



COVER SHEET

(This must accompany your firm's letter of interest and does not count in the page limit)

Firm's Full Legal
Name:

Surveying And Mapping, LLC

Firm Contact Name:

Chris Rutledge, PE

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Work Category:

- Roadway Design
- Trails & Sidewalks
- Construction Inspection
- Traffic Engineering & TEAP
- Structures
- Environmental
- Historic Preservation
- Multimodal Planning / Systems and Facilities Design
- Transportation Planning – **NEW CATEGORY**

GENERAL EXPERIENCE

Founded in 1994, **Surveying And Mapping, LLC (SAM)** has grown to become one of the largest providers of geospatial data solutions and construction services in the United States. Our construction engineering and inspection (CEI) team provides project management and inspection services for conventional design-bid-build (DBB) projects, as well as general engineering and owner verification services for design-build (DB) projects. In addition to CEI, SAM offers a full suite of services including land surveying, aerial mapping, subsurface utility engineering (SUE), utility coordination (UC), geographic information systems (GIS), and building information modeling (BIM).

Experience on similar and related work

SAM provides construction inspection services to departments of transportation (DOTs) throughout the country including Missouri, Texas, Florida, North Carolina, South Carolina, and Tennessee. We are proud to be on MoDOT's current on-call list and bring proven CEI experience including the I-55 Overlay and Route 25 Bridge Repair projects in the Southeast (SE) District.

Years of experience

SAM began providing CEI services in the transportation market in 2011 and has continued to support infrastructure projects over the past 14 years.

PAST PERFORMANCE

Similar projects for cities, counties, MPO's, MoDOT, and other entities

SAM's successful growth can be attributed to the continuous delivery of excellent quality and service to our clients. We provide construction services to DOTs throughout the country and have supported MoDOT by providing CEI, surveying, photogrammetry, SUE, and inspection services. The following is a sample of our direct CEI experience.

MoDOT I-55 - Cape Girardeau County: This 9.5 mile mill and fill project included milling 2 inches of existing asphalt, paving Superpave asphalt with the balanced mix design, shoulder repairs, bridge rehabilitation with curb block-outs, pavement striping, guardrail installation, and traffic control. SAM provided roadway inspection, asphalt plant inspection, and recordkeeping utilizing AASHTOware Project. Project documentation included daily work reports (DWRs), estimates, change orders, and final plans.

MoDOT MO 25 - Cape Girardeau County: SAM provided inspection services for this bridge rehabilitation project consisting of bridge deck repair, finger joint repairs, an epoxy polymer overlay, substructure repairs, and epoxy coating of bent caps. This work included specialized materials requiring strict adherence to specifications for finger joint and substructure repairs, as well as epoxy coatings. We also managed recordkeeping utilizing AW Project. Documentation included DWRs, estimates, and change orders.

City of Mission, TX - Taylor Road (Phase 1): SAM provided CEI services, schedule reviews, project management, materials testing, utility coordination, and railroad coordination for this project. The improvements included road widening, converting a two-lane roadway into a four-lane roadway with a center turn lane. The project included up-sizing of storm drainage, excavation, embankment, subgrade treatment, flex base, HMA paving, signs, striping, utility relocations for two different cities, and fiber/communication relocation.

Departments of Transportation (DOT) On-Call CEI Services: SAM is responsible for providing experienced, certified CEI inspectors to perform inspection duties, daily documentation of project activities, and materials testing for DOTs in Missouri, Florida, North Carolina, South Carolina, Tennessee, and Texas. We were also recently selected for the Kansas CEI on-call contract.

QUALIFICATIONS OF PERSONNEL



Chris Rutledge, PE
Project Director and
Quality Oversight

Chris has more than **30 years of MoDOT experience** including diverse planning, preliminary engineering, design, project management, and senior leadership ranging from rural areas to major interstate facilities. His areas of expertise include strategic planning, asset management, technical organizational leadership, innovation development, project budget and schedule management, team development, complex problem solving, safety oversight, client collaboration, and comprehensive communications.

