



**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:

Crawford, Murphy & Tilly, Inc.

Firm Contact Name:

R. JAY RAKERS, PE

Contact Email
Address:

rjrakers@cmtengr.com

Firm's Mailing Address:

Gateway Tower, One Memorial Drive, Suite 500

St. Louis, Missouri 63102

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**



Infrastructure Professionals

About CMT

Established

1946

Number of Offices

25

Firm Size

500+ employees | 138 in Missouri

Number of Professional Engineers

190

Prequalifications

CMT has the prequalification requirements and is currently prequalified as follows:

LPA/Federal Aid Basic Training

November 1, 2027

MoDOT E-Verify

November 26, 2026

Financial Prequalification

August 28, 2026

Bridge Forms

October 1, 2027

Bridge QA/QC Plan

October 1, 2027

Missouri Offices

Crawford, Murphy & Tilly, Inc.

1 Memorial Drive, Suite 500

St. Louis, MO 63102

☎ 314.436.5500

1631 W Elfindale Street

Springfield, MO 65807

☎ 417.869.6009

2480 Executive Drive, Suite 212

St. Charles, MO 63303

☎ 314.436.5500

1100 Main Street, Suite 1210

Kansas City, MO 64105

☎ 816.272.8318



@cmtengrs | cmtengr.com

December 12, 2025

Ms. Ashley Buechter, PE, Local Program Administrator
Missouri Department of Transportation
105 W. Capitol Avenue Jefferson City, Missouri 65102

RE: Letter of Interest - LPA On-Call Solicitations / Structures

Dear Ms. Buechter:

Crawford, Murphy & Tilly, Inc. (CMT) is very interested in continuing to be a part of Missouri's LPA team of consultants to provide professional engineering for Structures. Our reputation for providing quality deliverables related to bridge design projects while incorporating cost-efficiency and innovativeness has assisted our municipal clients' ability to best improve their infrastructure more cost-effectively.

General Experience of Firm

CMT has been in the transportation field since our incorporation in 1946. We have continually served federal, state and local governments during that time span providing transportation engineering services including structural design. Since 1983, when CMT opened an office in Missouri, we have provided structural engineering services to numerous municipal clients throughout the state. CMT has expanded our presence in Missouri to four regional offices (St. Louis, Springfield, St. Charles and Kansas City) to better serve our clients. Some of our key LPA projects are more fully described in the Past Performance section of this document.

Past Performance

The following projects are indicative of CMT's commitment to providing outstanding engineering services related to Structures.

Whitecliff Park Lane over Gravois Creek (LPA – Cost Share). CMT was the lead consultant responsible for replacing the existing bridge carrying Whitecliff Park Lane over Gravois Creek for the City of Crestwood. This structure serves as the only means of connection to the Crestwood Community Center, Aquatic Center and adjacent sporting facilities. Therefore, access management was a key driver in planning and design. The existing structure was removed after Labor Day, and a new 3-span bridge was constructed and opened prior to Memorial Day of the following year to isolate construction during the off-peak season for the park. During the bridge closure, a temporary access road was utilized to provide connectivity to the park facilities. The new structure consists of prestressed concrete spread box beams supported by integral abutments and intermediate bents founded on drilled shafts and rock sockets. Additionally, the structure provided a raised sidewalk and ornamental fencing to allow for safe pedestrian access into the park and an enhanced overall aesthetic.

Cool Springs Road Culvert Replacement (LPA – Locally Funded). A CMT inspection team determined that portions of the existing bridge carrying Cool Springs Road over Belleau Creek were no longer safe for vehicular traffic and immediately suggested reducing the traffic to one lane over the sound portions of the bridge. CMT then worked with the City of O'Fallon to initiate an emergency replacement of the existing bridge with a new culvert structure. Final PSE documents for the replacement structure and roadway improvements were completed within 3 months. Project elements included hydraulic analysis, new pedestrian path, roadway replacement and a new 14'x10' reinforced concrete box culvert.

