

GEOWEB®

EROSION & HARD-ARMOR PROTECTION

McCook Quarry Flood Reservoir

PROJECT TEAM

OWNER
METROPOLITAN WATER RECLAMATION
DISTRICT OF GREATER CHICAGO

ENGINEER
U.S. ARMY CORPS. OF ENGINEERS

CONTRACTOR
SCHWARTZ EXCAVATING INC.

**ON-SITE MFG REP &
MATERIAL SUPPLIER**
ERO-TEX



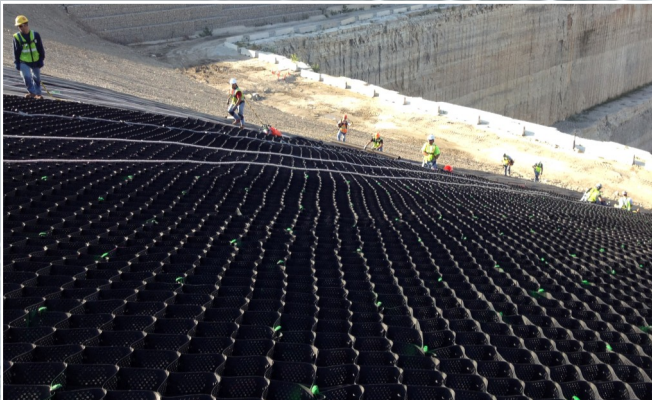
PERMANENT EMBANKMENT PROTECTION

PROJECT OVERVIEW

Permanent erosion protection was necessary for the McCook Quarry flood reservoir for the City of Chicago. The reservoir averages 300 ft deep and is approximately 1.75 miles in diameter. The 105 ft long slopes above the quarry face required a system that would be low maintenance and stable at 2H:1V. A major site specific challenge was installing an erosion control product on a steep, long slope with a 300 ft drop at the bottom. The product of choice was required to be installed by hand as machines are not safe on the slope.

GEOWEB® SLOPE PROTECTION SOLUTION

After evaluating several hard armor systems, the USACE selected Presto Geosystems' GEOWEB cellular confinement system with gravel and concrete infill. The GEOWEB system met the installation requirements in the restricted area along with minimal long-term maintenance.



Top view of the GEOWEB installed on the steep slopes at McCook Quarry.



Concrete being poured within the GEOWEB structure's cells.



An up-close look of aggregate within the GEOWEB confinement system.

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McCook Quarry BEFORE THE GEOWEB SYSTEM INSTALLATION



McCook Quarry DURING THE GEOWEB INSTALLATION PROCESS

GEOWEB® SLOPE PROTECTION

Per USACE requirements, a contractor is required to obtain material quotes from at least three manufacturers. But Jeff Russell from Schwartz Excavating wasn't about to compromise.

"We were dead set on using the Presto GEOWEB® cellular confinement system due to the patented ATRA keys, ATRA clips and the ability to use the GAD attachment with a Hilti air hammer. These features have drastically cut our installation costs down while giving us the highest performing finished product."

- Jeff Russell, Schwartz Excavating

- **GEOWEB** sections are quick and easy to connect with ATRA® keys. The keys are three times faster and three times stronger than stapling.
- The **GEOWEB** system with aggregate and concrete infill provides a flexible, hard-armored slope cover.



*"The **GEOWEB** system made sense on several fronts. It met installation requirements, requires virtually no maintenance and provides long term erosion protection of the slopes."* notes Brian Ericson, Ero-Tex, on-site manufacturer's field representative.



McCook Quarry INSTALLATION



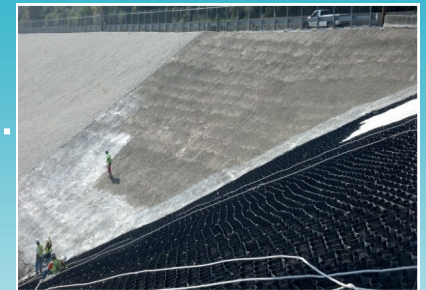
EROSION PROTECTION NECESSARY

The 2H:1V quarry slopes required erosion protection on its 105 foot long slopes.



GEOWEB® INSTALLATION

Installing aggregate in the GEOWEB structure on one of the slopes. No other formwork is required.



LONG TERM SLOPE PROTECTION

McCook Quarry's slopes are now protected with the 30-year proven GEOWEB® slope protection system.