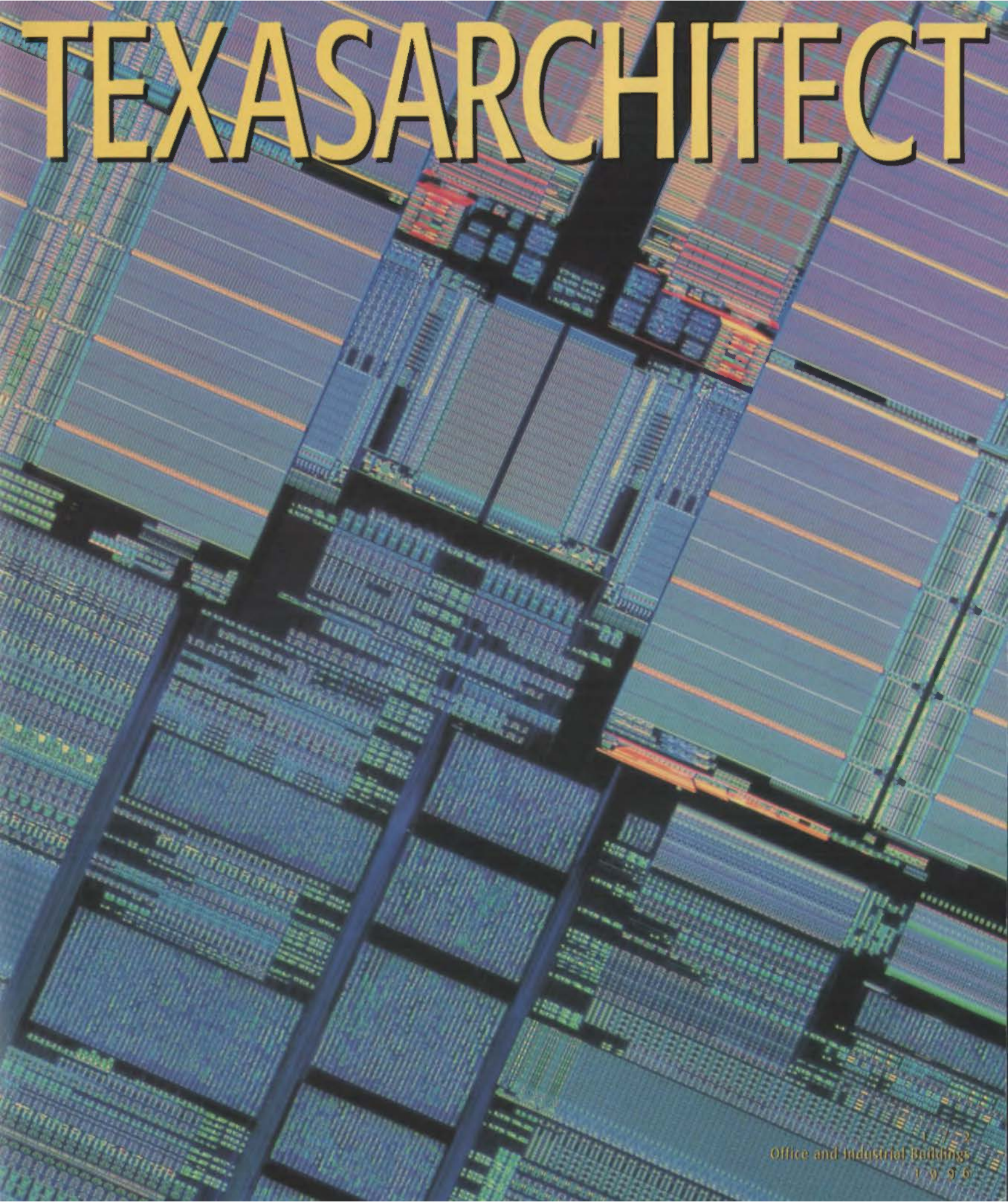
TEXASARCHITECT



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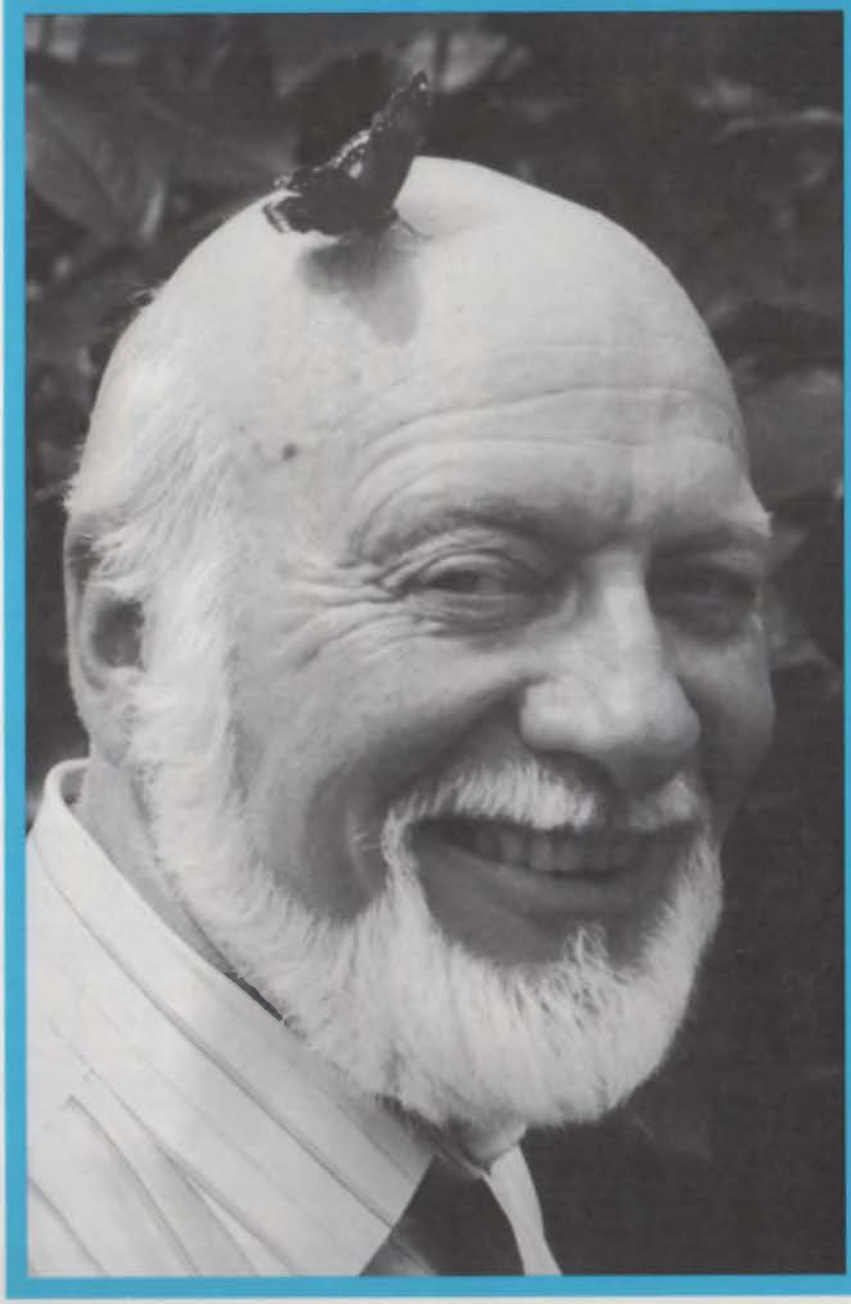

G. Norman Hoover, FAIA, Principal of Hoover Architects, design subsidiary of 3D/International, talks about working with Walter P. Moore and Associates on the Cockrell Butterfly Center, the only combined butterfly and rainforest exhibit in the country.

"There were so many challenges that neither of us could have conceived of the design independently."

"When the boundaries between 'designer' and 'engineer' began to blur, the best collaborative ideas came forth."

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TEXAS ARCHITECT

Left: Alice McDermott Institute by Kell Muñoz Wigodsky Architects, photographed by Greg Hursley

On the cover: Computer rendering of Motorola PowerPC microchip

FEATURES

Busque la sinopsis que se encuentra al principio de cada historia principal.

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TEXASARCHITECT

Jan/Feb 1996 Volume 46, Number 1

Texas Architect (ISSN: 0040-4179) is published seven times per year (bimonthly and in April) by the Texas Society of Architects, 114 West Seventh, Suite 1400, Austin, Texas 78701. TSA is the official Texas state organization of the American Institute of Architects (David Lancaster, Executive Vice President). Copyright 1996 by the Texas Society of Architects.

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$ $
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Second-class postage paid at Austin, Texas, and additional mailing offices. Postmaster: Send address changes to *Texas Architect*, 114 West Seventh, Suite 1400, Austin, Texas 78701. Phone: (512) 478-7386. Printed in the U.S.A.

Subscription price is $16 per year for TSA members, $21 for nonmembers with addresses in the continental U.S. Reproduction of editorial content without written permission is prohibited. Use of names and images of products and services in either editorial or advertising does not constitute an endorsement by TSA or AIA, nor does comment necessarily reflect an official opinion of either organization. *Texas Architect* is indexed by the Avery Index of Architectural Periodicals, available in major libraries.

BPA membership applied for 3/95.

Tools of the Trade

When I am leaning against a shovel or swinging a hammer, it is clear where the hand ends and the tool begins. In office and industrial settings, the distinction between human and tool can be difficult to perceive, as technology becomes an extension of the human hand and mind. When the currency of a transaction is information, the distinction becomes even more blurred. Until recently, innovations in work environments have been driven by assembly-line social ecology theories, such as those institutionalized by industrialist Henry Ford and French sociologist Emile Durkheim. Organizational charts and diagrams incorporating Durkheim's notions of the "division of labor" symbolize the fragmentation and compartmentalization of the traditional workplace, and its focus on completing single, isolated tasks.

The inability of the assembly line to adapt to rapidly emerging market demands is well-documented, and we are now very familiar with the issues raised by the quality movement and "just-in-time" resource-management systems. The symbols of these new systems can be found in the tools of our trade today, as surely as automobile fins and the typing pool reflect our history. Cellular telephones keep us connected to others, but separate us from a quiet hour on the road. Laptop computers both allow and require that we work at home. We, like our new tools, do many different tasks—we are limited less by physical constraints than by temporal ones.

In this evolution, has the basic relationship between the hand and the tool really changed, or have we just changed the language? A well-worn contractor's maxim—the saw itself has no intelligence, and will cut off a finger as easily as it cuts the board—suggests that we as individuals, not the system, influence the human-ness of these new environments. Current terminology describing new work environments, such as *workplace-as-tool* and *multi-tasking*, seem to be modeled after computer-chip architecture, and suggests one direction. The terms *collaborative planning* and *office-neighborhood* focus on people, and suggest quite another. In the press to *down-size* or *right-size*, or *focus on our core business*, as the discussion goes, can we keep our fingers out of the way of the saw blade?

UPCOMING ISSUES

We invite submissions to *Texas Architect* for our upcoming issues. Scheduled issue themes include

May/June '96 (deadline 15 Feb)
"Restaurants & Neighborhood Centers"
July/Aug '96 (deadline 15 Apr)
"Community Architecture and Social Service Centers"

If you can help with any of these topics, please call us at 512/478-7386 or fax at 512/478-0528.

This issue presents projects that suggest a wide range of responses by architects and their clients to current office-organizing theories—an international architectural practice, repositioning a "see-through" office tower, and a computer chip-fabricating plant. These projects, as well as designs for two new schools, suggest new opportunities for employing emerging technologies, as well as the human adaptations required to make them work well.

TA On-Line (http://www.eden.com/~txarch) this month includes additional images from the Xerox and MOS 13 feature stories, and more. Jonathan Hagood, currently an intern here at *TA*, has been working with Canan Yetmen, *TA* Associate Publisher, to make our World Wide Web home page a great one, and to link *TA On-Line* with other architectural resources on the Internet, including *Architecture Virtual Library* (http://www.clr.toronto.edu/VIRTUALLIB/arch.html).

Vincent P. Hauser

Compound Interest

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— James Kissling, Architect

Culpepper Residence, Quihi, Texas
designed by James Kissling, Architect, Bulverde, Texas
constructed by Tom Lutz, San Antonio, and clients

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Letters

A Good Start

The article entitled "Beyond Competence" authored by Dr. Charles W. Graham and William B. Rose in the 11/12 issue of *Texas Architect* is stimulating, thought-provoking, and worthy of every Architect's attention.

The authors identify areas of weakness and misplaced priorities in current college- and university-level Architecture curriculums and include a rough, somewhat disjointed menu for bringing balance between the "art" and "science" of Architectural instruction, education, and training.

Dr. Graham and Mr. Rose have done well to expose the too-long neglected areas of our schooling, but their challenge remains to present a more thoughtful treatment of "design" as a crucial element of the discipline and training it takes to produce a well-rounded, capable, and committed Architect.

To those in our community who are partial to a design-oriented, problem-solving curriculum, let them rise above pride and exclusivity to an equal challenge: establish a new rigor in design so that massing, proportion, scale, texture, volume, color, light, perspective, etc., can be researched, analyzed, taught, and built upon as fundamentals in the design process.

Daniel Ochoa, III, AIA
Architecture/Planning/Interiors
Boerne

Thanks for the Memories

The Awards Luncheon has always been a special part of the TSA Annual Meeting, but the event in Dallas in November 1995 had unusual significance for me. Edward J. Romieniec was not only the first holder of the educator's award that bears his name, but an inspiring teacher and administrator who went out of his way to attract me back to Texas, and supported my career in many ways. To receive this [Romieniec Award for Distinguished Achievement in Architectural Education] is a personal honor. . . .

On this twenty-fifth anniversary of my return to Texas I want to thank [the previous ten winners of the Romieniec award] for their mentorship; my students past and present for the privilege of letting me share part of their lives and for keeping in touch; and all the members of the Texas Society of Architects.

David G. Woodcock, FAIA, RIBA
Texas A&M University
Department of Architecture
College Station

Editor's Notes: The contractor for the Texas State Capitol *exterior* preservation project was Constructors & Associates, Austin. The contractor for the Capitol *interior* preservation project was SAE Spaw Glass, San Antonio (see "Capitol Restoration," *TA*, Sept/Oct 1995, pg. 54).

The 3D/International architectural project team for the Texas State Capitol extension project (see "Before and After," Nov/Dec 1995, pg. 66) also included Alan Atwood, Hormoz Bastani, Lin Bernard, Tomas Berrara, Bonnie Boudreaux, Calvin Bradshaw, Irvin Carter, Calvin Deese, Yvonne Elias, Mitch Gruberg, Belinda Ho, Mark Lange, Danica Tyler, Todd Unrath, and Miguel Villarreal.

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Tom C. Clark Building, Austin, Texas

News

Preserving the Trust

FORT WORTH Two thousand historic preservationists converged on Fort Worth in mid-October to attend the annual conference of the National Trust for Historic Preservation. Local organizers staged a full range of tours, talks, and Cowtown-style entertainment for conventioneers, including a night in the Fort Worth Stockyards National Historic District.

The theme for the conference was "Strategies and Partnerships for a New Era." Clearly, the new era for the Trust will be one of coping with diminishing federal support. Over half of the Trust's former federal funding was cut this year and all funding will be phased out in three years. "We are feeling it," said Richard Moe, president of the Trust, during the conference, "but we will get by this. We just need a couple of years for transition purposes." The Trust's strategy will be to replace federal dollars with private funds, Moe says. To this end, the Trust plans to both increase its membership and to start a capital campaign. As the conference theme implied, the Trust's other initiative is to form partnerships with related organizations, such as the United Way. "To be effective these days, non-profits have to establish partnerships with all kinds of other entities—public, private, and other non-profits," says Moe.

The Trust has begun its attempt to broaden its membership base with the Community Partners Program, which promotes preservation-based community development in urban, predominantly minority-populated, historic neighborhoods. The diversity of the attendees at the conference and the range of educational sessions devoted to preservation issues in ethnic communities reflected this commitment by the Trust to reach out to a multi-cultural audience. The first of the Community Partners projects, the Fort Worth/Tarrant County Partnership, was launched at the conference; its first act was to make scholarships to the conference available to 125 local business and community leaders, many from the historically African-American community in Fort Worth's near-southeast side, so that they could learn about using preservation to rebuild their neighborhoods. The project was funded by the Trust in conjunction with several local agencies.

Another initiative recently announced by the Trust focuses on providing support for local organizations. By awarding matching grants, the Trust is helping to establish the first, full-time

"Preserving the Trust," continued on page 18

Troubled Ordinance

FORT WORTH Hard on the heels of the National Trust's successful conference (see story above) came a crisis at Fort Worth's City Hall that threatens to undo years of preservation efforts. Following the 1992 demolition of houses on Summit Avenue (see *TA*, May/June 1992), preservationists spent three years working on a revised and strengthened preservation ordinance that was ultimately adopted by the City Council last May.

Unfortunately, the Zoning Commission dropped the ball during its subsequent review of the nearly 300 structures that the Landmarks Commission recommended be listed as demolition-delay projects (that is, if a demolition permit was requested, a 180-day delay would be required before the permit could be approved). When the owners of six of those properties protested the imposition of a demolition delay on their buildings, the Zoning Commission capitulated and removed them from the list, thus adding the le-

The Freese House (1929, Joseph Pelich) is one of the properties whose owner has protested imposition of a demolition delay.

Boyd Williams

Linking Up

AUSTIN TSALink, the online construction-information network for Texas Society of Architect-member firms, is approaching a critical deadline. In January, TSALink will either meet its goal for participation by architects and begin generating revenue, or it may go out of existence.

TSALink was formed in the summer of 1995 when TSA joined Construction Market Data (CMD) of Atlanta, Ga.; and PDS, Inc., of Dallas to create an online system for gathering and distributing information about projects that architects have in the planning stages, at least a month before the bidding process begins. It is the first program of its kind, and it promises to revolutionize the way architects share information on their projects while providing benefits for architects that are unobtainable now.

Traditionally, information on planned projects has been gathered from architects by telephone by employees of the reporting services such as F.W. Dodge and CMD. These services then sell the information to contractors, subcontractors, and materials suppliers (who need the information so that they can effectively present bids on upcoming projects); nationally, such sales generate millions of dollars per year.

The intention of TSALink is to change this procedure, according to Dallas architect Chris Dolton, principal of PDS, Inc., who originated the concept for TSALink. Revenue collected by TSALink will give architects a share in the income generated from information that they once gave away free. Second, it will make the information going out to the construction industry more accurate and more timely.

"TSALink will allow architects to reassume control of the flow of construction information and reassert their role as leaders of the project-design team," says Dolton.

There are several important benefits to the TSALink program. Revenue generated from the sale of the data will provide substantial non-dues income for TSA and local AIA chapters and may enable the expansion of programs and services or the elimination of supplemental dues. TSALink participating firms will also have free on-line access to construction information in the state—everything from new architectural-job prospects to as-built cost data. Reporting services will also be able to obtain the accurate and timely information they need from a central source.

As this issue goes to press, more than 300 firms have signed up to take part in TSALink. "We've made tremendous strides," says David Lancaster, TSA's executive vice president. "Firms around the state are learning how much TSALink can help them in marketing their services and managing their projects."

Participating in TSALink is simple. TSA members input information on projects in early design, using the software provided to them by TSA. The architect then decides when to upload by modem to the TSALink central computer. Firms receive free Internet software, along with CMD Online, which will give them free access to statewide information on the construction industry—information worth thousands of dollars per year. To find out more about TSALink, call TSA (800/478-7386).