Grand Street Bridge Over Jordan Creek (LPA-Locally Funded). CMT was selected by the City of Springfield to design the replacement of a deteriorated structure

over Jordan Creek and help develop solutions for pedestrian and vehicle safety concerns along the corridor. The project was very complex with multiple challenges within the urban collector corridor that went well beyond the need for a typical bridge replacement project.

I-70/Route MM Interchange (LPA-Cost Share). CMT worked with the City of Warrenton to navigate the state and federal process to design a new interchange. CMT initially completed a conceptual design and Access Justification Report (AJR) for the interchange, which was designed in a location to support economic development and provide traffic and safety benefits by diverting traffic from the congested interchange of I-70 and Route 47. The structural elements on the project included the design of a two span NU-Girder structure including MSE wall supported integral abutments and intermediate bents founded on cast-in-place concrete piles. The improvements also incorporated architectural design features including custom form lined concrete, ornamental lighting and aesthetic stained barrier. This project was on an extremely accelerated schedule with preliminary and final bridge design completed within a period of 8 months.

Greene County Highway Department Replacement of Bridge Carrying Farm Road 68 over BNSF Railway (LPA-Cost Share). Span length increased to 60 feet to meet BNSF minimum horizontal clearance requirements and profile raised to meet their minimum vertical clearance. New structure consists of a single-span adjacent pre-stressed box beams on pile supported integral abutments.

I-70 and David Hoekel Parkway Interchange (LPA-Cost Share). CMT led the design of a new tight diamond interchange with I-70 and the new David Hoekel Parkway. CMT's design, including the innovative interchange type and alignment changes, reduced the cost of the interchange by \$5.9 million, a 20% savings over the concept originally considered. CMT completed a successful cost share application with MoDOT to help the city secure the remaining funding to complete the project. The project includes two bridges carrying David Hoekel Parkway over I-70 and the Norfolk Southern Railroad along with 3 MSE walls supporting bridge end fills. Extensive railroad coordination was essential for the success of the project. Encroachment of the bridge on railroad ROW was approved, which resulted in significant cost savings through reduced structure depth and retaining wall height.

I-44 Marshfield Interchange at Route CC (LPA-Cost Share). The constraints on Marshfield's transportation network heightened the need for a long-term solution and an additional access point with I-44. In 2017, the city selected CMT for the planning and design of a new interchange that will facilitate the city's long-term goals for the area. The new interchange design included a two span NU-Girder structure to carry Route CC over Interstate 44. MSE walls were utilized along I-44 to reduce the structure spans and also served as a canvas for architectural enhancements desired by the City. Additional architectural elements included the use of a rectangular cross-sectioned bridge barrier (PennDOT standard), architectural fencing, form lined walls and barrier

faces, aesthetic stain and illuminated signage which were all incorporated into the structure plans.

Highway 160 over Howell Creek (LPA-Locally Funded). CMT completed the design effort for the reconstruction of US Hwy 160 over Howell Creek and the BNSF Railway for the city of West Plains. The project consists of the two separate bridge structures with associated retaining walls, multi-use pathway connectivity, and geometric constraints. Hydraulic analysis and coordination with the USACOE - Little Rock District was performed. CMT led design efforts for the US Hwy 160 over BNSF Railway grade separation structure to complete design within an 8 month schedule.

Wentzville Parkway South Extension (LPA-Federally Funded). CMT was the structural lead for improvements to the existing bridge carrying Wentzville Parkway over Interstate 70 and a new bridge over Norfolk Southern Railroad for the extension of Wentzville Parkway. New barrier and fencing were added to the existing MoDOT bridge to allow for safe pedestrian access over the interstate. CMT also oversaw efforts for a CIP retaining wall utilized to support the existing south abutment of the I-70 bridge and allow for a new interchange ramp onto I-70. The new single span bridge over NSRR is 126' long and supported by MSE walled end bents.

