Missouri's Local Program
for community development

COVER SHEET

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

Firm's Full Legal Name: Burns & McDonnell Engineering Company, Inc.

Firm Contact Name: Ronnie Williams

Contact Email Address: rwilliams@burnsmcd.com

Firm's Mailing Address: 9400 Ward Parkway, Kansas City, MO 64114

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

December 12, 2025

Ashley Buechter, PE
Local Program Administrator
Missouri Department of Transportation
1511 Missouri Blvd
Jefferson City, MO 65102

Re: LPA On-Call Professional Services – Structures

Dear Ms. Buechter:

Every assignment that a local public agency (LPA) undertakes is important, and regardless of its scope or complexity, it fulfills a commitment to improving mobility and safety throughout Missouri. As a trusted partner to numerous agencies over the years, Burns & McDonnell understands the variety of projects that are delivered by local agencies in Missouri and the many different professional services required to make them successful. We are pleased to express our interest in providing on-call services for structures to local public agencies seeking prequalified firms.

PREQUALIFICATION AND GENERAL EXPERIENCE OF FIRM

As a current MoDOT-prequalified bridge design consultant, Burns & McDonnell is proud to be the largest engineering firm in Missouri, employing more than 5,000 people within the state. With more than 12,000 employee-owners worldwide, we bring the depth and experience needed to support a wide range of projects and resource needs, including traditional bridge design, specialized studies in hydraulics, conceptual and planning-level studies, support in project delivery innovation, cost estimating, and augmentation of your existing staff.

Burns & McDonnell's team has provided bridge design services for LPAs throughout the state of Missouri for more than 30 years. We are well-versed in the requirements of the MoDOT Engineering Policy Guide at all project phases, including programming, preliminary design/estimating, final design, plan development and construction support. In addition, our bridge project managers are multi-discipline specialists, with the ability to creatively collaborate with roadway, traffic, and environmental staff to deliver practical, durable and economical solutions to your most challenging projects.

PAST PERFORMANCE

Our resume includes bridge design services for both on-system and off-system projects across the state for cities, counties, MPOs, MoDOT and private entities. The following projects demonstrate our ability to address a variety of potential project assignments:

Route MM over BNSF | On-Call | Southwest District—Burns & McDonnell designed a new bridge crossing over the BNSF as a part of this highway realignment expressway project serving via on-call as an extension of the in-house MoDOT SW district and bridge office design team. The proposed bridge is a four-span (115'-130'-130'-115') prestressed NU-girder bridge with multi-column bents founded on pile-supported footings and integral end bents. Features include an approach roadway with curve and width taper as well as median, pedestrian path, typical railroad fencing and light pole support on the bridge. A customized drain layout keeps drains away from the railroad and minimizes the necessary drainage system at one bent. Following the discovery of poor geotechnical conditions requiring ground improvement, the original 150-foot span bridge was updated based on feedback from MoDOT.

Three NW District Bridges | On-Call | Northwest District— This project included survey, geotech, 1D/2D hydraulic analyses and preliminary span layouts to develop innovative, cost-effective and durable solutions for three bridges. The team optimized a solution for each bridge site, resulting in three different structure types: prestressed panel, rolled steel I-beam (SD-CL) and NU-girder. A cost comparison between HPile and CIP pipe pile helped MoDOT select the preferred bridge friction pile foundations under drivability considerations. The superstructure selection for each bridge was chosen to minimize construction time and structure depth. The structures will be protected against scour and channel migration issues while maintaining existing freeboard

requirements. After one bridge was shut down to traffic due to dangerous conditions, the project team delivered the final plans early to accelerate the construction letting. Each bridge was originally considered part of the FARM bridge design-build project. One of these bridges was sent to Burns & McDonnell via on-call, after selection of the other two, to be completed in an efficient bundle.

Two Bridges over I-70 Saline County | Central District—Replacement of bridges carrying Lemon Trail Road and Nitrogen Avenue over I-70 was originally identified as part of the Improve I-70 study. After each bridge was impacted by a truck collision, MoDOT decided to accelerate both the design and construction of replacement bridges. Our team prepared conceptual, preliminary and final plans for the $5.3 million bridge package on an accelerated schedule. Key design elements included evaluating alternate structures to meet clearance requirements over I-70, developing median crossovers to facilitate MOT, and coordinating with MoDOT to accelerate the removal of the Lemon Trail bridge after it was struck a second time.