TSALink's contract with CMD requires that TSA member firms enter into the system at least 80 percent of the commercial, institutional, and multifamily residential projects they are designing. The deadline is late January of 1996, says Lancaster. "Achieving the benchmark is completely doable, given the enthusiasm shown by participating firms," he adds. "But if we fail, other groups are ready to step in and take over—then they'll enjoy the benefits of revenue and information that we let slip through our fingers." ***Susan Williamson***

thal criteria of "owner consent" to the ordinance. At its Nov. 14 meeting, the City Council heard numerous advocates for preservation defend the ordinance and urge the Council to disallow owner consent. Among the speakers, Robert Bass, chairman emeritus of the National Trust's board, observed, "owner consent . . . contradicts the entire ordinance—it eviscerates it." However, to override the protested designations, the Council would have had to marshall a two-thirds vote, which it clearly did not have. The properties of protesting owners were bound over for a special session to be held Dec. 12; most of the other properties were approved by the Council and classified as demolition-delay or highly significant endangered properties.

The December meeting will be the litmus test: If the Council agrees to drop any of the protested properties, the ordinance will be rendered useless, and Fort Worth, for all its bravura display of history during the National Trust conference, will have turned its back on years of hard work and nearly 16,000 citizens who signed petitions for a stronger ordinance after the 1992 demolitions. ***Barbara Koerble***

OF NOTE

State puts up for sale sign

In November, the State of Texas announced plans to make seven state-owned parcels of land in Austin available for purchase or development by private interests, according to the *Austin Business Journal*. The land includes 152 acres of the National Guard's Camp Mabry facility, between 35th and 45th streets west of Mopac Expressway, the 200-acre Travis State School in far east Austin, and two office buildings and three parking lots downtown. Most developer interest is focused on the Camp Mabry parcel, one of the last large undeveloped tracts near the central city, the *Business Journal* says. The state's proposal includes a mix of residential and commercial development.

UH simulates heat and humidity

Researchers at the University of Houston's College of Architecture have created a Simulation and Modeling Laboratory to help design professionals create more energy-efficient structures. The research and teaching facility can help predict how a building will respond to daylight, wind, sun, and shade. Other services include climate analysis, reverberation time, sun angles, and shading, lighting, and ventilation design. The lab is open to the professional community as well as to university faculty and students.

Make your plans now

The 1995 edition of *Planning Forum*, an annual journal published by the Community and Regional Planning Program at the University of Texas at Austin, focuses on issues ranging from the construction of community to environmental policy and water quality. Deadline for submitting articles for the 1996 volume is Feb. 1. For information about submissions or subscriptions, contact *Planning Forum* at 512/471-0731.

Spinning the Web

Now that everyone has checked out Texas Architect's *site on the World Wide Web (*TA On-Line*: http://www.eden.com/~txarch), here are a few more suggestions for your Web browsing. The* Architecture Virtual Library *(http://www.clr.toronto.edu/VIRTUALLIB/arch.html) is one good place to start. The page, published by the University of Toronto, has links to thousands of architectural sites throughout the Internet and is regularly updated as other architecture-related Web sites come on-line. Another site to check out is* Basilisk *(http://swerve.basilisk.com/), an on-line magazine about architecture and design.*

CALENDAR

James Beard Awards

Awards will be presented for outstanding restaurant design and outstanding restaurant graphics. The competition, cosponsored by the James Beard Foundation and *Interior Design* magazine, is open to any restaurant design project in North America completed since 1993. Winners will be featured in *Interior Design*. James Beard Foundation (212/627-2090, fax 212/627-1064), DEADLINE: JAN. 31

21st Century Project Management

A series of three one-day workshops in Houston, "Developing Project Managers for the 21st Century," will focus on a variety of project quality and communication issues. The workshops are designed for architectural and other design-industry project managers. Association for Project Managers and the National Society of Professional Engineers (312/472-1777), FEB. 6–8

"Reengineering America's Architecture"

This conference, to be held in Washington, D.C., will focus on historic-preservation issues involving structural, mechanical, and electrical engineering, as well as presentations on hazardous materials, communications and electronic security, and fire protection and life safety. The conference will include a meeting of the AIA Historic Resources Committee and tours in the Washington, D.C., area. AIA Historic Resources Committee (202/626-7482), FEB. 9–11

"Texas Modern and Post-Modern"

This exhibition will feature works from the permanent collection by Texas artists who have allied themselves more with international and modernist currents than with a regional identity. Museum of Fine Arts, Houston (713/639-7300), JAN. 21–MARCH 3

Photovoltaic Design Competition

This national competition hopes to generate innovative, technically feasible approaches for integrating photovoltaic technology into buildings. Prizes of $20,000 will be awarded. Winners will be displayed at the 1996 AIA National Convention, the U.S. Department of Energy Showcase of Energy Efficiency and Renewable Technologies, and the National Renewable Energy Laboratory Visitor's Center. Results will be published in *Architecture*. American Institute of Architects Research (Stephanie Vierra, 202/879-7752, fax 202/626-7425), DEADLINE: MARCH 18

El Paso names winners

EL PASO Four winners were selected in the 1995 El Paso chapter design-awards competition. Jurors Natalye Appel; Val Glitsch, FAIA; and Carlos Jimenez, all of Houston selected the winners from among 21 entries.

Honor awards went to Franklin High School in El Paso by Stanley + PSA Joint Venture Architects (see story, pages 62–65) and St. Stephen Catholic Community, Phase II, by Alvidrez Associates. An honor award for unbuilt work went to the Coronado Retail Center by Turner Lafving Architects.

The Migrant Farm Workers Center by the Architectural Practice of Barajas & Bustamante was selected to receive a merit award. *SW*

Atelier Wong Photography

1

1 Franklin High School

2 Migrant Farm Workers Center

3 St. Stephen Catholic Community

2

3

Brazos selects honorees

COLLEGE STATION AIA Brazos presented three awards as part of its 1995 awards program. Jurors were Jeff Potter, Architect, of Longview; Michael Gaertner, Architect, of Galveston; and David Lopez of RTKL, Dallas.

Patterson Architects received a design award for Bowen Elementary School in Bryan (see story, pages 62–65).

David Woodcock, FAIA, was selected to receive the chapter's Service Award in recognition of his 16 years of service as a contributing editor to *Texas Architect* and for his constant service to the profession. The Young Architect Award went to Charles Brenton for his contributions as a chapter leader and his achievements in architectural practice. *SW*

Charles Davis Smith

4

4 Alton Bowen Elementary School

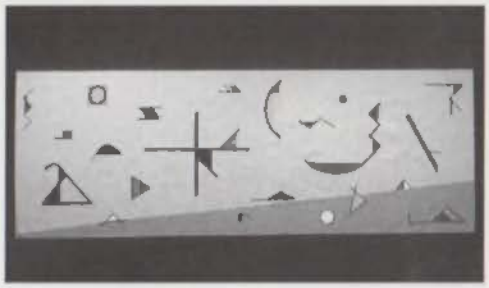
Seven winners chosen

FORT WORTH Seven projects were selected as winners in the 1995 AIA Fort Worth design-awards competition. Jurors for this year's competition were Robert Meckfessel of F/M Associates, Dallas; David Woodcock, FAIA, of Texas A&M University, College Station; and Kevin Sloan of Hellmuth, Obata + Kassabaum, Dallas.

Hahnfeld Associates Architects/Planners designed the two honor-award winning projects: the Walsh Complex/TCU Athletic Facility at Texas Christian University and Chisholm Trail Intermediate School, Keller Independent School District.

One of the three merit awards went to Hahnfeld Associates for the M.D. Anderson Moncrief Cancer Center (see *TA*, May/June 1995). The other two merit awards were presented to Daphne Dawn Perry, Architect, for "Elusive Inscription," a tapestry rug for the Bodycomb Residence; and to Vestal*Loftis *Kalista Architects for the Weatherford District Services Building, Weatherford Independent School District.

Citation awards went to Vestal*Loftis*Kalista Architects for Grapevine Elementary School, Arlington I.S.D.; and to Alfred Vidaurri, Jr., AIA, for "Castle Bed." *SW*



1

Michael French

2

Michael Lyon

3

Michael Lyon

4

Michael Lyon

5

Craig Blackmon, AIA

6

7

1 "Elusive Inscription"

2 Grapevine Elementary

3 Walsh Complex

4 Chisholm Trail Intermediate School

5 Moncrief Cancer Center

6 Weatherford District Services Building

7 "Castle Bed"

Austin honors graphics

AUSTIN Five projects were selected as winners in the 11th annual AIA Austin graphics competition. Jurors were designer Philip Leveridge of Austin; architectural illustrator Gregg Jones of Burton; and interior designer Judy Urrutia of San Antonio; the jurors selected the winners from among 54 entries.

A master's thesis publication created by Christiana Q. Moss and Christopher L. Alt was selected to receive best-of-show honors.

First honors went to a pair of travel sketches by Judith Birdsong. Second honors went to Thomas Clayton Boes for mixed-media color renderings of a studio project. Third honors went to Jeff Ryan for a graphite rendering of Austin's moonlight towers. In addition to the cash prizes, jurors recognized Briane Junge for a rendering of a Louis Sullivan detail. *SW*

Travel sketches by Judith Birdsong (right)

A West Texas Half Dozen

LUBBOCK Six projects were selected as winners in the 1995 AIA Lubbock design-awards competition. Jurors David Richter, FAIA, of Corpus Christi; David Messersmith of Midland; and Dr. Rod Hackney of London, England chose the winning projects from among 13 entries.

Merit awards went to Dalhart Federal Savings and Loan and the Gary Residence in Ransom Canyon, both by Condray Design Group.

Darwin Harrison

1

1 Gary Residence

2 Dalhart Federal Savings and Loan

Robert Suddarth

2

3

JQT Photography

4

JQT Photography

5

JQT Photography

6

Four projects received commendation awards: House at Ransom Canyon by Double H Design; Science Spectrum and Omnimax Theater in Lubbock by Joe D. McKay AIA, Architects with Michael Peters; Lifestyle Center at Methodist Hopital in Lubbock by Parkhill, Smith & Cooper; and Safety City in Lubbock, also by Parkhill, Smith & Cooper. *SW*

3 House at Ranson Canyon

4 Safety City

5 Science Center and Omnimax Theater

6 Lifestyle Center

"Preserving the Trust," continued from page 14

staff positions for local agencies around the country, as in the case of a recent grant to Preservation Texas. "We can't do preservation at the national level," says Moe. "All we can do is offer technical and sometimes financial help, and raise visibility about the issues. But the real work gets done at the state and local levels."

The educational sessions offered at the conference included several cosponsored by the American Institute of Architects, ranging from the current state of preservation technology to locating historic property architectural records. Local tours highlighted Fort Worth's African-American community, its art deco landmarks, and historic ranches. Tours of candlelit turn-of-the-century houses in the National Register Districts of Ryan Place and Fairmount South-side formed a nostalgic respite from the serious overtone of the conference.

Speakers included Henry Cisneros, Secretary of Housing and Urban Development, and Roger G. Kennedy, Director of the National Parks Service. Luncheon speaker Robert A.M. Stern, FAIA, whose invective against modern architecture was featured several years ago on PBS's *Pride of Place*, made a surprising appeal for the preservation of (some) modern buildings, such as the Gropius House.

Fort Worth received its share of attention in the conference offerings, with Sundance Square and its new downtown housing spotlighted in several panels. However, there were some raised eyebrows among conference attendees at the surfeit of painted facades, pseudo-styles, and "reconstructed" demolished structures in the downtown area. The effort to discern authentic history from 20th century in drag left many preservationists blinking. If Fort Worth's downtown proved to be a challenge for purists, the Trust's new policy statement on affordable housing and historic preservation may give preservationists even further pause. The statement, issued last summer and widely discussed at the conference, suggests that design guidelines should be tailored to particular neighborhoods as economic situations warrant. This means that previously taboo materials like vinyl siding are being considered as economically practical alternatives to wood. From new partnerships to new standards of appropriateness, the Fort Worth conference proved that the National Trust is resilient, open to change, and adapting to leaner times. ***Barbara Koerble***

Barbara Koerble is a TA *contributing editor.*

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January/February 1996

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NEW PRODUCTS AND INFORMATION

The **Dialogue Corporation** announces the introduction of WaveTerm, the first commercially available microwave termite-extermination device. The product, which has been in use in California since 1989, is safe and effective and does not damage surrounding materials.
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Offering unprimed adhesion to vinyl, acrylic, and most building products without causing damage to surfaces, PSI-641 is a silicone sealant introduced by **Polymeric Systems, Inc.** The one-part, neutral-cure silicone forms a durable, watertight bond, and can be used in many construction applications, including expansion joints and perimeter caulking of door and window frames.
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Galvalume sheet, a prepainted roofing material produced by **Bethlehem Steel**, offers durability and protection, even in the harshest climates. In addition, the roof sheet, which repels snow, ice, rain, and other airborne debris, can be formed into virtually any shape, from shingles and tiles to a look that resembles standing-seam panels.
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The **Florestone** 40-40H Wheelchair Accessible Shower measures 40-1/2" wide, 40-1/2" deep, and 80" high. The ADA-compliant shower features a slip-resistant floor and numerous accessories including a corner grab bar, a chrome-plated hose and slide bar, and a stainless-steel recessed soap dish.
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Lightolier announces the release of Tech-Express, an electronic-specification-support program that combines a fax-on-demand system, an electronic-bulletin-board service, and a CD-ROM-catalog prototype. A lighting-calculation program is planned for release later in 1996.
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Exterior insulation and finish systems (EIFS) consist of three layers: insulation board, a reinforced base coat, and a finish coat. Attached to plywood or other building materials, EIFS can be fashioned in a variety of shapes, colors, textures, and designs.
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The **PLUS** DP-30 Direct Projector can project transparencies, printed materials, and three-dimensional objects onto any flat surface. Ideal for business professionals, teachers, and communicators, the projector is quiet and weighs only 28 pounds.
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An effective application for reflective pools, fountains, decorative pools, HVAC holding tanks, and chillers, Pool-Gard II by **Neogard** is a water-containment system designed to protect surfaces, even under constant immersion.
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The benefits of residential roofing with the metal "tile-panel" system for new construction and remodeling projects, from ***Met-Tile, Inc.***
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Custom kitchens designed for a wide variety of commercial, institutional, and residential environments, from ***Dwyer Products***
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Properties and benefits of fiberboard in commercial and residential applications, from the ***American Fiberboard Association***
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"Hardwoods in the Bath" describing finishing tips for wet and humid environments, from ***The Hardwood Council***
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Modular bathroom cabinetry and lighting, shown individually and in multi-unit configurations, from ***PL Bath Products***
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Every building at risk?

In the most recent issue of the *Texas Tech Law Review*, a commentary by staff attorney Gene J. Heady suggests that recognition of "sick-building syndrome" by the legal and medical communities has laid the foundation to raise toxic tort litigation to new heights. This subject was also the focus of a symposium during this year's State Bar convention in San Antonio. While the subject is certainly not new to architects and engineers, several recent high-profile cases suggest that architects and contractors who continue to rely on traditional industry standards may do so at their own considerable peril.

Two of the cases involved Florida courthouses—Polk County and Martin County—whose mold- and mildew-contaminated interiors were attributed to leaks and misplaced or poorly installed vapor barriers. Over half the employees who worked in these buildings developed illnesses ranging from coughs to irreversible lung disease and, in each case, the costs to repair exceeded the original cost of construction. Not surprisingly, both counties filed suit against their architects and builders. There have been major economic ripple effects on the communities, huge attorneys' fees, and large damage awards in both cases.

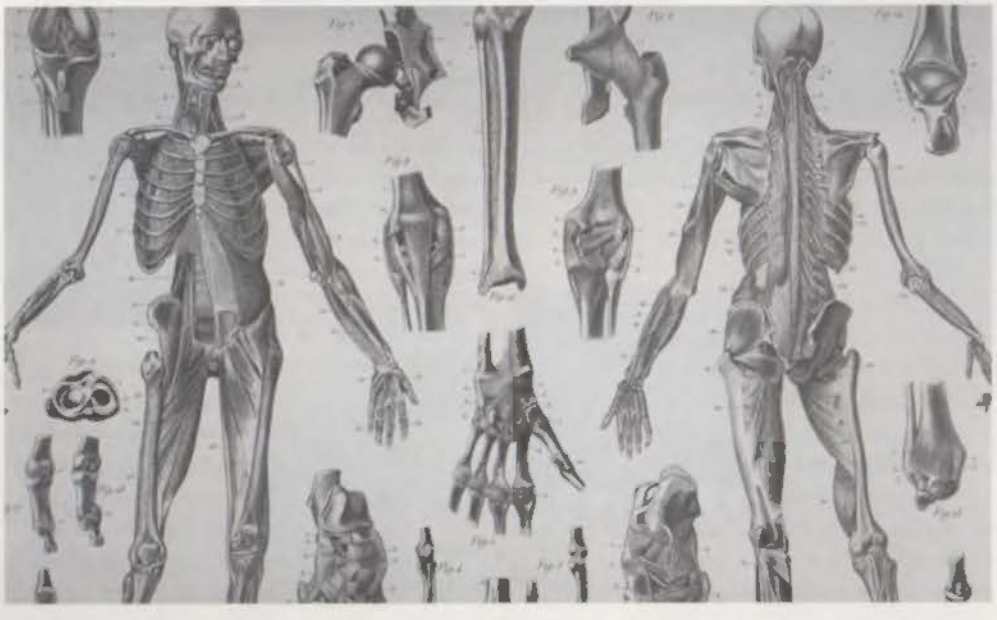
Another case involved a $4.6-*billion* suit against the contractor, architect, mechanical engineer, and product manufacturers for the 325-student Amelia Scudder Elementary School in Wimberly. The suit claimed that volatile organic compounds in the materials specified caused illness to 44 children and 42 adults and that the ventilation system was inadequate to prevent it. That case was settled for an undisclosed amount, but if a small school in Wimberly can even suggest $4.6 billion in damages, think what could happen if imaginative plaintiff's attorneys found a case involving a major metropolitan airport, for instance.

As design and construction methodology becomes increasingly advanced and as manufacturers (faced with potential liability as well as marketplace pressure from owners and architects) begin to quantify and publish hard data on the air-quality ramifications of their products, so called "industry standards" are in a state of rapid change. If litigation arises out of a sick-building syndrome problem, defendants should expect expert testimony about emerging state-of-the-art technology that the average design professional may have never heard of. Such things as building bake-out, contaminant-source identification, mixed-gas sensors, and computational fluid-dynamics studies will be rigorously touted. In the face of such evidence, it will become increasingly difficult to convince a jury that the standard of care has been met simply because the designer followed traditional industry standards or met minimum code requirements.

In the *Texas Tech Law Review* article, Heady suggests that the best defense is for architects and engineers to recognize that every building is at risk of becoming a sick building and to draft contract documents accordingly. Standard indoor-air-quality specifications should include pre-bid requirements for contaminant-source identification and for testing procedures as well as abatement procedures should unforeseen construction events introduce special hazards, he writes. Specified testing should occur periodically during construction and full compliance should be demonstrated prior to substantial completion and final commissioning of the HVAC system.

That is easy for a lawyer to say and it is undoubtedly sound advice but it raises as many questions as it answers. What clients in a competitive marketplace or in stewardship of tax dollars are apt to spring for the additional construction costs or even the increased design costs associated with such a program? What will be the response of the code and regulatory authorities? Should their requirements be prescriptive or performance-based? How will critical ongoing maintenance be monitored? Is there a true scientific or medical basis to justify such expense in comparison to other public-health-expenditure priorities, childhood immunizations, for instance?

