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DELAWARE VALLEY
GEO-INSTITUTE



PRESENT:
**“Quality Programs for Rigid
Inclusions and Load Transfer
Platforms”**

SPEAKER:
Ken Kniss, P.E.
Keller – North America



WHERE:

GoToMeeting Lunchtime Webinar
Click [HERE](#) to register

WHEN:

Thursday, May 1, 2025
Lecture: 12:00 to 1:00pm

**1.0 Professional Development Hour
(PDH) is pending**

*Free for ASCE members and
non-members*

For more information, contact
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Geo-Institute website
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GeoInstitute website

LECTURE SUMMARY

In the early 2020s, the Deep Foundations Institute (DFI) and the American Society of Civil Engineers (ASCE) started to develop guidelines and standards related to ground improvement technologies, including Rigid Inclusion (RI) systems composed of RI elements and Load Transfer Platforms (LTPs). The analysis and design of RIs and LTPs are well covered by representatives from academia, consulting, and specialty contracting. However, quality assurance and quality control practices related to RIs and LTPs are not thoroughly addressed in the recent literature.

In Mr. Kniss’s experience, the primary cause of structure performance issues, additional construction costs, and schedule delays is inadequate quality assurance and quality control of RIs and LTPs during installation, rather than incorrect or ineffective design. A robust inspection and testing program can identify both construction defects and potential issues with the design which ultimately reduces the risk for all stakeholders.

During the lecture, Mr. Kniss will provide a brief introduction to RI systems and industry initiatives specific to RI systems. The lecture will focus on both quality assurance and quality control for RIs and LTPs including how the stakeholders change for each component of the system and suggestions for roles and responsibilities. Key quality control practices will also be discussed. Finally, a project summary is presented to demonstrate how a quality program was implemented for a RI project in North Philadelphia, PA.

The Speaker: Ken Kniss, PE, Engineering Manager for Keller’s Northeast Business Unit, has 17 years of experience in geotechnical construction with Hayward Baker/Keller-North America. Ken has worked throughout the east coast on a variety of public and private projects as a field engineer, project manager and design engineer with a focus on ground improvement projects including rigid inclusions, aggregate piers/stone columns, compaction grouting and soil mixing. He also leads a group of subject matter experts within Keller focused on RI projects across the globe. Ken has co-authored multiple papers on RI systems including DFI’s RI Task Force Forum Papers published in 2023 and actively participates in the ASCE Design of Foundation Standard initiative. Ken holds a Bachelor of Science in Civil Engineering from Bucknell University and a Master of Science in Civil Engineering from the University of Texas at Austin.

Upcoming ASCE Met Section Geo-Institute Chapter Events:

49th Annual Met Section Geotechnical Seminar, Fri. 5/16

Upcoming ASCE Delaware Valley Geo-Institute Chapter Events:

Monthly dinner meeting, VF Casino, Tues. 5/20

Golf Outing, Kimberton Golf Club, Phoenixville, PA, Thurs., 6/19