WJE

PROJECT PROFILE

MD Anderson Cancer Center - Alkek Expansion

Peer Review, Testing, and Construction Observations | Houston, TX



CLIENT

McCarthy Building Companies, Inc.

BACKGROUND

MD Anderson sought to provide additional bed capacity in an already extremely congested medical center. To achieve their goal, they elected to build above the existing Alkek Hospital facility. The expansion is a twelve-story, state-of-the-art 500,000 square foot space with exterior walls consisting of prefabricated architectural GFRC panels and glazed window wall systems. The roof consists of a torch applied APP modified bitumen membrane system. WJE's challenge was to collaborate with McCarthy and HKS (their architectural firm), within a design-build setting, to perform peer reviews of the design development, performance specifications and testing criteria for the glazed window wall, waterproofing, roofing and GFRC wall panels systems as well as provide construction and testing observation services. The project's abutment to an active hospital facility provided numerous interfacing challenges, especially related to maintaining the weathering integrity of the existing structure.





SOLUTION

WJE formed a project team consisting of building enclosure professionals, each with unique glazed window wall, roofing and GFRC technical knowledge and experience. Each of these professionals provided peer reviews and construction services, including mock-up and field testing of systems related to their primary area of expertise. WJE also worked closely with the "Alkek Design Build" team to address potential interface challenges and offer solutions to assure that the performance of each of the building enclosure systems would meet the Owner's expectations.

During the project, our field services were increased to include twice a week site visits in order to enhance the windows, GFRC, and roof installations quality assurance. Due to the inability of the independent testing agency to complete the roof up-lift tests on schedule, WJE immediately responded to McCarthy's request to provide the equipment and completed the outstanding specified up-lift tests, as additional services. Our quick response allowed McCarthy to meet their required deadlines for the completion of these tests.



ENGINEERS Architects Materials scientists