

# Texas Construction

## Best of 2008

# BEST OF 2008 AWARDS

## BAS Medical Center, Paul and Judy Andrews Women's Hospital, Fort Worth

BEST OF AWARD: Health Care

### Key Facts

**Submitted by:** MEDCO Construction

**Owner:** Baylor All Saints, Fort Worth

**General contractor:** MEDCO Construction LLC, Dallas

**Architect and MEP engineer:** Page-SoutherlandPage, Dallas

**Civil engineer:** Kimley-Horn and Associates Inc., Dallas

**Mechanical contractor:** Century Mechanical Contractors, Fort Worth and Dallas

**Electrical contractor:** Cummings Electrical Inc., Fort Worth and Dallas

**Drywall contractor:** BakerTriangle, Fort Worth

**Millwork contractor:** MEDCO Millwork, Dallas

**Terrazzo flooring contractor:** American Terrazzo, Dallas

**Glazing contractor:** DGB Glass, Fort Worth

**Masonry contractor:** Gay & Son Masonry, Granbury

**Concrete contractor:** Sizelove Concrete Construction, Grand Prairie

**Fire protection contractor:** American Automatic Sprinkler, Dallas



A crowded medical campus and inclement weather did not stand in the way of the on-time completion of Baylor All Saints Medical Center, Paul and Judy Andrews Women's Hospital.

The project team managed the construction of the hospital on a jobsite filled with ongoing projects, including the new construction of a 10-story parking garage and a six-floor medical office building. Crews also coordinated the new Women's Hospital tie-in to the fully operational Baylor All Saints hospital on four of its five floors. During construction, the entrance to the main hospital was moved and all traffic into the facility was rerouted, maintaining full access to existing facilities.

Creative solutions to difficult problems kept the job on track. The team needed to build several stories over an existing porte-cochere that serves as the main entrance. In order to connect the new steel floor decking to the existing columns, the team X-rayed the columns to find existing rebar. Because the columns were packed



with rebar, the team instead engineered special custom connection plates on-site to support the new buildings.

Despite the fact that construction started six weeks later than originally planned and the building phase experienced 50 straight days of rainfall, the project's end date was still met. The contractor was able to make up time in the final months by rescheduling and completing work on multiple floors simultaneously.

**BEST OF**  
**2008**  
**AWARDS**

## Raymond and Susan Brochstein Pavilion, Rice University, Houston

**BEST OF AWARD:** Higher Education

The completion date of the Raymond and Susan Brochstein Pavilion at Rice University never changed, despite a fast-track schedule, a month of rain, critical path conflicts and 84 owner-initiated change orders.

Located in the heart of the university's campus, the \$7 million project features natural lighting from floor-to-ceiling windows that look out over a 10,700-sq-ft wraparound plaza. The exterior seating area is covered by a 14-ft-wide aluminum trellis designed to filter light, and is encompassed by an elm grove, fountains and live oak trees.

On top of 30 documented rain days, most of which occurred while trying to get the building out of the ground, the utilities contractor created a one-month delay in critical path activities. Additionally, the owner initiated 84 changes to the scope of the project.

Crews were able to provide a custom curtainwall system with a custom aluminum trellis in which practically all of the structure is exposed. The system included custom die extrusions for the curtain wall and interior aluminum ceiling, as well as fabricating and erecting architecturally exposed structural steel to exact tolerances to accommodate the stricter aluminum trellis and curtain-wall tolerances.

Custom aluminum perforated light scoops over the roof skylights were also a quality issue. Crews made the decision to purchase and fabricate the custom aluminum trellis and light scoops locally. This not only resulted in lower final cost to the owner but also allowed the contractor more control over delivery logistics and placement in relation to the exposed structural steel.

Services were provided to the building



from the university's central plant, requiring additional room to convert the chilled water and steam for use by the pavilion.

The challenge was in the placement of three air handlers, a PRV station, transformers, fire sprinkler tank and all of the associated ductwork and piping in a basement with a small footprint. The solution was to utilize building information modeling. Working in a 3-D environment, the team was able to design the most efficient use of the available space, which saved time in the installation process and eliminated any rework.

### Key Facts

**Submitted by:** Linbeck

**Owner:** Rice University, Houston

**Construction manager:** Linbeck Group, Houston

**Architect:** Thomas Phifer and Partners, New York, N.Y.

**Landscape architect:** The Office of James Burnett, Houston

**MEP engineer:** AltieriSeborWieber, Norwalk, Conn.

**Structural engineer:** Haynes Whaley and Associates, Houston

**Geotechnical engineer:** Ulrich Engineers Inc., Houston

**Civil engineer:** Walter P Moore and Associates, Houston

**Electrical contractor:** Design Electric, Houston

**Plumbing contractor:** Humphrey Co., Houston

**HVAC contractor:** Kilgore Mechanical, Houston

The contractor tapped to renovate the San Antonio Marriott Rivercenter's 90,000-sq-ft ballroom floor redefined "fast track" by submitting a plan for services just two days after accepting the project and completing work on a tight, 67-day schedule.

Demolition of the existing 90,000 sq ft of space was accomplished in five days, followed by 60 days of construction in which more than \$8 million in construction was put in place. The project scope included the renovation of ballrooms, meeting rooms, restrooms, elevator lobby and guest registration area and involved constructing intricately coffered ceilings with recessed lighting and elaborate chandeliers, as well as installing custom carpet, wall coverings and other finishes. At one point, 12 different trades were working on the floor at one time.

Crews saved time by implementing a schedule that included two, 10-hour shifts working seven days a week. Three weeks were shaved from the schedule by implementing a plan for the wood portals millwork that included a hybrid system of real wood and veneer wall covering. Additionally, the project team adopted an option proposed by the electrical subcontractors: a sequencing plan involving the delivery and installation of the light fixtures. This approach not only saved time but also money by eliminating the mechanical return air elbows that



were not needed.

In order to maintain the schedule, crews released equipment prior to finalizing design. The applicable trades procured submittals and immediately released the purchasing of the dimming systems, light fixtures and operable wall repair parts, all of which required between eight and 14 weeks of lead time.

The final building inspection approvals were acquired nine days ahead of schedule. The day after completion, a Harley-Davidson convention rolled into town as the first organization to make use of the new facility.

## Key Facts

**Submitted by:** Constructors & Associates

**Owner:** Host Hotels and Resorts, Bethesda, Md.

**General contractor:** Constructors & Associates Inc., San Antonio

**Architect:** RTKL Associates, Coral Gables, Fla.

**MEP engineer:** Blum Consulting Engineers, Dallas

**Mechanical contractor:** TDIndustries, San Antonio

**Electrical contractor:** Nathan Alterman Electric Co., San Antonio

# BEST OF 2008 AWARDS

## Borger ISD New Elementary, Borger

BEST OF AWARD: K-12

The decision to seek LEED certification for the new Borger ISD Elementary School makes the new, 122,000-sq-ft school the first in the West Texas region to do so. If certification is bestowed, it will be the second K-12 public school in Texas to attain the certification.

The new school was constructed with high quantities of recycled products. There also is highly efficient heating and air conditioning equipment, added insulation and efficient use of natural lighting.

The project combines two existing elementary schools built in the early 1950s under one roof. It includes four wings and a core area with a full-size gym, cafeteria/auditorium with operable panels for multifunctional use, kitchen, library with an elevated seating area, two computer rooms, two music rooms, teacher's workroom and teacher's lounge.

The project team faced a challenge of escalating construction costs due to the dramatic increase in oil prices. In order to meet the established budget, the general contractor and architect offered a number of value-engineering ideas.

The first major change came at the foundation level. By reducing the thickness of the building's footprint from 5 in. to 4 in., Borger ISD saved \$232,000. The second item, and one of the most extensive to complete, was the elimination of close to



40% of the ceramic wall tile. By using a PVC wall protection material with the same type film material used on countertops, the school district saved approximately 50% of the cost for ceramic wall tile.

In the end, value engineering resulted in a \$500,000 savings for the district.

The Borger ISD New Elementary School project finished up three months early, allowing for students to start their 2008-2009 school year in the new facility.

### Key Facts

**Submitted by:** MW Builders of Texas

**Owner:** Borger ISD, Borger

**General contractor:** MW Builders of Texas Inc., Temple

**Architect:** Parkhill, Smith & Cooper Inc., Lubbock

**Electrical contractor:** American Electric Co., Amarillo

**Fire protection contractor:** Casteel Automatic Fire Protection Inc., Amarillo

**Plumbing contractor:** Scottco Mechanical Contractors Inc., Amarillo

**Structural steel contractor:** CMC Alamo Steel Co., Waco

**Painting contractor:** Jack C. Thomas & Son Inc., Amarillo

**Masonry contractor:** Lonestar Industries LLC, Wolfforth

The 24-story, 1.1-million-sq-ft One Arts Plaza is a mixed-use structure that includes class A office space, retail and luxury condominiums. Its grand entrance is aligned with the Flora Street axis and the Dallas Museum of Art entrance, creating symmetry between the mixed-use project and the surrounding Dallas Arts District.

The construction team faced a tight schedule: the owner promised its major corporate tenant, 7-Eleven Corp., a move-in date of April 2007. That meant the parking levels, lobby and floors seven through 11 had to be completed and available for occupancy while the remaining six condominium floors were still in early construction stages. To accomplish the fast-track delivery, the team spent an extensive amount of time planning and scheduling every minute of each day to ensure that all elements of the work were accurately undertaken. Crews implemented a 24-hour work schedule and seven-day work weeks. This resulted in completion of the 7-Eleven portion of the building two weeks ahead of schedule and allowed 7-Eleven to move into its new headquarters one week ahead of the original schedule.

Once the corporate tenant's move-in was complete, crews had to construct the remainder of the structure and finish out



61 custom condominiums while providing a safe working environment every day for 1,000 7-Eleven employees. The team achieved this by keeping the entrances clear of clutter and covering walkways to shield employees. They also implemented a noise control plan during peak office hours (8 a.m. to 5 p.m.) to further minimize disturbances.

## Key Facts

**Submitted by:** Balfour Beatty Construction

**Owner:** Billingsley Co., Carrollton

**Construction manager:** Balfour Beatty Construction, Dallas

**Architect of record (office tower):** Corgan Associates Inc., Dallas

**Design architect (condo residences):** MorrisonSeifertMurphy, Dallas

**Structural engineer:** Brockette Davis Drake, Dallas

**Civil engineer:** LopezGarcia Group, (now URS/LopezGarcia), Dallas

**Landscape architect:** MESA Design Group, Dallas

# Africa Live!, San Antonio Zoo, San Antonio

**BEST OF AWARD:** Nonprofit

The new **Africa Live! Exhibit** at the San Antonio Zoo is an exhibit covering 1.5 acres in a facility open 365 days a year.

This exhibit's educational focus is the

importance of water and the intricate relationship between water, human beings, wildlife and food production. It includes an underwater exhibit of hippopotamuses and crocodiles, as well as tanks for fish from Africa. The project included 2.25-in.-thick glass to withstand water pressure from the hippo and crocodile pools, along with the force of potential impact from the animals.

With design professionals from Seattle as well as many key subcontractors from out of state, site visits were limited, requiring photos and e-mails to work out details.

The exhibit design included prototype technology for life-support systems, including water hydraulics, filtration, chemical treatment, heat controls and water-change operations. The hippo pool waste included extensive solids, which required special drum filters to process waste into existing sewage systems.

The small site required extensive site staging and remobilizations to avoid blocking access to other trades during

construction.

The non-linear, curved structure had 300 drilled piers in a tight, 18,000-sq-ft footprint. Because of its proximity to the San Antonio River, the contractor encountered water at 6 ft below the surface. That required drilling oversize, 36-in. shaft holes, filling them with concrete to create a water seal, and then drilling into that concrete for installation of the 24-in. piers.

Crews delivered the project on time and on budget, despite a record-breaking 90 days of rain during the critical site and structural phases of construction.

