
Robert W. Pearson, P.E. | Southeast Principal Engineer

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Professional Summary:

Mr. Robert (Bob) Pearson has over 3 decades of civil engineering design, project management, public utility infrastructure program management, construction management, and forensic engineering investigation experience for public, private, and institutional clients. Areas of engineering expertise include:

- Public and private (water, wastewater, stormwater) infrastructure systems
- Business Process Improvement
- Structural failures of building envelopes, components and systems
- Natural disaster (CAT) and storm-related assessments for hail, wind, fire, snow and flood damages
- Residential/commercial/industrial construction
- Site design
- Floor Covering Assessments

His forensic experience includes over 950 civil and structural forensic assignments related to residential, commercial, and industrial claims to determine cause of loss in steel, wood, concrete, and masonry structures; construction defects; water intrusion; building code compliance, geotechnical and foundation failures, and HVAC system failures.

Licenses and Certifications:

Professional Engineer (Additional states available upon application):

North Carolina, 027593

Georgia, 040516

South Carolina, 31700

New York, (Inactive) 071711

Virginia, 0402054589

West Virginia 025494

NCEES Record Holder

Licenses and Certifications (continued):

Residential Roof Inspector, Haag Engineering, 2015

Commercial Roof Inspector, Haag Engineering, 2015

Project Management Professional (CPMP), Central Piedmont Community College, 2013

Business Analyst Professional (CBAP), Central Piedmont Community College, 2013

Lean Enterprise Specialist, Central Piedmont Community College, 2012

OSHA/AHERA Asbestos O+M Certificate, Current

Luxury Vinyl, Hard Surface, and Carpet Inspector, *ifcii*, 2024

Honors and Awards

EFI/Sedgwick Pinnacle Award 2018

Unified Summit Award 2015, 2016, 2017

Project Experience

Ground Storage Tank Collapse

Charlotte, NC

Engineer-of-Record for in-service collapse of 1MM gallon non-potable water storage tank. Scope of work was to determine cause of loss. Process of elimination investigation indicated unauthorized breach of minimally secured SCADA system controls.

Public Water Utility Construction Defect

Burlington, VT

Technical Lead on City potable water Cured-in-Place Pipe (CIPP) rehabilitation project construction defect. Scope was to determine the cause of failure and to opine on the merits of contractor claims to recovery for mitigative open-cut parallel line installation.

Class A Warehouse Construction Claim

Durham, NC

In-progress construction claim in 2-15,000 sf Class A warehouses related to heaving of concrete floor slabs. Scope of work was to determine cause of loss, and recommend repair protocol. Geotech analysis determined presence of expansive soils and water intrusion due to improperly sloped rough grading. Recommendations included removal of recently placed concrete, removal

Project Experience (Continued):

of expansive soils, backfill with acceptable soil base, and replacement of concrete floor slabs. Project completed on-budget, on schedule.

Off-Campus Student Housing Floor Subsidence

Charlotte, NC

First Engineer on scene to investigate floor subsidence in five newly constructed (<3mos.) wood-frame high-end leased student apartment buildings. Similar conditions observed in other units and buildings necessitated displacement of all tenants. Detailed investigation determined cause of loss to be excessive point loads applied during construction.

Automotive Dealership Roof Collapse

Augusta, GA

Engineer-of-Record for automotive dealership expansion one week from obtaining Certificate of Occupancy, whose roof collapsed during a microburst rain storm. Scope of work was to determine cause of loss and recommend solutions. Investigation determined improper construction involving disconnected and plugged primary roof drain system and blocked secondary roof drains.

Subsidized Housing Condition Assessments

Nationwide

Project Manager for Condition Assessments for national subsidized housing complex property owner. Developed scope of work, field-work equipment, digital reporting platforms, reporting protocol and schedule for evaluation of 200 properties. Managed nationwide network of in-house Engineers to complete the scope on-budget, on-schedule.

32-Building Apartment Complex Roof Evaluation

Greensboro, NC

Wind and hail damage claimed on roofs of 32 3-story residential apartment buildings. Scope was to determine cause, extent of damage, and repairability given varying roof covering ages and varying direction of roof slope exposure. Project completed on-budget, on-schedule.

