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The Janus Brief
More in sorrow than in anger, John M. McGinty, FAIA, of Houston surveys the state of relations between architects and engineers, suggesting ways to improve them for the future.

Future Hiring
Nestor Infanzón of Dallas surveys the demands made on architectural firms and the architectural education system by changing standards for minority hiring and staffing.

Art and Architecture Underground
Dallas architects, engineers, and graphics designers work with artists to unify downtown's tunnel systems.

On the cover and this page: travel sketch of El Escorial, Spain, by Lina Husodo of The Bower Downing Partnership, Austin; and detail from a mechanical drawing of Women's and Children's Hospital, Shannon Medical Center, San Angelo, by Tom Green & Company Engineers, Inc., Austin (The Bower Downing Partnership, Austin, architects)
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A Gold Medal Winner Dies

WE WERE SADDERED, just as the last pages were being prepared for this issue, to learn of the death of Charles W. Moore, FAIA, who died of heart failure in Austin December 16. He was 68 years old.

Holder of the O’Neil Ford Centennial Chair in Architecture at the University of Texas at Austin since 1984, Moore was one of the country’s best known and most influential architects. He won the Gold Medal of the American Institute of Architects, the institute’s highest honor, in 1990, in recognition of his “unfailing pursuit of design excellence, education, and professionalism.”

Moore was principal of Austin’s Moore/Andersson Architects and Moore Ruble Yudell in Santa Monica, Calif., and was a design consultant at Centerbrook Architects in Essex, Conn.

His acclaimed work won more than 25 national awards for architectural design, including four national AIA Honor Awards for the year’s best design: in 1967, for California’s Sea Ranch Condominiums; in 1984, for St. Matthew’s Church in Pacific Palisades, Calif.; in 1987, for the Hood Museum of Art; in Dartmouth College; and in 1988, for Berlin’s Tegel Harbor Housing.

Moore’s work, extraordinarily influential throughout his life, drew on the ability to make architecture out of a wide range of qualities, from severely beautiful contextualism, as at the Sea Ranch Condominiums, to almost pure whimsy, as at the Piazza d’Italia in New Orleans and the Wonder Wall at the New Orleans World’s Fair. Moore’s knowledge and appreciation for architectural history were encyclopedic, while the freedom with which he played against that history was often breathtaking.

Hal Box, FAIA, the former dean who hired Moore to teach at UT Austin, said, “We are extraordinary privileged to have had such a great man in our midst. He loved students and the academic setting, yet he built as much as any architect in the country. Time will know Charles Moore as one of the most influential architects of this century.”

The 1989 winner of the Association of Collegiate Schools of Architecture (ACSA)/FAIA Topaz Medallion for Excellence in Architectural Education, Moore was known as a leading practitioner and scholar. He taught almost continuously for the past 40 years, guiding his students by this philosophy: “We believe that buildings live, and speak (of themselves, and the people who made them and inhabit them) and can receive investments of energy and care from their makers and their inhabitants, and can store those investments, and return them augmented, bread cast on the water come back to the back country.”

Joel Warren Barna
Now that you've seen the 1993 winners, why not make plans now to enter next year's 40th Anniversary competition? For details, see the 1993 Call for Entries (May/June 1993, p. 13), then watch for final rules in the March/April 1994 issue of Texas Architect.
The Texas Society of Architects wish to thank these companies for their generous support of the November 12–14, 1993, TSA Grassroots Leadership Conference at Lakeway in Austin:

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W.A. Vines High, Plano

Designed by Corgan Associates, this addition and renovation project for the W.A. Vines High School in Plano creates a new exterior shell for the facility. The 38,000-square foot addition wraps 18 new classrooms and an expanded cafeteria around the two most prominent sides of the building. The architects highlighted the addition on the exterior using different materials and colors.

Far left and above left: Eighteen new classrooms create a two-story atrium space, which brings natural light to the interior.

Below left: Wrapping around two sides of the school, the addition creates a new facade of brick and blue steel.

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Above left: Students play basketball in the school's gymnasium, which holds a stage for assemblies and productions.

Above right: The media center is centrally located at the corridor intersections of the three classroom groups.

Right: The school's southeast facade, covered in red brick, and the bus loop.

Nichols Junior High, Arlington
One of the few three-year junior high schools in the state, this new complex features a two-story academic block of classrooms combined with areas of specialized function such as music rooms and a media center. The junction of these elements forms an outdoor commons serving as a social "crossroads" for the students.

Above: Vestal Loftis Kalista's new junior high in Arlington

Right: A two-level atrium provides natural lighting in the administration and library areas.
Park Crest Elementary, Garland

Lacking the facilities to keep up with the growing school-age population of its neighborhood, the major intent of this project, designed by WRA Architects, was the addition of sixteen classrooms; an enlargement of library, cafeteria, and special education facilities; and compliance with State of Texas ADA requirements.

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Saginaw Elementary, Saginaw
This major renovation project by Vestal Loftis Kalista/Architects improved lighting, electrical circuitry, HVAC systems, and toilet facilities, added attic space by modifying the existing roof structure, and provided sidewalks and a fenced area for bicycles outside the gym, which was originally constructed in 1937.

Left: A secure area for bicycles outside the gym and new sidewalks were provided.

Below left: The gymnasium was refinished with new lighting, basketball equipment, floor surfaces, and acoustical carpet.

Below: Bathroom facilities found new life with improved lighting.

Far left: Carrie Frances Thomas Elementary, by Vestal Loftis Kalista/Architects, Inc.

Above: Creekside Intermediate, by PBK Architects, Inc.

Left: Irving High, by Corgan Associates Architects
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New Texas Schools
Special Advertising Section

Below: Meadows Middle School, Granbury, by Hahnfeld Associates Architects/Planners, Inc.

Far right: Rodgers Elementary School Addition, Frisco, by Corgan Associates Architects

Right: Rockwall High School, Rockwall, by Claycomb Associates, Inc.

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Below left: Tommie B. Williams Elementary, Arlington, by Vestal Loftis Kalista/Architects, Inc.

Right and below right: South Garland High School Gymnasium, Garland, by Corgan Associates

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Professors and students interface

DALLAS A jury composed of architects, zoo officials, and city administrators selected six winners from 45 entries in a competition to design a new entrance for the Dallas Zoo. The event was sponsored by the Urban Advisory Committee of the City of Dallas.

The first prize of $3,000 went to Robert Moylan for his space-framed billboard with different rotating messages visible in all directions. His project, he says, is intended to extend the existing zoo signage down Interstate 35.

Howard Langner and Ann Patterson received the second prize of $1,800; third place ($1,250) was given to Anurag Nema; and honorable mentions ($650 each) were awarded to Charles S. West, Robert Swann, and the team of Michael E. Twitchell and Ron Williams.

Juror and Dallas Zoo Director Rich Buickewood said he was extremely pleased with the overall quality of the work and ideas.

Dallas Mayor Steve Bartlett presented the prizes at a reception hosted by the Greater Dallas Planning Council. Winners will be displayed at sites throughout the city for several months. The Urban Advisory Committee plans to use the competition approach to stimulate interest in opportunities for the design of public projects in Dallas.

Mark Forsyth
TAMU Acadia Conference

COLLEGE STATION  University professors and students covered this past October for the 1993 Association of Computer-Aided Design In Architecture (ACADIA) annual conference held at Texas A&M University. The theme of this year's conference was "Education and Practice: The Critical Interface."

A colloquium kicked off the three-day event and featured four speakers offering notably diverse scenarios of how computers have been integrated into architectural education and practice. E. Davis Chauviere of HKS Inc. in Dallas provided insight into the evolution of the computer in architectural practice, while Kristin Woehl of Frank Gehry and Associates in Los Angeles and David Johnson of Eastlake Studio in Chicago cited examples of how computer technology has extended the limits of architectural form, as well as affected the processes of creativity itself, allowing a designer a greater latitude of expression.

Recognizing the growing use of computers in architecture, Walter Wendler, dean of Texas A&M's College of Architecture, stressed the importance of incorporating computers and computer-aided design into the educational curriculum as part of the university's responsibility to prepare architects not only for the "here and now," but for the "somewhere on the horizon." The colloquium, the first of its kind at the conference was attended by approximately 400 practitioners, faculty, and students.

"I found it to be something we could do more of," remarked Skip Van Wyk, next year's president of ACADIA. "It was nice having all of those practitioners and students around, and for university professors to be a 'minority' for a change."

Thomas Lineham of CRSS Architects in Houston delivered the keynote lecture. Lineham emphasized the direct link between the "design window" and the "digital window," arguing that designers are giving the computer a more active role in the design process. The conference was divided into five sessions, during which 14 peer-reviewed papers focusing on education, architectural practice, and urban architectural design were presented by faculty from architecture schools throughout the United States and Europe.

"The papers provided an excellent representation of where this field is headed," says Larry Degelman, associate dean for computing in Texas A&M's College of Architecture. Degelman and assistant professor Valerian Miranda served as site coordinators for the conference.

Other activities included a vendor display of some of the latest in CAD software and a tour of Texas A&M's College of Architecture, focusing on its electronic design studio. Ninety people attended the conference.

"We consider it quite an honor that Texas A&M was selected to host this year's conference," says Degelman. "Our college has continued to expand its technical capabilities in computer-aided design, and it's rewarding to know that we are being recognized as a front-runner in this field."

Jenny Cotner

Jenny Cotner is an information representative for the Texas A&M School of Architecture.

OF NOTE

Russian Hotel Complex

The city of St. Petersburg, Russia selected Phillip Shepard Architects, Inc., as design and project architect for the country's largest privately owned, mixed-use development. The Dallas-based firm is providing seven office towers, a 400-room hotel, and sites for American style restaurants and retail shops. Developed on 20 acres next to primary commuter railroad and subway stations, the project hopes to integrate international office tenants and local residents.

Citation Awarded

Lt. Gov. Bob Bullock was given a President's Citation of the Texas Society of Architects. James Tittle, FAIA, 1993 TSA President, and David Lancaster, TSA Executive Vice-President, presented Bullock with a plaque in honor of his support of the architecture and the built environment.

"A Handbook for Survival"

In MOSQUITOES, architects Ken Kaplan and Ted Krueger criticize social and political conditions at the expense of the pesky insect. Part of the PAMPHLET ARCHITECTURE series from Princeton Architectural Press, this book protests contemporary architecture, encouraging readers to follow the mosquitoes' tendency "to mutate in order to survive."

Billboards Controversy

A key provision of the Intermodal Surface Transportation Efficiency Act currently banning new billboard construction along federally funded scenic byways was overturned last November by the U.S. House Public Works and Transportation Committee. Rep. Nick Joe Rahall (D-WV) and Bud Shuster (R-PA) attached the overturn provisions to Hazardous Materials Transportation Act. The vote sparked protest from environmental groups. Scenic America president Sally Oldham said, "The billboard industry is shameless in its efforts to degrade our scenic environment and Mr. Shuster has long been the Industry's cheerleader in Congress."
Delineators honored

Eleven winners were chosen from 133 entries in the 1993 Ken Roberts Memorial Delineation Competition held last November in Dallas. Jurors Elizabeth Day, editor of the ASAP publication "Convergence"; Neil Denari of COR-TEX Architects in Los Angeles; and Matthew Morris of San Antonio's Lake Flato Architects also chose 60 works for an exhibit to be displayed at the Dallas AIA Chapter Gallery.