## Key Facts

**Submitted by:** C.F. Jordan

**Owner:** San Antonio Zoological Society, San Antonio

**General contractor:** C.F. Jordan LP, San Antonio

**Architect:** Jones & Jones Architects + Landscape Architects + Planners, Seattle

**Engineer:** CDS/Muery Services, San Antonio

**Site work contractor:** M&M Contracting Ltd., San Antonio

**Concrete contractor:** Ignacio Villarreal Foundation, San Antonio

**Waterproofing contractor:** Alpha Insulation and Waterproofing, San Antonio

**Concrete paving contractor:** Boothe Bros. Paving Co., Wimberley

**Electrical contractor:** Corbo Electric Co., San Antonio

**Decorative shotcrete:** The Nassal Co., Orlando, Fla.

**Interior painting and exhibit shotcrete:** Petraworks, Essex Fells, N.J.

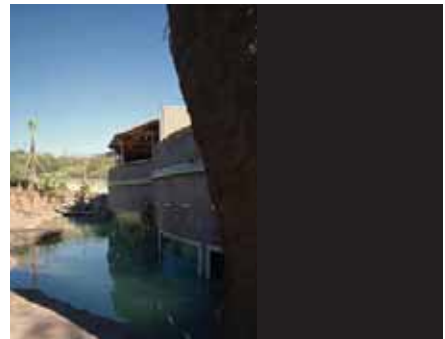
**Landscaping contractor:** Milberger's Landscaping, San Antonio

**Flooring contractor:** Long Flooring, Lubbock

**Painting contractor:** F. A. McComas Inc., San Antonio

**Stucco contractor:** Arahed Lathing Corp., San Antonio

**Tiling contractor:** J&R Tile Inc., San Antonio



**Discovery Green, a 12-acre park** located directly across from the George R. Brown Convention Center in Houston, required a diverse construction approach. The

varied project included a one-acre lake, underground parking garage, children's playground, amphitheater, two restaurants, two dog runs and a jogging trail.

The challenge of taking 12 acres, divided into three phases with multiple milestones within each area, was unlike any project previously undertaken by the team. Intricate phasing was required to complete construction of the underground garage to allow for the sitework and landscape above. At the same time, three independent structures and associated underground utility work were under construction, all necessary for the extensive landscape that would complete the project.

The project was targeted for LEED gold certification. The project team had to incorporate new materials, methods, and mindsets to make it a reality, including construction waste management, indoor air quality plans and MEP commissioning implementation. Regional and recycled materials had to be researched, obtained and documented.

Crews relocated a 100-year-old oak tree with a 35-ft root ball in order to capture the full footprint of the underground garage. The physical move of the tree took two days, with weeks of preparation and work leading up to the move.

The underground parking garage was completed during what was considered one of Houston's wettest years in decades. A commitment to schedule was maintained, with mud slabs being placed when weather permitted. That allowed workers to safely perform their tasks and concrete crews to do the necessary formwork and concrete pours.

## Key Facts

**Submitted by:** Miner-Dederick Construction

**Owner:** Discovery Green Conservancy, Houston

**General contractor:** Miner-Dederick Construction, Houston

**Architect:** Hargreaves Associates, San Francisco

**Architect/MEP engineer:** PageSouthernlandPage, Houston

**Structural engineers:** Henderson & Rogers, Houston; and Walter P Moore and Associates Inc., Houston

**Electrical engineer (site/garage):** Hunt & Hunt, Houston

**Landscape architect:** Lauren Griffith Associates, Houston

**Environmental consultant:** TGE Resources Inc., Houston

**Masonry contractor:** W.W. Bartlett, Houston

**Stone and ceramic tile contractor:** Cangelosi Marble and Granite, Missouri City

**Landscape contractor:** Gibson's Landscape Contractors, Houston

**Electrical contractor:** Mid-West Electric Co., Houston

**Plumbing contractor:** Mitchell Chuoke Plumbing Co., Galveston

**Glass and storefront contractor:** Ranger Specialized Glass, Houston

**Concrete contractor:** TAS Commercial Concrete Construction, Houston



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## Eagle Mountain Connection Pipeline, Fort Worth

BEST OF AWARD: Public

### The Eagle Mountain Connection

Pipeline was constructed to connect two reservoirs in East Texas - the Richland Chambers reservoir and the Cedar Creek reservoir - to the Eagle Mountain Lake reservoir northwest of Fort Worth. The connection was made with a 20-mi pipeline that extended to an existing pipeline reaching nearly 100 mi. The completion of the project allows the Tarrant Regional Water District to distribute up to 350 MGD from their East Texas reservoirs to the Eagle Mountain Lake reservoir, which supports a customer base of more than 1.6 million in a 10-county region of North Texas.

In addition to the pipeline, the project required the construction of several large structures, including the subaqueous installation of an outfall structure in Eagle Mountain Lake.

The project team had to deal with limestone rock for nearly half of the 47,025 lin. ft of 84-in. pipe installation. The installation of the pipe required a ditch width of 10.5 ft that could not be blasted. The trench was double-cut by Garney Construction's trenching subcontractor H.L. Chapman, which made two passes with a trencher with a 3.5-ft-wide chain. The



process left a 3.5-ft plug in the middle of the ditch. To remove the plug, a heavy-duty bucket was designed that attached to a Komatsu PC 1250 that excavated the plug ahead of the pipelaying crew. Approximately 23,000 lin. ft of the pipeline trench was in rock.

### Key Facts

**Submitted by:** Garney Construction

**Owner:** Tarrant Regional Water District, Fort Worth

**General contractor:** Garney Companies Inc., Kansas City, Mo.

**Civil engineer:** Freese and Nichols, Fort Worth

**Electrical contractor:** TPC Electric, Sachse

**Marine contractor:** Boyer Inc., Houston

**Tunneling contractor:** A.R. Daniel Construction Services Inc., Cedar Hill

**Rock trenching:** H.L. Chapman Pipeline Construction, Leander

**Paving contractor:** Advanced Paving Co., Fort Worth

## Key Facts

**Submitted by:** Hoar Construction

**Owner:** Granite Properties Inc., Plano

**General contractor:** Hoar Construction, Houston

**Architect:** Kirksey Architecture, Houston

**Landscape architect:** Kudela & Weinheimer, Houston

**Structural engineer:** Haynes Whaley Associates Inc., Houston

**Civil engineer:** Lin Engineering Inc., Houston

**MEP engineer:** Day Brown Rice Inc., Houston

**Mechanical contractor:** TDIndustries, Houston

**Electrical contractor:** D&L Electric Co. Ltd., Houston

**Canopy contractor:** Avadek Inc., Houston

**Drywall contractor:** BakerTriangle, Houston

**Masonry contractor:** Camarata Masonry Systems Ltd., Houston

**Millwork contractor:** CRC/Mastercraft Inc., Houston

**Precast contractor:** East Texas Precast Co., Waller

**Concrete contractor:** Keystone Concrete Placement, Houston

**Landscaping/irrigation contractor:** Pampered Lawns Inc., Houston

**Elevator contractor:** ThyssenKrupp Elevator Corp., Frisco

**Plumbing/site utilities contractor:** TNT Consultants Inc., The Woodlands

**Masonry contractor:** Veazey Enterprises Inc., Houston

**Early difficulties with materials** and equipment threatened to delay progress of Granite Westchase II construction project, but innovation and perseverance kept the office complex on track.

At the beginning of the project, Hoar learned that there would be a delay in the delivery of the stairs, which would cause difficulty in accessing the upper floors for the general contractor team as well as subcontractors. To help maintain the work flow, Hoar installed a set of temporary stairs outside the building to access floors up to level seven. After out-of-state travel to check the status of the stairs and discuss the situation with the material supplier, Hoar and the vendor established a definite delivery date.

Another major obstacle occurred a few months into the project. The material/man hoist set up on-site turned out to be faulty and unusable. Access to upper floors became a challenge. Between finding a new hoist, dismantling the old one and installing the new one, three weeks

went by with no hoist. Close communication with the subcontractors helped keep the job moving. When the old hoist was deemed unfit for use, Hoar called a meeting with the subs affected. They discussed the specific issues each sub was facing, and Hoar worked with each contractor to schedule tower crane time for them to get their materials to higher levels. By working together with the subcontractors, Hoar was able to help maintain target dates and get right back on schedule when the new hoist was ready.



The design-build partnership for the first phase of the renovation of Dallas' Cotton Bowl was put in place around the same time construction began. Despite the quick marriage, the contractor, Charter Builders, and the architect, Heery International, merged quickly into a unified design-build team.

One of the team's biggest hurdles was

what would seem to be a simple issue: a seating plan. However, the seating manifest for this stadium was anything but simple. The problem confronting Charter Builders was the stadium had three different manifests: Cotton Bowl Athletic Association, University of Texas and University of Oklahoma. Manifests are utilized to determine seat numbers on the printed tickets, however, none of the three manifests matched. Therefore, the decision of which manifest to use had to be made. This involved a complicated and lengthy decision making process that required coordination with all three stake holders. Ultimately, a manifest was selected.

However, the actual installation was not that simple. The exact seats at the exact location had to be matched seat for seat. Therefore, Charter Builders had to install each seat assignment section-by-section and row-by-row. The seat numbers of a typical stadium would be installed typically at 18 to 24-in. on center and then con-

tinuous throughout the bowl. However, the spacing between seats at the Cotton Bowl varied from seat to seat. All seat numbers and locations had to be field verified and confirmed by the three owners' representatives before it would be accepted. The verification was critical to the owner's representatives because it represented tickets that had already been sold before construction began.



## Key Facts

**Submitted by:** Charter Builders

**Owner:** City of Dallas, Dallas

**Design-build team:** Charter Builders, Dallas; and Heery International Inc., Atlanta, Ga.

**Ornamental handrail and fencing:** A-1 Ornamental Inc., Dallas

**Metal wall panels:** Accurate Perforating, Chicago

**Specialty stadium seating:** American Seating Park, Grand Rapids, Mich.

**Jobsite security:** CPS Security Solutions, Gardena, Calif.

**Painting contractor:** D&P Painting and Construction, Grand Prairie

**Masonry contractor:** DMG Masonry, Arlington

**Utility contractor:** Gorrondona & Associates, Fort Worth

**Plumbing contractor:** Lopez Plumbing, Dallas

**Concrete and paving contractor:** Szelove Construction, Fort Worth

**Pre-engineered seating:** Southern Bleacher, Graham

**Natural grass turf:** W.O. Adams Construction Co., Lancaster



**The historic, 31-story** Mercantile National Bank Building had been vacant for more than 15 years when Hensel Phelps began a far-reaching renovation project of the art deco building. Incomplete and inaccurate as-built documentation on the building complicated the job and crews were forced to address unforeseen conditions on a recurring basis. Despite the setbacks, the new Mercantile Tower was delivered on time and on budget with zero

lost-time accidents.

A major challenge was refurbishing the 68-year-old bricks, windows, limestone, granite and the 115-ft spire atop the tower. The Mercantile Tower was originally built in the art-deco style, which had multiple setbacks and more than a dozen different roof levels throughout the historic tower. An enormous amount of coordination was required to refurbish the skin while working above the active streets in downtown Dallas.

A constant challenge was the vertical transportation on the 31-story tower. As a solution, Hensel Phelps provided three

material hoists on the exterior of the building while the existing elevators were restored with new motors, cables and cabs. Off-shift material stocking was key to keeping the material ahead of the work and not hinder vertical access.

Mock-ups of each major room of the building's apartments were created for the owner and user groups to verify that everything was in place before construction on the units began. The mock-ups were invaluable in the selection of finishes, reviewing anticipated quality expectations by the owner, work sequencing and scheduling.

