



UNIQUE GLOBE LIFE FIELD TURNS NEW PAGE FOR TEXAS RANGERS

The \$1.2 billion, retractable-roof stadium in Arlington includes breakthrough climate control, sports lighting and electronics. Feature writer Steve Traiman gets insight from team, architect & key vendors.

With Major League Baseball expected to reopen a shortened 82-game season around July 4, players will take the field to empty ballparks with only TV available to satisfy homebound fans

When the **MLB Texas Rangers** officially opened their \$1.2 billion, retractable-roof **Globe Life Field** in Arlington, Texas, this July, it will be the successful result of a remarkable 31-month construction timeline.

"Discussions on the new ballpark, across the road from our former

Globe Life Park home, heated up in the summer of 2015," Rob Matwick, Rangers Executive VP for Business Operations, recalled for PS&AM. "The Cordish Companies, a highly regarded, Baltimore-based sports anchor development firm, approached us as the keystone anchor for its planned Texas LIVE project that would include a major brand hotel, retail, restaurant and entertainment space.

"We immediately began talks with the city of Arlington as a 50-50 partner to keep the team in the city for another

25 years, which led to overwhelming passage of a \$500 million bond issue in November 2016. Globe Life has been a great naming rights partner since 2014 and was pleased to extend that agreement on the new ballpark for another 25 years at \$11 million annually."

Matwick has been with the Rangers since 2008, joining after 21 seasons with the **Houston Astros** and briefly with the **Detroit Tigers**.

Asked about the team's major priorities for the new stadium, he said: "Our



All images courtesy of Texas Rangers & HKS
Globe Life Field North Plaza entrance



StubHub Club on lower suite level

primary goal was to mitigate the weather effect and make the ballpark operable 365 days a year. Premium amenities for our fans was another goal, including new club spaces, suites and boxes down both foul lines, some just 16 rows off the field.

“A retractable roof was a given, not only for air conditioning during the summer months, but also heat for some of those early April games and for fans to enjoy entertainment and other sporting events year-round. Pre-game amenities were also improved with many more restrooms, a family room for nursing mothers, a sensory room for kids with autism, and many concessions moved to the far side of all concourses.

“Another key goal was to get more natural light into the ballpark with

the roof closed. We challenged the architects and they did a really nice job, so you don't have to go very far to find transparency in the roof. We had an EFTE surface on the roof and on the east and west side walls, and they bridge the west side area between the upper concourse and outer wall for more natural light.

“In selecting HKS as our primary architect, we felt they brought a creative standpoint to the table with imagination. We didn't want to replicate what we had before, but to keep an exciting Texas feel to the new building with a large amount of glass and transparency HKS showed in other projects. With a focus on the new main and upper concourses, Fred Ortiz, one of the primary design architects, had a great idea to turn the exterior arches

from the old Globe Life Park to inside to provide about 800 feet of walkable area. We're really excited to get fans to experience that new feel and look. HKS vetted the other architects and with Manhattan Construction, our contractor, put together a great group of key vendors on the project team.

“As the original opening day approached, we were very lucky to pick March 11 for a morning media open house with about 50 local radio, TV and print folks on hand. It started at 4 am for the early morning on-air folks, and after lunch – I did about an hour and a quarter with one-on-ones! We had a small lunch for the Mayor and Council for their tour, and then from two to six in the afternoon welcomed more than 3,000 excited season ticket holders and others from the community.

“Response from media, fans and the community was very responsive and it was very exciting for me to see the positive reaction to the many new amenities. It was a credit to HKS, Manhattan Construction and the entire project team and our key owner's rep, Jack Hill, my 'best' hire who joined our staff in 2016 as project manager. His background includes The Ballpark in Arlington and American Airlines Center in Dallas. We may be the first major sports facility to be finished when it officially opens as in April our punch list had about 15,000 items and now we're getting it knocked out!

“Driving home that night I put on the NBA Dallas Mavericks game and heard the Thunder-Jazz game was delayed in Oklahoma City, due to this new virus. I called John Blake, EVP of Communications, to have him get the details. By the time I got home and turned on the TV, I got Mavs' owner Mark Cuban's reaction to the NBA >>

« *shutting down. When MLB shut down March 12, I called Sean Decker of our staff and our promoter Live Nation, about postponing the highly anticipated Chris Stapleton and Willie Nelson concert that was to officially open the ballpark on March 14, and we now hope to present them in the fall or winter.* »

DREAM ROLE

The architecture project that brought HKS architect Fred Ortiz back to Texas is a dream role: senior designer of the new Globe Life Field for the Texas Rangers.

