

BOULDERSCAPE RESTORES THE ROCK



QUIKRETE® Shotcrete gives Alcatraz Island a facelift.

By Chad Corley
of the Quikrete Companies.

During a challenging restoration project on the National Historic Landmark known as “The Rock,” Boulderscape, a premier design architect that specializes in shotcrete applications, used QUIKRETE® Shotcrete MS – Fiber Reinforced and QUIKRETE® Shotcrete MS to successfully repair and stabilize a failing slope on the 22-acre Alcatraz Island. The company also installed spe-

BOULDERSCAPE
continued from page 25

“meant everything had to be expedited starting with the delivery of material. Beyond the challenging schedule, the application process was full of danger. The nozzle men had to be hoisted more than 60 feet in lifts to spray apply the shotcrete before sculptors repelled down the cliff to shape the material. The end result was a structurally sound slope that matched the surrounding environment.”

Safety measures were a top priority to ensure safety of the eight-man crew. A Safety Fall Protection Plan was specially written for this project. Critical issues of the hazards were addressed, such as fall arrest and restraint methods and

cial planter pockets at the highest elevation to promote growth of vegetation.

In addition to facing dangerous application conditions, a condensed six-week shotcrete schedule was required to avoid disruptions to regular tour operations while considering the habitat and migration patterns of local seabirds. The timing was crucial for the San Juan Capistrano, California contractor, who had agreed to complete the work during winter months before the return of the gulls in February. Much of the work

bulk bags of QUIKRETE® Shotcrete MS were delivered to Alcatraz Island for the project. QUIKRETE® delivered 16 truckloads of material to Pier 50 in San Francisco before being shipped on two barges to Pier 33 on Alcatraz Island where it was offloaded at night by crane one-by-one before finally being transported to the jobsite on trailers pulled by four-wheel all-terrain vehicles. In all, a total of 810,000 pounds of materials had to be delivered to site.

In addition to the work performed by Boulderscape, AIS Construction was the drilling contractor. The project was overseen by the San Francisco office of Wiss Janney Elster Associates, along with T.L. Peterson, Inc., as general engineering

took place at night to avoid high winds that blew by day.

“Navigating a variety of unique factors made this a very fulfilling project for everyone,” said Steve Jimenez, senior vice president commercial sales for Boulderscape. “We couldn’t start until the indigenous birds migrated from the island in November and we had to complete our portion of the work before the birds returned in February, which

BOULDERSCAPE
continued on page 26

teristics. The QUIKRETE® Companies offers a full line of shotcrete products that can be applied through a wet or dry process to deliver high strength, high adhesion, low rebound and low sag in rehabilitating bridges, tunnels, parking garages, ramps, piers, dams and other concrete structures. QUIKRETE® shotcrete has been used on many unique and high-profile renovation and restoration projects including the Galveston Pleasure Pier in Texas, the Stanford Linear Accelerator in California, the Spokane River in Washington, and the Dennis Edward Tunnel in Oregon.

The QUIKRETE® Companies are leading manufacturers of packaged

maintenance for all climbing gear and machinery. Anchor points had to be determined and all wear areas needed to be covered and protected.

In one weekend, 131 3,000-pound bulk bags of QUIKRETE® Shotcrete MS - Fiber Reinforced and 126 3,000-pound

contractor.

QUIKRETE® Shotcrete MS - Fiber Reinforced is a single component Micro Silica enhanced repair and restoration material that achieves more than 9,000 PSI at 28 days, and features very low rebound and permeability charac-

teristics. QUIKRETE® Shotcrete MS - Fiber Reinforced is a single component Micro Silica enhanced repair and restoration material that achieves more than 9,000 PSI at 28 days, and features very low rebound and permeability characteristics. QUIKRETE® Shotcrete MS - Fiber Reinforced is a single component Micro Silica enhanced repair and restoration material that achieves more than 9,000 PSI at 28 days, and features very low rebound and permeability characteristics. For more information on QUIKRETE® and its products, visit quikrete.com, like it on Facebook and follow it on Twitter @QUIKRETE. CM

Photos courtesy Boulderscape.

