



SECANT PILES | TIEBACKS

UV DISINFECTION TREATMENT IMPROVEMENT SYRACUSE, NEW YORK

To facilitate construction of new buildings and associated piping for the Woodland Reservoir Ultraviolet Light Treatment Facility in Syracuse, New York, Schnabel designed and constructed an earth retention system utilizing overlapping steel reinforced concrete secant piles and tiebacks. Schnabel installed 600 lineal feet of secant pile wall with drilled depths of up to 63 feet within the existing reservoir embankment which has been in service since 1894. Tiebacks were installed and tested to laterally support the secant pile wall for excavation depths of up to 41 feet. Close coordination between Schnabel and the project General Contractor, C.O. Falter Construction Corporation was essential to maintaining the project schedule during secant pile and tieback installation.

A groundwater cutoff wall was specified by project engineer, CH2M Hill New York, Inc., for use within the existing reservoir embankment. A tieback, secant pile wall was selected by Schnabel as the preferred earth retention method due to its ability to cutoff groundwater and limit settlements and lateral movements of the existing reservoir embankment.

Schnabel's design-build approach provided the most economical and effective earth retention solution for allowing upgrades to the Woodland Reservoir facilities while maintaining and supporting the existing reservoir embankment whose operation has been critical to delivering water to the people of Syracuse for almost 120 years.

Owner: **Department of Water, City of Syracuse, New York**

General Contractor: **C.O. Falter Construction Corporation**

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



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