

PROJECT PROFILE

Red Hook Water Tower Red Hook, NY

VERTICAL
access

Project overview

Vertical Access performed a hands-on inspection of the steel structure of the Red Hook Water Tower in Red Hook, NY in order to assist the project team with characterizing the structure and documenting its condition.

Structure description

The Red Hook Water Tower was built in the 1930s and consists of a 223,000 gallon steel tank atop six steel legs and a central riser column. A concrete pad supports the riser column and each leg sits atop a separate concrete pier. Horizontal cross-members span the legs at two levels, while steel rods with turnbuckles and clevis connections create cross-bracing. The legs are constructed of steel plates and lattice fastened with rivets. Several cellular and other communications antennas are located on the structure.

Challenges

- Perform survey of existing conditions on areas of the structure that have no built-in access or fall protection.
- Obtain measurements of tank height and diameter as well as overall height.
- Work safely in close proximity to cellular and other antennas.

Solutions

- VA used rope access to perform a hands-on inspection of each of the six tower legs. Tank diameter and height measurements were taken from the tank catwalk.
- VA documented notable and representative conditions using photographs hyperlinked to AutoCAD drawings using TPAS®, the Tablet PC Annotation System.
- VA utilized radio frequency (RF) monitors to ensure safe working conditions for technicians.

Structure owner

Village of Red Hook

In collaboration with

- Ryan Biggs | Clark Davis
- C.T. Male Associates
- Village of Red Hook

Photos by Vertical Access

