



**GEO-
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**Delaware Valley
Chapter**

DELAWARE VALLEY GEO-INSTITUTE

DVGI February 2023

Volume 23 Issue 2

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February 2023 DVGI-SEI Joint Dinner Meeting

SPEAKER: Steven R. Saye, P.E.

TOPIC: Gardner Lecture: Lessons learned from the Omaha Storz Expressway Project

DATE: Tuesday February 21, 2023 – 5:30 PM to 8:30 PM

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

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

MEETING ABSTRACT:

This presentation describes the geotechnical design, construction and long-term monitoring of the Storz Expressway embankment crossing the thick highly plastic clays in the Florence Lake oxbow on the Missouri River floodplain in Omaha, Nebraska. The project was designed by Woodward-Clyde Consultants in the late 1970's and early 1980's, construction was completed in 1989 and the settlement performance monitored up to the current time. Significant uncertainty existed in the performance of the prefabricated vertical drain and surcharge ground improvements and an instrumentation and monitoring program was implemented during construction to evaluate the stability during construction, verify the performance of the prefabricated vertical drains, and determine the timing for surcharge removal and pavement construction.

ABOUT THE SPEAKER:

Michael Steven has been a professional engineer for 43 years and with Kiewit Engineering for the last 17 years primarily working on design-build pursuits and projects in North America. Important efforts in the Eastern US include the Goethals Bridge, the Kosciuszko Bridge, the Tappan Zee Bridge, and the Midtown Tunnel in Norfolk, Virginia. Other large design build projects and pursuits include the A-30 Highway and Turcot Intersection in Montreal, Quebec, the Port Mann Bridge in Vancouver, BC, and the Southwest Calgary Ring Road in Calgary, Alberta. Steven was the responsible engineer for Woodward-Clyde Consultants developing for the pre-bid ground improvement designs concepts and the final designs associated with the reconstruction of Interstate 15 in Salt Lake City, Utah prior to the Salt Lake City Winter Olympics built by Kiewit and Others. This project received the ASCE Outstanding Civil Engineering Achievement Award. Steven has had the good fortune of being associated with the late Dr. Charles C. Ladd throughout his career, including the Storz Expressway project in Omaha and the Reconstruction of Interstate 15 in Salt Lake City.

Steven is a life member of ASCE and a past president of the Nebraska Section. Steven is a licensed Civil Engineer in Nebraska. Steven received a BS and MS from Iowa State University 2019.

**Please register online via QR Code by February
14, 2023:**





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January 2023 DVGI Meeting

Speaker : Michael Bennett, E.I.T.

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

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 SPEAKER:

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.



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****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'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:

- 2/23/23 – Steven Saye, P.E. - DVGI/SEI Gardner Lecture: Lessons learned from the Omaha Storz Expressway Project
- 3/16/23 – Thursday - Student Night – Villanova – Jennifer Brandt (Pierce)
- 4/13/23 – ASCE Joint Meeting - Speaker to be announced
- 5/16/23 – Dan Brown DFI

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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