The competition, named in honor of its founder who died at age 34 in the year after he first organized the event, seeks to honor "excellence in graphic communication" and gives local architects an opportunity to be recognized for their graphic abilities.

R.B. Ferrier, FAIA, won the Wiley Award and Deborah Dynn-Kiper of the University of Texas-Arlington received the Best-In-Show award for students.

Four projects were given honor awards. Rick Del Monte of Urban Architecture, Graham Bryant of Collins/Reisenbichler Architects, and David Farrell of Good Fulton & Farrell Architects won in the professional category; and Corvin Mattei of UT-Arlington was honored in the student category.

Three merit awards were given. Fred Ortiz of Blinkley Sargent Architects and Bill Hendricks of Bill M. Hendricks Architect were the winners in the professional category, while Eric Rohlfing of UT-Arlington won in the student category.

Citation awards were presented in the professional category to Ferrier and to Tom Shaw of Phillips Swager Architects, and to Rohlfing and Beth Anshuette of UT-Arlington in the student category.

Mark Forsyth

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

CALL FOR ENTRIES

PUBLICATIONS AND AWARD WINNERS

The winners will be notified in March 1994. Certificates will be presented to the designers and owners of the winning projects during the 1994 Texas Hospital Association convention in Dallas.

To defray display and publicity costs, the winners will be assessed $250 for each award winning project and must submit 8 copies of an 6" x 8" black and white glossy photo of the project, no later than April 1, 1994. Winners will prepare 40" x 40" boards to be exhibited at the 1994 TSA and THA meetings, and information will be released to hometown newspapers and publications. The award winners will be published in Texas Architect magazine.

ENTRY FEE: An entry fee of $100 is required for each project submitted. Submission of any project in two categories requires an entry fee for each category in which the project is submitted. Fees must be postmarked no later than January 15, 1994. Checks or money orders shall be made payable to the Texas Society of Architects, c/o Committee on Architecture for Health, 114 West Seventh Street, Suite 1400, Austin, TX 78701. No entry fee will be refunded.

SCHEDULE

January 15, 1994 Entry fee must be postmarked
February 1, 1994 Submissions must be postmarked
February 15, 1994 Jury review
March 1994 Notification of winners
April 1, 1994 Publicity photos and assessment criteria due at TSA
June 1994 Announcement of winners to coincide with AMATHA Convention

Questions? Contact Bill Persiel at (214) 763-4000.

TARDAH!
1994 TEXAS ARCHITECTURE FOR HEALTH DESIGN AWARDS

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

ELIGIBILITY AND AUTHORSHIP: Any architectural or interior architecture project with a major health related component designed by a Texas TSA member firm, currently in design, under construction or completed with an occupancy permit issued after January 1, 1993, is eligible.

All entries in each category shall be projects designed by TSA members. 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 listed clearly for their role as part of the submission.

CATEGORIES: Awards may be given in any or all of the following categories. A single project may be entered in more than one category upon payment of separate entry fees.

- HOSPITAL DESIGN: to include any type of acute care or extended 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 nursing homes, skilled or handicapped, extended care facilities, housing for the retarded and the like.
- OUTPATIENT CARE: to include projects with an overnight bed, such as physician's offices, surgicenters, imaging centers, clinics, HMO's and suburban primary care centers.
- INTERIORS: to include any health related project whose principal focus is the design of interior space, graphics and furnishings.
- HEALTH AND WELLNESS: to include any preventive medicine facility, health clubs, aesthetics centers, athletic clubs and other projects whose principal focus is the maintenance of health.

SUBMISSION: Upon payment of any entry fee ($100/project) postmarked no later than January 15, 1994 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 project program, schedule, cost and square footage. It will be returned in a three ring binder 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 these pages, using normal single-spaced typewritten text, reduced to 8 1/2" x 11" size and must be included. All other pages shall be indicated on all plans. A graphic scale should be included on all drawings.

Any problem drawings may be accepted as a substitute for photographs of the actual project, or may be included if the entrant feels that they provide useful additional information. Entrant shall clearly identify the problem category.

Any project may be subject to disqualification at the 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 a 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 owner's identification shall not be revealed in any way on the binder or within the submission.
Preservation Ordinance Under Fire in Fort Worth

FORT WORTH Following complaints issued by business owners, the Fort Worth City Council set out to revise the city’s historic-preservation law, in effect since April. The new law would have limited the economic effects of the previous ordinance by decreasing the number of protected buildings. However, complications forced the council to table the vote beyond the Nov. 30 scheduled date.

The current law was intended to close serious loopholes, but its vague definition of “historically significant” is too broad, according to opponents, often preventing the disposal of property that is old, but not necessarily historic or architecturally important.

The November revisions would have further categorized older properties according to varying degrees of historical significance, but debate in council brought up much more destructive proposals, including making demolition entirely up to building owners.

Libby Willis, Director of the Fort Worth office of the National Trust for Historic Preservation, says such a dramatic change means preservationists would lose all voice in historically significant architecture in Fort Worth. Further action is expected in 1994.

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Circle 12 on the reader inquiry card
Dealing with Job Applicants: A Crucial Skill

A PREVAILING ATTITUDE among architects seems to be that we do not receive adequate respect or attention. Generally this seems to be attributed to a lack of understanding and interest among the public at large about what we do. While there is definitely some truth to this, I think the profession doesn't give enough attention to the seminal role architects themselves play in creating this attitude through cavalier treatment of graduate architects, and others, seeking employment in the profession.

As an example, in the spring of 1977, I began looking for a job by sending out a resume and cover letter to 25 of the leading firms in the Dallas area. Of these firms, only one was courteous enough to reply. To this day, I remember the name of the person who responded with a gentle “Thanks, but no thanks,” and have a favorable impression of him because of his interest and good manners. These qualities were particularly noticed because of their absence in the other 24 people contacted. More recently, I was talking to a married couple, who mentioned contrasting experiences looking for a first job; he as an intern architect and she as a CPA. She had been impressed at the professional way accounting firms dealt with those entering the profession—prompt responses to inquiries, well-structured interviews, coordinated efforts with the schools, and clear communication relative to needs. He was equally unimpressed by the hackadaiusal way architects approached these issues. For many recent graduates, the first impression of the profession will be formed by their interview experience. If our professional culture is such that we create a poor first impression, is it any wonder that we will end up with professionals who feel less than confident about the value of their knowledge and talent than they should?

This whole issue is particularly relevant at this time of year (lots of bright-eyed new graduates) and in this sort of economic climate (lots of diminished confidence). As practitioners, be it in traditional or non-traditional role, we can conduct our affairs in ways that contribute to a sense of professional self-worth or detract from it. The techniques for doing so are really pretty simple and generally involve little more than responding to job seekers with good manners and attentiveness rather than indifference. I know one firm that has a long-standing goal of responding in writing to every resume they receive. In the age of automated word processing this really doesn't take a Herculean effort, yet the architects in question regularly get notes from applicants they declined, thanking them for responding when so many others didn't. As a professional community, shouldn't we really do better? If every principal reading this were to adopt this simple goal, I submit that we would go a long way toward being better. If people coming into the profession begin by seeing respect and value attached to their skills, we will be a far healthier group than if they don't.

Duncan Fulton

Duncan Fulton, a principal of the firm Good Fulton & Farrell Architects in Dallas, wrote this article for Columns, the ALA/Dallas newsletter.
TFAA Show “Off The Map”

AUSTIN Architects from Arlington, Austin, Corpus Christi, San Antonio, Houston, and Dallas were among the 80 artists who created paintings, drawings, assemblages, and sculptures for the 1993 Texas Fine Arts Association Exhibition and Benefit Auction entitled “Off the Map.”

Among the Texas architects participating were Firm X of Arlington, headed by Richard Ferrier, FAIA; Elizabeth Danze and John Blood of Austin; Edgar Ricardo Farerra of Barley & Pfeiffer Architects, Austin; Kimberly Kohlhaas; Paul Lamb and Gary Furman of Austin; Heather McKinney, Courtney Anderson and Lars Stanley of Austin; Steven McGuckin of Austin; Britt Medford, Henry Panton, and Andy Drake of Austin; Bethany Ramey-Nix of Austin; Stephanie White of UT Austin; Danny Michael O’Dowdy and David Richter of Corpus Christi; Lynn Wilkes Armstrong and Chuck Armstrong of Dallas; Russell Buchanan of Dallas; Walt V. Buster of Dallas; Yew Kee Cheong of Overland Partners, San Antonio; David Lake, Ted Plato, and Graham Martin of Lake/Plato Architects, San Antonio; and Roland Rodriguez of Chumney Associates, San Antonio.

An auction of pieces included in the show was held Dec. 4. Proceeds from the auction will replenish TFAA’s Disaster Relief Fund for Artists and to funds its year-round program of exhibitions and services for emerging artists in Texas, according to TFAA Executive Director Sandra Gregor of Austin.

Mark Forsyth

CALENDAR

Environment and the City
The Rice Design Alliance will present “Planning for the Future: Creating a Sustainable Community,” focusing on the relationship between urban issues and the environment. The panel discussion will cover the interrelated aspects that confront planners, developers, and architects and the community. Architect and critic Barry Moore, FAIA, will serve as moderator for the event. Farnsworth Pavilion, Rice University, Houston (713/524-6297), Jan. 26

“Texas Between Two Worlds”
This exhibition will present work from 15 Texan artists that explores the ambiguity of human existence and one’s relationship to death, spirituality, and the environment. The works vary in media from painting and sculpture to photography. Contemporary Arts Museum, Houston (713/526-0773), through Feb. 6

Public Works Competition
The Dallas Area Rapid Transit (DART) announces 11 new public art commissions for light rail stations around the city. Budgets as large as $148,000 are available. Interested artists must register to receive the necessary information to submit proposals. DART Art and Design Program (214/749-2508), separate deadlines from Jan. 20 to Nov. 4

Popular Portraits

The Future of Jewish Monuments
This photographic exhibition dedicated to the preservation of Jewish architecture addresses the precarious state of the religion’s historic and artistic monuments, including synagogues and cemeteries around the world. Jewish Community Center of Dallas (214/739-2737), through Jan. 20
Scanning helps mix digital, hand drawings
by J. Thomas Joyce, P.E.

Since CAD systems first began to appear in architects’ offices, the interaction between old paper documents and newly created CAD files has been a problem. “What about my detail library?”, architects ask themselves as they begin using CAD. In practice, the digitizing process is so time-consuming and expensive that the transition from hardcopy drawings to CAD files has rarely occurred. Lately, more and more practitioners find themselves faced with clients who demand CAD drawings, however, even on projects where all the base drawing may already be in the flat file.

Luckily, developments in scanning technology have made quick, reasonably priced conversion of hand-drawn images into computer-readable files a reality, and are making hand-digitizing a thing of the past.

