



**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:

CDG Engineers, Inc.

Firm Contact Name:

Timothy R. Nugent, PE

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One Campbell Plaza

St. Louis, MO 63139

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

LOCAL PUBLIC AGENCIES OF MISSOURI

**RE: Letter of Interest for Structures
CDG Qualification No. M25327**

Dear Members of the Selection Committee:

CDG Engineers, Inc. ("CDG") is pleased to submit our qualifications for your review. This letter is in response to a request for Missouri's Local Program ("LPA") Consulting Services prequalification for the Structures category. CDG is currently on MoDOT's Approved Consultant Prequalification List.

General Experience:

Our team of engineers has worked on numerous MoDOT and LPA bridge projects throughout the state. CDG has a full-time professional staff of more than 80 personnel in our St. Louis office, including 20 structural and civil engineers who have the appropriate experience and available capacity for this work. CDG has the following expertise:

- > Hydraulic Calculations
- > Bridge Surveys
- > Pre/Final Bridge Replmt.
- > Bridge Rehabilitation
- > Bridge Widening
- > Multi-span Design
- > Pre/Final Culvert Replmt.
- > Staged Construction
- > Horizontally Curved
- > Bridge Inspections
- > Seismic Design
- > Shop Drawing Review
- > Construction Phase Services
- > Fracture Critical Analysis
- > Steel & Concrete Piles
- > Drilled Shafts
- > Spread Footings
- > Retaining Walls
- > Continuous Concrete Slabs
- > Steel Beams – Plate Girders
- > PPC Beams/Girders

Past Performance:

CDG understands the importance of project performance and its direct link to client satisfaction and repeat business. We have built our business by delivering high quality projects on schedule and budget while maintaining open client communications and closely tracking scope and project goals. CDG has a strong history of providing design solutions that achieve project objectives within designated budgets. Approximately 90% of our projects have bid results within a 10% range of our final engineers' estimate. Please see below for CDG structure experience.

Longview Drive Bridge Replacement, St. Louis County, MO – Single cell, non-standard 20'(w) x 8'(h) 3-sided cast-in-place box culvert with varying length/angled wing walls keyed into rock. 78' long with in-line up/downstream wings. Project included a temporary bypass road and a temporary concrete box culvert, as selected by the contractor, to maintain creek flow and access during construction to 100+ homes along this dead-end road. Constructed with two-lane, two-way traffic maintained during construction. **Ref:** Scott Norris, PE, St. Louis County DOT PM, 314.615.8679, snorris@stlouisco.com



Ries Road (BRM-4939(606)) & Ramsey Lane (STP-4939(607)) Bridge Replacements over Fishpot Creek, City of Ballwin, MO – One span three-sided precast concrete arch (55' span) on Ries Road (existing 4 cell box culvert). New one span 48' long PPC spread box beam bridge with vertical walled abutments along Ramsey Lane (replaced a 3-cell box culvert requiring frequent City Maintenance). **Ref:** Jim Link, Public Works Director, 636.227.9000, jlink@ballwin.mo.us



Hillsboro House Spring Road Bridge Replacement (STP-5403(693)), Jefferson County, MO – 36'x11' precast concrete arch over Bourne Creek with a signed detour. **Ref:** Jason Jonas, PE, County Public Works Director, 636.797.5369, jjonas@jeffcomo.org

Fee Fee Road Pavement and Bridge Rehabilitation (STP-5556(606)), City of Maryland Heights, MO – Bridge rehabilitation including removal and replacement of existing silica fume concrete overlay, partial and full-depth repairs to the superstructure, removal and repair of deteriorated sections of raised concrete sidewalks and barriers. **Ref:** Cliff Baber, Public Works Director, 314.291.6550, cbaber@marylandheights.com



Route J over Big Creek, MoDOT Northeast District – Bridge No. A9480 (80'-120'-80'). Continuous PPC NU53 girders on pile cap integral end bents and int. bents with drilled shafts and rock sockets. The bridge is 28'-8" wide out to out and carries two lanes of traffic. Seismic Design Category A. Construction to begin soon. **Ref:** Christopher Knapp, PE, MoDOT Northeast District, 573.526.7937, christopher.knapp@modot.mo.gov



Boeuf Creek Road Bridge Replacement (STP-5490(615)), Franklin County, MO – Replacement of existing single-lane bridge and roadway realignment over a tributary to Boeuf Creek. Provided a 65' single span precast, prestressed concrete spread box beam bridge on pile cap integral end bents. Two 12' lanes with 2' shoulders were provided. CDG provided both design and construction engineering. **Ref:** Jim Grutsch, Highway Administrator, 636.583.6361, jgrutsch@franklinmo.gov



New Hope Church Road over Little Indian and Big Indian Creeks, (STP-5489(604)), Franklin County, MO – Bridge Nos. 3100013 (118') P/S NU-girder; and 3100014 (50'-55'-50') P/S I-girder (right photo). All pile cap integral end bents open intermediate bents on drilled shafts at #3100014. CDG performed full LPA project Construction Engineering on this project.