Long Creek Bridge (Route 86) over Table Rock Lake | Southwest District—The site is characterized by deep water, limited construction access and difficult geotechnical conditions, and the project's complexity demanded solutions beyond standard practice. A foundation system using deep-water drilled shafts was utilized to meet the challenge of construction in lake depths of up to 115 feet with no overburden to rock. The drilled shafts ranged in diameter from 5 feet to 11 feet, 6 inches and socketed into rock up to 26 feet. The complex roadway geometry required challenging bridge detailing solutions, including a 7-foot grade change and superelevation transitions. The project also delivers significant community benefits, most notably a new 10-foot shared-use path that enhances safety and creates new recreational opportunities. The Route 86 project, praised by MoDOT and the construction contractor for outstanding work and professionalism, is a testament to quality engineering collaboration. It fulfilled MoDOT's needs by replacing a structurally deficient bridge with a community-focused asset. The project demonstrates innovation, sustainability and complexity that define a landmark achievement in transportation engineering.

Repair of Barry Road Bridge over US-169 | On-Call | Kansas City District—Significant girder damage caused by an over-height vehicle led to a time-critical MoDOT need. Our team was engaged through an on-call contract to engineer a rapid solution, which included repair plans for steel heat straightening, removal and replacement of the damaged section, and a traffic control scheme for US-169 and Barry Road. After a second, more critical hit (shown at right), our team mobilized again, this time to provide emergency removal plans within 48 hours of the incident and quickly restore traffic on northbound US-169.

Girder damage on Barry Road Bridge.

QUALIFICATIONS OF PERSONNEL

We bring a deep bench of engineers at all experience levels. **Each on-call project will be staffed to maximize efficiency**—our mid–level engineers will manage routine bridge replacements and rehabilitations, and our most experienced professionals will be consulted only on complex or unique tasks.

These key personnel are available to meet LPA on-call bridge design needs:

Julie Sarson, PE—Julie has provided bridge design experience on a variety of MoDOT projects in her 30+ year career, including in her role as owner's engineer on complex design-build projects. Recent MoDOT on-call work includes the development of unique solutions for the Barry Road Bridge repairs and the Bond Bridge cover plate repairs. Julie also manages our Bridge Department and provides quality oversight on bridge span layouts, structure type studies and structural designs.

Travis Rapp, PE—Travis has 20 years of experience in MoDOT bridge projects. He has provided oversight and technical experience for complex structures, including Route 86 over Table Rock. His attention to detail and cohesion throughout all project documents confirms that nothing is overlooked going into construction. His experience performing bridge inspections, structural design and detailing, and project management has been vital to the success of his projects.

Kevin Heffern, PE, SE—Kevin has 23 years of experience specializing in project design, project management, structural investigations, retrofit and rehabilitation, and plan/specification production. Kevin's recent assignments with MoDOT include managing the fast-track replacement of two bridges over I-70 in Saline County and the bridge replacement and interchange improvements on Big Bend Road over I-44. His project experience includes major river crossings, street and road bridges, rail bridges and pedestrian bridges on bike trails.

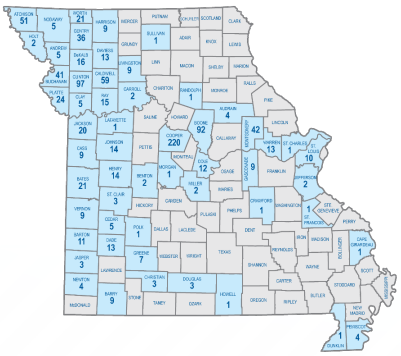
Thomas Greer, PE, CFM—With over 12 years of experience, Tom has held significant roles in the conceptual, preliminary, and final design of more than 30 MoDOT bridge replacements, including the recent project manager for the Route MM over BNSF bridge design in the Southwest District and three bridges in the Northwest District. Tom is committed to quality, innovation, and constructability. He is proficient at both stream crossing and grade separation projects. Tom performs 1D & 2D hydraulic analyses and floodplain permitting.

Caleb Mitchell, PE, SE—Caleb has eight years of experience in preliminary and final bridge design projects, ranging from single-span local bridge projects to major river crossings in Missouri, including every MoDOT project listed above in our Past Performance. He has served as a critical team member and task lead on nearly every MoDOT project in the last five years. Caleb is also an NBIS-certified bridge inspection team leader and a MoDOT-certified technician for concrete field testing.

FAMILIARITY/CAPABILITY

Our team is highly familiar with federal compliance and understands the requirements for successfully delivering federally funded projects. Through our extensive experience with major river bridge projects, we have established a strong partnership with MoDOT, the FHWA, and other regulatory agencies, enabling us to deliver the NEPA process, environmental mitigation requirements and permitting applications effectively.

