



Small, Serene, Simply Garnett.

City Commission Meeting AGENDA February 27, 2024, 6:00 P.M.

- I. **Call to Order of the Regularly Scheduled City Commission Meeting (6:00 p.m.)**
 - A. Pledge of Allegiance
 - B. Invocation, Sam Stoltzfus, Beacon of Truth
- II. **Citizens to be Heard (Five-Minute Time Limit Per Person)**
- III. **Governing Body Comments**
 - A. Commissioner Wiehl
 - B. Commissioner Locke
 - C. Mayor
- IV. **Consent Agenda**
 - A. Review/Approval of Minutes from February 12, 2024 Joint City/County Commission Meeting.
 - B. Approval of Minutes from February 13, 2024 Regular City Commission Meeting.
 - C. Approval of Semi-Monthly Bills and Payroll in the amount of \$284,137.41
 - D. Consideration of the 2024 Zombie Walk Event Agreement.
- V. **Regular Business**
 - A. Consideration of approval of the plan review for 219 S. Maple, Gilbreth Fireworks/Photography.
 - B. Consideration of TGT Application from Garnett BPW (Square Fair).
 - C. Consideration of Staff Engineer for the City of Garnett.
- VI. **Discussion Items**
 - A. Staff Engineer for the City of Garnett
 - B. Kansas Corporation Commission Standard Audit and Records Inspection
 - C. Municipal Court
- VII. **Informational Items**
 - A. The Chocolate Tour, hosted by Morning Mingle, will be held on March 2.
 - B. The Egg Drop Easter Egg Hunt, hosted by the Garnett Church of the Nazarene, will be held at the Garnett Industrial Airport March 23.
 - C. The Prairie Spirit Rail Trail Ultra Races, hosted by Outlaw 100, will be held on March 23-24.
 - D. Spring City Wide Garage Sale Day, hosted by Garnett Publishing Inc, will be held on Saturday, April 13.
- VIII. **Citizens to be Heard (Five-Minute Time Limit Per Person)**
- IX. **Signing of Approved City Documents**
- X. **Adjournment**



JOINT CITY/COUNTY COMMISSION MEETING



Small, Serene, Simply Garnett.

FEBRUARY 12, 2024 MINUTES

Convene

Les McGhee called the city/county meeting to order at 6:36 pm on February 12, 2024. In attendance: Les McGhee, David Pracht, Anthony Mersman, and Julie Wettstein from Anderson County; Jody Cole, Mark Locke, Nate Wiehl, Terry Solander, Trish Brewer, and Travis Wilson from City of Garnett. The pledge of allegiance was recited.

Governing Body Comments

Garnett Commissioner Nate Wiehl said he was excited to get started in his new position. County Commissioner Anthony Mersman had no comment. Garnett Commissioner Mark Locke stated he would like to see the two entities meet quarterly. County Commissioner Dave Pracht explained that the boiler in the courthouse was under repair and the commissioners approved to move forward to add mini splits to the courthouse for a more regulated heating and cooling system. He also stated the Road & Bridge department will be renting a tractor from John Deere this spring to mow. It is a cost savings to the county. Mayor Jody Cole gave an update on the US Hwy 59 project and stated the milling overlay will be completed spring 2024. The city has decided to pave 3rd avenue from Oak Street to the dead end on the west side of US Hwy 59. This will be an internal project. The rec center will be receiving new cardio equipment but unsure on its arrival. County Chairman Les McGhee elaborated more on the boiler in the courthouse. He discussed the county roads and their condition. It takes the grader operators 2 weeks to touch every road in their district and are working diligently to improve their conditions which is weather permitting. The department is also getting tire and dust control bids for the year. The scheduled asphalt for 2024 is for the road from Greeley to Linn Co line but may have to wait due to budget constraints.

Discussion Items

- Economic Development:
 - Casey Smith, ACDA board president, was present.
 - Discussion was held on the Economic Development Director position and what it looks like moving forward. Casey explained what the ACDA board is looking for in a candidate.
 - Jody Cole mentioned when visiting other cities with a bolstering community the big thing that stood out was the amount of grant monies they had received. All parties agreed that makes a difference to what can be accomplished and would like to see me grant activity.
 - Casey, on behalf of the ACDA board, would like to position to entail a full-time person who will be an assistant to the board and help execute their ideas.

- The Director position does not currently have all rights to execute any plans and must get approval from the ACDA board as well as the city & county commissions.
 - All commissioners agreed to revamp the job description for the main focus to be a joint city/county grant writer with duties assisting the ACDA board. Travis will rewrite the job description with Casey's help and disseminate the ad.
- Sewer Plant Road
 - Travis mentioned to the County Commissioners that the city would like to maintain the road leading into the sewer plant as it needs attention. The road is NE 1700 Rd. Les McGhee told Travis to contact Ethan Lickteig, Road Supervisor, to discuss the maintenance.

Garnett Commissioner Mark Locke moved and Garnett Mayor Jody Cole seconded to adjourn the meeting at 7:45pm. All voted yes.

The Governing Body of the City of Garnett met in regular session on February 13, 2024, at 6:00 p.m. with the following individuals present; Mayor, Jody Cole; City Commissioner's, Mark Locke and Nate Wiehl; City Clerk, Trish Brewer; City Manager, Travis Wilson; and City Attorney, Terry Solander.

CALL TO ORDER

Mayor Cole called the meeting to order at 6:00 p.m.

The Pledge of Allegiance was recited.
Josh Ford, Trinity Baptist gave the invocation.

CITIZENS TO BE HEARD (FIVE-MINUTE TIME LIMIT PER PERSON)

There were no citizens present wishing to speak.

GOVERNING BODY COMMENTS

- *Commissioner Wiehl*

No comments tonight

- *Commissioner Locke*

No comments tonight

- *Mayor Cole*

Attended the Chamber Awards Banquet. Attended the Library Board Meeting February 12th.

CONSENT AGENDA

- A. Approval of Minutes from January 23, 2024, Regular City Commission Meeting**
- B. Approval of Semi-Monthly Bills and Payroll in the amount of \$392,513.64**
- C. Consideration of the 2024 Antique Engine and Tractor Show Event Agreement**

Commissioner Locke motioned to approve the Consent Agenda as presented.
Seconded by Commissioner Wiehl. Motioned passed (3) AYE (0) NAY

REGULAR BUSINESS

- A. Consideration of approval of the plan review for 309 N. Maple, Dutch Country Café.**

Commissioner Locke motioned to approve the plan review for 309 N. Maple, Dutch Country Café as presented.
Seconded by Commissioner Wiehl. Motion passed (3) AYE (0) NAY

DISCUSSION ITEMS

- A. Rick Felt- Zombie Walk 2024**

Rick Feltz updated the Commission on the activities planned for this event.

INFORMATIONAL ITEMS

- A.** Moonlight Madness, hosted by Morning Mingle, will be held on February 23rd.
- B.** The Chocolate Tour, hosted by Morning Mingle, will be held on March 2nd.
- C.** The Egg Drop Easter Egg Hunt, hosted by the Garnett Church of the Nazarene, will be held at the Garnett Industrial Airport March 23rd.
- D.** The Prairie Spirit Rail Trail Ultra Races, hosted by Outlaw 100, will be held on March 23rd – 24th.

CITIZENS TO BE HEARD (FIVE-MINUTE TIME LIMIT PER PERSON)

There were no citizens present wishing to speak.

SIGNING OF DOCUMENTS APPROVED DURING THE COMMISSION MEETING.

Executive Sessions

Commissioner Wiehl motioned to recess into Executive Session to discuss a legal matter pursuant to K.S.A. 75-4319 (2) for consultation with an attorney for the public body or agency which would be deemed privileged in the attorney-client relationship for 10 minutes, starting at 6:14pm with the following present: Mayor Cole, Commissioner Locke, Commissioner Wiehl, City Manager Wilson, Planning/Zoning Director Eric Mills,

City Attorney Solander.

Regular session to resume at 6:24 pm.

Commissioner Locke seconded. Motion passed (3) AYE (0) NAY

Commission exited Executive Session at 6:24pm with an additional motion to extend the executive session until 6:34pm by Commissioner Locke. Seconded by Commissioner Wiehl. Motion passed (3) AYE (0) NAY

Commission exited Executive Session at 6:34pm with an additional motion to extend the executive session until 6:39pm by Commissioner Locke. Seconded by Mayor Cole. Motion passed (3) AYE (0) NAY

Commission exited Executive Session at 6:39pm with an additional motion to extend the executive session until 6:43pm by Commissioner Locke. Seconded by Mayor Cole. Motion passed (3) AYE (0) NAY

6:43pm Commission exited Executive Session. Mayor Cole called the open session back to order and stated no action taken within executive session.

ADJOURNMENT

With no further business before The Governing Body, Commissioner Locke made a motion to adjourn the meeting. Commissioner Wiehl seconded the motion. Motion passed (3) AYE (0) NAY

Meeting adjourned at 6:44 p.m.

Mayor

City Clerk

**MINUTES
(NOT YET APPROVED)
CITY OF GARNETT, KANSAS
PLANNING COMMISSION
FEBRUARY 20, 2024**

The February 20, 2024, regular meeting of the Garnett Planning Commission was called to order at 1908 hours by Chair Mersman. Other Commissioners present were Vice-Chair Peterson, and Commissioners Landis and Mills. Others present were Zoning Administrator Mills and Harold Gilbreth, Jr.

The chair asked ZA Mills about the minutes of the last meeting. Mills explained that the calling of the meeting was at the last minute, and was unable to properly prepare a packet for distribution. He further stated that the minutes of the special meeting and this meeting would be made available for approval at the next regular meeting.

Chair Mersman then called the business item, consider forwarding a recommendation of approval of electrical plan review for new construction at 219 S. Maple. ZA Mills stated he received the plans that morning, but inasmuch as the plans are not complex, he was able to review the said plans. During his review he determined the plans met the requirements of the NEC and the IBC, and asked the Commission forward a recommendation of approval to the governing body. Vice-Chair Peterson stated the he had also seen the plans, and concurred that the plans conformed to the requirements.

Commr. Landis then moved to forward a recommendation of approval of the plan review to the Governing Body. Peterson provided the second. Motion carried 4-0.

The Vice-Chair then moved to adjourn. Landis seconded. Motion carried 4-0.

There being no further business before this board, the meeting was adjourned at 1913 hours. The next regular meeting is scheduled for March 19, 2024.

ON CALL PROFESSIONAL SERVICES

Engineering, Surveying & Architecture

FOR THE CITY OF GARNETT

GARNETT



BG CONSULTANTS

ENGINEERS · ARCHITECTS · SURVEYORS

1405 Wakarusa Drive Lawrence, Kansas 66049

785.749.4474 / jason.hoskinson@bgcons.com

About BG Consultants

BG Consultants, Inc is a full-service E/A design firm providing services in planning; architecture; civil engineering; structural engineering; mechanical, electrical and plumbing engineering; and surveying. Our people are experts in their field, but above all, they're focused on our clients and helping them to realize their project vision.

For more information about BG Consultants and the services we provide, visit www.bgcons.com.

Offices

MANHATTAN

4806 Vue Du Lac Place
Manhattan, KS 66503
785.537.7448

EMPORIA

2508 W. 25th Avenue
Emporia, KS 66801
620.343.7842

LAWRENCE

1405 Wakarusa Drive
Lawrence, KS 66049
785.749.4474



Mr. Travis Wilson
City of Garnett - City Manager

January 11, 2024

Dear Mr. Wilson:

BG Consultants, Inc. is a full-service, multi-disciplinary firm providing professional services to clients like the City of Garnett on a wide range of projects. We are able to provide you with these services all managed under one roof. Other Kansas agencies have experienced the success we can bring to you as your On Call Engineer.

A Few Key Reasons to Choose BG Consultants. We understand you may get proposals from other firms and you will then be tasked with trying to make a selection. We understand that effort can be tedious so we offer following key reasons to choose BG.

- Service Sectors: To make a long story short, we have professionals that can provide you the technical expertise you need in every area except geology. Roads and bridges, traffic safety, airport engineering, structural engineering, solid waste management, water and wastewater, architecture & mechanical/electrical/plumbing.
- Transparent Service: We are transparent with our invoicing. We only charge for services you authorize and you will be fully aware of those costs in advance.
- Location, Location, Location: Our services will be provided by staff based out of our Lawrence office. Our office is about 50-minutes away, but I am often closer.
- Standing with Funding & Regulatory Agencies: Having worked on so many projects for such a wide range of clients, regulatory agencies have come to know and respect BG Consultants for the excellent service we provide. This has resulted in success with hundreds of millions of dollars brought into the communities we serve.
- Commitment to Garnett: We are no stranger to Garnett and have a project under construction (Maple Street KDOT CCLIP Project). We also served as City Engineer years ago and still have a trove of information that will be beneficial.
- Options for On-Call Service: I am willing to work with you for options on level of service and invoicing for On-Call services. For example, we could do a completely on-call contract where we only service and invoice when services are requested. Alternatively, we could do a competitive monthly fee for a minimum level of service which might include a staff meeting and/or a commission meeting per month to discuss projects, infrastructure needs, planning reviews, etc. so as to stay up-to-date and to help provide professional guidance on City infrastructure discussions.

If you have any questions concerning this proposal, please contact me at (785) 749-4474 ext. 2131 or by e-mail at jason.hoskinson@bgcons.com.

