quarry, adding a local connection that is appropriate and at the same time coordinates in color and texture with the Mesa's more generic cast-concrete panels. The library has a rigid 30-foot structural bay that is expressed clearly, showing a deliberate stance on structural layout that follows the precedent of the Mesa Building's severely logical structural system. The uninterrupted grid is used as underpinning for a more creative skin, and the use of sun screens, outdoor porticoes, light monitors, and curtain wall enliven the rigid framework. The master plan specifically prescribed that future buildings should avoid the monolithic one-building idea as exemplified by the Mesa, recommending colonnades, shade devices, bays, and other elements to subdivide long facades—which the new library does in elegant fashion.

Interpretation and misinterpretation of master plans, as well as the strict adherence to their dictates, is a much-debated topic in light of recent developments in campus planning and growth. (The ongoing Blanton Museum controversy springs to mind.) Universities in Texas and other states still wrestle with how to properly manage growth, and how to direct future construction that conforms to a unique, idealized vision. As realized on the UTPB campus, the new library demonstrates how an intelligent master plan can successfully guide planners toward an inspired, not a prescribed, solution.

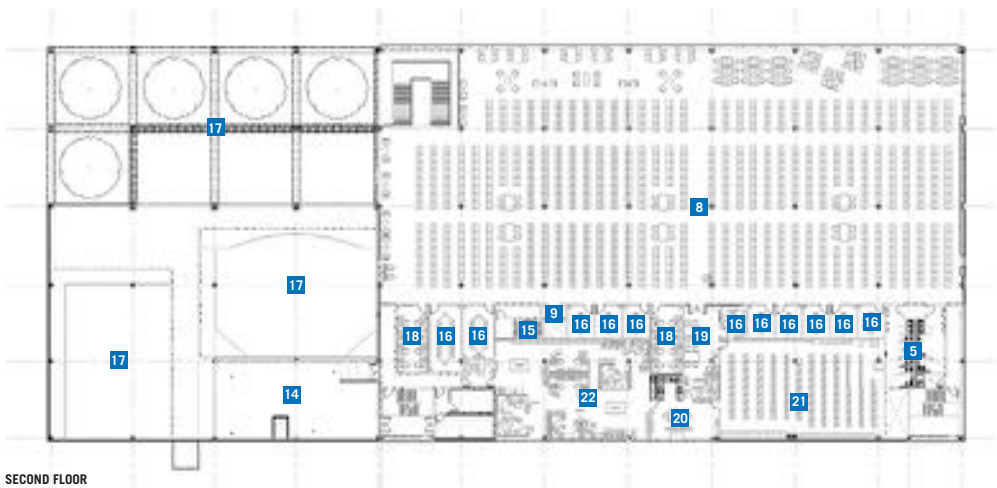
Darwin Harrison teaches architecture at Texas Tech University.

FLOOR PLAN

1 COMMONS
2 BREAK ROOM
3 SMALL LECTURE HALL
4 LARGE LECTURE HALL
5 REST ROOMS
6 CIRCULATION DESK
7 REFERENCE DESK
8 LIBRARY USER AREA & STACKS
9 COPY ROOM
10 DIRECTOR'S OFFICE
11 MICROFORM READERS
12 CD ROM READERS
13 A/V VIEWING
14 MECHANICAL
15 ELEVATOR
16 GROUP STUDY ROOM
17 OPEN TO BELOW
18 CARREL ROOM
19 ARCHIVES RESEARCH
20 ARCHIVES WORKROOM
21 ARCHIVES STACKS
22 TECHNICAL SERVICES



FIRST FLOOR



SECOND FLOOR

RESOURCES **UNIT PAVERS:** Pavestone; **MASONRY UNITS:** Texas Building Products; **LIMESTONE:** TexaStone Quarries; **CAST STONE:** Concrete Specialties; **ARCHITECTURAL METAL WORK:** Southwest Metalsmiths; **RAILINGS AND HANDRAILS:** York Metal Fabricators; **ARCHITECTURAL WOODWORK:** Terrill Manufacturing Company; **WATERPROOFING AND DAMPPROOFING:** Sonneborn; **BUILDING INSULATION:** Owens Corning; **ROOF AND DECK INSULATION:** Celotex; **MEMBRANE ROOFING:** The Garland Company; **METAL DOORS AND FRAMES:** Rocky Mountain Metals; **WOOD DOORS AND FRAMES:** Buell Door Company; **SPECIALTY DOORS:** Krieger Steel Products; **ENTRANCES AND STOREFRONTS:** Kawneer; **GYPSUM BOARD FRAMING AND ACCESSORIES:** USG; **TILE:** Daltile; **ACOUSTICAL CEILINGS:** USG; **WOOD FLOORING:** Permagrain; **ACOUSTICAL WALL TREATMENTS:** Lamvin; **PAINTS:** Sherwin-Williams; **SIGNAGE:** ASI Sign Systems; **AUDIENCE SEATING:** Irwin

DESIGN, AS TAUGHT AT RICE UNIVERSITY'S School of Architecture, is wide-ranging and open-ended. The school's approach to education is grounded in architectural discipline. However, architecture at Rice never focuses simply on hardware or on an obsession with form. Experience shows that without ideas, formal eloquence is hollow. Thinking, reflection, and criticism yield the ideas that lead students toward the best design.

Texas Architect asked Heidi Werner, a senior in the undergraduate architecture program, to document the design process that transpires in the classrooms and studios at Rice. Her images capture the essence of architecture as built thought, that a building is constructed with ideas and attitude while it is simultaneously fabricated in glass and steel.

photos by **HEIDI WERNER**

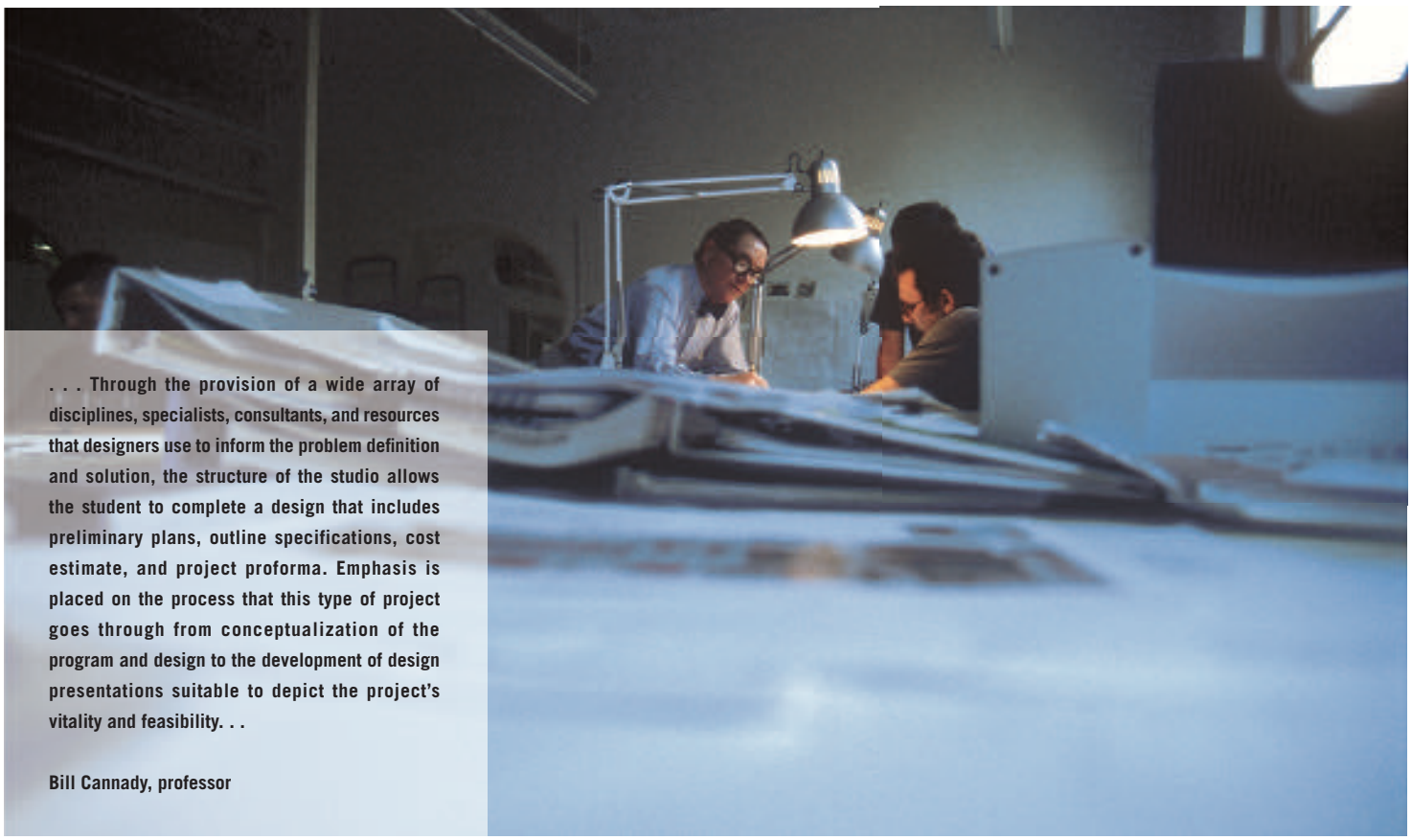
Designer Education

. . . There is no single logic to impart, no orthodoxy to embrace or reject, no forebears to revere, and no heirs to follow. If you are going to continue to work productively in the field, if you are going to avoid becoming part of the problem, you have to invent architecture for yourself. . .