## Key Facts

**Submitted by:** Hensel Phelps

**Owner:** Forest City Residential, Dallas

**Construction manager:** Hensel Phelps Construction Co., Dallas

**Architect:** BGO Architects, Dallas

**Design architect:** DiMella-Shaffer, Boston

**Civil engineer:** Brockette Davis Drake, Dallas

**MEP engineer:** NELCO, Richardson

**Structural engineer:** Datum Engineers, Dallas

**Landscape architect:** MESA Design Group, Dallas

**Painting contractor:** Alpha Applicators, Dallas

**Concrete contractor:** American Civil Constructors, Irving

**Mechanical contractor:** Weldon Contractors, Arlington

**Fire protection contractor:** Western States Fire Protection Co.

**Electrical contractor:** System Electric Co., Plano



## McCreless Marketplace, San Antonio

BEST OF AWARD: Retail

The **McCreless Marketplace** is a reincarnation of the original McCreless Mall built in San Antonio. Popular throughout the 60s, 70s and 80s, it began to lose tenants and customers in the 1990s.

The new project includes a 144,000-sq-ft HEBplus! grocery store, Cinemark theater and 256,000-sq-ft retail center. In ad-

dition, the sitework for the project was extensive and included several park-like seating areas as well as a city bus drop-off station. The HEB portion of the project incorporated a separate fuel station and car wash.

Each facility was assigned its own onsite superintendent and the site work was overseen by one team member. While the separate assignments made it easier to ensure accountability and final success, it also made communication and coordination that much more difficult. One senior project manager was responsible for overall project coordination. Final success was the result of the team's extensive preplanning for site management and sequencing and the use of strategic communications. A centralized office area was established for all jobsite trailers. Redundant communications systems were set in place with direct connections to the Joeris office, cell phones and two-way radios.

Site soil conditions at the McCreless

site led to several daunting safety issues. Typical shoring, trenches and trench boxes were insufficient, so the construction team brought in equipment traditionally used in swamp areas. The slide-rail systems installed are not typically used in the region except on sites around bodies of water. In some areas, the team couldn't overcome the collapsing trenches and were forced to dig 50-ft-wide trenches for a task that would typically only require a few feet. Despite working in the worst conditions possible, the project remained accident free.

### Key Facts

**Submitted by:** Joeris General Contractors

**Owner:** H.E.B., San Antonio

**General contractor:** Joeris General Contractors, San Antonio

**Architect:** Selser Schaefer Architects, Tulsa, Okla.

**Landscape architect:** Rialto Studio, San Antonio

**Structural engineer:** Wallace Engineering, Tulsa, Okla.

**Civil engineer:** Pape-Dawson Engineers, San Antonio

**MEP engineer:** Clive Samuels and Associates, San Antonio

**Mechanical contractor:** Jack Laurence Corp., San Antonio

**Electrical contractor:** Eldridge Electric, Helotes

**Concrete contractor:** Urban Concrete Contractors, San Antonio

**Roofing contractor:** Superior Roofing, Houston

**Plumbing contractor:** Gulf States Plumbing, Houston



BEST OF  
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## UH-Downtown Shea Street Parking Garage & Building

**BEST OF AWARD:** Higher Education, Design

The new University of Houston-Downtown Shea Street Building – home to the university's College of Business – and the accompanying 620-space parking garage - overlook downtown Houston. Located at the terminus of the METRO Light Rail line, the new structures anchor the redeveloping area.

The Shea Street Building is a critical piece of the university's master plan and its plans to meet Houston's higher education needs. Its location extends UH's campus to the other side of Interstate 10 and continues UH's expansion from a single building to a growing five-building campus serving the downtown area. The glass-encased four-story entry inspires faculty and students and provides expansive views of the downtown Houston skyline as well as the One Main Building. Located in a relatively dense urban area, the Shea Street Building will serve UH's commuter population and its location, accessible by light rail, provides convenient access for students who attend part-time while working downtown. It will provide further benefit in the near future as plans progress to locate a new Intermodal Center in the neighborhood.

Project features include a four-story glass atrium with views of the existing campus, fully integrated technology and wireless access throughout the building.



Also contributing positively to the overall impact of the facility are the green design components that were employed in the design and construction of the Shea Street Building. Aluminum louvers were used over the low-insulating glass windows to control light and the brick materials specified throughout the project were produced within 500 mi of the site.



### Key Facts

**Submitted by:** PGAL

**Owner:** University of Houston-Downtown System, Houston

**General contractor:** Manhattan Construction Co., Houston

**Architect:** PGAL, Houston

**Associate architect:** NATEX, Houston

**Structural and civil engineer:** Walter P Moore and Associates Inc., Houston

**Mechanical and electrical engineer:** Carter Burgess, Houston

**Security consultant:** Ferguson Consulting, Magnolia

**Landscape architect:** Knudson and Associates, Houston

**Audio-visual consultant:** PMK Consultants, Dallas

BEST OF  
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## Clear Springs High School, League City

BEST OF AWARD: K-12, Design

The Clear Springs High School design team worked closely with community members, parents, students, administrators and teachers to design the new 2,500-student, smaller-learning-communities-concept high school.

The 465,000-sq-ft. school incorporates six houses, each with a little more than 400 students. Each house has its own administrative area, which includes an assistant principal, a counselor and staff workrooms. The communities also include classrooms, science labs, large and small group collaboration areas and other spaces that allow for student interaction in smaller groups.

The design of the instruction areas contributes toward the school's collaborative learning environment. Classrooms within each house have been designed in an "S" shape. Unlike the traditional box that has defined classroom layouts for centuries, the configuration provides a more versatile working space for teaching methodologies associated with smaller group learning activities. By simply reconfiguring furniture arrangements and utilizing angles offered by the S-orientation of the classroom, educators can quickly organize small learning clusters to facilitate different curriculums within the same room.

The site's surrounding wetlands required the design team to configure the design in order to fit along a small, narrow site near Clear Creek, while still adhering to strict city ordinances. The surrounding natural wetlands had to be



maintained during and after construction, and the heavily wooded site was subject to stringent landscape and tree ordinances. A site redesign was required several times to satisfy tree removal ordinances and eliminate costly tree replacement. In addition, the U.S. Army Corps of Engineers was involved in the planning process while working through federal waterway and wetland issues.



### Key Facts

**Submitted by:** PBK

**Owner:** Clear Creek ISD, League City

**General contractor:** Gilbane Building Co., Houston

**Architect:** PBK Architects, Houston

**Structural engineer:** Jones Borne Engineers, Humble

**Civil and MEP engineer:** PBK Engineers, Houston

**Mechanical contractor:** CFI Mechanical Inc., Houston

**Electrical contractor:** Walker Engineering, Houston

BEST OF  
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## Waxahachie Global High School, Waxahachie

**BEST OF AWARD:** K-12 Renovation/Restoration, Design

The Waxahachie Global High School design team faced a difficult task: transform the dated, World War I facility into a modern high school while maintaining its original design characteristics and preserving its historical significance. Many of its graduates still lived in the community and did not want to see the landmark building demolished.

To understand what the school's original windows looked like, the architect, Huckabee of Fort Worth, researched the historical architecture of the building and also uncovered one remaining window that the team was able to match. The team also was able to discern the original paint color under layers of old paint. Through this process, designers were able to accurately portray the historical design features. The windows were replaced with new windows with low-e, high-energy-efficiency glass. Interior solar screens were also placed on the windows to give students and teachers the option to control the amount of natural light inside the classrooms.

The Huckabee team also refurbished the original hard wood and concrete floors and exposed ceilings as well as replaced doors and lighting fixtures with historically accurate materials.

The renovations took two construction phases. Phase one renovated the third floor classrooms, lecture hall and student alcoves. This allowed the new floor to be



used by administrators during the planning stages of the curriculum and campus opening. In phase two, renovations were made to the first and second floors to complete the transformation.



### Key Facts

**Submitted by:** Huckabee

**Owner:** Waxahachie Independent School District, Waxahachie

**Architect and structural engineer:** Huckabee, Fort Worth

**General contractor:** Buford-Thompson Co., Arlington

**Roofing consultant:** ARMKO Industries Inc., Flower Mound

**MEP engineer:** Estes, McClure and Associates, Tyler

**Geotechnical engineer:** Fugro Consultants Inc., Fort Worth

**Electrical contractor:** Bean Electrical Inc., Fort Worth

**Plumbing and HVAC contractor:** Premier Services, Terrell

**Demolition contractor:** T&B Demolition, Irving

BEST OF  
**2008**  
AWARDS

## Sally Cheever Girl Scout Leadership Center, San Antonio

**BEST OF AWARD:** Nonprofit, Design

Designed for the Girl Scout Council of the San Antonio Region, this 30,000-sq-ft regional headquarters serves the San Antonio area and nine surrounding counties. The mission of the facility is to embrace the spirit of the Girl Scouts - character, confidence and courage - and to maximize sustainability.

All of the funds for the building were raised through donations from the community and matching grants. With a limited budget, all spaces and building components were measured carefully for effectiveness. Activity spaces were designed for multiple uses. The cookie warehouse, for example, also serves as a meeting room, activity space and overnight camping room for the girls.

The building was designed to be a part of the site, not an institutional office building. The exterior is stone, siding and metal panel construction that is reflective of agrarian, hill country buildings. The structure is sited to flank the front portion of the site, leaving native trees between it and the street and preserving the majority of the site as an open area behind the building. The building has two main elements connected by an open lobby space that serves as a portal from the front entrance through the building to the nature area behind it. An amphitheater for outdoor activities greets visitors as they walk through the building into the natural setting beyond.

Sustainability is part of the Girl Scouts' education program, and the building re-



sponds with optimized solar orientation, energy-efficient roofing and skin materials, natural landscaping and a rainwater collection system. Rainwater and water generated by rooftop condensation units is collected and stored in two, 8,600-gallon tanks. Pumps pressurize water and provide adequate pressure for landscape irrigation. The irrigation pipes are purple to indicate that the water is nopotable.



### Key Facts

**Submitted by:** Marmon Mok Architecture

**Owner:** Girl Scouts of Southwest Texas, San Antonio

**General contractor/construction manager:** The Keller-Martin Organization Inc., San Antonio

**Architect:** Marmon Mok, San Antonio

**Civil engineer:** Pape-Dawson Engineers, San Antonio

**Landscape architect:** CFZ Group, San Antonio

**MEP engineer:** Cleary Zimmermann Engineers, San Antonio

**Structural engineer:** Alpha Consulting Engineers, San Antonio

**BEST OF**  
**2008**  
**AWARDS**

## Hunt Oil Corporate Headquarters, Dallas

**BEST OF AWARD:** Office/Corporate, Design

The new 475,000-sq.-ft. 14-story Hunt Oil Corporate Headquarters contains offices, conference rooms and break rooms. The building's focal point is its majestic glass "sail" and cylinder element that have a pronounced presence at the north side. The design metaphorically suggests a drill laboring through the earth's strata. A room with dining capacity for 150 tops the cylinder and is used to entertain guests. This "Treaty Room" takes advantage of downtown views. The complex also includes a seven-level structured parking garage and pedestrian sky bridge directly to the south.

Executing the complex ellipse and sail design concept was the source of lengthy problem solving for the entire team and required close collaboration across disciplines. In order to help technically resolve the intersection of the cylinder and the sail, the curtainwall subcontractor and two specialized curtainwall consultants were brought in early in the process. The team worked over a period of months on complicated geometry and engineering questions. Designing the cantilever and figuring out how to safely support the weight of the glass were difficult issues to solve. The team finally developed the 70-ft-long truss design, custom-rolled tube element and an elaborate back structure. To ensure correct construction, members of the general contractor, Austin Commercial of Dallas, joined Beck's designers early in the process and worked closely with them throughout the project.



For long-term durability and water tightness, a shop-fabricated, unitized curtainwall system was developed integrating granite and glass. In order to achieve maximum light and views into the space while controlling heat levels and satisfy energy codes, full height, 10-ft fritted glass was used on the top and bottom zones.



### Key Facts

**Submitted by:** The Beck Group

**Owner:** Hunt Consolidated Inc., Dallas

**Architect:** The Beck Group, Dallas

**General contractor:** Austin Commercial, Dallas

**Interior design:** Gensler, Dallas

**Structural engineer:** Brockette Davis Drake, Dallas

**Civil engineer:** Raymond L. Goodson, Dallas

**MEP engineer:** James Johnston and Associates, Dallas

**Landscape designer:** TBG Partners, Austin

**Curtainwall:** CDC, Dallas, and B.J. Swango Consulting, Dallas

**A wetland creek was the chief** obstacle during the design of the 80,000 sq ft of buildings. The recreation center's campus includes a double gymnasium; multi-purpose meeting spaces; babysitting area; game room; lounge spaces; indoor eight-

lane lap pool; jogging track; and an outdoor leisure pool.

