



**GEO-
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**Delaware Valley
Chapter**

DELAWARE VALLEY GEO-INSTITUTE

DVGI February 2019

Volume 19, Issue 2

February 2019 DVGI Dinner Meeting

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SPEAKER: Jonathan Bennett, PE, D.GE, Mid-Atlantic Regional Manager
Axiom Foundations, LLC

TOPIC: Micropiles: Introduction and Fundamentals

DATE: Tuesday, February 19th, 2019

LOCATION: Valley Forge Casino, Parkview Ballroom,
1160 First Avenue, King of Prussia, PA

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

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***Registration and Payment Online at www.dvgi.org**

ABSTRACT:

The presentation will explain what micropiles are, how they work, and what you can do with them. It will do that by answering these questions:

- What is a micropile ?
- What are some of the different kinds of micropiles ?
- What are some applications of micropiles ?
- How much do they cost ?
- Why use micropiles as opposed to something else ?
- How do you design a micropile ?
- How do you test a micropile ?

So come ready for an in-depth exploration of Micropiles and their applications!

ABOUT THE SPEAKER:

Jon Bennett has 25 years of design-build specialty experience focused primarily on geotechnical construction including deep foundations, ground anchors, anchored structures and ground improvement. He holds a Master's degree in Engineering and Technology Management from George Washington University, Master's and Bachelor's degrees in Civil Engineering from West Virginia University, and is a Licensed Professional Engineer in Virginia, West Virginia, Maryland and Pennsylvania. He was inducted into the ASCE Academy of Geo-Professionals in 2009. Jon is the immediate past Chairman of the DFI-ADSC Joint Micropile Committee and has been involved in Micropile industry development and training across the United States.

*One Professional Development Hour (PDH)
will be provided for this dinner meeting.*



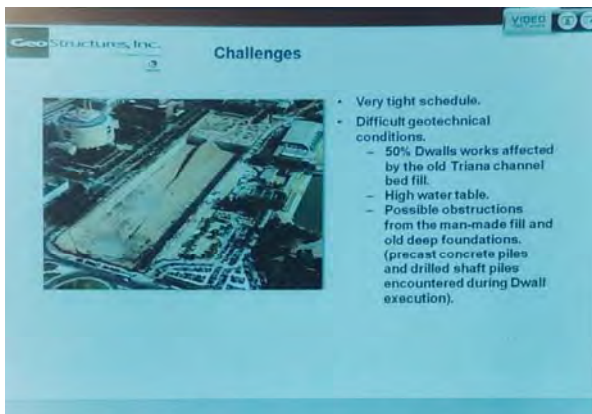
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January 2019 DVGI Dinner Meeting

The Cajasol Tower

Luis Gonzalez

New Products Implementation Manager, GeoStructures, Inc.



Slides from Luis González's Presentation
(Images courtesy of T. Loux)

The Cajasol Tower is the first skyscraper in the City of Seville, Spain. The Tower, an elliptic-shape structure with a height of 550 ft., was finalized in 2015 and is the seventh tallest building in Spain. The project included a shopping area and a four-level underground parking. Situated on the Island of Cartuja and built on the same location as the Decubrimientos Pavilion, one of the buildings of the Universal Exposition of Seville of 1992 (Expo '92), and over the Old Triana Channel Fill. Terratest was awarded a design build contract for support of excavation, dewatering system, concrete pile foundations (for the shopping area), and a 144 ft deep, 290,000 square foot, double elliptic diaphragm wall foundation for the tower. This presentation will concentrate on the structural and geotechnical aspects of the diaphragm wall utilized to support the tower and stabilize the below grade parking decks.



DVGI January Speaker Luis González
(Images courtesy of T. Loux)

ABOUT THE SPEAKER:

Luis González is a Civil Engineer holding a bachelor's degree from the Polytechnic University of Madrid. He began his career in Spain and later participated in different projects in Europe with the Terratest Group. After a five-year period in Brazil as Country Manager followed by two years in the Middle East area, he has recently moved in to the US as the New Products Implementation Manager for GeoStructures, concentrating on diaphragm walls and micro-tunneling.



ANNOUNCEMENTS

Upcoming Dates for 2019 Dinner Meetings and events are as follows:

- ◆ February 19th Dinner Meeting: Jon Bennett
- ◆ March 18th (Monday) Dinner Meeting (Student Night @ Villanova): TBD
- ◆ April 18th (Thursday) Joint ASCE Dinner Meeting: Rick Brinker, Pennoni

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

If you are interested in presenting at one our monthly meetings or have ideas about potential speakers, please get in touch with a DVGI board member.