Albert Pope, associate professor

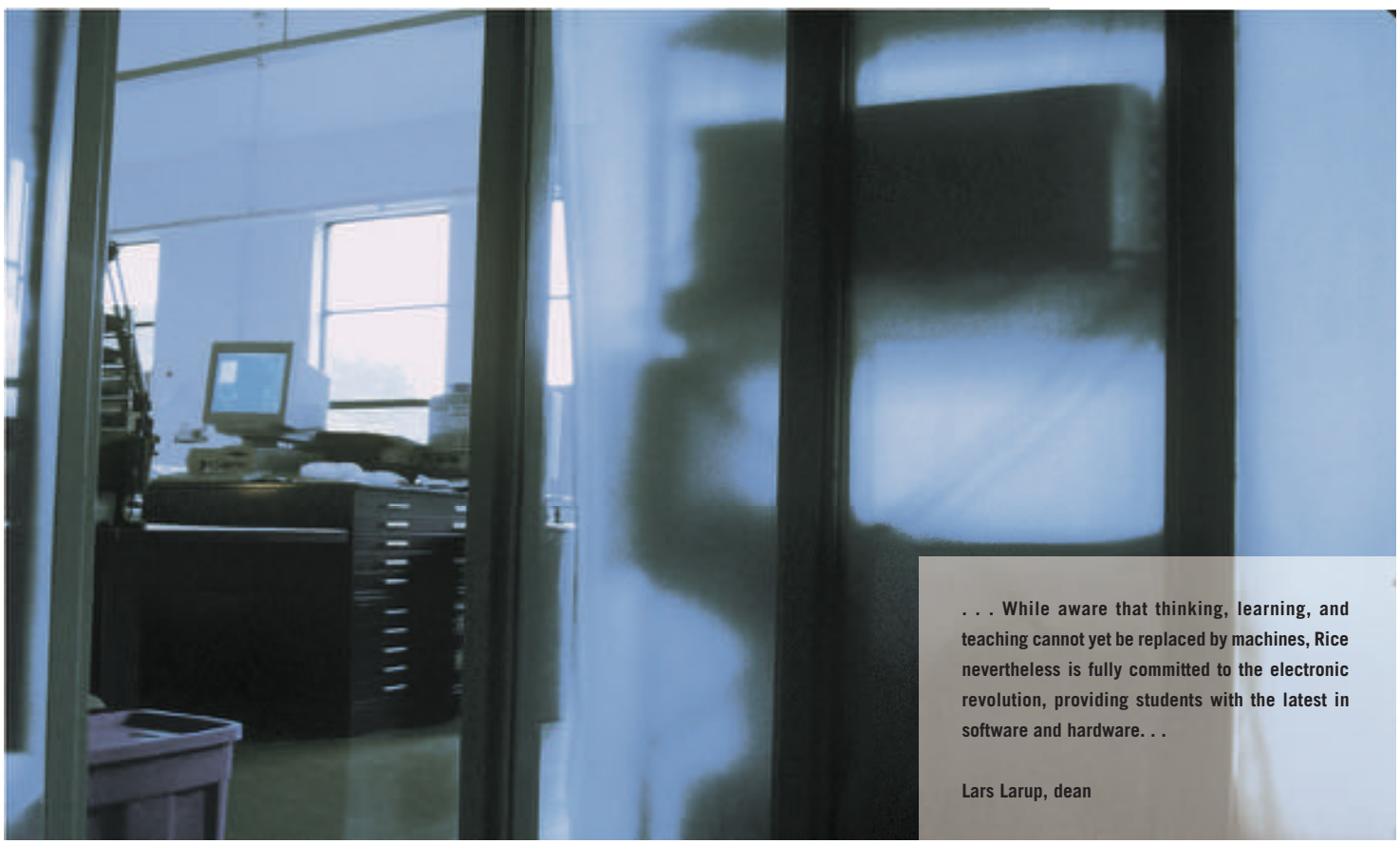
. . . What makes an extraordinary student project? A beautiful failure in which the reach exceeds the grasp. . .

Keith Krumwiede, assistant professor



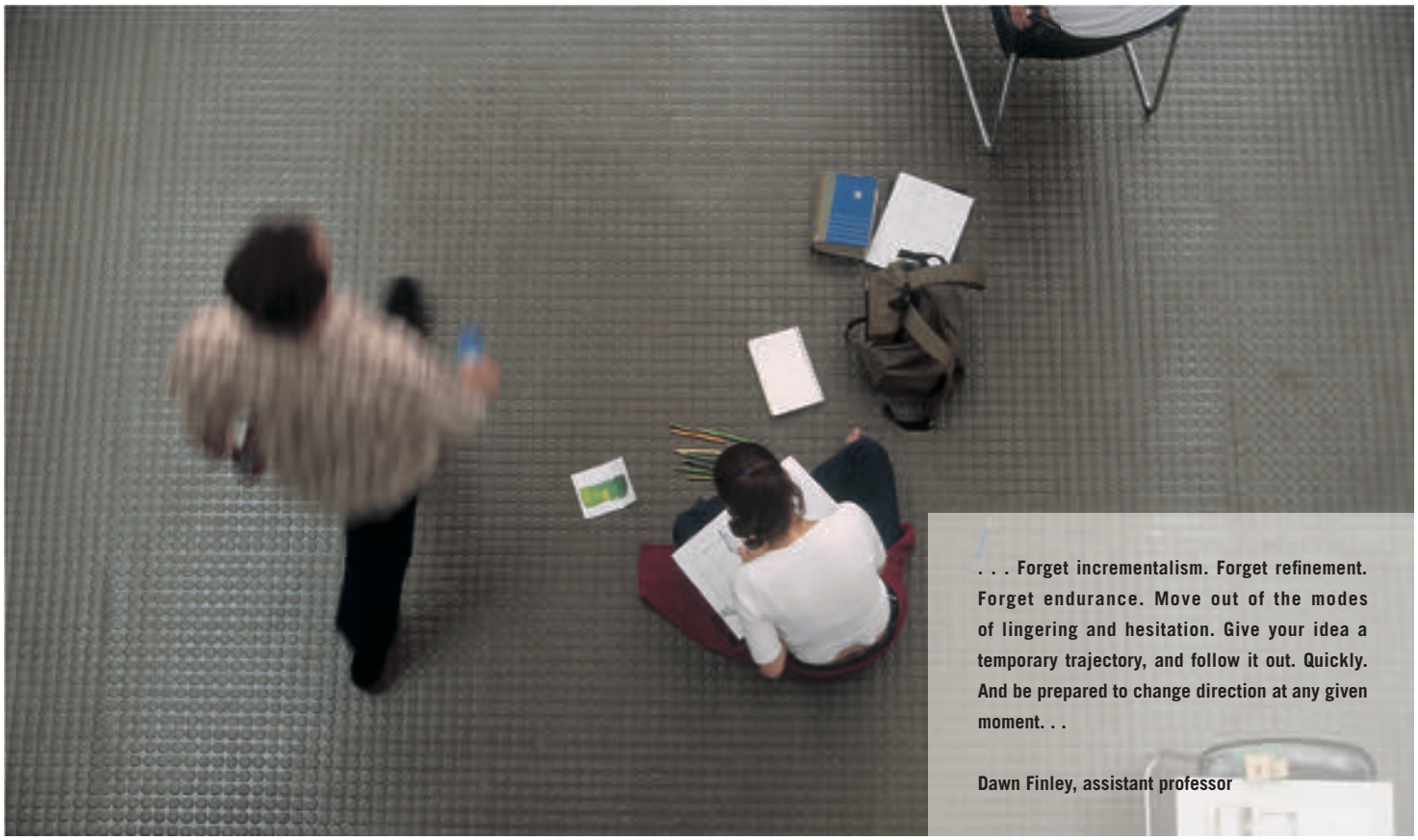
. . . Through the provision of a wide array of disciplines, specialists, consultants, and resources that designers use to inform the problem definition and solution, the structure of the studio allows the student to complete a design that includes preliminary plans, outline specifications, cost estimate, and project proforma. Emphasis is placed on the process that this type of project goes through from conceptualization of the program and design to the development of design presentations suitable to depict the project's vitality and feasibility. . .