Sincerely,

Jason Hoskinson, P.E., PTOE
Corporate Secretary

TABLE OF CONTENTS

Firm Background.....	1
City Engineer Personnel.....	3
Availability	13
Workload Capacity.....	14
Firm Experience	15
References.....	33
Grant Applications	35
Governmental Engineering Services.....	36
Attachments	39



FIRM BACKGROUND

At BG Consultants, our mission is to

provide client-focused service through integrated design solutions.

BG CONSULTANTS, INC.

The water you use, the roads you drive, and the spaces where you live and work significantly impact your quality of life. At BG Consultants, we want you to receive maximum benefits from your environment. That's why we partner with you to create design solutions that reflect a balance of technical knowledge and an understanding of human behavior. We provide multi-disciplinary services in architecture; structural engineering; mechanical, electrical, and plumbing engineering; civil engineering; planning; and surveying.

Projects today are multi-faceted, requiring continual collaboration between different disciplines and the client. As our firm has grown, we've added disciplines to target your specific needs. Selecting a firm that can work together in-house to provide you architecture and engineering solutions is advantageous. By combining these services under one contract to meet your targeted needs, we are able to offer a better coordinated, more efficient process from a project's onset. Under one name, BG groups together different design disciplines to provide resources to meet diverse project needs.

Our firm stands apart from tradition, due to the foresight of BG founders, who, over 47 years ago, started a collaborative firm of forward-thinking professionals known for delivering excellent customer service. Today we have a professional staff of over 85 people, including 28 licensed engineers, architects, and surveyors. Our people are experts in their fields, but above all, they're focused on realizing each client's vision.

One of our key market sectors is focused on municipal clients providing "On-Call" City & County Engineering services. From the smallest community to largest, our experience, knowledge and work ethic will provide the most efficient and accurate services to your community.

FIRM HISTORY

BG Consultants has provided professional engineering, architectural, and surveying services to our clientele since March 1, 1976. We maintain an S corporation status, with both our Board of Directors and shareholders composed of current employees. Today, BG Consultants is a mid-sized design firm with three offices, all located within the state of Kansas. Our Manhattan, Kansas, office serves as the corporate headquarters, with regional offices in Lawrence and Emporia.

SERVICES PROVIDED

- Architectural Design
- Bridges & Culverts
- Cost Estimating & Budget Control
- Construction Administration
- Dam, Dikes, Levees
- Electrical Distribution
- Energy Analysis & Design
- Gas Line Distribution
- Hydrology & Hydraulics
- Irrigation & Drainage
- Mechanical, Electrical & Plumbing
- Parks & Multi-Use Paths
- Planning & Design
- Programming
- Site Engineering
- Solid Waste Management
- Stormwater Collection
- Streetscapes
- Structural Building Design
- Surveying, Platting, Mapping
- Testing & Inspection Services
- Transportation & Traffic Engineering
- Water Supply, Treatment & Distribution
- Wastewater Collection, Conveyance & Treatment

QUALIFICATIONS

BG Consultants, Inc. is qualified to perform all work outlined within the Scope of Services in the RFQ with the exception of geotechnical services. This statement is based upon our extensive experience in the consultant profession and our wide array of knowledgeable staff. Another important function in this statement is that BG is a medium-sized firm that has a wide range of clientele size that we are currently working with. As you will note on our listing of current on-call clientele, we have a wide range of community populations, many similar in size to Garnett, as well as statewide on-call contracts with State Agencies.

Our approach to on-call services contracts is simple – it all revolves around *responsiveness*. Just like we do with our other on-call clients, you will have a dedicated project manager in Jason Hoskinson, P.E., available and ready to task the BG Team with your requirements.

A more direct and detailed approach to our performance of services would be as follows:

- Interact with the pertinent City Administration, Staff, policy-making boards or public at large, as required. BG understands that getting to the base of a situation may require multiple actions on our part as well as our clientele. We make sure that we fully understand the parameters of a situation prior to making recommendations. This direct line of communication provides the most efficient resolution to most situations. It also shows our utmost respect for our clients and also provides the building blocks of trust.
- Upon fully understanding all parameters of the particular situation, we directly involve the most competent staff members for that particular situation. In doing this, we are truly valuing your need and not treating the situation as a “pilot study”.
- Contact pertinent City, County, State and/or Federal agencies as required by the situation and need. Obviously, these initial contacts will be minimized to an “as needed” basis. This provides the City with a complete set of information and facts as required to evaluate the particular situation.
- Perform a preliminary review or evaluation of the situation and report back to City Administration or other pertinent responsible parties on our initial considerations and/or recommendations. Our job as City Engineer is to provide our client with the full range of information pertaining to the issue at hand. This full disclosure of information is the most direct way to allow the City to make comfortable, final decisions.
- If after the preliminary review it is determined that a more specific evaluation is required, we will perform a detailed evaluation as required to meet the City’s request. By including you in every step within the evaluation, we minimize time delays and keep our services, and costs, to the bare minimum as required by the particular situation.
- Upon selection or approval of recommendations provided, our staff will provide the additional services, including, design and/or construction engineering services. The assurance of the City is that all alternatives will have been evaluated prior to initiating this step. This is important for many of our clients as public relations are an extremely important function of City Administration and Staff.

WORKLOAD CAPACITY

BG Consultants is able to handle the needs of each of our clients. Each client is unique in need and no less important than the others. Our current workload will allow for providing the full range of City Engineering services that may be required by Garnett. As described in the following section, we provide a full compliment of engineering services well suited to our on-call municipal clients, including water resources, transportation, site, structural, mechanical-electrical-plumbing engineering, as well as planning, surveying, and construction administration services.

Our staff is large enough to handle major improvement studies, designs and construction engineering, but also diverse enough to handle the unexpected needs of the City. We have 83 employees, with a core of 24 licensed engineers, 2 registered architects and 2 licensed surveyors.

Our scheduling process is built around need awareness and flexibility. As Vice President for the firm, Jason Hoskinson has the full capacity of the firm available to him. If additional staff is required, it is managed to provide it for the project at hand. We maintain a diverse staff within our three offices with the depth and experience to aid on projects when projects are under a tight deadline. Our project managers and engineers often work on multiple projects at a time and have the proven ability to work with scheduling requirements.

When needed, we administrate subcontracting with our partners for geotechnical, environmental or landscape architecture services.

CITY ENGINEER PERSONNEL



The individuals we have assembled for your On Call Engineering embody the characteristics necessary to make this process enjoyable for you. In addition to this highly qualified team of individuals, your projects will be supported by a staff of support professionals.

Each person offers a great depth of experience with all types of community projects. If selected we are committed to starting to work promptly.



**JASON
HOSKINSON**
Point of Contact

Key Staff



**THANIEL
MONACO**
Water/Wastewater
Engineer



**BRIAN
FOSTER**
Potable Water
Engineer



**DAVID
HAMBY**
Stormwater
Engineer



**JOHNNY
ECLAVEA**
Structural
Vertical Engineering



**BRADY
HEDSTROM**
Structural
Bridge Engineering



**JARROD
MANN**
MEP
Engineering Studio



**DIANE
ROSEBAUGH**
Transportation/Site
Engineer



**BRIAN "BJ"
WESTBERG**
Project
Surveyor



**CLINT
HIBBS**
Architecture



JASON HOSKINSON, P.E., PTOE

POINT OF CONTACT

Mr. Hoskinson leads the Transportation and Traffic Engineering division of BG Consultants. He brings to the table a wealth of knowledge from his experience designing innovative solutions to complicated problems and managing complex projects from conception through construction. Mr. Hoskinson has produced numerous preliminary design reports for all types of public infrastructure to assist clients with capital improvement planning. He has led various design teams through many public infrastructure projects, ranging from privately funded improvements to publicly funded improvements for cities, counties, and state and federal agencies.

Mr. Hoskinson possesses the leadership skills and the technical knowledge that continually result in successful project delivery.

EDUCATION

B.S. in Civil Engineering
University of Kansas

REGISTRATIONS

Professional Engineer in
Kansas and Missouri

Professional Traffic
Operations Engineer

EXPERIENCE

22 years with
BG Consultants, Inc.

2 years with
other Firms

PROFESSIONAL AFFILIATIONS

Kansas Society of
Professional Engineers

Institute of Transportation
Engineers

Kansas Association of
Uniform Traffic Control

Chi Epsilon National Civil
Engineering Honor Society

RELEVANT EXPERIENCE

- **2019-2020 On Call Engineer**, Linn County, KS
- **2016-2017 On Call Engineer**, Mound City, KS
- **2018-2023 On Call Engineering**, Baldwin City, KS
- **2014-2023 On Call Engineering**, Anderson County, KS
- **KDWP On Call Civil Engineering**, Statewide, KS
- **Nighthawk Road HRRR Improvements**, Marion County, KS
- **Public Works Improvements to JF/DG Landfill Access Road**, Douglas County, KS
- **Kimball Avenue Corridor Study and Improvements**, Manhattan, KS
- **West Anderson Avenue Improvement**, Manhattan, KS
- **Area Transportation Plan US-40 (W. 6th Street)/K-10 Interchange**, Lawrence, KS
- **23rd (K-10) and Iowa (US-59) Geometric Improvements**, Lawrence, KS
- **Bob Billings Parkway Improvements**, Lawrence, KS
- **19th and Louisiana Improvements**, Lawrence, KS
- **Lake Pointe Drive Street and Roundabout Improvements**, Lawrence, KS
- **6th and George Williams Way Signalization**, Lawrence, KS
- **US-50 Passing Lane Improvements**, Emporia to Hutchinson, KS
- **Denison Avenue and Kimball Avenue Street Improvements (NBAF)**, Manhattan, KS
- **Branch Street and US-36 Improvements**, Seneca, KS
- **Douglas County Route 1055 Improvements**, Douglas County, KS
- **Old US-40 Ellis to Yocemento HRRR Improvements**, Ellis County, KS
- **Douglas County Route 442 Improvements**, Douglas County, KS
- **15th and Industrial Safety Improvements**, Emporia, KS
- **US-24/40 and Main Street Improvements**, Tonganoxie, KS
- **Statewide Off-System Bridge Load Rating Project**, KDOT, Manhattan, KS
- **15th Street Bike Lanes and Sidewalk Improvements**, Ottawa, KS
- **US-59 & 14th St./George St. Traffic Signal Improvements**, Atchison, KS
- **US-24 Geometric Improvements**, Rossville, KS
- **Chieftain Trail, Phases I & II**, Tonganoxie, KS
- **Jones Park Memorial Trail**, Lyndon, KS
- **Langston Commons Development**, Lawrence, KS
- **Cudney Dam Repairs**, Kansas City, KS
- **Dam M-9 Modifications, Marais des Cygnes Drainage Dist. #1**, Franklin County, KS



THANIEL MONACO, P.E.

WATER/WASTEWATER ENGINEER

Thaniel Monaco, P.E., has gained valuable experience throughout his career in a variety of levels within the water and wastewater industry. His area of expertise includes pumping systems, piping system evaluation and design, utility modeling evaluation, water and wastewater treatment and construction administration. His experience has provided for the design and construction of numerous water and wastewater projects. Thaniel understands the needs required due to failing systems either in the physical/mechanical sense, quality issues such as permit requirements, or meeting the long-term growth needs of a community in regards to their infrastructure.

Thaniel typically serves as Project Manager from start to finish on the project. He utilizes his evaluation and design experience to streamline his capabilities as a Project Manager. His ability to manage multiple facets of the project concurrently enhances the efficient completion of his projects. He also has effective public administration skills which assist him in the interpersonal requirements of projects both with City Staff and the public at-large on all types of projects.

EDUCATION

B.S./Civil Engineering
Kansas State University
Environmental Option

REGISTRATIONS

Professional Engineer:
KS, NE

Registered Land Surveyor:
NE

EXPERIENCE

With BG Consultants: 17
With other firms: 14

TECHNICAL EXPERTISE

City Engineering Project
Management
Wastewater Collection and
Treatment
Water Supply and Water
Rights
Water Treatment, Storage
and Distribution

RELEVANT EXPERIENCE ON CALL

- On Call Engineering Services, Hiawatha, KS
- On Call Engineering Services, Osawatomie, KS
- On Call Engineering Services, Chapman, KS
- On Call Engineering Services, Edgerton, KS
- On Call Engineering Services, Reno County, KS
- On Call Engineering Services, South Hutchinson, KS
- Franklin RWD #4 On Call Services, Franklin County, KS
- WWTF On Call & Bi-Annual Inspections, Lyons, KS
- On Call MSWL Monitoring Well Sampling 2017-22, Emporia, KS
- On Call MSWL Monitoring Well Sampling, Osage County, KS
- On Call City Engineering Services, Emporia, KS
- Gas Monitoring at Landfill On Call, Riley County, KS
- On Call Engineering Services, Tonganoxie, KS

WATER/WASTEWATER

- City Representative Design/Build WWTP Improvements, Arkansas City, KS
- City Representative Design/Build WWTP Improvements, Emporia, KS
- 2024 Phase I & IA WWTP Improvements, Tonganoxie, KS
- WWTP Facility Plan, Lyons, KS
- WWTP Facility Plan, St. Marys, KS
- New & Parallel Waterlines & Pressure Reducing Valves (PRV's), Manhattan, KS
- Kansas State University Water, Wastewater and Stormwater Master Plans, Manhattan, KS
- Kimball/Denison Street Improvements, Manhattan, KS
- River Trail Development, Ogden, KS
- Wastewater Treatment Facility Improvements (0.45 MGD), Norton, KS
- Wastewater Treatment Facility Improvements (1.0 MGD), Colby, KS
- Interceptor Sewer Improvements, Colby, KS
- Wildcat Creek Lift Station Phase I - Manhattan, KS
- Water System Improvements, Horton, KS
- Water Treatment Plant Improvements, Hiawatha, KS



BRIAN FOSTER, P.E.