The foundation of the process is the scanner itself. The new scanners offer photographic, high-resolution quality at affordable prices. These scanners have as many as three cameras for resolutions up to 1,000 dpi (dots per inch). Furthermore, the software that controls the scanning process has become more powerful. Options are available enabling automatic compensation for varying backgrounds, faded areas, and stains, along with despeckling and deskewing, resulting in horizontally aligned, clean scanned drawings. This is great, but what use are these scanned images?

The most attractive option for most architects is conversion of the scanned images to a vector format usable by your existing CAD system. Originally this conversion was basically a stream-lined “on-screen” digitizing process. The scanned images were imported into a conversion program and CAD lines were traced over the scanned image. Today’s conversion software can recognize scanned elements and convert them into CAD format automatically. While this does not necessarily produce a perfect conversion (it’s usually about 80 percent accurate), it relies on computer time rather than operator time to make the conversion. Other conversion programs combine the best of both worlds, allowing an interactive process for completing the drawing after the automatic conversion. This combined method can produce a continued, page 30
Business and pleasure do go together on rare occasions. With Tulsa’s Ronald McDonald House, Marvin Windows proved that one window can be all business outside and nothing but warmth and charm inside.

Architects designed a storefront window application, given its commercial-scale exterior. But contrary to this business facade, they also wanted the warm character of wood windows inside that would befit a home away from home for families of seriously ill children. Would it take two window systems? Or was it just impossible?

Neither. Marvin’s staff came up with one system that accomplished both tasks. It’s a wood window system, cozy and comfortable feeling inside. But it also has structural mull reinforcement and exterior aluminum cladding to give it storefront appeal. With 3/8" steel tied into header and floor, Marvin was able to pull off what seemed impossible. Crisp metal outside, warm wood inside. Business and pleasure. In one window system.

But that kind of innovation is nothing new to Marvin Windows, where every window is made to order. When you order a Marvin window, you’ll have a lot more than just a few standard sizes and options to choose from.

Marvin makes windows in over 8,000 standard sizes and a virtually unlimited number of custom shapes and sizes, with a variety of options to suit your most specific needs. Because at Marvin, we know that the right window may even be two windows in one. Beautifully made to order, one at a time.

“Marvin Windows was new to our area when we designed the Ronald McDonald House. The house is run by a non-profit organization and its long-term maintenance had to be minimized, so we needed a strong building, almost like a park headquarters. We also wanted a home-like atmosphere inside for the families. Marvin did it all. They provided a durable, long-life commercial window wall that at the same time created a residential environment and offered strong energy efficiency. Marvin was new alright—the new solution for a tough design.”

— Connie McFarland, Architect
“CAD” perfect solution with the layers, colors, 
line types, and text strings we have all become 
used to in “from scratch” CAD drawings. Most ar-
chitects choosing this option do not invest in the 
hardware, software, and training necessary to 
make the conversion in-house. They find it more 
cost-effective to send their drawings to a conver-
sion service, get back a CAD file on a floppy disk, 
and use it with their existing hardware, software, 
and personnel.

The other option is to purchase a “raster” edit-
ing program to function inside a existing CAD 
system. Such programs create a hybrid file that 
can be both raster and vector (scanned) format. 
The value of this software is that the near photog-
graphic quality of the scanning process is utilized. 
The line sizing, type, and shading are seen as in 
the original and can be edited and appended with 
either raster or vector image enhancement. Other 
advantages of this method: The time and cost of 
conversion are unnecessary, and the compressed 
raster files are significantly smaller than converted 
vector files. The disadvantage is that while draw-
ings may be sent out to be scanned, you will need 
to purchase (at $2,000 and up) and learn new software. 
In addition, most architects will require a new 
plotter to handle raster files.

Many architects have a career’s accumulation 
of hand-drawn plans and details taking up valu-
able storage space. When the drawings are 
needed, they either can’t be found or take so long 
that would have been cheaper to recreate the 
drawings. Scanning technology allows conver-
sion of all the hand-drawn images into digital 
form. Now there are several good electronic-docu-
ment-management programs that can index these 
digital drawings for quick and effective searching. 
These specialized database programs, which sell 
for as little as $1,000, allow searching by title, date, 
project, or almost any user-selected parameter. 

A few keystrokes lets you view the file on the screen 
or plot a hard copy. These systems are not limited 
to drawing files. Any digital file (from scanned 
specs or contracts to recently created word-pro-
cressing files or spreadsheets) can be managed in 
this form.

Scanning and electronic-document manage-
ment can be a tremendous saver of time, space, 
and money. As with many aspects of the computer 
industry, more improvement is on the way. Hard-
ware developments in scanning technology have 
outraced software development. However, soft-
ware is now available to allow even small firms to 
reap substantial benefit from scanning technology.

Austin engineer J. Thomas Joyce, P.E., wrote this 
story for CJI CAD-SCAN of Austin, which provides CAD and 
scanning services for architects and engineers.

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Professional Relationships

Author John M. McGinty, FAIA, says January, named for the Roman god Janus, is a good time for evaluating the present state of the crucial professional relationship between architects and engineers, looking for the sort of cooperation once exemplified by Milton McGinty and Walter P. Moore (both shown above).
The Janus Brief

by John M. McGinty, FAIA

The accord between architects and engineers, negotiated recently by Ted Maffitt, FAIA, chairman of the Texas Board of Architectural Examiners, and Earnest Glynna, P.E., chairman of Texas State Board of Registered Professional Engineers, has hopefully put to bed the ridiculous internecine dispute between architects and engineers, the Sharks and Jets of the design professions, over the turf of "prime" professionals, whatever that term means.

But the rhetoric of that dispute has underscored a far deeper and more significant problem between the professions, one that simply should not exist. That problem is best described as a gulf of ignorance about the real meaning of professionalism and about the interdependence of all the disciplines and specialties involved in the process of creating spaces for human habitation.

Rumbling over Turf

Consider the following editorial statement from a recent issue of the *Texas Professional Engineer*, the magazine of the Texas Society of Professional Engineers:

"In lean times, architect's services are not as necessary in the construction process as a [those of a] professional engineer. Additionally, an analysis is under way which TSPE leaders believe will show that buildings de-
signed by engineers are not only more functional but are also economically constructed than similar buildings designed by architects.

Now, it's easy for architects to see the intellectual depravity of such a statement. But I would argue that it is matched by problems that we too often overlook. First among such problems would be the ethical poverty of the treatment too often meted out by architects to the consulting engineers with whom they work (and vice-versa when engineers hold the contract). It's called stiff-the-consultant, a syndrome which many of us have experienced at one end or the other. It occurs when you finally receive payment from the client, but the payroll taxes are delinquent, the health-insurance premiums are overdue, and the rent is in default. Surely, you tell yourself, the consultant will wait until more fees are received next month. After all, you think, he or she must hope for work in the future and wouldn't risk alienating such an important client by demanding payment. Maybe that's what "prime" means: holding the purse strings. In the standard arrangement, architects are usually the prime contractors. Paying consultants last is arguably what underlies the rage that engineers, through their association, are constantly venting.

Nor is that all. On another level, how many of us have demonstrated not economic, but intellectual contempt for our colleagues by failing to properly value the contributions of other professionals in the design process? How many times have you seen a star "designer architect" neglect consideration of space requirements for mechanical systems or treat the need for lateral bracing as an impediment to the statement of pure metaphor? On the other hand, I have worked for engineers who assumed responsibility for the design of a ten-acre aircraft hangar and then, with straight faces, asked
if I could put some “architecture” around the personnel entrance.

No wonder the lesser of us have sunk into in a rumble over economic turf, fought on the field of state law, no less. How did this happen? Somehow, we have lost our way. Architecture and engineering are so much more than legislation and registration. They are about art, science, creativity and the human spirit. I would submit that any design professional who must rely on an attorney general’s opinion to get a job is, de facto, unqualified.

**Dig the Roots**

**WE SHOULD REEXAMINE** our professional roots and try to understand who we are. Such an understanding might then provide guidance in our day-to-day need to define architectural and engineering education, training, registration, and practice.

First of all, let’s agree that we’re not talking about Brunelleschi or Bucky Fuller. Brunelleschi came up as an architectural apprentice, but won the competition for the Florence Cathedral based on the elegant structural design of his dome. Fuller, with no degree or license, designed the geodesic dome and a three-wheeled car, and won the AIA’s Gold Medal. Geniuses need no professional identification, credentials, or even formal education. The rest of us need all those things to operate effectively and ethically in our everyday struggle to serve, to create, and to succeed.

At first there was no recognized distinction between the professions. You will recall that Daedalus, the first architect from Greek mythology, was also an aeronautical engineer. He designed the labyrinth to house the Minotaur of Crete, and when imprisoned there himself, designed and built wings for himself and his son Icarus to fly away. (Icarus crashed and burned, but Daedalus made it to Sicily). Spiro Kostof, in his book *The Architect*, details our more recent origins. Herodotus first coined the term *architecture* (spanning technology) in the 5th century B.C. and applied it equally to the likes of Iktinos, the temple builder and Eupalinos, who designed an underground canal to bring water to Samos. The same term was used by others to describe the engineers who bridged the Bosphorus for Darius’s invasion of Greece as well as for the designers of the ships used in the assault. Vitruvius, who wrote his definitive work on the profession around 25 B.C., saw no distinction between architecture and engineering; he expected a Roman architect to be expert in construction, hydraulic engineering, surveying, and planning. It was obvious to Vitruvius that what we call the laws of gravity and thermodynamics required architects to be engineers.

The seeds of schism first appeared when Appollodorus, architect for the emperor Trajan and a renowned engineer who designed both the Danube Bridge and the Baths and Forum in Rome, was executed by the emperor Hadrian, Trajan’s successor, for smarting off to him. Hadrian, it is said, had a flair for design and was enamored with architecture as form and symbol, but he lacked a true appreciation of architecture’s scientific underpinnings. When he showed Appollodorus some sketches of a temple he was designing himself, Appollodorus told him to “be off and draw your pumpkins.” Such a remark to a powerful politician may have been evidence of the power (or at least chutzpah) of architects at that time, but it was also evidence of a
real lack of judgment on Appollodorus' part. His head rolled.

Another example from history is illustrative as well. Anthelmus, the architect of Hagia Sophia, was sued by a lawyer named Zeno, and lost the first round. Rather than appeal and thus engage Zeno again on legal turf, Anthelmus had a better idea. He tunneled under Zeno's house and installed a large steam-pressure device that, when fired, shook the entire building. Zeno thought it was an earthquake and left town. Now if Anthelmus had been a typical modern day practitioner of pastiche, ignorant of engineering, he would have lost that engagement.

**The Origins of Specialization**

OF COURSE, BUILDINGS were simpler back then. What has happened to disintegrate this once unified profession has been the limitless expansion of information and technology. In modern times, the undertaking of a building design is such a complex process that it is beyond the scope of almost any single individual. Walter Gropius had this in mind when, 20 years after its founding, he offered the following rationale for The Architects’ Collaborative: “The architect's scope must be broad, for design and planning are of vast complexity. They embrace civilized life in all its major aspects, the destiny of the land, the cities and the countryside, the knowledge of man through biology, sociology and psychology, law, government and economics, art, architecture and engineering. All are interdependent; we cannot consider them separately in compartments.”

