

PROJECT EXPERIENCE

WEST VILLAGE 7B - ARDAN WEST VILLAGE RESIDENTIAL TOWER & HILTON CANOPY UPTOWN HOTEL

DALLAS, TEXAS



COMPLETED:
2018

SQUARE FOOTAGE:
950,000 SF

ARDAN RESIDENTIAL Team:
OWNER: Forest City
ARCHITECT: GFF

HILTON CANOPY TEAM:
OWNER: Cityplace Company
ARCHITECT: WDG

CONTRACTOR:
Rogers-O'Brien Construction

RLG SERVICES:
Structural Engineering

PROJECT DESCRIPTION / SCOPE:

RLG Consulting Engineers, in partnership with GFF and WDG, provided structural engineering services for the West Village 7B project. This project incorporates the The Ardan West Village residential tower with the Hilton Canopy Uptown hotel. The building has more than 50,000 square feet dedicated to amenities for its residents including a five-story parking garage with approximately 690 parking spaces. In addition, the 25,000 square feet of retail and restaurant space at the ground floor allows residents and guests to shop and eat without leaving the building.

RLG's team of structural engineers provided engineering services for the building's various uses including the residential/hotel floor framing, parking garage, elevated amenity deck including a pool, and the building lateral system. The building's parking garage required mild reinforced pan beams and girders for the ramp and one-way post-tensioned slabs and girders for the elevated garage framing. At the elevated amenity deck, there were 3'-8" and 5'-8" steps in the structure to accommodate 3'-0" of soil for landscaping and a 4'-0" deep pool. The amenity deck included pan beam and post-tensioned girder framing. The building's lateral system included concrete shear walls and concrete moment frames. The floor framing system at the units/keys consisted of two-way, post-tensioned concrete slabs. A key structural challenge for this project was finding column locations that worked for both the residential/hotel units and the parking layout below. We worked collaboratively with the architects to come up with a layout that both minimized column transfers and met their architectural vision for the project.