

Project Spotlight

Camping World Stadium

Location: Orlando, FL

Scope: Railing Replacement Contract

Project Delivery: 2026–2027

Architect: DLR Group

Construction Manager: Barton Mallow
and AECOM Hunt joint venture



Executive Summary

As part of a large-scale stadium renovation, this project evaluated two primary railing installation methods: surface-mounted systems and core-drilled embedded systems across 2901 LF of aisle railing. Through early design coordination and constructability analysis, the embedded system was identified as the preferred solution, delivering an estimated ~20% total installed cost savings while improving long-term durability and reducing installation risk.



Current Camping World Condition

Project Overview

The Camping World Stadium project involves the replacement and installation of approximately 14,560 linear feet of railing in a high-traffic sports and entertainment environment. Given the scale, safety requirements, and exposure to heavy crowd loads, railing system selection was a critical decision impacting cost, schedule, and long-term performance. Of the total railing scope, approximately 2,901 linear feet was directly impacted by the cost savings achieved through the selected approach. This impact was primarily associated with aisle railing, with other railing systems such as drink rail, glass rail, side-mounted rail, and cable rail expressly excluded from the savings analysis.

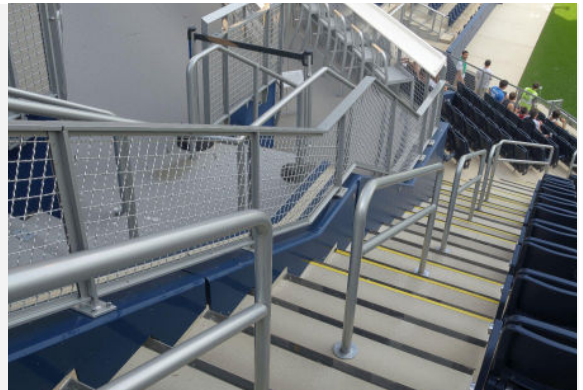
Early involvement during design allowed for a detailed evaluation of installation methods and their downstream implications on fabrication, field labor, and coordination.

Design Decision: Embedded vs. Surface-Mounted Systems

Two primary installation methods were considered:

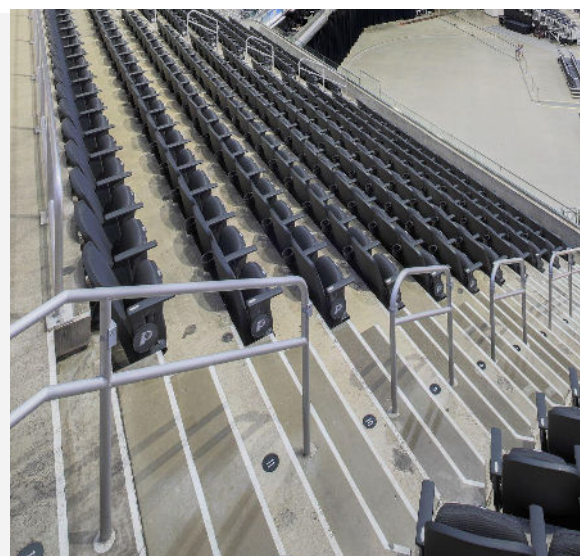
Surface-Mounted Railings

- Installed using base plates and a quantity of 4 adhesive anchors
- Less adaptable to late-stage field conditions



Embedded (Core-Drilled) Railings

- Concrete is drilled with an oversized hole and post is set directly into the concrete structure
- Eliminates need for base plates, anchors, and surface-mounted hardware
- Embedded railing mounting provides significantly greater flexibility for both fabrication and field tolerances, helping minimize rework and reduce scheduling impacts
- Core drilling streamlines installation, resulting in faster execution and an improved schedule



Cost & Schedule Impact

Based on preliminary estimates, the embedded railing system offers meaningful cost advantages:

20%

**TOTAL INSTALLED
COST SAVINGS**

26%

MATERIAL SAVINGS

Elimination of base plates,
anchors, sealants, and
waterproofing components

13%

**LABOR AND
FABRICATION SAVINGS**

On a \$1M railing opportunity, this represents a significant potential cost reduction driven by reduced material, shop labor, and reduced installation complexity.

Schedule Benefits

- Faster field installation due to fewer components and simplified assembly
- Reduced need for anchor layout, drilling, and inspection
- Lower risk of rework tied to anchor placement or concrete inconsistencies

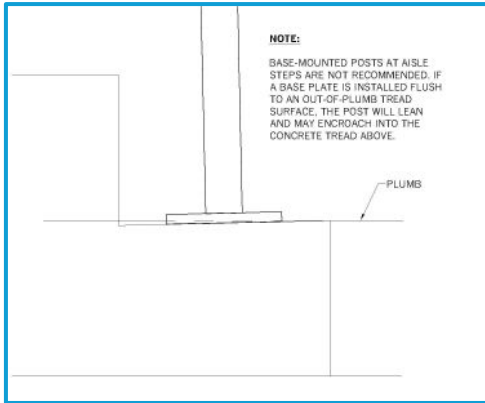
Outcome & Value Delivered

The evaluation concluded that core-drilled embedded railings provide the most effective solution for this project, balancing cost efficiency, installation efficiency, structural performance, and long-term durability.

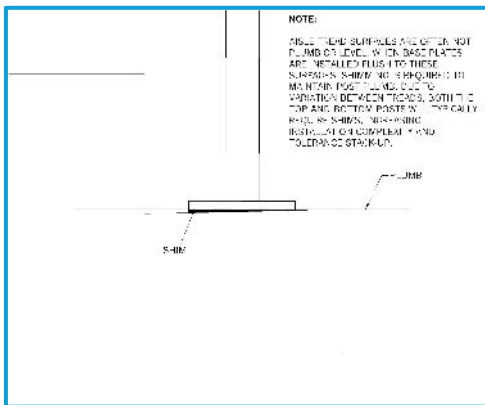
By influencing this decision early in the project lifecycle, the team was able to:

- Identify substantial cost savings opportunities
- Improve installation efficiency and reduce schedule risk
- Deliver a higher-quality, more durable final product

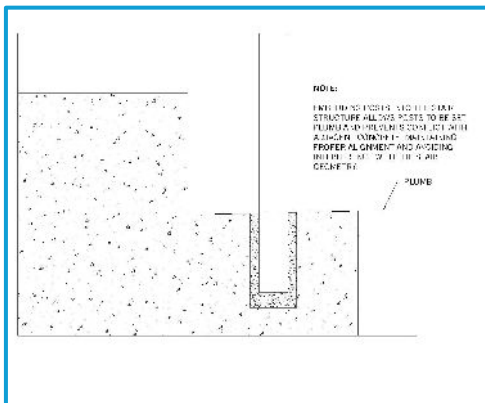
This project demonstrates the benefits of early contractor involvement and design-assist delivery for complex arena and stadium projects, including new and renovated large-scale commercial construction.



This illustration highlights an instance where the tread was out of plumb, resulting in misalignment of the rail baseplates.



This illustration highlights an instance where irregularities in the aisle tread required shimming to maintain post plumbness.



This illustration shows embedded posts which allow for plumb installation while preventing conflicts with concrete and stair geometry.