POTABLE WATER ENGINEER

Brian is the Lead Project Engineer in BG Consultants' Water Solutions Department. He has developed a comprehensive background in civil engineering to include Stormwater, Wastewater and Transportation engineering for municipal clients and has specialized in potable water solutions. Brian has successfully designed and managed many water engineering projects, including studies, supply, treatment, storage, and distribution system improvement projects. He utilizes his evaluation and design experience to streamline his capabilities as a Project Manager. His ability to manage multiple facets of the project concurrently enhances the efficient completion of his projects. He provides a common sense approach with the ability to quickly analyze technical, construction, and administrative aspects of these projects. Current and past clients appreciate his excellent project management skills and attention to client communication. Brian is a dedicated engineer with an excellent balance of technical knowledge and project management skills.

EDUCATION

B.S./Civil Engineering
Kansas State University

REGISTRATIONS

Professional Engineer:
KS

EXPERIENCE

With BG Consultants: 19
With other firms: 2

TECHNICAL EXPERTISE

Water Supply and Water
Rights
Water Treatment
Water Storage and
Distribution
Hydraulic Computer
Modeling

RELEVANT EXPERIENCE

- **Preliminary Engineering Reports & Water System Studies**
- Alexander, KS Green, KS Milford, KS
- Bison, KS Greenwood RWD #1 Moline, KS
- Bronson, KS Hartford, KS Olpe, KS
- Caldwell, KS Highland, KS Onaga, KS
- Cambridge, KS Hiawatha, KS Osage City, KS
- Chase Co RWD #1 Horton, KS Phillipsburg, KS
- Clayton, KS Howard, KS Preston, KS
- Concordia, KS Humboldt, KS Pretty Prairie, KS
- Cottonwood Falls, KS Kiowa, KS PWWSD #26
- Cowley RWD #6 KSU - Colby Sedan, KS
- Culver, KS Leavenworth Water Severy, KS
- Damar, KS Lyndon, KS Silver Lake, KS
- Elgin, KS Lyon Co. RWD #1 St. George, KS
- Elmdale, KS Lyon Co. RWD #2 Strong City, KS
- Emporia, KS Lyon Co. RWD #4 Timken, KS
- Eureka, KS Long Island, KS Toronto, KS
- Fontana, KS Manhattan, KS Turon, KS
- Franklin Co RWD #4 Maple Hill, KS Washington, KS
- Fulton, KS Matfield Green, KS Williamsburg, KS

ON CALL

- **On Call Engineering Services**, Hiawatha, KS
- **MSW Landfill On Call Services**, Rush County, KS
- **RWD #2 On Call Engineering Services**, Lyon County, KS
- **RWD #4 On Call Services**, Franklin County, KS
- **On Call Engineering Services**, Lyndon, KS
- **C&D Landfill On Call Services**, Howard, KS
- **On Call Engineering Services**, St George, KS
- **RWD #8 On Call Engineering Services**, Osage County, KS
- **Landfill On Call Services**, Norton County, KS
- **On Call City Engineering Service**, Emporia, KS
- **Farrar Corporation On Call**, Manhattan, KS
- **Landfill On Call Professional Services**, Nemaha County, KS
- **RWD #1 On Call Engineering Services**, Chase County, KS
- **On Call Engineering Services**, Alma, KS



DAVID HAMBY, P.E., CFM

STORMWATER ENGINEER

Mr. Hamby is a member of the civil engineering evaluation and design team at BG Consultants, and serves as the Lawrence Office Manager. Mr. Hamby has over 25 years of experience providing engineering designs on a wide range of projects for both public and private sector clients. He is responsible for providing design, interfacing with clients, preparing written reports, and ensuring successful project completion.

Mr. Hamby is a strategic thinker. He is comfortable and experienced in making project level decisions, creating detailed engineering design, writing specifications, writing analysis and study-level reports, determining appropriate design methods, and equipment sizing. He also conducts quality control reviews of completed designs.

EDUCATION

B.S./1994/Civil Engineering
University of Kansas

REGISTRATION

Professional Engineer:
KS, MO

Certified Floodplain
Manager: National

YEARS OF EXPERIENCE

With BG Consultants: 29

TECHNICAL EXPERTISE

Municipal Engineering
Site Planning
Street Design
Water Line Design

RELEVANT EXPERIENCE ON CALL

- On Call Engineering, De Soto, KS
- On Call Engineering, Tonganoxie, KS
- On Call Engineering, Edgerton, KS
- On Call Engineering, Ottawa, KS
- On Call Engineering, Perry, KS

STORMWATER

- 23rd & Ousdahl Stormwater & Geometric Improvements, Lawrence, KS
- Dam #6 Combined Sewer Separation, Atchison, KS
- Storm Sewer Improvements at the University of Kansas, Lawrence, KS
- 1st and Meriwood Stormwater Drainage Improvements, Edgerton, KS
- 15th Street Storm Sewer Improvements, Atchison, KS
- Lift Station #2 Replacement, Bonner Springs, KS
- Sewer & Lift Station Improvements, Ottawa, KS



JOHNNY ECLAVEA, P.E.

STRUCTURAL ENGINEER - VERTICAL

John has a comprehensive knowledge of architectural design, building code compliance and integrated building systems. As a valued member of BG's Architectural, Structural, and Inspection Department, he offers analysis, design, and value engineering solutions. Balancing design and practicality, John concentrates meeting structural demands and functionality while accounting for safety and economic factors. He always strives to research the needs of facility occupants, aiding in the overall project design and functionality. He knows what it takes to successfully complete any building project from the initial designs through construction, including Contract Documents and Technical Specifications. Concrete Framed Buildings, Masonry Buildings, Timber Buildings, Steel Framed Buildings, and Precast/Pre-stressed Structures are among the variety of building structures he has designed throughout his career. John is a dedicated engineer ready to pursue the next challenge for design excellence.

EDUCATION

B.S./Architectural
Engineering
Kansas State University

REGISTRATIONS

Professional Engineer:
KS, MO, NE, OK

YEARS OF EXPERIENCE

With BG Consultants: 29

TECHNICAL EXPERTISE

Bridge Structural Design
Concrete Design
Steel Design
In-Service Bridge
Inspection
Structural Analysis/Load
Rating
Hydraulic Analysis and
Modeling

RELEVANT EXPERIENCE ON CALL

- On Call Engineering Projects, Hutchinson, KS
- Engineering Services On Call, Edgerton, KS
- On Call Engineering Services, Anderson County, KS
- On Call Engineering Services for Road & Bridge Projects, Riley County, KS
- KSARNG AGD On Call Civil Engineering 2019-2021, Statewide, KS
- KSDWPT On Call Civil Services for Small Projects 2020-22, Statewide, KS
- KU On Call MEP Engineering Services, Lawrence, KS
- Garber Property On Call Development Assistance, Lawrence, KS
- On Call Engineering Services, St George, KS
- On Call Engineering Services, Tonganoxie, KS

MUNICIPAL

- Fire Station, Wheaton, KS
- Fire Station 12, Riley County, KS
- Anderson County EMS Headquarters, Garnett, KS
- Kingman County Law Enforcement Center, Kingman, KS
- Public Works Facility, Tonganoxie, KS
- Barber County Jail Improvements, Medicine Lodge, KS
- Anderson County Shop Facility, Garnett, KS
- Elevated Water Tank and Waterline Improvements, Emporia, KS
- Water Tower Repair Concrete Footings, Council Grove, KS
- Leavenworth Waterworks Standby Generator Foundation, Leavenworth, KS
- Lyndon Wastewater Treatment Facility and Standby Generator, Lyndon, KS
- Hiawatha Water Treatment Plant and Standby Generator, Hiawatha, KS
- Chase County PWWSD #26, Strong City, KS
- Iowa EPS Foam Manufacturing Facility, Lawrence, KS
- Multiple Equipment/Foundation installation projects, Manufacturing Facility, Lawrence, KS



BRADY HEDSTROM, P.E.

STRUCTURAL ENGINEER - BRIDGE

Brady Hedstrom is a design engineer in BG's bridge department. He has participated in all aspects of bridge replacement and rehabilitation projects, including hydraulic modeling and analysis, road alignment, site grading, approach grading and structural design. He has experience coordinating with utility companies on relocations and with government agencies to secure required permits. He has design, analysis and load rating experience with concrete, prestressed concrete, timber and steel bridges.

Brady also serves clients as an in-service bridge inspector, prequalified by KDOT to work throughout the state of Kansas as a fracture critical bridge inspection team leader, and trained and certified in rope access techniques. He assists in the structural design of building projects, and contributes to grading, storm drainage, and road design projects.

EDUCATION

B.S./Civil Engineering
Kansas State University

REGISTRATIONS

Professional Engineer:
KS

EXPERIENCE

With BG Consultants: 15

TECHNICAL EXPERTISE

Bridge Structural Design
Concrete Design
Steel Design
In-Service Bridge
Inspection
Structural Analysis/Load
Rating
Hydraulic Analysis and
Modeling

RELEVANT EXPERIENCE ON CALL

- Highway Dept On Call Engineering Services, Republic County, KS
- On Call Engineering Services, Council Grove, KS
- Everyg On Call, Statewide, KS
- On Call Engineering Services, Edgerton, KS
- On Call Engineering Services, Lyon County, KS
- Highway Dept On Call Engineering Services, Republic County, KS
- On Call Engineering Services, Tonganoxie, KS
- On Call Engineering Services, Rush County, KS
- On-Call Professional Services, Coffey County, KS
- On Call Engineering Services for Road & Bridge Projects, Riley County, KS
- On Call Engineering Services, Eureka, KS
- On Call Engineering Services, Linn County, KS
- On Call Engineering Services, Brown County, KS
- On Call City Engineering Services, Emporia, KS
- On Call Engineering Services, Hiawatha, KS
- On Call Engineering, Strong City, KS
- KSDWPT On Call Civil Services for Small Projects, Statewide, KS
- On Call Engineering Services, Norton County, KS
- On Call Engineering Services, Anderson County, KS
- On Call Engineering, South Hutchinson, KS
- On Call Engineering Services, Reno County, KS
- KSOFPM On Call 2014 Structural Engineer Services, Statewide, KS
- On Call Engineering Services, Chapman, KS

MUNICIPAL

- City of Hiawatha Water Treatment Plant, Hiawatha, KS
- City of Council Grove Riverwalk Trail, Council Grove, KS
- City of Olsburg Fire Station, Olsburg, KS
- City of Horton K-20/US-73 Geometric Improvements, Horton, KS
- Canopies for Midland Railway Depot, Baldwin City, KS



JARROD MANN, P.E.

MEP ENGINEER

Jarrod is Head of MEP Engineering for BG Consultants, bringing over 23 years of engineering design and project management experience to a wide variety of projects. He has worked in many market sectors, with special emphasis on healthcare, K-12 and higher education, and municipal projects ranging from libraries to treatment plants.

Jarrod is a LEED Accredited Professional, and has been instrumental in the completion of the LEED Gold Lawrence Public Library renovation and expansion and the LEED Platinum Kiowa County Memorial Hospital in Greensburg, KS. But whether a project is pursuing industry certification in green design, or simply lowering energy bills and maintenance costs, Jarrod brings a balanced approach to evaluating initial and life-cycle costs, ease of use and maintenance, performance and occupant comfort to every project.

Jarrod has worked with many project delivery methods, including serving as the prime design professional and as a subconsultant for design-bid-build, design-build, construction manager at risk, and negotiated construction projects. He has extensive experience managing on-call design services for clients both large and small. While each project type presents its own unique benefits and challenges, Jarrod believes that open communication and a team-focused attitude are always the keys to building both projects and relationships.

EDUCATION

B.S./Architectural
Engineering
Kansas State University

M.S./Engineering
Management
The University of Kansas

REGISTRATIONS

Professional Engineer:
KS, MO, OK, SD

YEARS OF EXPERIENCE

With BG Consultants: 6
With other firms: 18

TECHNICAL EXPERTISE

Pump Station
Rehabilitation and
Replacement
Treatment Process Power,
Instrumentation and
Controls
Site and Building Power
Distribution
Standby Power Generation
and Distribution
Design for Hazardous
Locations
Communications and
Signaling System Design
SCADA and Telemetry
Design, Modification, and
Upgrade

RELEVANT EXPERIENCE ON CALL

- On Call Engineering Services, Tonganoxie, KS
- On Call Engineering Services, Edgerton, KS
- On Call Engineering Services, Highland, KS
- On Call Engineering Services, Mayetta, KS
- On Call City Engineering Services, Emporia, KS
- On Call Engineering Services, Hiwatha, KS
- On Call Engineering Services, Ottawa, KS
- On Call City Engineering and Architecture Services, Independence, KS
- On Call Engineering Services, Auburn, KS
- On Call City Professional Services, Baldwin City, KS
- Iowa Tribe On Call Engineering Services, White Colud, KS
- WWTF On Call & Bi-Annual Inspections, Lyons, KS
- KU On Call MEP Engineering Services, Lawrence, KS
- PSU On Call Engineering Services, Pittsburg, KS
- KDWPT On Call Engineering Services Small Projects, Statewide, KS
- KSDOC On Call MEP Engineering Services, Statewide, KS
- J Webb On Call Fire Alarm Design Services, Lawrence, KS
- Garber Property On Call Development Assistance, Lawrence, KS

MUNICIPAL

- City of La Harpe Electrical Distribution Improvements, La Harpe, KS
- Ogden and Leonardville New Fire Station Buildings, Ogden and Leonardville, KS
- Electrical Distribution System Modifications with CDBG Grant, Centralia, KS
- Electrical Distribution System Improvements with CDBG Grant, Norton, KS
- Parsons Stormwater Pump Station Improvements, Parsons, KS
- Highland Water Treatment Plant, Highland, KS
- Eudora Main Lift Station Replacement, Eudora, KS
- City of Emporia Lift Station 2 Improvements, Emporia, KS
- City of Eudora Main Lift Station Replacement, Eudora, KS
- City of Fredonia WWTF Improvements, Fredonia, KS



DIANE ROSEBAUGH, P.E.

