April 2014 Joint ASCE/DVGI Dinner Meeting

SPEAKER: Joseph Thomas Coe, Jr., PhD
Assistant Professor, Temple University

TOPIC: PennDOT Research Project- NDT Evaluations for unknown Bridge Foundations

DATE: March 18, 2014

LOCATION: The Mansion at Villanova Conference Center, 601 County Line Road, Radnor, PA

TIME: 5:30 PM Social Hour, 6:30 PM Dinner and 7:15 PM Presentation

This is a Philadelphia Chapter ASCE event

Register online at www.asce-philly.org

Sticking with the format from the past four years, this meeting will be a Joint-Session with ASCE and feature breakout sessions after dinner. Newly-inducted ASCE Life Members will be featured and honored at this meeting as guests of the Section. Past-Presidents are also invited as guests of the Section in appreciation of their service and assistance.

DVGI Breakout:

It is estimated that design plans or as-built specifications are unavailable to determine foundation type, depth, and/or geometry for more than 40,000 bridges across United States. Bridge foundation geometry is an important input into a scour analysis, particularly the depth to the foundation bottom. These unknown foundation bridges (UFBs) therefore present a major risk to the public as it is often difficult to assess their vulnerability to scour-related failures. Moreover, foundations can be reused for bridge widening purposes, seismic retrofit operations, or reduced material costs in sustainable new construction projects. The uncertainty associated with UFBs prevents such practices. Several non-destructive testing (NDT) methods have therefore been developed to evaluate unknown foundations.

*One Professional Development Hour (PDH) will be provided for attendance at any of following the three sessions
Mr. von Rosenvinge presented his work on The Pearl Harbor Memorial Bridge over the Quinnipiac river (a/k/a Q Bridge) that is under construction in New Haven, Connecticut. GeoDesign is the geotechnical engineer for the project as subconsultant to URS, the prime engineer to ConnDOT. The URS/GeoDesign contract covers the main span and approach viaducts. This portion of the contract is about $450 million, part of an overall project including abutting highway and interchange contracts totaling about $1 billion. Ted presented the unique foundation aspects of the project including long precast friction piles for the West Viaduct with a design phase pile load test program and 8 foot diameter drilled shafts for the main span. Drilled shafts were carried to depths of over 200 feet over soil and then into rock.

Hailing from the Boston area and a resident of Connecticut for 30 years, Mr. von Rosenvinge has practiced geotechnical engineering since graduating from MIT with an M.S. in Civil Engineering, including a long career segments at GZA before founding GeoDesign in 1995. In addition to bridges, Ted has been geotechnical engineer for innovative projects involving deep soil compaction by blasting, the first slurry drilled shaft project in Boston for a high rise building (1985) and was part of an emergency response team to “triage” and fast track repair damaged heavily damage bridges and highway embankments during Tropical Storm Irene for Vermont Agency of Transportation.
Employment Opportunities

Kleinfelder has nearly 2,000 employee-owners with offices nationwide and abroad. With over 50 years of experience, Kleinfelder’s reputation for providing innovative, commonsense solutions to the most complex challenges has solidified its status as a trusted partner to its global clients and a leader in the industry.

Working as a team, Kleinfelder’s bright people will deliver the right solutions.

Kleinfelder’s Cranberry office (Pittsburgh, PA) is seeking a Senior Geotechnical Engineer to lead its geotechnical engineering discipline in our exciting Marcellus-Utica Shale Program. We are currently providing our clients with multi-disciplinary professional engineering services on the most challenging pipeline, well-pad, and facility development projects in the rapidly expanding Marcellus and Utica Shale plays. Kleinfelder’s Marcellus-Utica Program offers a wide range of challenging project work and a great opportunity to develop professionally.

The ideal candidate will have the following skills and experience:

- Pro-actively troubleshoot and problem-solve with practical, client-focused solutions
- Demonstrate technical expertise in geotechnics, slope stability, foundation design and earthwork
- Excellent verbal and written communication skills
- Lead a team of geotechnical engineers and professionally develop staff at all levels
- Interface with the civil design team to develop and value-engineer practical, fit-for-use grading plans
- Develop strategic pursuits and proposals
- Organize priorities and multi-task effectively
- Collaborate with Regional leadership and Project Managers to resource delivery effectively
- Manage projects from cradle-to-grave in a fast-paced and dynamic environment
- External focus to grow client relationships and develop business through the work

Possess a thirst to learn and achieve continuous improvement in a team environment

Requirements

- Candidates are required to have 12+ years of related experience.
- Proven experience in geotechnical design, slope stability, foundation design and earthwork
- Past experience in leading diverse project teams

Proven experience in business development opportunities and preparing proposals

Education: Bachelor’s degree in civil engineering, MS degree geotechnical engineering or equivalent required. Professional Engineering license required.

Kleinfelder offers an excellent compensation and benefits package, including: medical, dental, vision, life insurance, 401(k) plan, paid holidays, and employee-ownership. Kleinfelder is an Equal Opportunity Employer.
Employment Opportunities

Kleinfelder is seeking Geotechnical Engineers with 0-2 years’ experience to join us in our Exton, PA and Cranberry, PA offices.

Skills required for this position include:

- strong verbal and written communication skills,
- the ability to organize priorities and multi-task effectively, and
- a thirst to learn and achieve continuous improvement in a team environment.

A can-do attitude and problem-solving mindset is essential.

