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**Delaware Valley
Chapter**

DELAWARE VALLEY GEO-INSTITUTE

DVGI January 2023

Volume 23 Issue 1

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January 2023 DVGI Dinner Meeting

SPEAKER: Michael Bennett, E.I.T.

TOPIC: The Johnstown Flood of 1889: A Case Study in Geotechnical History

DATE: Tuesday January 17, 2023 – 5:30 PM to 8:30 PM

WHERE: Valley Forge Casino, 1160 1st Ave, King of Prussia, PA 19406

COST: Cost for general admission \$55. One PDH will be given for verified attendance.

MEETING ABSTRACT:

The Johnstown Flood of 1889, the deadliest US dam failure ever, offers many lessons for geo-professionals. When the South Fork Dam was built in western Pennsylvania in the mid-19th century to facilitate transportation across the Commonwealth, its design and construction met the contemporary standard of care. However, decades later, a group of Pittsburgh tycoons hastily rehabilitated the dam to create an exclusive resort. While their dam repairs were shoddy, warnings of disaster went unheeded.

On May 31, 1889, following a torrential rainstorm, the dam failed, flooding the prosperous steel town of Johnstown and killing over 2,200 people. After the disaster, outrage over the disaster and calls for justice were widespread. Yet the connections the tycoons had in the Pennsylvania legislature, the courts, and the press insulated them from the legal and financial fallout of the flood. The tycoons' influence even compromised the ASCE investigation of the dam failure. Although society, the law, dam safety regulations, and engineering ethics have undergone many major positive changes since the disaster, the Johnstown Flood of 1889 stands as a stark reminder of the duties and responsibilities of civil engineers and particularly of geo-professionals.

ABOUT THE SPEAKERS:

Michael Bennett, E.I.T., works at American Geotechnical and Environmental Services, Inc. in King of Prussia, PA, performing geotechnical engineering in support of transportation projects. Prior to starting with A.G.E.S., Michael spent 1.5 years on the commercial side of Geotech. He earned a B.S. in Civil Engineering and a B.A. in History at Lafayette College in 2017 and earned his M.S. in Civil Engineering in the geotechnical program at Virginia Tech in 2019.

Please register online via link in e-mail by January 10 2023



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November 2022 DVGI Meeting

Speakers : Eli Brinker and Elisabetta Iannetti, EIT

Topic : Pennoni 2021-2022 Project of the Year Winner

“uCity Square Development”

MEETING ABSTRACT:

Pennoni has provided Geotechnical, Environmental, Construction Inspection, and Surveying Services for four new buildings on the 36th to 38th and Filbert Street blocks. The projects consist of the flagship uCity Square Life Sciences Building, the Powel Elementary Science and Leadership Academy (PSLAM), the Drexel Academic Tower (DAT), and 3700 Lancaster Avenue. All four buildings were under construction at the same time. The foundation systems for the buildings consisted of a combination of drilled shafts (commonly called caissons) and a mat foundation below the core of the building for the DAT and uCity square projects, while PSLAM and 3700 Lancaster were supported on aggregated piers and rigid inclusions, respectively.

The presentation outlined the design of the foundation systems and provided a summary of the geotechnical investigation, laboratory testing of soil and rock samples, engineering analysis, and observations made by the geotechnical consultant who was involved in the project throughout the investigation and construction process. The importance of keeping the geotechnical engineer of record involved throughout the investigation and construction was examined and discussed.



ABOUT THE SPEAKER:

The presentation was presented by Elisabetta Iannetti, EIT and Eli Brinker of Pennoni Associates.

Ms. Iannetti serves as an Associate Engineer in the Pennoni Geotechnical Group in Philadelphia. She received a BS in Civil Engineering from George Mason University in 2018 and is currently attending Drexel University getting her MS in Civil Engineering with a concentration in Geotechnical Engineering. Ms. Iannetti is affiliated with ASCE, PWC (Philadelphia), DFI, and ADSC.

Mr. Brinker is a Graduate Engineer in the Pennoni Geotechnical Group in Philadelphia. He received a BS in Civil Engineering from the University of Maine in 2019. Mr. Brinker is affiliated with ASCE, DFI.



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ANNOUNCEMENTS

****DVGI PROJECT OF THE YEAR****

4th Annual DVGI Geotechnical Project of the Year Competition

Submissions to be accepted through **May 1, 2023**

Project of the Year to be selected in May 2023

Projects to be featured in DVGI Newsletters!

Please submit applications to Theresa Loux at tloux@aeroaggregates.com

****DVGI GEOTECHNICAL ENGINEER OF THE YEAR****

2023 DVGI Geotechnical Engineer of the Year Nomination

Submissions to be accepted through **January 15, 2023**

Any questions and nomination materials may be directed to Bob Crawford (bobc@jjaconstruction.com)

DVGI's 2023 Scholarship and Student Night Presentation Applications

Wanted to provide a reminder that *DVGI's 2023 Scholarship and Student Night Presentation Applications* are open and will be **due February 1, 2023**. Please share these with deserving civil engineering or geoscience students you know for consideration by this year's DVGI scholarship selection committee.

