

David J. Littlewood, P.E.

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Consulting Engineer in Civil Engineering, specializing in Civil Engineering, Construction, Materials Testing, Concrete Design and Evaluation, Walkway Surfaces, Building Code Compliance, ADA Compliance, OSHA, and Structural Concrete Evaluation. Extensive experience in Construction Management, Health and Safety, Asphalt and Concrete Pavement Evaluation, Sinkhole Evaluation and Remediation, Snow and Ice Removal/Treatment, Snow and Water Sports Design/Safety, Golf Course Safety & Management, Stormwater Management and Compliance, and Environmental Remediation.

PROFESSIONAL ENGINEER: Pennsylvania, Delaware, New Jersey

EDUCATION: Bachelor of Science Degree in Civil Engineering, Villanova University, 2000
Master of Science Degree in Civil Engineering, Villanova University, 2011

PROFESSIONAL BACKGROUND

2012-Present – Fleisher Forensics – Ambler, Pennsylvania:

Civil Engineer responsible for evaluating matters involving premises liability, walkway surfaces, construction practices and safety, construction materials, structural and geotechnical engineering evaluations including concrete performance; foundations; settlement; sinkholes; slope stability; retaining walls; river and stream engineering; stormwater management; dredging. Consulting in code compliance and standards involving construction testing and inspections of soil, foundations, reinforced concrete, structural steel, parking lots/asphalt, walkways, stairways, snow and ice removal/treatment, snow and water sports design/safety, ski area safety, fireproofing, waterproofing, and Exterior Insulation Finishing Systems (EIFS). Consulting in health and safety compliance with OSHA standards, construction and industrial safety, walkway surface safety, and evaluation of project specific health and safety plans. Plan and project document review; environmental remediation evaluations and site inspections. Evaluation of snow sports safety, boat safety and golf course/cart safety & course/fleet management.

2011-2012 – Delaware Valley Concrete Co., Inc. – Hatboro, Pennsylvania:

Director of Quality Control. Responsibilities included ASTM International and American Concrete Institute (ACI) code compliance, maintaining of Northeast Center of Excellence for Pavement Technology (NECEPT) and National Ready Mixed Concrete Association (NRMCA) standards and practices, monitoring quality and consistency of raw materials, plant and field control of product, managing of soil and concrete laboratories at six plants, PennDOT field inspections, investigations of performance and quality issues, stormwater compliance, and obtaining/maintaining PennDOT and DelDOT certifications and related industry certification. Performed optimization of concrete mix designs which involved proportioning of sand, aggregate, cementitious materials, pozzolans, water, and chemical admixtures to achieve the required design parameters. Technical lead for design and construction projects including the complete re-construction of a ready-mix concrete plant, and re-design and construction of stormwater management systems for three ready-mix concrete plants.

2009-2010 – Bureau Veritas, NA/Vertical V – Broomall, Pennsylvania:

Business Unit Leader responsible for engineering, design, and construction inspections of residential, commercial, and public works projects in Pennsylvania, New Jersey, and Delaware. Managed branch operations including oversight of technical staff, soil and concrete laboratory management, budget

preparation, marketing and sales planning. Served as Engineer of Record for construction inspections which included: soil, concrete, structural steel, parking lots/asphalt, walkways, steps, fireproofing, waterproofing, and Exterior Insulation Finishing Systems (EIFS). Code compliance including IBC, ICC, ADA, and/or local municipal codes. Provided technical review and final certification for inspection projects. Responsible for coordination with PennDOT officials for acceptance testing for roadway openings. Performed landslide investigation and report which included soil samples, friction interface analysis, comparative surveying, slide geometry analysis, and determination of additional unstable conditions.

2005-2009 – Arcadis, Inc. (formerly known as Blasland, Bouck, & Lee) – King of Prussia, Pennsylvania: Senior Civil Engineer and Engineering Group Leader of the King of Prussia office. Project work in 20 states included: geotechnical design support for the Hudson River Superfund remediation dredging project for General Electric which involved processing facility design, foundation design, sheeting and shoring design, dredge sequencing, river bank stabilization and fortification; dam closures which involved sheeting, hydrostatic gradient analysis, and construction sequencing; structural foundation design and analysis for large tank structures which required foundation alternatives analysis, deep foundation design, and soil structure improvement analysis and recommendations. Managed environmental remediation projects which involved construction management, contractor awarding, budget management, and ongoing testing and monitoring program through multiple offices. Work also included stream realignment project which required stormwater management plan, stream realignment plan preparation and design, permitting through Department of Environmental Protection (DEP), National Pollutant Discharge Elimination System (NPDES), and erosion and sediment control plan preparation. Oversaw health and safety for refueling station upgrades for Public Service Electric and Gas Company (PSE&G) in New Jersey. Responsible for quality assurance of site health and safety plan and OSHA compliance, specifically lock out/tag out compliance.