The candidate should have at least, experience in, or the ability to readily learn, all basic components of the delivery of a fundamental geotechnical investigation including:

- organization and performance of the field investigation,
- assignment of the appropriate lab testing,
- performance of the associated engineering analyses under the PE’s guidance,
- preparation of the geotechnical report, and
- ability to work with design teams to incorporate geotechnical aspects into site designs.

The candidate should also demonstrate experience with, or the ability to readily learn earthwork and foundation construction observation.

Experience with CAD is strongly desired. Experience with gINT, Lpile and SlopeW software is preferred.

A BS in Civil Engineering with EIT is required and MS in Geotechnical Engineering is preferred.

Some travel to project sites and other Kleinfelder offices is required. The Exton and Cranberry offices offer a wide range of challenging project work and a great opportunity to develop professionally.
Announcing New GSI Webinars

The Geosynthetic Institute (GSI) is hosting monthly webinars on the 2nd Wednesday of each month which started June 12, 2013.

The schedule is as follows:

GSI 1 – June 12, 2013 “MSE Wall Failure Data Base of 171 Cases”
GSI 2 – July 10, 2013 “MSE Wall Back Drainage Design”
GSI 3 – August 14, 2013 “MSE Wall Remediation for Walls with Excessive Deformation”
GSI 4 – September 11, 2013 “MSE Wall Field Inspection Practices”
GSI 5 – October 9, 2013 “Geosynthetics in Hydraulic Applications”
GSI 6 – November 13, 2013 “Geosynthetics in Heap Leach Mining”
GSI 7 – December 11, 2013 “Geosynthetics in Agriculture”
GSI 8 – January 8, 2014 “Geosynthetics in Private Development Applications”
GSI 9 – February 12, 2014 “Landfill Failures”
GSI 10 – March 12, 2014 “Landfill Bioreactors”
GSI 11 – April 9, 2014 “Landfill Expansions”
GSI 12 – May 14, 2014 “Landfill Final Covers”

Each webinar is for 90 minutes, from 11:30 AM until 1:00 PM (Eastern Time Zone). The presenter in all cases will be Dr. Robert Koerner, Director Emeritus of the Geosynthetic Institute. Each webinar carries 1.5 Professional Development Hours (PDH’s). Due to the fixed costs involved, each assess portal will require a $350 registration fee. Of course, as many participants as desired can participate. For details, additional information, and on-line registration please go to the following address:

www.geosynthetic-institute.org/webinars.htm
Earn PDHs at 2014-2015 DVGI Events

Upcoming Dates for 2014 Dinner Meetings are as follows:

- **April 10th**, Villanova Conference Center - ASCE joint Meeting - Dr. Joseph Coe on PA-DOT Research project - NDT evaluations for Bridge Foundations
- **May 20th**—Gardner Lecture—Ron Smith, Ph.D., P.E., Uncertainty in Geo-Engineering and Construction”

*One PDH will be awarded for most dinner meetings that you attend.*

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Looking for a Geotechnical Career Opportunity?

Have you considered a student internship or a co-op position? It’s a great way to “get your foot in the door” while gaining practical professional experience. Check the new geotechnical co-op and internship links on the G-I Student page at: [http://content.geoinstitute.org/student.html](http://content.geoinstitute.org/student.html).

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G-I Chapters and Local Geotechnical Groups

As a 21st Century professional organization, the G-I aims to collaborate with local, national, and international geo-professional organizations. To meet that goal, the G-I has developed a strategic plan for outreach to local geotechnical groups to assist them in becoming a Geo-Institute Chapter. Check out this great link to other G-I Chapters and local Geotech Groups across the country:

[http://content.geoinstitute.org/groups/index.html](http://content.geoinstitute.org/groups/index.html).

*The University of Delaware has a Student Chapter. Please contact the Chapter President, Lauren Lobo at email address llobo@udel.edu for more information. Congratulations to the GIUD!*  

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G-I Twitter Brings You Quick News Updates

Twitter is a social networking tool for posting very brief updates, or “tweets.” The G-I launched its Twitter feed in April 2009 to announce updates to its website and other relevant news items. Since then, over 150 updates have been posted and more than 144 persons have become registered G-I followers. Visit our Twitter feed at [http://twitter.com/GeoInstitute](http://twitter.com/GeoInstitute). You can check for updates or “follow” us using a Twitter account, an RSS reader, or one of the many other web applications that work with Twitter. Spread the word. Also check out the DVGI link at [www.linkedin.com](http://www.linkedin.com). Set up an account and keep up to date with business associates.
DVGI 1st Golf Outing

DVGI is organizing its first Golf Outing to be held in June. Please stay tuned for more details.

UPDATE: New DVGI Website

Over the last several months we have added some additional content to the DVGI web site located at www.dvgi.org. The web site now includes links to our corporate sponsors web pages, past newsletters, the 2013-2014 DVGI events calendar, industry related links and events, and most notably a form for online reservations to our monthly meetings.

HAVE DVGI PUBLISH YOUR ARTICLE

Do you have an interesting article on a project or individual in your organization that you would like to have published in the DVGI newsletter? Please submit your articles for consideration in an upcoming edition to Archie Filshill at archie_filshill@golder.com

DVGI Merchandise Available for Purchase

1 GB memory sticks ($12); coffee mugs ($8); and lapel pins with the DVGI logo ($5) are available for purchase. See Ara Mouradian if you are interested in purchasing any of these items.

ASCE/G-I Members:
Read past and present issues of Geo-Strata magazine online at www.asce.org