Education: MBA, Southwest Baptist University; B.S., Civil Engineering, Missouri S&T

Professional License: Missouri PE No. 29727; additional licenses in AR, IL, IA, KS, KY, NE, and TN



Ed Hess, PE
Senior Project Manager (PM) and
Resident Engineer

Ed has **33 years of MoDOT experience** holding the positions of **District Bridge Engineer, District Construction Engineer, Operations Engineer, Area Engineer, Resident Engineer, and Construction Inspector**. Ed now serves as SAM's Senior Project Manager in Missouri where he is responsible for construction contract execution and administration, field inspection, quality control, and implementation of construction phase services for MoDOT projects. He is the team lead and project manager for SAM when performing bridge and infrastructure inspections. In addition to his extensive MoDOT experience, he is also working on the SR 400 Constructors DB team for GDOT to determine the Baseline Element Condition Rating for the 25 bridges within the project limits.

Education: Bachelor of Science, Civil Engineering, South Dakota School of Mines and Technology

Professional License: Missouri PE No. 27452, Illinois PE No. 062.077323



Caleb Bullock
Lead Inspector

Caleb will be SAM's construction inspector during this contract. He has Advanced Work Zone, OSHA 10, ACI Concrete Field, MoDOT Aggregate, MoDOT Bituminous, and MoDOT Superpave certifications. **Caleb has performed field inspection, asphalt plant inspection, field materials testing, and preconstruction data collection on I-55 in Cape Girardeau, MO 25 in Cape Girardeau, Route 400 in Georgia, and is currently assigned to MoDOT SE Various Counties, Various Routes Pavement Preventive Maintenance project.** He was a technical engineer in the Missouri Army National Guard for 8 years and completed 2 deployments. He provided support throughout Kuwait, Afghanistan, Jordan, and UAE by performing construction surveys; created architectural drawings for vertical and horizontal construction; and gained experience in soil, aggregate, and concrete testing.



Blythe Jowers
Recordkeeper and Contract
Compliance Manager

Blythe has 11 years of construction recordkeeping experience, including her time as TxDOT's maintenance contract specialist. **Blythe recently oversaw SAM's recordkeeping for MoDOT's I-55 project and MO 25 in Cape Girardeau.** In addition to her MoDOT experience, she managed recordkeeping on 11 of SAM's projects where her responsibilities include utilizing AASHTOWare and SiteManager to verify quantities of pay items, processing contractor pay estimates, clearing project deficiencies, and monitoring plan and major quantities on the estimates. She monitors contract compliance with state and federal requirements in LCP tracker, the diversity management systems (DMS), EPRS, AASHTOWare, and other programs.

FAMILIARITY/CAPABILITY

Familiarity and ability to deliver federal projects

SAM has extensive experience supporting various federally funded projects and has a thorough understanding of federal guidelines and the FHWA audit process. In addition, we are well-versed in MoDOT's Engineering Policy Guide, Standards, and Specifications, and overall project delivery process. We have the ability, personnel, and equipment to manage contract administration, materials testing, and field inspection.

SAM will implement our proven quality control process to capture, verify, and authorize documentation of the completed work and ensure contract compliance. Our procedures include:

- Perform pre-construction constructability reviews of the approved plans and specs to identify potential design, quantity, construction, or maintenance issues.
- Hold kickoff, pre-activity, and bi-weekly project update meetings to keep MoDOT informed on project status.
- Provide staffing and inspectors for new or modified structures or travel ways, including asphalt and concrete plant inspections.
- Provide reviews of shop drawings, design modifications, and noted changes in conditions.
- Ensure field inspectors are certified in Advanced Work Zone, OSHA 10, ACI Concrete Field, MoDOT Aggregate, MoDOT Bituminous, and MoDOT Superpave, per MoDOT's Technician Certification Program.
- Oversee recordkeeping with PMs who are former MoDOT employees and highly experienced with payroll tracking systems, ProjectWise, and other electronic recordkeeping methods.
- Enter inspection and test results daily and authorize DWRs.