Student scholarships will be awarded at this year's DVGI Student Night, scheduled for March 16, 2023.

Applications for downloading as well as additional information on scholarships and on DVGI's Student Night will be available at the www.dvgi.org website under the "Students/Scholarship" tab. Both the scholarship and student night presentation applications must be received by February 1, 2023 for consideration.



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2022 Landreth Steward of the Environment Award

Winner 2022: Theresa Andrejack Loux, Ph.D., P.E.,



Geosynthetic Institute

The Geosynthetics Institute (GSI) provide this award to recognize “distinguished engineering achievement related to the environment.” We are proud to announce our own board member at DVGI as the 2022 winner: Theresa Andrejack Loux, Ph.D., P.E.

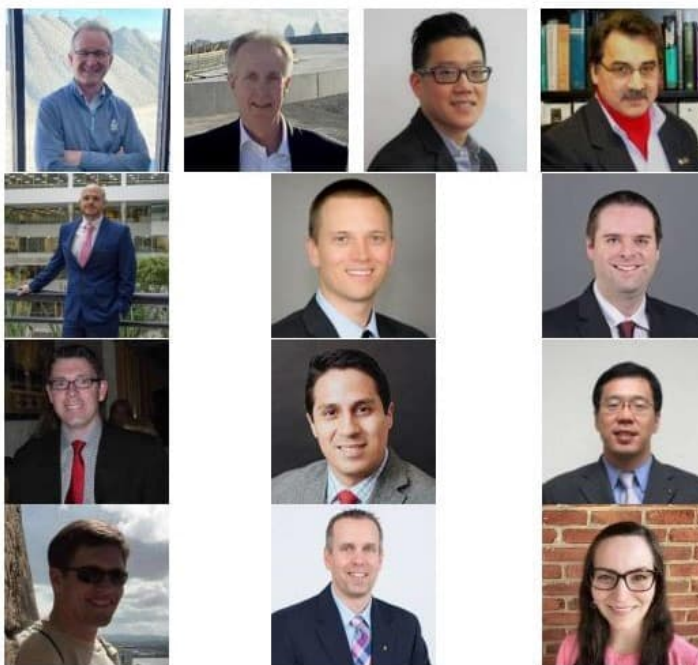
Congratulations, Theresa!



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Geosynthetic Institute

GSI RECORDED WEBINARS

- Topics, and Registration at www.geosynthetic-institute.org/webinar.htm
 - Each Webinar Carries 1.5 Professional Development Hours
Upon Completion of a 10-Question Multiple Choice Test
 - Each presentation lasts approximately 90 minutes

**ALL WEBINARS WILL BE RECORDED AND CAN BE PURCHASED FOR VIEWING AT
YOUR CONVENIENCE**

GSI/GMA Members \$200.00 USD per each Webinar
Non GSI/GMA Members \$250.00 USD per each Webinar

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



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Upcoming Dates for 2022-23 Dinner Meetings and events are as follows:

1/17/23 – Mike Bennett - The Johnstown Flood of 1889: A Case Study in
Exploring Geotechnical History

2/21/23 – with SEI DVGI Host – Steve Saye, Kiewit, Gardner Lecture

3/16/23 – Thursday - Student Night – Villanova – Jennifer Brandt (Pierce)

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

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

On Director's Cut

Geo-Institute Director Brad Keelor interviews G-I members about anything and everything. You might hear about their favorite geotechnical project, their favorite music, or their favorite pie. In Episode 18 of Season 3, Brad speaks with Theresa Andrejack Loux of Aero Aggregates!

See the video here: <https://youtu.be/Gn-aDAHfCXg>

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



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Mid-Atlantic East Student Symposium

The student leaders at Temple and Villanova Universities, the host schools for the upcoming Mid-Atlantic East Student Symposium, are currently seeking local volunteers to serve as judges in the various competitions they are hosting. The symposium will be held on April 21st, 22nd, & 23rd, 2023. Of the ASCE Society-Wide competitions, they are going to be hosting the Concrete Canoe Competition, the Innovation Contest, the Sustainable Solutions Competition, and the Student Steel Bridge Competition.

The students are currently in need of a head judge for each of these competitions. The role of the head judge includes some coordination of the specific competition in addition to the standard role of a judge, but the ASCE staff and the student leaders at Temple & Villanova will provide training, support, and the necessary resources to succeed in this position.

If interested in serving as a head judge for any of these competitions, please reach out to the students at midatlanticeastsymposium.2023@gmail.com.



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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 Neil Scafonas (neil.scafonas@aecom.com).

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