While the answers to such questions are not altogether clear, some things are. We do live in a society with decreasing tolerance for environmental compromise. Indoor air quality is receiving increasing attention from the legal, medical, and political communities. It is not a subject we can simply leave to ASHRAE. Some architects are already developing specialty practices to address these emerging issues and the industry is expanding its research to produce more viable data. If the lawyers don't get you, the competition will. ***John M. McGinty, FAIA***



John M. McGinty, of Houston, a former president of the American Institute of Architects, is managing principal of American Construction Investigations, a forensic consulting firm.

The following may offer further information about issues relating to sick-building syndrome:

- "Stuck Inside These Four Walls," *Texas Tech Law Review*, Vol. 26, Number 3, 1995. This article includes a comprehensive technical and legal bibliography
- "Indoor Ecology," *Architecture*, June 1993
- "Designing Healthy Buildings: Indoor Air Quality," *AIA*, Building Performance & Regulations Committee/Committee on the Environment, November, 1992

TAHDA!

1996 TEXAS ARCHITECTURE FOR HEALTH **DESIGN AWARDS**

THE
TEXAS SOCIETY OF ARCHITECTS
in cooperation with the
TEXAS HOSPITAL ASSOCIATION
is issuing a

CALL FOR ENTRIES

PURPOSE This program has been created to promote public interest in health-related architecture, and to recognize excellence in design.

ELIGIBILITY AND AUTHORSHIP All entries shall be a health-related architectural or interior architecture project designed by a TSA member. Projects must be located in Texas and/or designed by a Texas firm. Eligible projects must have been designed or under construction after January 1, 1991. Projects that completed construction prior to January 1, 1991 are not eligible.

Entries are eligible even though the submitting architect or interior designer may not be the sole participant in the design. All participants substantially contributing to the design must be given full credit for their role as part of the submission.

CATEGORIES Awards may be given in any or all of the following categories. Each category has a separate Architecture or Interior Architecture subcategory. A single project may be entered in more than one category and/or subcategory upon payment of separate entry fees. Entrant shall clearly identify the category of facility design and subcategory.

HOSPITAL DESIGN: to include any type of acute care, sub-acute or inpatient care projects located in a hospital, or the design of a hospital.

MEDICAL SPECIALTY DESIGN: to include projects with a very specialized focus, such as pediatric, psychiatric, research, or medical technology designs.

LONG TERM CARE: to include long term rehabilitation and mental health facilities (nursing facilities, skilled nursing, extended care facilities, hospices, etc.)

AMBULATORY CARE: to include projects with no licensed beds, such as medical office buildings, physician's offices, surgi-centers, imaging centers, clinics, HMOs and primary care centers.

HEALTH AND WELLNESS: to include any preventive medicine facility, health clubs, aerobics centers, athletic clubs, and other projects whose principal focus is the maintenance of health.

SUBMISSION Upon payment of the entry fee and receipt of completed entry form received no later than January 29, 1996; each entrant will receive a packet with the submission requirements and a data sheet to be returned with the submission. All necessary forms will be provided.

The data sheet will ask for information relating to the project, program, schedule, cost and square footage. It shall be returned, in a black three ring vinyl binder with no visible means of identity, containing no more than 14 other 8 1/2" x 11" pages of information on the project in clear acetate sleeves (using only the front of each page). A narrative, describing the problem and its solution, will be limited to one of those pages, using 11 point, single-spaced typing (no photo reduction) with at least 1" margins.

The other pages shall include photographs (in color or black and white) sufficient to clearly show the full scope of the project, with no more than two images per page. Plans and drawings reduced to 8 1/2" x 11" sufficient to fully describe the project must also be included. North shall be indicated on all plans. A graphic scale should be included on all drawings.

Renderings will not be accepted as a substitute for photographs of a completed project, but may be included if the entrant feels they provide useful additional information.

Any project may be subject to disqualification, at the sole discretion of the jury, if it feels the submission does not completely or accurately describe the project.

Finally, the concealed identification form (provided in the submission requirements packet), which will include the identity of the architect, owner, consultants, location, and person to notify, will be placed in a sealed envelope with no exterior marking and will be taped inside another acetate sleeve at the back of the binder. The entrant's identification shall not be revealed in any way on the binder or within the submission.

All entries shall be sent to the Texas Society of Architects — Committee on Architecture for Health, c/o Ken L. Ross, AIA, 6575 West Loop South, Suite 300, Bellaire, Texas 77401.

AWARDS AND AWARD WINNERS The winners will be notified in April 1996. Certificates will be presented to the designers and owners of the winning projects at an awards ceremony during the 1996 THA convention in San Antonio.

To defray display and publicity costs, the winners will be assessed $250 for each award winning project and must submit 8 copies of a 8" x 10" black and white glossy photo of the project, no later than June 1, 1996. In addition each winner will need to provide one set of color slides representative of the winning project for use at the awards ceremony. Slides will become the property of the Texas Society of Architects — Committee on Architecture for Health.

Winners will prepare 40" x 40" boards to be exhibited at the 1996 THA convention, and information will be released to hometown newspapers and publications. The award winners will be published in *Texas Architect* magazine in the summer of 1996.

ENTRY FEE An entry fee of $100 is required for each category/subcategory submitted. Submission of one project in more than one category/subcategory requires a separate entry fee. Fees and entry form must be received no later than January 29, 1996. Checks or money orders shall be made payable to the Texas Society of Architects — Committee on Architecture for Health, and sent to Ken L. Ross, AIA, 6575 West Loop South, Suite 300, Bellaire, Texas 77401. No entry fee(s) will be refunded.

SCHEDULE

January 29, 1996	Entry fees and forms must be received
February 29, 1996	Submissions must be received
March 7, 1996	Jury review
April 15, 1996	Notification of winners
June 1, 1996	Publicity photos, slides & assessment checks due

Announcement of winners to coincide with the THA Convention in San Antonio, June 2-4, 1996.

ENTRY FORM

Firm Name_____

Contact_____Telephone_____

Mailing Address_____

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Categories/Subcategories of Submittals

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Number of Entries: ☐ Architecture ☐ Interior Architecture

MEDICAL SPECIALTY DESIGN
Number of Entries: ☐ Architecture ☐ Interior Architecture

LONG TERM CARE
Number of Entries: ☐ Architecture ☐ Interior Architecture

OUTPATIENT CARE
Number of Entries: ☐ Architecture ☐ Interior Architecture

HEALTH AND WELLNESS
Number of Entries: ☐ Architecture ☐ Interior Architecture

Amount Enclosed $_____(Total number of submittals x $100)
Make checks payable to Texas Society of Architects — Committee on Architecture for Health.

Fee(s) and entry form must be received no later than January 29, 1996 and sent to Texas Society of Architects — Committee on Architecture for Health, c/o Ken L. Ross, AIA, 6575 West Loop South, Suite 300, Bellaire, Texas 77401. No entry fee(s) will be refunded. All questions should be directed to Ken L. Ross, (713) 665-5665.

Learn the lingo

As the demand for office space revives, and our "see-through" buildings once again fill up with tenants, it is time for architects to review the basics as well as the idiosyncrasies of the space-planning process. The marketing, leasing, planning, construction, and initial occupancy of a tenant's leasehold can be traumatic for a tenant, and often sets the tone for the long-term tenant/owner relationship. The architect as space-planner plays a crucial role in setting that tone through his direct interface with the tenant, owner, broker, property manager, and tenant contractor. More specifically, because of the architect's uniquely personal involvement with the tenant, the architect assumes certain responsibilities and, in the owner's eyes, liabilities for the results of the spaceplanning process. Before he or she assumes this responsibility, the architect must have a thorough understanding of the key terms and components of the lease and their implications, or he will not serve his client or the tenant well. The following terms are commonly used in leasing and space-planning process, and are among the most important for the architect to know intimately.

Language of the Lease

An *allowance* is a defined quantity of material or measure of construction value that the owner will provide under the terms of the lease agreement. Traditionally, as part of a lease agreement, the owner will either provide a certain amount of building materials and labor or will offer cash to assist the tenant in construction of the new leasehold. The owner will want to identify the nature of these improvements in order to quantify his tenant construction cost exposure and to order the materials in advance of the construction of the space.

A *cash allowance* is normally defined in dollars per square foot of net rentable or usable area. The tenant-improvements contractor will price the plans for the space to determine what the actual cost will be. If the construction cost exceeds the total cash allowance, the tenant will have to pay the difference or revise the plans.

Building-standard allowance is the term normally used to describe a materials-and-labor allowance. Some tenants will not use all of the items or quantities of materials allowed by the owner; they may wish to install a floorcovering, ceiling, or other finish that is different from those the owner has designated and sometimes even pre-purchased as building-standard materials. Or a tenant's open-planning concept may not require the number of building-standard doors allowed. A more sophisticated tenant may ask the owner for cash credit for the unused material or credit toward another building-standard material. Although some owners have a policy of not offering credits, in a competitive market or in a negotiation with a desired tenant, the owner may wish to extend such a credit.

Building standards, when they are the responsibility of the architect, should be specified as early as possible to provide the owner a written description to distribute to prospective tenants during the leasing phase. If used as an exhibit to the lease agreement, the building-standard descriptions should be generic in order to maintain owner flexibility and competitive pricing.

The *workletter* is that exhibit to the lease that commits the owner to providing and installing the building-standard or other improvements, defines the process and schedule by which these improvements are documented and completed, identifies the responsibilities of owner and tenant during that process, and deals with other items such as non-building-standard improvements and the tenant's own contractors.

The workletter includes a date certain, usually identified by the owner during negotiations or when the lease is drafted, which is the basis for determining whether the owner or tenant is the cause of a delay, if a delay occurs. This date is the *tenant information date*, the latest date by which the tenant can provide the basic information required to allow the owner's architect to prepare timely pricing and construction drawings. The various steps of the normal planning, pricing, and construction process follow the information date and are based on standard time frames provided by and mutually agreed upon by the owner, architect, and contractor. The ultimate purpose of all this detailed date tracking is, of course, to ensure that the rent starts on the lease-commence date.

Defining the Space

When it comes to defining areas and, more important, calculating those areas (a task that is normally performed as part of the architect's base services), the array of terms can be confusing. Worse still, the subtle differences between specific area terminologies can turn into big differences in rental rates and improvement-cost obligations if the architect applies them incorrectly. Some of the more common area references and their meanings are:

- *Gross area*: all area inside the building's outer wall (usually to the glass line);
- *Building common area*: public areas, other than on typical office floors, that are leasable to tenants on a prorated basis (for example, main lobby, truck deck, mail room, etc.);
- *Non-rentable area*: vertical penetrations through the floor, such as fire stairs, elevators, air shafts, etc.;
- *Net rentable area*: the gross area less the building common area less the non-rentable, that is, all the traditionally leasable spaces;
- *Building factor*: the multiplier applied to each tenant's net rentable area to obtain that tenant's prorata share of the building common area. Calculated by dividing the total building common area by the total net rentable area and using the percentage as a multiplier;
- *Adjusted net rentable area*: the increased net rentable area after multiplying by the building factor;
- *Core common area*: all shared facilities in each floor's core area, including elevator lobby, corridors, restrooms, electrical and mechanical rooms, janitorial and telephone closets;
- *Usable area*: all occupiable floor area outside the core;
- *Floor factor*: the multiplier used to prorate the core common area to each tenant on the floor. Obtained by dividing the net rentable area by the usable area;
- *Cumulative factor*: the multiplier used to prorate all building common and core common areas to each tenant.

There are many other terms commonly used in the spaceplanning process that become more familiar with repeated use. The architect should become conversant in this language of the lease. The world of leasing space is very competitive and making a deal sometimes depends on the owner's ability to respond quickly, clearly, and accurately to a tenant prospect's requirements. Most lease opportunities carry a significant economic impact, and a deal lost because of the architect's lack of understanding or fluency with the terminology will certainly irritate the tenant and likely jeopardize if not terminate the relationship with the owner. ***Michael Webster***

Michael Webster is a partner in Champion Partners, a Dallas-based development firm specializing in real estate strategy and implementation.

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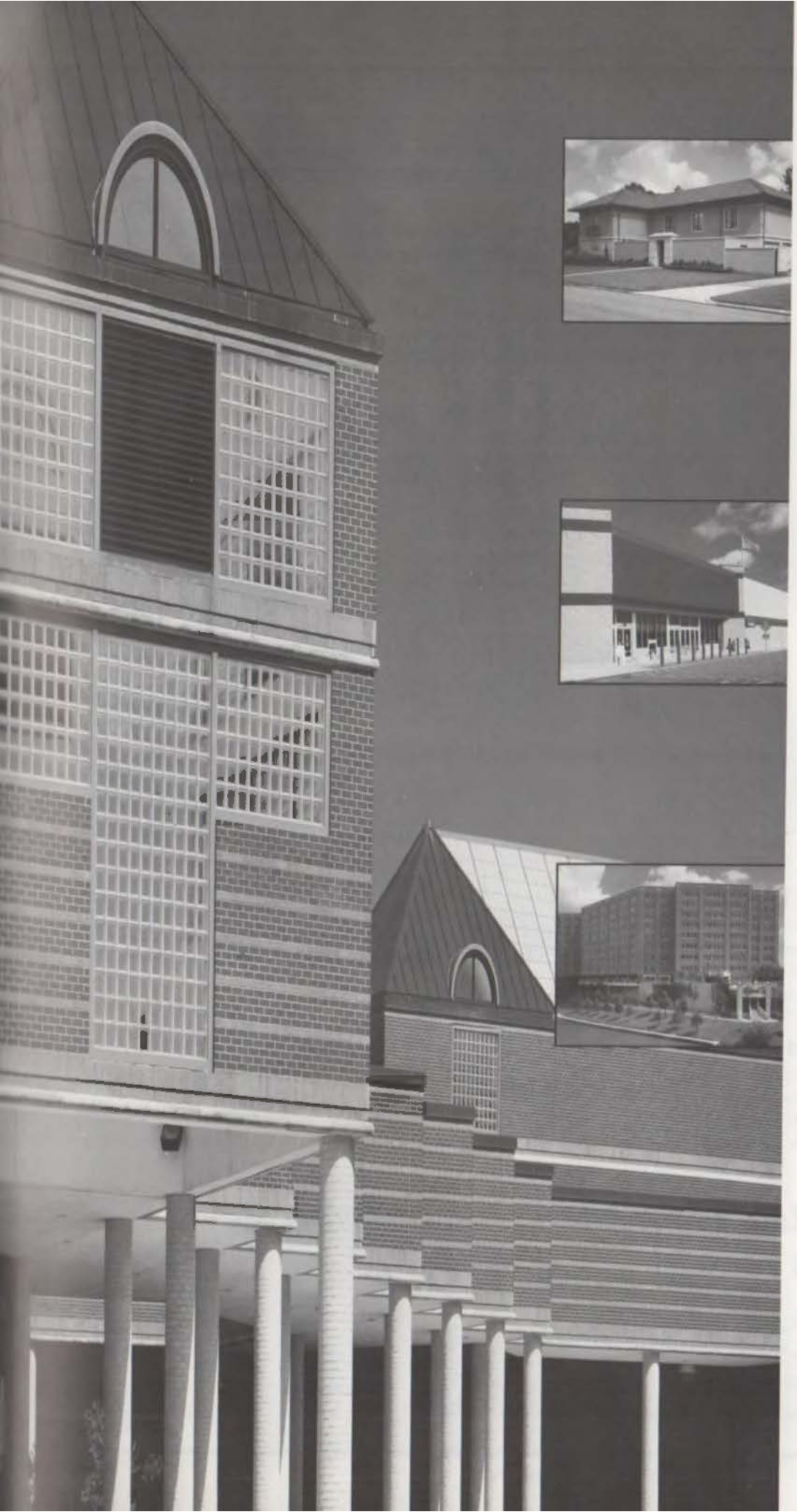

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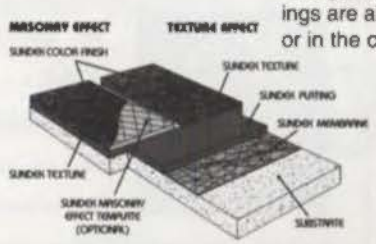

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1995 Exhibit of School Architecture

PUBLIC SCHOOLS
SPECIAL ADVERTISING SECTION

IN THIS SPECIAL advertising section *Texas Architect* features selected award recipients of the 1995 Exhibit of School Architecture statewide design competition. This year's event was co-sponsored by the Texas Association of School Administrators, the Texas Association of School Boards, and the Texas Society of Architects.

The jury for the 1995 Exhibit of School Architecture included Tony Jones, Superintendent, Lockhart ISD; Melissa Knippa, Austin ISD Board; Otto Grove, AIA, Texas Education Agency; and Jim Brady, AIA, Texas Association of School Boards. The jury selected several projects to receive special recognition. Awards were given in the following categories for architectural excellence in school design. Projects indicated with an asterisk are addition/renovation projects. All others are new construction.

Caudill Award

The Rice School
Taft Architects, Houston
Houston ISD

Honor Award with Distinction

Katherine Stevens Elementary
Burleson Singleton Architects, Dallas
Garland ISD

Community Learning Center
SBWV Architects, Houston
Humble ISD

Oñate High School
SHW Group, Inc., Dallas
Las Cruces Public Schools

Bussey Middle School
Burleson Singleton Architects, Dallas
Garland ISD

*Steeplepoint Instructional Support Center**
PBK Architects, Inc., Houston
Cypress-Fairbanks ISD

*T.H. Rogers School Natatorium**
Watkins Carter Hamilton Architects, Houston
Houston ISD

Merit Award

Alton Bowen Elementary School
Patterson Architect, Bryan
Bryan ISD

Arbor Creek Middle School
SHW Group, Inc., Dallas
Lewisville ISD

Bay Elemenatry School
PBK Architects, Houston
Cypress-Fairbanks ISD

*Belton High School**
BLGY, Inc., Austin
Belton ISD

Cedar Park Middle School
BLGY, Inc., Austin
Leander ISD

Eagle Pass Regional Technical Center
SHW Group, Inc., Dallas
Eagle Pass ISD

Ed Vanston Middle School
WRA Architects, Inc., Dallas
Mesquite ISD

Fredericksburg Elementary School
Pfluger Associates Architects/ Planning Consultants, Austin
Fredericksburg ISD

Glen Oaks Elementary School
SHW Group, Inc., Dallas
McKinney ISD

Hollie Parsons Elementary School
Claycomb Associates, Inc. Architects, Dallas
Copperas Cove ISD

St. Mark's School of Texas Alumni Center
Corgan Associates Architects, Dallas
St. Mark's School of Texas


1


2


3


4

1. T.H. Rogers School
2. Cedar Park Middle School
3. The Rice School
4. Humble Community Learning Center

Caudill Award

The Rice School

THE RICE SCHOOL by Taft Architects of Houston was awarded the Caudill Award, the competition's highest honor. As the first kindergarten through eighth grade school in the Houston Independent School District, the Rice School was designed by the architects to accommodate the exploration of innovative teaching methods developed hy HISD and Rice University. The 176,000-square-foot complex is located on a ten-acre site bordered on the west side by natural wetlands which were made more densely wooded by transplanting existing trees from the building location. The building design creates a "community for learning," with large and small common areas analogous to a small town dominating the organization. Groups of four classrooms are clustered in pods, each with commons, visitor classroom and support labs, and studios. Nestled in the trees, the pods relate diagonally to the long, linear support building that provides a buffer between the public and private functions. The major public blocks are organized to define an interior skylit plaza in which the library, the heart of the school, is located. Materials, textures, and colors express and reinforce the individual character of each separate form.