The LPAs across Missouri are extremely varied, from rural counties with small populations and simple needs to large metropolitan areas with complex needs and requirements. The ability to understand and determine a structure type that will meet a client's needs, criteria and budget can be as much an art as a science. The structure type and size are affected by multiple factors, including right-of-way acquisition, environmental constraints, material costs and availability. Current rolling periods of steel girders or the size of prestressed concrete girders may impact a structure type as much as the need to keep a bent out of a channel or maintain clearances to various obstacles and cultural resource sites.



Our ability to provide design services for a wide variety of projects with LPAs and MoDOT Districts is illustrated by the map at right, which represents our experience throughout the state of Missouri. Nearly a third of these projects involved the use of BRO, FEMA or CDBG funds or were completed for Soft Match credits.

ACCESSIBILITY & COMMITMENT TO LOCAL PUBLIC AGENCIES

Burns & McDonnell is committed to providing local public agencies with experienced professionals who bring a strong history of service to our clients, knowledge of both federal and state requirements, and the range of skills needed to make each project successful. We look forward to building on our long-standing relationships by providing on-call services for structures to LPAs across Missouri.

We look forward to building on our long-standing relationship with LPAs by continuing to provide on-call bridge design services to your staff over the next three years and beyond.

Sincerely,

Agnes Otto, LEED AP
Transportation Director
816-276-1502 | aaotto@burnsmcd.com

Julie Sarson, PE
Bridge Department Manager
816-276-1593 | jsarson@burnsmcd.com

BURNS McDONNELL

2025

Global Profile

At Burns & McDonnell, our engineers, architects, construction professionals, scientists, and consultants do more than simply plan, design and construct. With a mission unchanged since 1898 — make our clients successful — our team partners with you to take on the toughest challenges, constantly working to make the world an even more amazing place.

The Burns & McDonnell Difference

True partnerships lead to successful projects. At Burns & McDonnell, we dedicate experienced and innovative leaders to your work, beyond the specific needs of a particular job. We build long-term relationships as our professionals become valued extensions of your own teams.

History

We've grown since two Stanford University graduates set out for the American Midwest, earned 13 cents in their first three years and designed a water and energy plant for a small town in Kansas.

Our firm continues building strength from that legacy born in 1898. Clinton S. Burns and Robert E. McDonnell set up in Kansas City, Missouri, where they could reach the most communities needing water and energy within a day's travel by train. Their enterprise soon branched into transportation, energy transmission, and military and federal projects. Soon came experience in architecture, aviation, technology, environmental services, manufacturing and process design. Today we're a $7.4 billion firm with offices worldwide, and our first client — Iola, Kansas — remains a repeat and ongoing partner.

Community

As employee-owners, we embrace our responsibility to give back to our communities. We nourish the communities where we live and work to become healthy and strong. We share our collective passion by giving financially and investing our time and talents. From fundraising walks and community cleanups to educational outreach and one-on-one mentoring — especially when it comes to sharing our passion for STEM projects — our employee-owners work to make our communities successful.

Culture

Burns & McDonnell is 100% employee-owned, and that promotes the integrated teamwork that generates success. As owners ourselves, we understand what your project means to you, and we are willing to do whatever it takes to deliver what you need, when you need it and beyond.

SERVICES

- 1898 & Co.: Business & Technology Consulting
- Architecture
- Commissioning
- Construction
- Engineering
- Operations & Maintenance
- Program Management
- Project Management Office (PMO)

