



FIRM PROFILE

*CONSTRUCTION MATERIALS TESTING
& INSPECTION SERVICES*



Engineering Surveys & Services

DELIVERING YOUR VISION™

Construction-Support | Materials & Analytical Laboratory Services

ES&S technicians are full-time employees, allowing us to maintain consistently-trained, high-quality staff to respond efficiently to our clients' QA/QC testing needs. ES&S' Columbia materials laboratory and mobile materials lab are validated by the *U.S. Army Corps of Engineers* for numerous soils, concrete, mortar and aggregate test procedures. The firm also has certified technicians available for MoDOT projects and for a variety of special inspections required by the *International Building Code (IBC), Chapter 17*. Our support staff is familiar with MoDOT's *Local Public Agency (LPA)* guidelines and offer construction observation administration and oversight to meet FHWA and MoDOT requirements. These same services are applicable for all manner of public-sector infrastructure and vertical construction projects. ES&S maintains MoDOT-certified technicians for responsive construction observation and materials testing services on state and local transportation projects.

ES&S believes critical construction activities and field observations requiring added engineering judgment should be overseen by licensed professionals and have registered engineers available for observation of mass excavation, structural backfill, foundations of many types, and can provide a certified weld inspector for inspection and non-destructive testing of structural steel connections. Below is a list of common services provided by ES&S technicians and professional staff.

Materials Testing & Quality Assurance/Control

- ◆ Earthwork Observation & Testing
- ◆ Concrete, Grout & Mortar Testing/Mix Design Consulting
- ◆ Pavement & Subgrade Condition Assessment
- ◆ Reinforcing Steel Placement/Post-Tensioned Concrete Tendon Placement & Loading Documentation
- ◆ Foundation Construction Observation & Documentation (*Shallow Foundation, Drilled Shafts, Rammed Aggregate Piers, Driven & Auger Cast Piles, Micropiles*)
- ◆ Non-Destructive Testing
- ◆ Certified Welding Inspector for Structural Steel Connections
- ◆ Floor Flatness/Levelness Observation
- ◆ Fireproofing Adhesion, Cohesion, Applied Density, & Intumescent Paint



Construction Engineering/Quality Management

- ◆ Maintenance of the Construction Diary
- ◆ Quality Assurance/Quality Control Testing
- ◆ Progress Report Preparation
- ◆ Wage Rate Interviews/Assist with EEO Compliance
- ◆ Document Quantities of Work-In-Place for Pay Estimates
- ◆ Change Order Documentation
- ◆ Perform Semi-Final Observation/Coordinate Final Observation
- ◆ Submit Final Observation Report & Applicable Final Documentation



Analytical Laboratory

- ◆ Ground Water, Surface Water, Landfill Gas Monitoring & Analyses
- ◆ Water, Waste Water, & Sludge Sampling & Analyses (*autosampler available for composite samples*)
- ◆ Storm Water Quality Sampling & Analyses
- ◆ Industrial Pretreatment/Process Monitoring & Analyses
- ◆ Facilitation of WET Testing, RBCA Testing, etc.
- ◆ NPDES Permit Consulting
- ◆ Soil Permeability/Contamination Monitoring & Analyses
- ◆ Standards Compliance: EPA, APHA, AWWA, WEF, USBM, ASTM, AASHTO



ES&S Core Practices

ES&S operates three core service areas, integrated to provide planning and design of civil infrastructure and site development from concept through construction. Meet the leaders for each service group.



BEN ROSS, PE, PTOE
CIVIL ENGINEERING

- ES&S since 1995, managing the spectrum of civil infrastructure & facility site design projects
- Over one dozen civil engineers, most licensed in Missouri, some in other states
- Provide planning & design for transportation, environmental (water & waste water systems), storm water management, and site development



FRED CARROZ, PLS
LAND SURVEYING

- ES&S since 1996, managing traditional boundary & topographic surveying & utility mapping
- Overseeing data collection and precision surveys using 3-D scanning & UAS (drone) technologies
- Land acquisition assistance including title research & legal descriptions, easement displays, stakeholder outreach, and negotiation support.



JOSH LEHMEN, PE
**GEOTECHNICAL &
CONSTRUCTION-SUPPORT**

- ES&S since 2010, oversees the firm's geotechnical engineering and lab/field services
- Subsurface investigations
- Foundation & pavement design recommendations
- Certified lab & field materials testing technicians
- USACE-validated materials laboratory

Partnering with ES&S

Throughout the firm's history, ES&S has regularly partnered with A/E firms that provide engineering discipline and design support services (right) that are often required on our clients' projects. Partnering with firms that provide these services has allowed ES&S to actively seek relationships with disadvantaged business enterprise (DBE) firms to help our clients meet their internal utilization goals, and to strategically structure teams for efficient, successful project delivery, at times when there is no utilization goal.

Structural Engineering	MEP Engineering
Traffic Study/Signal Design	Enviro. Studies/NEPA
Landscape Architecture	Public Outreach

ES&S Value

- ♦ **One of the strongest and most stable engineering and design/construction support practices in mid-Missouri.** Our firm-wide staff is approximately fifty - a mix of registered professional engineers and surveyors; design drafting and field services technicians; and laboratory specialists.
- ♦ **Outstanding design-support staff that is integrated into the planning & design process throughout the life of a project.**
- ♦ **A commitment to the region, the State of Missouri, and our clients** developed over ES&S' nearly seven-decade history of providing professional services to the design and construction community!

ES&S has three locations in mid-Missouri, offering efficient and effective response to your needs for design, design-support, and construction-support services. We have onsite construction materials testing labs in Columbia, Jefferson City, and Sedalia; and a USACE-validated mobile testing lab.

COLUMBIA

1113 Fay Street
Columbia, MO 65201
573-449-2646

JEFFERSON CITY

802 El Dorado Drive
Jefferson City, MO 65101
573-636-3303

SEDALIA

1775 West Main Street
Sedalia, MO 65301
660-826-8618