- Hold weekly quantity reviews to prevent disputes during the monthly estimate cycle.
- Generate mid-month and preliminary estimates to verify the accuracy of installed quantities and resolve any quantity discrepancies.
- Provide timely responses to contractor submittals including RFIs, change orders, and schedule updates.

ACCESSIBILITY

Record of responsiveness

SAM has more than 100 full time team members in our St. Louis, Maryville, and Kansas City offices and over 1,600 employees throughout the United States.

Our team provides the requisite local knowledge of Missouri projects and highways while having the scalability to meet the requirements of any construction inspection project, from a small rural project to a large interstate project. Our regional staff includes PMs with over 60 years of combined MoDOT experience. If a project requires additional resources, SAM's national CEI team has over 150 full-time inspectors plus administrative personnel to support field or office staff.



THE SAM DIFFERENCE

Redefining how infrastructure is delivered by combining geospatial intelligence, engineering expertise, and advanced technology within a single, streamlined service model.



Surveying And Mapping, LLC (SAM) is the leading geospatial professional services firm, trusted to deliver innovative and customized solutions for projects of any scale. Our teams integrate advanced technologies, deep domain expertise, and flexible delivery models to support infrastructure and capital programs with speed, precision, and confidence.

SAM delivers a comprehensive suite of services for collecting, managing, and analyzing complex spatial data across diverse markets and infrastructure programs. Our capabilities include:

- Professional Land Surveying
- Aerial Mapping
- Subsurface Utility Engineering (SUE)
- Utility Coordination (UC)
- Construction Engineering and Inspection (CEI)
- Geographic Information Systems (GIS)
- Building Information Modeling (BIM)
- Digital Data Services

This broad range of expertise provides critical data, insight, and oversight needed to support successful project delivery from concept through completion.

With more than 31 years of experience and 51 offices nationwide, SAM has the expertise, processes, plans, tools, and technology to develop efficient and tailored solutions for projects of any scale.

MISSOURI RESOURCES	MIDWEST RESOURCES	NATIONWIDE RESOURCES
3 Offices	12 Offices	51 Offices
100+ Personnel	280+ Personnel	1,600+ Personnel
12 PLS	38 PLS	112 PLS
5 PEs	14 PEs	36 PEs
9 Survey Field Crews	30 Survey Field Crews	200+ Survey Field Crews
4 SUE Field Techs	34 SUE Field Techs	122 SUE Field Techs
30 CADD Techs	80 CADD Techs	474 CADD Techs

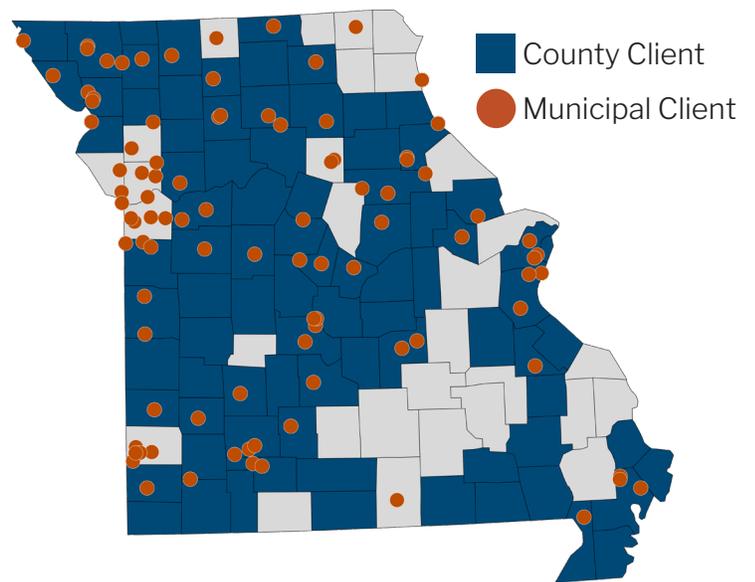
MODOT, MISSOURI, AND TRANSPORTATION EXPERIENCE

MoDOT Experience Since 2012

SAM is proud to have been selected by MoDOT for various technical and professional services for many projects, on-call assignments, and as subconsultants. As a national leader in geospatial services, SAM has supported MoDOT in addressing challenges across multiple service lines since 2012. This performance is driven by effective project management, industry-leading technology, and proven processes. In recent years, SAM has become one of the premier SUE firms in the St. Louis region and now provides CEI services for MoDOT. Historically, our work in LiDAR and surveying has helped address statewide photogrammetry needs for guardrail inventory, corridor planning, and topography and boundary surveying. SAM has also led and supported various GIS services for the Department and local public agencies. To help deliver these important services, SAM brings several former MoDOT employees that have diverse experience and expertise in the Department's program delivery and operations.

