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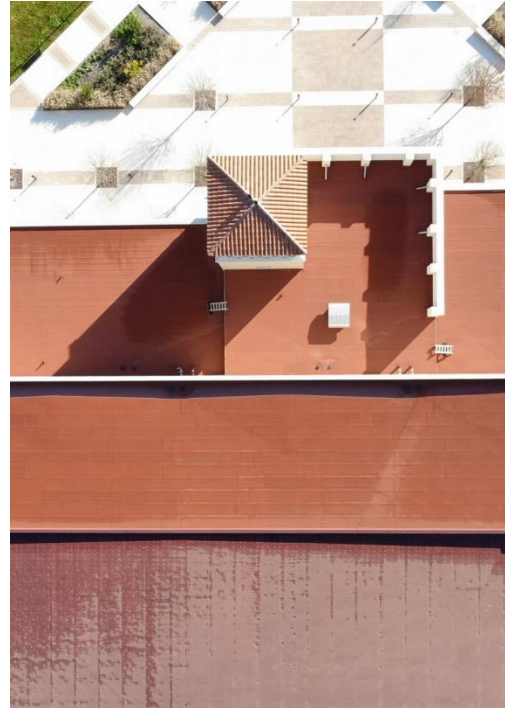
Strahan Arena

Building Enclosure Consulting | San Marcos, TX

CLIENT

Sink Combs Dethlefs

BACKGROUND

The University Events Center, formerly known as the Strahan Coliseum, is located on Texas State University's main campus. The indoor sports arena and events facility was originally a two-story, concrete-framed building and underwent a $62.5 million expansion in 2016. The expansion added 81,000 square feet of space for seating, sports facilities, program offices, and event support spaces. The architect of record for the project was Sink Combs Dethlefs (now a part of Perkins&Will).

The client retained WJE to provide design peer review services related to exterior enclosure components and their integration into the overall building enclosure system. The components involved roofing, including drainage patterns, gutters, and penetrations; crawlspace drainage and grading; wall cladding; window systems; air and moisture barriers; and flashings and seals at cladding transitions, penetrations, and fenestrations.

SOLUTION

The new construction was to be placed on ground that is below the flood plain and subject to rising water for most of the year. This addition was tied into multiple phases of existing construction and roofing. As such, below-grade waterproofing and roofing connections would be critical to the success of the project and keeping the building watertight.

We provided a technical review of the drawings and specifications, as well as design assistance to ensure the waterproofing, roofing, and cladding systems were designed to prevent water infiltration. The entire lower-level slab and walls utilized blind-side waterproofing to prevent any water from rising through the slab or at tie-ins to existing construction. Roof tie-ins were designed to accommodate differential movement between old and new construction and to eliminate persistent leaks.

We also performed field observations and problem solving for roofing, waterproofing, and walls at critical times during the construction period.

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