Bill Cannady, professor



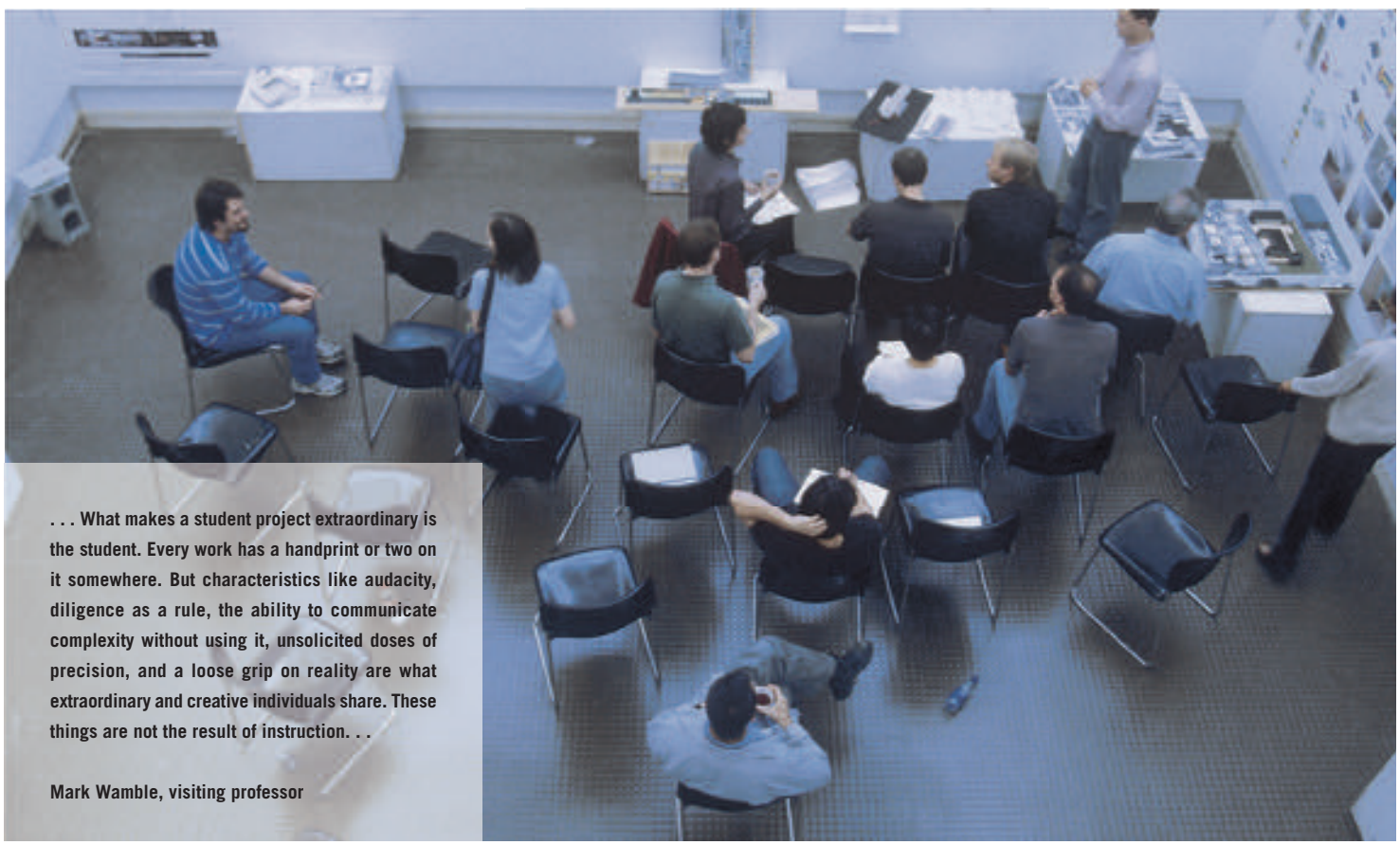
. . . While aware that thinking, learning, and teaching cannot yet be replaced by machines, Rice nevertheless is fully committed to the electronic revolution, providing students with the latest in software and hardware. . .

Lars Larup, dean



. . . Forget incrementalism. Forget refinement. Forget endurance. Move out of the modes of lingering and hesitation. Give your idea a temporary trajectory, and follow it out. Quickly. And be prepared to change direction at any given moment. . .

Dawn Finley, assistant professor



. . . What makes a student project extraordinary is the student. Every work has a handprint or two on it somewhere. But characteristics like audacity, diligence as a rule, the ability to communicate complexity without using it, unsolicited doses of precision, and a loose grip on reality are what extraordinary and creative individuals share. These things are not the result of instruction. . .

Mark Wamble, visiting professor

2001 TASB/TASA School Architecture Awards

In this issue's portfolio, Texas Architect presents a selection of winning projects from the 2001 School Architecture awards, sponsored by TASA/TASB. The full list of winners follows.

Caudill Award

Roy Lee Walker Elementary School, McKinney ISD, SHW Group

Educational Appropriateness Award

W. Charles Akins High School, Austin ISD, Pfluger Associates, STG Architects, and Parhsall & Associates Architects

Del Valle High School, Del Valle ISD, BLGY, Inc.

Flour Bluff High School, Flour Bluff ISD, Ferrell/Brown & Associates

Roy Lee Walker Elementary School, McKinney ISD, SHW Group

McKinney High School North, McKinney ISD, SHW Group

Vernon Solomon Performing Arts Center, Northwest ISD, Hahnfeld Hoffer Stanford

Whitehouse High School, Whitehouse ISD, Eubanks - Harris Architects

Value Award

Blanco High School, Blanco ISD, Fromberg Associates

Newman Smith High School, Carrollton-Farmers Branch ISD, PBK Architects

Margaret Moore Gleason Elementary School, Cypress-Fairbanks ISD, PBK Architects

Col. John O'Ensor Middle School, Socorro ISD, PSRBB Architects

West Oso Elementary School, West Oso ISD, Ferrell/Brown and Associates

Whitehouse High School, Whitehouse ISD, Eubanks - Harris Architects

Flour Bluff High School, Flour Bluff ISD, Ferrell/Brown & Associates

Dr. Rodney Cathey Middle School, McAllen ISD, PBK Architects

Orange Grove High School, Orange Grove ISD, WKMC Architects

Planning Award

W. Charles Akins High School, Austin ISD, Pfluger Associates, STG Architects, and Parhsall & Associates Architects

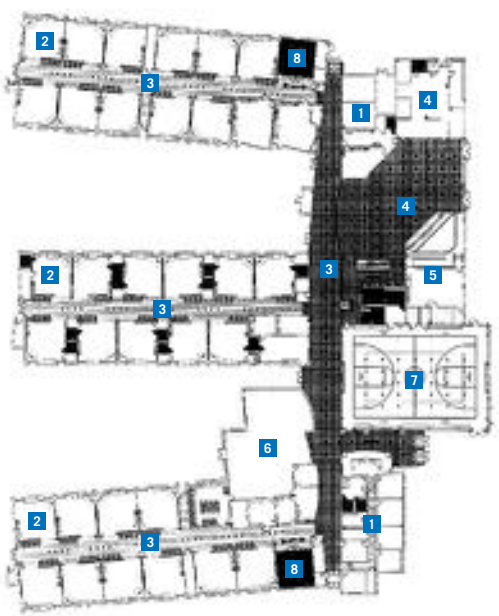
Flour Bluff High School, Flour Bluff ISD, Ferrell/Brown & Associates

Roy Lee Walker Elementary School, McKinney ISD, SHW Group

Spring High School, Spring ISD, CLR

"Award winners" continued on page 53

Roy Lee Walker Elementary School



FLOOR PLAN
1 ADMINISTRATION
2 CLASSROOMS
3 COMMONS/SUPPORT
4 DINING
5 FINE ARTS
6 MEDIA CENTER
7 PHYSICAL EDUCATION
8 RESTROOMS

PROJECT Roy Lee Walker Elementary School, McKinney
CLIENT McKinney Independent School District
ARCHITECT SHW Group, Inc.
CONTRACTOR Pogue, Inc.
CONSULTANTS Innovative Design; Fugro South (geotechnical & construction materials testing)
PHOTOGRAPHERS Jim Wilson; Michael Lyon

Caudill Award

Roy Lee Walker Elementary School may be the most comprehensively sustainable school in America, incorporating such elements as daylighting, rainwater harvesting, solar energy, wind energy, sundials, a weather station, a water habitat, native landscaping, community recycling, and building materials chosen for their environmental sensitivity. These combined elements help create a school in which students may learn about sustainable systems. Two main features of the school are the windmill and the stone cistern (top) that stand near the main entrance. The school is designed to collect all rainwater that hits the roof and the windmill circulates the rainwater from a network of cisterns through the school's irrigation system. Walker Elementary's six cisterns store up to 68,000 gallons of rainwater. Each cistern also has a filtration system to filter debris that washes from the roof. Teaching tools associated with the school's sustainable design are located throughout the building. The main entry corridor (bottom) is painted with colors of the rainbow—a consistent decorative theme chosen to represent the project's efforts to incorporate and protect the natural environment. Walker Elementary uses natural light as much as possible and daylighting is the key ingredient. Vertical daylight monitors on the roof bring in sunlight to provide the light needed during the day. Daylight monitors are installed above every classroom, as well as the cafeteria, music room, and main corridor. Each classroom has a light-level sensor that maintains a constant level of light in the learning space. The sensors constantly monitor the level of light, and when the level drops too low the electric lights automatically compensate. This helps reduce the amount of electricity used during the day. Another sustainable element is the use of space in the classroom wings. The design team reduced wasted space by widening the hallways and incorporating this otherwise unused space into areas dedicated to group activities and computer workstations.

