



Located in the heart of downtown at 50 stories high and nearly 1.5 million square feet, Thanksgiving Tower is a premier commercial property in Dallas, TX. With industry-leading tenants, posh amenities, and upscale accommodations, Thanksgiving Tower continues to provide the highest level of productivity, comfort, and safety for building occupants.

The Situation

When Woods Capital acquired Thanksgiving Tower in 2013, the building was 52 percent leased with 600,000 square feet of tenants planning to move out. Built in 1982 and maintained without the full life-cycle in mind, the building needed renovations to not only improve the tenant experience and bring it up to code, but to also reposition itself as a first-class property through significant leasing activity.

Changing out cooling towers, chillers, and air handling units required the ability to thrive in a collaborative environment early and often due to tenants' schedules, downtown congestion, elevator restrictions, and FAA regulations. A high level of expertise in constructability engineering and ground operations, as well as effective pull planning and adaptive engineering designs, were necessary.

The Solution

TD provided design-build mechanical services and split the work into three phases. Eight cooling towers were replaced over Thanksgiving weekend 2013 and everything was fully operational before 6 a.m. the following Monday. The chillers were replaced from December 2013 to February 2014 without any loss of service. TD replaced a total of 96 AHUs across 48 floors, covering approximately 1.4 million square feet in eight months, in addition to rebuilding the AHUs servicing the 48th floor.

Thanksgiving Tower by the Numbers

- 31 of 50 floors occupied
- 8 cooling towers
- (1) 990 ton chiller
- (2) 855 ton chillers
- (8) 250 ton cooling tower cells
- (96) 10,600 CFM AHUs with VFDs

MITIGATING RISK THROUGH DESIGN-BUILD



Equipment sizes included (1) 990 ton chiller, (2) 855 ton chillers, (8) 250 ton cooling tower cells, and (96) 10,600 Cubic Feet per Minute (CFM) AHUs with Variable Frequency Drives (VFDs). TD's ability to prefabricate nearly all the piping for the chiller and cooling tower replacements was critical to keeping the project on schedule.

Throughout the course of the project, 31 of the 50 floors were occupied. Work was performed on the unoccupied spaces during the work week and switched over to the occupied floors on the weekends. To accommodate the schedule of Tower Club, a well-known Thanksgiving Tower tenant, TD completed the 48th floor AHU rebuild during the night. Work requiring shutdowns was scheduled over two holiday breaks, Thanksgiving weekend and Christmas break in 2013.

The new cooling towers are taller than the old ones, which exceeded the FAA height limitation by 14 inches. One potential solution included modifying the existing structural steel supporting the cooling towers, to lower the new towers, which would increase cost and extend the schedule due to the need for added helicopter lifts. Instead, TD collaborated with the FAA (amid a government shutdown) and obtained approval for the additional height.

There are only four helicopter companies in the U.S. that can lift equipment as heavy as a cooling tower. Despite the original helicopter company backing out just four weeks before the lift due to a natural disaster, TD was able to start over with ground-zero planning and find another helicopter company that was available and within the budget.

50 helicopter lifts were scheduled and a remarkable total of 51 lifts were performed. TD rented two parking lots for the ground operations; and efficiently coordinated

two helicopters, a crane, multiple trucks, scissor lifts, and forklifts in a congested urban area. The ground operations included 12 Dallas police officers controlling automobile and pedestrian traffic on the affected streets. To prepare the parking lots for the helicopters and crane, our electrical service group had to remove light poles and overhead wires with a bucket truck.

TD helped the owner navigate through different options for refurbishment and replacement. All AHUs were replaced, except for the 48th floor, which was refurbished. Together, the team ultimately decided on new Daikin units, as the fans are direct drive and the units fit better. They are also easier to take apart and reassemble, which was vital to installation within each mechanical room. Scheduling and a clean workspace were keys to success for this project.

The Success

The \$37 million renovation of all common areas and building systems is a testament of balancing aesthetics and constructability. Woods was able to manage integrative assets and develop significant leasing activity with venerable tenants.

Thanksgiving Tower is now about 70 percent leased. The all-glass building is designed to serve companies of all sizes and industries through private offices, event spaces, collaborative workspaces, unique common areas, dining options, an engaging lobby, a fitness club, a helipad, and a parking garage.

TD added value to the project with its design and constructability engineering capabilities and provided hands on expertise to mitigate risk in a collaborative environment.