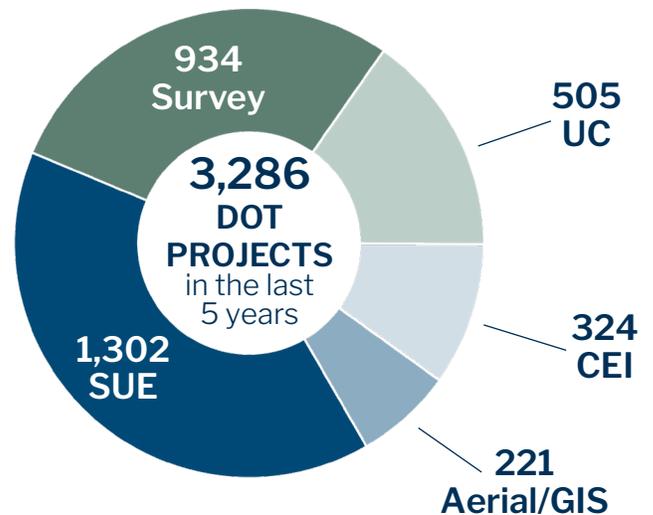
Missouri Experience

With more than 24 years of experience across Missouri, SAM's support for state organizations, counties, municipalities, and utility companies is unrivaled. This includes projects in both the private and public sectors, notably in utilities, transportation, and other government agencies. **In the last five years alone, SAM delivered more than 1,200 projects throughout Missouri.** SAM completed the largest GIS project in the State for the Missouri Department of Conservation (MDC) and has provided statewide survey and data acquisition services for MoDOT for more than a decade. With three Missouri offices and over 100 highly trained staff, SAM's local knowledge has led to consistent selections to deliver surveying, LiDAR, photogrammetry, GIS, SUE, UC, and CEI throughout the state for clients at every level.



Nationwide DOT Experience

Since our founding in 1994, SAM has supported DOT projects that require us to meet and uphold state and federal regulations. Successful work in the DOT sector is part of what allowed our firm to expand and grow into what we are today, a nationwide provider of geospatial and construction solutions. To date, SAM has worked with 24 DOTs, successfully providing aerial mapping, surveying, SUE, UC, CEI, GIS, and many other services.



LAND SURVEYING

SAM's industry-leading land surveying solutions capture data in even the most difficult-to-access locations. Our capabilities are supported by the industry's most advanced technology, including high-density terrestrial, mobile, and airborne LiDAR solutions, 3D scanners, and leading edge sensors that collect detailed data and as-visible imagery.

Our field crews mobilize with the best data collection and communication tools. Trimble robotic total stations and dual-frequency GPS survey equipment meet the needs for the most demanding surveying projects. Survey tablets with integrated laptops, data collection, navigation systems, and digital cameras provide real-time data exchange between field and office operations, increasing speed and productivity in data collection and management. In addition, we own and operate several different leading high-definition scanners (HDS) for ultra-high-speed terrestrial LiDAR scanning.