Client: Houston Independent School District
Architect: Taft Architects, Houston
Contractor: The Cadence Group, Houston
Consultants: The Spencer Partnership, (associate architect); CBM Engineers, Inc. (structural engineering); Grunewald Engineering, Inc. (mechanical, electrical & plumbing engineering); Karen Rose Engineering & Surveying (civil engineering); Busby Denny International (cost estimating); Kudela Design works (landscaping); Hoover & Keith, Inc. (acoustics); Herbst & Stiffler, Inc. (systems technology); Frank Clements Associates (food service)

Resources

Elevators: *Dover;* ***area lighting:*** *Widelite;* ***fluorescent/ downlighting:*** *Lithonia;* ***library fluorescent:*** *Peerless;* ***tubs & lavatories:*** *Eljer, Elkay;* ***water closets:*** *Eljer;* ***plumbing fittings:*** *Bradley;* ***toilet stalls:*** *Santana;* ***water fountains:*** *Halsey Taylor;* **AHU's:** *Thermal;* **VAV's:** *Continental;* ***chillers:*** *Carrier;* ***stationary partitions:*** *USG;* ***paint:*** *Jones-Blair;* ***lockers:*** *DeBourgh;* ***auditorium seats:*** *Irwin Seating;* ***folding bleachers:*** *Mussey Seating Co.;* ***building signage:*** *ARK Ramos;* ***chalkboards & tackboards:*** *Tac Rite;* ***concrete masonry units:*** *Eagle Lake Concrete;* ***built-up roof:*** *Allied Signal Inc.;* ***metal roof:*** *MBCI;* ***brick masonry:*** *Acme Brick;* ***split-face concrete masonry units:*** *Houston Concrete Products;* ***ground-face concrete masonry units:*** *Trenwyth Industries;* **EIFS:** *Dryvit Systems;* ***curtainwall:*** *VistaWall;* ***metal siding:*** *MBCI;* ***plaster:*** *USG;* ***gypsum board:*** *USG;* ***windo wall:*** *VistaWall;* ***insulated fiberglass skylights:*** *Skywall;* ***aluminum frame:*** *VistaWall;* ***overhead doors:*** *Kinnear North America;* ***terrazzo:*** *American Marble Mosaic;* ***vinyl tile:*** *Azrock;* ***ceiling gypsum board:*** *USG;* ***acoustic panels:*** *Armstrong, USG;* ***sealants:*** *Tremco;* ***built-in desks:*** *TMI;* ***classroom casework:*** *TMI;* ***lab casework:*** *Hamilton Scientific;* ***mini blinds:*** *Levelor;* ***stage curtains:*** *Houston Scenic Studios;* ***playground:*** *Columbia Cascade*

District Champ

Killeen 9th Grade Center

Venable Village Elementary School

Schools designed by JPJ Architects, Dallas, for Killeen ISD

Ellison 9th Grade Center

Palo Alto Middle School

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Recently, the Killeen Independent School District added four new schools to its growing district of 34 elementary, middle, 9th grade, and high schools. Each school features ground-face and split-face masonry units as primary exterior and some interior finishes. Not just any custom masonry units, though. Killeen ISD's new schools feature only block from Jewell Concrete Products. Jewell's state-of-the-art computer-controlled manufacturing plant in Waco is the winning choice for precise color selection and consistency. Build with confidence when you specify Jewell Concrete Products' family of masonry products, including Decro-Face® exposed-aggregate units, Keystone™ Retaining Wall Systems, and Aurora™ Masonry Fence System. Go with Jewell and go with a champ—products and service you can trust.

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Honor Award with Distinction

Community Learning Center

THE COMMUNITY LEARNING CENTER in Humble, designed by SBWV Architects of Houston, received an Honor Award with Distinction. The center serves as a learning facility for any at-risk, gifted, and handicapped students in grades 1-12 from within the school district on a free-choice basis, provides long-term programs for students removed from regular classrooms for more than 12 days for disciplinary reasons, offers early-childhood programs and day care for school-age parents, and provides extension programs, such as GED classes and computer and technology classes to the public after regular school hours. The 25-acre site and 64,000-square-foot building are both zoned to allow these four distinct programs to be offered. The high school, early-childhood programs and discipline programs have separate controlled entries with a main corridor connecting them internally as well as with the cafetorium/gym and clinic (see also *Survey*, page 69).

Resources

Concrete: *Campbell Ready Mix*; ***steel frame:*** *V.S.F., Inc.*; ***concrete masonry units:*** *Cordell Brick*; ***steel joists:*** *Vulcraft*; ***brick:*** *Delta*; ***vinyl wall coverings:*** *RJF International*; ***glass block:*** *Pittsburgh Corning*; ***entrance doors:*** *Tex-Steel*; ***interior doors:*** *Gulf Coast*; ***overhead doors:*** *Overhead Door*; ***terrazzo:*** *Southern Tile & Terrazzo*; ***carpet:*** *Karastan Bigelow*; ***acoustical ceiling tile:*** *Armstrong*; ***built-up roofing:*** *Schuller*; ***sheet metal roofing:*** *Berridge*; ***elastomeric membrane:*** *Nervastral*; ***sealants:*** *Tremco*; ***insulation:*** *Manville, Schuller International, V.C. Industries*; ***fiber deck:*** *Martin Fireproofing*; ***metal roof deck:*** *Vulcraft*; ***insulating concrete:*** *Perlite*; ***gypsum:*** *USG*; ***moveable partitions:*** *Panelfold*; ***paint:*** *Glidden*; ***hardware:*** *Hager, Sargent*; ***cooler/freezer:*** *Kol-Pak*; ***washer/dryer:*** *Kenmore*; ***communication system:*** *Dukane*; ***security/fire detection:*** *Airtech*; ***lockers:*** *Lyon Metal*; ***signage:*** *South Texas Graphic Specialties*; ***lighting:*** *Spaulding, Columbia, Shaper*; ***electric distribution:*** *Square D*; ***tubs, lavatories, fittings, water closets:*** *American Standard*; ***flush valves:*** *Zurn Industries*; ***toilet stalls:*** *Tex Lam*; ***mirrors:*** *Bobrick*; ***water fountains:*** *Halsey-Taylor*; ***sprinklers:*** *Reliable*; ***heating system:*** *Chromalox*; ***air-conditioning system:*** *McQuay, UEC*; ***environmental controls:*** *Automated Logic, System 20/20*; ***casework:*** *Southwest Caseworks*; ***library desk:*** *Buckstaff*; ***mini-blinds:*** *Spring Windows*; ***closed-circuit television:*** *Burle*

Client: Humble Independent School District
Architect: SBWV Architects, Houston
Contractor: Gamma Construction Company, Houston
Consultants: Walter P. Moor & Associates, Inc. (civil engineering); Jones/Borne/Inc. (structural engineering); CHP & Associates, Inc. (mechanical, electrical & plumbing engineering); Frank Clements Associates (food service)

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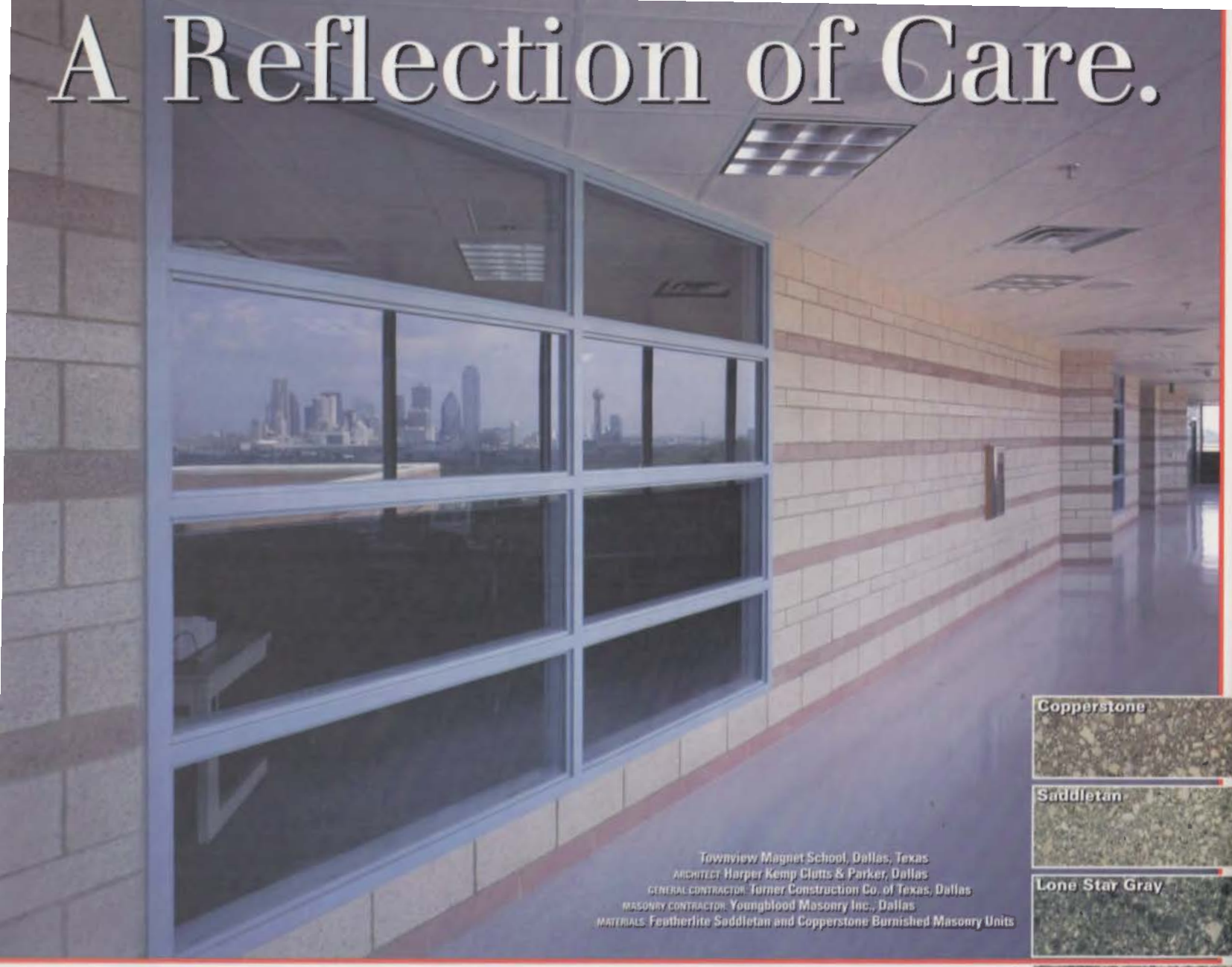

Townview Magnet School, Dallas, Texas
ARCHITECT Harper Kemp Clutts & Parker, Dallas
GENERAL CONTRACTOR Turner Construction Co. of Texas, Dallas
MASONRY CONTRACTOR Youngblood Masonry Inc., Dallas
MATERIALS Featherlite Saddletan and Copperstone Burnished Masonry Units

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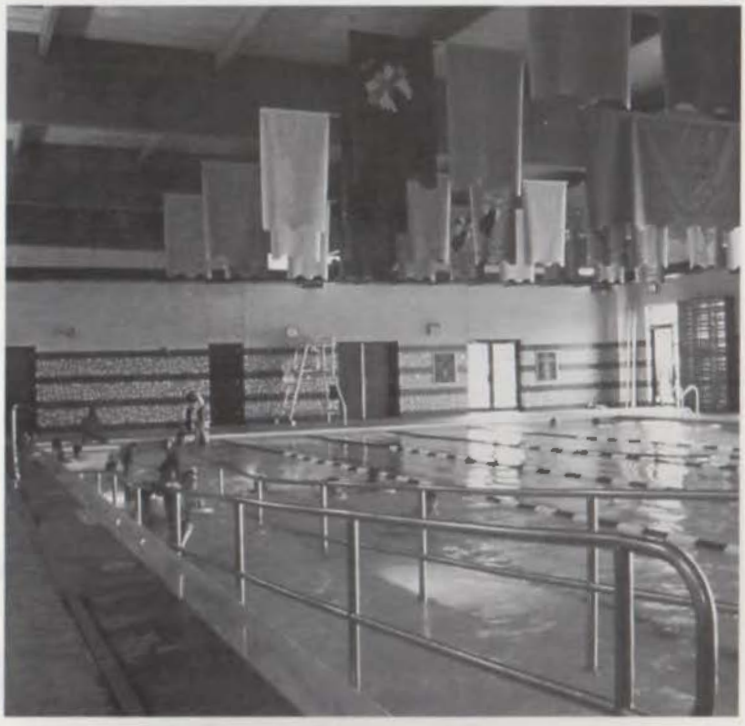
Honor Award with Distinction

T.H. Rogers School Natatorium

THE T.H. ROGERS SCHOOL NATATORIUM in Houston by Watkins Carter Hamilton Architects, Inc., of Houston, received an Honor Award. The school brings a unique concept to education, by serving both multi-impaired students with a minimum of three major handicapping conditions and gifted and talented students who have been tested and found to learn at accelerated levels and advanced rates. The gifted and talented students are required to learn sign language to facilitate communication and are encouraged to volunteer in the classrooms of their disabled peers.

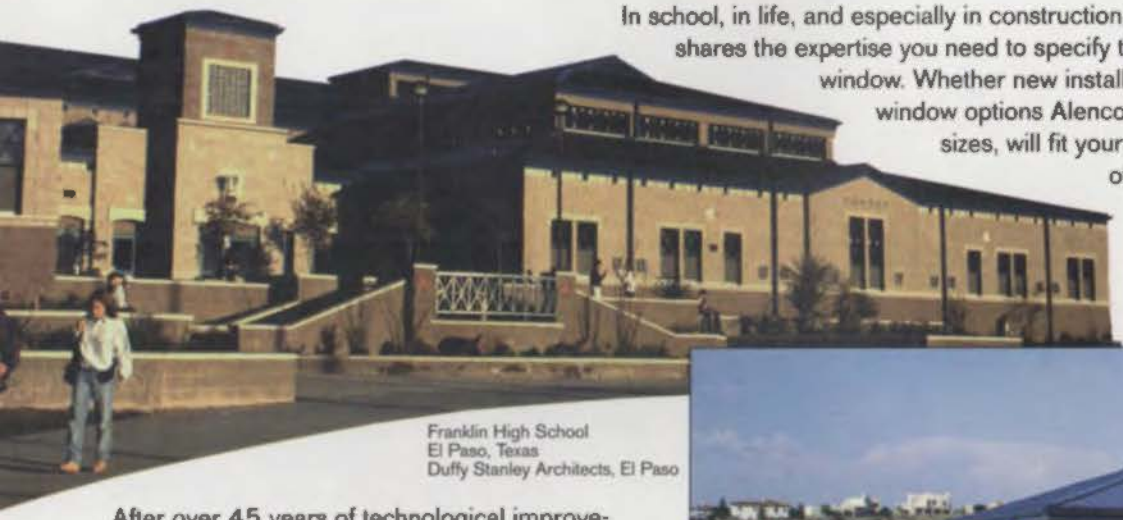
When the need for a hydrotherapy complex and a barrier-free playground arose, all funds were privately donated to build the complex. Through the generosity of the design profession and the construction industry, the project was designed and constructed at no cost to the school district.

The hydrotherapy complex consists of two swimming pools, a therapeutic pool and a six-lane regulation competition pool. The barrier-free playground component is divided into sections by open pathways and includes a multi-use basketball court and a double-wide bike and roll track.



Client: Be An Angel Fund
Architect: Watkins Carter Hamilton Architects, Inc. Bellaire
Contractor: W.S. Bellows Construction Corporation
Consultants: Edward W. Bradshaw & Associates, Inc. (landscaping); Walter P. Moore & Associates, Inc. (civil engineering); Smith Seckman Reid, Inc. (structural engineers); Haynes Whaley Associates, Inc. (mechanical, plumbing, and electrical engineering)

Windows of Knowledge



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Honor Award with Distinction

Oñate High School

ONATE HIGH SCHOOL in Las Cruces, N. Mex., by SHW Group, Inc., of Dallas received an Honor Award with Distinction. Due to the extreme New Mexico climate — either very hot or very cold or very windy — the plan was designed so that all areas of the school could be accessed without students having to pass through exterior spaces. SHW Group conducted a ten-day site-based design workshop, involving school administrators, staff, board members, students and interested community members in the development of the design concepts for the project.

The 272,000-square-foot building sits on a 55-acre site and captures the beautiful mountain view to the east. The long, linear plan stretching mostly north and south allows the auditorium, gymnasiums, and commons/cafeteria to be accessed from the student parking area for after-hours public use.

Client: Las Cruces Public Schools, Las Cruces, N. Mex.
Architect: SHW Group Inc., Dallas associated with Nima/Calvani & Associates, Las Cruces, N. Mex.
Contractor: Bradbury & Stamm Construction Co., Inc., Albuquerque, N. Mex.
Consultants: Matthew Borowski (landscape); Estes, McClure & Associates, Inc. (mechanical, electrical and plumbing engineering); Scenic Equipment (stage); Southwest Engineering (civil); Boner & Associates (acoustical); SHW Group (structural)

Resources

Doors: *Kawher;* ***ceiling surfacing system:*** *Armstrong;* ***insulation:*** *Owens Corning;* ***movable partitions:*** *Modernfold;* ***public address system:*** *Rauland;* ***lockers:*** *Lyon Metal Products;* ***bleachers:*** *Folding Bleacher Co.;* ***lighting:*** *Lithonia;* ***lavatories:*** *Kohler;* ***water fountains:*** *Elkay;* ***environmental control:*** *Automated Controls Systems;* ***furniture:*** *American Desk*

Merit Award

Cedar Park Middle School

CEDAR PARK MIDDLE SCHOOL, designed by BLGY, Inc., of Austin received a merit award. In response to the Leander Independent School District's desire to emphasize academics, fine arts, and athletics, the architects gave these programs separate identities. A wing was created for each program, located off the main axis of the school, which is anchored by main and secondary foyers. The media center, which looks onto an interior courtyard serves as the nucleus of the school. The academic wing consists of nine teaching units centered around computer labs which serve the three teaching teams required by each grade. Each unit consists of science, math, social studies, and English classrooms. This wing includes a greenhouse located on the second floor that cantilevers over the facade of the building. The fine arts wing incorporates a small gallery with views from the main foyer in addition to art, theatre, band, and choir rooms. The corridor is accented with a four-color abstract-patterned tile floor and tack walls. The exterior of the art wing is accented with bright-red and blue glazed tiles. The athletic wing houses two gyms with wood floors and bleacher seating, and a weight room.

Client: Leander Independent School District
Architect: BLGY, Inc., Austin
Contractor: BFW Construction Co., Austin
Consultants: Stoeltje and Associates (structural engineering); Fisher, Hagood, Inc. (civil engineering); Talex, Inc., Engineers (mechanical, electrical, and plumbing engineering); J. Robert Anderson (landscaping); Bruce Walker (kitchen consultant)

Spec Note: abstract patterns of bright red and blue glazed tiles manufactured by Elgin-Butler Brick are incorporated into the exterior brick facade expressing the fine arts program.

