

JAGUARS AMPHITHEATER AND COVERED FLEX FIELD

## \$15 MILLION TO \$75 MILLION | MERIT AWARD Daily's Place, Jacksonville, Fla.

**PROFESSIONAL SPORTS TEAM OWNERS** of all types have long looked for ways to monetize their stadiums beyond their respective seasons.

TIAA Bank Field, home to the NFL's Jacksonville Jaguars, has taken things even further with the addition of an adjacent new, all-weather team training facility that also serves the dual purpose of increasing the vibrancy of downtown Jacksonville.

Daily's Place, named for a local convenience store chain, is a first-of-its-kind facility: a 5,500-seat concert venue that connects a new, 94,000-sq.-ft indoor football training facility to TIAA Bank Field (recently renamed from EverBank Stadium). Both new spaces are covered by a fabric roof that is elegantly suspended from a sinuous exposed steel roof structure.

Architect Populous' design was inspired by Jacksonville's distinctive array of steel truss bridges over the St. John's River, resulting in a 450-ft-span roof form that seamlessly blends structure and architecture to cover both the practice field and performance venue. Collaborating with structural and enclosure engineer Walter P Moore from the outset, the design team developed an integrated structure that features exposed articulated steel trusses atop a single-layer membrane hung below. The exposed trusses architecturally connect the venue to the adjacent stadium scoreboard structure and provide a visual nod to the nearby Hart Bridge.

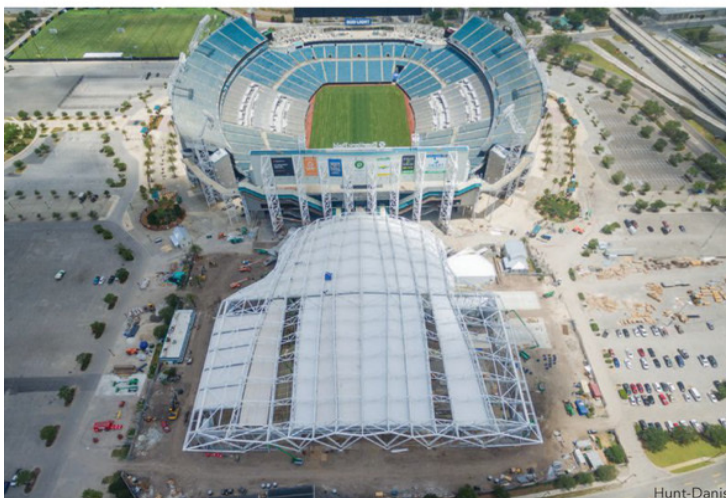
Exposed V-columns around the perimeter serve as vertical load-bearing members while economically resisting hurricane-force winds. Massive, 50-ft-tall rolling doors make the spaces

flexible, enabling the facility to host a wide variety of events including conventions, festivals and the NFL draft. The cost-efficient marriage of exposed steel with a specialized, shimmering fabric membrane allows the structure to appear opaque during the day—protecting Jaguars' practices from the prying eyes of competitors—and come translucently alive at night via distinct lighting from within.

Key to the project's success was a fully integrated design approach that simultaneously developed the architecture, structure and membrane designs. Construction manager Hunt-Danis engaged steel fabricator Banker Steel and the membrane system supplier early to collaborate with the design team. One significant concern was water management at the attachments of the single-layer membrane roof beneath the roof trusses. Working closely with the membrane supplier, Walter P Moore developed innovative, reliable attachments at the truss nodes, thereby mitigating concerns about leaking at these key points. The result was a series of beautiful exposed trusses complemented by a diaphanous, single-layer (rather than a more expensive double-layer) membrane.

The schedule was driven by a series of concerts scheduled for Memorial Day weekend of 2017, leaving only 13 months from the end of design development to opening day. To achieve such an accelerated pace, the integrated project team implemented a fully digital delivery process that eliminated the sequential handoffs of documents between design team, construction manager and subcontractors that tend to slow traditional processes. A central information





Simple, disciplined elegance emphasizing the joys of a tent structure, along with curving roof shapes and the relief of openness. —Grant Gustafson

database (CID) created from the architect's Rhino model was crucial to this process. Every participant drew data from the CID, which defined the complex work point geometry for the entire project, feeding structural and documentation software platforms including Rhino, Revit, SAP 2000 and Tekla to seamlessly develop the raw architectural form into a fully connected Tekla model that was delivered to Banker. By faithfully maintaining the CID throughout the project, the team could absorb ongoing design refinements and explore value engineering options without slowing down or introducing coordination errors. Hunt-Danis estimated that this overlapping and interoperable digital process shortened the project time frame by 15% without compromising quality or cost.

The digital delivery also enabled real-time tracking of steel tonnage as the design developed, helping keep the project tightly aligned with its budget of \$60 million. To further speed the process, the design team's fully connected Tekla model included all needed connection information including bolts, shims and welds, eliminating another step in the procurement process that the schedule could not accommodate. The result of this more comprehensive approach was lightning-fast completion without the additional costs that too often accompany project acceleration. Total steel change orders amounted to less than 0.2% of the contract amount for the primary steel.

Thanks to innovative design and delivery, Daily's Place opened on time and to rave reviews for a Dave Matthews concert and hosted

27 events over its first four months leading into football season. The elegant steel structure is distinctively lit at night, creating a new architectural landmark for Jacksonville—and perhaps most importantly, the new venue has helped revitalize the downtown area while making TIAA Bank Stadium a much more vibrant civic destination for Jaguar fans and the public.

#### Owners

City of Jacksonville  
Jacksonville Jaguars, LLC

#### General Contractor

Hunt-Danis, a Joint Venture, Indianapolis and Jacksonville

#### Architect

Populous, Kansas City

#### Structural Engineer and Connection Designer

Walter P Moore, Kansas City

#### Steel Team

##### Fabricator

Banker Steel Company, Lynchburg, Va. 

##### Erector

Midwest Steel, Inc., Detroit 

##### Detailers

BDS Vircon, Brisbane, Australia   
LTC, Inc., West Salem, Wis. 