



**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:

Bowen Engineering & Surveying, P.C.

Firm Contact Name:

Christopher M. Buerck, P.E.

Contact Email
Address:

chrisbuerck@bowenengsurv.com

Firm's Mailing Address:

2121 Megan Drive

Cape Girardeau, MO 63701

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**

**Letter of Interest – Roadway Design
Missouri’s Local Program
On-Call LPA Consulting Services**



About Bowen Engineering & Surveying

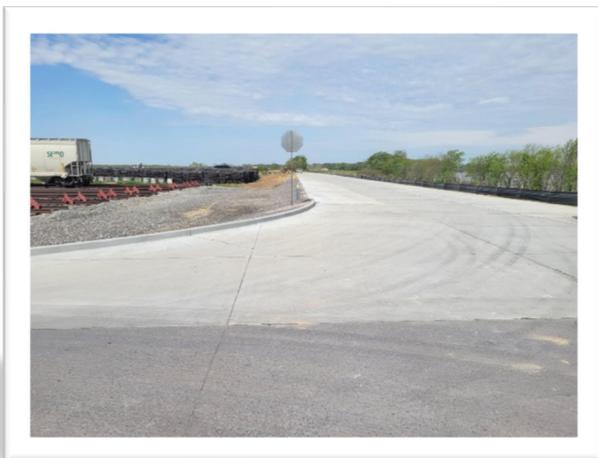
We are pleased to express our interest in providing services through the On-Call LPA Consulting Services program. Bowen Engineering & Surveying was founded in 1979 by the late Richard I. Bowen. For over 40 years, our firm has provided a full range of civil engineering, surveying and testing services to the general public, developers, municipalities, and state and federal government agencies throughout southeast Missouri and southern Illinois. Having completed successful roadway design projects for various LPAs in Missouri, we feel that we are well qualified to provide these services through the On-Call program.

Experience

In the past 10 years, we have completed roadway improvement projects for various municipalities and public entities in the Southeast Missouri area, including the cities of Cape Girardeau and Park Hills, as well as the Southeast Missouri Regional Port Authority. These projects ranged in complexity from residential streets to high volume arterial streets through congested downtown areas.

We are very experienced in determining horizontal and vertical roadway geometry using criteria established by municipalities and the American Association of State Highway and Transportation Officials (AASHTO). We utilize the latest roadway and drainage design software, paired with sound engineering judgment, to complete optimized roadway designs with minimal impact to the environment and adjacent property owners. We have experience with projects utilizing Community Development Block Grant (CDBG) funding and we are also very familiar with the Federal-Aid Surface Transportation Program (STP) administered through the Missouri Department of Transportation.

Below are a few of the roadway design projects that we have completed in the Southeast Missouri area:



River Road Improvements and Utility Installations – Loop Tracks Terminal (LTT) Project – Southeast Missouri Regional Port Authority (Federally Funded Project)

MARAD Project No. 693JF71910013

Year Completed: 2022

Work consisted of survey and design engineering services for an approximately 625 linear foot road extension. Scope included topographic surveying services and design of grading, pavement, sanitary force main and waterline improvements.

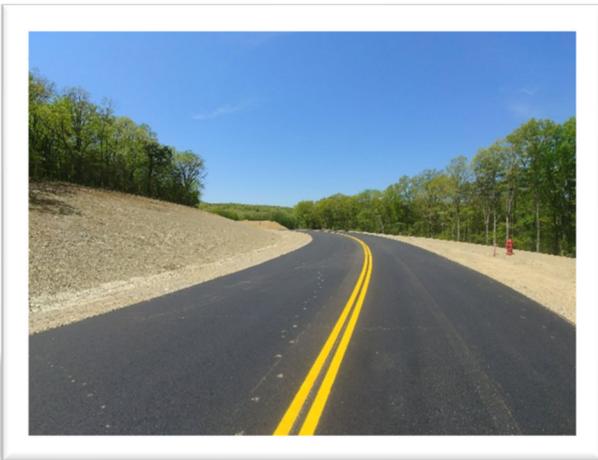


Veterans Memorial Drive - Hopper Road to Scenic Drive - City of Cape Girardeau (City Funded Project)

City Project No. 6154

Year Completed: 2015

Work consisted of survey and design engineering services for an approximately 4,100 linear foot street extension. Scope included topographic and boundary surveying services and design of grading, pavement, sidewalk, storm sewer and sanitary sewer improvements and preparation of easement documents.



Fairgrounds Drive Extension - City of Park Hills (Federally Funded Project)

Project No. STP-7100(009)

Year Completed: 2017

Work consisted of survey and design engineering services for an approximately 1,600 linear foot road extension. Scope included topographic and boundary surveying services and design of grading, pavement, storm sewer, sanitary sewer and waterline improvements and preparation of easement documents.