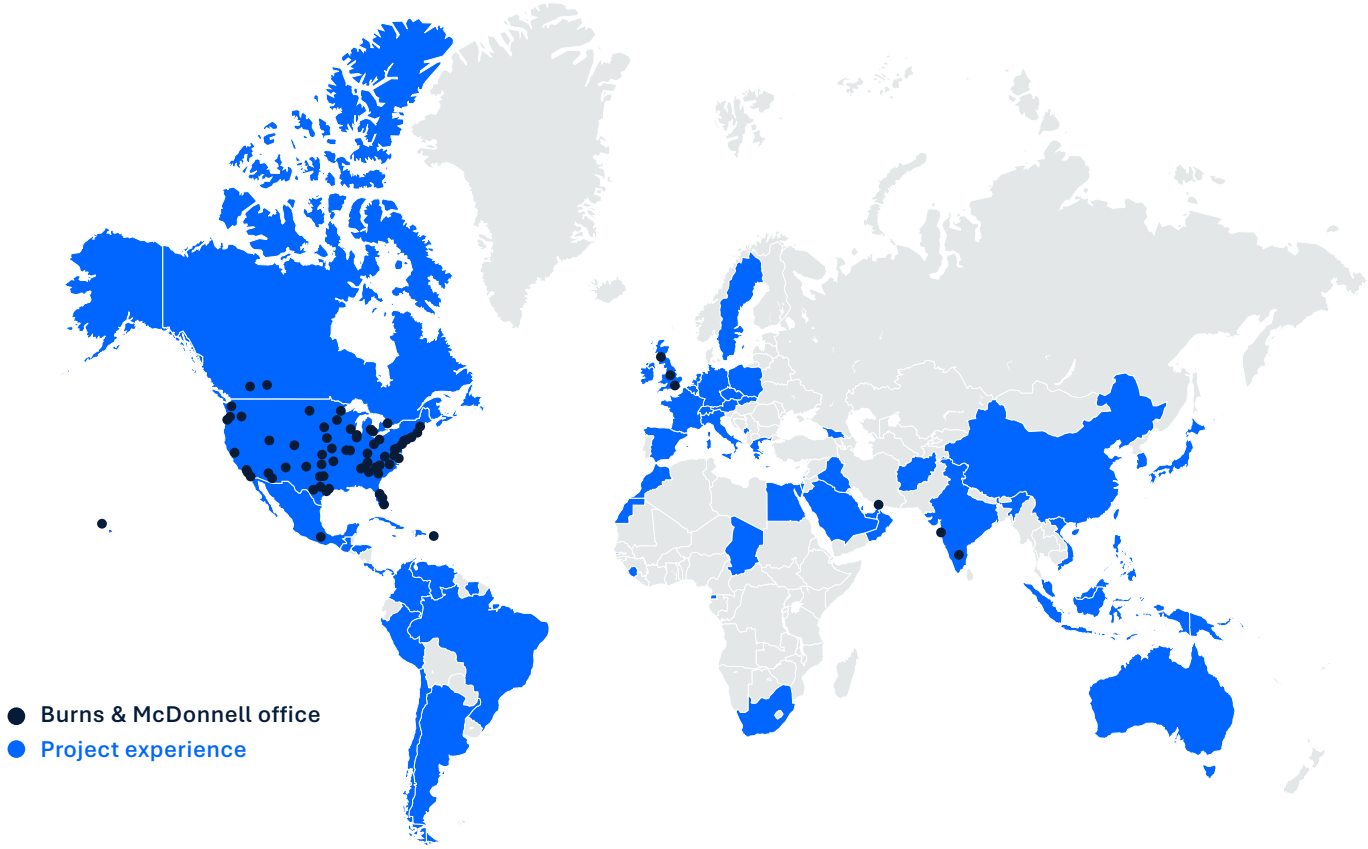
AMONG TOP
5%
SAFETY PERFORMANCE

TOP
5%
DESIGN FIRMS

75+
OFFICES WORLDWIDE

90%+
REPEAT BUSINESS

100%
EMPLOYEE-OWNED



INDUSTRIES WE SERVE

Aviation
A lot happens before the aircraft is in the air. Our aviation industry experience includes every facility, every service that touches your commercial or private operation.

Commercial, Retail & Institutional
Your competitive markets make seamless planning, design and construction critical to project success. Our agile, integrated teams bring your vision to life.

Construction
Whatever you're building, and wherever you're building it, our construction teams take your project through to the finish, delivering a safe and efficient project site.

Data Centers & Critical Services
Data centers must be resilient, high-performing, energy-efficient, flexible, scalable and reliable. Our integrated approach develops innovative, optimized solutions to keep critical information flowing.

Environmental
From investigations and remediation to compliance and permitting, we stay on top of regulations and environmental project needs to help determine your most effective, cost-efficient and sustainable environmental solutions.

Government, Military & Municipal
Public projects demand public trust. Our responsive solutions meet and exceed expectations on projects from basic infrastructure to government offices and military bases.

Manufacturing & Industrial
Through understanding the complexities of your business, we bring you better ways to control costs, optimize systems and processes, and deliver results.

