



MICROPILES | UNDERPINNING

MUSEUM OF SCIENCE & INDUSTRY-U505 SUB RELO CHICAGO, ILLINOIS

The Museum of Science and Industry U-505 Submarine Relocation project required the construction of an underground reinforced concrete vault shoring (37 ft deep) and underpinning of the existing museum footings for construction of a new elevator and stairwell area.

Schnabel designed and installed the shoring and 21 micropiles approximately 65 ft long to support the existing structure. The micropiles consisted of a 9-5/8" diameter by 0.545-inch thick permanent casing extending into the stiff clay with a #20 bar extending the full length into the Chicago hardpan. To minimize interference with future building walls, the micropiles were drilled at a slight batter underneath the existing footing. Reinforced concrete micropile caps were placed under the existing footings to permanently support the building load.

Owner: Museum of Science and Industry
General Contractor: W.E. O'Neil Construction Company
Design/Build Specialty Contractor:
Schnabel Geotechnical Design & Construction



For more information on this project or any other of our projects please contact Schnabel at:

(703) 742-0020 or visit our website at www.schnabel.com