The late William Caudill, FAIA, was another of the first to articulate this reality back in the '60s, when he began preaching “architects by team.” The law of gravity remains constant, but we now also have the UBC, the AIC, the EPA, and the unified field theory, not to mention the CSI and the ADA, none of which Vitruvius had to deal with. In order to cope with this explosion of information, we have become specialized. We are not unique in this response; other professions have done likewise. For instance, there is actually a difference now between a proctologist and a gastroenterologist, and I assume that the distinction is based on how each approaches the subject. However, I have not heard of an attorney general’s opinion being sought by either on who gets to operate on the transverse colon.

We have succeeded brilliantly in some aspects of specialization. In the design of environmental systems we have gone beyond cool buildings to healthy buildings, even green buildings. But this takes collaboration, with many minds working together. As in any team setting, success requires mutual respect and even admiration among participants. Respect and admiration must be rooted in knowledge, gained through experience, of the other's art and of one's own limitations. This is where I think we have failed, and also must begin, if we are to go beyond a regulatory truce to seek improvement in our inter-professional relationships.

**The Way Things Ought to Be**

To begin to understand how things ought to be, we don't have to look very far. The examples of successful collaboration and team work are all around us. Lerner and Lowe were matched by Fazlur Khan and Bruce Graham. Can you imagine the Sears Tower without the bundled tube system? Lou Kahn's Richard's Medical Tower at the University of Pennsylvania was totally driven by the poetry of exhaust and supply systems. The only artifact in America that was acknowledged as informative by Le Corbusier on his first visit here was the rotolactor, a carousel-like milking machine he visited near Trenton, New Jersey. As usual, the most literate architect in America, Jack H. Ruttalayer, FAIA, of Chicago illuminates the subject. He tells how Sy Rutman, a legendary Chicago mechanical engineer felt that, in designing assembly spaces, the air-conditioning should always flow front-to-back. Architects adopted this theory, assuming the airflow would assist in carrying the sound...
from the stage to the audience. Rottmayer, says Hartray, did not believe that this would really happen, but he did feel that people would be more comfortable facing into an air current because their cheeks were fat, while the backs of their necks were lean and uninsulated. He proved his theory by research: Peoples who had evolved on the cold steppes of Central Asia had the fattest cheeks on earth. To Rottmayer, mechanical engineering and anthropology were all part of a larger design.

Closer to home, I recall a story told by my father, Milton McGinty, FAIA, that is revealing of the comfort and confidence borne of a career of collaboration between himself and his friend, the great structural engineer, Walter P. Moore, Sr. It was September of 1950. They had just completed the design and witnessed the construction of Rice Stadium. As they walked into the opening game together, their design came alive under the lights and sounds of 70,000 excited fans. (Yes, Rice used to draw such crowds). My dad turned to Walter and said, “You know, I couldn’t sleep last night. I kept thinking that those columns we designed could be too slender and when the upper deck fills with people, it’s liable to slide right down into the field.”

Moore, being a scientist, had no such doubts. He replied “That’s ridiculous. That could never happen. If those columns fail, the stands will fall backwards into the parking lot.” That, I think, explains the real difference between architects and engineers.

If we are to restate the essential and historic unity of the design professions, the educational system is, of course, where we must start. We cannot afford to have architectural schools that do not integrate technology into their curriculum. This is not as simple as assumed in the ’50s when at Rice we were required to take “pots and pans” (mechanical and electrical equipment) and “sticks and bricks” (materials and methods), both taught by architects. Later efforts, inaugurated by Caudill and continued others, were considerably better.

Nat Krah, one of the finest structural engineers I ever met, was brought to the school. He did not teach isolated courses, but was a full participant in design studios. Nat understood structure, of course, but he valued architecture as well and understood the disciplines’ interdependence. He could be as excited as a sophomore when challenged with exploring structural solutions to architectural problems. Nat was followed by Joe Colaco, a marvelously creative engineer with a
Left: Rice Stadium in Houston, as it neared completion
similar talent. But somewhere we dropped the ball. Myopic concern with “design theory” (as if that isn’t what Krahl was teaching) crowded technology into the backwaters of the curriculum.

Even worse, in my opinion, are schools that teach full courses in simplified technology for architects. Courses in professional practice, with an emphasis on how to pass the state board exam, are at best applied technology and only serve the purpose of diminishing the respect of architects for engineers, who, the students ignorantly come to assume, do nothing but ductator calculations. Architects must know that mechanical engineering is more than that, just as engineers should know that architecture is more than exterior decorating.

On the other hand, I know of no civil or mechanical engineering curriculum anywhere that includes courses taught by architects or about architecture. The abysmal ignorance illustrated in the Texas Engineer editorial quoted above stems from an education devoid of addressing fundamental issues of the design process, much less the humanities. It would seem that, as a minimum, the engineering curriculum should include basic design, programming, and the history of architecture, all courses common to both disciplines. Better yet would be a shared curriculum the first two years, before specialization.

In most engineering offices that I have observed close hand, the term “designer” is reserved for the most inexperienced and unlicensed apprentices who do the scut work—i.e., ductstructor and steel-table computations. Contrast that use of the term with the lexicon of the architectural office, where a “designer” is a real architect as opposed to one who simply markets or manages. A technician is the low man on the architectural totem pole, the one responsible for the menial tasks of code compliance, leak prevention, life safety, and economy. Without a common vocabulary, it is hard to achieve common purpose. And, with such stereotypes dominating in the practice of both architecture and engineering, and with schools doing nothing to better educate the next generation, it’s no wonder that professional relations so often resemble a schoolyard brawl.

Astute marketing is beginning to achieve what philosophical insight has been unable to do heretofore, however. Practices are being shaped in dramatic and potentially beneficial ways. The plethora of mergers and acquisitions between A and E firms is recognition of the fact that projects these days are larger and more technically complex, and that they are driven by sophisticated economic realities. Clients for these projects, for the most part, are bureaucrats and middle managers who could care less about the species of their principal consultant. What they want is single-point responsibility and minimization of risks. They already know their projects require an ensemble of talent, often extending to specialties outside of either traditional architecture or engineering, such as curtain-wall specialists, fire-and-life-safety analysts, food-service and acoustic consultants, even financial and marketing experts. Multi-disciplinary firms are an appropriate response.

In addition to the cafeteria type organizations, these same trends have given rise to the development of “boutique” firms with deep single specialties, either related to special services (my own is an example) or to building type, such as healthcare or school design. Such firms are finding business opportunities for clients with specialized needs, or as highly marketable members of teams aggregated to address large projects.
Mutual Respect
These trends should not be seen as evidence of further polarization of the design professions. Rather, they should signal to all of us, and to the schools that made us, that we need to identify those things that unify us in order to be free to pursue specialties within the context of our common professionalism.

After all, what is a professional? The common public definition means one who plays for pay. Hence we often include athletes, artists and teachers, or business people such as marketers and managers. It is no denigration of the importance or usefulness of such people, however, to say they are not truly professionals. A true professional is more accurately defined as a privileged member of a learned curia, one upon whom society has vested certain privileges and certain responsibilities. In Roman England, clergy were kept in cages until needed. The power of their knowledge was too dangerous to permit the masses free access. We, likewise, are "kept" by society because we are custodians of a historical body of academic knowledge essential to civilization. Furthermore, as John Only Greer, FAIA, has correctly stated in this publication (see TA Nov/Dec 93, p. 9), "The future of the profession is absolutely dependent on architecture developing its body of knowledge; expanding it, defining it, disseminating it, and claiming proprietary interest in it'.

Nowadays, only architects, engineers, lawyers, and doctors may rightly be considered vested with such title and authority. When we accept such vesting, we accept as an obligation a code of behavior—our cage, as it were. The ethics of all four professions contain very similar mandates, including those of uncompromised service to clients and community, allegiance to one's profession and its body of knowledge, and respect for fellow members of the clan.

In the case of architects and engineers, since we are sports of a once unified species, the duty to respect cannot be accomplished without a fundamental understanding and appreciation for the contribution to the common purpose of the other's art. That respect also carries an obligation to decline assignments wherein we know we singularly lack the expertise, and to enthusiastically enlist in teamwork in order to provide the full spectrum of talent demanded by the task.

Nat Krahl knew too much about architecture to ever attempt to design a building himself. He would no more have undertaken such an assignment than O'Neil Ford, as excited as he was about technology, would have undertaken to design a suspension bridge. Well, on second thought, Neil just might have tried that, but it would have been a small one, and he would have insisted on being the first one across. Both of those guys represented the paradigm of the way it should be between architects and engineers: true professionals with an informed respect and an acknowledged dependence on the art of others.

The myth of Janus somehow seems instructive in all of this. Janus was one of the Numina, a pantheon of lesser Roman gods connected to everyday life and vocation. He is sometimes known in an architectural context as the god of doorways. His temple ran east and west and had doors at each end. His statue, in the center, had two faces, one toward each door, not unlike our two professions, being singular, but with separate ways of seeing things. On the darker side, his two-faced countenance has become synonymous with deception. Both meanings could apply to this situation, but I prefer the first; the two aspects of a united profession.

Janus (for whom the month of January is named), was also known as the god of new beginnings. Only in times of peace were the doors opened and the vision revealed. We can learn from that too as we try to rediscover the commonality of the design professions. After all, there could be no architecture without engineering. Without architecture, there would be little need for engineering.

John M. McGiniry, FAIA, a former president of The American Institute of Architects, is Managing Principal of American Construction Investigations, Inc.
Future Hiring

by Nestor Infanzón

WITH GLOBAL COMPETITION, the woes of the economy, and changing business practices, architects are facing constant new challenges. And in today's market for architectural services, a new challenge has emerged—meeting legal and judicial mandates for racial balance in staffing. Following decades in which architecture was virtually a white gentlemen's club, the profession has started to attract more minority members and to better reflect the society it serves. But friction on the issues of education, training, hiring, advancement, and governmental oversight remain. A look at the state of minority recruiting within architecture in Texas is in order.

Demand for minority professionals has been on the increase since the 1960s, but growth in numbers has been slow. Educators and practitioners cite two primary reasons: the inadequate preparatory education most candidates must draw on and the financial burden required to obtain an architecture degree. Through its own university systems, the State of Texas attempts to provide for an excellent education at a reasonable cost and actively recruits minority students, but even at this level the truly disadvantaged students cannot gain access. As the economy continues to fluctuate, the number of disadvantaged minority candidates who can afford an architectural education is diminishing. Many universities have expanded their recruiting efforts to foreign countries, allowing them on the one hand to attract a mix of racial groups and on the other bring in students who are financially stable and don't require financial aid. This is understandable in a time of shrinking college budgets, but the effects is that doors to American-born disadvantaged students are closing instead of opening.