TARA SPARKS

RESOURCES **CARPET:** Collins & Aikman; **FLOORING:** Armstrong; **CEILINGS:** Armstrong; **BRICK/MASONRY:** Acme Brick; **CABINETS:** Anderson Cabinets; **TILE:** Daltile; **DOOR HARDWARE:** McKinney, Sargent, Rockwood; **DOORS:** Reese, Graham, Binswanger; **INSULATION:** Johns Manville; **MOVABLE PARTITIONS:** Dietrich; **PAINT:** Kelly-Moore; **ROOFING:** Tamko, Atlas; **SKYLIGHTS:** Vistawall; **WINDOWS:** Binswanger Glass; **LIGHTING:** Lithonia Lighting

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Branch Crossing Junior High School

FLOOR PLAN
1 ADMINISTRATION
2 MAIN ENTRANCE
3 CLINIC
4 STAGE
5 COMMONS
6 CLASSROOMS
7 SPEECH
8 MULTI-PURPOSE
9 LIBRARY
10 SCIENCE
11 COURTYARD
12 FOOD SERVICE
13 HOME ECONOMICS
14 ART
15 INDUSTRIAL TECH
16 ORCHESTRA
17 CHOIR
18 BAND
19 GYM

PROJECT New Branch Crossing Junior HIgh School, Conroe
CLIENT Conroe Independent School District
ARCHITECT PBK Architects
CONTRACTOR Satterfield & Pontikes
CONSULTANTS RH George (MEP); Conti, Jumper, Gardner & Associates (structural); Lamb & Barger Engineers (civil); Frank Clements & Associates (food services)
PHOTOGRAPHER Jud Haggard

Design Award

Completed in June 2000, Branch Crossing Junior High School sits on 22 acres in Conroe. The appearance of the building works strongly with the community's desire to preserve the area's natural habitat. One of the main concepts in the design centers on "bringing the outside in" and works to bring into the building as much natural light and views of the surroundings as possible. The traditional appearance of the building (top) blends well with adjacent neighborhoods. Building the school on a site with a 17-foot natural drop challenged the architect who solved the problem by dividing the school's spaces into three areas that connect by a series of ramped corridors. Several 28-foot, floor-to-ceiling windows surround the main areas of the school, effectively reducing the need for artificial lighting. The main foyer of the building features a two-story, prismatic-shaped skylight that illuminates the area during the day. The majority of the windows are made with solar-shaded glass to reduce heat gain. The centrally located commons area provides a community environment in which students and staff interact during and between classes. In all, 1,500 students attend class each day in the school's 42 regular classrooms. The classrooms are arranged in "pods" of four that include math, social studies, English, and reading. The academic pods are arranged around the library (bottom), a configuration which allows for flexibility and grouping of classes. The commons area and library were built in a central location to separate the quiet academic area from activities taking place in the gym, vocational, and musical areas. Traditional materials such as cast-stone and brick were used to build the school. All materials were chosen for cost effectiveness, low maintenance, and durability.

TARA SPARKS

RESOURCES FENCES, GATES, AND HARDWARE: Anchor Fence; LIGHT GAUGE STEEL FRAMING: Unimas; WATERPROOFING AND DAMPPROOFING: Sonneborn; BUILDING INSULATION: Owens Corning; EXTERIOR INSULATION AND FINISH SYSTEMS: Finestone; BUILDING SEALANTS: Sonneborn; ROOF HATCHES: The Bilco Company; ISOLATED SKYLIGHTS: Kalwall; MEMBRANE ROOFING: Johns Manville; METAL ROOFING: Berridge Manufacturing Company; METAL DOORS AND FRAMES: Door Pro Systems; WOOD AND PLASTIC DOORS AND FRAMES: Buell Door Company; SOUND RETARDANT DOORS: Overly; ACCESS DOORS: Larsens; ROLLING COUNTER DOORS: Corwell Iron Works; GLASS REINFORCED CONCRETE: Weather Rok; TILE: Daltile; ACOUSTICAL CEILINGS: Armstrong; ATHLETIC SURFACING-INDOOR: Action Floor Systems

W. Charles Akins High School

SITE PLAN
1 BAND, ORCHESTRA, CHOIR
2 THEATER
3 ART, DANCE, DRAMA
4 EVENT ENTRY
5 COMPETITION AND PRACTICE GYMS
6 DRESSING ROOMS
7 KITCHEN
8 BUS DROP
9 FOOD COURT
10 OUTDOOR DINING
11 THEMATIC HOUSES ONE AND TWO
12 CENTRAL COURTYARD
13 THEMATIC HOUSES THREE AND FOUR
14 ADMINISTRATION
15 LIBRARY, MEDIA CENTER

PROJECT W. Charles Akins High School, Austin
CLIENT Austin Independent School District
ARCHITECT Pfluger Architects
ASSOCIATE ARCHITECT STG Partners, Inc., Parshall & Associates
CONTRACTOR Faulkner Construction Company
CONSULTANTS Jose I. Guerra Engineers (structural); HMG & Associates (mechanical); KLW Engineers (electrical and plumbing); Bury + Partners, IT Gonzalez (civil); Fugro South (geotechnical & construction materials testing); Boner Associates (sound and video); Millunz & Associates (food service); Texas Scenic (stage rigging); Kent Chatagnier (roofing)
PHOTOGRAPHER Leigh Christian

Planning Award

Completed last summer, W. Charles Akins High School is the first new high school in Austin in 10 years. The school for 2,400 students encompasses a series of four buildings organized around a natural bowl on the site and oriented to take advantage of daylight and prevailing breezes. The design is based around the concept of four "thematic houses"—information technology, art technology, biosciences technology, and industrial/engineering technology. Each "house" contains classrooms and science labs. The diverse South Austin community also uses Akins High School as a community center. To accommodate this need the main spaces – library, theater (top), cafeteria, and gymnasiums – are equally adaptable for use by the school or community. Akins High School is also an example of sustainable design. The school uses few windows and massive concrete block walls on the western facade to reduce heat gain and shield the courtyard. To maximize natural daylighting, major spaces are oriented to capture indirect sunlight while minimizing heat gain from direct sunlight. The circular layout of the buildings allows for optimal lighting and ventilation into all interior spaces. As a result of careful planning and prudent design, Akins High School is an efficient, cost-effective, and vital resource for South Austin.

TARA SPARKS

RESOURCES **FENCES, GATES, AND HANDRAILS:** Best Hardware, Ornamental Fence; **CONCRETE MATERIALS:** Transit Mix; **MASONRY UNITS:** Featherlite; **STRUCTURAL STEEL:** Southwest Steel Services; **METAL DECKING:** Vulcraft; **RAILINGS AND HANDRAILS:** Southwest Steel Services; **ARCHITECTURAL METALWORK:** Southwest Steel Services; **ARCHITECTURAL WOODWORK:** Symmetry; **BUILDING INSULATION:** Johns Manville, Dow Corning; **EXTERIOR INSULATION AND FINISH SYSTEMS:** TEIFS Wall Systems; **VAPOR RETARDERS:** Textrude; **ROOF AND WALL PANELS:** MBCI; **MEMBRANE ROOFING:** Soprema; **METAL ROOFING:** MBCI; **FASCIA AND SOFFIT PANELS:** MBCI; **ENTRANCES AND STOREFRONTS:** Vistawall; **UNIT SKYLIGHTS:** Naturalite Skylight Systems; **TILE:** Daltile, Armstrong; **ACOUSTICAL CEILINGS:** Celotex; **ATHLETIC WOOD FLOORING:** Action Floor Systems; **ACOUSTICAL TREATMENTS:** Tectum, Conwed; **PAINTS:** Sherwin-Williams; **HIGH PERFORMANCE COATINGS:** STO; **PHOTO LAB EQUIPMENT:** Kreolab (Photo/graphic Concepts)

Vernon Solomon Performing Arts Center

FLOOR PLAN
1 LOBBY
2 TICKET BOOTH
3 ENTRY
4 AUDITORIUM
5 CHOIR
6 LIBRARY
7 OFFICE
8 UNIFORM
9 ORCHESTRA PIT
10 STAGE
11 DRAMA
12 COSTUME
13 DRESSING ROOM
14 STAGE SHOP
15 SCENE SHOP
16 PERCUSSION
17 INSTRUMENT STORAGE
18 BAND
19 CONTROL ROOM
20 PRACTICE
21 ENSEMBLE
22 COMMONS

PROJECT Vernon Solomon Performing Arts Center, Justin
CLIENT Northwest Independent School District
ARCHITECT Hahnfeld Hoffer Stanford
CONTRACTOR Buford-Thompson Company
CONSULTANTS Baird, Hampton & Brown (MEP); Metro Structural Consultants (structural); Starr Tek Design (theatrical lighting); WJHW (acoustical, sound, and video consultant); Cheatham Associates (civil)
PHOTOGRAPHER Michael Lyon