Qualifications of Personnel

Josh Jolliff, P.E. - Josh has over 24 years of experience designing structures for transportation projects and serves as CMT's lead structural engineer in the state of Missouri. He is very familiar with the LPA Bridge requirements and has served as the lead bridge engineer on over 25 different projects in Missouri. He recently served in this role on the I-44 and Route CC Interchange, the I-70 David Hoekel Parkway Interchange, and the US 67 Interstate conversion project. His resume includes all aspects of structural design including design of complex structures, seismic analysis, bridge rehabilitation, hydraulic analysis, culvert design and retaining wall design. His strong technical skills coupled with his attention to detail and responsiveness make him a valuable addition to any project team.

Allen Smith, P.E., S.E. - Allen is responsible for bridge project management of complex bridge projects and has over 34 years of experience. Allen was the design team Project Manager for the Terminal Railroad's Merchants Bridge Main Span Replacement and Rehabilitation project over the Mississippi River and provided design and construction support for the Merchants Bridge rehabilitation project. In addition to his work on rail structures, Allen also has an impressive resume of highway bridges including his recent work in leading the design efforts on the 415' main span of IL US 67 over the Illinois River including vessel collision design of the proposed piers. Allen's extensive experience in design, construction, and inspection of major/complex structures throughout the Midwest makes him a great resource for our structural team.

Jared Wigger, P.E. - Jared is an accomplished bridge engineer with over 25 years of experience in design, construction inspection, rehabilitation, and replacement of transportation structures. He has been the Project Manager for various complex bridge and retaining wall replacements and has proposed innovative construction methods and manages subcontractors/stakeholders. Recently, Jared was the lead bridge engineer for the MoDOT Route NN over the BNSF Railway project in MoDOT's Southwest District and the Route 100 Bridge Rehab over the Missouri Eastern Railroad in the St. Louis District.

Joseph Wendl, P.E. - Joe started with CMT in 2018 and has provided structural design support for several projects including the US 67 Corridor Improvements through Butler County for MoDOT, the I-70/David Hoekel Parkway Interchange project for Wentzville, MO; and the I-44/Route CC project for Marshfield, MO. Joe has also served as the lead structural designer on the Whitecliff Bridge Replacement project for the City of Crestwood, MO.

Albert Reinwart, P.E. - Albert is structural engineer with five years of experience. Albert completed the NHI Bridge Inspection training course in 2021 and assisted in design efforts on the Marshfield Interchange and Wentzville Parkway extension projects. Albert also adds construction inspection experience through his work assisting MoDOT on the bridge inspection work along the I-55 corridor near downtown St. Louis.

Mohannad Alhusban, E.I. - Mohannad has served as a structural designer at CMT since 2022. His design experience includes prestressed girder design and substructure analysis utilizing Bentley Open Bridge Designer. Mohannad has provided design support and plan production on the Route 366 bridge over Gravois Creek and structure rehabilitation plans and details to include pedestrian accommodations for Route D over Metrolink in St. Louis, MO, both for MoDOT.

Familiarity/Capability

CMT has a long history of meeting our clients' goals on projects, whether this is through meeting aggressive schedules, using the latest technologies and software on a project or the application of cost-efficiency measures to help save construction dollars. CMT has an excellent relationship with our core group of clients and our extensive experience with their staff gives us the familiarity to be very efficient throughout the design process. Through our projects, CMT has become intimately familiar with the processes and requirements on projects with federal funding as well. The following list of projects shows projects that were federally funded or cost share. All of these projects were completed with minimal review comments:

- Whitecliff Park Lane (Crestwood)
- West Terra Road – Phase III (O'Fallon)
- Historic Lighting (Warrenton)
- U.S. Route 54 Sidewalks (Camdenton)
- Farm Road 167 Bridge (Greene County)