Encouraging minority and disadvantaged students to attend schools of architecture and other professional programs has also drawn the attention of professional societies. The Texas Society of Architects and the American Institute of Architects have taken the initiative through foundations set up for the purpose. The Texas Architectural Foundation, created by TSA, offers a variety of scholarships and has been of help to many minority students. But one must be enrolled and

Architects must deal with increasing demands for a diverse workforce.
self-supporting to apply for one of these scholarships, so they have been of little help in getting disadvantaged minority students into the system. The American Architectural Foundation, created by the national AIA and funded by members to the tune of $100,000 annually, has over the past 25 years provided scholarships to minorities and disadvantaged high school students seeking to pursue an architectural education. Through its Minority and Disadvantaged Scholarships, the foundation provides every recipient with a stipend to cover tuition and miscellaneous expenses for the first three years of their architectural education. The final two years of education the student is encouraged to apply for the regular AIA scholarship program. Since its inception, over 400 candidates have benefited from this program and have joined the profession.

One Texas firm has also been a standout in this area. Corgan Associates of Dallas, led by Jack Corgan, FAIA, has awarded a scholarship to attend a professional school of architecture to an African-American student from a Dallas high school. To date, Corgan Associates has sponsored three high school graduates in pursuing architectural educations; recipients also get paid for working in the firm, providing them with employment during vacation periods and a source of professional experience while they are still at the university level.

Jack Corgan says that, after years of professional involvement, he felt the lack of representation of the African-American community among architects was a pressing problem. His firm's scholarship, he says, is aimed at helping the profession as much as at helping individual candidates. He regards it as a personal commitment, staying in touch with each of the students during the year. The program, he says, is the best way to attract minority students to a profession that lacks the glamour and financial rewards promised by other careers.

And those numbers remain low. After decades of change, minority architects currently account for about 4,000 of the AIA's 52,000 members nationally.

Pressure to increase the representation of minorities in architecture is increasing. Of all the sources of this pressure, state and national governments, with their efforts to level the playing field among professionals and to increase minority contracting, are perhaps the greatest. Particularly for firms that do lots of governmentally funded work, rules and regulations have proliferated that govern how prospective employees are to be interviewed, hired, and treated with in firms, as well as the steps that must be taken if they are to eliminate the employment of those identified as belonging to special groups. Some firms have reacted by developing strict Human Resource guidelines and policies, while most tend to practice with a loose yet understood group of policies that, walking a narrow path between compliance and good business sense. Of course, there are scores of firms that never deal with these issues, and probably never will, due to the types of practices they run.

Dealing with Diversity

A survey of some of the largest and most active Texas-based firms, practicing both at the state and national level, provides a sense of their attitudes and commitment.

The educational support funded by Corgan Associates of Dallas, already mentioned, is part of the firm's overall commitment to broad-based recruiting. Jack Corgan says he looks for a way of advancing the betterment of the profession as a whole, without having to be reminded of the current social differences or pressures. The firm recruits the best-qualified and suited candidate for any given opening, Corgan says. Within the firm's practice, each architect is required to do his or her best work and to challenge their peers. There are no preferential policies, he says, just architects helping each other.

HKS Inc. of Dallas, one of the county's largest architectural firms, has over the past decade developed a variety of programs to promote the architectural profession. A participant of the Dallas Independent School District Executive Assistance Program, a program that places a minority high school student in the firm's offices to gain exposure and experience in the profession. Joe Buskull, president of the firm, synthesizes their recruitment policy as a tendency to hire the most suitable candidates without prejudice. Throughout the firm's existence, he says, the policy has been to promote and encourage individuals to excel and reach their potential, benefitting both employees and the firm.

Barbara Allen is vice president and director of Human Resources for Gensler Associates/Architects, the international firm that has had a Houston office for almost two decades. Gensler, says Allen, has a very active multilevel recruitment program in high schools and colleges throughout the U.S. Gensler's commitment, Allen says, is to recruit and hire the most suitable candidates we can find. "We hire for qualifications," she says.
As one of the handful of Texas firms whose international practice is an active component of their essential business development, Gensler is interested in recruiting individuals who will represent a balance within the global spectrum of social segments that practice encounters, she says. According to Allen, the firm is extremely proud of its internship programs, which over the last decade have sponsored students to work in their offices, providing them with financial reward and professional experience needed for development as architects. Some of their current interns have been asked to rejoin Gensler’s staff after graduation, a system that works for the firm as well as the candidate. Allen emphasizes that Gensler is committed to hiring employees based on their qualifications, not on quotas.

RTKL Associates, Inc., the international firm with which I work, attempts in its recruitment programs to hire not only the most qualified candidate but to achieve a social and regional balance. This policy allows for the recruitment of candidates from all segments of our social structure and it also provides the firm with the opportunity to recruit students from different regions of the country. Susan Middleton, vice president and director of Human Resources for RTKL, describe the company’s policy as “color and sex blind.” RTKL staffs, she maintains, tend to represent a well-rounded group of professionals from all facets and social segments of our society. Along with the programs the firm provides for minority employees, the firm is also committed to encourage minority-owned firms and other professionals to network and participate within the community and their respective professional associations. It is the commitment of the vice presidents at RTKL to achieve a well-balanced firm with the most qualified personnel available, reflecting the social balance in our society and representing the cultures of the countries in which the firm is doing business.

**Networking Needed**

Because so many of these architecture firms compete for public funds under political scrutiny, they are like the mine canaries of our society, feeling pressures that may eventually become part of the fabric of more and more of the business world. As government bodies try to come up with fair ways of distributing contracts and opportunities, programs are undertaken that often strike many at first as unfair or one-sided. For most, the aim is repair an apparent disparity: the inability of minority professionals to gain the experience needed to compete on equality terms with majority-race firms. This dilemma is what architecture firms need to be involved in, training minority staff members and helping them gain experience.

Indeed, for those small number of young minority entrepreneurs in business with experience, today’s situation can be very advantageous. Marcel Quimby, president-elect of AIA Dallas, says that it is important to the profession that minority architects become involved and network within the profession and the community. This will allow them to become an integral part of the decision-making process. During the past year, Quimby has advised a City of Dallas board evaluating issues that affect the city’s business practices regarding minority contracts and services. She says that current approaches within the city require allocating contracts on a the basis of numerical quotas, with set-asides for Hispanics, African-Americans, and others. But, according to Quimby, city officials would like to change to a more holistic approach for awarding contracts, based more on the involvement of minority staff within firms, instead of the current practice of joint-venturing to meet requirements. Such a system, it is hoped, would encourage firms to recruit more minority staff and mentor them into leadership positions.

**Continuing Challenges**

OVER THE PAST several years I have had the opportunity to meet with students, fellow professionals, and recruiters from other firms, and even though there are many firms attempting to remedy the wrongs of the past not all is well. Minority and women architects say they must work harder to be recognized and promoted, and complain that they are paid less than counterparts for equal work or that they are not allowed to meet clients for whom they work. These are thorny problems that won’t go away until we within architecture start evaluating employees for their potential and contribution to a firm, rather than on the basis of color or sex. If there is a lesson to be learned out of recruiting, it is that the search for the most suitable candidate transcends racial boundaries. If you hire the best, you will challenge your staff and the overall qualities of the personnel will advance.

Architect Nestor Infanzón, a member of the TSA Publications Committee, works at RTKL Associates in Dallas, where he has been involved in recruitment.
The Art of Working Together, Underground

The extensive underground tunnels in downtown Dallas form two systems, one for the east part of the central business district, and one for the west, that have never been linked. The City of Dallas has wanted for years to connect these systems at Thanks Giving Square, but has been prevented by cost and technical problems.

A new connector at Thanks Giving Square, designed by a team of engineers, architects, and artists, is planned to unify the two systems, avoiding buried utilities and linking fewer buildings than had been planned before.

Called the Akard/Pacific Pedestrianway, the project is unusual for its strong public-art component. Instead of blank tunnels, the openings to the new pedestrianway at Akard and Pacific will showcase the work of artists Susan Magilow of Dallas and Jack Robbins of San Antonio.

The artists have collaborated on work that, they say, "explores the universal journey experienced by all organisms," connecting living things to "modern tech-
ology, archaeological history, geometry, and the structure of thought,” along with the invincibility of nature in relation to the manmade.

The strategy is to set sculptural objects in a series of architectural display cases that passersby will look into as they walk through the entry spaces. One object in the Pacific tunnel, set behind a serpentine opening, will be a snake-like construction made of bicycle calipers immersed in imitation amber. Behind another opening, an acrylic jellyfish seems to float on a timeless journey through outer space.

The cross-section of a shell, crystals, and the capillaries of a human heart will provide other starting points for exploration.

The themes explored in the Pacific tunnel are continued in the Akard walkway. Six habitats—a rocket, a spiderweb-space station, the Earth’s atmosphere, a nest, a tortoise shell, and an egg—examine the interplay of humans and the environment.

The Pedestrianway project has been bid and awaits City Council approval. Joel W. Barma

**PROJECT** Akard/Pacific Pedestrian Way, Dallas
**CLIENT** City of Dallas
**DESIGN TEAM** Datum Engineers, Inc., Dallas (prime contractor); Philip C. Henderson Architects, Dallas and John S. Chief, FALA, Architects, Houston (architects); Susan Magilow and Jack Robbins (artists); Good Design and Olivette Hubler Graphics (graphic design); Gene E. Dunley/Little Lighting (lighting design); Blum Consulting Engineers, Inc., and Campus Engineers, Inc. (mechanical, electrical, and plumbing)

Facing page: Shell-like shapes mark displays of art in the walls of the Pacific Avenue entrance, including a jellyfish in space (right).

This page, top and above: opposite sides of the Akard Street entry displays are faced in metal and stone.
Survey

Living in a Tower

ARCHITECTURE Responding to Houston's extreme climate, this backyard tower retreat designed by Deborah Morris of Morris Gutierrez Architects meets the client's needs and serves as a prototype for environmentally sensible design.

The client, writer Olive Hershey, expressed a need for a working space that would be "free, airy, and peaceful," away from the business of home, yet near at hand. Morris moved this new workspace into a tower in a shaded area behind the writer's bungalow house. The 12-foot-by-12-foot tower provides sleeping and studio space on the upper floors and offers a flexible ground level for kitchen and dining facilities. A shaded roof deck extends to the west and an outdoor stair connects the three floors on the project's east side.

To combat high energy costs associated with Houston's uncomfortable heat and humidity, the architect uses the stair and deck together with steel-framed, perforated sun-screens to shield the house from the sun. Casement windows are oriented to catch prevailing breezes, and the thin galvanized steel siding allows heat to escape quickly for evening comfort. In addition, a "whole house..."
ventilator” will draw fresh air through all three levels via grated floor openings.

The projections also serve to extend the living space outside the structure’s rather limited dimensions. The screen-covered roof finds use as an auxiliary deck inviting vistas in every direction.

Morris hopes the house can be used as a prototype for modular construction in low-income housing projects. She notes that the basic form was developed with an emphasis on space and budget efficiency, designing units that could be joined side-to-side in row arrangements.

Mark Forsyth

Plan (left): In relation to the neighboring trees, the tower consumes little surface area.