TRANSPORTATION/SITE ENGINEER

Ms. Rosebaugh currently serves as a Project Engineer with BG Consultants. Since joining the company in 2010, she has been involved with the design of a wide variety of capital improvement projects including transportation projects, sanitary sewer projects, stormwater projects, and site planning. She has gained knowledge and experience using Power Geopak in Microstation and the Kansas Department of Transportation design standards. She is recognized for her attention to detail, organizational skills, and her drive to succeed. She is a valuable member of the BG staff, and is resourceful and efficient in seeing projects through in their entirety. With Diane on the project team you can have confidence that she will develop and design solutions that meet your vision while maintaining the project budget and schedule. Her time management and interpersonal skills raise the bar for all team members and provide our clients with punctual project deadlines and the most value for their engineering dollars.

EDUCATION

B.S./Civil Engineering
Kansas State University

REGISTRATIONS

Professional Engineer:
KS

EXPERIENCE

With BG Consultants: 23

TECHNICAL EXPERTISE

Site Design
Streetscape Improvements
Stormwater
Transportation

RELEVANT EXPERIENCE TRANSPORTATION

- **Stormwater and Geometric Improvements at 23rd Street & Ousdahl**, Lawrence, KS
- **US 166 and Willow Geometric Improvements**, Coffeyville, KS
- **K-68 and Main Street Geometric Improvements**, Ottawa, KS
- **Douglas County US-56 Highway Widening**, Baldwin City, KS
- **KDOT US-50 Passing Lanes**, Between Hutchinson and Emporia, KS
- **Nelson Street Improvements**, Edgerton, KS
- **Baptiste Drive Extension Project**, Paola, KS

ROAD RECONSTRUCTION

- **Metcalf Road Reconstruction**, Louisburg, KS
- **Silver Street to 4th and Iron**, Paola, KS
- **Baptiste Drive and Hedge Lane Improvements**, Paola, KS
- **Road Reconstruction West Miami Street East Kaskaskia Street**, Paola, KS

PASSING LANES

- **KDOT, US-50 Passing Lane Improvements**, Emporia to Hutchinson, KS
- **US 400 Passing Lanes**, KDOT District 4
- **US-24 3R Improvements**, Jefferson County, KS

KDOT LPA

- **River Street Improvements 2017 CCLIP**, Eureka, KS
- **Market Street Pavement Replacement CCLIP**, Osage City, KS
- **US 36 State Street Improvements**, Phillipsburg, KS
- **US-77 Pavement Improvements CCLIP**, Marysville, KS

SIDEWALK/TRAIL

- **15th Street Sidewalk & Bicycle Lane Improvements**, Ottawa, KS
- **Municipal Street & CDBG Sidewalk Improvements**, Osawatomie, Kansas

**EDUCATION**

A.A.S/ Land Surveying
Metropolitan Community
College

EXPERIENCE

With BG Consultants: 11

BRIAN "BJ" WESTBERG, P.S.

PROJECT SURVEYOR

B.J. Westberg joined BG Consultants, Inc. in January, 2013 after completing his Land Surveying degree. Since joining BG, B.J. has been involved in all aspects of the surveying services we provide. This includes: project research, legal research, horizontal and vertical project control, boundary determination and resolution, processing field information into a digital CAD format, analyzing spatial relationships with GIS software, preparing legal descriptions and exhibits, project management and scheduling, fieldwork, and client relations. He has worked on a wide variety of projects such as: bridge, road, intersection, potable waterline, sanitary sewer, and storm drainage and sewer study/design/ replacement/repair projects, boundary surveys, ALTA/ACSM surveys, subdivision design/layout /plats, right of way acquisition and staking, construction staking, and FEMA related surveys.

RELEVANT EXPERIENCE

Boundary Surveys

Preliminary Surveys

Condominium Surveys

Subdivision Surveys

Construction Surveys

Topographic Surveys

Mortgage or Title Surveys

**EDUCATION**

B.S./2003/Architecture
Kansas State University
Minor in Community
Planning

REGISTRATION

Registered Architect:
KS, MO, NE, OK

LEED AP®

CLINT HIBBS, AIA

ARCHITECT

Clint is a thorough, conscientious project architect comfortable acting as the liaison between the client and contractor. With over 20 years of experience, he oversees elements of the design and construction process, provides quality control, coordinates the project team, and carefully tracks the budget and schedule. In his projects, he ensures they exceed environmental, safety, zoning, and aesthetic standards. As a proficient communicator during all phases of construction projects, he is successful in assisting the progress of projects of various sizes. His scope of work has encompassed architectural programming, architectural design and management, building code analysis, specifications writing, project delivery, post-occupancy evaluation analysis, architectural modeling/rendering and construction administration.

RELEVANT EXPERIENCE

- **KSARNG AGD On Call Architecture**, Statewide, KS
- **On Call Architectural Services**, Atchison, KS
- **On Call Architectural Services**, Emporia State University, KS
- **On Call Engineering**, Ottawa, KS
- **EMS Station Community Center**, Green Valley, KS
- **Nemaha County Transit Facility**, Seneca, KS
- **New Fire Station**, Marysville, KS
- **KSARNG Roof Replacement**, Salina, KS
- **KSDOC New KCI Industrial Building**, Lansing, KS
- **Water Treatment Improvements**, Highland, KS
- **Clock Tower Improvements**, Hiawatha, KS

AVAILABILITY

BG Consultants, Inc. will make available the full capacity of the firm for all duties so desired by the City of Garnett. Our team has been carefully selected to provide you an experienced and dedicated group of professionals excited to work with you for municipal Engineering On-Call services. Our staff, firm-wide, will serve as excellent resources to draw upon.

BG Consultants is organized with a vision of cooperation within our engineering departments. While we do have technical experts for water, transportation, wastewater, stormwater & structural engineering within our firm, many of our professionals are cross trained in other disciplines to provide the most beneficial use of time and budget. This is important to our department leads, as we

have the ability to effectively address engineering needs by drawing from a pool of professionals that can assist.

Jason Hoskinson works continually to manage workloads and schedules of those individuals involved in his projects. His extensive experience in the engineering industry is often utilized during the design process, as well as the Quality Control aspects. When projects require additional staffing, we are able to incorporate professionals from our Manhattan, or Emporia offices. This diversity in experience has allowed our company to meet the demands of our clients in an efficient manner.





GRANT APPLICATIONS

At BG Consultants, we make it a habit to go above and beyond for all of our clients. One of our value-added areas of expertise is grant funding. Many engineering projects that deal with infrastructure, especially those in low to moderate income communities, depend upon grants for funding. Without grants, communities would be forced to raise utility rates by obscene amounts in order to finance local projects.

BG's experiences with the Kansas Department of Transportation (KDOT), Kansas Department of Health and Environment (KDHE), United States Department of Agriculture (USDA) – Rural Development (RD) and Kansas Department of Commerce Community Development Block Grant (CDBG) will be proven invaluable for future projects. BG has developed a good rapport with KDOT, KDHE, USDA-RD and CDBG officials on past projects done through various grant administrators, which will enable projects to progress seamlessly while meeting the needs of the City.

BG has a long list of projects that are funded using USDA-RD, KDHE-SRF and/or CDBG funding. These projects include, but are not limited to transportation needs, municipal water treatment/distribution/storage needs, sanitary sewer treatment/collection/pumping related projects, downtown streetscape/beautification projects and architectural needs. BG has the experience with and capability to assist or complete applications for funding requirements with KDOT, KDHE-SRF (Water and Sewer) and USDA-RD.

While our engineers can't write or administer grants themselves for programs such as CDBG, our thorough, up-to-date knowledge of grant funding makes us better suited to design according to grant requirements and present recommendations that align with the latest grant opportunities. In other words, we try to make grant procurement as easy as possible for our clients, and we have a proven track record of doing just that.

Because funding opportunities and requirements are always changing, we make it a priority to maintain personal relationships with grant funding agencies and attend funding agency workshops whenever possible. In addition, we have multiple engineers in the firm who went so far as to become a certified grant administrator. That knowledge not only allows us to make the design process more efficient, but also to communicate more clearly to our clients about grant requirements and opportunities. The engineering we do requires careful attention to details of the grant requirements if we want our clients to receive funding.

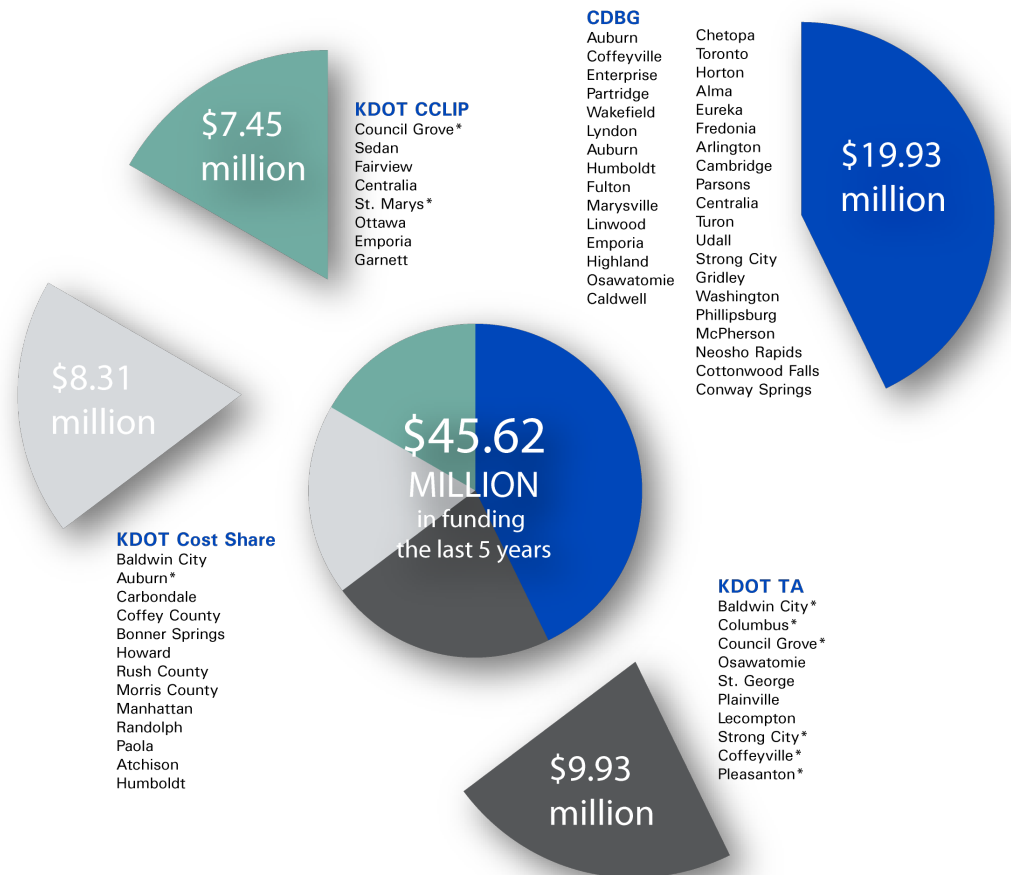
Due to our firm's success with these different programs, we have built and maintained a highly successful network of professionals with the agencies above. This benefits you as a community as we can professionally coordinate all aspects of your project to provide project success. Our ability to work cooperatively with community leaders, grant administrators and State agencies has allowed us to be involved with many CDBG funded projects. Our specific CDBG experience does include the Water/Wastewater program (large and small-scale system improvements), as well as KANSTEP program (water & community facilities), Urgent Need program (Tornado reconstruction of municipal facilities), and Community Facilities program (street and stormwater infrastructure).

Our ability to work cooperatively with community leaders, grant administrators and State agencies has allowed us to be involved with many grant and loan funded projects.

**Since the 2009 cycle,
we have assisted on 139
projects acquiring over
\$60,356,811 in CDBG
grant funding alone.**

This chart is a snip of the last 5 years of projects that have received funding for clients working with us. We have aided municipalities across the state with - many of which have received multiple awards across several years. Our in house experts can assist with the following transportation related funding, but we also have Water, Sewer and Architectural professionals who have assisted in thousands of critical infrastructure projects.

Our firm has a proven track record with funding agencies in Kansas. If you are interested in making needed improvements to your area, let us help make your project a reality.



FUNDING PROGRAM TYPES AND THEIR PROJECT ELIGIBILITY

CDBG - Community Facilities eligible projects include Public Safety Facilities, Community Centers, Park and Trail Improvements, Swimming pools and Splash pads, City Hall, Library and Municipal facility improvements.

CDBG - Transportation projects also eligible include reconstruction and/or widening of existing streets and construction of new streets; Street Accessories; Necessary transportation support facilities such as culverts, crossway, curbs, gutters and other normal appurtenances to streets or other structures which facilitate passage on or use of the streets; Parking Facilities; Bridges; Sidewalks.