Designers and project stakeholders decided early in the process that the creek was to be saved and embraced. Pragmatically, it was considered jurisdictional water, and so modifying it to any substantial degree would likely delay the project through federal permitting process. A hydrological study was performed defining the footprint of the wetlands and providing a tangible floodway basis for design.

Because the creek bisects the site, the program would have to somehow traverse it to fit. Designers placed the parking on one side and the building on the other, connecting the two spaces by bridges. In this way, visitors directly engage the wetland by driving and walking across it each time they visit the center. All the while, the wetland area is protected from human intervention and left in its natural state. Parking lot run-off is pre-filtered in bioswales before entering the wetland.

The project's design was developed through a series of meetings with officials and numerous stakeholders. The general public was engaged on multiple levels. Neighborhood concerns were recorded and addressed. Various groups and clubs such as swim teams, senior citizens and a table tennis club were invited to provide direct input.

## Key Facts

**Submitted by:** Brinkley Sargent Architects

**Owner:** City of Plano, Plano

**General contractor:** CORE Construction, Frisco

**Architect of record:** Brinkley Sargent Architects, Dallas

**Design architect:** Moody Nolan, Columbus, Ohio

**Structural engineer:** Stenstrom Schneider Inc., Dallas

**Civil engineer:** Teague Nall and Perkins, Fort Worth

**MEP engineer:** M-E Engineers, Wheat Ridge, Co.

**Mechanical contractor:** H&G Systems, Garland

**Electrical contractor:** Groves Electrical Service Inc., Farmers Branch

**Aquatic design:** Counsilman/Hunsaker & Associates., St. Louis, Mo.

**Landscape and site design:** MESA Design Group, Dallas

**Pool contractor:** Sunbelt Pools, Dallas

**Interior design:** Brinkley Sargent Architects, Dallas

**Acoustical consultant:** Acoustic Design Associates Inc., Dallas

**Glass art:** Ray King Studios, Philadelphia, Penn.



**BEST OF**  
**2008**  
**AWARDS**

## St. Michael the Archangel Catholic Church, McKinney

**BEST OF AWARD:** Worship, Design

**The master plan and expansion of St. Michael the Archangel Catholic Church serves a congregation that has been in existence since the late 1800s. Phase one, which was designed and con-**

structed by Beck, includes a 1,000-seat sanctuary and chapel. The 36,400-sq-ft building's simple, traditional, cruciform design contrasted with the unique forms and materials used in the areas of the building representing the sacraments.

The small site dictated a unique tilt-wall erection method. Because of its proximity to an existing building, the Beck team could not walk the tilt-wall panels into place using a crane, as is the usual manner. As a result, the panels were cast outside of the building footprint, close to the existing sanctuary. At times, Beck had to rotate the panels a full 90 degrees to avoid hitting the existing facility.

Another challenge arose during the construction and positioning of the internal bracing. These elements had to connect back to the inside of the slab on the tilt panels until the roof-exposed wood decking was installed. This technique created a diaphragm that provided the bracing with lateral stability, which al-

lowed Beck to postpone construction of the slab-on-grade until after the tilt panels were completed.

For the baptismal bowl/fountain, the process of constructing the fountain was not specified. Beck had to find a foundry to create the mold and cast it. Beck also had to identify a consultant to braze the bowl that sits inside the limestone elliptical base.

### Key Facts

**Submitted by:** The Beck Group

**Owner:** St. Michael the Archangel Catholic Church, McKinney

**General contractor and architect:** The Beck Group, Tampa, Fla.

**Acoustical consultant:** Acoustic Dimensions, Dallas

**Landscape architect and civil engineer:** Halff Associates, Dallas

**Landscape contractor:** Parkway Landscape, Dallas

**Structural engineer:** Hart, Gaugler and Associates Inc., Dallas

**Steel manufacturer:** Crist Industries Inc., Fort Worth

**Mechanical and plumbing engineer:** Telios Corp., Dallas

**Mechanical contractor:** MIINC Mechanical Contractors, Richardson

**Electrical contractor:** Prism Electric Inc., Garland

**Masonry contractor:** Garland Masonry, Garland

**Millwork contractor:** MEDCO Construction LLC, Dallas

**Demolition/earthwork contractor:** Weir Brothers, Dallas



BEST OF  
**2008**  
AWARDS

## Baylor University Medical Center Emergency Department, Dallas

**EXCELLENCE AWARD:** Health Care

**Recent work** at the Baylor University Medical Center at Dallas resulted in the expansion and renovation of a crowded, 33,000-sq-ft emergency department into a 78,000-sq-ft facility. The new emergency department also includes private rooms for patients, efficient staff space and the features needed to allow it to function as a stand-alone facility in case of a mass disaster.

To triple the existing facility's treatment capacity, several existing departments were relocated in their entirety. Some of the relocations included complete mechanical and electrical rooms, and the moves had to be made with little or no interruption in service for the existing emergency department. Complex planning and off-hour tie-ins were required to maintain

seamless service.

Medical gasses, emergency power, nurse call, fire alarm and patient monitoring systems had to remain active while intercepting and expanding the systems into newly renovated spaces. A complete mechanical pump room servicing two hospitals was entirely relocated without any significant interruption to the building or its occupants.

Infection control concerns were addressed daily throughout the construction process. Special partitions were constructed and negative air pressure environments were created to avoid contamination of air in patient treatment areas.



### Key Facts

**Submitted by:** MEDCO Construction

**Owner:** Baylor Health Care System, Dallas

**General contractor:** MEDCO Construction LLC, Dallas

**Architects:** FreemanWhite, Charlotte, N.C., and t. howard + associates, Dallas

**Structural and civil engineer:** R. L. Goodson Inc., Dallas

**MEP engineer:** Meinhardt Consulting Engineers, Dallas

**Mechanical contractor:** TDIndustries, Dallas

BEST OF  
**2008**  
AWARDS

## UT Southwestern Medical Center Research Lab & Support Bldg, Dallas

**EXCELLENCE AWARD:** Higher Education

**The new University** of Texas Southwestern Medical Center Laboratory Research and Support Building's proximity to an existing building meant crews had to carefully coordinate activities to minimize impact on the building's occupants.

The new five-story, 80,853-sq-ft laboratory research space at the university's south campus connects to the south end of Building J. The field team took measures to control noise, vibration, and even odor, all of which can have an effect on sensitive research processes.

The McCarthy team worked with its subcontractors to produce exterior building mock-ups. The mock-ups were water-tested to allow for a complete understanding of the skin system components and

ensure leak-proof installation. The mock-up was helpful in another way as well: after viewing the mockup, the owner realized it disliked the color and requested to change the curtain wall and exterior metal panel system. Ordering these new colored components caused a long delay. However, work had to continue on the inside of the building in order to stay on schedule, so an elaborate temporary building enclosure system was installed to waterproof the building while crews waited for the new exterior skin system to arrive.



### Key Facts

**Submitted by:** McCarthy Building Cos.

**Owner:** University of Texas Southwestern Medical Center at Dallas, Dallas

**General contractor:** McCarthy Building Cos. Inc., Addison

**Architect:** Perkins+Will, Dallas

**Structural engineer:** Structures + Haynes Whaley LLC, Austin

**Civil engineer:** Pacheco Koch Consulting Engineers, Dallas

**MEP engineer:** HMG and Associates Inc., Austin



BEST OF  
**2008**  
AWARDS

## Houston Baptist University Student Housing, Houston

**EXCELLENCE AWARD:** Higher Education

### Key Facts

**Submitted by:** Tellepsen Builders

**Owner:** Houston Baptist University, Houston

**Construction manager:** ChurchWorx, Houston

**General contractor:** Tellepsen Builders, Houston

**Architect:** Gensler, Houston

**Structural engineer:** Haynes Whaley Associates Inc., Houston

**Civil engineer:** Andrew Lonnie Sikes Inc., Houston

The newest dormitory on the Houston Baptist University campus is a six-story, 130,000-sq-ft structure designed on a radius with a brick exterior, punched windows and metal roof.

The project's design on a radius brought with it challenges to the layout of all components of the construction. To ensure layout of all components were accurate, Tellepsen kept a full-time layout engineer onsite for the duration of the project to assist all subcontractors and ensure all components of the building were coordinated and positioned correctly.

A tight, 392-day construction schedule was threatened by 55 bad weather days and a looming move-in date for students, who would have to be placed in tempo-

rary housing if the finish date was not met. To meet the accelerated schedule requirements and achieve an August move-in date, the entire team worked six-day weeks throughout the life of the project. Manpower was increased at critical times with the workforce exceeding 200 people with extended shifts. Subcontractors were pre-selected early and provided valuable scheduling, material selection and sequencing expertise.



BEST OF  
**2008**  
AWARDS

## Houston Community College Learning Hub & Science Building, Houston

**EXCELLENCE AWARD:** Higher Education

### Key Facts

**Submitted by:** Tellepsen Builders

**Owner:** Houston Community College, Houston

**General contractor:** Tellepsen Builders, Houston

**Architect:** Kirksey Architecture, Houston

**Structural engineer:** Jaster-Quintanilla Houston LLP, Houston

**Civil engineer:** Othon Inc. Consulting Engineers, Houston

**MEP engineer:** E&C Engineers and Consultants, Houston

**Mechanical:** The MLN Co., Houston

The Houston Community College Learning Hub and Science Building is a four-story, cast-in-place, 124,000-sq-ft student learning hub in the middle of a fully functional campus. The construction site was surrounded on three sides by students and faculty and a major thoroughfare on the fourth side that stayed congested with vehicular traffic. Crews minimized disruptions by keeping administrative staff onsite and coordinating weekly meetings between the entire project team. Adjacent areas and access roads to the jobsite were maintained and cleaned daily to ensure minimal disruptions to surrounding activity.

One of the unique features of the building design is the exposed concrete

used in the stairway that accesses the second floor of the building and the exposed concrete columns in the library portion of the project. The project team painstakingly reviewed several mix designs to minimize air bubbles and air pockets and fabricated several mock-ups to meet the intent of the architect's design and maintain a consistent finish throughout the project. Pre-pour checklists were created and strictly adhered to for assurance that each exposed area would be of the highest quality and match the other exposed concrete areas.

BEST OF  
**2008**  
AWARDS

## Marriott Solana, Westlake

**EXCELLENCE AWARD:** Hospitality

The 66,280-sq-ft expansion of the existing Marriott in Westlake includes a new seven-story wing to the hotel, adding 94 rooms, a fitness center, junior ballroom, boardroom, pre-function space and an outdoor terrace.

An early setback during the foundation construction threatened to delay the project and cut deeply into the project's contingency. As crews were drilling piers to support the new structure, the team encountered loose rock. Because piers need solid ground to secure them, the site needed to be cleared of any loose debris. Traditional method of clearing the site with backhoes and dump trucks would add several weeks to the schedule. During a discussion over the situation, one of the

project engineers pondered the idea of "just vacuuming the loose rock out." After some further investigation and due diligence, that is exactly what the team did. Crews cleared the site using a hydro-excitation truck traditionally used for the excavation of soil for utility installations. Once the solution had been found, it took the team only one week to finalize the logistics, test the equipment and remove the debris with minimal impact to the project contingency.



### Key Facts

**Submitted by:** Constructors & Associates

**Owner:** Maguire Partners, Westlake

**General contractor:** Constructors and Associates Inc., Dallas

**Architects:** HKS Inc, Dallas; Rottet Studio, Los Angeles and Legorreta + Legorreta, Mexico

**Structural engineer:** Ingenium Inc., Houston

**MEP engineer:** Blum Consulting Engineers, Dallas

**Mechanical/plumbing contractor:** Decker Mechanical, Cedar Hill

BEST OF  
**2008**  
AWARDS

## Courtyard by Marriott, Pearland

**EXCELLENCE AWARD:** Hospitality

The construction of the 110-room, 75,000-sq-ft Courtyard by Marriott Hotel was complicated by its location above the retail area of Pearland Towne Center—a 143-acre, 1.5-million-sq-ft outdoor retail and lifestyle center.