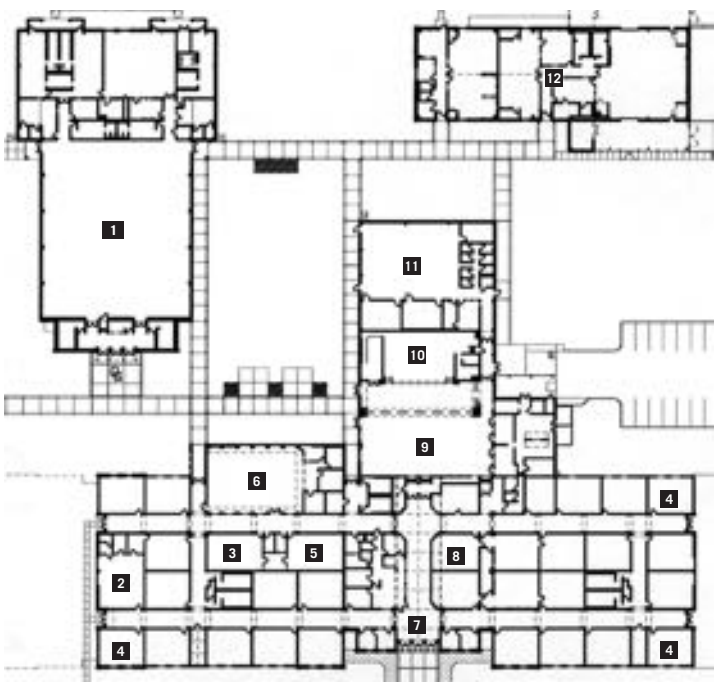
Innovation Award

The Vernon Solomon Performing Arts Center (top) is a state-of-the-art facility that serves the existing high school and middle school campuses. The major elements of the center include the lobby, commons, auditorium, 200-person band rehearsal hall, percussion/jazz hall, drama classroom, choir room, and ensemble and practice rooms. The multi-purpose auditorium (bottom) seats 800 and is designed to accommodate choir, band, orchestra, dance, and dramatic presentations. The auditorium is equipped with an orchestra pit, stage loft, sound and lighting booth, side balconies for musicians, scene shop, and stage equipment storage. The director's office, music library, and instrument storage rooms are located to provide sound isolation from adjacent rehearsal spaces. A recording studio is located between the band rehearsal hall and large-ensemble rooms. The drama area has a "black box" classroom with a portable 24-setting dimmer system and a catwalk gallery providing access to lighting grids and for scenery adjustment. The choir area holds up to 125 vocalists and, like the drama area, has a director's office and storage area. The practice room suite is located next to the choir area and includes seven solo practice rooms, two multiple-musician rooms, one small-ensemble room, and one large-ensemble/studio room. The architects were challenged to find a lighting and acoustical plan that would satisfy all of these functions, including a percussion/jazz area that must be responsive to both high and low frequencies. Each rehearsal facility was carefully evaluated to provide the proper acoustical environment. Ceiling height, space proportions, and room shaping were all considered when designing the facility. The design team introduced an acoustical envelope over all performance spaces to eliminate outside noise from the nearby regional airport. Storage rooms, equipment, and uniform rooms were used to create buffer zones for maximum sound isolation.

TARA SPARKS

RESOURCES **FACE BRICK:** Acme Brick; **BURNISHED CONCRETE MASONRY UNITS:** Texas Masonry Builders Products; **WOOD DOORS:** VT Industries; **PLASTIC GLAZING:** Kalwall; **GLAZED CURTAINWALL:** Kawneer; **TILE:** Daltile; **TERRAZZO:** American Terrazzo; **WOOD FLOORING:** Bauer Floors; **ACOUSTICAL WALL PANELS:** Conwed; **AUDITORIUM SEATING:** Irwin

Orange Grove High School



SITE PLAN
1 GYM
2 ART ROOM
3 BUSINESS LAB
4 CLASSROOMS
5 COMPUTER LAB
6 LIBRARY
7 ENTRY
8 SCIENCE CLASSROOMS
9 CAFETERIA
10 STAGE
11 BAND HALL
12 AGRICULTURAL/SHOP BUILDING

PROJECT Orange Grove High School, Orange Grove
CLIENT Orange Grove Independent School District
ARCHITECT WKMC Architects
CONTRACTOR Don Krueger Construction Company
CONSULTANTS Callins Haggard & Associates (MEP); Laurence & Associates
PHOTOGRAPHER Ivy Associates

Value Award

In the small agricultural and ranching community of Orange Grove, northwest of Corpus Christi, the new high school serves both its students and the community. (top) Orange Grove High School functions as the primary public facility for the city as well as for the school district. The architect worked with community leaders to plan a school to reflect the town's unique history and culture. The public functions of the school are designed to operate independently both during and after school. Some of these functions take place in the cafeteria, the only space available for the community to use as a meeting hall, and (bottom) the school library, which also serves as the city's public library after school hours. In addition, computer labs are used for adult-education evening classrooms. The design of the building incorporates features from several regional buildings and reflects the community's heritage. The exterior brickwork is taken from traditional Texas masonry work constructed by German immigrants who originally settled the town. Galvanized metal roofing, siding, and exterior walkways are drawn from area agricultural structures. Some exterior building materials were chosen to correspond with building materials traditionally found in South Texas. The region's Hispanic influence can be seen in the use of stucco and tile. The campus character fits into the rural ranch setting of the community. The school has 38 classrooms, laboratories, a gymnasium, and an agriculture building. The high school was built with plans for future growth. The school's master plan is sited on 53 acres and will eventually hold 900 students.

TARA SPARKS

RESOURCES **CONCRETE MATERIALS:** Alamo Concrete Products; **CONCRETE MATERIALS:** Alamo Concrete Products; **MASONRY UNITS:** Featherlite Brick, Athens Brick Company; **CAST STONE:** Pyramid Stone Company; **METAL MATERIALS:** Western Steel; **METAL DECKING:** Vulcraft; **RAILINGS AND HANDRAILS:** Western Steel; **ARCHITECTURAL WOODWORK:** Hoffman Millwork; **LAMINATES:** Nevamar; **BUILDING INSULATION:** Dow Corning; **ROOF AND DESK INSULATION:** Johns Manville; **EXTERIOR INSULATION AND FINISH SYSTEMS:** Dryvit; **ROOF AND WALL PANELS:** Fabral; **SIDING:** Johns Manville; **MEMBRANE ROOFING:** MBCI; **METAL DOORS AND FRAMES:** Ceco; **WOOD AND PLASTIC DOORS:** Buell Door; **SPECIALTY DOORS:** Windsor Door; **ENTRANCES AND STOREFRONTS:** United States Aluminum; **GLASS:** Saflex; **TILE:** American Olean; **CERAMIC TILE:** D'Hanis (quarry); **ACOUSTICAL CEILINGS:** Armstrong; **WOOD FLOORING:** Action Floor Systems; **WALL COVERINGS:** Essex Wallcovering; **PAINTS:** Sherwin-Williams; **LOCKERS:** List Industries

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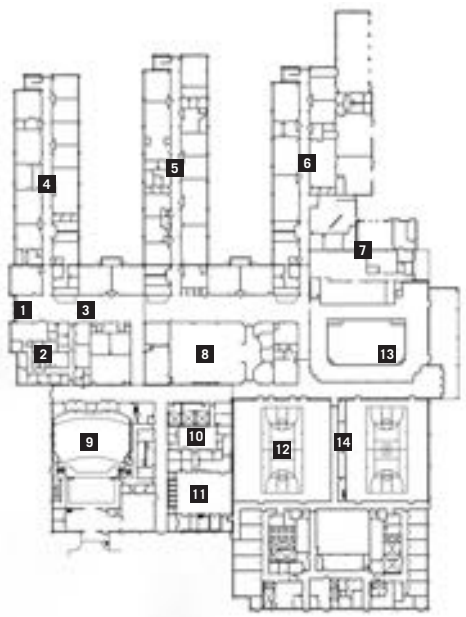
Del Valle High School



FLOOR PLAN
1 ENTRY
2 ADMINISTRATION
3 LOBBY
4 ART/BUSINESS/COMMUNICATIONS
5 HEALTH SCIENCES/MILITARY/HUMAN DEVELOPMENT
6 CAREER/TECHNOLOGY
7 CAFETERIA
8 LEARNING RESOURCE CENTER
9 PERFORMING ARTS
10 CHOIR
11 BAND
12 COMPETITION GYM
13 P.E. GYM
14 P.E./ATHLETICS DRESSING

PROJECT Del Valle High School, Del Valle
CLIENT Del Valle Independent School District
ARCHITECT BLGY, Inc.
CONTRACTOR Faulkner Construction Company
CONSULTANTS Datum Engineers (structural); MEP Engineering (MEP); K.C. Engineering (civil); Alex Boedy (landscape)
PHOTOGRAPHER Greg Hursley

Educational Appropriateness Award

(top) Del Valle High School is designed to allow students to participate in educational activities where they feel like they are outside without every having to leave the classroom. Each classroom has access to exterior light and natural ventilation, reflecting the importance of natural light to an effective learning environment. Computer labs, located in several areas throughout the building, are equipped with the latest in educational technology. Noisy areas such as gyms, music rehearsal halls, and vocational shops are located at the rear of the school. The first-floor academic area is split into three wings—art/business/communications, health sciences/military/human development, and career/technology. Classroom wings, vocational shops, cafeteria, administrative offices, and library (middle) are all located around the main corridor entry and, along with the gym and theater, can be sectioned off by roll-down grilles installed to secure classroom areas from after-hours areas. The school has energy-efficient mechanical systems that are monitored by a district-wide energy-management system to achieve optimum life-cycle cost and energy performance. The school was designed with the creative use of metal trusses, a custom floor-tile pattern, and a detailed storefront design inspired by Frank Lloyd Wright. Split-faced CMU veneer emphasizes the importance of limestone to Central Texas, and the red-glazed ceramic tile acknowledges the district's school colors. The cafeteria offers an outdoor eating area protected from weather. The campus has many athletic areas including a softball field, baseball field, athletic field, and tennis courts. All the fields are located for easy access from dressing rooms adjacent to the gyms. The entire site is master-planned to allow for future expansions, portable classroom buildings, and the addition of other district facilities.