CDBG - Water/Sewer projects include improvements to water supply, collection, and distribution as well as sanitary sewer and stormwater collection and treatment.

USDA-RD and KDHE-SRF - These projects include, but are not limited to transportation needs, municipal water treatment/distribution/storage needs, sanitary sewer treatment/collection/pumping related projects, downtown streetscape/beautification projects and architectural needs.

KDOT CCLIP - provides funds to cities to address deficiencies or improve a City Connecting Link on the State Highway System. A City Connecting Link is defined as any routing of the State Highway System that is located within the corporate limits of a City. There are three program categories that target specific types of improvements: Surface Preservation, Pavement Restoration and Geometric Improvements.

KDOT Transportation Alternative - provides funding for a variety of alternative transportation projects, including pedestrian and bicycle facilities; infrastructure for non-driver access to public transportation; projects that enhance safety and mobility; improve the scenic or environmental, or archaeological assets in our state; Safe Routes to School projects; and others. All selected projects are required to meet a minimum 20% local cash match.

KDOT Cost Share - is available for transportation projects that improve safety, support job retention and growth, improve access or mobility, relieve congestion and help areas across the state improve the transportation system.



WATER RESOURCES

The Water Resources Studio provides comprehensive solutions for the entire water cycle. We'll work with you to provide safe drinking water, reliable water pressure, effective wastewater collection and treatment, and to manage stormwater and runoff threats to your environment.



TRANSPORTATION

The Transportation Studio is dedicated to providing engineering designs that produce safe and reliable infrastructure that gets us from Point A to Point B.



CIVIL

The Civil Engineering Studios have a reputation for applying holistic design practices to each project. This approach enables our team to deliver quality, sustainable projects that are economical to build and easy to maintain.



SITE

The Site Engineering Studio provides planning and design services for civic, commercial, and private land sites. We partner with you on all phases of a project, beginning with site analysis through permitting and construction, to develop site-specific solutions.



STRUCTURAL

The Structural Studio collaborates with architects, building owners, organizations, and contractors to design efficient solutions for projects of all types, sizes and levels of complexity.



SURVEY

The Survey Studio is where most projects start within our firm. Our professionals pride themselves with the utmost accuracy and time efficiency possible.



CONSTRUCTION ADMIN

The Construction Administration is often the final step in our projects. We work with you to ensure that all aspects of your project are completed as designed and within specifications.



MEP SYSTEMS

The MEP Studio balances comfort, cost, efficiency and aesthetics through team effort. Our engineers view themselves as facilitators of each team to understand the needs and constraints of the project and then apply expertise to guide the team towards the solutions that's right for them.



ARCHITECTURE

Our Architectural Studio designs a wide range of building types that excel at their function, provide quality environments, strengthen organizations mission and identity, conserve energy and water, and complement their contexts.

FIRM EXPERIENCE

GENERAL ON CALL SERVICES

- **Preliminary Plans:** Prepare preliminary plans or review preliminary plans provided by designers hired by the City of Garnett
- **Create Plans and Specifications:** Create plans and specifications for projects that are too small in scope to be sent to a consultant for design
- **Field Check:** Field check preliminary plans prepared by other designers hired by the City
- **Project/Subdivision/Planning Review:** Review plans and specifications for City projects, designed by other consultants
- **Project Specifications:** Prepare project specifications using the Garnett standard construction specifications or EJCDC (Engineers Joint Contract Documents) and in-house BG technical specifications. Assist with developing new City standard specifications for contract documents or technical specifications related to street, stormwater, sewer or other construction
- **Equipment Specifications:** Research and write equipment specifications to facilitate the purchase of equipment by the City.
- **Emergency Management Engineering Input:** Provide engineering input to the City Emergency Management operations when requested
- **Report Writing:** Assist City Staff with development of pertinent reports for presentations
- **Public Relations:** Assist City Staff in presenting to City Administration / Council or Public at large for specific or general needs.
- **Capital Improvement Plans:** Assist City Staff in preparing short or long-term Capital Improvement Plans for municipal departments.
- **Regulatory Assistance:** Assist City Staff in working with Federal / State / County agencies pertaining to municipal needs.
- **GIS Systems Expansion/Development:** Work with City Staff in developing a comprehensive GIS management system for pertinent infrastructure.

Our diverse project portfolio allows us to be provide for your needs. We have personnel who specialize in all aspects of municipal engineering and architecture needs. Across Kansas, numerous roadways, wastewater treatment and gravity mains, potable water treatment and distribution mains, streetscape beautification, trail or sidewalks, community facility and recreational facility projects completed by BG Consultants, Inc. have exceeded client expectations. With our understanding of municipal and community needs and technical experience, we are confident that we can provide you unmatched service. Within this Statement of Qualifications, you will find a brief explanation of the team selected for your consideration. This selection of staff and the accompanying past project information is only a brief summary of our projects and technical abilities, but will show our diverse experience and success in assisting communities similar to Garnett.

Working with our dedicated professionals, you will be part of an all-inclusive design experience from start to finish. A critical part of our design process is becoming familiar with your project's purpose and goals. Add to that our understanding of local communities, commitment to innovative yet functional problem solving, and network of shared resources, and your project needs — however diverse — are sure to be met.



"Helping clients plan wisely and sustainably is crucial to our process. We strive to make each place we work in better tomorrow than today with our combined investment."

--Jason Hoskinson, P.E., PTOE

POTABLE WATER ENGINEERING



PROFESSIONAL QUALIFICATIONS

Water is the lifeblood of any community. Though we often take it for granted, growing demand, diminishing supply, and aging infrastructure make it increasingly difficult for water suppliers to provide quality, affordable water to their customers.

BG Consultants understands these challenges. Over the past 47 plus years, we have helped communities identify problems with their systems, prioritize rehabilitation efforts, meet drinking water regulations, and implement creative solutions to maintain sustainable water supplies. We have experience with every component of potable water systems, including distribution lines, storage systems, pumps, and meters, as well as increasingly complex treatment facilities.

Our experience has also taught us the importance of service beyond our technical abilities. Gathering public input and building consensus, navigating the regulatory environment, and identifying funding sources are all included in BG's commitment to you. Our goal is to not only meet your current needs, but to develop long-term relationships built on trust, transparency, successful solutions and management skills.

SPECIALIZED EXPERIENCE

BG Consultants, Inc. is a mid-sized firm with staff that has expertise in hydraulic modeling, distribution design, supply, treatment, and storage. Our team utilizes WaterCAD software for hydraulic studies. We have created numerous models for City and RWD systems throughout the State. Overall, our team is well-versed in water distribution system design requirements. The BG water engineering team utilizes common sense and field experience in developing detailed, well thought out construction documents that are easy to understand and

constructible. This ultimately leads to less questions and problems during construction, resulting in successful projects that are within budget.

Our water engineering team also has significant supply, storage, and treatment experience. In the past 10 years, BG has designed over 14 new water storage facilities (including a new 1MG Elevated Storage Tank for Emporia), 6 new water treatment plants, and numerous rehabilitations to existing facilities. Our treatment experience includes Disinfection, Chemical Feed, Reverse Osmosis, Ion Exchange, Filtration, Process Controls, and Clarification. We also have professional Structural, Architectural, and MEP staff experienced in treatment and pump station design in-house that would be available.

Our Potable Water services include:

- Water Supply
- Water Distribution
- Hydraulic Modeling
- New Service Analysis
- Construction Engineering
- Capital Improvements Analysis
- Funding Assistance
- Public Relations

"Our team offers an unparalleled level of expertise in this area of practice. We make a commitment to our clients to understand the problem and then develop innovative solutions to solve the problem. We understand that Stormwater can impact people, families and communities and work hard to minimize that impact."
--David Hamby, P.E., CFM

PAST PERFORMANCE: POTABLE WATER ENGINEERING

The following information represents a sampling of BG Consultants' potable water projects in recent years.

Project Name	Location	Project Cost	Project Description
Denison Avenue Waterline Improvements	Manhattan, KS	\$875,000	2,750 LF of 12" DIP, HMA Surface (Ultrathin Bonded) on Denison Avenue
St. Luke's Watermain Extension	Manhattan, KS	\$200,000	3,000 LF of 12" DIP, 250 LF of 8" DIP
Judson Street and Nutmeg Waterline Improvements	Manhattan, KS	\$600,000	250 LF of 8" C-900 PVC; 2,100 LF of 8" DIP
2012 & 2013 Water System Improvements	Manhattan, KS	\$1,830,000	10,000 ft of DIP Distribution Main & PRV Improvements Over 10 Separate Sites
Eureka Valley Water Transmission Main Improvements	Manhattan, KS	\$3,600,000	30,000 ft of 16" DIP Transmission Main & Appurtenances
New & Parallel Water Mains & PRV Installations	Manhattan, KS	\$1,055,000	4,000 LF of 16" & 12" Dist. Main; 5,000 LF 8" Dist. Main & 4 PRV Vaults
Kansas State University 2025 Water Master Plan	Manhattan, KS	\$30,000 (Study Cost)	Developed Campus Wide Hydraulic Model of Water System & CIP Development
North Denison Water Main Extension	Manhattan, KS	\$250,000	5,200 LF of 12" DIP with Two Master Meter Vaults
Industrial Park 3 Water Storage and Waterline Improvements	Emporia, KS	\$1,250,000	3,600 LF of 10" PVC with 136 Services & Pavement in Downtown Business District
2020 Water System Improvements	Strong City, KS	\$8,150,000	55,000 LF 6", 8" & 12" WM & Appurtenances; Groundwater Supply Improvements
2019 Water System Improvements	Sedan, KS	\$6,160,000	66,000 LF 4", 6", 8" WM & Appurtenances
Nitrate Removal Water Treatment Plant	Hiawatha, KS	\$6,700,000	1 MGD Ion Exchange Water Treatment Plant, Groundwater Well Improvements
Public Wholesale Water Supply District #26	Chase County, KS	\$5,000,000	0.5 MGD Greensand/RO Water Treatment Plant; 5,400 LF Raw Water Main; 9,000 LF 16" PVC
2015 Water System Improvements	Howard, KS	\$2,750,000	48,000 LF 4", 6", & 8" WM & Appurtenances

PROJECT FEATURE: EUREKA VALLEY TRANSMISSION MAIN IMPROVEMENTS

This project was driven by capacity issues for fire demand needs at the Manhattan Corporate Technology Park (Tec Park) and economic development in the Eureka Valley Corridor. The Eureka Valley area, or Southwest Pressure Zone, was being served via a 12" water transmission main fed from the Stagg Hill Pressure Zone (Miller Ranch Tower) through the Stagg Hill PRV and Scenic Meadows PRV. A larger, high pressure water transmission main to connect the Miller Ranch Tower to the Tec Park was needed.

Preliminary engineering began with a Route Analysis. Most of the focus was through the middle portion of the project, the most developed area of the route. An iterative process confirmed three routes for final comparison. A decision matrix was developed that evaluated capital cost, accessibility for maintenance and ease of easement acquisition. Once the route was chosen, a Hydraulic Analysis followed that evaluated current and future demands in the Southwest Pressure Zone, water age, pipe velocities and sizing of the transmission main. The analysis included an evaluation for supplying water to the Murray Addition Area, a mostly commercial area served by individual wells, via the existing 12" (low pressure) domestic waterline.

The final design is for a 16" high pressure watermain from the Miller Ranch Tower to Wildcat Creek Road (approximately 26,200 LF) where a new PRV will be installed. A 12" watermain (approximately 5,700 LF) will extend north from the new PRV to the Tec Park. Additionally, the Stagg Hill and Scenic Meadows PRV's will be replaced with safer, more accessible designs. An operation manual will be provided for guidance on PRV settings for the Southwest Pressure Zone. In conjunction with our status as the City's number one on-call engineer in the Water category, we updated City-wide current demand in the hydraulic model and provided training.

SANITARY SEWER SYSTEM

SPECIALIZED EXPERIENCE

BG Consultants understands the costs and schedules associated with sanitary sewer infrastructure projects. We strive to develop an achievable work plan with project stakeholders that will match the scope, budget, and meet project milestones. We have an excellent track record of working with communities in this capacity. Our 10 most recent sanitary sewer projects met the required funding schedules and were awarded within the budget identified in the Preliminary Engineering Report (PER). The individual project change orders never exceeded the

original PER budgets and were typically Owner driven to utilize remaining grant funds associated with the project. Our expertise in the local area gives us knowledge of common practices and regulations, while giving access to network resources for the local community and industry to draw from. We are currently working with the Cities of Chase and Alden on improvements to both communities sanitary sewer collections systems. The wastewater team at BG Consultants serves as a reliable partner for many communities across Kansas, leveraging our expertise in collection systems, lift stations, and



treatment facilities to help achieve the best level of service possible.

We are passionate about investing in a community's improvement, as seen through our successful track record and repeat clients. Our design team has the experience and to effectively meet our client's needs, as we continually invest in our staff and technology to provide more efficient services. The proficiency we demonstrate in GIS and database technologies often assist clients with operational considerations. Integration with other firm departments, including MEP, help you achieve the best level of service possible.

