

Anton J. Schneider, Jr., PE

Forensic Engineering Expertise

Origin & Cause

Determine the source and responsible party or element related to the failure of a structural or architectural element or water damage in a building. Examples of past work include failure of roofing and wall cladding causing moisture entry, humidity and condensation-related losses, and groundwater entry.

Inspection and Evaluation of Roofing Systems

This includes steep-sloped roofs and various types of roofing materials, including both common and unique roofing applications. Past work involved offering opinions and repairs related to installation deficiencies and storm-related damages, including hail and wind.

Forensic Geotechnical Engineering

Determine the source and cause of notable movements of buildings, pavements, and other structures. Examples of past work include determination of the presence of poor (soft or unsuitable) foundation/subgrade conditions of buildings and/or pavements, sinkhole/mine subsidence studies, subsidence and/or heaving of structures subjected to the effects of expansive soils, subsidence that develops as the result of collapsible soil deposits, and subsidence due to slope stability failure, as well as determination of active slope stability movements.

Civil Engineering

Geotechnical recommendations and design related to site grading, earth balance, soil stabilization, pavement design, drainage, hydrology, sanitary/storm sewer and water main systems installation, on-site sewage disposal systems and wells, and pumping stations.

Qualifications & Training

- Eleven years of experience in the engineering and construction industry through geotechnical engineering related to foundation inspection/investigation, landslide investigations, pavement distress evaluations, commercial/residential buildings, schools, bridges, light/heavy duty pavement, and agricultural facilities. Development of technical experiences during this period includes primary focuses on foundation (shallow, deep, intermediate) analysis/design, retaining wall design, slope stability analysis, pond/lagoon design, excavation support analysis, and pavement design.
- ASCE – Iowa Geotechnical Conference, April 2024
- CI & CEC Joint Conference, March 2024
- ASCE – GEO-Omaha 2023 Geotechnical Seminar, February 2023
- Introduction to Geogrid Technology, Testing & Validation, May 2022
- ASCE – Iowa Geotechnical Conference, March 2022
- Municipal Streets, November 2021
- ASCE – GEO-Omaha 2021 Geotechnical Seminar, February 2021
- Subgrade & Subbase: Iowa DOT Research and Next Steps, January 2021
- ASCE – Innovative Foundation Design Methods for Structures on Expansive Soils, August 2020
- Concrete Pavement Preservation Performance and Resources, June 2020
- Concrete Pavement Preservation Treatment Construction, June 2020
- Overview/Existing Pavement Evaluation and Concrete Overlay Selection, April 2020
- Geopier Ground Improvement for Solutions for Grain Bins, April 2020

- Geotechnical Stability of Waste Fills: Lessons Learned & Continuing Challenges, January 2020
- TenCate Mirafi Road Show Education on Geotextile Fabrics, October 2019
- Geofoam Applications for Transportation Infrastructure, May 2019
- ASCE – Iowa Geotechnical Conference, March 2019
- Designing with Ductile Iron Piles, March 2019
- Mitigating Construction Vibration Risks, December 2018
- ASCE – Iowa Geotechnical Conference, March 2018
- Design of Mechanically Stabilized Earth Walls with Low-Density Cellular Concrete, March 2018

Education

Bachelor of Science in Civil Engineering
Iowa State University, Ames, IA
December 2012

Licenses & Certifications

PE - Professional Engineer
Licensed by the State of Iowa - Number P24434

Employment History

Forensic Engineer
Nederveld, Inc.
2024 - Present

Duties include forensic engineering relating to building pathology, storm damage (wind, snow, hail), geotechnical, and water loss events, calculations, and plan of repair design.

Project Engineer, Geotechnical
Allender Butzke Engineers, Urbandale, IA
2016 - 2024

Duties included compiling proposals, coordinating site explorations, establishing and administering lab testing programs, analyzing test results, providing geotechnical design recommendations, and on-site consultation during the site exploration and construction phases.

Staff Engineer, Geotechnical/Construction Testing
TEAM Services, Des Moines, IA
2016

Duties included compiling proposals, coordinating site explorations, establishing and administering lab testing programs, analyzing test results, providing geotechnical design recommendations, and overseeing lab operations.

Assistant Engineer, Geotechnical/Construction Testing
Olsson Associates, Des Moines, IA
2013 - 2015

Duties included compiling proposals, coordinating site explorations, establishing and administering lab testing programs, analyzing test results, providing geotechnical design recommendations, on-site consultations during the construction phase, and overseeing lab operations.