Resources

Reinforced Concrete: *Texas LeHigh, Alpha Rebar;* ***steel studs:*** *Dietrich;* ***concrete masonry units:*** *Eagle;* ***steel joists:*** *C&F Steel Co., Inc.;* ***steel deck:*** *Vulcraft;* ***light weight concrete:*** *W.R. Grace;* ***exterior insulating finish system:*** *Synergy;* ***split-face concrete masonry units:*** *Featherlite;* ***glass block:*** *PC Glass Block;* ***brick:*** *Elgin-Butler;* ***gypsum board:*** *Gold Bond;* ***windows:*** *U.S. Aluminum Corp.;* ***entrance doors:*** *Door-Pro;* ***plastic-faced doors:*** *Buell Door Co.;* ***overhead doors:*** *Peele-Richmond;* ***colored concrete:*** *Featherlite;* ***ceramic tile:*** *Dal-Tile;* ***carpet:*** *Collins-Aikman;* ***vinyl tile:*** *Azrock Industries;* ***wood floors:*** *Action Floor Systems;* ***acoustical ceiling tiles:*** *Armstrong;* ***modified bitumen roofing:*** *Tremco;* ***metal roofing:*** *Berridge;* ***waterproofing:*** *Sonneborn;* ***fiberglass insulation:*** *Energy Blanket of Texas, Inc. (Owens-Corning);* ***steel deck:*** *Vulcraft;* ***stationary partitions:*** *Gold Bond;* ***movable partitions:*** *Won-Door Corp.;* ***paint:*** *Devoe;* ***acrylic coating:*** *Triarch;* ***hinges:*** *Hager;* ***locksets:*** *Flacon;* ***door closers:*** *Dorma;* ***panic exits:*** *Von Duprin;* ***door stops:*** *Quality Hardware;* ***fire alarm systems:*** *Edward Systems;* ***metal lockers:*** *List Industries;* ***bleachers:*** *Interkal;* ***signage:*** *ARK Ramos;* ***monitor brackets:*** *DEA Specialties;* ***elevators:*** *Dover;* ***stairs:*** *Mercer Products;* ***handrails:*** *C&F Steel Co.;* ***lighting:*** *Lithonia;* ***electric distribution:*** *Spectra;* ***lavatories, water closets:*** *Crane;* ***shower heads:*** *Bradley;* ***heating & air conditioning systems:*** *Trane;* ***piping:*** *Loop Tech Int.;* ***shelving systems:*** *Terrill Manufacturing;* ***blinds:*** *Ball;* ***acoustical panels:*** *Tectum, Inc;* ***musical instrument storage:*** *Wenger;* ***instrument practice modules:*** *Acoustic Systems;* ***greenhouse:*** *Florian Greenhouse, Inc.*

Merit Award

Belton High School

THE BELTON HIGH SCHOOL expansion and renovation project by BLGY, Inc., of Austin received a merit award. Since its completion in 1979, the original building has undergone two previous classroom expansions and has grown from a small 3A school to an enrollment of over 2,500 students. New additions include 20 new classrooms, a new library, a second dining room, a competition gymnasium, locker rooms, expansion of the band hall, and a new 825-seat auditorium with a performing stage. The addition was designed to occur on three sides of the existing building to create more visually interesting and contemporary facades. The new exterior introduces the use of the school color by including red tile in the new precast panels, a new entry canopy and red metal roofing. The school facilities remained in use while the expansions and renovation occurred in stages to minimize disruption.

Client: Belton Independent School District
Architect: BLGY, Inc., Austin
Contractor: Neu-Tek Construction Co., Inc.
Consultants: Temple Civil Engineering Co. (civil engineering); Datum Engineering, Inc. (structural engineering); Gorling, Thomas Ward, Inc. (mechanical engineering); Boner Associates (acoustical); Architectural Concrete Associates, Inc. (architectural concrete)

Resources

Reinforced concrete: *Trinty Industries, Inc (Transit-Mix);* ***steel reinforcing:*** *Alamo Steel Co.,* ***steel columns, beams:*** *Davis Iron Works;* ***steel joists:*** *Vulcraft;* ***precast concrete:*** *Dayton Superior Corp.;* ***concrete floors:*** *Trinity Industries, Inc.(Transit-Mix);* ***metal deck:*** *Vulcraft;* **EIFS:** *Dryvit, Inc.;* ***glazed tile:*** *Dal-Tile;* ***acoustical panels:*** *Tectum, Inc.;* ***vinyl-covered gypsum board:*** *Gold Bond;* ***fixed windows:*** *Kawneer Co., Inc.;* ***operable windows:*** *Alenco;* ***entrance doors:*** *Tex-Steel Corp.;* ***plastic-faced doors:*** *VT Industries;* ***overhead steel doors:*** *Overhead Door Corp.;* ***vinyl tile:*** *Azrock Industries;* ***ceramic tile:*** *Dal-Tile;* ***wood gym flooring:*** *Robbins;* ***carpet:*** *Queen Carpet Corp.;* ***acoustical ceiling tiles:*** *USG Interiors;* ***modified bitumen roofing:*** *Manville;* ***metal roofing:*** *Berridge;* ***sealant:*** *W.R. Grace & Co.;* ***fiberglass insulation:*** *Manville;* ***polystyrene insulation:*** *Dow Chemical Co.;* ***light weight insulating concrete:*** *W.R. Grace & Co.;* ***stationary partitions:*** *Gold Bond;* ***metal studs:*** *Delta Metal Products;* ***moveable partitions:*** *Curtition, Inc.;* ***paint:*** *Devoe & Raynolds;* ***epoxy:*** *Sherwin-Williams;* ***hinges:*** *Stanley;* ***locksets, door closers, panic exits:*** *Sargeant;* ***lockers:*** *Interior-Medart;* ***bleachers:*** *Hussey Seating Co.;* ***signage:*** *JD Specialties;* ***marker & tack boards:*** *Pioneer Industries;* ***spiral stairs:*** *Stairways, Inc.;* ***ladder stairs:*** *Precision Stair Corp.;* ***handrails:*** *Davis Iron Works;* ***lighting:*** *Thomas Industries, Inc., McPhilben, Rambusch;* ***lavatories:*** *Kohler, Elkay;* ***water closets:*** *Kohler;* ***showers:*** *Bradley;* ***heating & air conditioning systems:*** *Carrier;* ***cabinets:*** *Paragon;* ***auditorium seating:*** *American Desk;* ***blinds:*** *Springs Window*

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New Office or No Office?

The need to respond more quickly to client needs and a more urgent awareness of the bottom line has placed additional pressure on every business to do more with less. At the same time, rapid advances in cellular and network technology have created new opportunities, and have made the the automobile, the airport lobby, and the spare bedroom as much a part of the new workplace definition as the corner office. Architects continue to adapt and lead the way in developing new designs for the workplace, for manufacturing, and for growing technology concerns.

Your New Office at Xerox:

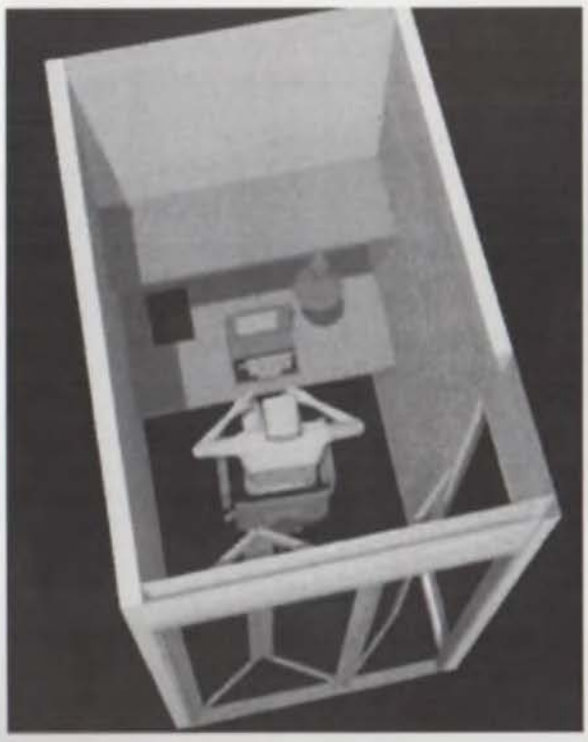
Collaborative strategies and technology are changing the workplace

La corporación Xerox, al enfrentar drásticos cambios producidos por la nueva tecnología, trata de adaptar sus centros de trabajo a los los nuevos sistemas de organización. Xerox, con asistencia de BOSTI Asociados de Buffalo, N.Y., desarrolló un modelo llamado "trabaje-de-dondequiera" para sus facilidades de ventas. Este enfatiza el proceso de trabajo sobre el lugar de trabajo, y consiste de en el uso maximo de computadoras portables y asignar reuniones en restaurantes o vestibulos en vez de salas de conferencia. Al emplear ecología organizacional, la compañía intenta dar preferencia al uso del espacio sobre la posesión del espacio, y a su vez proveer eficiencia para sus empleados. El modelo puede reducir basta por un tercio de tres millones de pies cuadrados.

THE IMAGE THAT COMES to mind when we think of the traditional office is probably very close to a scene from *How to Succeed in Business Without Really Trying* or *Working Girl*. Vast mail rooms, and secretarial pools enclosed by walls of perimeter offices complete the picture, and if we are shown to the "power corner" office, we are certain that the business to be transacted is being taken seriously. Are these images still valid today? Recent projects undertaken by the advertising agency Chiat/Day, the accounting firm Deloitte & Touche, and notably by Xerox Corporation, suggest that new ways of doing business are transforming the workplace in a fundamental manner.

Work from Anywhere

IS THERE STILL ROOM in the business plan for the traditional office template, and is it responsive to our new work processes? These and a host of related questions were posed by the Xerox Corporation, according to company executives Dick Kennett and Joe Rooney who have directed a broad-based initiative to rethink and redesign



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Xerox sales facilities through its XSERV division. Beginning in 1992 with the assistance of BOSTI Associates, a Buffalo, N.Y.-based consulting firm, Xerox has developed a "work-from-anywhere" model that emphasizes work processes over work places. Remote-access technology, laptop computers, and the use of restaurants and hotels as informal meeting places reduce the need for a dedicated office. The real-estate impact is significant: By the end of 1996, Xerox will have reduced three million square feet of leased space targeted for renovation by a million square feet.

A New Vocabulary

"HISTORICALLY, THE WORKPLACE has been viewed in a physical sense exclusively—the one place where all of the work was done," says Kennett. This is no longer true. Recognizing that the most effective workplace for selling is the client's place of business, many dedicated offices have been replaced by "phone booths": small, private cubicles with folding glass doors. They provide visual and acoustical privacy, are wired for voice

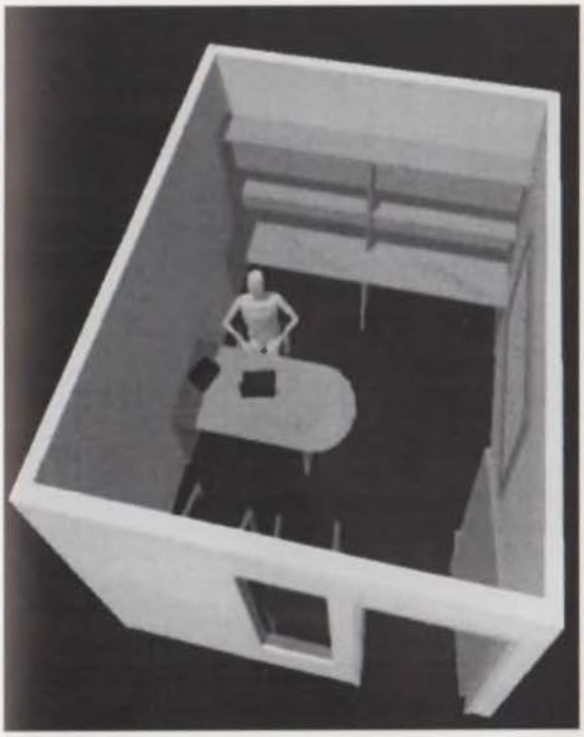
and data. With this reorganization of the workplace, a new vocabulary has been created that describes the new offices.

- *Cockpits* measuring six feet by eight feet provide more room to spread out than phone booths, and accommodate one or two people.
- *Walkers* are managers who do not require a dedicated office, and share 10-foot-by-12-foot offices used for small meetings and solo work.
- *Sitters* are managers who have dedicated offices measuring 10 feet by 12 feet that are used for small meetings.
- *Hotelling* implies regularly-scheduled but less than full-time use of an office. This concept originated with designs for accounting firms, among others, that needed to provide occasional space for field auditors, and other workers with similar schedules. Again, the emphasis is on the temporal aspect of the need. This basic concept has been modified by Xerox and others to accommodate their sales force, in addition to emphasizing "virtual offices."

Organizational Ecology

CENTRAL TO THE OVERALL concept and design of the new Xerox workplace is the notion that the entire office is available for use by any employee. The use of space has precedence over possession of space. This shift is the essence of the redefined set of work processes—the organizational ecology. Additionally, considerable effort is made to allow individual control of the immediate environment, and to create acoustical and visual privacy. These edges and boundaries organize the entire floorplate, and give the necessary visual cues that facilitate needed privacy. Diagrammatically, the plan is organized into four areas: The *commons* includes check-in areas for sales personnel, storage lockers, phone booths, cockpit offices, walker offices, work lounges, and eating areas—all wired with laptop network and telephone connections. *Customer areas* include the necessary office, electronic, and communications equipment, but are presented as in-use demonstrations so that customers see the equipment in a real-world environment. *Support* and *management areas* include the traditional back-office functions.

The changes do not end here, as site-selection priorities shift from trophy real estate to properties typically located closer to customer bases, reinforcing emerging demographic shifts. The earliest of these new offices are already being modified, suggesting a work-in-progress, as well as significant adjustments by the people themselves, getting used to their new laptops. ***Vincent P. Hauser***



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1 "Phone Booth" with a folding glass door provides the most privacy, and includes network, voice and data connections.

2 "Cockpit Office" provides space for individual or small groups to work in a private environment.

3 "Walker Office" is used for meetings when not in use by "walker managers," who are frequently in the field.

4 Working/eating areas are wired for laptop use, suggesting working lunches within the office itself.

PROJECT *Xerox Alternative Facilities Initiative, USA and International Field Operations Centers*
CLIENT *XSERV Strategic Services, Xerox Corporation, Stamford, Conn. (Richard Kennett and Joseph Rooney, project executives)*
ARCHITECTS *Haldeman Powell & Partners, Dallas (Pam Allen, Xerox account manager for Texas and St. Louis, Mo., projects)*
CONSULTANTS *BOSTI Associates, Buffalo, N.Y. (Michael Brill, president; James F. McDonough, associate), Working Spaces: The Lauck Group, Dallas (Steve Borg, alternative-officing associate)*
CAD IMAGES *Xerox Corporation*

1

Designing a Cure

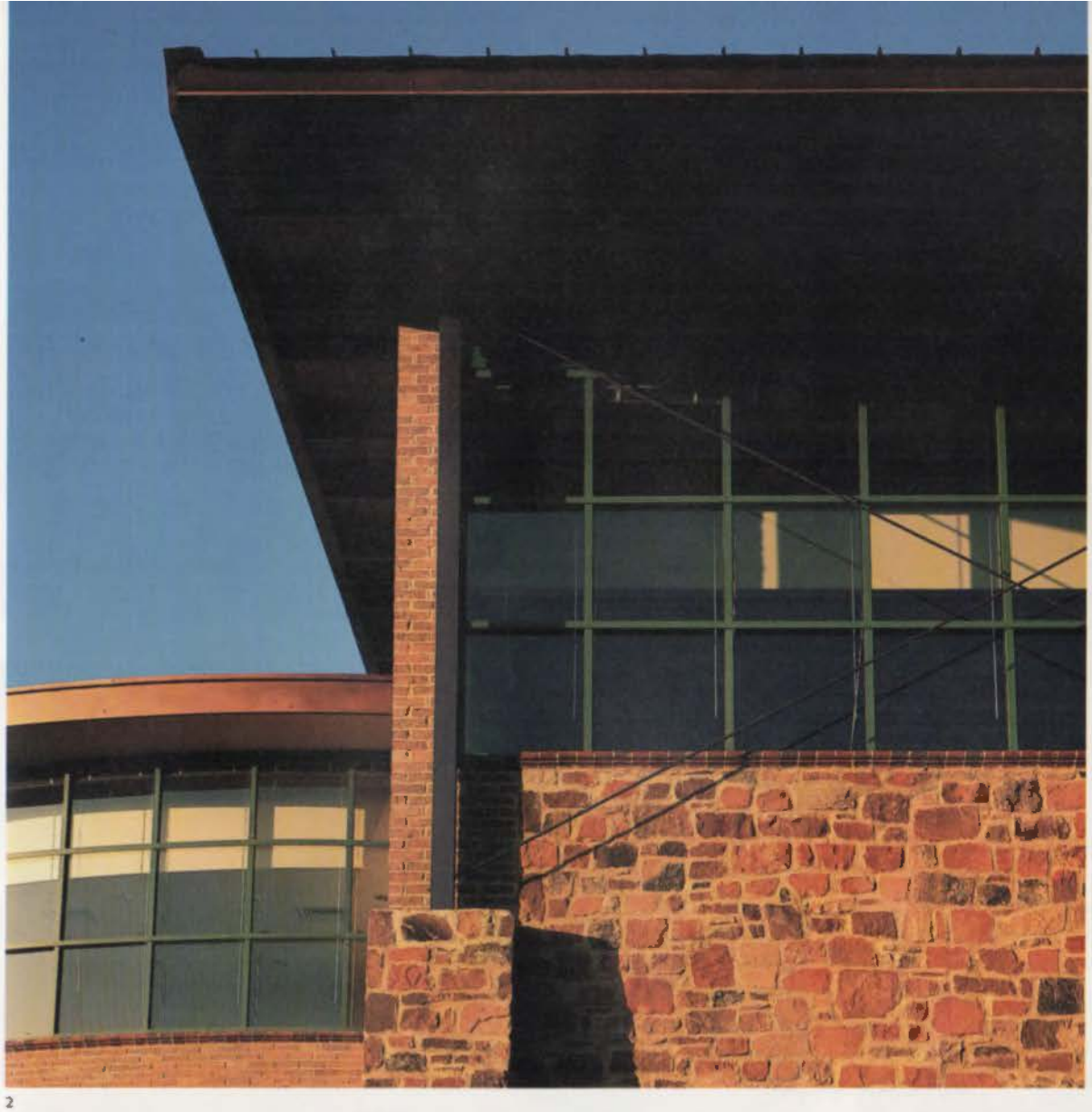
By Mark Forsyth

El Centro de Terapia e Investigación de Cancer, en las afueras de San Antonio, es un centro de producción de medicinas anti-cancerosas. Diseñada por Jones Kell Arquitectos (ahora Kell Muñoz Wigodski), esta facilidad médica es un campus atractivo y placentero. Según Richard Love, miembro fundador del Centro, los arquitectos dieron al campus un estilo de "un antiguo fuerte tejano rodeando un moderno laboratorio de alta tecnología."

El Instituto de Desarrollo de Drogas, un edificio de 40,000 pies cuadrados, es la pieza central del "fuerte." Su exterior consiste de piedra nativa, ladrillos cortados a mano, ventanas de madera y una ventana curvilínea. Para reducir costos, componentes de construcción prefabricados. El valor arquitectónico del Centro atrae posibles empleados.

Located outside San Antonio on a wooded site in the Texas Hill Country, the Texas Research Park is home to the Cancer Therapy and Research Center (CTRC). The Center, designed by JonesKell Architects (now Kell Muñoz Wigodsky Architects) of San Antonio, features two buildings oriented toward a secluded parking lot that wraps around a circular median. Housing the Alice McDermott Institute for Drug Development and the Southwest Oncology Group's corporate headquarters, the complex, which won a San Antonio AIA chapter merit award in 1993, holds offices and biological-research laboratories that employ the latest technological tools and scientific methods in a finely crafted container of stone, brick, and glass.