TARA SPARKS

RESOURCES **MASONRY UNITS:** Featherlite; **STEEL JOISTS:** Vulcraft; **LADDER AND HANDRAILS:** Bludau Fabrication; **MILLWORK:** Timber Casework Manufacturing; **MODIFIED BITUMEN ROOFING:** Johns Manville; **EIFS:** Senergy; **PLASTIC LAMINATE DOORS:** Buell Door Company; **ALUMINUM WINDOWS:** TRACO; **TILE:** Daltile; **ACOUSTICAL CEILING:** Celotex; **ACOUSTICAL PANELS:** Tectum; **PAINT:** Sherwin-Williams; **SOUND MODULES:** Acoustic Systems; **SIGNAGE:** Austin Architectural; **METAL LOCKERS:** List Industries; **STAGE EQUIPMENT:** Texas Scenic; **SEATING:** Irwin

"Mold" continued from page 21

trained consultants to conduct indoor air quality surveys. Unfortunately, the expertise of such specialists varies widely, as there are no federal or state regulations governing professional practice for indoor air services.

Many problems can be detected and corrected by building maintenance personnel. A typical IAQ investigation would involve the following steps:

- Determine who is affected together with when and where they are affected.
- Inventory potential sources of environmental agents that may be related to indoor air quality problems.
- Identify locations and sources of moisture intrusion or water damage.
- Investigate HVAC system problems and air movement pathways.

A key step in resolving mold-related problems is to review complaints and comments from the facility users. Areas associated with frequent occupant complaints should be checked for airborne contaminants, visible mold contamination, and for water-damaged materials. Throughout the process, it is recommended that the building's occupants be kept informed of the findings and process.

For small areas of contamination, many strains of molds can be safely removed by simply cleaning with bleach and water or an appropriate cleanser. However, even a small area of heavy mold growth may have the potential to release a large quantity of spores into the air. The cleaning materials should be discarded after use to prevent further contamination. After cleaning, the affected area should be allowed to dry completely. The recurrence of mold growth may indicate that the source of moisture is still present. Although the use of biocides is not commonly recommended, there are some instances where professional judgement may indicate its use.

Large or complex remediation efforts, or the remediation of *Stachybotrys*, are much more extensive and best left to specially trained professionals. Large projects may require complete containment of the work area, as well as personal protective equipment and the removal of contaminated materials. Containment is also required to limit the spread of mold spores. The extent of contamination – along with the potential for human exposure – often indicate the level of containment required.

In areas of extensive contamination, absorbent materials such as carpet, gypsum board, insulation, and ceiling tile may have to be completely replaced. The removal of wall coverings over mold growth and contaminated materials can release spores into the air. Building materials and furnishings that are not salvageable should be double-bagged and removed from the premises to prevent mold spores from spreading throughout the building. The damaged materials can usually be discarded as ordinary construction waste.

After remediation efforts are completed, the indoor air quality should be tested to ensure that the problem has been corrected. Efforts should be made to properly maintain the facility to prevent a recurrence.

For large-scale contaminations of this type, the EPA's publication "Mold Remediation in Schools and Commercial Buildings" is an excellent reference for the causes of mold growth within buildings. The booklet outlines procedures for identifying mold problems and for facilitating their remediation. However, it may still be necessary to consult a mold remediation expert for recommendations on removal.

In addition, the Texas Department of Health (TDH) has published "Voluntary Indoor Air Quality Guidelines for Public Schools." Although the guidelines do not directly address mold-related air quality problems, the TDH recommends the establishment of a local school-based indoor air quality program to monitor for potential air quality problems, including mold contaminations.

John Brooks, AIA, is a senior design architect with WorkPlace Design Group, a division of Dallas-based WorkPlaceUSA.

Web Resources for Mold Information

U.S. Environmental Protection Agency
www.epa.gov/iaq/molds

U.S. Centers for Disease Control
www.cdc.gov/nceh/asthma/factsheets/molds/default.htm

Texas Department of Health
www.tdh.state.tx.us/beh/iaq/default.htm

California Department of Health Services
www.cal-iaq.org

The American Lung Association
www.lungusa.org

How to Prevent Mold

Many cases of mold contaminations are caused by problems recurring from project to project, the most common being improper control of moisture within the exterior building envelope. Leaky and poorly maintained roofs or skylights are repeatedly cited as a typical source. Special design attention should given to ensure that the roof properly drains. Attention should also be given to parapet and roof junctures, vapor barriers, flashing, and properly weeping windows.

Various experts offer the following recommendations for mold prevention:

1. Maintain low indoor humidity levels (from 30- to 50-percent relative humidity). To reduce moisture levels in the air, repair leaks, increase ventilation (if the outside air is cold and dry), or dehumidify (if the outside air is warm and humid).
2. Use an air conditioner or a dehumidifier during humid months.
3. Be sure there is adequate ventilation, including exhaust fans in kitchens and bathrooms. Vent moisture-generating appliances such as clothes dryers to the exterior.
4. Add mold inhibitors to paints.
5. Clean bathrooms with mold-killing products.
6. Do not carpet bathrooms.
7. Remove and replace flooded carpets.
8. Repair leaky plumbing, building envelope leaks, or other sources of water quickly.
9. Wash mold off hard surfaces and dry completely. Replace absorbent materials if they are contaminated with mold.
10. Keep HVAC drip pans clean, flowing properly, and unobstructed.
11. Don't let foundations stay wet. Provide proper drainage for crawlspaces and slope grades away from the foundation.
12. Perform regular building and HVAC inspections and maintenance as scheduled.
13. Clean and dry wet spots within 48 hours.
14. Vinyl wall covering used on exterior walls should be micro-vented to allow moisture to pass through. The VWC should also be specified to have anti-microbial coating and mildicide. The substrate should be properly primed with a mold-inhibiting primer.
15. Painted surfaces with mold contamination should be cleaned prior to repainting. Paint applied over mold is likely to peel.

"Award winners" continued from page 42

Design Award

W. Charles Akins High School, Austin ISD, Pfluger Associates, STG Architects, and Parhsall & Associates Architects

Newman Smith High School, Carrollton-Farmers Branch ISD, PBK Architects

Branch Crossing Jr. High School, Conroe ISD, PBK Architects

Orange Grove High School, Orange Grove ISD, WKMC Architects

Col. John O'Ensor Middle School, Socorro ISD, PSRBB Architects

Springtown High School, Springtown ISD, SHW Group

Margaret Moore Gleason Elementary School, Cypress-Fairbanks ISD, PBK Architects

Del Valle High School, Del Valle ISD, BLGY

Farmersville High School, Farmersville ISD, WRA Architects

Coppell High School, Coppell ISD, SHW Group

Lone Star Elementary School, Keller ISD, VLK Architects

Dr. Rodney Cathey Middle School, McAllen ISD, PBK Architects

Roy Lee Walker Elementary School, McKinney ISD, SHW Group

Dr. Ralph H. Poteet High School Phase IV, Mesquite ISD, WRA Architects

Vernon Solomon Performing Arts Center, Northwest ISD, Hahnfeld Hoffer Stanford

Waxahachie ISD Fine Arts Center, Waxahachie ISD, SHW Group

Whitehouse High School, Whitehouse ISD, Eubanks - Harris Architects

Innovation Award

W. Charles Akins High School. Austin ISD, Pfluger Associates, STG Architects, and Parhsall & Associates Architects

Coppell High School, Coppell ISD, SHW Group

Roy Lee Walker Elementary School, McKinney ISD, SHW Group

McKinney High School North, McKinney ISD, SHW Group

Vernon Solomon Performing Arts Center, Northwest ISD, Hahnfeld Hoffer Stanford

Col. John O'Ensor Middle School, Socorro ISD, PSRBB Architects

A Specifier's Look at 'Green' Products in Construction

The traditional methods of selecting and specifying a product based on code compliance, performance, aesthetics, cost, and availability will no longer be the sole basis of specifying in a "green world." Whether you're a direct-sales employee of a company or an independent product representative, your ability to understand and promote the sustainable attributes of your products will have a large impact on your success in the near future.

Governmental bodies, school districts, university systems, and corporate America are greening their building projects at an increasing rate. Supplying this ever-increasing number of sustainable projects will require new skills, knowledge, products, and practices. This article will outline some of the questions you will face and some basic steps you and your company can take to meet these new opportunities.

With most everything else in the world today, learning the language of sustainability is a good first step. Start with some of the more common terminology listed at the end of this column and follow up with glossaries included in many of the publications on sustainability. Understand those terms most directly related to your product line.

Learn more about the environmental direction of your company. Many companies have very aggressive environmental goals and policies, not only to comply with certain regulatory mandates, but also to meet the environmental concerns of their shareholders. Does your company have Web pages dedicated to environmental stewardship?

Become familiar with the sustainable attributes of your product. Be able to discuss the products origins and manufacturer. What's its recycled content; what wastes are generated in its manufacture; are there toxic by-products in its manufacture; what's the embodied energy? If you can't answer these questions, encourage your company to develop and publish "environmental fact sheets." Refer to the *HOK Product Questionnaire* on their Web site for an excellent example of a product questionnaire focused on these questions.

There are many publications, Web sites, and directories dedicated to sustainable products with more arriving daily. Encourage your marketing department to explore and take advantage of promoting your sustainable products through these media. Can your product labels be improved to express its recycled content, nontoxic content, organic content, or classification as a recyclable feedstock?

Does your product qualify for certification under one of the current certification programs such as "Green Seal," Scientific Certification Systems or has ISO 14000 environmental criteria been met? Is your trade group developing certification standards for "green" materials?