The new hotel's construction was located one story off the ground and atop a slab already constructed. Only one side of the hotel was accessible for any kind of equipment because the retail roof extended past the hotel footprint on three sides. Also, for a good portion of the project, the retail contractors required EBCO's only accessible side of the building for the bulk of all site utilities feeding the retail areas on the south end of the property.

It was three months before all retail

utilities could be coordinated and installed around this area of the project. During this time, many of the utilities were relocated multiple times to work around EBCO's swimming pool and pool equipment building. As part of that coordination, the swimming pool was relocated to allow more space for the utility easements for the retail complex.



### Key Facts

**Submitted by:** EBCO

**Owner:** Pearland Towne Center, Pearland

**General contractor:** EBCO General Contractor Ltd., Cameron

**Architect:** Mayse & Associates Inc., Dallas

**Structural engineer:** McHale Engineering, Plano

**Civil engineer:** Carter & Burgess Inc., Houston (now Jacobs Carter Burgess)

**MEP engineer:** Half Associates, Dallas

**Mechanical contractor:** Raintree Construction Inc., Austin



BEST OF  
**2008**  
AWARDS

## Advanced Micro Devices Lone Star, Austin

**EXCELLENCE AWARD:** Office/Corporate

### Key Facts

**Submitted by:** Austin Commercial

**Owner:** Advanced Micro Devices, Austin

**General contractor:** Austin Commercial, Dallas

**Architect:** Graeber, Simmons & Cowan, Austin

**Structural engineers:** Paul Koehler Brown, Austin; and Jaster-Quintanilla, Austin

**MEP engineer:** Michael E. James & Associates, Austin

The owner's request that much of the Advanced Micro Devices Lone Star's 58-acre project site remain undisturbed meant Austin Commercial had to implement creative construction and material staging methods.

Although tempted to spread out across the site during construction of the corporate campus, Austin Commercial, in some locations, kept all activities within 10 ft of the buildings. Advanced Micro Devices's goal was to preserve 20% more land than what was allowable by zoning. The contractor fenced portions of the site to remain undistributed and located construction activities in strategic areas of the site. Cranes were erected and operated on building pads and construction materials

were staged in areas that would ultimately be affected by the buildings' construction. Austin Commercial strategically placed a job trailer on the future site of a basketball court to further reduce the amount of site disturbance.

As a candidate for LEED gold certification, the project includes one of the world's largest rainwater collection systems, with a capacity of more than 1.2 million gallons harvested from rooftops and garages. To assist in storm-water management, Austin Commercial installed innovative berms and vegetated filter strips to facilitate rainwater absorption across the site.



BEST OF  
**2008**  
AWARDS

## Fidelity Express Headquarters, Sulphur Springs

**EXCELLENCE AWARD:** Office/Corporate

### Key Facts

**Submitted by:** Harrison, Walker & Harper

**Owner:** Fidelity Express, Sulphur Springs

**General contractor:** Harrison, Walker & Harper, Paris

**Architect:** Alton Parker Associates, Dallas

**HVAC contractor:** A&S Air Conditioning, Sulphur Springs

**Fire alarm systems:** Advance Alarm and Electronics Inc., Paris

**Plumbing contractor:** Blake Plumbing, Paris

By working overtime, crews were able to keep construction of the new 35,000-sq-ft facility for financial services firm Fidelity Express on schedule, despite an unexpected early site survey redesign and 30 bad-weather days.

Work included construction of two joined buildings: a 23,680-sq-ft office building and an 11,094-sq-ft warehouse. The two buildings are separated by a three-hour firewall.

A difficult site was among the project's challenges. A creek and sewer easement bisecting the site diagonally had to be temporarily diverted off site while the project team constructed an 8-ft-wide by 4-ft-tall storm drain. It was built on site using poured-in-place concrete. The fin-

ished drain is approximately 600 ft long and runs under the parking lot and around the building's east side.

The site required 8 ft of select fill. Its location was between a creek and a hillside with numerous underground springs. Massive drainage kept the site muddy and difficult to work. To keep the site dry, a temporary 4-ft-tall berm was built around the entire site.

The design-build partnership between Harrison, Walker & Harper and Alton Parker Associates resulted in no significant change orders. The team finished the project on time and returned \$68,000 to the owner upon completion.

BEST OF  
**2008**  
AWARDS

## Fox Network Center - Houston, The Woodlands

**EXCELLENCE AWARD:** Office/Corporate

The new 191,640-sq-ft campus-style Fox Network Center is the largest master control center in the country. It includes a two-story broadcast distribution facility, a central plant and an antennae farm serving all Fox Sports networks.

Design and construction of the network broadcast control center complies with the stringent hurricane resistant standards set forth in the building code of Florida's Miami-Dade County.

The facility was designed to withstand a minimum of a category two Hurricane, with winds of 100 mi per hour. The structure is steel and pre-cast concrete panels that are 8-in. thick. Mechanical penetrations are specially designed to resist water intrusion. The center's curtainwall sys-

tem was designed to withstand large and small missile impact.

One of the facility's unique aspects is its roof. Its only penetrations are well-sealed roof hatches. The mechanical equipment is located at ground level and vented out the sides of the building to minimize the potential risk of equipment blowing off the roof and damaging the structure or nearby antenna yard. In addition, high-parapet walls diminish the roof's uplift.



### Key Facts

**Submitted by:** Gilbane Building

**Owner:** Fox Networks, Los Angeles, Calif.

**Construction manager:** Gilbane Building Co., Houston

**Architect:** Archcentric P.C., Greenwood Village, Colo.

**Structural engineer:** Martin/Martin Consulting Engineers, Lakewood, Colo.

**Civil engineer:** Vogt Engineering LP, Shenandoah

**MEP engineer:** EYP Mission Critical Facilities, Los Angeles

BEST OF  
**2008**  
AWARDS

## Armed Forces Reserve Center at Ellington Field, Houston

**EXCELLENCE AWARD:** Public

The airport at Ellington Field in Houston, opened in 1917, was once the nation's premiere aviation training facility for armed forces personnel. When World War I ended, however, the need for such a heavily occupied military base diminished and Ellington Field slowly fell into decline.

The U.S. Army Corps of Engineers decided to give Ellington Field a modern transformation. It includes the new Armed Forces Reserve Center, which SpawGlass constructed through a design-build partnership with Gensler. The AFRC allows various recruiting and reserve units previously scattered about Houston in several old buildings to be consolidated into a single facility. The

new structure is a two-story, 148,000-sq-ft building for training Army, Marine and Navy reservists.

At the start of the AFRC design charrettes, the undersecretary for army procurement mandated that there would be no changes to the budget. Throughout the entire course of the project – from design and beyond construction – the initial budget was adjusted only twice: once for a single value-engineering credit to the government and again for a single addition.



### Key Facts

**Submitted by:** SpawGlass

**Owner:** U.S. Army Corps of Engineers, Louisville, Ky.

**General contractor:** SpawGlass Construction Corp., Houston

**Architect:** Gensler, Houston

**Structural engineer:** Walter P Moore and Associates Inc., Houston

**MEP engineer:** I.A. Naman + Associates, Houston

**Mechanical contractor:** The MLN Co., Houston

**BEST OF  
2008  
AWARDS**

**Dallas Animal Shelter, Dallas**

**EXCELLENCE AWARD: Public**



The new 52,000-sq-ft Dallas Animal Shelter offers capacity for nearly 800 dogs and cats and includes an adoption area, holding areas and 12 “get acquainted” rooms. The new shelter replaces the former shelter, which could offer space to only 400 animals.

The facility was designed and built to conform to the U.S. Green Building Council's LEED Silver guidelines. Fifty percent of the building materials were derived from recycled content and 50% of the waste generated during construction was diverted from landfills. Six large planters located in the public parking lot house cells that are part of a wastewater treatment system that will clean and reuse up to 10,000 gallons of water a day.

The energy for the system is generated by a wind turbine that is located at the north end of the row of planters. This also has a double function as an outdoor sculpture, adding a touch of whimsy to the surroundings.

**Key Facts**

**Submitted by:** Alshall Construction

**Owner:** Department of Public Works, Dallas

**General contractor:** Alshall Construction Co., Carrollton

**Architect:** Work Architecture, Dallas

**Structural engineer:** Charles Gojer & Associates Inc., Dallas

**Civil engineer:** APM & Associates Inc., Dallas

**MEP engineer:** LOPEZGARCIA GROUP, Dallas

**BEST OF  
2008  
AWARDS**

**U.S. 277, Knox County, Munday**

**EXCELLENCE AWARD: Public**



The Knox County U.S. 277 project included construction of four single-span bridges, four MSE bridges and conversion of a 10-mi stretch of U.S. Highway 277 from two to four lanes.

The James Construction Group project team had to address a six-month delay in the relocation of overhead and above-ground utilities. In addition, the crew encountered utilities not indicated on the project drawings, some of which were never relocated and had to be worked around during construction. The utility issues had a domino effect, preventing scheduled asphalt paving during two winter seasons when this activity was critical to progress.

JCG addressed the situation by adjust-

ing the project sequence so work could continue. Phase two was split into two parts, allowing work to begin for phase three even though phase two was not yet complete. The JCG project staff also developed alternate traffic phasing schemes, which included elimination of two unnecessary detours. The shortened project duration and saved the Texas DOT \$100,000.

**Key Facts**

**Submitted by:** James Construction Group

**Owner:** Texas Department of Transportation, Childress District, Childress

**General contractor:** James Construction Group LLC, Belton

**Engineer:** Kennedy Consulting Ltd., McKinney

**Concrete contractors:** Garza Concrete Construction, Vernon, and OK Concrete Co., Vernon

**Reinforcing steel:** Lofland Co., Dallas



BEST OF  
**2008**  
AWARDS

## University of Texas at Austin UFCU Disch-Falk Field Renovation, Austin

**EXCELLENCE AWARD:** Renovation/Restoration

### Key Facts

**Submitted by:** Flintco

**Owner:** The University of Texas System, Office of Facilities, Planning and Construction, Austin

**General contractor:** Flintco Inc., Austin

**Design architect/architect of record:** DLR Group, Omaha

**Construction administration/MEP design:** O'Connell Robertson, Austin

**Structural engineer:** Walter P Moore and Associates Inc., Austin

**Civil engineer:** Martinez Wright & Mendez, Austin

Originally built in the 1970s, the University of Texas at Austin's UFCU Disch-Falk Field was in dire need of repair. The extensive renovation began in 2006 with 70,000 sq ft of new and renovated space that included abatement of existing asbestos-containing materials and lead-based paints; renovations and expansion to the seating areas; and the creation of a modern press box with separate areas for writers, cameras and radio media.

Deadlines were critical during the renovation process. Not only was the completion date a factor for the first 2008 game, but the facility was under construction and in-use during the 2007 season. To accommodate the 2007 season, the Flintco team worked closely with stadium

facilities officials and created individual, detailed game-day plans for each of the 30 home games. Each game required a special game-day construction staff to be on hand to assist stadium facilities personnel with electrical, audio, fire alarm, security and ingress and egress issues.



BEST OF  
**2008**  
AWARDS

## The House of Blues, Dallas

**EXCELLENCE AWARD:** Renovation/Restoration

### Key Facts

**Submitted by:** The Beck Group

**Owner/developer:** Hillwood Property Group, Dallas

**Tenant:** House of Blues Entertainment Inc., Hollywood, Calif.

**Construction manager:** The Beck Group, Dallas

**Architects:** Corgan Associates, Dallas; and Gensler, Dallas

**Interior design (general):** Gensler, Santa Monica, Calif.

**Interior design (foundation room):** Bruce D. Robinson Architecture, Cincinnati

Originally built in 1914 as a food processing facility, the 69,000-sq-ft White Swan Building went through a number of uses before its most recent renovation to accommodate the House of Blues.