- Wentzville Parkway Turn Lane (Wentzville)
- Hawk Ridge/Rte N Intersection (O'Fallon)
- Sullivan Elmont/W Springfield Signals (Sullivan)
- Lay Road Sidewalk and Roadway (Ladue)
- Fifth Street Gateway Streetscape (St. Charles)
- I-70/David Hoekel Parkway Interchange (Wentzville)
- I-44/Route CC Interchange (Marshfield)
- Route 185 over I-44 (Sullivan)
- I-70/Route MM Interchange (Warrenton)

Accessibility/Responsiveness

All of the assigned personnel for structural engineering are located in our Missouri offices. This entire group is highly focused on the successful delivery of services within allotted schedules set by our clients. Our Missouri Surface Transportation Group have met 100% of their scheduled milestone dates on all of their projects over the last ten years. In addition, our team relies on responsiveness to our clients' requests, with a goal of responding to all requests within 24 hours.

CMT has enjoyed the working relationship that has been established and grown over the years with our LPA teammates. CMT offers an uncommon level of stability and staff continuity which will assist us as we move forward with more complex and exciting projects with municipalities throughout the state. We believe we have an excellent team that can provide responsive and cost-efficient designs for LPA Structural projects. Over 90% of our team works inside a CMT office to optimize communication and efficient collaboration. When necessary, they effectively use Microsoft Teams for meetings and are equipped with laptops, cell phones, and I-pads to conduct business, with the backing of a strong IT department who keeps our ORD software, technology, and computers running smoothly.

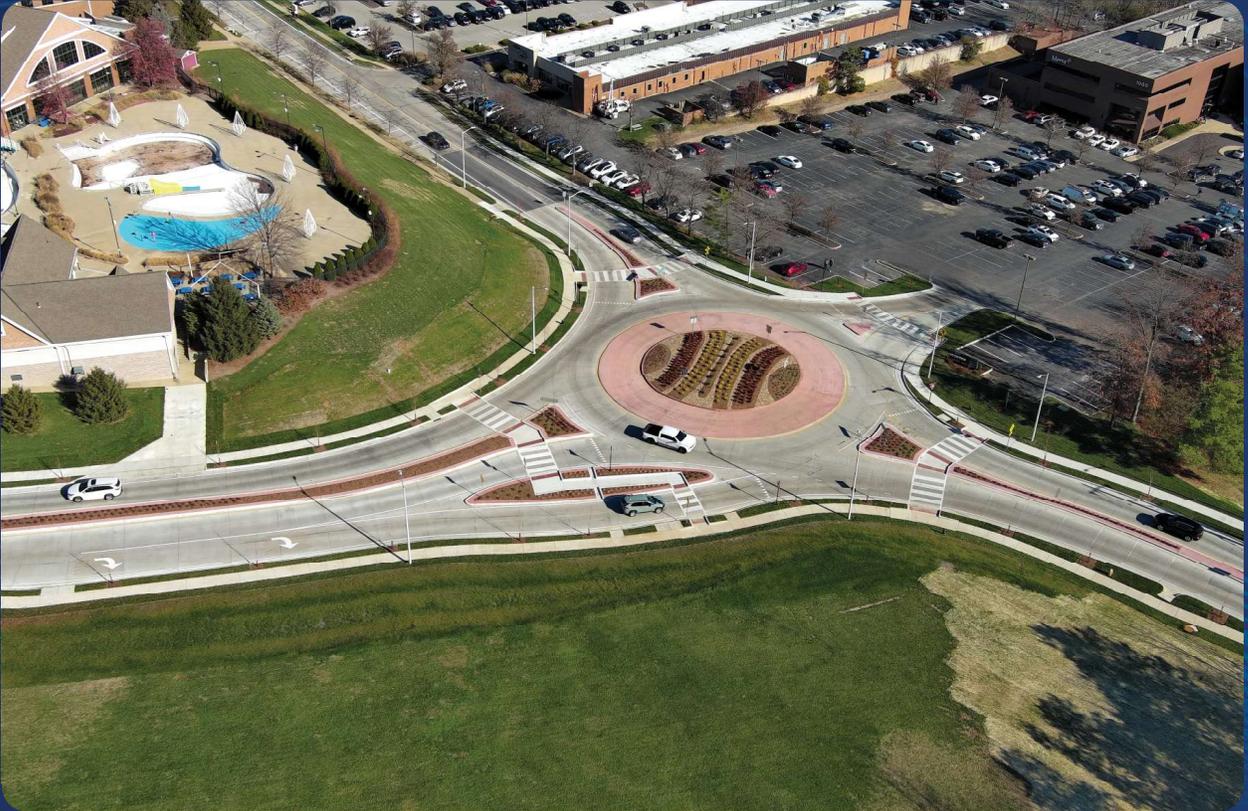
We wish to thank the selection committee in advance for their time and effort in reviewing and evaluating our Letter of Interest and look forward to your favorable consideration.