Our wastewater services include:

- Wastewater Collection
- Wastewater Treatment & Pumping Systems
- Sanitary Sewer Evaluation Survey: Smoke Testing, CCTV Inspection Evaluation, Flow Monitoring, Dye Testing, Manhole Inspection, GIS Database Analysis
- Sanitary Sewer Rehabilitation: Manhole Rehabilitation, CIPP or Fold and Form Pipeliner, CIPP Service Tap Rehabilitation, Open Trench Replacement, Horizontal Directional Drilling, Pipe Bursting/Pipe Reaming
- Lift Stations
- Capital Improvement Analysis

PAST PERFORMANCE: SANITARY SEWER ENGINEERING

The following information represents a sampling of BG Consultants' Sanitary Sewer projects in recent years.

Project Name	Location	Project Cost	Project Description
Sanitary Sewer and Wastewater Treatment Improvements	Fredonia, KS	\$2,774,500	New Pump Station, Flood prevention berm and overflow basin
City Wide Sanitary Sewer Collection System Improvements	Fredonia, KS	\$13,670,000	84,900 ft of sewer Rehabilitation
City Wide Sanitary Sewer Collection System Improvements	Strong City, KS	\$3,975,000	30,275 ft of sewer Rehabilitation and lagoon improvements
City Wide Sanitary Sewer Collection System Improvements	Humboldt, KS	\$7,065,000	54,890 ft of sewer Rehabilitation
City Wide Sanitary Sewer Improvements	Pomona, KS	\$4,805,000	42,740 ft of Sewer Rehabilitation
City Wide Sanitary Sewer Improvements	Gridley, KS	\$2,728,000	21,940 ft of Sewer Rehabilitation
City Wide Sanitary Sewer Rehabilitation, Phase 1	Horton, KS	\$4,000,000	28,300 ft of Sewer & 100 Manholes Replaced
City Wide Sanitary Sewer Rehabilitation, Phase 2	Horton, KS	\$3,552,000	38,500 ft of Sewer Rehabilitated
City Wide Sanitary Sewer Rehabilitation Phase 1	Scranton, KS	\$2,957,000	36,300 ft of Sewer & 820 vertical ft of Manhole Rehabilitation
City Wide Sanitary Sewer Rehabilitation Phase 1	Carbondale, KS	\$3,696,000	26,400 ft of Sewer & 850 vertical ft of Manhole Rehabilitation
Lift Station & Collection System Improvements	University Park, KS	\$4,175,000	34,700 ft of Sewer and 1078 vertical ft of Manhole Rehabilitation

PROJECT FEATURE: HUMBOLDT SANITARY SEWER REHABILITATION

The City of Humboldt, Kansas has a deteriorating collection system that has resulted in excessive quantities of Rainfall Derived Inflow and Infiltration (RDII). BG Consultants, Inc. has authored a Preliminary Engineering Report to evaluate the current conditions of Humboldt's current collection system and methods to address the problems identified.

Phase 1 Wastewater Treatment Facility Improvements (WWTF) including various monitoring, controls and electrical upgrades for flow monitoring, backup generator operations and Dissolved Oxygen (DO) control in the aeration basins. Additional work in the collection system included replacement of control panels at several lift stations.

Phase 2 This project consisted of rehabilitating approximately 97,400 linear feet of sewer main in varying sizes (6" diam. To 18" diam.) and materials (clay, PVC, and polyethylene) and manhole rehabilitation. BG Consultants, Inc. completed manhole inspections to determine the repairs necessary to address the problems associated with manholes. Smoke testing was also conducted on the entire collection system and observations were recorded in GIS and sent to the City. A Closed Circuit Television (CCTV) in accordance with the Pipeline Certification Program (PACP) guidelines has been completed and evaluated. Evaluation of the CCTV inspection data revealed multiple defects including fractured pipe, broken pipe, visible sags, root intrusion and defective taps. Flow monitoring has also been conducted and all meters recorded varying levels of peak flow during wet weather events.

MECHANICAL WASTEWATER SYSTEMS

PROFESSIONAL QUALIFICATIONS

BG Consultants has a long-standing experience and expertise in mechanical wastewater treatment facility evaluation and improvements. Our experience has assisted many communities throughout the state of Kansas in optimizing operations, upgrading technologies, and meeting new discharge standards for their NPDES permit. This experience starts with Thaniel Monaco, P.E., but our company has many additional personnel that are experienced with these types of projects. Our company can effectively meet the needs of these projects by not only having experienced process engineers but also additional staff with expertise in structural, site development, and MEP engineering, as well as,

architectural and survey staff to supplement a full breadth of services for mechanical facility improvements.

Our staff has a full understanding of the regulatory and funding issues that are typically involved with these types of projects as well. Our experience has included; simple energy efficiency projects, headworks upgrades, clarifier upgrades, activated process enhancements, sludge management upgrades, disinfection upgrades and complete new facility design. A few examples of our mechanical wastewater treatment facility projects are listed in the following chart.



SPECIALIZED EXPERIENCE

BG has also completed or are in the process of completing many additional mechanical wastewater treatment facility upgrade projects. Projects located in Horton, Lyndon, Osawatomie, Eudora, Manhattan, Wamego, Basehor, Buhler, Humboldt, and Riley County University Park Sewer District have all been projects that have replaced aging or failing equipment, been completed in anticipation of future BNR requirements, met a specific enhancement need or optimized the

efficiency of the plant. Some projects are large and some are small but the attention to detail remains the same throughout the BG process. We understand the importance of a reliable and efficient Wastewater Treatment Facility to the community. That dedication to excellence can always be expected of BG because we have and will perform in that manner.

PAST PERFORMANCE: WASTEWATER TREATMENT

The following information represents a sampling of BG Consultants' Wastewater Treatment projects in recent years.

Project Name	Location	Average Daily Flow	Project Description
Arkansas City WWTP Efficiency Upgrades	Arkansas City, KS	2.5 MGD	Replacement of Headworks Screening Dewatering Removal System, Replacement of grit removal and dewatering system, Replacement of Trickling Filter Distributor Arms (2), Upgrade of Trickling Filter Recirculation Pump (1), Replacement of Final Clarifier Mechanism & Install Launder Covers, Installation of New Blowers (3) for Aerobic Basin, Installation of New Anaerobic Digester Lids (2) & Associated Piping/ Pumping Systems, Replacement of Gas Flare System, Replacement off UV Disinfection System, Installation of New Electrical MCC Building, New SCADA System, and Associated Piping/Electrical Conduit Installations.
New Wastewater Treatment Facility (Ongoing)	Horton, KS	0.25 MGD	New Mechanical Wastewater Treatment Nutrient Removal Facility Design (Activated Sludge). Project also includes influent pumping replacement with peak overflow basin enhancements, new headworks screening, blowers, UV Disinfection, new Chemical/ Filtration system, new administration building, aerobic digestion improvements with sludge dewatering.
Wastewater Treatment Facility (Ongoing) Upgrades – City Representative	Emporia, KS	2.50 MGD	City Consultant Services for Design/Build Process. Project include influent pumping upgrades, grit removal & screening replacement, blowers, new process building, clarifier upgrades, UV Disinfection, new Chemical system, new admin building, switchover from anaerobic to aerobic digestion and new Integrated Fixed Film Activated Sludge (IFAS) for Nutrient Removal Requirements
Wastewater Treatment Facility Evaluation (Ongoing)	Lyons, KS	0.55 MGD	Nutrient Removal Wastewater Treatment Facility Evaluation. Project initially includes evaluation of existing WWTF for short term improvements to the activated sludge process due to equipment failure. Will also evaluate enhancements to existing WWTF for future BNR permit requirements, as well as, new Mechanical BNR Facility.

PROJECT FEATURE: HORTON KANSAS NEW WASTEWATER TREATMENT FACILITY

In 2015 BG was contracted to assist the City of Horton with improvements to their Wastewater Treatment Facility due to effluent permit limitation violations with the Kansas Department of Health and Environment. After conducting a study that identified options for improvement and replacement, it was concluded that replacement was the best option due to the existing facilities' condition. The final design consisted of construction of a new wastewater treatment facility, lift station, and force main to connect the City's collection system to a new wastewater treatment facility that is located on the south edge of the city. Careful coordination efforts were required to allow the existing plant to remain operable during construction as the new plant utilized the existing site.

The project included a new submersible lift station to handle both average daily and peak daily flows. Peak daily flows are pumped to a separate extraneous flow basin. Process flow is pumped to a headworks building with a mechanical screen, washer compactor, and grit removal equipment. From the headworks, wastewater is treated in a BNR extended aeration treatment facility. Wastewater is disinfected with a closed vessel UV disinfection system. Solids are aerobically digested, thickened, and applied to 9 sludge drying beds. The project also included a new administration building with a laboratory and controls room.

Financing for the project through the USDA Water and Waste Disposal Loan and Grant program was acquired with roughly 40% of the money coming as a grant. BG Consultants performed the initial site evaluation, preliminary analysis, project design, and construction administration. This project was awarded the 2023 Kansas Rural Water Association Most Improved Wastewater System of the Year.

STORMWATER ENGINEERING

PROFESSIONAL QUALIFICATIONS

The BG Water Solutions team of engineers provides a full range of Water, Wastewater and Stormwater services for the planning, design and construction of municipal, industrial and private clientele projects.

Our core group of stormwater engineering professionals are passionate about project success. From large-scale regional planning projects to sanitary sewer inflow

and infiltration reduction studies; we are your experts. Quality service and friendly correspondence is behind everything we do. We understand that listening to client needs and responding in kind is the first step in any successful project. Our industry experience enables us to identify critical path project issues and provide you with viable and sustainable infrastructure improvement options. Our approach is simple: Listen and provide thorough and complete solutions.



SPECIALIZED EXPERIENCE

Our team has significant stormwater experience in the areas surrounding across the state. They have completed numerous other drainage studies and floodplain projects.

BG Consultants, Inc. is uniquely qualified in this service as a local firm that has conducted several major stormwater master plan studies across Kansas. Our stormwater engineering has not been primarily driven by private developers, which we believe this provides a better overall understanding of storm drainage. From a simple culvert analysis to an involved urban drainage H&H analysis, our stormwater design team is ready and willing partners with all of your on-call project needs. We can also offers vital support for BG's multidisciplinary projects, including site development and transportation, to detain stormwater runoff close to the source and lessen peak flow rates. Regardless of the project, we always keep the public welfare in mind as we tackle existing and future stormwater problems that threaten your environment and property.

Our stormwater services include:

- Stormwater Masterplan
- Drainage Analysis & Reports
- Floodplain Profiling and Inundation Mapping
- FEMA Map Revisions & Amendments (LOMR, CLOMR, & LOMA)
- Open Channel Storm System Design
- Closed System Stormwater Design
- Hydraulic Structure Design
- Hydrology & Hydraulic Analysis
- Watershed Modeling
- Permitting & Compliance
- Floodplain Management
- Street Design
- Site Design

PAST PERFORMANCE: STORMWATER ENGINEERING

The following information represents a sampling of BG Consultants' stormwater projects in recent years.

Project Name	Location	Project Cost	Project Description
Eugene Field Stormwater Improvements	Manhattan, KS	\$90,000	Design of 365 LF of 30" RCP and 4 A-10 Curb Inlets
Stormwater Management Criteria Update	Manhattan, KS	\$225,000 (study cost)	Sub-consultant to Burns & McDonnell for this Stormwater Update
23rd and Ousdahl Stormwater and Geometric Improvements	Lawrence, KS	\$3.2 million	Study and design to improve flooding areas and geometric aspects of intersection
Dam #6 Sewer Separation	Atchison, KS	\$1.6 million	Sanitary and Storm water separation of +/-150 acre watershed from discharging into storm sewer system
McFarland Dam Improvements	McFarland, KS	\$236,000	Taller, Wider Dam with New Principal Spillway & Lower Auxiliary Spillway for 2007 Regulations
2012 CDBG Storm Sewer Improvements	Meriden, KS	\$408,800	Study & Design to Improve Multiple Areas of Flooding within City Limits
Storm Drainage Improvements	Onaga, KS	\$549,000	Study & Design to Improve Multiple Areas of Flooding within City Limits
Becker Addition Channel Drainage Study	Emporia, KS	\$2,000,000 (est.)	HEC-RAS Study for Erosion Control of Approx. 1.1 mi of Stream through Residential Neighborhood
Kansas State University 2025 Stormwater Master Plan	Manhattan, KS	\$5,100,000 (CIP Rec.)	H&H Study to Identify Stormwater System Deficiencies for KSU Campus Encompassing Approx. 675 Ac.
Eastside Drainage Study	Manhattan, KS	\$6,000,000 (CIP Rec.)	H&H Study to Identify Existing & Future Improvements for 630 Ac. in SE Manhattan
North Jackson Drainage Channel Improvements	Junction City, KS	\$2,300,000	Beautification & Hydraulic Improvements that Transformed 2,200' of Major Roadside Ditch
Lime Sludge Basin Improvements	Manhattan, KS	\$700,000	Stormwater Detention Basin Design that Added 21.4 Ac-Ft of Additional Storage
Storm Drainage Improvements for Dickens Professional Place	Manhattan, KS	\$300,000	Stormwater Detention Basin Design for 80 Ac. Drainage Basin on 8-Ac. Tract Developed
Tuttle Creek Blvd. Channel Improvements Phases I-II	Manhattan, KS	\$1,300,000	Beautification & Hydraulic Improvements that Transformed 2,800' of Major Roadside Ditch
Northview Drainage Study	Manhattan, KS	\$8,000,000 (CIP Rec.)	H&H Study to Identify Existing & Future Improvements for 1,900 Ac. in NE Manhattan
Poyntz Avenue Pump Station	Manhattan, KS	\$850,000	Stormwater Pump Station with Two 150 HP Pumps Rated for 32,000 gpm Next to Kansas River Levee

PROJECT FEATURE: 23RD AND OUSDAHL STORMWATER AND GEOMETRIC IMPROVEMENTS

After years of managing the routine flooding at the intersection of 23rd Street and Ousdahl Road, the City of Lawrence contracted with BG Consultants to develop a design remedy for the flooding problem and for additional geometric improvements at the intersection. The design included a detention pond which is located on the western portion of the Schwegler School parcel.

