Foundation Remediation Using Micropiles and Low Mobility Grouting (LMG) at Sandy Cove Condominium, Barbados

Presented By: The DFI Travelling Lecturer, John R. Wolosick, P.E., D.GE, F.ASCE, Director of Engineering for Hayward Baker Inc., Atlanta, Georgia

This case study describes the grouting aspects of the foundation improvements carried out to remediate the settlement distress of a partially constructed new building located on the west coast of the Caribbean island of Barbados. The foundation remediation ultimately included the construction of a 280-foot-long sub-surface 'sea-wall', the installation of 174 micropiles (providing direct and indirect support to the building), and the grouting of voids and interconnected fissures/fractures in the weak, vuggy, uncemented coralline limestone strata underlying the building foundations.

An investigation of the cause(s) of the settlement, a flexible remediation design, and close monitoring of the drilling and grouting operations during construction were essential to the success of the project. In addition, contractor procurement and operation based on an ‘alliance’ concept resulted in an excellent consultant-contractor team relationship throughout and was key to the completion of the work within the tight schedule required by the owner.

John Wolosick is the director of engineering for the Atlanta office of Hayward Baker Inc. (HBI), where he is responsible for engineering design and business development support for HBI offices nationwide. With over 35 years of experience in geotechnical engineering and contracting, Wolosick specializes in slope stabilization, support of excavation, soil nailing, micro pile foundations including underpinning, and all types of grouting.

He holds Bachelor of Science and Master of Science degrees in civil engineering from the University of Illinois at Urbana-Champaign and is a registered professional engineer in 10 Southeastern and Mid-Atlantic states. As an active member of the industry, he is the author of more than 35 technical papers, and was the recipient of the 2008 ASCE/Geo-Institute Martin S. Kapp Foundation Engineering Award.

DATE: Thursday February 28, 2019

Place: Penn Brewery
800 Vinial St.
Pittsburgh, PA 15212

Time:
6:00 PM – 7:00PM Socializing and Cash Bar
7:00 PM – 8:00PM Dinner
8:00 PM – 9:00PM Presentation

Reservations received on or before 2/8/19:
$25 ASCE Pittsburgh Section Members / Government Employee
$30 Non-members
Free to Students

Reservations received from 2/9/19- 2/20/19:
$30 ASCE Pittsburgh Section Members / Government Employee
$35 Non-members
$10 Students

PLEASE RSVP by contacting Dr. Maria Jaime at mjaime@agesinc.com OR by registering online at http://www.asce-pgh.org/ Online registration is highly encouraged and payments can be made with credit card. Only cash or checks will be accepted at the door.