27-Building Condominium Complex Roof Evaluation

Myrtle Beach, SC

Wind damage claimed on roofs of 27 3-story multi-unit residential condominium buildings. Scope was to determine cause, extent of damage, and reparability of Hurricane Dorian-related damages, given varying roof covering ages and varying direction of roof slope exposure. Project completed on-budget, on schedule.

Expert Witness Testimony

Expert Witness for Defense on C&Y Faithful Group, Inc. d/b/a/ Sato Japanese Steak House vs. Auto-Owners Insurance, US District Court, Columbia Division, Civil Action 3:18-cv-2468-JFA, December 2019.

Pre-trial deposition on Darrell Brown d/b/a Darrell's Parts Company Plaintiff vs. Ohio Security Insurance Company Defendant, US District Court, Charleston Division, Civil Action No.: 2:17-cv-3060-RMG, November 28, 2018.

Pre-trial deposition on State Farm Fire and Casualty Company a/s/o Kenneth Green, Plaintiff vs. Galbreath and Sons Heating, Air Conditioning and Electrical Company, Inc., Defendants, State Court of Georgia, Bryan County Civil Action No.: STSV2018000021, November 27, 2018.

Professional Experience:

EFI Global, Inc, Southeast Engineering Principal, 2018-Present

EFI Global of NC, PC, President, 2024 - Present

EFI, (formerly) Unified Forensics, PLLC, Senior Forensic Consulting Engineer, 2017 – 2018

EFI, (formerly) Unified Forensics, PLLC, Forensic Consulting Engineer, 2013 – 2017

Vector Consulting, PLLC, Owner, Engineering Project Manager, 2011- 2013

US Infrastructure of Carolina, Inc., Engineering Project Manager, 2008-2011

Clark Patterson Lee, Engineering Principal, 2007

Charlotte Water, Capital Improvement Program Manager/ GIS Project Manager, 1999-2007

Stantec, Engineering Project Manager, 1997-1999

Pearson Consulting, Engineering Project Manager, 1995-1997

LJR Engineering, Project Engineer, 1989-1995

Way International, Engineering Coordinator, 1983-1989

Formal Education:

MBA, Forbes School of Business, University of Arizona Global Campus, November 2026
Completion

BS, Civil Engineering Technology, Virginia Tech, Blacksburg, VA, 1979

Specialized Education:

Liquid Applied Roofing, AIA Continuing Education, 2025

Building Envelope Systems, AIA Continuing Education, 2025

The PE as an Expert Witness, NSPE, 2025

Understanding Sanitary Wastewater Engineering, NSPE, 2025

Water Modelling Digital Twin, NSPE, 2025

Ethical Case Studies, Lessons in Disclosure, NSPE, 2024

Ethical Insights, Dealing with Conflicts, NSPE, 2024

LED Tunable Lighting, NSPE, 2024

Advanced Roof Certification, Vale Training, 2024

UAV Seabed Mapping, NSPE, 2024

Protecting Public Safety, NSPE, 2024

Defending the PE License, NSPE, 2024

Ethics in Claims Handling, Saenger Consulting, 2023

Infrastructure for EV Transition, NSPE, 2023

Sustainability through Strategic Planning, NSPE, 2022

Mentoring by Coaching, NSPE, 2022

St. Joseph Water Crisis, NSPE, 2022

Ethical Witness, NSPE, 2021

Mass Timber Construction, Design and Connections, Wood Products Council, 2020

Electric Transmission Future Trends, National Society of Professional Engineers (NSPE), 2020

Consequences of Industrial Exemptions to Engineered Facilities, NSPE, 2020

Application of Artificial Intelligence in Engineering, NSPE, 2020.