Approach

A typical project at Bowen Engineering & Surveying maximizes the use of our personnel. Before a project is started, we will prepare and submit a timeline for the completion of preliminary and final plans. The project is then separated into specific tasks and assigned to individuals with the expertise to complete them in a timely manner. This allows our office to function productively, and achieve project completion without delays or cost overruns. This also helps to reduce the likelihood of change orders during construction and helps keep the construction cost within budget. Our approach to a typical roadway design for a Local Public Agency project is generally as follows:

1. Assist the Local Public Agency (LPA) in programming the project, if required
2. Prepare environmental documentation as required
3. Meet with LPA officials, property owners and interested parties to gather input
4. Complete a traffic volume study through a subcontractor, if required
5. Complete a boundary and topographic survey of the project area
6. Prepare preliminary plans and environmental documentation for review by MoDOT and other state and federal agencies
7. Complete final plans, specifications and estimates for review by MoDOT
8. Assist the LPA in advertising for bids and evaluating bids
9. Provide construction inspection and testing services as needed
10. Review applications for payment, payrolls, shop drawings and other submittals
11. Complete a final inspection and submit all final documentation to the LPA and MoDOT

Personnel

Our staff includes three Professional Engineers, two Professional Land Surveyors, three fully equipped survey crews, and various office and field technicians. We maintain a highly experienced and motivated team and are adequately staffed to meet the time constraints of demanding projects. The majority of our employees have been with the firm for over 10 years, and their experience and loyalty are evident in the quality of work that is delivered to our clients. Below is some brief information about our key employees:

Chris Bowen, P.L.S. (MO), President

Education: Civil Engineering & Land Surveying – University of Missouri, Columbia

With over 40 years of experience in the surveying and civil engineering fields, Chris draws from his deep knowledgebase to lead our company. His responsibilities include overseeing daily operations including coordination of field crews, record research, data processing, review of survey information, review of CAD Drawings and project management.

Christopher M. Buerck, P.E. (MO), Project Manager

Education: B.S. Civil Engineering – University of Missouri, Columbia

Chris has been with the company since 1997 and has over 25 years of experience. His responsibilities include providing design and construction engineering services for municipal roadway projects, traffic signalization, rural and urban hydrology studies, watershed analysis, residential and commercial planning and site development. Chris also has extensive experience with sidewalk and trail projects. His other duties include overseeing CAD technicians, coordinating survey crews, co-managing field and laboratory testing services and providing inspection services for construction projects. Through his work with various cities and counties, Chris has become extremely knowledgeable about the LPA program.

Martin G. Hoffman Jr., P.E. (MO), Project Manager

Martin has over 19 years of experience in civil engineering and has been with us since 2003. His responsibilities include providing design and construction engineering services to the Southeast Missouri Regional Port Authority (Semo Port), managing land and hydrographic surveying projects for the U.S. Army Corps of Engineers and co-managing our field and laboratory testing services department. He is an expert in survey data processing, CAD and GIS systems.

Jacob Ortega, P.E. (MO, TX), Project Manager

Education: B.S. Civil Engineering – University of Texas, San Antonio

Jacob has over 15 years of experience in the field of Civil Engineering and has been with Bowen Engineering & Surveying since 2017. Jacob's engineering expertise includes: streets, railroad extensions, sanitary sewers, wastewater treatment facilities, storm sewers, stormwater management facilities, site layout and grading. Jacob has accumulated experience with LPA projects during his career and he is very familiar with the entire process.

In Closing

We appreciate the opportunity to present our qualifications and express our interest in being considered for the On-Call LPA Consulting Services program. We would be happy to provide you with a list of references, letters of reference or any information you may need to assist you during the consultant selection process.

Sincerely,



Chris Bowen, President

Company Brochure

About Bowen Engineering & Surveying

Bowen Engineering & Surveying was founded in 1979 and since that time we have provided civil engineering and land surveying services to government agencies, municipalities, private entities and individuals in southeast Missouri. We believe the following items make us well qualified to provide consulting engineering services to Local Public Agencies throughout the area:

- Bowen Engineering and Surveying has called southeast Missouri home for over 40 years. Our staff members are very familiar with local regulations, local geology and issues unique to the region.
- Our staff members are experienced with state and federally funded projects, such as the Federal-Aid Surface Transportation Program (STP) and the Community Development Block Grant (CDBG) program.
- Our company can provide construction testing and inspection services. We employ MoDOT and ACI certified lab and field personnel.
- We are adequately staffed to ensure that work on each project will begin promptly and will remain a priority of our company.

We hope that the information included in this brochure will give you an idea of our firm's experience and capabilities. We know you will find that Bowen Engineering and Surveying is well qualified to provide consulting services and we look forward to working with you on your next project.

Civil Engineering

Our engineering staff includes three professional engineers, as well as experienced civil technicians and draftsmen. Our staff has substantial experience in site civil engineering and we have completed many projects in the southeast Missouri area involving state and federal grant



funding. We have worked with the Southeast Missouri Regional Port Authority of Cape Girardeau and Scott Counties since 1983. We have extensive experience with river port projects, street design and construction, load-out facilities and rail extensions. Over the past 39 years, our firm has prepared plans and specifications for the Semo Port on water lines, sanitary sewer lines, highways, railroads and site grading projects. Most projects completed for the Semo Port were done with the assistance of state and federal grant money.