Far left: A shaded deck extending to the west gives sunset views, and a fourth-floor roof deck provides 360° vistas.

BOOKS Austin architect Stephen F. Collier has written a simple, easy-to-read guide for people contemplating the first steps of building a new house. Billed as “the ultimate insider’s guide to organizing the people you need to get your dream house built,” Raising the Rafters is, in fact, something much better: a roadmap through the complexity of the housebuilding project, covering planning and design, financing, fees, construction, and legal and ethical relationships.

Structured as a series of questions and answers that can be approached from almost anywhere in the book, Raising the Rafters again and again shows that getting a house designed and built is not a one-step event, but a river of decisions in which the client must choose from among often-competing options.

In answering the question “How does the architect/designer charge for his services?” Collier writes, “This issue can be very confusing when you don’t know about the design and construction process. . . . [T]housands of decisions will be made from the conception of the project to the time you move in. The amount of an architect’s or designer’s fee is based on the number of decisions you make with his or her advice.”

Fellow architects might wish that Collier had been a little less even-handed in his treatment of the distinction between architects and home designers (it depends on the level of service and control that the client expects as to which should be chosen, he says), or a little less noncommittal in his answers to such questions as “Whom should I go to—the architect or the builder?” (He writes that, “The question is a complicated one that requires a good knowledge of the design and construction process.”) But Collier’s even-handedness and his emphasis on clarity of communication from start to finish are the great strengths of the book. Because of these qualities, Raising the Rafters is excellent reading for any architect, builder, or contractor, and would make a perfect gift from any of them to a new residential client.

Joel Warren Barna
Victory of Pride

REVITALIZATION  The Odessa–Main Street project highlighted the list of winners at the 1993 Texas Downtown Association award ceremony. Of the competition’s five construction-related categories, Odessa–Main Street won four; three of these winners were designed by architect members of AIA West Texas.

Featuring the rehabilitation of 22 buildings; the construction of three new structures; a net gain of 59 business starts, relocations, and expansions; and the creation of 220 new jobs in the first six months of last year, Odessa–Main Street is part of the nationwide Main Street program, which seeks to revitalize small towns while bolstering their small town character, using community pride.

Odessa–Main Street’s winners included Proteus by Dale Jenkins, (best store interior); the Boy Scouts of America Office by Larry Johnson of Johnson Seefeldt Architects, (best adaptive reuse); the Streetscape project featuring Monte Hunter of MS Hunter Associates, Inc., (best public/private venture); and the Farmer’s Market by Terry Witherspoon (best new construction).

Community fundraising supported the efforts of the designers. The Boy Scouts raised $294,000 to save the Henderson Drug Store; students held bake sales, sold candy, and even paid money to chew gum in class to support the Streetscape’s tree plantings. Local architects also donated time to the projects. For instance, Witherspoon volunteered over 100 design hours for the Permian Basin Farmer’s Market.

The individual projects together have stimulated economic progress and secured community pride in Odessa. The Streetscape project, for instance, brings not only green trees to a new downtown median in the summer months, but Christmas lights in December.

Main Street–Odessa executive director Kathy Hendrick says, reflecting on the positive changes made in the city, “Main Street–Odessa as a whole is beautifying our community. We feel that beautification is part of economic development. People do not want to move where it’s ugly. Odessa has fought the ugly image for many years. However, with the many new downtown changes people are talking about how great it looks and now they enjoy coming to the downtown area.”

Mark Forsyth

Twilight of zoning

POLITICS  Houston’s voters narrowly defeated the city’s third zoning referendum in the Nov. 2, 1993, election. Barely 20 percent of registered voters turned out for a lackluster city mayoral and council election, which also included the zoning proposal, in the works for nearly three years. The close 52-percent to 48-percent margin nonetheless stalls the process, which seemed a sure thing several months ago.

Opponents to zoning put on a well-funded last-minute media blitz, targeting business and low-income area with the threats that zoning would kill jobs, increase taxes and bureaucracy, and foster segregation. Supporters, who were outspent three-to-one, were unable to organize a counter campaign against these basic “pocketbook” issues. Immediately after the election, the anti-zoning coalition called for the city to cease all zoning-related expenditures, repeal the interim zoning ordinance, and to dismiss Donna Kristaponis, the head of the Department of Planning and Development. None of this has happened yet and the contending forces remain locked in the debate. Former councilman Jim Greenwood, the initiator and champion of zoning this time around, has vowed to bring the issue back to the voters. However, an upcoming city charter change option will complicate such efforts by requiring a six-month public review period before another zoning ordinance can be proposed.

Despite the efforts of the Zoning Strategies Committee to find a unique “Houston-style” zoning, the final ordinance was flawed because it was not a comprehensive plan for the city’s development as required in the initiating ordinance of January 1991. Without a vision for Houston’s future, zoning merely ossifies the status quo. So for now, Houston remains the “free-enterprise city.”

Gerald Moorhead

Gerald Moorhead is an architect in Houston.
DUGOUT TO DECO: BUILDING IN WEST TEXAS, 1880-1930
by Elizabeth Skidmore Sasser
Texas Tech University Press, 1993
185 pages; $45.00 hardcover

Books
Dr. Elizabeth Sasser is a much beloved former professor of architecture who taught at Texas Tech University for 40 years. Her latest work, Dugout to Deco, while it is not a comprehensive building survey, enjoyably traces the origins and appearances of different architectural styles in different parts of West Texas from 1880 to 1930.

The limits of the subject area, as defined by Sasser, are Dalhart, Fort Worth, Laredo and El Paso. As she points out, this is a vast unbounded area without geographical interruption, but what the undistinguished terrain lacks in physical attractiveness, it makes up for in its enormous wide-open spaces and big sky.

The 50-year span of this study begins in 1880; the date could almost be considered the beginning of civilization for this part of the state. Very little remains of any West Texas buildings or shelters built prior to the 1880's other than the missions near El Paso.

Sasser's historical research includes information that one would only expect to learn "if these walls could talk." She sketches descriptions of the lives of the people responsible for the development of towns and their buildings, and ties together the needs of builders with the influence of new architectural styles, the culture of the era, and the increasing availability of new building materials. Buildings types depicted are primarily utilitarian structures: houses, barns, railroad stations and churches.

The color and black-and-white photographs are consistent with the spirit of the text—representative, crisp images that personally characterize the styles and details rather than dryly document the buildings.

The book features complimentary notes from a couple of Dr. Sasser's more celebrated former students. Richard Payne, FAIA, contributed the forward and Paul Stevenson Oles wrote the introduction to the author.

An inspiring teacher does more than instruct, acting as a catalyst to allow students to enjoy the thrill of learning on their own. That inspirational quality is evident in Dr. Elizabeth Sasser's book. The West Texas terrain demands more than a casual examination to appreciate its subtle diversity and unspectacular beauty. The author challenges her readers to take a closer look, in order to relish the hidden charm of West Texas' eclectic architectural heritage.

Lawrence Connolly Architet Lawrence Connolly is a member of the TSA Publications Committee.

Odessa–Main Street's winning projects in the 1993 Texas Downtown Association's Competition.

Facing page: best store interior, Proteus Hair Salon

Top far left: best public/private venture, Streetscape Project

Bottom far left: best new construction project, Farmer's Market

Best adaptive reuse, Boy Scouts of America office; interior (top left) and exterior (bottom left)
Bryan's Song

PRESERVATION Over 170 years after Bryan's birth on the Texas plain, preservation efforts are working to save historic homes. Like many frontier towns, Bryan shelters a rich architectural history, represented by houses built in numerous imported styles.

Initially settled in 1821, Bryan benefited greatly from the westward expansion of the railroad. Forty-five years later when the trains rolled into the area, population and commercial activity increased sharply. Bryan became a regional center for surrounding farms, adding government to its urban center when the Brazos county seat was captured from nearby Boonville. In 1876, Texas A&M University further enhanced the city's economic vitality, growing over the years into a major state university.

Downtown Bryan saw the rise of a merchant and professional class which built businesses along Main and Bryan Streets, and neighborhoods of houses to the east and west of this center. Today, the city has close to 2,000 significant historic structures representing a wide variety of styles, from Italianate to Mexican Adobe.

With a particularly cohesive neighborhood unit, the homes bounded by East 29th, Baker, Ennis, and 33rd Streets became the East Side Historic District. Created in 1983 by the Bryan City Council under a historic preservation ordinance, this relatively small district illustrates a chronological development of Bryan's residential architecture from the 1870s to the 1930s.

The council's involvement charged the Historic Landmark Commission with the protection and enhancement of the area's historic resources. The commission required property owners to file a Certificate of Appropriateness before any exterior change is made to homes in the district. To help owners with these alterations or renovations, the HLC developed design guidelines with the help of Texas A&M University's School of Architecture.

Adapted from the general principles of the Secretary of Interior's Standards for Rehabilitation, the guidelines recognize the unique qualities of each structure, the need for special care involved with the age of these buildings, the importance of practical modernization, and the conformity with current zoning and building codes. Addressing new construction and additions, the guidelines include: description and identification of the preservation elements, supplemented with a pictorial table of typical Bryan roofs, openings, and color schemes; preliminary preparations for preservation, such as paint preparation, roof inspection, and treatment of openings; and procedures of preservation including protection, repairs, and replacement.

Seeking to avoid conflicts in improvements and repairs, these principles inform owners about the importance of preservation by teaching traditional and contemporary techniques for treating historic property. The guidelines hope to guard the neighborhood's precious character for years to come.

Anat Geva

Anat Geva, a Ph.D. student in architecture at Texas A&M, helped to write the guidelines.
Authenticity Rebound

ARCHITECTURE In the recent rehabilitation of the Levin residence, originally the Warner Clark House by David Williams, Phillips Ryburn Architects maintains that the firm strove not to recreate the original structure, but to reveal its authentic character. David Williams considered the Warner Clark residence the best embodiment of the indigenous architecture for which he is so well-known. Williams wrote in a 1931 article for the Southweset Review that “A logical regional architecture has for its origin the simple, early forms of building native to its own locale, and grows by purely functional methods into an indigenous form of art.” The localized quality of such building brings with it attention to “honesty”—the use of forms that are in character with their materials. In addition, such architecture also emphasizes orientation on the site, as well as craftsmanship. All of these elements are exhibited in the Warner Clark House.

Since it was built in 1930, the Warner Clark residence had undergone changes that obscured the simple nature of the original house. The second owner covered the brick walls and hewn beams with plaster, replaced French doors and casement windows with plate glass, and removed much of the original ornamentation, including copper light fixtures by Lynn Ford. The sleeping porch had been roofed in and enclosed with sliding glass doors.

According to Robert Van Buren of Phillips Ryburn, the architects sought to interpret Williams’s influences and use components of his vocabulary rather than attempt to replicate what was lost. The architects used information from Williams houses in the area to establish motifs to be used in the rehabilitation.