Kingsland Avenue Bridge Reconstruction (BRM/STP-5582(604)), City of University City, MO – Removal and replacement (cut and cover) of the top slab structure along 1,000' of a 4-sided tunnel section carrying the northeast branch of River des Peres between Etzel and Bartmer Avenues along with a side alley structure over the same stream. Staged construction designed into project to allow local traffic to cross Kingsland Avenue during construction. **Ref:** Mirela Celaj, Director of Public Works, 314.505.8548, mcelaj@ucitymo.org



Dardenne Greenway Connector (I-64 N.O.R. over Dardenne Creek) (TAP-5407(619) & JSL0112), City of O'Fallon, MO/MoDOT Joint Project – Bridge No. A9387 (63.5'-82'-63.5') P/S NU-Girder with pile cap integral end bents and open concrete intermediate bents on columns/drilled shafts. Bridge included a 12' wide Shared-Use Path on the east side plus 40' wide roadway. Currently under construction. **Ref:** Chris Clercx, Project Manager, 636.379.5590, cclercx@ofallon.mo.us



Historic Route 66 State Park Bridge, St. Louis, MO – Adaptive re-use of former Route 66 1008' long, 15-span steel plate girder and truss highway bridge over the Meramec River as a new pedestrian bridge. Project includes substructure rehabilitation and superstructure replacement with new 1008' 12-span pedestrian bridge. Approach Spans 1 & 5 thru 12 will use prestressed I-Girders and

Main River Spans 2 thru 4 will use prefabricated steel trusses with 14' clear width concrete deck. Design completion in 2025. Estimated Construction Cost: \$10,620,000. Ref: Eric Hibdon, PE, Senior Project Manager, 573.522.0322. eric.hibdon@oa.mo.gov

Qualifications of Personnel:

The following are some of CDG's key structures personnel:



Paul Cardwell, PE, SE

- Civil/Structural Director
- 15 years of experience
- 50+ Bridges/Culverts



Nathan Barger, PE, LEED AP

- Structural Engineer
- 25 years of experience
- 50+ Bridges/Culverts



Tim Nugent, PE

- Transportation Structures Manager
- 31 years of experience
- 100+ Bridges/Culverts



Evan Wilson, PE, SE

- Utility Structures Manager
- 10 years of experience
- 5 Bridges/Culverts



Kevin O'Shaughnessy, PE, PMP

- Civil Project Manager
- 15 years of experience
- 20+ Bridges/Culverts



Akash Jain, PE

- Structural Engineer
- 10 years of experience
- 10+ Bridges/Culverts

Familiarity/Capability:

CDG has successfully designed multiple bridges and structure replacement projects for local municipalities, counties, and MoDOT. Our team will work closely with local staff to ensure projects stay on schedule.

CDG understands the requirements of projects with federal funding and knows how to deliver projects meeting those requirements. We look for opportunities to apply innovative and practical design solutions to improve project economy and efficiency. We understand all relevant design requirements of AASHTO and MoDOT and are very familiar with the MoDOT LPA policies/procedures. CDG also understands the process and documentation required to obtain environmental and other clearances for bridge projects. CDG knows how to deliver federally funded projects to obtain PS&E approval and obligation of construction funds.

Accessibility:

CDG understands that clients need consultants who can respond quickly to requests. Responsiveness is engrained in our corporate culture and a requirement of our employees. CDG prides itself in being available to our clients, with a pledge to respond within 24 hours. Maintaining active Consultant-to-Client communications on project engineering and design assignments is vital for success and is a trademark of CDG.

Sincerely,

CDG Engineers, Inc.



Timothy R. Nugent, PE; Manager, Transportation Structures
tnugent@cdgengineers.com



CDG
ENGINEERS



**ENGINEERING
A BETTER WAY**

cdgengineers.com

One Campbell Plaza
St. Louis, Missouri 63139

ST. LOUIS, MO

CHARLOTTE, NC

SHERIDAN, WY

TROY, IL

33

Years of Engineering Excellence

100+

Employees Firm-Wide

200+

Bridges Inspected & Designed by
CDG Staff

300+

Trail, Roadway, Sidewalk, & ADA
Improvements in the Last 5 Years

FIRM OVERVIEW

CDG is a full service, multi-discipline engineering firm with capabilities in civil, structural, mechanical and electrical engineering, as well as architecture. Services include planning, engineering, architectural design, and construction administration. CDG works in the fields of public works/infrastructure, power, renewable energy, industrial, and mining.

