

# Ian J. Keating, GIT

## Senior Staff Geologist

Currently the director of the geotechnical engineering department of the Converse Consultants State College, Pennsylvania office, Mr. Keating oversees all aspects of the geotechnical and material testing and inspection projects which include project initiation/proposal-phase, client interaction, coordination and scheduling, technical report generation, field report review/distribution and overall project management. He specializes in geotechnical investigations which have included aspects such as sinkhole investigation and repair, clean fill due diligence, test pits, infiltration, SPT borings, rock probes, cone-penetrometer tests, electrical resistivity, thermal resistivity, seismic analyses, etc. He also manages the material testing and inspection which includes field testing of subgrades, subbase and cementitious materials and laboratory analyses of soils and cementitious materials which include items such as compression testing on concrete and rock cores, storage of cementitious specimens, soil classifications (USCS & USDA), maximum density/moisture relationships (proctors), Atterberg limits (soil plasticity index), etc.

Mr. Keating has maintained progressive experience in geotechnical services throughout his career. He joined the Converse team at the State College, Pennsylvania office where he oversees the aspects of the materials testing department. Mr. Keating has worked on numerous geotechnical projects, logging soil and obtaining representative samples in the field. He has assisted in the field and with project management by compiling geotechnical reports on pre-construction projects (planning-phase) and working with the Client to produce above-satisfactory levels of quality control during the construction-phase. Mr. Keating has been involved with oversight on construction-phase projects that have included aspects of micro-pile load testing, underpinning, cementitious materials testing, and backfill placement.

## Relevant Experience

### **Renovo Energy Center - Geotechnical Investigations - Geophysical Methods - Renovo, Pennsylvania**

Mr. Keating has been involved with the field subsurface investigations, laboratory testing, and geotechnical report composition. Field investigations and activities included the drilling and logging of 30+ SPT borings, test pits, thermal resistivity, electrical resistivity, downhole testing, undisturbed (Shelby tube) sampling, and concrete coring. Mr. Keating assisted in the laboratory analysis (USCS classifications, Atterberg limits, etc.) of the soil samples collected from the exploratory borings, produced all the drilling logs and cross-sections for the SPT borings and compiled all the data for the appendices to be included in the final geotechnical report.

#### EDUCATION

- B.S., Geology, Juniata College, 2015

#### REGISTRATIONS/CERTIFICATIONS

- Pennsylvania, Geologist-in-training license: GT000453
- ACI Grade 1 Concrete Technician
- PennDOT NECEPT Cert ID: 560368
- APNGA Portable Nuclear Gauge Safety & U.S. D.O.T. Hazmat Certification

#### AREAS OF EXPERTISE

- Geotechnical Report Preparation
- Materials Testing and Inspection
- Karst and Sinkhole Restoration
- Geophysical Survey Methods
- Geotechnical Engineering
- Laboratory Determination of Soil Properties
- Laboratory Cementitious Material Testing
- Clean Fill Designation and Due Diligence
- Expansive Shale Remediation
- Subsurface Logging
- Rock Probes
- Infiltration
- Test Pits



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### **East Halls Phase 1A - Materials Testing and Inspection - University Park Campus, Pennsylvania**

Mr. Keating assisted in the materials testing and inspections for the construction of a new, 96,000 square foot building and the 67,000 square foot renovation of the adjacent Stuart Hall and Findlay-Fisher Tunnels on The Pennsylvania State University's University Park Campus located in State College, Pennsylvania. Mr. Keating assisted in the oversight of the load testing for 50+ micro-piles, the associated cementitious material testing, subgrade bearing capacity verification and the backfill placement compaction testing.

### **Cenveo Building - Geotechnical Investigation - Expansive Shale Remediation - Altoona, Pennsylvania**

The project consisted of a geotechnical investigation which included four (4) test pits, chemical analysis of the subgrades, and the overall repair of a warehouse that had offset the existing concrete slab-on-grade because of the discovered expansive (pyritic) shale that was underlying the property. Mr. Keating was on-site as a part of the geotechnical investigation to fix the subgrades, which included the excavation of approximately 1,000 cubic yards of weathered, pyritic shale and overburden and the remaining, less weathered shale was cleaned thoroughly of debris and coated with Tremlastic-S roofing sealant to act as an oxygen barrier. Mr. Keating also inspected the subbase and flow-fill installation which was being placed to bring the excavations back up to adjacent grades. After the field work had completed, Mr. Keating assisted in compiling and submitting the geotechnical report to the Client.

### **Bloomsburg Flood Risk Management Expansion Project - Project Management - Bloomsburg, Pennsylvania**

This project consisted of the mass fill placement for a new, approximate, 4,300 linear feet levee and the new construction of associated concrete developments, substations and closures which is located adjacent to Bloomsburg, Pennsylvania. Mr. Keating was involved with the project management for this project which included the oversight, coordination and scheduling of field personnel, report review, billing/invoicing and distribution of documentation to the Client. Mr. Keating assisted in the project documentation review and relayed field results to provide clarity and coordination to the Client throughout the course of the project. Mr. Keating also worked closely with the laboratory to ensure the proper testing could be accomplished to assist the project schedule.

