
Shan Sivakumaran, P.E.
Senior Geotechnical Engineer

General Qualifications

Mr. Sivakumaran has accumulated more than 23 years of transportation, public infrastructure, commercial, and industrial projects experience involving geotechnical engineering, laboratory testing, and construction monitoring/materials testing. He has served as the Project Manager/Geotechnical Engineer for numerous geotechnical engineering projects involving Interstate Highway Widening, Highway Interchanges, Grade Separations, local Roadways and Intersections, Bridge Replacement and Rehabilitation, Bikeways, Culverts, Retaining Walls, Noise Barriers, Commercial and Industrial Buildings, Transit Centers, Parking lot and Garages, Wastewater and Water Treatment Plants, Storm, Sanitary, and Water main lines, Airport Terminal, Runways, and Taxiways. His geotechnical experiences include development and implementation of subsurface exploration and laboratory testing programs, evaluation of subsurface soil/rock conditions and calculate soil parameters, foundation analysis, bearing capacity analysis, slope stability analysis, settlement analysis, lateral earth pressure calculations, groundwater management, pavement design, earthwork and construction and monitoring, and writing detail technical reports. He is also responsible for the project technical cost preparation, budget, and quality assurance and quality control. Mr. Sivakumaran has provided constructions inspections for installing piles, drilled shafts, spread and strip footings, and granular foundation pads for bridges, subgrade proof rolling, mechanically stabilized earth walls, approach fill embankments, and storm and sanitary sewers. His experienced in laboratory testing of soils include Atterberg Limits, Gradation/Hydrometer Analysis, Standard and Modified Proctors Testing, CBR Testing, Permeability Testing, Tri-axial CU and UU Compression Testing, Unconfined Compressive Strength Testing, Direct Shear Testing, and One-Dimensional consolidation Testing and field testing of construction materials include aggregates, concrete and asphalt. He is also experienced in instrumentations which include installing and monitoring standing pipe and vibrating wire piezometers, inclinometers, settlement cells for slope failure and embankment projects.

Years with Pro Geotech: 4

Years with Other Firms: 20

Education:

University of Peradeniya/Sri Lanka
B.S. in Civil Engineering

Affiliations:

American Society of Civil Engineers
(ASCE)

Registrations/Certifications:

- 2000/Professional Engineer-Ohio
- Radiation Safety Trained for the use of Nuclear Density Gauges
- KTA-Tator Coatings Inspection Certification
- ODOT Level 2 Asphalt Quality Control Technician certification
- ACI Concrete Field Testing Technician – Grade 1
- 10 Hour Health and Safety Training & Confined Spaces Certification - per OSHA 29 CFR 1910.120

Continuing Education

- Geotechnical Consultant Workshop 2004 through 2012 – Office of Geotechnical Engineering
- Green Infrastructure Design and Construction Case Studies – CT Consultants' CPD Seminar
- Dynamic Foundation Testing Seminar and GRLWEAP Workshop – Pile Dynamics, Inc.
- American Association of State Highway Transportation Officials (AASHTO) LRFD Foundation Courses – Ohio Department of Transportation
- Earth Retaining Structures – Federal Highway Administration, National Highway Institute
- Analysis of Slope Stability by Dr. Robert Y. Liang, Ph. D., P.E. Professor of Civil Engineering, University of Akron
- New Development in Municipal Materials and Technology Courses (Environmental and Soils) - Ministry of Transportation of Ontario.
- Engineering Economics – University of Toronto, Ontario
- Manpower Planning and Labor Relations – University of Toronto, Ontario
- The Business organization – University of Toronto, Ontario
- Computers, Computing & Numerical Analysis – University of Toronto, Ontario
- Computer Programming 1 – Fortran – Ryerson, Toronto, Ontario

Experience

Geotechnical

Arcadis - Brainard Road Water Main - Subsurface Exploration, Cleveland, OH
DLZ - CUY-271 - Subsurface Exploration, Cleveland, OH
HNTB - Warrensville/Van Aken - Subsurface Exploration, Cuyahoga County, OH
R.W. Armstrong - MOT-70-11.04 - Subsurface Exploration, Montgomery County, OH
PE&A - Alum Creek Refuse - Subsurface Exploration, Columbus, OH
TranSystems - Ford Road Bridge - Subsurface Exploration, Lorain County, OH
Richland Engineering Ltd. - Prospect St. Bridge - Subsurface Exploration, Huron County, OH
CH2M Hill – Akron-Canton Regional Airport - Subsurface Exploration, Stark County, OH
Parsons Brinkerhoff - HAN-75-14.39 – Red Flag Summary, Findlay, OH
TranSystems - Stearns Road Grade Separation - Subsurface Exploration, Cuyahoga County, OH

Bowen & Associates - House of Corrections/Dog Kennel - Subsurface Exploration, Cleveland, OH
Jones Stuckey - MEDINA-Fenn Road Bridge - Subsurface Exploration, Medina, OH
DLZ - Shaker Heights Water Main - Subsurface Exploration, Shaker Heights, OH
Wade Trim - Lake to Lakes Bikepath- Subsurface Exploration, Cleveland, OH
DLZ - Cedar Ave. Reconstruction - Subsurface Exploration, Cleveland, OH
Osborn Engineering - Waterloo Road - Subsurface Exploration, Cleveland, OH
PE&A - Maine LOPE's - Subsurface Exploration, Maine, OH
E.L. Robinson - MOT-35-19.59 - Subsurface Exploration, Montgomery, OH
RW Armstrong - MOT-70-11.04 - Subsurface Exploration, Montgomery, OH
HNTB/Shannon & Wilson - I-90 Innerbelt - Subsurface Exploration, Cleveland, OH
Osborn Engineering - East Side Transit Center Canopy - Subsurface Exploration, Cleveland, OH
PE&A - Corporal Gordon Crag USARC - Subsurface Exploration, Brockton, MA
Arcadis - Sandusky Ave, Water Main - Subsurface Exploration, Cleveland, OH
Euthenics - Rockefeller Ave. Utility Bridge - Subsurface Exploration Cleveland, OH
PE&A - Lima Tank Plant - Subsurface Exploration, Lima, OH
Euthenics - West 74th ST. Bridge - Subsurface Exploration, Cleveland, OH
HNTB - Front St. Overpass - Subsurface Exploration, Berea, OH
HNTB - Mill St. Bridge - Subsurface Exploration, Canton, OH
McCormick Taylor-McIntosh Rd. Bridge/South Fork Licking Rd-Subsurface Exploration, Ashtabula, OH
PE&A - ADA-1.25 -0.52 Subsurface Exploration, Adams County, OH
REL - ASH-90-7.56 - Subsurface Exploration, Ashtabula, OH
DLZ - Keller to Water Tank - Subsurface Exploration, Brunswick, OH
Hull & Associates - GUE-22-2.96 Landslide - Subsurface Exploration, Guernsey County, OH
TranSystems - East 93rd St. Bridge - Subsurface Exploration, Cleveland, OH
Baker & Associates - CAK-RW 5/3 Supplemental SR - Subsurface Exploration, Akron, OH
KS Associates - LOR-57-16.17 - Subsurface Exploration, Lorain County, OH
GGI Inc. - ABS Lake Ave. Bridge - Subsurface Exploration, Ashtabula County, OH
Baker & Associates - Storm Sewer Installation - Subsurface Exploration, Summit County, OH
CT Consultants - MAH-626 Intersection Storm Sewer- Subsurface Exploration, Mahoning County, OH
Arcadis - Broadway Ave. Rehab - Subsurface Exploration, Cleveland, OH