2001-2005 – Earth Engineering, Inc. – East Norriton, Pennsylvania:

Senior Project Manager responsible for coordination and management geotechnical investigation design projects. Project experience included coordination with subcontractors, which involved contract review, scheduling, contractor selection, invoice and payment, work specification, work site direction, health and safety oversight, tool box talks with subcontractors prior to and during work performance, and change order review and approval. Design work included commercial and residential foundation analysis and design, test boring and test pit investigations, PennDOT roadway design, PennDOT bridge foundation design (Park Avenue Bridge over Perkiomen Creek), sinkhole investigations and remediation, retaining wall design, percolation testing, deep foundation design, foundation alternatives analysis, soil structure improvement analysis and recommendations, and preparation of geotechnical reports. Performed structural settlement investigations of residential homes and commercial structures which involved taking photographs, measuring settlement depth, crack analysis, subsurface investigation and analysis, and report of findings.

2000-2001 – Advanced GeoServices, Corp. – West Chester, Pennsylvania:

Field Engineer responsible for geotechnical and environmental field work, construction inspections, and report preparation. Geotechnical and environmental investigation project work involved conceptual layout, surveying and field layout, plan review, subcontractor coordination and direction, soil sampling and visual classification, environmental sampling of soil and groundwater, boring/test pit logging, and decontamination of sampling equipment. Construction inspection tasks included foundation inspections, retaining wall inspections, bearing capacity verification, reinforcing steel inspection, concrete sampling and documentation, and construction safety. Performed design calculations and prepared graphics including slope stability analyses, bearing capacity analyses, foundation designs, cross sections and profiles for geotechnical reports.

1992-1998 - Philadelphia Country Club – Gladwyne, PA:

Caddie/Bag Room Assistant responsible for caddying/forecaddying, caddie training, golf cart storage and maintenance, golf course setup/breakdown, professional and amateur tournament setup/breakdown, outing setup/breakdown.

PROFESSIONAL ORGANIZATIONS

American Society for Testing and Materials, ASTM

- Committee C09 on Concrete and Concrete Aggregates
- Committee D18 on Soil and Rock
- Committee F13 on Pedestrian Walkway Safety and Footwear
- Committee F27 on Snow and Water Sports

American Society of Civil Engineers, ASCE

American Concrete Institute, ACI

National Ready Mixed Concrete Association, NRMCA

National Society of Professional Engineers, NSPE

Pennsylvania Society of Professional Engineers, PSPE

Northeast Center of Excellence for Pavement Technology, NECEPT

Pennsylvania Geo-Institute

National Ski Areas Association (NSAA)

CERTIFICATIONS

Certified XL Tribometrist

Concrete Technologist - Level 4, National Ready Mixed Concrete Association, NRMCA

Concrete Field Testing Technician - American Concrete Institute, ACI

Certified Aggregate Technician – Northeast Center of Excellence for Pavement Technology, NECEPT

Certified Ready Mix Concrete Plant Technician – PennDOT

Concrete Field Testing Technician - PennDOT/NECEPT

OSHA 40-Hour HAZWOPER Trained (1999-2001, 2005-2010)

Loss Prevention System (LPS) Trained (2005-2010)

Troxler Nuclear Density Gauge Trained

CONTINUING EDUCATION

Certified XL Tribometrist Certification Program, 2015

Winter Maintenance /A2 Course, PennDOT LSAT, 2012

Concrete Durability Course, National Ready Mix Concrete Association, 2012

Concrete Technical Short Course, National Ready Mix Concrete Association, 2011

Aggregate Technician Certification Course - Northeast Center of Excellence for Pavement Technology, 2011

Principles of Project Management, University of California-Los Angeles Extension, 2008

Interface Friction/Direct Shear Testing & Slope Stability Issues, TRI Environmental, Inc, 2006

Foundation Engineering, University of Wisconsin-Madison, 2006

Traffic Crash Investigation 1, Northwestern University Center for Public Safety, 2022

ARTICLES & PUBLICATIONS

Long-Term Field Performance of Pervious Concrete Pavement. Advances in Civil Engineering. Volume 2012. (2012)

PRESENTATIONS

Forensic Analysis of Concrete, DRI Personal Injury Practicum, Philadelphia, PA, 2017
Screening and Evaluating Cases through the Pandemic Lens, NJAJ, Virtual, 2021