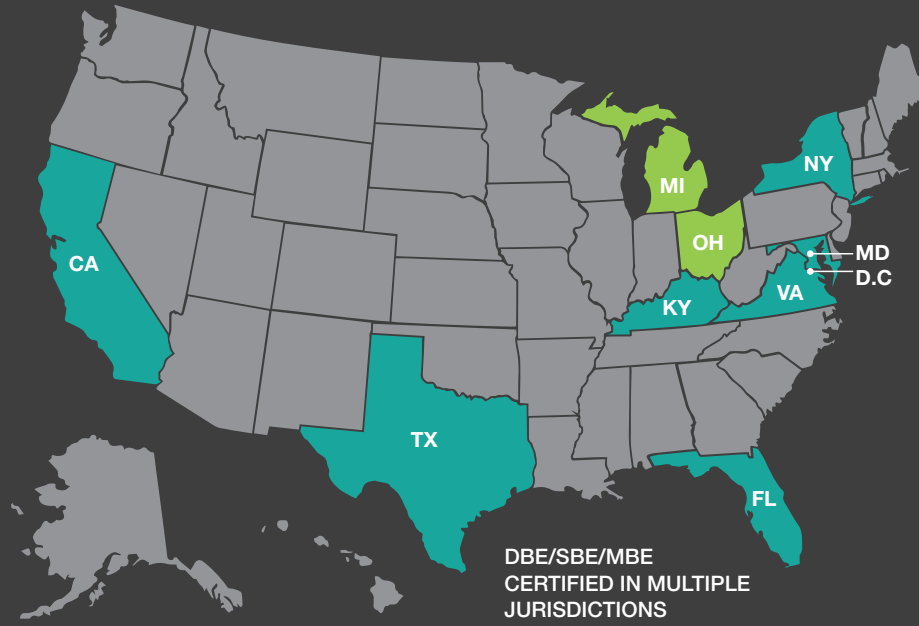


Delivering Optimal and Adaptive Engineering Solutions through Global Experience



WHERE WE ARE ACTIVE...

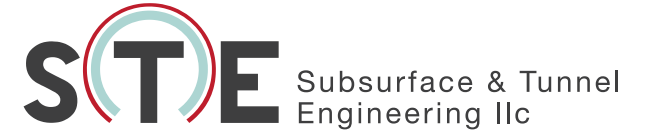


COMPANY REGISTRATION + PE LICENSE
PE LICENSE

Other state registration /PE License can be obtained, as necessary.



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PIONEERING THE ADVANCEMENT
OF UNDERGROUND CONSTRUCTION
ENGINEERING

Adaptive Engineering

Innovative Solutions

Achieve Project Objectives

STE specializes in the planning, design, and management of heavy civil tunnel and underground projects such as transportation, water, wastewater, and mining projects. We combine our past experience with advanced engineering techniques to provide optimum solutions for your project.

Our philosophy is to deliver integrated and adaptive engineering solutions to our clients to meet program and project objectives.

- 1 Specializing in the Heavy Civil and Underground Construction
- 2 Assisting clients achieve success across 5 continents for over 30 years
- 3 Experience coupled with cutting edge solutions to overcome complex challenges
- 4 STE Services – Innovative and Adaptive Solutions

What we do...

BY SECTOR

Client / Prime Consultant Services

- Geotechnical investigation & assessment
- Preparation of Geotechnical Data Report (GDR), and Baseline Report (GBR)
- Construction support/field supervision
- Preliminary & Alternative design
- Detailed/Final Design
- Contract Document Preparation (Design-Bid-Build, Design-Build, PPP)
- Contract procurement support
- Independent review
- Claim Support Services & Expert Witness

Contractor Services

- Value Engineering & Alternative Design
- Pre-bid design & support
- Geotechnical assessment
- Groundwater control
- Support of excavation
- Shaft lining design (temporary and final lining)
- Tunnel face pressure and advance rate analyses
- Tunnel temporary support design
- Rock tunnel excavation and support analysis/design
- Tunnel final lining design
- Precast segmental lining design
- Numerical modeling (geomechanical and structural analysis)
- Construction impact assessment and protection of existing structure
- Submittal preparation

Claim Services

- Claim support
- Forensic engineering
- Expert witness

Other Contractor Services

- Temporary Works | Formwork Design
- Shoring | Cofferdams
- Crane Stability | Lift & Rigging Plans
- Steel & Precast Concrete Erection

BY DISCIPLINE

Geotechnical Engineering

- Geotechnical analysis
- Groundwater control
- Ground improvement
- Preparation of Geotechnical Data Report (GDR) & Baseline Report (GBR)

Structural Engineering

- Tunnel concrete lining design
- Segmental lining design
- Steel liner plate lining design
- Pipe jacking design
- Shaft/excavation support
- Structural component design

Numerical Analysis

- Structural and Geomechanical numerical modeling (2D and 3D)

Tunnel Design

- Tunnel analysis & design
- Tunnel face pressure analysis
- NATM
- Tunnel Inspection/Rehabilitation
- Rock tunnel excavation sequence and initial support
- Rock tunnel advance rate

Support of Excavation

- Solider pile and lagging
- Deep soil mixing walls
- Cement bentonite walls
- Sheetpiling
- Diaphragm wall
- Rock shaft support system
- Groundwater control
- Shaft/Station box excavation sequence, initial and final lining design

Trenchless Technology

- Microtunneling, pilot tube, HDD, jack and bore
- Jacking forces estimation and backstop design
- Trenchless technique alternative analysis and recommendations

Protection of Existing Structures

- Condition Survey / Evaluation
- Construction impact assessment and analysis
- Mitigation recommendations and design

Construction Management

- Scheduling
- Submittal reviews
- Construction monitoring services
- Claim Services
- Claim support
- Forensic engineering
- Expert witness

TRANSPORTATION

WATER & WASTEWATER

MINING

Soft Ground & Rock Tunneling | NATM | Trenchless Technology | Shafts