We have completed many roadway projects in the southeast Missouri area including projects for the cities of Cape Girardeau and Park Hills. These projects have ranged in complexity from local road extensions to major upgrades for multi-lane arterial streets with pedestrian walking paths.

Our design and construction experience also includes extensive work in commercial and residential subdivision development, drainage facilities, water and sewer projects, storm water management projects and ADA-compliant design. We are experienced with completing hydrologic analyses of watersheds

and hydraulic analyses of storm sewers, culverts, bridges and natural waterways to prepare optimized designs with minimal impact to the environment and any adjacent properties. We are also experienced in preparing cost estimate data, permit applications, construction plans, bid documents, specifications and construction records.

Typical civil engineering services we provide include the following:

- Streets and Roads - New Roadway Design, Street Extensions, Widening, Rehabilitation and Resurfacing, Signalization
- Sidewalks and Trails - New Sidewalk Design, Trail Extensions, Widening and Rehabilitation
- Site Design - Site Layout and Grading Plans, Site Utility Plans, Stormwater Management and Collection, Stormwater Pollution Prevention Plans, Permitting
- Wastewater Treatment Design - Residential and Commercial Wastewater Treatment Systems, Septic System Design, Sanitary Sewer Design
- Drinking Water - Public Water Line Extensions, Public and Private Wells
- Industrial - Port Authority Development, Railroad Design
- Structural - Foundations, Structural Design and Analysis

Surveying

Our surveying staff includes two professional land surveyors and 3 fully equipped survey crews. We utilize the latest surveying equipment and software, including cutting edge GPS systems and 3D Laser Scanning equipment that collect real time data and minimize field survey costs and office processing. Our surveyors are very experienced in completing residential and commercial boundary surveys, right of way and easement surveys, and topographic and utility surveys – particularly in southeast Missouri.

We provide construction surveying services, including construction staking, mapping control surveys, earthwork surveys and as-built surveys. Our surveying clients include state and federal agencies, local municipalities, corporations, contractors, developers and private landowners.



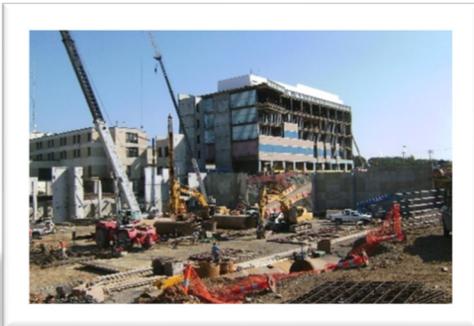


We are the only company between St. Louis, MO and Memphis, TN to provide hydrographic surveying and we operate a fully equipped hydrographic surveying vessel and several smaller boats for accessing confined waterways. Since 2001, our firm has continually contracted with the St. Louis District US Army Corps of Engineers to provide land and hydrographic surveying services. We are currently one of only three surveying companies contracted by the St. Louis District and have completed surveys throughout eastern Missouri and western Illinois. We have completed hydrographic surveys extensively on the Mississippi, Missouri, Illinois and Kaskaskia Rivers and have surveyed major impoundments as far away as Oklahoma, Texas, Pennsylvania and New York State.

Our staff is also experienced in collecting field data for use in Geographic Information System (GIS) applications, as well as encoding the data into Esri ArcGIS software. We have completed GIS projects that involved coordinating aerial photography with on the ground survey data to update utility maps for local public agencies. We have also completed GIS projects for the Corps of Engineers, such as collecting and processing survey data for all navigable features along 700 miles of the Missouri River.

Testing and Inspection

Our testing and inspection staff includes professional engineers and certified technicians. Typical testing and inspection services we provide include:



- Field and Laboratory Concrete Testing
- Soils and Aggregate Testing and Classification
- Moisture / Density Testing of Soils and Asphalt
- Residential and Commercial Structural Inspection
- Construction Inspection and Monitoring

Our technicians maintain the following certifications:

- American Concrete Institute (ACI) Concrete Field Testing – Grade 1
- Humboldt Scientific / Troxler Electronic Laboratories Nuclear Gauge Training
- MoDOT Concrete Field
- MoDOT Concrete Strength
- MoDOT Aggregate Technician
- MoDOT Soil Density
- MoDOT Plasticity Index
- MoDOT T85 Absorption

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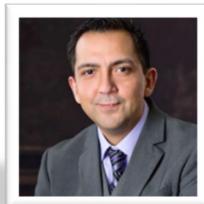
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Martin has over 19 years of experience in civil engineering and has been with us since 2003. His responsibilities include providing design and construction engineering services to the Southeast Missouri Regional Port Authority (Semo Port), managing land and hydrographic surveying projects for the U.S. Army Corps of Engineers and co-managing our field and laboratory testing services department. He is an expert in survey data processing, CAD and GIS systems.



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Contact Us

We welcome any questions and look forward to speaking with you about your next project. We are always happy to provide references or additional information about our company that you might need during the consultant selection process. Please call us at (573) 339-5900 or visit our website at www.bowenengsurv.com.