The highly specialized campus, which was built for $5.2 million, has as its central focus the development and manufacture of anti-cancer drugs. According to Richard Love, a founder of the non-profit CTRC (and now president of ILEX Oncology, a for-profit offshoot), research operations at the complex involve the development, extensive testing, and manufacture of



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1 The two-story Alice McDermott Institute for Drug Development rests on a wooded site west of San Antonio.

2 Stone, glass, and brick are combined on exterior walls that support the pre-engineered roof.

3 The reception area features an adjacent stone stair tower.

4 Buttresses carry purple-painted exposed columns.

3

4

1 High windows bring light into a stairway in the Southwest Oncology Group building.

2 A balcony overlooking the reception area passes alongside a curving glass wall at the eastern edge of the building.

3 The Alice McDermott Institute for Drug Development houses biological-research laboratories that develop and manufacture anti-cancer drugs.

4 The reception area, which features stone floors, connects to an a library.

1

RESOURCES
Reinforced concrete: Ingram; **pre-engineered roof system**: CECO/Moore Erection; **stone**: S&H Masonry; **brick**: Bickerstaff; **windows**: Kawneer, Best Built; **skylights**: Skylights over Texas; **interior doors**: VT Industries; **overhead doors**: Overhead Door Co.; **pavers**: Alamo Concrete Pavers; **interior flooring**: Scoffield; **carpet**: Prince Street Technologies; **interior graphics**: Gem Sign Service; **elevators**: Dover; **HVAC system and environmental control**: York; **lab casework**: Hallmark/St. Charles

pharmaceuticals from their inception through patient consumption. To accommodate this scientific-research component, the architects provided Love and his associates with state-of-the-art laboratories that met specialized air-handling and filtering requirements.

However, unlike many similar medical facilities, the architects provided much more, utilizing an architectural sensitivity to blend the limestone, brick, and glass buildings into a forest of live oaks. Love, who worked with architect John Kell on the project, explained, "In order to help with recruiting efforts, we felt we needed to offer potential employees a pleasing campus setting on top of the standard functional labs." In response to this need, the architects, according to Love, gave the CTRC the look of "an old Texas fort enclosing a high-tech modern laboratory."

The 40,000-square-foot Institute for Drug Development, the centerpiece of the "fort," is organized as a simple, two-story block with laboratories, located on exterior walls, surrounding a central core of support services. Auxiliary and public areas are located outside the block at either end of the building. The exterior of the building features native field stone, hand-cut brick, wood windows, and a curved window wall. In addition, pre-engineered components including exposed columns and the copper-painted roof are used as economical alternatives to custom-fabricated elements.

Adjacent to yet detached from the Institute for Drug Development, the Southwest Oncology Group is a related business that coordinates clinical-research studies. Its 11,000-square-foot, two-story building constructed of similar materials consists mainly of office space housing the company's corporate headquarters. **TA**

PROJECT *Alice McDermott Institute for Drug Development and the Southwest Oncology Group Building, San Antonio*
CLIENT *Cancer Therapy and Research Center*
ARCHITECT *Kell Muñoz Wigodsky Architects, San Antonio (John H. Kell, Daniel E. Wigodsky, Reagan W. Cocke, Ronald J. Biediger, Steven Land Tillotson, Michael G. Imber, Thomas R. Jackson)*
CONTRACTOR *Bartlett Cocke Construction, Inc., San Antonio*
CONSULTANTS *Danysh Lundy and Pinnell, Inc. (structural engineering); Silber and Associates, Inc. (mechanical, plumbing, and electrical engineering); Research Facilities Design (laboratory)*
PHOTOGRAPHER *R. Greg Hursley, Austin*

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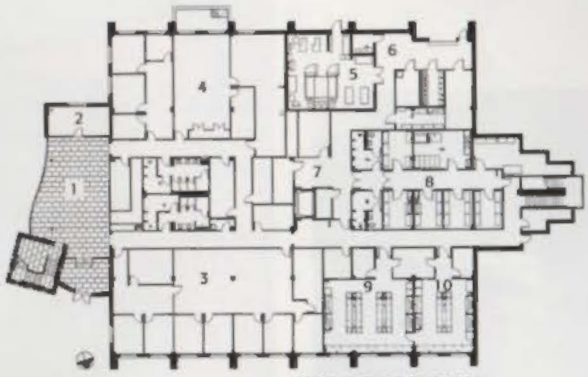
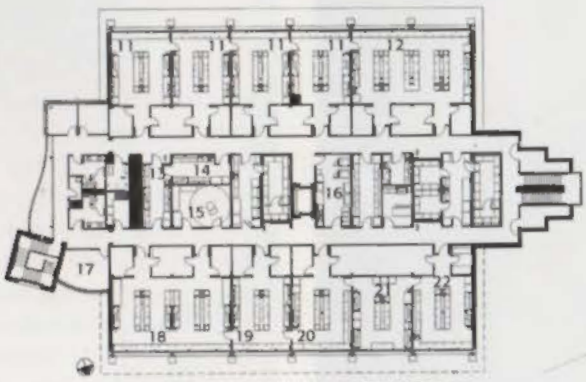


FIRST FLOOR PLAN

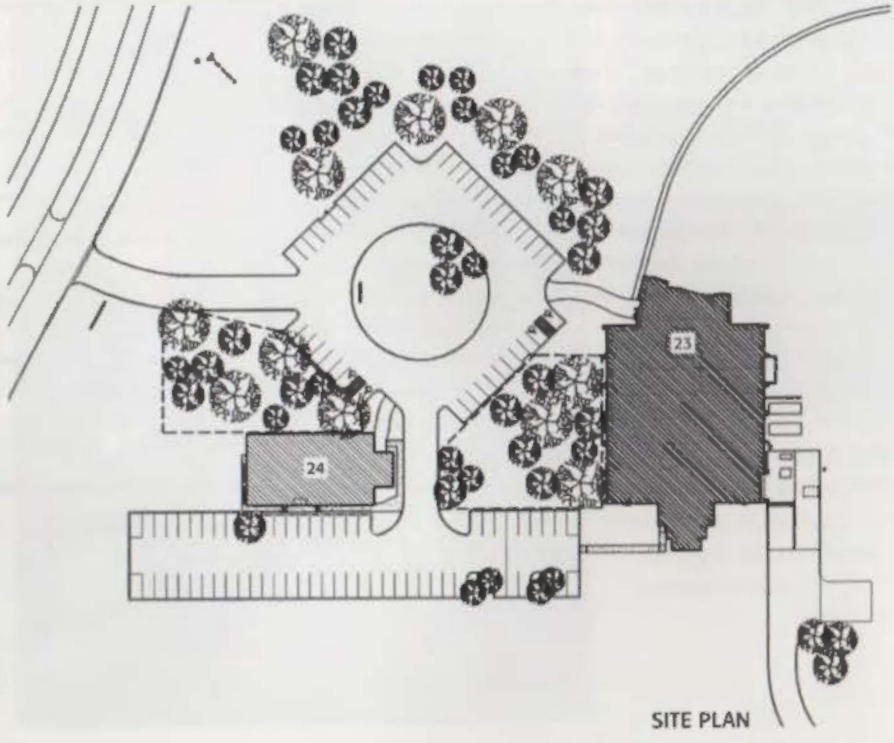


SECOND FLOOR PLAN

FIRST FLOOR PLAN
1 RECEPTION
2 LIBRARY
3 ADMINISTRATIVE AREA
4 CONFERENCE ROOM
5 MECHANICAL ROOM
6 SHIPPING/RECIEVING
7 STORAGE AREAS
8 ANIMAL AREA
9 DRUG EVALUATION AREA
10 TOXICOLOGY

SECOND FLOOR PLAN
11 CHEMISTRY
12 DRUG EVALUATION AREA
13 HAZARDOUS CHEMICALS
14 RADIOISOTOPE
15 ANALYTICAL ROOM
16 GLASS PREPARATION
17 CONFERENCE ROOM
18 FORMULATION
19 SCALE UP
20 MOLECULAR BIOLOGY
21 TISSUE CULTURE
22 TUMOR CLONING

SITE PLAN
23 ALICE MCDERMOTT INSTITUTE FOR DRUG DEVELOPMENT
24 SOUTHWEST ONCOLOGY GROUP BUILDING



SITE PLAN

Showroom of Detail

By Mark Forsyth

1

ORIGINALLY A DISTRICT OF CAR SHOWROOMS and gas stations, Commerce Avenue in downtown Dallas is now being gradually renovated into residential and commercial lofts. F/M Associates, an architecture firm that moved its offices to the area in 1994, has had a hand in many of the renovations, including their own workspace, a third-story loft at 2105 Commerce.

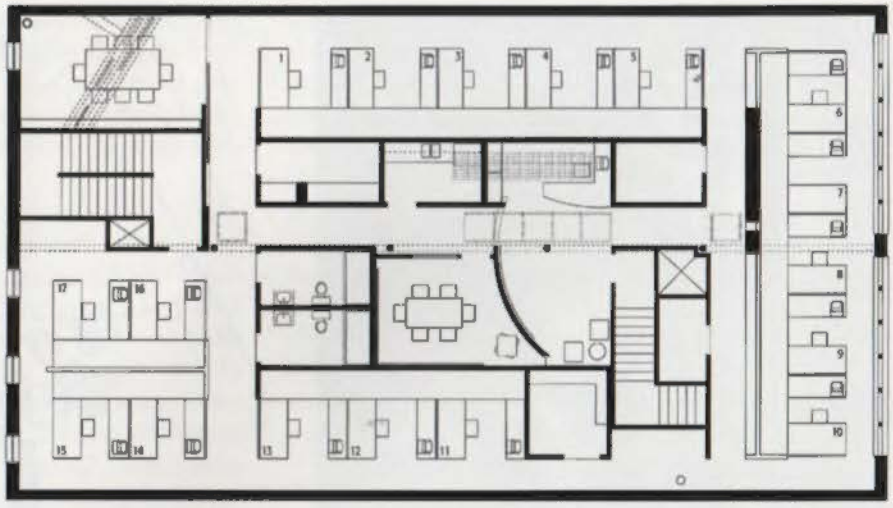
The relocation to downtown from Deep Ellum allowed the firm to profit from the area's affordable rents, enjoy the convenience of a central location, and contribute to the revitalization of the central business district. The move also gave F/M Associates a chance to create a functional office that reflects the firm's team-oriented approach combining traditional- and electronic-design methods. By distributing four open studios around the perimeter and clustering reception and service areas, which include a kitchen, a workroom, restrooms, and storage space, in a central skylit gallery, the architects accommodated this team approach while avoiding the typical front room/back room dichotomy. The four studios contain seventeen work stations, each configured to hold a computer as well as a traditional drawing board and wired for voice, data, and network access.

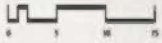
The blending of old and new was not limited to the work stations. In retrofitting a modern office into a building dating from the 1920s, the architects felt that it was important to clearly distinguish between original and new construction rather than use contemporary material to imitate historic conditions. In addition, the design team, which included virtually every member of the firm, wanted to explore the design potential of low-cost

F/M Asociados, una firma arquitectónica de Dallas, estableció sus oficinas en la Avenida Commerce. Dicha avenida pasa por el centro de la ciudad, el cual se encuentra en proceso de revitalización. Al relocalizar F/M, los arquitectos aprovecharon bajos costos de alquiler, disfrutan de un local céntrico y contribuyen a la renovación de un sector importante de Dallas. Las nuevas oficinas fueron creadas en un edificio de los años '20. Las partes nuevas de la remodelación contrastan en harmonía con las partes antiguas.

1 A purple divider holding a low bookcase separates a studio at the office's southern end from the central reception area.

2 Four studios surrounding a central reception and service area were retrofitted into a 4,500-square-loft space in downtown Dallas.





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EXISTING WALLS ●
NEW CONSTRUCTION ○

FLOOR PLAN

3 A curved wall of steel plates serves as a divider between the reception desk and a conference room; the plates are bolted to a wood stud wall coated in hand-troweled mortar.

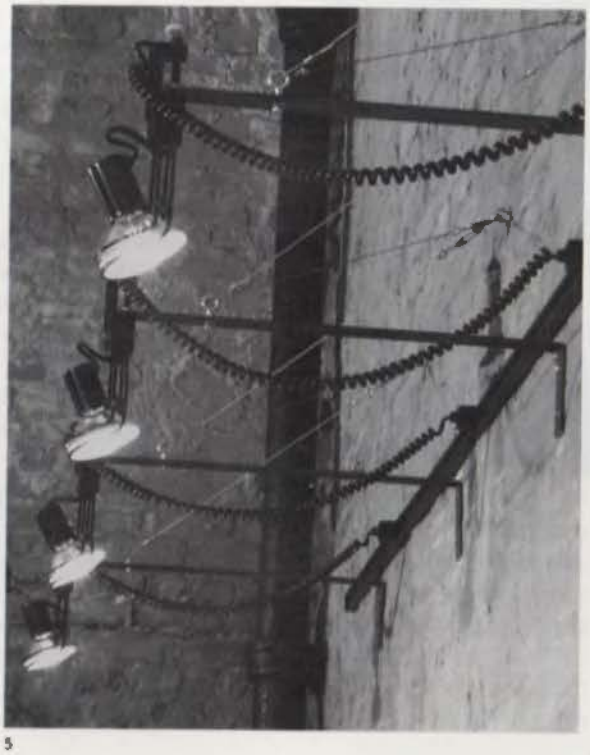
4 F/M Associates office's 17 work stations are equipped with a computer as well as a traditional drawing board and are wired for voice, data, fax, and network transmissions.

4

construction materials and techniques. These design goals were met through the integration of simple, durable, off-the-shelf materials such as plywood, homasote, recycled steel, and troweled plaster with existing elements and surfaces.

The 4,500-square-foot office space uses bold colors and meticulous detailing throughout. For example, a purple wall serves as a bookcase divider in one of the studios, while a curved partition constructed of steel plates attached to a stud wall with carefully aligned exposed bolts separates a conference room from the reception area. The attention to detail is also illustrated by the design of much of the furniture, which incorporates recycled materials and components. **TA**

PROJECT *F/M Associates Office, Dallas*
CLIENT *F/M Associates, Dallas*
ARCHITECT *F/M Associates, Dallas (Robert L. Meckfessel, Clifford M. Welch, Dean Bowman, David Stewart)*
CONTRACTOR *Gene Dennis (general contractor); Craig Benecke & Dean Bowman (special finishes and details)*
CONSULTANTS *L.A. Fuess Partners Engineers (structural engineering); MEP Systems (mechanical and electrical engineering)*
PHOTOGRAPHER *Craig Blackmon, Dallas*



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RESOURCES
Hardware: Schlage; **appliances**: General Electric; **communication**: Comdial; **security**: Westinghouse; **lighting**: Juno, Generic; **tubs/lavatories**: Standard; **water closets**: Bemis; **HVAC**: Janitrol; **chairs**: Steelcase, Wilkahn, ICF; **tables**: Paramount; **windows**: Andersen; **skylights**: Naturalite; **paint**: Benjamin Moore

5 Contemporary lighting is attached to the existing brick walls of the 1920s building in Dallas's central business district.

Competitive Edge

By Vincent P. Hauser

La torre de oficinas North Park fue remodelada bajo el diseño de F&S Partners de Dallas. Parte de la renovación fue reorganizar las áreas de descarga y acceso. El nuevo edificio provee una entrada formal para automóviles, una comodidad necesaria para espacios de clase A. El lujoso nuevo vestíbulo está adornado con acero pulido (cubriendo las columnas), pisos de granito y muebles grandes de piel. Baños, elevadores y otras áreas fueron reconstruídas de acuerdo a códigos contemporáneos. En cambio el sistema mecánico y la cubierta exterior de la torre quedaron intactas.

North Park Central es uno de muchos edificios que han resucitado debido al resurgimiento del mercado de oficinas en Texas durante los últimos años.

1

1 An improved leasing climate led to the renovation of the North Park Central office tower.

2 The winning competition design relocated service access to allow for a new entry plaza.

EMERGING SUCCESSFULLY FROM a compensated, developer-sponsored competition held in the fall of 1992, F&S Partners of Dallas has completed a renovation of the 360,000-square-foot NorthPark Central office tower located at the intersection of Central Expressway and Northwest Highway in Dallas. The winning competition scheme, which originally included a proposal for an additional office tower on the site, focused on a list of elements intended to bring the then-vacant property on line to compete with other "A" space, in the generally improving leasing climate.

F&S Partners worked at the direction of Fults Realty Corporation of Dallas, agents for Cigna Investors, Inc., of Hartford, Conn., owners of the property. Focusing on the functional needs of the project, a concentrated effort was needed to address loading and entrance issues, say the architects. The original loading-dock access conflicted with the front door, which created potential leasing problems. In order to correct this, a new way of servicing the building was required. The proposal suggested in the competition entry addressed this by relocating the loading access to the space between Central Expressway and the existing parking garage. This required significant coordination with the reconstruction of the expressway and new ramp configurations, as well as modifications to the building service-access routes. The most recent construction projects along Central Expressway to acommodate light rail began in 1989, and are scheduled to be completed in 1997 (see *TA*, "News," Mar/Apr 1993).

With the new service configuration, it was possible to focus on a more prominent vehicular entrance court. Beginning with concrete pavers set flush with the adjacent grade and a new fountain, vehicles can drop off or pick up passengers at the front door, a necessary amenity for a class-A leasing program. The new lobby is finished with flamed granite flooring, polished stainless steel column covers, and furnished with oversized leather seating. In order to further dress up the entrance sequence, the parking garage was repainted, and exterior openings between floors were infilled on the entrance-court side of the project.

Extensive improvements to the core systems were undertaken to comply with the ADA and updated building-code requirements. Each of the toilet cores was completely redesigned and rebuilt, as were the elevators. The core mechanical systems were essentially left intact, and the exterior cladding was unaltered.

NorthPark Central is one of a growing number of office buildings that have been resuscitated by awakening office markets in many parts of Texas. After finding their way through a series of varied real-estate portfolios, or being held over time by entities with deeper pockets, these buildings have rebounded in value by virtue of their location and solidifying market fundamentals, such as steady absorption rates. Institutional investors such as Cigna have returned to the commercial real estate market as returns have stabilized, and prices for class-B properties seem to have finally bottomed-out in stabilized markets. What this means for architects is significant.

- Owners and their representatives are still nervous from previous experience: Budget, schedule, and functional issues, such as those illustrated by

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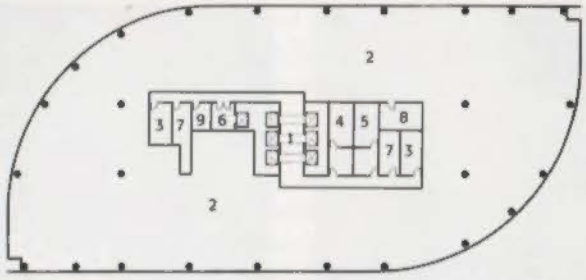
3 Granite floors and wall panels, and upgraded lobby furnishings were added as part of the overall leasing strategy.



4

KEY TO PLAN

1 ELEVATOR LOBBY
2 LEASE SPACE
3 STAIR
4 MEN'S RESTROOM
5 WOMEN'S RESTROOM
6 FREIGHT
7 ELECTRIC/ TELEPHONE
8 FAN ROOM
9 JANITOR

4 Plan showing renovated core services. The project included modifications required for ADA compliance.

NorthPark Central, will continue to dominate the decision-making.

