

Virginia Tech
Center for Geotechnical Practice and Research
Annual Lecture Program

Thursday, March 1, 2012

Alumni Assembly Hall
Inn at Virginia Tech and Skelton Conference Center
Blacksburg, Virginia

8:00-8:45

Kord Wissmann, Ph.D., P.E. *Geopier Foundation Co.*
“Rammed Aggregate Pier Foundations - from Soil Mechanics to Ground Improvement”

Design of ground improvement for the support of foundations, slabs, and retaining walls relies on an understanding of how the ground improvement interacts with the supported structures and surrounding matrix soil. This presentation will describe pier construction techniques and then show the results of field, laboratory, and numerical investigations used to develop design methods.

9:00-9:45

Matthew Meyer, P.E., *Langan Engineering and Environmental Services*
“The MET Development, Miami, Florida”

The MET project includes a 47-story office tower, a 44-story hotel tower, and a 41-story residential tower. This presentation will focus on design, installation, and full-scale load testing of augered-cast-in-place piles with capacities as high as 1200 tons. Documented settlements of the MET buildings will be presented, along with historical settlements of surrounding structures for comparison.

10:00-10:45

Thomas B. Ramsey, P.E., *Geosyntec Consultants*
“The Cherry Island Landfill, Wilmington, Delaware”

Expansion of the Cherry Island Landfill will provide for 20 million yd³ of disposal volume to allow the landfill to operate for another 24 years. The expansion project included an 8,000-ft long, 70-ft high mechanically stabilized earth berm over deep deposits of soft dredge spoils and natural sediments. This presentation will focus on the design and construction challenges, which included incorporation of PVDs, use of high-strength geotextiles, and accommodation of 14 ft of settlement and 5.5 ft of horizontal displacement.

Keynote Speaker

11:00-12:00

Nathan J. Snorteland, P.E., *Director of the US Army Corp of Engineers Risk Management Center*

“Managing Risks in a Diverse Water Resources Portfolio”

Historically, safety programs within the US Army Corps of Engineers have been de-centralized. Following an audit by the Association of State Dam and Safety Officials and the disaster in New Orleans following Hurricane Katrina, the USACE established the Risk Management Center (RMC) to manage infrastructure risk, support strategic planning, and lead consistent risk-informed decision making for dams and levees. So far, the RMC has saved the USACE approximately \$2 billion. This presentation describes the RMC mission and operation, quality throughout the USACE, and future challenges.

12:00

The lecturers, CGPR members, and Virginia Tech faculty and graduate students are invited to join us for lunch.