The owner and tenant wanted to maintain as much of the original appearance of the façade as possible, requiring careful dismantling. The building was originally constructed using gravity loaded, heavy-timber framing; meaning few nails were present in the structure. The general interior demolition and surgical dismantling of half of the building structure took 60 days. The exterior façade walls were temporarily braced on both sides so that they would not topple and could be retained as the new restaurant

and musical venue's exterior.

Portions of the original building structure were salvaged and used in the new venue, but most of the materials were sold as high-value salvage. In particular, the timber beams were stored and reused throughout the remaining interior spaces.

BEST OF  
**2008**  
AWARDS

## The Joule Hotel, Dallas

**EXCELLENCE AWARD:** Renovation/Restoration

Originally built in 1927 as the Dallas National Bank, the 1530 Main Street building is one of the last remaining examples of Gothic Revival architecture in Dallas. Its gradual deterioration was halted with a complete renovation and restoration of the building, demolition of an adjacent plaza and construction of a new 10-story structure.

Over the course of several remodels between 1927 and 2005, much of the building's original gothic elements and accents were damaged or removed and replaced with simpler, more modern designs. Balfour Beatty's renovation fully restored and reconstructed many of the elements. Most notably, in the main entry's archway, balconettes and bronze doors were re-

constructed. All replacement stonework was hand-carved rather than mass-molded and the metalwork was custom-cast bronze and iron.

The only reminder of the original interior was the badly damaged Tennessee pink marble lobby floor. Prior to restoration, the team created several mock-ups outlining the process for grinding, polishing and filling in nicks and abrasions. Finding the perfect match to the marble for surrounding stone work and the replacement of damaged pieces was an issue, but the architect of record and restoration consultant were able to find a perfect match to the vintage 1920s stone.



### Key Facts

**Submitted by:** Balfour Beatty

**Owner:** Dunhill 1530 Main LP, Dallas

**General contractor:** Balfour Beatty Construction, Dallas

**Construction manager:** Juno Development, Dallas

**Design architect:** Tihany Design, New York

**Architect of record:** Architexas, Dallas

**Structural engineer:** Jaster-Quintanilla Dallas LLP, Dallas

**Mechanical and electrical engineer:** Goetting and Associates, San Antonio

BEST OF  
**2008**  
AWARDS

## Johnson County Courthouse, Cleburne

**EXCELLENCE AWARD:** Renovation/Restoration

The restoration of the 96-year-old Johnson County Courthouse is part of the Texas Historic Courthouse Preservation Program authorized in June 1999 – the largest preservation grant program initiated by a state government.

The restoration included the complete replacement of the MEP systems; cleaning, repair and sealing of the exterior; a new roof on two levels; restoration of the stained-glass skylight and marble wainscoting; restoration of all windows and restoration of the dome and terra cotta.

Concealing mechanical equipment in a historic building is no easy task. Carefully placed fur-downs and beams were constructed to hide the intrusion while blending with the building's interior design.

The stained-glass skylight at the apex of the courthouse's atrium required special attention. Removal of the skylight required construction of a four-story interior scaffold. Glass replacement and cleaning took more than four months. Original glass material was nonexistent, so the closest match possible, in color and texture, was made. Because it was so rare and historical, even the smallest original glass slivers were preserved on the repaired skylight.



### Key Facts

**Submitted by:** Harrison Walker & Harper

**Owner:** Johnson County, Cleburne

**General contractor:** Harrison, Walker & Harper, Paris

**Architect:** ArchiTexas, Dallas

**Historical preservation consultant:** Texas Historical Commission, Austin

**Electrical contractor:** Buffalo Gap Electric, Buffalo Gap

**Roofing contractor:** Chamberlin Roofing and Waterproofing, Houston

BEST OF  
**2008**  
AWARDS

## Weber Shandwick Worldwide, Dallas

**EXCELLENCE AWARD:** Renovation/Restoration

The renovation of this public relations firm's 25,000-sq-ft office was performed between Dec. 1 and Dec. 31, 2007. Weber Shandwick Worldwide employees vacated the space, but the project team still had to work around other tenants in the downtown Dallas high-rise.

The tight timeline required innovative scheduling and material procurement. To help ensure the project would not face any delays, MAPP Construction ordered the carpet before it had the contract.

Also, MAPP worked with Weber Shandwick to modernize the firm's conference table. Because the table was custom made and had sentimental value to the client, MAPP roughed in electrical and data wiring in the table to allow for

Internet connection and projection capabilities.

To ensure the fast-track project remained on schedule, MAPP crews held project meetings on a weekly basis with the owner, architect and subcontractors to discuss progress, changes, schedule and cost.



### Key Facts

**Submitted by:** MAPP Construction

**Owner:** Weber Shandwick Worldwide, Irving

**General contractor:** MAPP Construction, Baton Rouge, La.

**Architect:** iNTERPRISE, Addison

**Engineer:** Urban Engineering Inc., Addison

**Fire protection:** Western States Fire Protection Co., Houston

**Mechanical contractor:** New Generation Mechanical, Dallas

BEST OF  
**2008**  
AWARDS

## Lake Travis High School & Middle School, Austin

**EXCELLENCE AWARD:** Renovation/Restoration

The \$65 million renovation of Lake Travis High School and Middle School was completed on time while keeping the entire 155-acre campus fully operational through two complete school years.

The scope of work included expanding the high school's capacity from 1,500 students to 2,500 students by adding 310,000 sq ft of new building space and renovating 240,000 sq ft of the existing high school. A new weight room, middle school gymnasium and indoor football practice facility were also added.

A six-month kitchen renovation and restoration was simplified by American Constructors' plan to bring in a mobile food service company to serve hot meals for a six-week period at the end of the

2008 spring semester. This avoided phasing the work over two summers and allowed the work to start two months earlier than planned. By taking advantage of this earlier start date, crews were able to re-sequence other work, reduce the six-month schedule to five months and complete the kitchen/dining work prior to the start of school in the fall.



### Key Facts

**Submitted by:** American Constructors

**Owner:** Lake Travis ISD, Austin

**General contractor:** American Constructors Inc., Austin

**Architect:** Pfluger Wiginton Hooker Architects, Austin

**Structural engineer:** Datum Engineers, Austin

**Civil engineer:** Baker-Aicklen and Associates, San Marcos

**MEP engineer:** MEP Engineering, Austin

**Mechanical contractors:** RM Mechanical, Austin; and Mtech, Austin



BEST OF  
**2008**  
AWARDS

## Universal Toyota Dealership, San Antonio

**EXCELLENCE AWARD:** Retail

### Key Facts

**Submitted by:** Koontz McCombs Construction

**Owner:** McCombs Family Ltd., San Antonio

**General contractor:** Koontz McCombs Construction, San Antonio

**Architect:** Guajardo & Associates, San Antonio

**Structural engineer:** Faraklas Engineering, San Antonio

**Civil engineer:** Hartnett Engineered Solutions Inc., San Antonio

The new 91,000-sq-ft Universal Toyota dealership includes 60 service bays, vehicle showroom and training facilities. Sustainable features include a water reclamation system that captures the condensate water from the rooftop units for reuse on the surrounding landscaping. The system provides an estimated 1,500 gallons of water per week.

Crews accommodated special requests by the owner, including the construction of an authentic Texas barn built in the showroom. The structure was constructed from reclaimed long-leaf pine wood to provide a conversation piece for customers and add charm to the showroom's interior. Builders sifted through 5,000 ft of old wood to obtain the needed materi-

als. Authentic windows were also restored and installed in the barn. A barn pulley from the 1940s, discovered among the vintage wood, was also installed at the barn's pinnacle. A special sprinkler had to be installed due to the highly flammable nature of the products used.

Universal Toyota's new dealership is the largest USA II Toyota dealership in the Gulf States region.



BEST OF  
**2008**  
AWARDS

## CrossRoads Fellowship, Odessa

**EXCELLENCE AWARD:** Worship

### Key Facts

**Submitted by:** The Beck Group

**Owner:** CrossRoads Fellowship, Odessa  
**Design-builder:** The Beck Group, Dallas

**Structural engineer:** Armstrong Douglas Partners, Dallas

**Civil engineer:** Landgraf Crutcher and Associates, Odessa

**Mechanical engineer and electrical consultant:** Telios Corp., Dallas

**Acoustical contractor:** Acoustic Dimensions, Addison

**Mechanical contractor:** Bosworth Mechanical Contractors, Midland

**Budget savings realized** through construction efficiencies allowed for additional project enhancements during construction of the new 79,000-sq-ft CrossRoads Fellowship. The new worship facility, formerly called Temple Baptist Church, includes a 1,050-seat worship center, children and student ministry centers, adult education facilities, administrative space and a 300-seat chapel.

The \$16 million, phase one budget was based on funds raised and could not budge. From the earliest days of design development, construction was involved in assigning up-to-the-minute cost and identifying more cost-effective means of achieving the same end vision. As a result, The Beck Group was able to save

CrossRoads Fellowship more than \$600,000, which was reinvested into the scope of the project. One direct benefit of the savings was the installation of a more sophisticated, directed lighting system. While the up-front cost of the system is higher, the overall life-cycle cost of operating the directed system is lower, thereby saving the fellowship money.

The 79,000-sq-ft facility was completed in 14 months and exceeded the grand opening date announced to the congregation before construction began.

BEST OF  
**2008**  
AWARDS

## Butterfield Elementary School, Sanger

**EXCELLENCE AWARD:** K-12, Design

The new Butterfield Elementary School was constructed using an insulated concrete forming system – an approach that had not been used in a Texas school project.

Huckabee performed detailed research of ICF, which promised to deliver the benefits of a high-performance, energy-efficient, structurally superior exterior wall system.

To ensure the Texas construction market was ready for the new product, the Huckabee team brought in four construction companies, various manufacturers and multiple vendors for a discussion about ICF as it related to the new elementary school project. The discussion group accepted the forming system and,

nearly two years later, the design team and the contractor are convinced that it turned out to be a better system than originally anticipated.

The 12-month schedule, while usually sufficient for a typical elementary school, initially proved daunting due to the use of the new, relatively unknown ICF system. With the exception of a few scheduling conflicts noted by the contractor, the ICF wall system, in the end, actually saved approximately one month in construction time.



### Key Facts

**Submitted by:** Huckabee

**Owner:** Sanger Independent School District, Sanger

**Architect and structural engineer:** Huckabee, Fort Worth

**General contractor:** Plyler Construction, Sherman

**Civil engineer:** CHA, Sanger

**MEP engineer:** Romine, Romine & Burgess, Fort Worth

**Structural steel contractor:** Plyler Fabrication and Erection, Sherman

BEST OF  
**2008**  
AWARDS

## Hector P. Garcia Middle School, Dallas

**EXCELLENCE AWARD:** K-12, Design

The available area for the new Hector P. Garcia Middle School was a constrained 13.4-acre site sloping as much as 15 ft in opposite property corners. To facilitate the desired site program and parking requirements, the school is designed with a compact footprint and the program distributed on three floor levels.

The overall site plan identifies shared use of the site and building functions with other nearby educational facilities and the larger surrounding community. The fully accessible facility is zoned strategically to allow public access to the gymnasium, library, cafeteria and performance venues during or after school hours.

When Perkins+Will was in the early stages of design development, the price of

steel skyrocketed. The team made a strategic decision to change the primary structure of the school to cast-in-place concrete with limited steel structure for long-span program spaces such as the library, dining area and gymnasium.

It was difficult to quantify the end-result cost savings because the change was made in the middle of the design phase, but the savings was estimated to be about \$1.2 million.