DVGI

Call for Officers

DVGI will have an open position for an At-Large Advisor at the conclusion of the 2018-2019 DVGI Season. If you are interested in becoming more involved with our organization, please get in touch with a board member to learn more or to provide your bio for consideration.



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Geosynthetic Institute

Upcoming GSI Webinars for 2019
(1.5 PDH/each upon completion of exam)

11:30 AM—1:00 PM (Eastern Time)

Topics, Dates and Registration at www.geosynthetic-institute.org/webinar.htm

Cost: GSI Members \$200; Nonmembers \$250

Date	GSI No.	Title
February 20	W-2	MSE Wall Back Drainage Design
March 6	W-3	MSE Wall Remediation and Monitoring
March 20	W-4	MSE Wall Inspection

HAVE DVGI PUBLISH YOUR ARTICLE, ADVERTISEMENT, OR JOB POSTING

- 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?
- Would you like to get the word out about a job opening, new venture, etc. to our membership via the newsletter?

Please submit your articles or news items for consideration in the next edition of the newsletter or get in touch about our reasonably-priced advertising by contacting Theresa Loux (tloux@aeroaggregates.com).

DVGI Merchandise Available for Purchase

Coffee mugs (\$8) and lapel pins with the DVGI logo (\$5) are available for purchase. See Russ Preuss if you are interested in purchasing either of these items.

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



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EVENTS AND CONFERENCES



Geotechnical Symposium on Support of Excavation

Are you working on projects with support of excavation needs? Do you need continuing education credits? Join ASCE NCS GEC for our annual symposium. This year's focus is on temporary and permanent support of excavation. Check out the speaker line-up below and then register to secure your spot!

When:

Thursday, May 16, 2019
from 8:00 AM to 5:15 PM

Where:

Marriott Tysons Corner
8028 Leesburg Pike
Tysons Corner, VA 22182

8 Professional Development
Hours*

*New York approval pending

Registration Fee:
\$275/person

Fee includes continental
breakfast, lunch & parking.

Register today!

https://lnkd.in/eU_2Hcj

Building a 85 foot high wall to catch jets for Chuck Yeager Airport

Presented by: [Allen Cadden, PE](#); [Schnabel Engineering Associates](#)

Design and Construction of VDOT Midtown Tunnel

Presented by: Ketan H. Trivedi, PE; [Mueser Rutledge Consulting Engineers](#)

Design and Coordination Complexities at Apex

Presented by: [Sarah Martino, PE](#); [Clark Foundations](#)

Smithsonian National Zoo General Services Building & Retaining Wall

Presented by: [Keith R. Moser, PE](#); Geomo Enterprises, Inc.

Analysis of Predicted Capacity versus Load Test Results of Ground Anchors in Multi-Regional Geology

Presented by: [Eric Backlund, PE](#); [Kleinfelder](#)

Soil Mixing for Support of Excavation

Presented by: Dr. Michael Arnold; [Bauer Foundation Corp.](#)

Protection of Structures - A discussion on SOE design with Zone of Influence of Critical Infrastructure

Presented by: [Christopher H. Locussol, PE](#); [GEI Consultants, Inc.](#)

Challenges with Regulatory Reviews of SOE Documents

Presented by: [Morgan A. Eddy, PE](#), MSc; [Steele Foundation, LLC](#)

The use of the Observational Method in the construction of a 42 foot deep, internally braced 3 level sheet pile cofferdam in Norfolk, Virginia

Presented by: [Gunaratnum Gnana, PE](#); [D.W. Kozera, Inc.](#)

The Cajasol Tower

Presented by: Luis Gonzalez, PE; [GeoStructures, Inc.](#)

Earth pressure analysis from Confined Granular Fill

Presented by: [Mohab Sabry, PhD, PE](#); [Bechtel](#)

Deflection Based Design for the Capitol Crossing SOE

Presented by: [Harald Ludwig, PE](#); [Schnabel Foundation Co.](#)

History of Shoring in the DC area - 1960 to present

Presented by: [Ronald W. Steele, PE](#); [Steele Foundation, LLC](#)



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EVENTS AND CONFERENCES



Geo-Congress 2019

Philadelphia, Pennsylvania | March 24–27, 2019



**GEO-
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ASCE Metropolitan Section
Chapter



43rd ANNUAL MET SECTION GEOTECHNICAL SEMINAR

Seminar: May 9, 2019

<http://www.ascemetsection.org/tech-groups/geotechnical/home>



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