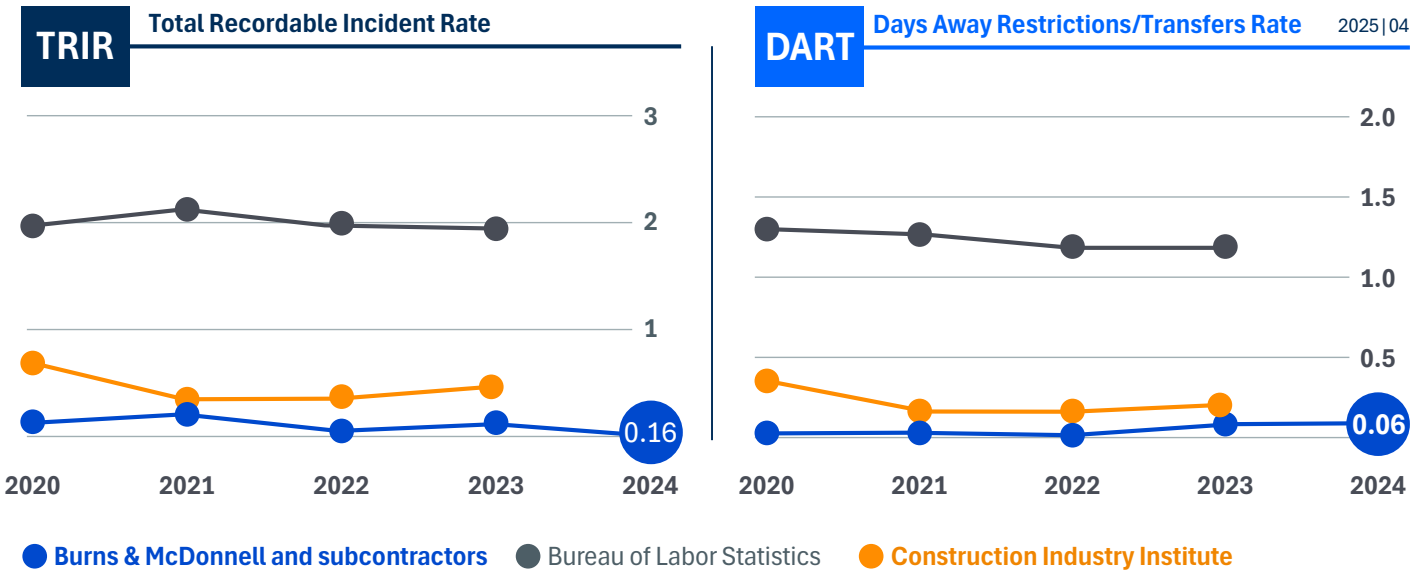
Oil, Gas & Chemical
To handle changing markets, regulations and infrastructure needs, our solutions deliver efficient, resilient projects — oil fields, refineries, storage terminals and everything in between.

Power
Reliable, sustainable power is essential. From generation to delivery, we help you forge the future with solutions that build your business.

Telecommunications
In this rapidly evolving field, we connect the right people, knowledge and systems to put you on the road to successful communications networks that move you forward.

Transportation
Infrastructure drives economic growth. Our planning, design and construction experience enables you to keep traffic flowing while saving time and money.

Water
Our water treatment, supply and systems solutions evolve with the ever-changing needs of communities and industries.



We hold our contractors accountable to the same safety standards we hold for ourselves. Because of this, our recordable incident rate includes our subcontractors and is consistently well below the Bureau of Labor Statistics and the Construction Industry Institute (CII) contractor averages.

Combined employee-owner and subcontractor data

Safety & Health

Safety isn't just a metric — it's an ingrained cultural value we view as a deliverable like design and construction. By integrating a Corporate Safety & Health Program with our project processes, we actively seek and implement safe work practices. As a result, our safety performance is consistently better than the industry average, placing us among the top 5% of safest architecture, engineering and construction firms.

Every project we complete operates with the safety philosophy that zero recordable incidents can be accomplished with proper planning, resources and follow-through.

Our project safety records demonstrate the success of this approach. Our Days Away Restrictions or Transfers (DART) rate and Total Recordable Incident Rate (TRIR) safety statistics are considerably better than industry standards set by the Construction Industry Institute and the U.S. Bureau of Labor Statistics.

Although it is not an OSHA requirement, we are one of the few firms to include subcontractors in our safety statistics. We choose to do this because our safety commitment goes beyond reporting the numbers. It is our intrinsic expectation that everyone working on a project — our employee-owners and those who work with our partners — goes home safe to their families every night.

Rankings and Recognition

Our ownership culture helps drive amazing services for clients. We're proud others recognize that too, ranking us among the nation's leading engineering, design and construction firms in multiple industries.

View Current Industry Rankings

BURNS McDONNELL

8382272297-0525