Featuring a retractable roof for climate control, seats that are closer to the field and open views from the concourse, the new ballpark is a far cry from the barebones Arlington Stadium where Ortiz spent summer nights in college watching former Rangers Rubén Sierra, Iván “Pudge” Rodríguez and Nolan Ryan play ball.

Ortiz is not just designing a sports facility, but a home to the team he has watched since college, and building another landmark for the city that started his architectural career. (He earned his architectural degree from the University of Texas at Arlington.)



Panoramic view of seating bowl shows two of three “floating” Daktronics Video Boards

“The roof was the project team’s biggest challenge,” Ortiz told PS&AM. “Structural engineer Walter P Moore played the key role in creating the largest single-panel retractable roof in all sports venues – 7 acres of coverage with the largest span of 650ft. Something that large was well worth the effort as with ME Engineers providing MEP services, their climate control system allowed the Rangers to create a truly multi-purpose venue.

“There is no need to have to cancel events due to weather. There are no

rain delays. It’s more functional and comfortable for fans if the summer game time temperature is 107 degrees at first pitch. And there are no missed concerts or family shows due to snow, rain or thunderstorms.”

Ortiz said HKS also worked with four local architectural firms - **VLK , VAI Architects, SDS Architecture** and **EJEX, Inc.** – all assisting with documentation of the project.

“They were fantastic partners to have as part of the overall team

Northeast aerial view with roof open



structure and an important part of the project's success.

"We were able to keep to the tight 31-month construction timetable with no major weather or other problems. The roof and framing did leave the bowl space open to the elements for an almost two-year period. So, there may have been some minor flooding along the way inside, but this was minimal... and planned for. There were no just-in-time delivery problems with key Texas-specific materials - brick, granite and limestone all embody a unique Texas feel and theme. Precast was used to emulate large blocks of stone.

"It was a great experience for HKS and contractor Manhattan Construction working together with a very supportive project team. We were together with the Rangers from day one collaborating, expressing ideas. And with Jack Hill as the key team contact, we were able to understand the Rangers' vision to craft a solution that elevates the team brand. The result is the first next-generation ballpark for MLB.

"For Rangers' fans, it will be a special feeling when they see a new building open up...similar to when you move from one house to another. You loved

the home you were in and are leaving... but it's a chance to go to a new space with more amenities, things you may have felt you were missing. For HKS, it was a chance to create a memorable experience for fans of all ages. There will be a dynamic for Rangers' fans looking at where they were before in the old ballpark and where they are now. A park with an iconic Texas feel...a much higher level of transparency... and a connectivity to the Texas LIVE entertainment district.

"To build something for the City of Arlington, where I went to school and where I spent so many years of my life, it's like contributing to something bigger. I feel very blessed and honoured to be part of an architectural firm that has the opportunity to work on a project like Globe Life Field."

RETRACTABLE ROOF

As structural engineer for Globe Life Field, **Walter P Moore** was responsible for major elements including the retractable roof and the lower arena bowl.

Jeff Jansing, a firm Principal, is both overall and roof Project Manager, with long experience in structural engineering analysis and design of a diverse group of project types, including sports, healthcare, aviation, performing arts, parking garages, municipal, and hospitality. He joined the firm in 2004 after receiving his Bachelor of Science and Master of Engineering degrees from Texas A&M University.

As the overall Project Manager, Jeff told *PS&AM*: *"One of my primary responsibilities included interfacing with the HKS Architects' Project Manager, Greg Whittemore, and the Ranger's on-site liaison, Jack Hill, to understand the desired vision and goals for the overall project. Internally, my primary function was to keep the structural engineering teams for both the roof and bowl to remain aligned throughout the aggressive project design and construction schedule.*

"I also collaborated closely with Shruti Sharma, our bowl Project Manager, to offer insight and provide resources to ensure that all project objectives were met. As the roof Project Manager, I also provided ongoing guidance and insight into the design process and directed the day-to-day efforts of the roof design team. I collaborated directly with the roof design team and architect to ensure that architectural features and materials were properly integrated into the overall roof design, resulting in

a new model for sports venue single-panel retractable roofs."

Sharma is a Principal with Walter P Moore, with over 15 years of experience in delivering successful projects in a variety of sectors including sports, healthcare, aviation, commercial, cultural facilities, parking structures, and education.

Her many notable sports projects include: **Protective Stadium**, Birmingham, AL; **Fiserv Forum**, Milwaukee, WI; **Gaylord Family Oklahoma Memorial Stadium** expansion, Norman; **Texas A&M University Kyle Field** redevelopment, College Station; **Daytona Rising**, Daytona Beach, FL; **BBVA Compass Dynamo Stadium**, Houston; **KFC Yum! Center**, Louisville, KY; and **Lucas Oil Stadium**, Indianapolis, IN.