Respectfully yours,



R. JAY RAKERS, PE
Principal / Group Manager
✉ rjrakers@cmtengr.com
☎ 314.571.9069

Elevating Infrastructure, *together*



Crawford, Murphy & Tilly, Inc. Company Brochure

Local Public Agency On-Call Services
(for Missouri's Local Program)

December 12, 2025



Infrastructure Professionals



Elevating infrastructure, *together.*

About CMT

Established

1946

Number of Offices

25

Firm Size

500+ employees

Number of Professional Engineers

190

Missouri Offices

Crawford, Murphy & Tilly, Inc.

1 Memorial Drive, Suite 500

St. Louis, MO 63102

☎ 314.436.5500

1631 W Elfindale Street

Springfield, MO 65807

☎ 417.869.6009

2480 Executive Drive, Suite 212

St. Charles, MO 63303

☎ 314.436.5500

1100 Main Street, Suite 1210

Kansas City, MO 64105

☎ 816.272.8318



Firm Overview

Since 1946, our dedicated team of engineers, planners, scientists, and other professionals has partnered with clients to elevate infrastructure through a shared commitment to innovation and excellence. From planning and engineering to asset management, we guide every step to provide maximum value in every project.

But the real impact is on people. By working together, we create infrastructure that enhances communities and empowers our employees to thrive. We don't just build infrastructure – we elevate it, making our communities more livable, sustainable, and connected for a better future.

CMT's core service areas include surface transportation, aviation, water resources, and site and building development. Our multidisciplinary teams offer services such as civil engineering, planning, environmental consulting, traffic analysis, utility coordination, permitting, and floodplain studies. We integrate technical excellence with regulatory insight so projects meet both performance goals and compliance requirements.



**Senior Vice President
– Director of Business
Development**

STEVE PRANGE, PE

417.799.6253

sprange@cmtengr.com



**Group Manager –
St. Louis Surface
Transportation**

R. JAY RAKERS, PE

314.368.2797

rjrakers@cmtengr.com



**Group Manager –
Springfield Surface
Transportation**

ANDY MUELLER, PE

417.799.6250

amueller@cmtengr.com



**Group Manager –
Kansas City**

JERRY BOLLINGER, PE, PTOE, RSP1

317.492.9173

gbollinger@cmtengr.com



**Vice President,
Construction Services
Manager – Missouri**

KEVIN FULLER, PE

314.571.9061

kfuller@cmtengr.com



@cmtengrs | cmtengr.com



Major Areas of Expertise

From complex highway interchanges in urban settings and major bridge river crossings to municipal services and tailored streetscape designs, CMT can take a transportation project from its earliest development stages through planning, design and construction. Whether we are working with a large transportation agency or a local community, CMT is responsive to our clients' needs. While meeting client-driven goals of providing safe and efficient transportation, we also seek out community input and account for environmental considerations. All of this helps us to provide context-sensitive solutions that supports project success on every level.

