PROJECT PROFILE

AT&T Stadium

Peer Review and Construction Observation Services | Arlington, TX

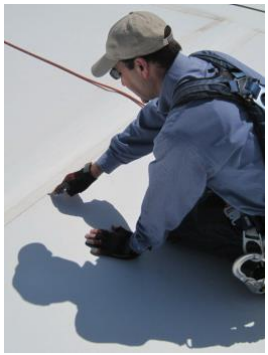
CLIENT

Manhattan Construction Company

BACKGROUND

AT&T Stadium, formerly Dallas Cowboys Stadium, is the largest enclosed NFL stadium with approximately 3 million square feet under roof. The playing field is 50 feet below grade with the retractable roof surface some 300 feet above. The seating bowl of the stadium is primarily constructed of cast-in-place concrete with precast concrete seating risers and is clad primarily in a glass curtainwall system. The structure of the dome is primarily structural steel and features two large free-standing supporting arches. The roof is covered in a PVC single ply membrane, and the retractable roof sections feature an architectural fabric membrane. The stadium also features operable end zone doors.

Manhattan Construction Company was tasked in 2006 with constructing the new stadium for the Dallas Cowboys and having it ready for the 2009 football season. No building envelope consulting was included in the original design, and Manhattan sought to have the services of a professional consulting firm to provide recommendations and observations on key building envelope elements during the construction phase. WJE was selected to provide those services and assisted Manhattan for four years with the construction of the stadium.



SOLUTION

WJE advised Manhattan on the selection of many of the products and systems within the stadium. The below grade waterproofing and the seating bowl waterproofing are two of the largest areas where WJE's solutions were implemented. In addition, WJE designed many of the specialty expansion joints throughout the stadium. WJE performed observation services on the spray water tests of the glass systems and conducted quality assurance observations of both the PVC and fabric roofing systems. In the performance of services, WJE provided over forty site visit reports, observed twenty-plus spray water tests, and conducted individual tests of sealant joints, coating slip resistance, and PVC and fabric membrane seams.

WJE ENGINEERS ARCHITECTS MATERIALS SCIENTISTS