The existing storm sewer system was investigated, and survey work documented existing flow line elevations, pipe sizes, materials and length of pipe. The existing 72" x 44" RCP storm sewer was analyzed to determine feasibility of the pipe remaining in service. Approximately 5,100 feet of new storm sewer was constructed ranging in size from 12" to 66" in diameter.

A traffic engineering analysis was also completed to determine design traffic volumes, vehicle classifications, crash history, speed data, and recommended signal timing and phasing. Lane configurations and geometrics were reconfigured to optimize traffic operations based on the analysis.

BG Consultants prepared the National Pollutant Discharge Elimination System (NPDES) Permit for Construction Activities and the Kansas Department of Health and Environment Notice of Intent.

TRANSPORTATION ENGINEERING



In an increasingly mobile society, safe and reliable infrastructure that gets us from point A to point B is imperative. From county roads to interstate highways, transportation is what keeps our society moving.

Transportation engineering has been a staple of BG Consultants since 1976. As a recognized transportation engineering leader in Kansas, we have helped city, county, and state agencies, as well as private developers design, repair, and maintain their vital infrastructure.

We greatly enjoy working with our clients and have a track record of meeting project deadlines. As most projects encounter the inevitable twists and turns throughout the design and construction process, having a consultant you can depend on is especially important. BG Consultants understands the importance of keeping a close eye on project schedules and costs as the project develops from preliminary design to construction.

In the face of increasing demand created by aging roadways and bridges combined with funding limitations, communities trust our team to deliver innovative and cost-saving solutions that minimize impacts to the environment and neighboring properties. Keeping your long-term success in mind, we'll help you analyze the worth of your existing infrastructure and formulate plans to maximize its service life. Throughout the design and construction process, we'll partner with you to communicate with the public, identify funding sources, and plan for the long-term management of your assets.

Innovation, experience, and commitment—we have what it takes to deliver quality and cost-effective transportation designs.

Our experience spans a variety of transportation engineering projects including:

- Road and highway design
- Structural design of roadway and pedestrian bridges, culverts, and retaining walls
- Geometric Improvements
- Traffic signal analysis and design
- Transportation planning
- Traffic impact studies
- Streetscape enhancement
- Multi-Use Path design for pedestrians and bicyclists
- Safe Routes to Schools Master Planning
- Street Maintenance Planning & Design
- Street/Pavement Resurfacing
- Sidewalk design
- Traffic Operations Analysis
- Transportation Safety Analysis and Mitigation
- Street drainage analysis and hydraulic design

PAST PERFORMANCE: TRANSPORTATION ENGINEERING

Project Name	Location	Project Cost	Project Description
US-59 Maple Street Improvements	Garnett, KS	\$1,554,875	Roadway and Stormwater Design
Kimball Avenue and College Avenue Improvements	Manhattan, KS	\$7,500,000	Roadway and Storm Sewer Design, Traffic Signalization Design, Multi-Use Path
CDBG 12th Street Improvements	Osawatomie, KS	\$1,500,000	Design Survey, Concrete Pavement Design, Stormwater Design
Sales Tax Street Improvements	Hiawatha, KS	\$5,564,000	Street and Stormwater Design, Sidewalks, ADA Ramps
US-24 and Kimball Ave Geometric Improvements	Manhattan, KS	\$1,000,000	Intersection and Storm Sewer Design, Traffic Signalization Design, Multi-Use Path
Anderson County Bridge	Allen/Anderson Counties, KS	\$228,300	24'-32'-24' Reinforced Concrete Haunched Slab Bridge Design with 24' Wide Roadway
US-166 & Willow Geometric Improvements, Coffeyville, KS	Coffeyville, KS	\$1,400,000	Roadway and Intersection Design
US-54 River Street Pavement Restoration	Eureka, KS	\$3,500,000	Road and Storm Sewer Design, Sidewalk and ADA Ramps
6th Ave (US-50) & Prairie St. Geometric Improvements	Emporia, KS	\$1,000,000	Geometric, Stormwater & Traffic Signalization Improvements
Louisburg/Miami County Metcalf Road Improvements	Louisburg, KS	\$3,900,000	Roadway and Storm Sewer Design, Traffic Signalization Design, Multi-Use Path
Cedar Street Improvements	Ottawa, KS	\$2,100,000	Roadway and Drainage Design, ADA Compliance
Rucker Road Corridor Improvements	Junction City, KS	\$3,100,000	1.2 Mile Three-Lane Arterial Roadway Construction
23rd & Iowa Street (US-59) Intersection Improvements	Lawrence, KS	\$2,800,000	Geometric & Traffic Signalization Improvements
George Williams Way Improvements	Lawrence, KS	\$2,557,000	Design of 5-Lane Urban Roadway Section

PROJECT FEATURE: GARNETT US-59 MAPLE STREET IMPROVEMENTS

This Kansas Department of Transportation/Federal Highway Administration funded City Connecting Link Improvement Pavement Restoration project addresses various existing pavement and stormwater issues on the route between 4th Street and Park Road. To accomplish these improvements 2680 linear feet of storm sewer, ranging from 15-inches to 36-inches in diameter were installed. 5,060 linear feet of concrete curb and gutter, 3040 square yards of concrete pavement, 5,000 tons of AB-3 base rock, 3350 tons Commercial Grade Hot Mix Asphalt, and 6620 linear feet of pavement marking were also installed. This construction improved the riding surface of the north half of Maple Street through Garnett. It also addresses a part of a long-standing stormwater drainage issue in the corridor.

STREETSCAPES

PROFESSIONAL QUALIFICATIONS

Your community's streetscape amounts to more than just the roads and sidewalks. A streetscape characterizes your community's identity, draws attention to local businesses, and becomes part of its history. BG Consultants partners with cities to transform downtown streetscapes into vibrant community attractions. Our full-service team can help you create safe and efficient circulation for vehicular and pedestrian traffic, increase businesses' visibility, and establish inviting spaces for commercial and social interactions. BG Consultants has worked with many communities throughout the State of Kansas to preserve and improve their Main Street appearance and enhance their Downtown Business Districts. BG has completed design of improvement

projects in one third of the 626 Kansas cities, with locations in 90 of the 105 Kansas counties. Downtown Building projects have addressed historic preservation, rehabilitation, and renovation of Historic structures, resulting in a close working relationship with the Kansas State Historical Society in Topeka. Downtown Streetscape improvements involve pedestrian and vehicle access, installation of pavement and pavers, low maintenance landscaping, and relocation and/or replacement of utilities. BG is well aware of the issues encountered to keep businesses open and accessible during the construction period, and the public relations management needed in a successful Downtown undertaking.



SPECIALIZED EXPERIENCE

Often improvements such as streetscapes are not a high priority for tax dollars with other more pressing projects to fund. BG Consultants is an expert and acquiring funding for our clients through multiple funding agencies, with KDOT Transportation Alternative Funding for streetscape improvements specifically. We have helped 15 communities through the process of acquiring funding, some of which completed multiple phases of improvements exclusively with BG Consultants through completion.

The communities we have provided services for are the following:

- Alma
- Atchison
- Bonner Springs
- Emporia
- Eudora
- Hiawatha
- Hutchinson
- Lebo
- Onaga
- Osawatomie
- Overbrook
- Rossville
- Tonganoxie
- Wathena
- Strong City

PAST PERFORMANCE: STREETSCAPES



Hutchinson Streetscape

Completed: 2016

The project began with Rice • Foster/BG Consultants, Inc. performing master planning for the City of Hutchinson Downtown Streetscape Improvements by following recommendations of the Hyett/Palma Economic Development Strategy Report and involving key stakeholders into a project team to develop a master plan. Surveying of over 23 blocks of downtown area and presenting distinct district approach to streetscaping was utilized. The city of Hutchinson contracted with BG Consultants to complete the Streetscape Improvements from 3rd avenue to 5th Avenue. The improvements included new lighting and poles throughout the site. Also the inclusion of stone monuments which showcase a special tile that was designed for the improvements. The Downtown now looks fresh and vibrant. It is the heart of the Hutchinson community and it communicates to the visitor and to the local alike that it is a vibrant, interesting and successful community with a great future.

Client Contact: Brian Clennan, P.E.
Hutchinson City Engineer (620) 694-



Atchison 800 Block Light and Landscape

Completed: 2018

BG Consultants was hired to design streetscape enhancement improvements in the 800 block of Commercial Street. The project was federally funded through the Transportation Alternatives program administered by the Kansas Department of Transportation. The project was a second phase extension of the streetscape theme previously used in the 700 block of Commercial Street. BG Consultants was tasked with evaluating and designing the street lighting system and developing the plans and specifications for the roadside improvements, including street furniture, tree grates, planters, etc. The street lighting system utilized the locally manufactured Streetscrete decorative poles with LED acorn light fixtures. The electrical system included branch circuits for seasonal lighting, including circuits to the tree wells to allow for lights to be strung in the streetscape trees.

Client Contact: David Mahoney, P.E.
Atchison City Engineer (913) 367-5560



Rossville Downtown Streetscape Improvements

Completed: 2015

The City of Rossville obtained Transportation Enhancement funding through the Kansas Department of Transportation in 2013 to improve the public infrastructure in their downtown. Curbs and sidewalks were replaced, decorative street lighting with banner arms, flag holders, and an audio system was installed, brick paver inlays were installed in various patterns and locations, and street furniture was added to enhance the communities experience on Main Street. Upon completion of the Streetscape Improvements, Shawnee County's Public Works Department performed a mill and overlay of the asphalt street pavement to complete the beautification efforts. The community now regularly holds a variety of annual events, including car shows and the locally famous Tall Corn Festival. The community regularly gathers downtown and some events even include closing Main Street to traffic to host car shows and live bands.

Client Contact: Lisa Stum
Rossville City Clerk (785) 584-6155



Osawatimie Streetscape

Completed: 2010

The renovation of the Osawatimie Streetscape greatly enhanced the appearance of downtown Osawatimie. The improvements included milling off a part of the existing street, building a valley gutter and overlaying the street with 2 inches asphalt surfacing. The previous streetscape's overgrown trees and vaulted concrete slabs were removed and replaced with new landscaping and new concrete. Decorative sidewalks were constructed. The streetscape includes planters, trash receptacles, inlaid brick and decorative lighting. The overall ambience of this project has received widespread compliments throughout the community. This project updated the original 40 year old streetscape while maintaining the original character of the downtown. This streetscape will serve the community well for many years to come.

Client Contact: Bret Glendening
Deputy City Manager (913) 755-21466

ADDITIONAL SERVICES



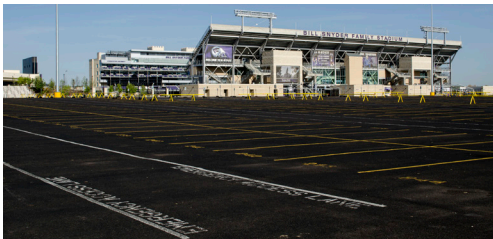
MECHANICAL-ELECTRICAL-PLUMBING ENGINEERING

You may not realize the impact internal and external building systems have on your day-to-day life. Having the appropriate thermal comfort, lighting, and wireless infrastructure creates a better experience for every person in your building. In 2014, BG Consultants added a Mechanical, Electrical, and Plumbing (MEP) Engineering division to better serve you. We now offer a single source of accountability and optimized communication between the disciplines working on your project. Using a whole building approach, we have developed a more fluid design process where building systems are integrated into the overall design from initial phases. Although MEP Engineering is not included in this contract, having individuals in-house to answer questions and provide input will be a valuable resource.

With years of combined experience, our experts deliver coordinated system designs tailored to your needs and optimized for your budget. In compliance with changing regulations, we seek to enhance the comfort, safety, and operations of your facilities with energy-conscious solutions you can easily maintain. By staying current with advancements in technology, regulations, and sustainable design practices, we consistently provide systems adaptable to current and forecasted needs.

Areas of Focus Include:

- Heating, Ventilation, and Air Conditioning
- Electrical Power and Lighting
- Plumbing
- Fire Protection
- Telecommunications



SITE ENGINEERING

Managing resources is critical in today's world. As land development increases, careful planning and design on every project site, both above and below ground, becomes more important. Consideration has to be given to site and infrastructure constraints, environmental and regulatory concerns, and potential community impact. We can help with that.

BG Consultants provides planning and design services for civic, commercial, and private land sites. Our team can address all of these needs in-house, bringing you individually tailored solutions for transforming land into usable residential, commercial, and public spaces. From detention ponds and utility lines to parking lots and sidewalks, the functional and environmental factors that determine a site's impact on land development can be overwhelming. Successful projects require carefully creating a layout that responds to site and infrastructural challenges and maximizes a site's potential. We partner with you on all phases of a project, beginning with site analysis through permitting and construction, to develop

site-specific solutions that meet your unique project objectives.

A Word on: Site Development

Planning for new construction rarely starts with the actual building. From detention ponds and utility lines to parking lots and sidewalks, there are many functional and environmental factors that determine a site's impact on land development.

It takes multiple design disciplines to bring a development together. BG Consultants' team can address all of these needs in-house, bringing you tailored solutions for transforming land into usable residential, commercial, and public spaces. We've designed projects ranging from 10-lot residential subdivisions to 200+ acre commercial and industrial parks.