In 2025, CDG celebrated 33 years of engineering excellence. We have built our reputation on referrals and repeat business and have created trusted partnerships with our clients that is based on integrity, value, and responsiveness.

INFRASTRUCTURE SERVICES

CDG provides a wide variety of infrastructure services. These services largely involve public works and concentrate on state and local infrastructure. Projects range from roads, highways, and pedestrian trails to bridges, culverts, river structures, and more.

Transportation

- > Roads and Highways
- > Bike/Pedestrian Trails
- > Marine Facilities
- > Bridges
- > Streetscapes
- > Rail

Water Resources

- > Hydraulic Modeling
- > Hydrologic Analysis
- > Flood Protection
- > Streambank Stabilization
- > Stormwater
- > Wastewater
- > Potable Water

Site Development

- > Planning
- > Drainage
- > Grading
- > Parking Lots



STRUCTURES

CDG provides clients with practical and cost-effective structural engineering solutions. Our staff can provide inspection, evaluation, design, and construction aspects of structures such as stream crossing bridges, grade separations, culverts, retaining walls, and other unique structures.



ROADWAYS

CDG provides clients with full spectrum engineering solutions for roads and highways. Our experienced staff has expertise in roadway widening, intersection design and realignment, transit planning, curb design, streambank stabilizations, streetscape improvements, and hydraulics and hydrology.



TRAILS & SIDEWALKS

CDG recognizes the importance of pedestrian-friendly spaces and brings a unique approach to trail design by incorporating community needs, regulatory constraints, and aesthetic considerations to each project. Our experienced staff also have extensive knowledge in ADA compliance.



Henry Avenue Roadway Improvements, STP-4939(604), City of Ballwin, MO - 1.3 miles of roadway improvements from Clayton Road south to the city limits. Cold milling and resurfacing of 4-5 inches of asphalt pavement; replacement of structurally deficient curb and gutter sections; new curb and gutter; re-established gutter capacity where curb was overlaid; stormwater upgrades; new storm sewers where needed; new sidewalks; and curb ramps to comply with ADA requirements; striping and crosswalks.



Boeuf Creek Road Bridge Replacement, STP-5490(615), Franklin County, MO - Replacement of existing bridge and roadway realignment over a tributary to Boeuf Creek. The existing bridge carried a single lane of traffic. A 65' long single span precast, prestressed concrete spread box beam bridge on pile cap integral end bents was the best solutions for this site. Two 12' lanes with 2' shoulders were provided. The road was raised slightly at the bridge and approaches to accommodate the increased depth of the new, longer bridge. CDG provided both design and construction engineering services for this project.



Rock Island Spur Trail (47-mile Extension of Katy Trail State Park), Missouri State Parks - CDG designed the western Missouri ped/bike trail and performed construction inspection between Windsor and Pleasant Hill, Missouri, along the abandoned Missouri Central Railroad corridor. The 12' wide gravel trail travels over 85 existing bridges and culverts. Several trailheads and road crossings over county/state routes were developed during design.



Lucas-Hunt Road (North) Improvements, St. Louis County, MO - Engineering and design services for 1.3 miles of roadway improvements to Lucas-Hunt Road between Hord/Hulskamp Avenue and Halls Ferry Road (HWY AC). Included surveying, utility coordination, stakeholder coordination, and environmental permitting. Design consisted of cold milling 3 inches of asphalt pavement, asphalt resurfacing, partial depth pavement and concrete base repairs, pavement joint repairs, guardrail removal and replacement to meet MASH standards, replacement of structurally deficient concrete curb and gutter and sidewalk sections, upgrading curb ramps to comply with ADA requirements, traffic control, and erosion control.



Longview Drive Bridge, St. Louis County, MO - St. Louis County DOT needed to replace Bridge No. 511 located immediately east of State Route 61/67 (Ferry Road). It was determined to temporarily divert and construct a two-lane temporary road to the north across private property in an easement then returning the ground to its original condition. A custom designed single cell 20' wide x 8' tall cast-in-place box culvert was selected as the best option with a slightly raised deck. After the new bridge was constructed, the temporary road and box culvert were removed and the site was re-graded and vegetated with native grasses. It was turned back over to the property owner.



Laclede's Landing Street Improvements, HUD No. 2008-DI-114, City of St. Louis Land Clearance for Redevelopment Authority (LCRA) - \$5.2M project to reconstruct 1st and 2nd Streets in Historic Laclede's Landing in downtown St. Louis. Removed cobblestones and added concrete curb and gutter. New concrete sidewalks and crosswalks (redesigned 35 ADA compliant curb ramps). Improved stormwater system and replaced entire street lighting system and power supply. CDG performed all LPA required CE inspections, documentation, and submittals.