The architects removed the added plaster to expose the beams and brick walls. With the structural role of the brick apparent, Williams’s arched doorways, repeating those found in the backyard arcade as well as in the window openings, once again express their brick construction. Consequently, the house has taken on an honesty and simplicity previously hidden. The structural integrity of the house has, for the most part, been maintained, the only change being an expansion of the master-bedroom closet to incorporate the leg of the former L-shaped sleeping porch. The remaining portion of the porch has been completely enclosed to provide additional space, while arched window openings compatible with other fenestration have replaced the glass doors.

Because little is known about the original crafted ornamentation, the architects chose to introduce features that are sympathetic to the Williams vision. The middle-bedroom fireplace mantle, for example, has been replaced by an inset featuring David Williams’ favorite symbol, the Lone Star. Other fireplaces exhibit the arch motif and other brickwork, such as a course of alternating projecting vertical bricks, that are appropriate to their material.

Shannon Smith

Shannon Smith is a recent graduate of Texas A&M’s College of Architecture.
NEW PRODUCTS AND INFORMATION

SPI Lighting introduces the Lightruss System. Consisting of a series of indirect light modules spaced evenly within a truss, the system is designed to conform to any environment and lighting system, including straight runs, curves, angles, and changes in elevation.

The SL-4100 series shear lock is the latest introduction from Von Duprin, Inc. Offering twice the holding force of previous designs, the electromagnetic lock eliminates the need for constant readjustment after construction settling or heavy usage. The lock also features built-in voltage surge protection, a plated armature, and corrosion-resistant assembly.

Dangerous avalanches of snow and ice off metal roofs are prevented by the Snow Dam from Thycurb. This aluminum guard fastens to the standing seam, and permits water from melted snow to run off while retaining unmelted snow. Tape mastic used between the Snow Dam's base and the seam ensures a watertight seal.

Aesthetic considerations are incorporated into the wooden Chateau Fire Door from the Simpson Door Company. Available in Douglas fir and Western hemlock, the door features laminated panels and fire-resistant core, and carries the company's characteristic "raised eyebrow" top panels and lock rails.

Designed to encourage movement, the Allegis seating system from The Harter Group enhances the users' comfort and productivity. The chair's seat and back automatically and independently float forward and backward to support the body's movement. Fingertip switches allow the chair to be locked into a desired position.

The Digital Equipment Corporation announces the arrival of more than 150 products and services to the computer and software market. Designed as part of a worldwide initiative to help customers move to open client/server computing, the products include the LinkWorks software, major additions to UNIX and Open VMS, and the second generation of Alpha AXP servers.

Masonry Products and Systems

Stone Images from GRUPO INTERIEUR offers construction flexibility. The wall panel system uses large blocks measuring 4 feet by 8 or 9 feet that arrive ready for field installation by carpenters.

Designed for government centers, plazas, and parks, floor brick by SUMMITVILLE TILES, INC. is durable and requires little maintenance. The product is extruded from high-quality shale to create a uniformly dense unit capable of withstanding chemicals, snow, and ice.

STARK CERAMICS, INC. has introduced a utility brick, a cost-effective exterior masonry option. Larger 4-inch-by-12-inch units cut labor costs and installation time. The product is available uncoated, Geo-tone coated, and glazed.

Ideal for bridging hairline and movement cracks, brush-grade ter-polymer sealants are now available from the VIP division of the FLOOD COMPANY. The waterproof sealant provides flexibility and protection from weather for stucco and all masonry surfaces, as well as metals and plywood.
Resources

South Garland High School, Garland
Concrete piers, Gifford-Hill; Reinforcing steel, Co-Met; Steel embed plates, Metal Building Systems; Roof joints, Vulcraft; Framing, A & S; Roof insulation, Manville; Fireproofing, Isolake; EIFS, TEC; Wall panels, Citadel; Doors, Tex-Steel; Roll-Ed shutter doors, Atlas; Vinyl flooring; Tarkett; Wood flooring, Rubbins; Rubber flooring, Burich; Acoustical tiles, Celotex; Ceiling grid, NRM; Bulk tees and Fibre-plank roof decking, Martin; Foundation waterproofing, Somernor; Roofing waterproofing, W.R. Meadows; Ceiling insulation, Owens-Corning; Paint, Sherwin Williams; Hinges, Stanley; Locksets, Ruswin; Door closers and panic exit, Yale; Kickplates, stops, and slencers, Trimco; Lockers, Lyon; Bleachers, Interkal; Rings and hoists, Gibson; Volleyball nets and basketball backboards, Porter; Hardware, Metal Building Systems; Exterior lighting, Alolite, Devine Design; Floor lighting, Midwest, Infinity; Interior lighting, Chloride; Exit lighting, Custom; Interior lighting, American Electric; Electrical panels, Siemens; ITI; Lavatories, Kohler; Water closets, Kohler; Faucets, Speakman, Symmons; Traps, McGuire, Zurn; Partitions, San Tan; Water heaters, State; Washroom accessories, McKinnon Parker; Grab bars, Oasis, Ebco; Shower stalls, Aquarius; Showers, Acorn; Toilets seats, Olsonic; Sinks, Dayton; Duct housings, Kidde; Alarm horns, Wheelock; Fire alarm stations, Edwards, General Signal; Alarm electronics, Fire-Lite; Smoke detectors, BRK; Risers, Stage right, Security sensors, Honeywell Infraroc, PA and intercom, Bogen; Microphone mixer, Ashly; Mounting cabinets, Atlas, Sound. Amplifiers, Altec Lansing; Equalizer, Electro-Voice; Audio cable, Roper; Loudspeakers, Soundsource, Sonic.

W.A. Vines High School, Plano
Reinforcing piers, Loisland; Steel embed plates, Metal Building Systems; Fireproofing, Isolake; Steal studs, Maverick; Bar joints, Vulcraft; CMU, Featherlite; Wall panels, Copper Sales; Cement, Texas Industries; Stucco, Tex-Star; Louvers, Industrial Louvers; Storefront system, Kawneer; Acoustical wall fabric, Guildford of Maine; Acoustical wall panels, AVL; Gypsum board, Gold Bond; Glass block, Pittsburgh Corning; Skylight, Naturalite/EP; Steel doors, P&W; Metal; Accordian walls, Modernfold; Wood doors, Buell; Pavers, Dal-Tile; Expansion joints, Construction Specialties; Wood flooring, Homer; Grid suspension, USG; Dorn; Ceiling panels, USG; Roof coping, Hickman; VCT, Armstrong; Roof insulation, Permalite; Built-up roof and Elastomeric sheets, Manville; Paint, Glidden; Hinges, McKinney; Locksets, Scalage, Merit; Door closers and panic exit, Sargent; Lockers, List; Controller, Baster; Hoisings, Balco; Hardware, Metal Building Systems; Uplights, Hydro; Lighting, Lithonia; Sinks, American Standard; Just, Faucets, american Standard; Speakman; Flush valves, Sloan; Toilet stalls, San Tan; Washroom accessories, Bradley, Water fountain, Halsey-Taylor; Ice makers, Marrel.

Dishwashers, General Electric; Heating system, Sterling; Air conditioning system, Johnson Controls; Environmental Technologies; Roof Fans, Greenheck; Laboratory classroom desks, American Desk; Custom millwork, Velen; Plastic laminate, Wilsonart; Counters, Nevamar; Outdoor seating, LFI; Chalk/Tack boards, Claridge; Blinds, Beli, Carey-McFall; Flagpole, Baartol.

Irvig High School, Irving
Steel frame, Structural Iron Works; Drywall, Ranger Acoustics, Carpet/VCT, Med. Floors, Suspended acoustic ceiling, Ranger Acoustics; Roofing, Classic Comm.; Laboratory casework/equipment, American Desk, Taylor.

Rodgers Elementary School, Frisco
Steel Frame, Hughes, Brick, Anne; Sheetrock, Durenoble, Windows, Efco; Exterior doors, PPG; Pierce; Interior doors, Western Oregon; VCT/CT, Armstrong; Carpet, Mohawk; Acoustical tile and drywall, Armstrong; Shingles, Owens-Corning; Partitions, Hufcor, Panelfold, Paint, Shervin Williams; Rings, McKinney; Locksets, Falcon; Door closers, Dorma; Panic exit, Monsch; Magnetic door holders, Edwards, Visual display boards, Claridge; Headers, Hands, Lighting, Lithonia, Notifire; Plumbing fixtures, Kohler; Toilet compartments, Metpar; Flush valves, Sloan; Washroom accessories, Gamae; Water fountains, Halsey Taylor; Heating system fan coil, McQuay; Pumps, Oslimation; Boiler, Weil-McLain; Air conditioning chiller/ice harvester, Turbo Refrigerating; Condensing units, McQuay.

Creekside Intermediate School, Cleark Creek
Roof structure, Carlisle; Brick, Elgin Butler, Interior doors, Marlitte; Pavers, Dal-Tile; Carpet, Bigelow, Karastan; P.A. system, Radial; Signage, Texas Graphics, A.R.K. Ramos.

Pork Crest and Southgate Elementary Schools, Garland
Reinforced concrete piers, North Texas Cement; Grade beams, Daniel Steel; Slab on canton forms, Harris; Structural steel, Metal Building Products; Metal studs, Dietrich; Concrete masonry units, Builders Concrete Products; Bar joists/meal deck, Vercraft; Brick veneer, Boral (Park Crest only), Acme, Elgin Butler; Glass block, Pittsburgh Corning; Stucco, Tex-Star; Gypsum board, USG; Ceramic tile, Dal-Tile; Vinyl wallcovering, Carroll; Wallcovering Industries; Windows, Jordan; Metal doors, Ceco Door; Wood door, Algoma; Vinyl tile, Arruck; Acoustical tile in suspended metal grid, USG/Dorn; Built-up roofing, GAF; Metal roofing, Beridge; Joint sealant, Tremco; Masonry sealant, Chempro; Insulation, Manville; Paint, Sherwin Williams; Hinges, McKinney; Locksets; Door closers, Panic exit, Sargent; Push plates, Pulls, Stops, Flushbolts, Tanco; Cooler/Freezer, Master-Bilt; Exhaust hood, Gaylord; PA System, Dukane; Wireway, Polytrac; Pull stations, Edwards.

Smoke Detectors, Notifier; Lockers, Lyon; Signage, American Graphics, A.R.K. Ramos; Exterior lighting, Devine, Midwest Chandelier; Interior lighting, Neo-Ray; Electric distribution, General Electric; Lavatories, Water closets, American Standard; Faucets, Speakman; Symmons; Flush valves, Zurn; Toilet stalls, San Tan; Washroom accessories, Gamo; Water fountains, Ebco; HVAC System, Tran; Environmental controls, Environmatic; Carpets, Straton; Cabinets, Tyler Woodworks; Blinds, Balf-Gabler; Project ion screens, Draper.

