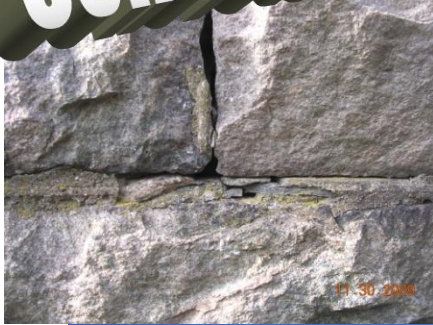


PROJECT CASE STUDY

Concrete Examples of Success



Client

Smoke Rise Tower
Wentworth Management

Market Served

Home Owners
Association

Project Description

Stone Tower Restoration
Ongoing Project

Project Size

\$135,000

Project History

In 2010, the Smoke Rise Home Owners Association, located in Kinnelon, New Jersey decided to restore the exterior of the Smoke Rise Tower on Kitty Ann Mountain. The Tower was originally constructed by Francis S. Kinney in 1904 to survey his 5000 acre estate, located at the highest point within Kinnelon, which is now a restricted residential community of approximately 450 homes. The Tower was also used to spot for enemy aircraft during World War II. After Morris Kinney died in 1945 the structure became neglected and eventually the iron staircase rusted beyond usability.

The Aquarius Solution

Working with the Board of Directors and Wentworth Management, Aquarius developed a restoration specification that addressed structural, visual and community concerns. The first step was to wrap the entire exterior structure with pipe staging so that all exterior surfaces of the facades could be accessed in order to perform masonry repairs. All failed mortar joints within the stone façade were repointed. Missing stones within the façade and turret were located at the main entrance and were reused during the restoration to reconstruct the original design. The interior steel staircase had been removed and replaced with a new OSHA compliant ladder to give access to the roof.

In addition, the roof structure was reconstructed with new concrete and the addition of a new membrane. Aquarius provided and installed a new roof access door to provide a water tight roof and allow for access to the rooftop for the maintenance of the emergency fire, police, first aid and Smoke Rise Security communication antennas.