Roadway Design

- Traffic Calming
- Roadway Geometrics
- Project Development Reports
- Drainage & Stormwater Management
- Intersection Design Studies
- Interchange Type & Design Studies
- Pavement Evaluation and Design
- Life Cycle & Cost/Benefit Analysis
- Roundabout Design
- Roadway Lighting/Signing
- Complete Streets
- Sidewalks/Multi-Use Paths/Trails

Bridge and Structural Design & Inspection

- Pedestrian Bridges
- Prestressed I-Beam Bridges
- Precast, Prestressed Concrete Deck Beam Bridges
- Concrete Slab Bridges
- Steel Stringer with Cast-in-Place Concrete Deck Bridges
- Steel Plat Girder Bridges with Horizontal Curves
- Major River Crossing Structures
- Bridge Hydraulic Analysis and Bridge Condition Surveys
- Bridge & Culvert Rehabilitation

Construction Services

- On-site Construction Inspection
- Construction/Materials
- Documentation

Transportation Planning

- Agency Coordination
- Feasibility, Corridor & Location and Alignment Studies
- Public Involvement & Participation
- Phase I, Preliminary Design (Federal Aid Projects)
- Alignments & By-Pass Studies
- Interstate Access Justification
- Pavement Management Systems
- Value Engineering
- Roadway Safety Audits

Environmental Compliance

- NEPA Compliance
- Environmental Impact Statements
- Environmental Assessments (EA)
- Wetlands
- Endangered Species
- 404/401 Permitting
- Phase I & II Property Assessments
- Noise Compatibility/Monitoring
- Air Quality Studies

Land Acquisition

- Right of Way Documents
- Property Surveys
- Right of Way Acquisition
- Relocation Services

Traffic Systems

- Traffic Signal Systems
- Traffic Impact Studies
- Traffic Analysis/Capacity Analysis
- Traffic Simulation Modeling
- Impact Traffic Management
- Traffic Calming Studies
- Safety Studies

GIS Technology & Asset Management

- Needs Assessment
- Database Design
- Applications Development
- Data Conversion
- GIS Facility Data Collection

Rail Engineering & Planning

Utility Coordination

Land Surveying

Asset Management

Value Engineering

Delivering Value to Local Public Agencies

SAVINGS & PERFORMANCE



I-70 & Mississippi River Bridge Interchange
- MODOT & St. Louis, MO

Innovative & streamlined
project development
process **saves MoDOT**

28%



I-70 & Route MM Interchange
- Warrenton, MO

CMT delivered preliminary through final plans on
this developer driven, fast-tracked Interchange
project in

8 Months

Saving Money

We know that going over budget is not an option. CMT is consistently commended on our ability to not only remain within budget, but often identify opportunities to either save money or maximize the money already being spent.

Beating Schedules

Through streamlined communication and proven workflow processes, CMT routinely demonstrates our commitment to meeting schedules or fast-tracking schedules to address specific client goals.

Performance-Based. Value-Driven.

At CMT, we know that costs and schedules aren't the only contributors to successful projects. True transformation happens when the resulting infrastructure is more efficient and functional.

As pioneers in performance-based project development, CMT helps our DOT clients leverage their investments to create greater value and enhanced project performance.



Achieving Recognition

CMT's innovative and collaborative solutions are routinely honored with industry awards for excellence and client satisfaction.

Des Peres Roundabout

- 2025 APWA Missouri
- Transportation Project of the Year

Mississippi River Bridge Project

- 2014 ACEC Missouri Grand Award
- 2019 America's Transportation Award

Park Over the Highway

- 2019 America's Transportation Award
- 2017 ACEC National Recognition Award

20th Street Cycle Track & Mobility Project

- 2023 APA St. Louis
- Outstanding Planning Practice Award