

Friday, October 13th

1:30pm

Nelson Auditorium

“Evolution of Drilled Shafts in the Northeast”

by

John Roma

Underpinning and Foundation Skanska

ABSTRACT

Prior to 1985, Driven Piles were the foundation of choice for heavy loads. With the introduction of the slurry caisson (now generally called drilled shafts) in 1985, a swing started to occur towards the use of drilled shafts, installed under slurry, to support the heavy loads of high-rise buildings. The presentation will cover the early testing of both soil and rock to establish design values in friction and end-bearing, and also to test the validity of the installation procedure itself. Shafts installed "in-the-dry" will be discussed, as well as those installed under slurry. Trends of shafts with greater diameters and ever-deepening rock sockets will be discussed, as well as the evolution of the equipment to install the shafts. Some \$ 150 million worth of drilled shafts were installed on the "Big Dig". Projects from the Big Dig will be presented, as well as other interesting and challenging projects throughout the Northeast.

John Roma is the New England Area Manager of Underpinning and Foundation Skanska which is a heavy foundation specialty contractor founded in 1897. John



has almost 50 years of experience in construction supervision and project management related to the deep foundation industry and has been involved with over \$300M worth of drilled shaft work. His experience includes work with: drilled shafts, deep soil mixing, earth retention systems, underpinning, and micro-piles. John uses his extensive knowledge of all aspects of deep foundations as well as his project

management experience to deliver the highest quality projects. He earned his BS degree in Civil Engineering from Northeastern, Master's degree in Geotechnical Engineering from MIT and MBA from Northeastern.