- Budgets will provide for quality materials in high-visibility and image-enhancing locations, such as lobbies and entrances.
- Additional effort will be required to adapt new control systems to aging mechanical systems, particularly in response to higher tenant expectations.
- Refrigerant, air-quality issues, and hazardous-materials concerns may make some projects functionally obsolete, particularly from a financial perspective in a risk-averse investment environment.
- Extensive feasibility studies directed by the owner and architect may be required to provide a clear investment picture, particularly as more sophisticated investor groups see market pressure building.

TA

RESOURCES

Pavers: Pavestone; **parking coating:** Duroplex; **fountain:** Roman Fountains; **lighted handrails:** Nu-Art; **signage:** Art-O-Grafx; **exterior seating:** The Petoskey Group; **stone:** Texas Stone & Tile; **security system:** Control Systems International; **glass entry:** ACI Glass; **column covers:** American Steel & Aluminum; **elevator:** Millar; **millwork:** Patella Woodworking; **carpet:** Masland, Bentley; **acoustic ceiling:** Armstrong; **paint:** Sherwin Williams; **wallcovering:** Innovations in Wallcovering; **mirrors:** Oak Cliff Mirror & Glass; **interior planters:** Niedermaier; **seating:** Brayton; **corporate art:** Dan Rizzie

PROJECT *NorthPark Central, Dallas*
CLIENT *Cigna Investors Inc., Hartford, Conn.; Fults Realty Corporation, Dallas*
ARCHITECT *F & S Partners, Inc., Dallas (Bob Shaw, partner-in-charge; Ken Hutchens, Gary Pitts, Michael Voit, Barbara Nugent, Kenda Draper)*
CONTRACTOR *Hill & Wilkinson*
CONSULTANTS *Ellisor & Tanner, Inc. (structural engineering); Dunn Consulting Engineers (mechanical, electrical, and plumbing engineering); Brockette Davis Drake (civil engineering); Johnson, Johnson & Roy, Inc. (landscape design); Mary Peyton (lighting design); Architectural Arts, Sharon Lieber (artwork consultant); Coco Hudson Company (interior plantscape)*
PHOTOGRAPHER *James F. Wilson*

Silicon Hills

By Vincent P. Hauser

La planta Motorola MOS 13/APRDL, fabricante de semiconductores se inauguró este año. Este proyecto, localizado al este de Austin, incluye además el Laboratorio de Desarrollo e Investigación Aplicada. La facilidad fue diseñada por Graeber, Simmons y Cowan Arquitectos y Corporación de Diseño Industrial. Algunos la conocen como una "máquina gigante de aire," por el inmenso volumen de aire filtrado que circula en su interior para permitir el funcionamiento de la maquinaria. La prisa de Motorola para terminar la planta hizo que el equipo de diseño sincronizara su trabajo de tal manera que la construcción comenzara mientras se producían documentos de construcción. Esta estrategia naturalmente produjo dificultades y retos a diario pero aun así el proyecto se completó exitosamente.

The Motorola MOS 13/APRDL semiconductor-fabrication plant and research laboratory in Austin formally opened on August 22, 1995, representing a $1-billion investment in buildings and equipment. Located at Motorola's Ed Bluestein campus in East Austin, MOS 13 is the latest addition to an expanding Texas industry, and Motorola's largest-ever construction undertaking. It includes the fabrication plant itself and the Advanced Products Research and Development Laboratory (APRDL).

Designed by Industrial Design Corporation (IDC) and Graeber, Simmons & Cowan, AIA Architects (GSC), both of Austin, the facility broke new ground not only in process-engineering and chip-fabrication technology, but also in project and documentation management. The scale of the facility is impressive. Built for high-volume production of sub-micron semiconductors including the PowerPC chip, the 800,000-square-foot complex is frequently referred to as "a giant air machine," a reference to the enormous volumes of filtered air required to maintain the clean-room

Motorola

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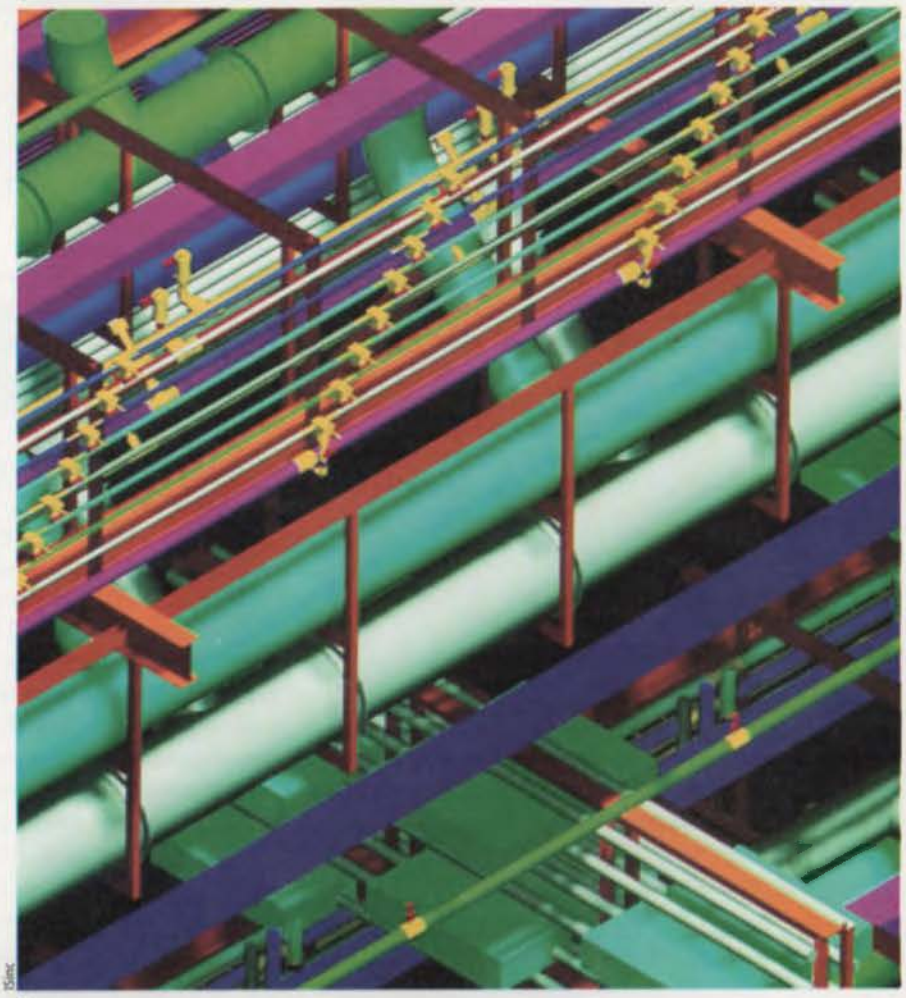
1 The completed wafer is prepared for cleaning and testing at the end of the fabrication process.



IDC

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2 In order to coordinate fab-process systems, CAD-design drawings were translated directly into shop drawings.

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3 Vibration generated by process piping, scrubbers, and exhaust stacks was mitigated by a stiff structural system and equipment isolation.

environment. Large volumes of air flow through the structure moving at 60 to 75 feet per minute, and provide a 100-percent air change every 6.7 seconds. Also incorporated into the project are on-site water-treatment facilities, extensive water-recycling systems, and multiple air-scrubbing systems. Just-in-time delivery systems—a now-familiar industrial methodology that minimizes storage requirements and allows for rapid production changes—are used to minimize on-site chemical-storage requirements, for example.

Soft Bake, Hard Bake

"The building is essentially wrapped around the fab process," says architect Bob Harding of GSC. The fabrication process itself is similar in concept to conventional photography, as a silicon wafer—the film—is exposed to an image—the particular circuit that forms the actual chip—as exposures are built up in layers.

After the silicon crystals themselves are grown in a furnace, they are sliced by diamond saws to the specified thickness, polished and cleaned, and then coated with a photoresistive material. The wafers are then *soft baked* in an oven, curing the photoresistive material. At this point, the wafers are exposed to the circuit image—the *mask*—in a photolithography process, developed to remove unexposed material, then *hard baked* to set the image. At this point, the wafer is prepared for the next set of images by a stripping-and-etching process that chemically removes the remaining residue from the wafer and prepares it for the next circuit—a process not unlike preparing architectural metals for an anodic coating. The layers are *implanted* with select material to connect one circuit to the next. This step is repeated up to 14 times, as required to complete the wafer. When the wafer is completed, it resembles nothing so closely as a sheet of money before it is cut into individual bills—in this case, individual computer chips.

MOS 13 and the adjacent research facility are developing processes and machinery that make the layers ever-thinner, and in smaller line widths. In addition to making the chips run cooler and quicker, the reduced thickness and size results in smaller built-up components when they are assembled into commercial products—less is indeed more.

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In order to provide the air for the clean rooms themselves, as well as the make-up air for the exhaust systems, the upper levels of the plant are essentially large fan decks, dumping air over the equipment and floor decks below like water through a sieve. The fab processes and equipment are very sensitive to vibration. In order to address this issue, a stiff, 36-inch-deep waffle-

slab structure was provided, supported by columns on 12-foot to 18-foot centers. To accommodate utilities and expansive-clay soils conditions indigenous to this part of Austin, the ground floor incorporated a suspended slab-on-pier structural system.

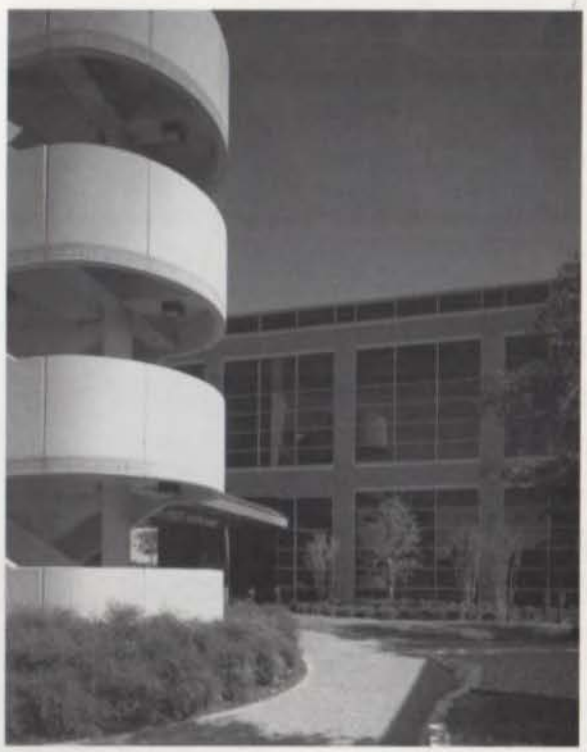
Compatible Cultures

"We really began preparing for this project five or six years ago during our first project with Motorola," says GSC partner Al Simmons. The design-build, fast-track approach permeates every aspect of document production, he says, and therefore, the projects are measured in weeks, not months or years. "We quickly found that we would have reached the physical limits of what we could produce" by conventional CAD, and needed to focus on more closely-integrated project-management procedures, Simmons continues. During these early projects for Motorola, GSC tailored their production and management tools to assist Motorola; as the relationship developed, and as the two companies found their respective ways of communicating and doing business very complementary, GSC became involved earlier in the project-development loop. "We are generalists first, and that's one reason why we have been able to be successful," says Simmons. One result of this close relationship with Motorola has been the co-development of CAD software that renders piping drawings in three dimensions; this approach addresses the traditional nemesis of the architect—coordination. The 3-D drawings are linked to piping shop drawings to reduce the time between design and fabrication. The process was used on MOS 13 primarily in lab facility and process areas where GSC had a more direct coordination responsibility.

Most fab plants are process-engineering driven, and MOS 13 is no exception, according to the architects. As the lead and coordinating consultant to Motorola, Industrial Design Corporation was charged with the overall project responsibility and worked closely as a team with GSC and Motorola to develop the project budgets and schedules needed to begin producing wafers. MOS 13 began producing silicon five

1 The entrance to the Advanced Products Research and Development Laboratory facility at MOS 13

2 Ventilation systems required for baking and etching processes provide a defining image.



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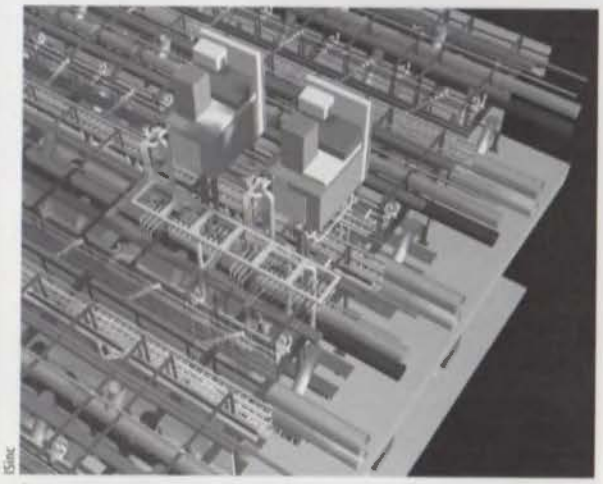

GSC

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months after the delivery of process equipment, according to Motorola. From the field perspective, this schedule presented enormous challenges, according to GSC architect Jim Overton. Field engineering and equipment changes, cleanroom protocols during construction and after plant start-up, and temperature- and humidity-control issues during construction each provided daily challenges. Despite the changes in design, the schedule did not change.

The urgency and magnitude of the schedule and production issues gain added dimension with a cursory reading of the business pages of the newspaper, or any news or business magazine: The global demand for computer chips and components is exceeding even the most aggressive projections, and Texas is one of the most desirable international fab locations. It is this shared sense of urgency, some might say shared panic, inherent in a project of this scale and complexity that creates the edge needed to find the fully-baked solution to the work at hand. **TA**

Motorola

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3 Chilled-water piping supplies the air handlers that cool the clean rooms.

4 Enhanced CAD software was jointly developed by GSC and Motorola.

5 Photolithography areas inscribe the circuit image on the prepared wafers.

PROJECT *Motorola ULSI/MOS 13, Austin*
CLIENT *Motorola, Austin*
PROJECT TEAM *Industrial Design Corporation, Austin (mechanical, electrical, plumbing, and process engineering: James D. Carr, P.E., principal-in-charge); Graeber, Simmons & Cowan, AIA Architects, Inc., Austin (architectural design: Al Simmons, principal-in-charge)*
CONSTRUCTION MANAGER *McCarthy, Phoenix, Ariz.*
CONSULTANTS *Baker Aicklen (civil engineering); Jose I. Guerra (structural engineering); The Broussard Group (landscape design); Colin Gordon & Associates (vibration)*
PHOTOGRAPHER *Atelier Wong Photography, Austin (except as noted)*

RESOURCES
Insulated wall panels: H.H. Robertson; **paint:** Pittsburgh Paints; **wall covering:** Tri-Kes; **curtainwall:** PPG Architectural Finishes; **glazing:** Guardian Industries; **skylights:** Super Sky Products, Naturalite; **overhead doors:** North American; **carpet:** Interface; **VCT:** Armstrong; **conductive vinyl:** VPI; **ceramic granite:** Fiandre; **specialty coatings:** Stonhard; **access floor:** Tate; **acoustical ceiling:** USG Interiors; **roofing:** Bondcote; **waterproofing:** Bentonite; **hardware:** Hager; **elevators:** Dover; **stairs:** American Stair; **miniblinds:** Bali

Schools of Thought

by Susan Williamson

El diseño arquitectónico de escuelas elementales y superiores es un trabajo cada vez mas complejo. La configuración tradicional de las escuelas de Texas se vuelve obsoleta, debido a la necesidad de espacios mas flexibles y adaptables a cambios tecnológicos y demográficos. Al arquitecto además se le asigna la producción de un ambiente hogareño para cada estudiante. La Escuela Superior Franklin, en El Paso, fue diseñada por Duffy B. Stanley, Arquitectos y PSA, Inc. La nueva institución que sirve a 2,400 estudiantes. Sus componentes están organizados alrededor de patios interiores, plazas y paseos peatonales, elementos que crean una atmósfera íntima. La Escuela Elemental Alton Bowen en Bryan, en cambio, solo sirve a 550 estudiantes de edad temprana. Patterson Arquitectos diseñó un nuevo prototipo de escuela pequeña, el cual consiste en agrupar salones de cuatro en cuatro, uno para cada nivel escolar. Cada grupo incluye un centro de trabajo para maestros.

An examination of two recently completed school projects is introduced by some observations on current issues in educational design by Brent Byers, FAIA, of Dallas.

SCHOOL PLANNING TODAY is tougher than ever. Architects involved in school projects are faced with a variety of complex demands and pressures: Community-based input, site-based-management decision making, citizen empowerment, and expanding educational programs are just some of the trends that have increased the complexity of educational-facility design.

And school-design questions are of ever-increasing concern. Texas schools are growing at a prodigious rate: 150,000 new students are entering the state's schools every two years. This growth, combined with new Texas Education Agency (TEA) standards and the move toward equalization of funding per student, has placed a tremendous burden on architects and educational planners.

The most important trends include changes in overall building configurations, the incorporation of even more flexible spaces, energy-management sys-

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1 Simple building forms, hipped roofs, and polychrome masonry provide a strong regional identity for Franklin High School in El Paso.

2 Alton Bowen Elementary in Bryan, a new prototype for the school district, was designed with input from a wide range of user groups.

tems, and specific client-customization features. Today's schools must meet the pressures of ever-changing demographics, adapt to the needs of future expansion and programming changes, and incorporate the technological changes that are occurring at a supersonic pace.

One way school planners are meeting these diverse and sometimes conflicting needs is by creating a "typical" classroom that is generic in design, fitted with computer outlets, marker boards, overhead screens, teacher storage cabinets, media-retrival technology, and more—all to make the environment both flexible and still as conducive to learning as possible.

Yet another complicating factor is the conflict that occurs with the imposition of state mandates that promote standardization, while individual communities require specialization to meet local needs. Urban districts are attempting to offer more to attract a shrinking and diverse enrollment, while suburban communities are maturing into full-fledged cities, complete with the complexities of traditional urban schools. All districts, however, seem to be focused on the needs of the individual student.

That focus means floor plans that reflect more intimacy at the classroom level as well as more opportunity for sociability in the common spaces such as dining, assembly, and athletic facilities. Creating a "sense of place" for every student, while offering the most flexible learning environment has become the challenge of the 1990s.

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As today's Texas schools take on more responsibility in areas like morality and social values, as well as in providing support for the family in other ways, the architects and planners who undertake the design of these educational facilities are faced with a corresponding increase in the complexity of the task that faces them.

Brent Byers, FAIA

Brent Byers, FAIA, is a principal with Corgan Associates in Dallas.

Franklin High School, El Paso

PROJECT *Franklin High School*
CLIENT *El Paso I.S.D.*
ARCHITECT *Stanley + PSA Inc., Joint Venture Architects, El Paso (Duffy B. Stanley, senior architect/project manager; Lars A. Stanley, project architect/designer; Manual Contreras, field representative; design team: Samuel U. Vail; Lee Hampton; Gerald Maffei; Eleanor H. McKinney; Sharon Stanley-Moreno; Tara Taggert; Brock Stanley; Dickson Skidmore; Tommy Razloznik, CAD production architect; CAD production team: Charles Smith; Jim Kelly; Ron Tapia; Roger Martinez; Abram Alvarez; Jerry Quiñones; Lettie Camacho)*
CONTRACTOR *Bradbury & Stamm Construction and Bradbury & Stamm of Texas, a Joint Venture*
CONSULTANTS *Robert Navarro (structural); Bridgers & Paxton (mechanical); Coupland Moran (electrical); Kistenmacher (civil); Lewis & Associates (landscape); PCC (cost forecasts); Rolf-Jensen (life safety); Boner Associates (sound systems); Crawford-Friend (theater); Robert Butler (roofing systems); Sergent Hauskins (soils); Irene Muller Stanley (colors/material selections)*
PHOTOGRAPHER *Atelier Wong Photography, Austin*

When Duffy B. Stanley, Architects, and PSA, Inc., were hired by the El Paso Independent School District to design the district's first new high school in 20 years, the team was faced with a number of complex issues. Because of rapid population growth on the city's west side, the district needed a facility that would house more than 2,400 students and would include a wide range of functions: 110 classrooms, two gymnasiums, a performing arts center and outdoor amphitheater, and athletic fields. Much of the campus—the performing-arts center and the library—had to be designed to serve community groups after hours as well as students. In addition, the district's educational specifications for such a school were outdated and needed to be revised before an actual design could be initiated.