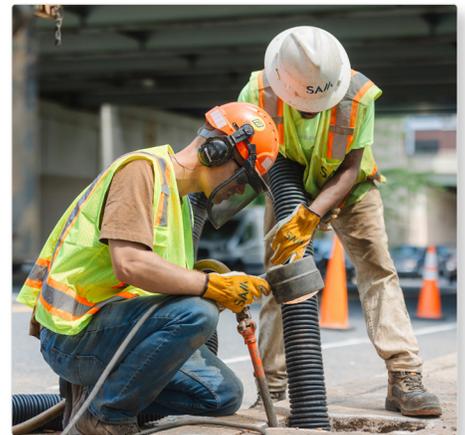
AERIAL MAPPING

SAM provides high-density, high-resolution remote sensing datasets that achieve survey grade accuracies utilized for engineering design and as-built documentation. Our tools include manned and unmanned aerial systems (UAS), fixed-wing and rotary aircraft, and mobile mapping for highway, off-road, or marine environments. All of our LiDAR and scanning platforms are tightly coupled with high-definition image sensors where data can be acquired in both the visible and non-visible electromagnetic spectrum. Multiple sensors can be configured for acquisition during a single flight or drive that yields high value, multi-purpose products in an efficient manner.



SUBSURFACE UTILITY ENGINEERING

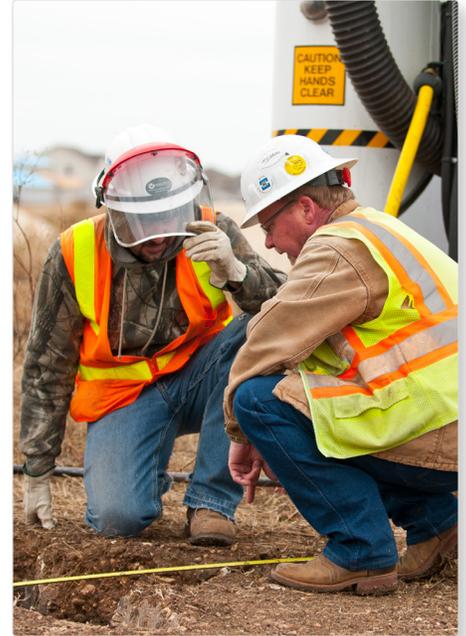
SAM's SUE team provides high-quality information on the existence and location of underground utilities using state-of-the-art geophysical sensing equipment to identify, designate, locate, and map existing and abandoned utility infrastructure. We recognize every site is different, so we bring a suite of equipment including magnetic, sonic, and acoustic technologies; ground penetrating radar; and radio frequency detection. SAM provides SUE Quality Levels "D" through "A" under the oversight and direction of an experienced registered Professional Engineer or Professional Land Surveyor in strict accordance with CI/ASCE 38-22.



UTILITY COORDINATION

At SAM, our comprehensive utility coordination services blend expert knowledge, cutting-edge tools, and extensive experience to solve complex utility challenges before they become roadblocks. By integrating early communication, strategic planning, and proactive conflict resolution, we streamline the utility coordination process, enabling projects to move forward efficiently and cost-effectively.

Our experienced team works hand-in-hand with utility owners, designers, contractors, and municipal agencies to navigate regulations and optimize project timelines. With a tailored approach incorporating advanced SUE services, detailed site inspections, and robust project tracking, we provide the essential data and insights to make informed decisions, reduce risk, and accelerate project delivery. For transportation and infrastructure projects, it's effective utility coordination that drives success — ensuring projects are completed on time, on budget, and with minimal disruption.



CONSTRUCTION ENGINEERING AND INSPECTION

Engineering inspection services are a critical link between design and execution. SAM provides material testing to validate as-built to engineering design criteria, with expertise in program management for transportation infrastructure. Our engineering team provides quality assurance to ensure compliance with state and federal requirements, providing our clients with the trusted confidence that their program is being executed on time, within budget, and with the highest quality engineering standards.

SAM has embedded advanced technology and modern scientific instruments, digital sensors, and software solutions to enhance our inspection services. These innovative tools enable engineers and program managers to rapidly obtain insights that enhance the outcomes we deliver to our clients. SAM swiftly mitigates stakeholder risks, enabling focused actions that align with the strategic objectives and positively impact the financial performance of infrastructure projects.



BRIDGE DECK SURVEYS

SAM's bridge inspection teams combine LiDAR, remote vehicles, and advanced sensor technologies to perform accurate, efficient, and safe evaluations of bridge deck conditions. We partner directly with DOTs to deliver comprehensive inspection data, even in the most difficult-to-access locations.