Nichols Junior High, Arlington
Concrete piers, Pioneer; Steel, Ennis; Floor and roof structures, Vulcraft; Metal studs, Debra, Brick, Acme; Storefront, E.G. Smith, U.S. Aluminum; VWC, Koroseal; Acoustical wall panels, AVL Systems; Windows, DGB, U.S. Aluminum, Acme; Entrance doors, U.S. Aluminum; Interior doors, VT Industries, DoorPro, Krieger, VCT and tile flooring, Armstrong; Carpet and wood flooring, Karastan/Bigelow, Wundweave, Sealcon; Ceiling surfacing, USG; Built-up roofing, GAF; Metal roofing, Beridge; Urthane sealant, Somerborn, Chem Res; Flashing, York; Spray-on water repellent, Chempro; Joint sealers, Pecora; Insulation, Firestone; Accordian partitions, Hufcor; Pains, Glidden; Texture finish, USG; Food service equipment, General Electric; Fire protection, Fire Systems; Corridor and athletic lockers, List; Bleachers, Southern; Signage, ASI; Cabinets, Henry's; Blinds, Bali, Elevator, Dover; Lighting, Lithonia, Gentley, Bodine, NxtArt, Hydrel, Forum; Water closets, Crane, Urinal flush valves, Sloan; Toilet flush valves, Crane; HVAC system, Tran; Environmental control, Johnson Controls.

Tommie B. Williams, Arlington
Concrete piers, Pioneer; Grade beams, Rebar Services; Steel, Nasco; Floor and roof structure, Vulcraft; Underlayment, Gy-Crete; Brick, Acme; Storefront, Riverside, VMC, Koroseal; Wall carpet, Timberlake/Dow River; Windows, Tempgrass; Entrance doors, Riverside, Interior doors, Buell, SterlingCraft; Coiling doors, Atlas; VCT and carpet, Tarkett, Armstrong, Bigelow; Ceiling system, Armstrong, Gold Bond; Roofing, Owens-Corning, Vie-West; Pavement sealing, W.R. Meadows; Joint sealant, Tremco; Membrane, Structural Building Products; Spray-on water repellent, Chempro; Toilet partitions, Ampco; Accordion partitions, Hufcor; Paint, Glidden; Hardware, H. Soss, Best.

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Von Duprin, Rissone Firemark, Hager, Heni, Adams Rite, Russwin; Kitchen, Gernsbacher, Fire protection, American Automatic Sprinkler; Lockers, Lymon; Signage, ASI, A.R.K. Ramos; Cabinets, Worth, Wilsonart; Blinds, Bali; Handrails, Nasco; Plumbing, Tyler; Sprinkler heads, Pendant; HVAC system, Carrier-Bock; Environmental controls, Johnson Controls.

Carrie Frances Thomas, Birdsville
Concrete pier, Pioneer; Grade beams, Lottland; Steel, Metroplex; Floor and roof structure, Vulcraft; Storefront, U.S. Aluminum; VMC, B.F. Goodrich; Carpet, Timelake; Structural glazed tile, Butler Brick; Windows, U.S. Aluminum; Alcnco; Entrance doors, P.M. Metal Products; Interior doors, VT Industries; Pavers, Paves, VCT, Kentile, Armstrong; Ceramic and quarry tiles, American Oak; Carpet, J & T Industries; Roofing, AEP Span, Huls America; Waterproofing, Chempro, Something, Percora; Insulation, Georgia Pacific; Toilet partitions, Wilsonart; Paint, Gihlden; Kitchen, Gernsbacher, P.A. system, master clock, Dukane; Fire alarm, Simplex Time; Signage, ID Specialties, A.R.K. Ramos; Cabinets, Terrill; Blinds, Bali; Stage curtains, KM Fabrics; Lighting, Mid-West Chandelier, Esco, Lithonia, Durac, HVAC system and environmental controls, Slack Buckner.

Saginaw Elementary Gymnasium, Saginaw
Steel, Metroplex; Doors, Total Opening; Communication and fire detection, Accent Electric; Gymnasium equipment, Porter; HVAC system, Carrier-Bock.

Rockwall High School, Rockwall
Steel, Emnis; Roof structure, Vulcraft; Brick, Interstate; Metal panels, 11.11. Robertson; Ceramic tile, Daltile; Windows, Vistawall; Skylights, Plasteco; Entrance doors, Vistawall; Interior doors, Total Openings; Overhead doors, Atlas; Terrazzo, American Terrazzo; Ceiling system, Hunter Douglas; Roofing system, Waterproofing, Aberdeen; Insulation, Johns-Manville; Paint, Sherwin Williams; Food service equipment, Food Service Concepts; Lockers, Penco; Bleachers, Interior; Chair lifts, GT Manufacturing; Elevator, Dover; Lighting, Dal Lite, Holophane; Water closets, American Standard; Flush valves, Sloan; HVAC system, York; Carpet, Mohawk; Cabinets, Medco; Audio-visual system, Lone Star Communications; Retaining Walls, Jewel Concrete Products.

Meadows Middle School, Granbury
Concrete, Ingram; Bar joists, Vulcraft; Steel, Nasco; Rebar, Lottland; Concrete tilt wall, Buford-Thompson; Concrete slabs, Precast Services; Brick, Acme; Aluminum curtain walls, U.S. Aluminum; Translucent panels, Major; Windows, U.S. Aluminum; Skylights, Naturalite; EP; Aluminum doors, U.S. Aluminum; Steel doors, Texas Steel; Wood doors, Buell; Overhead door, Overhead Door; Rubber base surfaces, Burke; Concrete; Buford-Thompson; Carpet, Stratton; VCT; Tarkett; Ceramic tile, Daltile; Grout, Hydroment; Ceiling system, Celotex; Roofing system, Carlisle; Sealant, Tremco, Volkm; Trowel-on damproofing, Sonneborn; Metal studs, Delta; Gypsum board, National; Marble, Georgia Marble; Paint and stain, Glidden; Vinyl wallcovering, Koresol; Hardware, Rustwin, Von Duprin; Kitchen equipment, Hobart; Lockers, Medart; Bleachers, Hunter; Signage, A.R.K. Ramos; Plastic laminate, Wilsonart; Chalkboard and markerboard, Green Steel; Tackboard, Krommene; Handrails, Nasco; Fluorescent lighting, Mid-west Chandelier; Stage lighting, Times Square; Gym and cafeteria lighting, Abole; Sinks, Kohler; Faucets, Delta; Stainless steel sinks, Elkay; Flush valves, Kohler; Showers, Bradley; Toilet stalls, Amaco, Paper towel dispenser, Fort Howard; Grab bars and toilet accessories, McKinney, Parker; Water heaters, Lochinvar, State; Hand dryers, World Dryer; Wash fountains, Bradley; Heating system, Berko; Air conditioning system, Lenux; Diffusers, Nailor; Science equipment, Taylor; Library shelving, Smith; Display case, Nelson-Harkins; Blinds, Bali; Acoustical wall panels, AVL; Stage curtains, K.M. Fabrics; Gymnasium wall panels, Atohe, Ceiling fans, Nutone.

Decatur Elementary School, Decatur
Footings, Lafarge; Steel, Bason; Walls, Featherlite; Reinforced concrete, Lafarge; Bar joists and metal decking, Vulcraft; Brick, Acme, Elgin Butler; Concrete block, Featherlite; Windows, Kawneer; Skylights, Naturalite; Entrance doors, Tex-Steel; Interior doors, Buell; Tile flooring, Azoek; Carpet, Stratton, Shaw; Ceiling surfacing, USG, Donn; Asphalt shingles, Elk; Built-up roofing, Johns-Manville; Joint sealers, Tremco; Masonry sealer, Chemical Products, Limited; Gutters and downspouts, H.E.C.; Concrete masonry partitions, Featherlite; Folding partitions, Hufcor; Paint, Sherwin Williams; Hinges, Hager; Locksets and panic exit, Russwin; Door closers, Norton; Trim and hardware accessories, Trimco; Exhaust hood, Gaylord; Food service equipment, Heibart; Cooler/freezer, Jack Langston; P.A. system, clocks, bells, Paulind-Borg; Fire alarm, Edwards; Lockers, Interior; Signage, Signart, A.R.K. Ramos; Chalkboards and tackboards, Alliance; Gymnasium equipment, Porter; Exterior lighting, Devine; Interior lighting, Mid-west Chandelier; Switchboards, panelboards, General Electric; Transformers, Holophane; Lavatories, Crane; Water closets and urinals, Eljer; Faucets and showerheads, Symmons; Flush valves, Sloan; Toilets stalls, Global; Washroom accessories, Bradley; Water fountains, Elkay; HVAC system, Sanyo/McQuay; Energy management system, Slack-Buckner; Cabinets, R.E. Smith; Blinds, Bali; Acoustical wall panels, DeCoustic; Baffles, MBCI.

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58 Texas Architect 1/2 1994
Sebastopol Restored

SEGUIN During one of his many travels, the noted landscape architect Frederick Law Olmsted visited central Texas in the 1850s and, emerging from the shade of the walnut and pecan bottoms along the Guadalupe River, recorded this description of Seguin:

About a mile from the river we entered Seguin. It is the prettiest town in Texas, at least of those we saw. It stands on elevated ground in a grove of shaggy live oaks which have been left untouched in their natural number and position, the streets straying through them in convenient directions, not only at right angles. How wonderful that so cheap and rich ornamentation should not be more common.

Such must have been the view from the porches of Sebastopol, surely the most remarkable house of its day in Seguin, which has recently been beautifully restored by the Texas Parks and Wildlife Department. Thought to be named after the Russian city besieged during the Crimean War, Sebastopol was constructed between 1854 and 1856, possibly as the result of the collaboration between the owner, Joshua Young, and the chemist John Park. What they built was a two-story slip-formed concrete structure in the tradition of the raised cottage. Ornamented in a simplified Greek revival style, it has walls that at one point were tinted maroon or pink, with cream lines imitating masonry joints.

The design is attributed locally to Tobias Meininger, an architect then living in Seguin, assisted during the construction of the house by West Reagan, who built a concrete home for his family at about the same time.

The use of this early form of concrete was primarily the result of John Park’s experiments with the gravelly alluvial deposits along the Guadalupe River during the previous 10 years and his familiarity with pise de terre, or rammed-earth construction. This technology, combined with simple Greek revival detailing, was used for construction of over 100 concrete buildings and miles of garden walls in the Seguin area between 1848 and 1856. Of those structures, 30 or so remain today, making Seguin well worth a visit from any Texas architect.

Vincent P. Hauser

Architect Vincent P. Hauser practices in Austin.

Top Left: The historic house at Sebastopol State Historic Site, recently restored by the Texas Parks and Wildlife Department, faces Seguin across a broad lawn; the property slopes steeply at the rear.

Below left: porch during restoration

Below: map showing location of Seguin

Left: plans of upper and lower floors

Above: Porch after restoration

PROJECT Sebastopol State Historical Site (704 Zorn St., Seguin)
CLIENT Texas Parks and Wildlife Department (M. Lynn McDonald, ALA, Architectural Section Leader)
ARCHITECT James D. Bigger, Texas Parks and Wildlife Department, Austin (project architect)
CONTRACTOR Kochler Company, Seguin (Steve Kochler, construction manager; Calvin Ward, job superintendent)
CONSULTANTS Richard Myene, San Antonio (Architectural consultant); Glen Williams (mechanical and electrical engineer); Williams, Schneider, Calcavetti (structural engineers)
PHOTOGRAPHER James Bigger
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