Updating the educational specifications was one of the keys to creating a successful design, says architect Lars Stanley. The process involved a wide range of people, including students, teachers, administrators, staff, and other members of the community. In addition, the architects visited ten similar high schools in Texas and New Mexico. That experience, combined with the information gleaned from the users, helped the team determine the basic direction of its design, Stanley says.

One of the team's guiding principles was that "developing a sense of place and a human scale would be important" in designing a project of such a large scale. That realization led to the team's decision to organize the 300,000-square-foot campus, located on a 45-acre site, around a series of outdoor courtyards, plazas, and walks. These outdoor spaces, particularly the central commons around which the classroom wings are positioned, provide areas where students can gather, Stanley says, either individually or in groups.

The outdoor spaces are organized on an axis that follows the arroyo on which the campus sits. That axis terminates with views of the Franklin Mountains to the northeast and of the Rio Grande Valley to the southwest. The classroom wings extend on an axis aligned with the river. This organization, along with building forms and patterns of texture and color in the masonry that allude to the regional style popularized by Trost & Trost, provide the human scale the project needed, Stanley says.

A wide variety of sustainable design features were included: insulated masonry walls; small, shaded operable windows; provisions for rainwater harvesting and gray-water usage; automatic, energy-efficient HVAC controls; water- and energy-efficient fixtures; and the use of local materials.

Because of an extremely tight schedule, site work began while working drawings were being completed. All academic areas were completed first to allow students to begin using the school as early as possible. Other sections—the performing arts center and athletic facilities—were completed later. Bids for the complex came in $1.2 million under the budget of $27 million; the final cost was $25.9 million.

KEY TO PLAN
1 ADMINISTRATION
2 LIBRARY
3 ACADEMIC WING
4 CENTRAL PLANT
5 GYMNASIUM
6 PERFORMING ARTS
7 BASKETBALL/VOLLEYBALL
8 TENNIS COURTS
9 FOOTBALL/TRACK
10 PRACTICE FIELD
11 BASEBALL FIELD

1 A courtyard at the heart of Franklin High School provides space for students to gather.

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1 The Bowen Elementary media center includes whimsical features like this freestanding house for storytelling and other class-size activities.

2 An art room with a curving wall acts as a hinge at one corner of the elementary-school building.

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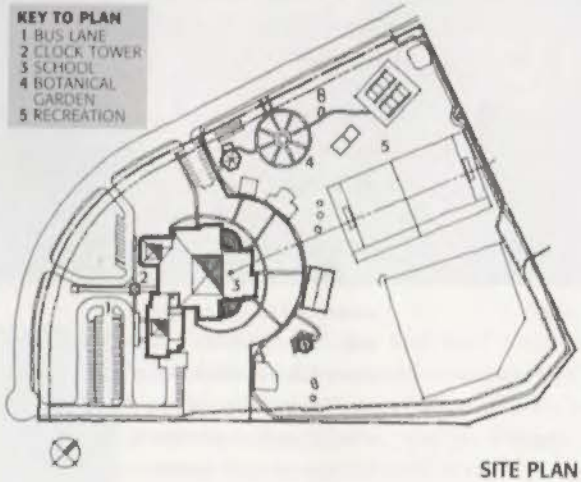


SITE PLAN

PROJECT *Bowen Elementary School, Bryan*
CLIENT *Bryan Independent School District*
ARCHITECT *Patterson Architects, Bryan (Fred A. Patterson, principal; Jameel Chaudry, associate; Linda DeSalvo, associate; Abigail Butler, intern architect; Jay Davis, intern architect)*
CONTRACTOR *Paul Pogue, Inc., Sherman*
CONSULTANTS *MLC & Associates (structural engineering); Robert Eisenbeck Engineers (mechanical, electrical, and plumbing engineering); McClure Engineering (civil engineering); Mark E. Ferguson (landscape architect); Richard G. Allen Architects (educational/architectural consultant); Mellinger Designs (interior design)*
PHOTOGRAPHER *Charles Davis Smith*

Alton Bowen Elementary School, Bryan

Although Alton Bowen Elementary School in Bryan is at the other end of the size spectrum from Franklin High School—it was designed to house 550 students, from kindergarten through fifth grade—the process the architects undertook was similar. Patterson Architects of Bryan, which designed the 59,650-square-foot school as a new prototype elementary for the district, worked with Richard G. Allen Architects of Florida to develop a set of educational specifications; the team met with students, parents, teachers and administrators, as well as specialists in areas like library science, special education, and the various subject areas.

Input from teachers led to the arrangement of classrooms in pods, a group of four classrooms, one for each grade level, centered on a teacher planning room. The planning rooms provide space for a telephone and computer, as well as work areas and storage. Centralizing the teacher work areas allows more space in the classrooms for educational uses and enables teachers to cooperate in planning and supervising. Teachers also asked for an extra classroom for each grade level, according to architect Fred Patterson. Although for budget reasons that wish could not be accommodated, the architects did include several auxiliary "learning spaces"—areas where a class-size group could gather.

The classroom pods surround the media center that lies at the heart of the school. The media center's central feature is an elevated mezzanine—students specifically asked for a two-story space during programming, Patterson says; the center includes spaces for both group and individual activities.

Incorporation of the latest educational technology was another important consideration. Each classroom has six computer workstations, all completely networked, and each room is set up with two-way video capability. In addition, satellite linkages allow the school to connect to a wide variety of educational resources and services.

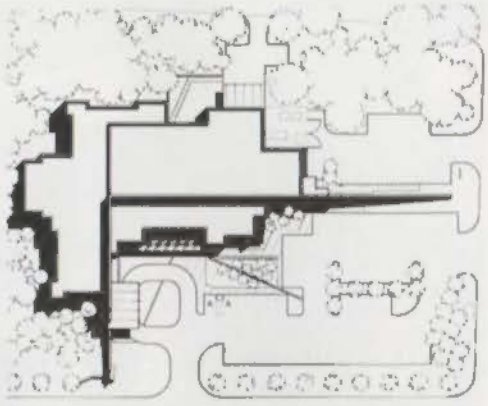
The school is located adjacent to a neighborhood park built in conjunction with the Texas Parks and Wildlife Department and the City of Bryan. The park includes school play areas, other recreational facilities, and an interactive fountain. *SW*

RESOURCES
Franklin High School
Reinforced concrete: Jobe Concrete; **reinforcing steel:** Hausman; **structural steel:** W&W Steel; **concrete masonry units:** Del Norte Masonry Products; **metal decking:** Vulcraft; **gypsum wallboard:** U.S. Gypsum; **windows:** Alenco; **skylights:** Naturalite; **entrance doors:** Steelcraft; **interior doors:** Weyerhauser; **overhead doors:** Wayne Dalton; **exterior paving:** Jobe Concrete Products; **VCT:** Amtico; **acoustical panels:** USG; **metal roofing:** BHP Steel; **insulation:** Owens-Corning, Certain Teed; **gutters and**

(continued on page 65)

Survey

Treatment in the Woods



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ARCHITECTURE Cancer treatment centers need thick walls to shield the rooms where radiation is used for therapy. Brinkley Sargent Architects of Dallas used this fact as a starting point in the firm's design of Longview Regional Cancer Center in Longview. The architects elaborated elements of the $3-million, 24,300-square-foot building's function, along with images evoking local history, to make an inviting space and a soothing atmosphere for patients undergoing an otherwise difficult experience.

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The Longview Regional Cancer Center's three-acre site, which retains 40-foot-tall pine trees along its northern and eastern boundaries, lies at the end of a street of tight-packed single-story office buildings, each paved out to the property line. In such a context, the woods were a luxury that it would have been wasteful to ignore.

Toward the street, the architects oriented a tall, two-foot-thick datum wall in local limestone and sandstone; projecting forward from it are the brick-clad volumes for the public reception areas, which face the parking lot. The brackets on the canopies cantilevered from this wall are detailed to look like the counterweights on oil-well pump stations, a nod to the area's history.

Behind the wall, in a plan that steps in and out to maximize views, the architects clustered the patient waiting rooms and radiation- and chemotherapy-treatment areas. The sense of connection to the landscape is enhanced by the use of operable wood windows and wood paneling in this zone. The architects tried to make the serenity of the woods, with its undisturbed floor of pine needles, a part of the patient experience. ***Joel Warren Barna***

3

PROJECT *Longview Regional Cancer Center, Longview*
CLIENT *Physician Reliance Network, Inc.*
ARCHITECT *Brinkley Sargent Architects, Dallas*
CONTRACTOR *Paul Pogue, Inc.*
CONSULTANTS *Brockette/Davis/Drake (structural engineering); Kimley-Horn & Associates (civil engineering); Koegel & Associates (mechanical and electrical engineering)*
PHOTOGRAPHER *Brendan Dunnigan*

1 Site plan, Longview Regional Cancer Center, designed by Brinkley Sargent Architects of Dallas; the project's patient-care areas open toward the rear of the forested site.

2 A two-foot-thick datum wall, in limestone and sandstone, divides the project into public and patient-care zones.

3 Canopy brackets recall pump-station weights.

Educational Playhouse

ARCHITECTURE Incorporating elements of the environment such as clouds, sky, and water into a transportation theme, Kidstar is an upscale children's entertainment center located in the Alamo Wing of San Antonio's North Star Mall. Designed by Marmon Mok, the playhouse, which opened in August 1994, features a variety of "vehicles" that children can use to manuver around the 6,000-square-foot space including a bullet train, the space shuttle, and Noah's Ark.

Developer Kidstrek International, which operates two restaurants that cater to children in Mexico City, approached the San Antonio architecture firm with the idea of creating a supervised play area where parents could drop off their kids while shopping in the mall. The incorporation of features like the space shuttle, constellations, and weather imagery was meant to inspire the children's imagination and, not incidentally, allow the finished product to be marketed as an educational alternative to standard arcades and party areas located elsewhere in the city.

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Connected to the mall and the exterior, Kidstar has a maximum occupancy of 400 children and features video games, party rooms, a dining area, and play areas. The party rooms are located inside the space shuttle, which flies under a night sky illuminated by fiber-optic constellations and over a padded globe, and Noah's Ark, which sails under suspended clouds and neon lightning bolts. Play areas include the Ball Bath, a thickly padded ball pit incorporating a manufactured submarine, and a series of tubes and slides located along the rear wall.

Offices, restrooms, a kitchen, and a food-service counter are also included in the project and are hidden behind blue-green glass block and the Wave, an undulating wall detailed with neon lights. ***Mark Forsyth***

PROJECT *Kidstar, San Antonio*
CLIENT *Kidstrek International*
ARCHITECT *Marmon Mok, San Antonio (Richard A. Keeler, partner-in-charge; Alan Roush, project architect; Cathy Doebbler, interior designer)*
CONTRACTOR *Malitz Construction, Inc.*
CONSULTANTS *Steve Persyn (structural engineering); Beyer Mechanical (mechanical engineering); Scholze & Associates (lighting design); Glenn Williams & Associates (kitchen); Glen Barclay (safety)*
PHOTOGRAPHER *Greg Hursley, Austin*

1 The space shuttle, a private party room, is located underneath a starry sky lit by fiber-optic constellations.

2 Noah's Ark houses another party room, and the adjacent Ball Bath incorporates a submarine.

Courtyard in Houston?

ARCHITECTURE The Houston architecture firm OA+D's project for Houston's KTRK-TV allowed the station to expand and to replace outmoded facilities, with minimum disruption of the station's round-the-clock operations.

The original building, designed by Lloyd Morgan and Jones and completed in 1963, consisted of an L-shaped complex attached to a domed studio, a miniature of the Astrodome, which was designed by a team led by Lloyd Morgan and Jones and which was not completed until 1965. The station's blank-walled buildings were set within a square site along Bissonet, bracketed by parking lots to the north and south.

The space between the domed studio and the office wing at the eastern edge of the property formed a small courtyard, complete with a circular swimming pool and semitropical plantings. The courtyard was divided from the parking lot and frontage on Bissonet by a low wall and a long, scalloped entry canopy.

OA+D deferred to the station's best aspects—its period-piece mini-dome image and its relaxed relationship to the landscaped courtyard—while getting more usable space from the site.

Their first phase was a two-story, 14,000-square-foot addition, facing Bissonet, enclosing the courtyard by linking the studio with the office block. This new wing is marked by a central entry opening onto a double-height lobby with a vertical fin. To the right of the lobby, a long strip of black-glass curtain wall brings light into the second-floor sales offices. To the lobby's left, in a banded section that curves outward, black-glass windows in aluminum mullions light the station's accounting offices.

The architects reorganized the circulation of the station to reinforce the path around the pool courtyard. The entries to each of the departments are clad in anigre-wood paneling; private offices in each department share daylight and courtyard views.

A courtyard for a Houston office, let's face it, really works only as something to look at; OA+D made it easier for the station's employees to do so by inserting two small pavilions into the newly landscaped space. One, an elliptical dining room, is faced in glass with a seemingly random pattern of mullions (although they can be seen to spell out "KTRK TV"). The second is a small barrel-vaulted conference room with a rectangular plan. *JWB*

PROJECT *KTRK-TV, Channel 13, Houston*
CLIENT *Capital Cities/ABC, Inc.*
ARCHITECT *OA+D/Office for Architecture + Design, Inc., Houston (Joe E. Price, Scott Palermo, Judith DeJong)*
CONTRACTOR *E.E. Reed Construction Company*
CONSULTANTS *OA+D/Office for Architecture + Design (interiors); McDogalol Steel (landscape); John J. McCutchen Interests (project management); Walter P. Moore & Associates (civil engineering); Cagley, Conti & Jumper (structural engineering); CHP & Associates (mechanical, electrical and plumbing engineering); Debner + Company (furniture)*
PHOTOGRAPHER *Richard Payne, FAIA*

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1 OA+D created an elliptical dining room, increasing the usefulness of the KTRK courtyard.

2 A new canopy and a banded pylon mark a new entry for KTRK-TV's Houston offices.

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3 The architects added a small barrel-vaulted conference room.

4 A new double-height entry lobby features anigre-wood paneling.

Quest for Learning

ARCHITECTURE A new school constructed by Humble Independent School District serves four distinct educational programs. The Community Learning Center has a capacity of 636 students, 400 of which attend Quest High School. Another 125 are students from around the district on long- and short-term disciplinary status, and the remainder are children, age infant to five years, enrolled in a licensed day-care center that serves the district's school-age parents. In addition, the Community Learning Center is used after hours for an extension program including GED, adult continuing-education, community college, and other classes.

SBWV Architects, Inc., of Houston, zoned the site and school to accommodate the needs of the four programs: The main entry and administration area separate the high school from the day-care center, yet are adjacent; a secondary entrance to the day-care center, controllable by the day-care staff, was provided; the student entrance to the discipline program was isolated at the back of the school, controlled by a separate administrative area. Overhead rolling grilles allow flexibility for after-hours use.

The high school is organized as four houses surrounding a central resource center; each house is divided with movable panel walls into three sections to allow for large and small group activities and to encourage collaborative teaching. Computers are located throughout the building, networked to support instruction and administrative functions. ***Susan Williamson***

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1 An on-site day-care center serves the children of school-age parents.

2, 3 Humble I.S.D.'s new Community Learning Center also includes a 400-student high school, a district-wide disciplinary program, and an after-hours community extension program.

PROJECT *Community Learning Center/Quest High School, Humble*
CLIENT *Humble Independent School District*
ARCHITECT *SBWV Architects, Inc. (Gerald P. Stuyck, principal-in-charge; David S. Valerius, project manager; J. Michael Langley, designer)*
CONTRACTOR *Gamma Construction Company*
CONSULTANTS *Walter P. Moore & Associates, Inc. (civil engineering); Jones/Borne/Inc. (structural engineering); CHP & Associates, Inc. (mechanical, electrical, and plumbing engineering); Frank Clements Associates (food service)*
PHOTOGRAPHER *Gerald P. Stuyck*

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A View with a Room

I placed a jar in Tennessee,
And round it was, upon a hill. . . .
The wilderness rose up to it,
And sprawled around, no longer wild.
Wallace Stevens

The Birthday, by Frank Welch, FAIA, sits in splendid isolation at the top of a bluff in West Texas; the stone pavilion is 30 years old this year.

Photographs by W. Mark Gunderson, AIA

TRAVEL/TREASURE The Birthday, Dallas architect Frank Welch's limestone retreat for the Dorn ranching family, located on a remote stone bluff in Sterling County, is 30 years old this year. It is called The Birthday, Welch says, because his client told him it reminded her of the small stacks of masonry they had found while scouting the site. The shrine-like stone stacks were built by Mexican sheepherders, she told him, and the local ranchers always called them "birthdays."

The project was first published in *Texas Architect* in September 1967; the Ezra Stoller photographs showing a horse tied to a nearby tree spoke of a deft reconciliation of West Texas pragmatism and modernist poetic, while the text spoke of the necessity to "avoid 'cleverness' in a building with a program and site so unencumbered."

Like the jar on a hill in Wallace Stevens's poem "Anecdote of the Jar," the building sits conspicuously yet quietly, a kind of stone, wood, and steel "chapel." A single room 20 feet square with abutting stone fireplace "apse," it is enclosed by two opposing sliding-wood wall/panels, invoking barn doors, box cars, and shoji screens, as well as modernist tenets of spatial flexibility. One passes transversely through this assembly, from the top of the bluff, through the room, to the open deck and view beyond.

With the tough directness of ranching technology and the elegant formal complexity of a Donald Judd plywood box, two flat roof sections are held by a single heavy timber girder in such a way as to allow a glass clerestory (actually a glazed joint much like the one found in the library at the Kimbell) to light the fire/place.

On the exterior, the stone chimney engages the end wall in a manner reminiscent of the Rancho de Taos church so frequently painted and photographed; the opposing end is held by two stone columns that support the door tracks. All three serve as stakes or dowels, pinning the room to the rock. Sparsely furnished with tables and simple chairs, the building provides only a few amenities in the usual sense. It is quite rich with amenity in another.

The 30 years of its existence have not diminished these qualities in the least. Some maintenance and repairs have been undertaken and a few steel brackets added. Termites are tasting the timber girder, a ring-tailed cat lives in the storage space, and a lone cactus now grows against all odds on top of a stone deck column. The steel railings and stair now lean a bit, but were always a bit incongruous in relationship to the purity of the original concept.

The view seems to require a structure such as this, poised on table rock; it is entirely appropriate that the Italian word for room is *camera*.

Recently a bronze plaque has been added that reads, "It was no will o' the wisp that brought me here"—a quote, a private story no doubt, and a fitting architectural synopsis.

W. Mark Gunderson

Architect W. Mark Gunderson, a member of TSA's Publications Committee, practices in Fort Worth.

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