### Key Facts

**Submitted by:** Perkins+Will

**Owner:** Dallas Independent School District, Dallas

**Program manager:** DMJM Management, Dallas

**Construction manager:** KJM & Associates, Dallas

**General contractor:** Satterfield & Pontikes Construction Inc., Irving

**Architect:** Perkins+Will, Dallas

**Structural engineer:** APM & Associates / L.A. Fuess Partners, Dallas

**Civil engineer:** APM & Associates, Dallas



BEST OF  
**2008**  
AWARDS

## Pershing Middle School, Houston

**EXCELLENCE AWARD:** K-12, Design

### Key Facts

**Submitted by:** PGAL

**Owner:** Houston Independent School District, Houston

**Program manager:** Gilbane, Houston

**General contractor:** Miner-Dederick Construction, Houston

**Architect:** PGAL, Houston

**Structural engineer:** DYDA Structural Engineers, Houston

**Mechanical, electrical and civil engineer:** I.A. Naman + Associates, Houston

During the design of the new Pershing Middle School, designers studied the possibility of saving a previously threatened 1940s natatorium. The natatorium was salvaged, renovated and integrated into the new 187,000-sq-ft school and 30,000-sq-ft gymnasium's design.

The rescued structure represents the only existing middle school natatorium in the Houston Independent School District.

Design elements that significantly increased the natatorium's usability included the addition of natural lighting, new exterior cladding and overall increased functionality. A full-size exterior basketball court with new scoreboards, retractable interior basketball goals and lockers complete the renovation.

Accommodations in the design allowed for minimal changes to the existing site location, which lies within a flood plain. It was imperative that the design complement the existing residential community that was established prior to the 1890s. Retaining old-growth trees and the inherent character of the community was accomplished.



BEST OF  
**2008**  
AWARDS

## Mansfield Legacy High School, Mansfield

**EXCELLENCE AWARD:** K-12, Design

### Key Facts

**Submitted by:** Huckabee

**Owner:** Mansfield Independent School District, Mansfield

**Architect:** Huckabee, Fort Worth

**General contractor:** Hunt Construction Group, Dallas

**Structural engineer:** Huckabee, Forney

**Civil engineer:** Adams Engineering, Southlake

**MEP engineer:** Romine, Romine & Burgess, Fort Worth

**Geotechnical engineer:** C & C Engineering, Dallas

Located in the second-fastest-growing school district in Texas, the design of the new Mansfield Legacy High School faced hurdles before the first line was drawn.

Large sites, particularly for a 425,000-sq-ft facility with accompanying athletic fields, field houses and thousands of parking spaces, were becoming increasingly difficult to obtain. The new high school design for what would become the fourth high school in the district would also become the new prototype for future high school facilities.

That meant the design team had to develop a compact solution that would allow future designs to fit comfortably on small sites.

The design team's solution was to

move to a three-story facility. The vertical solution significantly reduced the footprint of the building and minimized travel distances for students moving between classes. The three-story portion of the building focuses on core curriculum while extracurricular activities and electives are pushed to the single-story ends of the campus.

The compact solution also addressed the client's desire to be able to segregate freshmen, if desired. The third story, with its central minicommons, offers the possibility of minimizing freshmen interaction with upperclassmen by opting for a grade-level division of classroom functions in lieu of the departmental divisions currently in use.

BEST OF  
**2008**  
AWARDS

## Center for the Sciences and Student Services, St. Agnes Academy, Houston

**EXCELLENCE AWARD:** K-12, Design

The new Center for the Sciences and Student Services at St. Agnes Academy celebrates the centennial anniversary of the 840-student, all-girls' college preparatory private school. The three-story building serves as a premier science laboratory/lecture space and the campus' new entrance housing the student services center.

The structure is designed to be a low-energy-consuming building. The rotunda is partially tempered rather than conditioned by surrounding conditioned spaces and by return air passing back to the air handlers. The rotunda is protected against solar gain by insulated low-e curved glass. The mechanical system is designed to provide comfort and high-quality indoor air for all occupied spaces

as efficiently as possible.

Lobbies function as student lounges and double as gathering and work spaces. Corridors are outfitted with built-in seating alcoves and power outlets to provide students the opportunity for individual study.

The science classrooms, which were designed with maximum flexibility, allow the opportunity for any of the various science classes (biology, chemistry, physics, or general science) to be taught in any or all of the classrooms.



### Key Facts

**Submitted by:** Turner Partners Architecture

**Owner:** St. Agnes Academy, Houston

**Architect:** Turner Partners Architecture, Houston

**General contractor:** Fretz Construction, Houston

**MEP engineer:** Holste and Associates, Houston

**Structural engineer:** Pinnacle Structural Engineers, Houston

**Civil engineer:** Landtech Consultants Inc., Houston

BEST OF  
**2008**  
AWARDS

## Azure Condominium Tower, Dallas

**EXCELLENCE AWARD:** Multifamily, Design

The new 31-story Azure high-rise is the tallest condominium residence tower in Uptown and the first in the Harwood district.

The 375-ft tower, built in stone with metal detailing and sheathed in blue-tinted glass, is highlighted by a blue light that illuminates the building façade. It has 156 luxury homes, views of the Dallas skyline, a junior Olympic swimming pool, fitness center, private 18-seat film theater and landscaped podium gardens.

The landscaped and raised podium supporting the pool and waterfalls presented cost and scheduling challenges for the owner, design and construction team. The fixtures, furnishings, equipment and stone purchased overseas added logistical roadblocks.

The project team overcame obstacles by reorganizing the owner and general contractor team and dividing responsibilities. Contingency plans were updated daily and tracked by the owner, and equal value or superior materials and labor were always made available.

The team met milestones by implementing additional staffing, accelerated subcontractor schedules and the utilization of temporary power and dry-in.



### Key Facts

**Submitted by:** Harwood International

**Owner:** Harwood Living, Dallas

**Design architect:** James KM Cheng Architects Inc., Vancouver, B.C.

**Architect of record:** Perkins+Will, Dallas

**General contractor:** Balfour Beatty Construction, Dallas

**Landscape architect:** SWA Group, Dallas

**Interior architect:** Gensler, Dallas, and Harwood Design Studio, Dallas

**Structural engineer:** Thornton Tomasetti, Dallas



BEST OF  
**2008**  
AWARDS

## Cypress Creek Family YMCA Programs Building, Houston

**EXCELLENCE AWARD:** Nonprofit, Design

### Key Facts

**Submitted by:** Brave/Architecture

**Owner:** YMCA of Greater Houston, Houston

**General contractor:** PrimeTex Corp., Spring

**Project manager:** The Mathis Group, Sugar Land

**Architect:** Brave/Architecture, Houston

**Structural engineer:** CSF Civil, Structural & Forensic Engineering Solutions, Houston

**Civil engineer:** Johnston LLC, Houston

The new 17,000-sq-ft Cypress Creek Family YMCA Programs Building was planned on an existing YMCA site, situating the building within the 100-year flood plain and the revised 10-year flood plain set up after Tropical Storm Allison and adopted in June 2007.

Often, the 10-year flood plain places more stringent conditions on the elevation of the finished floor. In this case it put the finished floor of the structure 24 in. above the base flood elevation. To meet this requirement, the slab was raised and the site regraded with approximately 5 ft of select fill.

Because of the building's increase in elevation, the landscaping design focused

on transitioning gradually to surrounding lower areas around the building. Accordingly, storm mitigation was re-evaluated, enlarging the existing lake on the site.

The Programs Building serves approximately 300 children for after-school and summer programs. Clad in metal panels and stone, the pre-engineered steel structure offers flexibility in the floor plan's organization, allowing all secondary programmatic spaces to orient around the large exercise room.

# BEST OF 2008 AWARDS

## Awards of Merit



**AWARD OF MERIT:** Educational

### **TSTC Industrial Technology Center, Waco**

**Submitted by:** Harrison Walker & Harper

**Owner:** Texas State Technical College, Waco

**General contractor:** Harrison, Walker & Harper, Paris

**Architect:** BRW Architects, Dallas

**Roofing, demolition, carpentry, drywall and acoustical ceilings contractor:** We Build, Paris

**Concrete contractor:** Stephens and Sons Concrete, Paris



**AWARD OF MERIT:** Health Care

### **Children's Medical Center at Legacy, Plano**

**Submitted by:** Austin Commercial

**Owner:** Children's Medical Center, Dallas

**General contractor:** Austin Commercial, Dallas

**Architects:** Zimmer Gunsul Frasca Partnership, Los Angeles, and PageSoutherlandPage, Dallas

**Glazing contractor:** Oak Cliff Mirror and Glass Co., Dallas

**Flooring contractor:** American Terrazzo Co., Garland

**Masonry contractor:** DBI Inc., Garland

**Waterproofing contractor:** Chamberlin Roofing and Waterproofing, Dallas



**AWARD OF MERIT:** Higher Education

### **University of Texas at El Paso Garage, El Paso**

**Submitted by:** C.F. Jordan

**Owner:** UT System, Office of Facilities Planning and Construction, Austin

**General contractor:** C.F. Jordan LP, El Paso

**Architect:** Mijares-Mora Architects, El Paso

**Engineer:** Robert Navarro & Associates, El Paso



**AWARD OF MERIT:** Multifamily, Concrete

### **Mosaic on Hermann Park, Houston**

**Submitted by:** Baker Concrete Construction

**Owner:** Phillips Development & Realty, Houston

**General contractor:** JE Dunn Construction, Houston

**Architect:** The Preston Partnership, Atlanta

**Engineer:** Echelon Engineering LLC, Atlanta

**Concrete contractor:** Baker Concrete Construction, Houston

**Glazing contractor:** Admiral Glass & Mirror Inc., Houston

**HVAC contractor:** Atlas Comfort Systems, Houston

# BEST OF 2008 AWARDS

## Awards of Merit



### AWARD OF MERIT: Office/Corporate **Sysco Facility, Houston**

**Submitted by:** D.E. Harvey Builders  
**Owner:** Sysco Corp., Houston  
**Developer:** Hines, Houston  
**General contractor:** D.E. Harvey Builders, Houston  
**Design architect:** HOK, Houston  
**Architect:** Kendall/Heaton Associates, Houston  
**Interior architect:** Kirksey Architecture, Houston  
**MEP engineer:** I.A. Naman + Associates, Houston



### AWARD OF MERIT: Public **State Highway 36, Cameron**

**Submitted by:** James Construction  
**Owner:** Texas Department of Transportation, Bryan District, Bryan  
**General contractor:** James Construction Group LLC, Belton  
**Engineer:** Parsons Brinckerhoff Quade & Douglas Inc., Dallas  
**Erosion control:** ABC Erosion Control Inc., Leander  
**Paving contractor:** Kellystone Inc., Pflugerville  
**Sheet pile installation:** MB Western Industrial Contracting Co., Pasadena  
**Electrical contractor:** Mica Corp., Fort Worth



### AWARD OF MERIT: Worship **Lake Pointe Church Firewheel, Garland**

**Submitted by:** MEDCO Construction  
**Owner:** Lake Pointe Church, Rockwall  
**General contractor:** MEDCO Construction LLC, Dallas  
**Architect:** HH Architects, Dallas  
**Structural engineer:** Datum Engineers, Dallas  
**Civil engineer:** Half Associates, Dallas  
**MEP engineer:** Blum Consulting Engineers, Dallas  
**Concrete contractor:** T.A.S. Commercial Concrete, Dallas



### AWARD OF MERIT: K-12, Design **Carter Lomax Middle School, Pasadena**

**Submitted by:** Bay Architects  
**Owner:** Pasadena Independent School District, Pasadena  
**Architect:** Bay Architects, Houston  
**Program manager:** Jacobs Facilities, Pasadena  
**General contractor:** Skanska, Houston  
**Structural engineer:** Conti Jumper Gardner and Associates, Houston  
**MEP engineer:** Kalmans Marshall Engineering, Houston  
**Civil engineer:** Sparks-Barlow-Barnett, Pasadena

# BEST OF 2008 AWARDS

## Awards of Merit



**AWARD OF MERIT: K-12, Design**  
**Katherine Smith Elementary, Houston**

**Submitted by:** Brave/Architecture  
**Owner:** Houston Independent School District Bond Office, Houston  
**General contractor:** Prime Contractors Inc., Houston  
**Architect:** Brave/Architecture, Houston  
**Structural engineer:** Matrix Structural Engineers, Houston  
**Civil engineer:** TTL Corp., Houston  
**MEP engineer:** Hirsch & Associates, Houston  
**Mechanical contractor:** MAA Mechanical Services, Houston