As the bowl Project Manager, Sharma noted for *PS&AM*: *"I led all aspects of structural engineering such as conceptualising the design solution, comparative analysis of structural systems, pricing the schematic design options, parametric modelling of structure, detailing the connections, outlining staged construction analysis and coordinating with architecture as well as other disciplines.*

"I also spearheaded the integration of structural systems with the unique architectural design features such as multi-story, cantilevered trusses supporting the bowl; 100-ft-tall arches lining up the 1,000-ft wide north entrance; balcony seating between the arches; sloped framing defining the two 360-degree concourses; the structural back-up for the Daktronics scoreboards that appear to float above the concourse; and the Texas porches that welcome the fans into the ballpark."

SAFETY SYSTEMS

Lauren Berry, Associate Principal-Mechanical, has been with ME Engineers for nine years and prior to that was in health care.

As project manager for Globe Life Field, she noted for *PS&AM*: *"In the past 10 years we have teamed with the Rangers for a handful of renovations at Globe Life Park, including the new concession stand for the famous Boomstick, the world's largest baseball bat-sized hot dog! We had worked with HKS on the >>*





« design and construction team that built AT&T Stadium for the NFL Dallas Cowboys, and on earlier Globe Life Park renovations.

“We’ve worked with Trane on other major sports projects, as Trane provided the chillers and air handling units on our first sports job, Denver’s Coors Field for the MLB Colorado Rockies. Trane and other manufactures play an integral role in providing assistance and education on the latest products and advancements in HVAC. ME Engineers’ sports lighting design and specifications allowed multiple manufactures to bid, with Musco selected. ME has worked with Musco on many sports lighting projects.

“Our key priorities on overall MEP design, based on the Rangers direction, were first and foremost the systems that support the life safety of fans -- emergency power and smoke control to name a few. Next, 9,000 tons of cooling uses a lot of energy so we had to utilise the most efficient systems while balancing the cost of construction.

“While there’s no doubt the latest in technology allowed us meet the rigorous timeline, it wouldn’t have been possible without the talented individuals that HKS and each team member brought to the table – and a trusted relationship between the design and construction teams. Constant collaboration with all the project team members allowed us to react quickly to the building design, to provide a great new modern ballpark.”

DAKTRONICS DISPLAYS

Globe Life Field features eight new displays using 3-in-1 LED, Surface-Mount Device (SMD) technology from **Daktronics**, Project Manager Brent Dunkel told PS&AM.

“We designed, manufactured and installed the displays to enhance the event experience with visual technology accounting for more than 8.8 million LEDs to engage audiences throughout the ballpark. Additionally, more than 1,450 LCDs were integrated throughout the venue to connect with viewers via an IPTV system. The largest display - and main scoreboard - in right field is 58-ft-high by 150-ft-wide (8,700ft²) and features 15-millimeter line spacing.”

Daktronics President and CEO Reece Kurtenbach added: “This main video display is beyond HD resolution, using the latest SMD technology that is increasingly becoming standard in these large displays. Our other displays in the bowl and an IPTV network of displays throughout the stadium create a comprehensive solution to deliver an immersive experience for Rangers’ fans.

“These technologies, powered by an innovative broadcast-quality control system and service expertise, will take the new home of the Texas Rangers to another level of game-day experience.”

Matwick summed up: “We’re very thankful we can play games this year even without fans, and to do it safely with continually testing players and key staff. With our loyal fans able to watch on TV, we look forward to at least a limited season in our new ballpark.” ■

Typical field level Field Suite looking toward main right-field Daktronics Video Board

GLOBE LIFE FIELD	
Project Team and Fact File	
Location	Arlington, Texas
Construction Cost	\$1.2 billion
Owner	City of Arlington and MLB Texas Rangers.
Operator	MLB Texas Rangers
Capacity	40,300
Architect	HKS Inc., Architect of Record; VLK, VAI Architects, SDS Architecture, EJEX, Inc., Associate Architects
General Contractor	Manhattan Construction
Structural Engineer	Walter P Moore
Services Engineer	ME Engineers
Video Boards/ Electronics	Daktronics
Landscape Architect	SWA Architects
F&B Concessionaire	Delaware North SportService
Major Tenants	MLB Texas Rangers
Amenities	
238,000ft ² retractable roof; Live Nation as concert partner; Over 4,200 Club Seats; 71 long-term & 37 nightly event Suites; three Field Level & two lower Level Clubs including the Lexus Home Plate Club, field-level Evan Williams Lounge & Germania Insurance Lounge, left-field upper level Karbach Brewing Sky Porch, online ticket provider StubHub Lounge & Balcones Distilling’s lower suite level Balcones Speakeasy Club; keystone of new Texas LIVE! project with a Live! by Loews Hotel, retail and restaurants.	