Recently, a subcontractor's project schedule was jeopardized when his supplier was unable to provide the specified "green" submittal data. Not until the supplier was by-passed and the manufacturer contacted directly did the subcontractor obtain the needed documentation. Educate your suppliers on the products' sustainable aspects; provide them with documentation for recycled content, certifications, etc. to expedite the process.

Be aware of how your products are packaged and shipped to the job site. Can packaging be altered to reduce job-site waste? Are the packing materials returnable, reusable, or easily recycled? While there is a ready market for cardboard and wood pallets, "shrink-wrap" plastics and certain foam packing materials have no recycle market and typically end up in the landfill. Consider renewable, biodegradable starch-based pellets and wraps rather than petrochemical-based materials.

What's the life cycle of your product? Can it be disassembled and reused or recycled once it's fulfilled its serviceable life in its first-generation use? What are the alternatives to wasteful landfilling? Has your company explored "green leasing" or reclamation programs to create potentially new profit streams and lasting customer partnerships?

These are just some of the questions specifiers will be asking product representatives in the future. As the saying goes: "Become the solution not the problem." Understanding sustainability and the ability to qualify your products as "green" can have positive impact on your sales. It will also illustrate to your customers your concern and commitment to a healthier, more sustainable environment.

GREG ROBERTS, AIA, CSI

Greg Roberts, AIA, is an associate and senior specification writer with Watkins Hamilton Ross Architects in Houston.

Sustainablity Glossary

Embodied energy: The total energy that a product may be said to "contain," including all energy used in growing, extracting, and manufacturing it and the energy used to transport it to the point of use. The embodied energy of a structure or system includes the embodied energy of its components plus the energy used in construction.

Life cycle: All stages of a product's life, beginning with raw materials acquisition, and continuing through processing, materials manufacturer, product fabrication, and use, and concluding with waste management, recycling, or reuse programs.

Offgas; outgas: A process of evaporation or chemical decomposition through which vapors are released from materials.

Post-consumer waste recycled content: A reclaimed waste product that has already served a purpose to a consumer and has been diverted or separated from waste management systems for recycling. Most suppliers can specify the percentage of post-consumer waste (PCW) content in their materials.

Pre-consumer recycled material; post-industrial recycled material: A material that is removed from source gathering or production processes (such as scrap, breakage, or returned inventory) and returned to the original manufacturing process or an alternative process. Pre-consumer recycled materials have not yet reached a consumer for the intended use.

Recycled material: Material that would otherwise be destined for disposal but is diverted or separated from the waste stream, reintroduced as material feedstock, and processed into end products.

Renewable resource: A resource that is being replenished at a rate equal to or greater than its rate of depletion.

Source reduction; pre-cycling: Minimization of waste at the start of a process or activity so that there is a reduced amount of waste to recycle or dispose.

Sustainable: A concept that subscribes to "meeting the needs of the present without compromising the ability of future generations to meet their own needs." Achieving a balance among extraction and renewal and environmental inputs and outputs, so as to cause no overall net environmental burden or deficit. To be truly sustainable, a human community must not decrease biodiversity, must not consume resources faster than they are renewed, must recycle and reuse virtually all materials, and must rely primarily on resources of its own region.

Volatile organic compound (VOC): A large family of chemicals based on carbon and hydrogen structures that vaporize at room temperature.

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September 11 and Sustainable Architecture – a Sobering Connection

What happened September 11 was a horrible thing. However, the silver lining in this cloud is a strong wake-up call to America—and its leaders in the building industry, architects included. Right after agriculture, the building industry is the next most energy and resource consuming activity on earth. As architects we have a unique opportunity to help set the United States on a path to greater prosperity and a healthier environment, to say nothing of national security, by designing buildings that consume less energy to build and operate.

By helping enact simple and very achievable measures, we can sincerely "act locally while thinking globally." Examples include conscious choices when laying out our projects. Proper solar orientation can achieve as much as a 50 percent reduction in energy consumption. Controlling the infiltration of outside air is also critical. Lighting and window choices come next. If every building in North America was built and/or retrofitted with energy-efficient lighting, such as fluorescent; and at least double-pane insulating glazing, we could effectively reduce the amount of oil we consume from the Middle East.

Speaking of energy sources, consider this: harvesting the oil from the Arctic National Wildlife Preserve is a long-term and risky proposition that will do little to bolster our energy independence. Indeed, it may just end up prolonging our coming to grips with the reality of serious energy conservation. Simple energy-efficiency measures are *the* rapid-deployment energy resource. Also, by spending less of our money on Middle East oil imports we can help choke off the financing of much of the western world's terrorism.

To quote Amory and Hunter Lovins of the Rocky Mountain Institute: "Compared to 1975, America used 40 percent less energy and 49 percent less oil last year to produce each dollar of gross domestic product. Those savings are now the nation's largest 'source' of energy—five times domestic oil output. Most were achieved in just six years, from 1979 to 1985, when GDP grew 16 percent, total oil use fell 15 percent, and Gulf imports fell 87 percent. Maintaining that pace could have eliminated all Gulf imports after 1985. Modern efficiency technologies can put another $300 billion a year back in Americans' pockets.... Saving energy is the fastest way to blunt OPEC's market power, beat down prices, and expand the share of energy supply from invulnerable sources."

Let's continue to exert our leadership role in the design profession. This means educating our clients on the benefits of employing sustainable design into *every* one of our endeavors. This also means enlightening ourselves to include sustainable design practices into *every* project we are involved in.

It is no longer just a matter of spending some extra construction dollars (usually in the two to three percent range) to save a lot of money in operation costs. It is every bit as much an issue of independence and national security.

PETER L. PFEIFFER, AIA

Peter Pfeiffer, AIA, is a principal of Barley + Pfeiffer Architects in Austin.

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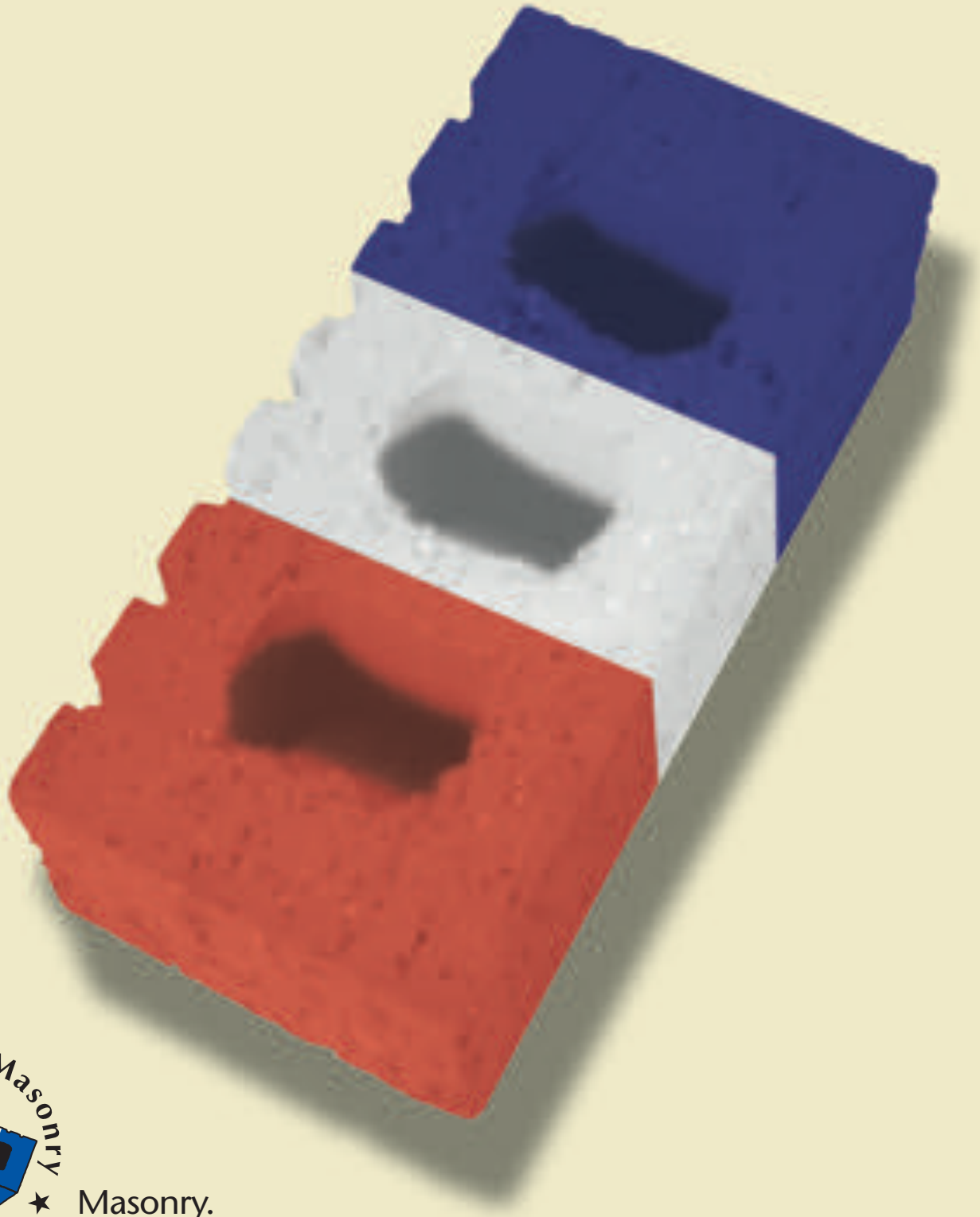