**AWARD OF MERIT: Public, Design**  
**South Central Police Station, Dallas**

**Submitted by:** Perkins+Will  
**Owner:** City of Dallas, Dallas  
**General contractor:** CORE Construction, Frisco  
**Architects:** Perkins+Will, Dallas, and Roth Sheppard Architects, Denver  
**Structural engineer:** L.A. Fuess Partners, Dallas  
**Civil engineer:** Charles Gojer & Associates Inc., Dallas  
**MEP engineer:** Meza-Piazza Engineering, Dallas



**AWARD OF MERIT: Public, Design**  
**Bernie Guerra Bridge, Houston**

**Submitted by:** Reynolds, Smith and Hills  
**Owner:** City of Houston and Texas Department of Transportation, Houston  
**Design engineer:** Reynolds, Smith and Hills Inc., Houston  
**General contractor:** Lone Star Road Construction, Houston  
**Drilling contractor:** WW Foundation Drilling, Houston  
**Paving contractor:** GMJ Paving Co., Houston  
**Painting contractor:** J.H. Painting Co., Houston  
**Steel contractor:** Martinez Steel, Sealy



**AWARD OF MERIT: Private, Design**  
**Laversab BTS, Sugar Land**

**Submitted by:** Powers Brown Architecture  
**Owner:** Laversab  
**General contractor:** E.E. Reed  
**Architect:** Powers Brown Architecture, Houston  
**Civil engineer:** TAC Worldwide, Houston  
**MEP engineer:** Project Solutions Engineering Inc., Houston  
**Structural engineer:** Bihner Chen Engineering, Houston  
**Security consultant:** Infrastruct Security, Houston

BEST OF  
**2008**  
AWARDS

## Awards of Merit



**AWARD OF MERIT:** Worship, Design  
**Chase Oaks Church, Plano**

**Submitted by:** F&S Partners

**Owner:** Chase Oaks Church, Richardson

**General contractor:** MEDCO Construction LLC, Dallas

**Architect:** F&S Partners Inc., Dallas

**Structural engineer:** Brockette Davis Drake, Dallas

**Civil engineer:** BSM Engineers, Mesquite

**MEP engineer:** Blum Consulting Engineers, Dallas

**Theming consultant:** Haven Productions, Franklin, Tenn.



**AWARD OF MERIT:** Public, Design  
**Texas Department of Transportation Management Center,  
Mesquite**

**Submitted by:** Rees Associates Inc.

**Owner:** Texas Department of Transportation, Mesquite

**Architect:** Rees Associates Inc., Dallas

**General contractor:** Mitchell Enterprises Ltd., Sherman

**Structural engineer:** Jaster-Quintanilla Inc., Dallas

**Mechanical engineer:** Meza Engineering Inc., Dallas

**ITS engineering:** PB Farradyne, Dallas

**Landscape architect:** MESA Design Group, Dallas

**BEST OF  
2008  
AWARDS**

## Co-Cathedral of the Sacred Heart, Houston

**JUDGES AWARD:** Construction (tie)

**Completion of the Co-Cathedral** of the Sacred Heart capped eight years of collaboration between the general contractor and owner. Linbeck worked with the archdiocese and project consultants to analyze materials, building systems, schedules and costs to maximize the scope of the project.

The analysis required development and repeated refinement of many financial models. For each phase, Linbeck's conceptual financial models depicted alternatives that helped the owner make informed project decisions.

The project team's greatest challenge was the building shell's 80-ft-tall concrete walls that are as important for the building's acoustics as its structure. >>



### Key Facts

**Submitted by:** Linbeck

**Owner:** Archdiocese Galveston-Houston, Houston

**Construction manager:** Linbeck Construction, Houston

**Architect:** Ziegler Cooper Architects, Houston

**Civil engineer:** Walter P Moore and Associates Inc., Houston

**Geotechnical engineer:** Ulrich Engineers Inc., Houston

**Structural engineer:** CBM Engineers Inc., Houston

**MEP engineer:** CHP and Associates, Houston

**Acoustical consultant:** Kirkegaard Associates, Boulder, Colo.

**Steel erection:** Bosworth Steel Erectors Inc., Dallas

**Mechanical contractor:** MLN, Houston

**Plumbing contractor:** Mitchell Chuoke Plumbing Co., Galveston

**Electrical contractor:** Fisk, Houston



With no floors to work from, the walls had to be plumb for the application of exterior stone and interior stone and plaster. Every concrete pour had numerous angles and openings.

To avoid the nightmare of multiple scaffolding, the team invested more than \$1 million and an entire year erecting 78,000 sq ft of multilevel scaffolding inside and outside the shell. Scaffold builders were able to accommodate the

diverse height, width and weight requirements of the individual trades while also complying with state and OSHA regulations.

For the ceiling plaster application, two temporary wooden plank “dance floors” were built on top of interior scaffolds, one at 55 ft and another at 100 ft above the floor.

Approximately 48 mi of wiring went into the cathedral, much more than what is used in a typical sanctuary. To ensure superior electrical installations, the designers and contractors began discussing wiring two years before the technical equipment was installed.

The design of the building called for concrete structural walls with cement plaster applied directly to the concrete, which left no chase space for the mechanical or electrical infrastructure. Therefore, all conduits had to be placed

inside the concrete walls. This required knowing where the electrical device was going before the walls were formed and poured. Every conduit and audio speaker space was drawn into the plan and elevation views nearly two years before the first pour occurred.

Two 12-ft-tall, 13,000-lb sculptures hang 6 ft above the cathedral floor. An Italian engineer designed mounting plates on the back of the statues, but placing them on the walls of the co-cathedral was a complicated engineering feat.

Linbeck’s team designed a unique support system to stand up and then rotate the sculptures once they arrived in their crates. After performing a dry run with an 8,000-lb test weight, they found ways to modify and improve the process. Ultimately, the intricate mounting process took Linbeck workers two weeks.

# BEST OF 2008 AWARDS

## Joe R. and Teresa Lozano Long Center for Performing Arts, Austin

**JUDGES AWARD:** Construction (tie)

While the 162,000-sq-ft Joe R. and Teresa Lozano Long Center for Performing Arts replaces the outdated Palmer Auditorium, the new facility repurposes more than 65% of the old facility's materials.

The building's exterior has maintained the ring beams and columns from its predecessor to create a distinctive entry plaza and outdoor space. Hail-damaged roof panels from the Palmer Auditorium dome have been reclaimed, tinted with bold colors and mounted to create a textured motif.

Glass from the Palmer Auditorium's curtainwall was formed into panels that now feature names of the Long Center donors. Of the 44 million lbs of debris – including steel, concrete, dirt and glass – resulting from the original building's demolition, more than 97% avoided land-



fills and was recycled or reused at the Long Center or somewhere else.

The Long Center includes two performance venues: the 2,400-seat Michael and Susan Dell Foundation Hall and the Debra and Kevin Rollins Studio Theatre. A flexible performance space seats between 80 and 240 people. Supporting the venues are several lounge areas and the City Terrace, which has reclaimed the structural ring of

the Palmer Auditorium as an open window to the skyline of Austin.

Combining an old structure with a new one wasn't easy. The dome of the existing building and its associated structure were demolished, leaving the stagehouse to be retrofitted for the new performance hall.

Because the stagehouse was structurally braced for wind loads by the frame of the dome, this portion of the structure >>

### Key Facts

**Submitted by:** Austin Commercial

**Owner:** Arts Center Stage and Greater Austin Performing Arts, Austin

**General contractor:** Austin Commercial, Dallas

**Architect of administration:** Nelsen Partners Architects (formerly Team Hass), Austin

**Architect of record:** Zeidler Partnership Inc., West Palm Beach, Fla.

**Structural engineer:** Architectural Engineers Collaborative, Austin

**Civil engineer:** LOC Consultants, Austin

**Landscape architect:** Roberto Garcia, Austin

**MEP engineer:** TLC Engineering for Architecture, Deerfield Beach, Fla.

**Mechanical contractor:** The Porter Co., Manchaca

**Electrical contractor:** JMEG Electrical Contractors, Austin





would have been unable to stand alone in the unbraced condition while the new structure was being built around it. Working with an independent structural engineer and the demolition subcontractors, Austin

planned a temporary shoring and bracing scenario to be included as part of the demolition bid package. The plan included taking the load off of the tension ring while the roof of the dome was being dismantled.

Electrical conduits for the lighting and theatrical sound systems required extensive coordination. Incorporating the various acoustical systems required for various performance types was complex and required an experienced acoustical subcontractor. Solutions developed by Mark Holden/Jaffe Holden Acoustics included a flexible orchestra shell that can be used as an orchestra pit for theatrical performances or repositioned to serve as stage during symphony performances.

Additionally, the Dell Hall was acoustically sealed to prevent vibrations from affecting adjacent performance halls. It was acoustically isolated from the rest of the facility to prevent any background noise from entering. Any utilities crossing the “acoustic joint” were handled with devices to eliminate the transmission of sound across the joint.

# BEST OF 2008 AWARDS

## Walter P Moore Office, Houston

JUDGES AWARD: Design

When Walter P Moore and Associates wanted to relocate, it turned to its clients to determine what changes needed to be made. The design provided by architectural firm Gensler offered a more collaborative environment and a space that helped define the engineering firm as a forward-thinking company.

Previously, engineers occupied enclosed offices, and CAD drafters were separated in their own “open plan” by tall dividing walls. The new design encourages more interaction, with CAD drafters interspersed with groups of engineers in a primarily open

plan with lowered divider walls.

Flexible conference rooms were built into the arrangement of offices along the core. In addition, a large, impressive staircase now connects all three floors of the office, providing access to public areas on each level and encouraging more interaction between employees.

Using a large open plan for the office meant lots of echoing and poor noise control. An acoustical technician was introduced to the project to provide solutions for the many different workspaces.

The firm decided to leave ceiling structure exposed, which provided an added function of serving as an educational feature for the young structural engineers in the office. The challenge arose, however, when the exposed elements needed to be presentable while accommodating both acoustical and lighting control. To conceal the acoustical solution and reflect light to the workspaces, Gensler positioned white drop ceilings, or “clouds,”

throughout the space.

A collaborative effort between Gensler and Walter P Moore’s engineers resulted in the most prominent example of innovative design in the office. Instead of presenting the firm with its own design for a central stairway, Gensler asked the firm’s engineers to come up with a design for a gravity-defying stairway. Gensler selected the winning design of the “floating” stair that utilized the same advanced materials that the firm routinely used in large stadium projects.

The stairway’s primary structure >>

### Key Facts

**Submitted by:** Gensler

**Owner:** Walter P Moore and Associates Inc., Houston

**Architect:** Gensler, Houston

**General contractor:** D.E. Harvey Builders, Houston

**Structural engineer:** Walter P Moore and Associates, Houston

**MEP engineer:** Wylie Consulting Engineers, Houston

**Security consultant:** SST, Stafford, Texas

**Acoustical consultant:** HFPA Acoustical Consultants Inc., Houston

**Lighting consultant:** CharterSills, Houston

**Mechanical contractor:** TD Mechanical Contractors, Houston

**Electrical contractor:** Melton Electric, Houston

**Lighting consultant:** CharterSills, Houston

**Graphics:** Rigsby Hull, Houston

**Acoustical consultant:** HFP Acoustical Consultants, Houston

**Millwork contractor:** CRC Mastercraft, Houston





is drawn from its basic elements – guardrails and stair treads – resulting in a minimal form that does not require traditional stair stringers. Cables typically used in long-span roof construction are incorporated into the design as guardrails and form the top chords of the Vierendeel truss system.

Separate precast panels of Ductal make up the treads, which collectively function as the bottom chords of the truss. Finally, the truss web is made up of the solid vertical posts of the guardrail. Vertical steel members at the top of each flight support the cantilevered guardrails, resulting in a floating sensation.

A hanging custom-tuned mass damper – like those typically used to control sway in high-rise buildings – controls vibration from the “floating” stair from the base of each flight.