



Above: Artist's rendering of completed development.
Right: Development site prior to construction.



Harborside Development, North Pier (Pier F)

Jersey City, NJ

Mueser Rutledge Consulting Engineers (MRCE) performed geotechnical and foundation engineering services for a new seven-story residential structure sitting atop an existing waterfront pier on the Hudson River. The structure occupies a total area of approximately 22,000 square feet. The rest of the pier area supports a new promenade surrounding the building.

MRCE performed geotechnical investigations and underwater diving surveys to establish the condition and possible alternatives for the rehabilitation of the existing deteriorated pier supported on timber piles, which had undergone settlement of 12 to 18 inches at the outboard end while in service as a cargo handling facility.

Working with the developers and based on MRCE's findings, a completely new foundation scheme was selected for support of the new building and promenade within the footprint of the existing pier. The new foundations were constructed on new 150-ton steel pipe piles driven to rock.

MRCE performed design and preparation of Contract Drawings and Specifications for the new foundations, including the first level slab to be used for parking, and the promenade areas surrounding the building, in addition to a new bridge for vehicular traffic to access the pier.