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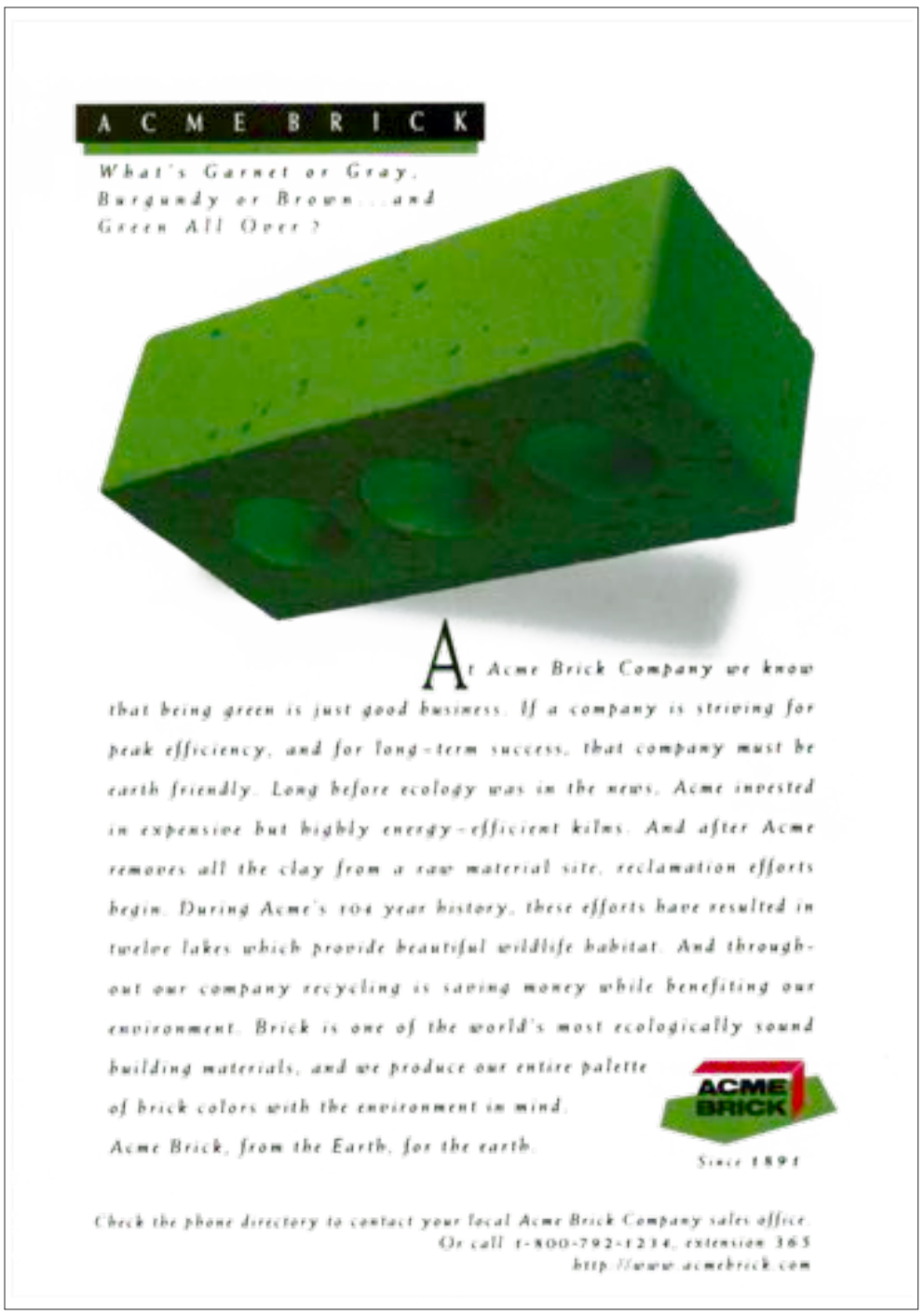

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Marketplace

Marketplace

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Marketplace

Elementary Education

The best school designs, old or new, teach subliminal lessons.

I DO NOT RECALL IF THE QUESTION WAS "what building type has the best architecture today" or "what building offers the most creative opportunity?" Either way the answer from a celebrated design colleague was instant and unambiguous: "Museums are where you find the best architecture."

I sure hope not. If we ever find ourselves contracted to such a small circle, we should never admit it. Personally, I vote for schools. Schools are where architecture is at—or at least where it ought to be. The opportunity to help jury this year's TASA/TASB design awards reminded me how incredibly important school design is, and how amazingly difficult it has become.

The public school, that most ubiquitous building type, is almost everyone's first and possibly most formative introduction to architecture as symbol and civic meeting place. How can anyone forget the sights, sounds, smells, and even the scale of the spaces of the schools of their childhood? The school resides both at the core of each neighborhood and at the beginning of each life journey. There is no other design opportunity quite like it.

When I was a child, in the 1960s, there were just two kinds of schools—the old, classical ones and the new, modern ones. The old schools were grander, with brick and stone and tall windows and central corridors with pendant light fixtures. They were imposing and serious, and with a certain type of principal at the helm, a little scary. The new ones were low and lean, with broad canopied breezeways and ribboned windows. They were neighborly and no-nonsense; and with a certain type of principal at the helm, a little scary. Neither one of these kinds of schools was air-conditioned. What both kinds of schools shared was not fully grasped by me in my youth—sensitive solar orientations, open courtyards, open doors. Materials were simple and honest – usually brick, wood, glass, tile, terrazzo, and large slabs of honed black slate repetitively experienced at very close proximity – offering subliminal lessons in architectural materiality. No carpet, no vinyl, no lay-in ceilings, no Crayola graphics, no contrived imagery. Schools were just architecture as a place for education—solid structures born of simple virtues.

Times have changed and nothing is simple anymore. Thankfully, low expectations are not the problem. Clients want environmental sensitivity yet few windows, fortress-like security yet a sense of welcoming, flexibility and permanence, beauty and low cost. They have a dauntingly clear image of what constitutes beauty, and they too often select architects based on the lowest average square-foot cost of their recent portfolio. Administrators enforce zero-tolerance policies that suspend students for nail file possession, yet they so yearn for a fun learning environment that they would prefer a design that emulates a shopping mall rather than "look too much like a school." Add procurement methods that have diluted the architect's authority, and it's a wonder that good school design ever happens. I give school architects a "10" for degree of difficulty.

Architects' responses to this richly conflicted environment range from the profound to the zany. The best, as always, give form to the core virtues. Their designs convey a sense of civic and social purpose, a respect for context and environment. They are defined by clarity and order, and they invest classrooms with controlled natural light. They give teachers good places to teach, and they display to students the beauty of real materials and the honor in putting them together well.

Good school design does happen, evidenced by this issue. The challenge is to maintain focus on the core vision and the serious business of school design. Perhaps if we pause and ponder those days long ago at the chalkboard, we will remember again how to simplify the equation.

DAVID RICHTER, FAIA

David Richter, FAIA, is a principal of Richter Architects in Corpus Christi.

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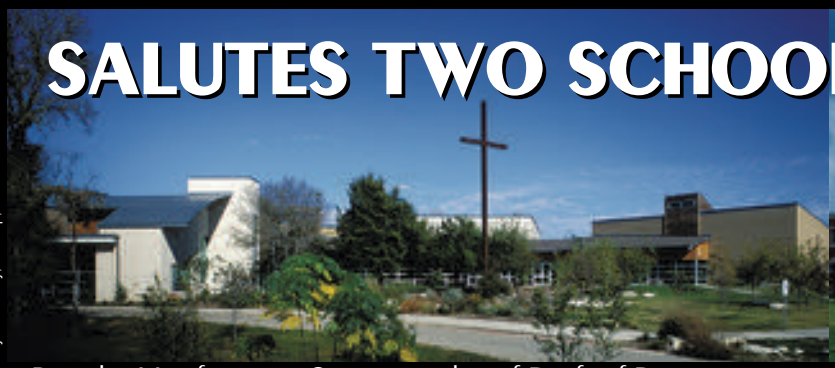

Ray Don Tilley, Bastrop, TX

Jud Haggard Photography, Houston

Berridge Manufacturing Company, maker of Roofs of Distinction, congratulates the architects, administrators, and construction teams who earned awards in the 2001 Texas Association of School Administrators / Texas Association of School Boards Design Awards!

Project: Madeleine Chafin Learning Center, Canterbury Episcopal School, DeSoto, TX

Architect: Hildinger Associates Architects, Dallas

General Contractor: Tegrus, Cedar Hill, TX

Berridge Installer: Anderson Reconstruction, Duncanville, TX

Berridge Products: Berridge High Seam Tee-Panel and Curved Tee-Panel

Finish: Kynar 500/Hylar 5000 "Preweathered Galvalume"

Project: Branch Crossing Junior High School, Conroe, TX

Architect: PBK Architects, Houston

General Contractor: Satterfield & Pontikes Construction, Houston

Berridge Installer: R.W. Honea Sheet Metal, Houston

Berridge Products: Berridge Cee-Lock Panel

Finish: Kynar 500/Hylar 5000 "Teal Green"

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