Automated Vehicles and Application of Engineering, NSPE, 2020

Use of Unmanned Aerial Vehicles in Engineering, NSPE, 2020

Green Design and Construction, Titan Continuing Education, 2019

Mold Remediation in Schools & Commercial Buildings, Titan Continuing Education, 2019
2010 ADA Part 1-Title II, Titan Continuing Education, 2018
Investigation and Repair of Fire-Damaged Framing, ASCE, 2018
Retaining Wall Design and Slope Stabilization, Half Moon Education, 2017
Nuclear Energy in the Future, NSPE, 2017
Public Investments and Regional Economic Health, NSPE, 2017

Specialized Education/Training (Continued):

Introduction to Wood, Wood Products Council, Charlotte, NC 2016
Residential Roof Inspector Certification Course, Haag Education, Columbus, OH 2016
Commercial Roof Inspector Certification Course, Haag Education, Columbus, OH 2016
Evolving Professional Risks, NSPE, 2015
Single-ply Roof Damage Assessments, Haag Education, 2015
Low-slope Roof Basics, Haag Education, 2015
Moisture Penetration in Building Envelopes, Case Institute, 2014
Composition Roof Damage Assessment, Haag Education, 2014
Contractual Indemnities, AIA, 2014
Project cost Control, NSPE, 2014
Building Information Management, NSPE, 2014
Effective Investigation and Testimony, IAAI, 2013
Residential Building Construction, IAAI, 2013
Vacant and Abandoned Building Hazards and Solutions, IAAI 2013
NFPA 921 and 1033 2014 Updates, IAAI 2014
Regulatory Reform in NC Affecting Engineering, Professional Engineers of NC (PENC), 2013
Hydraulic Fracturing in North Carolina, PENC, 2013
Project Planning and Control, PMI, 2013
Determining Business Requirements, PMI, 2013
Creating Functional Specifications, PMI, 2013
Structured Systems Testing, PMI, 2013
Microsoft Project, PMI, 2013
Cloud Technology- Transforming Municipalities, APWA, 2011
Energy Audit Preparation, APWA, 2011

Watershed Master Planning, APWA, 2011
Engineering Contracts, APWA, 2011
Stormwater and Ice Removal, APWA, 2011
Surge Model Calibration, AWWA, 2011
Capital Program and Operating Budgets, AWWA, 2011
Process and Economic Benefits, AWWA, 2011
Addressing Sanitary Sewer Overflows, AWWA, 2011
Drought in Catawba River Basin, AWWA, 2011
Asset Management Plans, AWWA, 2011
North Carolina Dept. Transportation (NCDOT) Bridge Program, NSPE, 2011

Affiliations:

Institute of Floor Covering Inspectors International (*ifcii*)
North American Laminate Flooring Association (NALFA)
American Water Works Association (AWWA)
American Public Works Association (APWA), past
National Society of Professional Engineers (NSPE)
Professional Engineers of North Carolina (PENC)
National Academy of Forensic Engineers (NAFE)

Courses Instructed/ Guest Lecturer:

"Ethics for the Forensic World," Saenger Consulting Group, 2026
"Structural Assessments of Roofs," Distinguished Insurance Underwriters, 2025
"Roof Damage Assessments," Saenger Consulting Group, 2024
"The Scientific Method," EFI Global Continuing Education Series, 2024
"Ethics for the Insurance Industry," Saenger Consulting Group, Inc. 2022, 2023, 2024, 2025
"Wind vs. Wave," Saenger Consulting Group, Inc., Lexington, KY 2024, 2025
"Construction Defects," Saenger Consulting Group, Inc. Charlotte, NC 2019
"Wind, Water and More", Natural Disaster Damage Assessment, Saenger Consulting Group, Inc. Charlotte, 2017, 2018 and 2019.



"Making Sense of Cracking Up," Types and Causes of Cracks in Structures, Saenger Consulting Group, Inc., July 2017, 2023, 2023, 2025, 2026.

"Lean Business Processes Score in Lean Times," American Water Works Association Annual Conference, Concord, NC, 2013.

"Lean Business Processes Score in Lean Times," American Public Works Association Annual Conference, Asheville, NC, 2012.

"Working Smarter by Mapping Your Business Processes," AWWA Finance and Management Workshop, Asheville, NC, 2008.

"GIS Implementation: Which Comes First, Data Conversion or Business Processes?" ESRI International Users Conventions, San Diego, CA, 2006.