You can rely on us through all phases of development, from pre-development meetings with city administrators, to preliminary and final platting and design, all the way through construction administration.



STRUCTURAL ENGINEERING

Facilities unable to withstand adverse forces and pressure endanger lives and damage economies. Structural engineers minimize a building's twisting, bending, and vibrating when strong winds batter it or an earthquake rumbles beneath its foundation. We rely on the integrity and security of structural designs to keep our most valuable assets safe from the threats of nature, time, and man.

The structural engineers at BG Consultants are trusted to do just that. Whether working with architects or engineers on design projects or responding to the emergency needs of clients, our team has the expertise needed to deliver reliable, constructible solutions.

With an integrated understanding of architectural design, building code compliance, and building systems, we develop comprehensive solutions customized to meet our clients' needs. We address functional demands while accounting for safety and economic factors by applying value engineering principles and in-depth training. Software tools like Revit and BIM modeling enhance our interactions with the building industry and have proven advantageous when coordinating with architects, consultants, and contractors. Utilizing the latest technology further allows us to provide economical and seamless designs to our clients.

A Word on: Structural Load Rating

BG's Structural department is experienced in evaluating and load rating structures of various types for typical and unique loading situations. For example, we evaluated the 6th and 7th floors of the KSU Foundation building at 2323 Anderson Ave. for the addition of heavy filing systems. We performed on-site inspection, research and calculations to provide a maximum load that could be safely distributed as well as made recommendations on placement and orientation of the individual filing system units. Our engineers can also design additions, retrofits or repairs to your structure to accommodate the desired use of your structure.

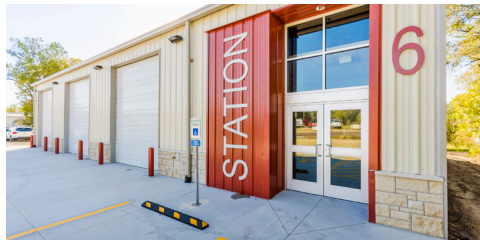
A Word on: Structural Modifications

When a building is renovated or altered, structural modifications often accompany those changes. Our engineers have experience working with clients, architects, and other engineers to ensure the safety of a structure while making the necessary modifications. Listed below are common examples of structural changes we've worked on:

1. Create New Openings in Masonry and Concrete Structures
2. Create New Tunnel Openings (i.e. Steam Tunnels, Electrical Ducts, etc.)
3. Provide Structural supports for new MEP Equipment on Existing Structures
4. Repair settlement related issues in existing structures
5. Elevator Installation into Existing Buildings
6. ADA Accessibility to Existing Buildings
7. New Openings in Concrete One- and Two-Way Slabs
8. Create Temporary openings into buildings for installation of large equipment
9. Strengthen Existing Load Bearing Structures to increase load capacity
10. Repair failing structural systems
11. Design New additions to structures from Concrete, Precast, Steel, Wood and Masonry
12. Provide Wind Screens to Roof Top MEP Equipment

A Word on: Retaining Walls

We have designed retaining walls from large to small in size. Whether a standalone project or included in another project, we are experienced designing with modular block walls, in both gravity configuration and mechanically stabilized with geogrid. The most common of these are the Keystone and Versa-Lok systems. We have also designed stone and precast concrete "bunker block" walls, as well as cast-in-place reinforced concrete walls. Recently, our structural department designed two retaining walls on North Manhattan Avenue south of Kimball Avenue. The first was a Mechanically Stabilized Earth wall with a Keystone masonry block face, while the second was a cast-in-place concrete retaining wall with a form liner that gives the appearance of a stone masonry wall. Our experienced Engineers are ready to meet your retaining wall design needs.



ARCHITECTURAL SERVICES

As a regional mid-sized firm, we have in-house professionals who serve as technical experts in their fields. We work hard to understand the needs of our clients, from the specific demands of their facilities to the requirements of fulfilling public needs and oversight.

We design with consideration to the regional context, are knowledgeable about local trade conditions and regulations, and use creative problem solving as issues arise. We have a strong portfolio of architectural projects where a client's budget and timeline are significant considerations.

PROJECT TEAM

Each member of our team is selected for the expertise they bring to our diverse projects. Because our team has worked together for years, efficiencies in planning, design, and administrative methods have been realized. We pass those advantages along to you.

Together, they bring a balance of technical competence and specialized expertise that will allow them to work efficiently with you. Because BG has fostered an environment of mentoring and shared resources across our offices, our collective knowledge is shared and cultivated among every member of our team.



OUR EXTENDED CAPABILITIES

Projects today are multi-faceted, requiring continual collaboration between different disciplines and the client. As our firm has grown, we've added disciplines to target your specific needs. Selecting a firm that can work together in-house to provide you architecture and engineering solutions is advantageous. By combining these services under one contract to meet your targeted needs, we are able to offer a better coordinated, more efficient process from a project's onset. Under one name, BG groups together different design disciplines to provide resources to meet diverse project needs.

CIVIC & CULTURAL ARCHITECTURE

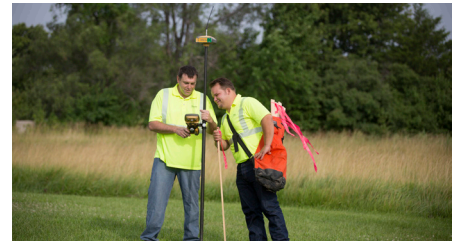
The fabric of a community is embodied through civic and cultural buildings. They preserve our local heritage and communicate our aspirations. They are critical to continued growth. Whether that means designing a new downtown landmark to kickstart revitalization or renovating existing building systems to promote energy efficiency, we can help you achieve your vision.

We start by developing an understanding of your culture and work to bring together the many voices of your community. We design to maximize performance, create a unique sense of place, and enhance the individual

experience. No matter the size of your project, we want to leave you with a building that celebrates your community.

PARKS & RECREATION/SPORTS FACILITIES

Working with Recreation and Sports professionals and their unique facilities, as well as the opportunity to maintain and enhance the critical amenities of our built environment, are opportunities our team is passionate about. Members of our team have significant experience master planning and building parks and recreation facilities, both large and small scales, locally and nationwide. Providing solutions that meet the specific needs of public recreation and sport facilities is not a common combination of skills in our profession, but one that our team have successfully completed over the course of a number of years.



SURVEYING

Surveying is essential to land development. One of the oldest known professions, surveyors originally determined property boundaries and measured and mapped the land. Today's surveyors still do that, dealing with the land individuals own, topography, and elevation. They help us understand how to best work within the available land and constraints, accurately plan and design for a project, and establish constructability.

Expertise is more than just knowledge—it requires making the connections that others miss, answering the “why” and “how” questions. The Surveying Department at BG Consultants explains complicated circumstances so that you can clearly understand the situation and available options.

*“Almost every project in our firm starts with surveying. Surveyors locate ground features, underground features, easements, property lines, things that need to be known about a project for design. It’s critical to know where you can and can’t do improvements, to what degree you can design your elevations from, understand what features exist and areas of danger, where access to public streets and utilities are. **We work to eliminate problems in the future.**”*

--Fred Gibbs



CONSTRUCTION ENGINEERING

When our designs are constructed, we want you to get exactly what was promised. That's why our role extends throughout the bidding period and construction. By providing Construction Engineering services, we can act as your advocate and review construction for compliance with the design intent. We will observe the contractor to see that proper construction techniques, materials, and equipment are used and that the project is constructed in compliance with the construction documents.

In addition, we are one of the largest and most experienced Local Public Authority Consultants (LPA) qualified for Kansas Department of Transportation inspection projects. We consistently serve federal, state, county, municipal, and local governments, as well as commercial and private clientele, in the inspection of all types of construction projects.

We train our employees to be flexible and able to handle a variety of duties. This gives us a pool of trained and experienced personnel to complete the testing and inspection of diverse project types. Attending training schools conducted by KDOT develops client confidence in our staff. We regularly frequent courses to broaden our services and remain on the leading edge of technology and regulatory requirements. Our company has equipment to handle three major concrete pours simultaneously, and our asphalt testing equipment meets all requirements for KDOT laboratories. The size and experience of our staff allows us to complete the required services within the time prescribed by the contractor and/or client.



PUBLIC RELATIONS

An important aspect of our City Engineering services has been Public Relations. This is important for our clients by providing the residents an opportunity to interact directly with us as Engineers and also providing a “buffer” between residents and City Staff. Our staff is proficient in public speaking and have years of experience to draw on when assisting the City in communicating to the residents. The aspects of the public relations service could include, community coordination on particular issues, attend and/or direct Public Informational Meetings, or even participate in meetings with other governmental agencies on particular issues. Our familiarity with many of the governmental agencies

typically involved with municipal clients is also a benefit to our clients. Whether it is KDHE on a particular water/wastewater issue, KDOT or County officials on a transportation need or USDA-Rural Development needing information on a financing component of a project, our staff is experienced and ready to assist.

Services may include:

- Community Coordination
- Public Information Meetings
- Meet with Fort Scott Constituents
- Meet with City, County, or State Officials
- Build Public Support for Bond Issues
- Integration of Social Media



CITY ENGINEERING DESIGN STANDARDS

As consultants we are exposed to many different engineering design standards as adopted by federal, state, county, municipal and local governments. To develop or edit design standards, our first step is to really listen to your community’s needs. Understanding past events and specific problems will be paramount in moving forward to institute design standards that will ensure quality development or re-development and meet current regulatory requirements. Once the areas of concern are understood, example standards will be presented. The City will make preliminary choices and a review process will continue until the final Design Standards are ready for adoption.

BG Consultants, Inc. has prepared preliminary and final plans for cities with advanced requirements and for smaller communities with virtually no planning and zoning ordinances to guide the process. Our goal is to help you find a balance. Improved regulation is needed to ensure quality construction in Garnett without creating undue additional duties for City staff or deterring interested developers. We will be your unbiased advocate who can still bring a consultant’s perspective.

REFERENCES

We always believe that it is important for a potential client to speak with other clients or agencies when doing a project to determine if a consultant can provide what is required. We have included applicable references below. If additional references are required, we would

be happy to provide an expanded list. As requested, we are submitting sample plans, but have attached them separately from this document due to the number of sheets involved. We would be happy to submit additional copies upon request.

COLE HERDER

City Administrator
City of Humboldt
(620) 473-3232
cole.herder@humboldtkansas.org

Projects Include:

- Elevated Water Storage Evaluations and Improvements
- Water Treatment Evaluations and Improvements
- Water Distribution Modeling, Evaluation, and Improvement Design
- 9th Street Sanitary Sewer Extension
- City Street Improvements
- Wastewater Treatment Plant Facility Plan and Priority Improvements
- Industrial Park Development Evaluation and Infrastructure Design

JIM UBERT

City Engineer
City of Emporia
(620) 343-4260
jubert@emporia-kansas.gov

Projects Include:

- "On-Call" Civil Engineering Services
- Peyton Street Rail Road Utility Crossing
- Industrial Park III 16" Waterline Improvements
- 1 MG Composite Water Tower
- 6th (US-50) and Prairie CCLIP Geometric Improvement
- Potable Water System Modeling
- 12th Ave. Waterline Improvements Grand to Constitution
- Lift Stations 1, 2 & 15 Design Services(19-1151E) (CDBG \$700,000)
- Arundel Street 48" Diameter Sanitary Sewer Interceptor Improvements
- Neosho River Water Intake (to WTP) Improvements
- City Representative for BNR WWTP Improvements

BRET GLENDENING

Deputy City Manager
City of Osawatomie
(913) 755-2146
bglendening@osawatomieks.org

Projects Include:

- 12th Street Improvements
- Northland Interceptor Sewer Improvements
- Water Distribution Improvement
- 2022/2023 Street Improvements
- Walnut/Pacific/Brown Street Improvements
- Downtown Streetscape

GEORGE BRAJKOVIC

City Manager
City of Tonganoxie
(913) 845-2620
mayor@ogden-ks.gov

Projects Include:

- Replacement of 4th St Bridge over Tonganoxie Creek
- 2023 Wastewater Treatment Plant Improvement Phase I & IA
- Replacement of Church St Bridge & Channel Improvements
- On Call Engineer 2000-2023
- Industrial Park Street, Lift Station, and Water Tower Improvements

RANDY DEWITT

Assistant Director of Public Works
City of Manhattan
(785) 587-4530
dewitt@cityofmnhk.com

Projects Include:

- 2023 Surveying Sanitary Sewer Improvements
- North Campus Corridor Detention
- Sanitary Sewer at 1920 Poyntz Ave
- Butterfield Neighborhood Waterline Improvements
- Multi-Phase Kimball Avenue (KSU North Corridor) Improvements

GOVERNMENTAL ENGINEERING SERVICES

BG Consultants currently performs city engineering duties for 30 cities, as listed below. Each community we work with gains a full service engineering design team, ready to conduct construction document reviews for zoning and code compliance, assist in obtaining funding for needed projects, organize capital improvement and maintenance plans, provide construction documents ready for bidding, and conduct public meetings.

After contracting with BG, our wide range of services will be at your disposal; every aspect from planning to construction is safe in the hands of our firm. Once we sit down with you to learn about your needs, wants, and expectations, BG will compile a team specialized for your project. Your team will be made up of professional individuals, all with personal experience related to the task at hand.

Financing can be made a breeze with the help of BG as we are veterans in working with the Kansas Department of Health and Environment (KDHE), Kansas Department

of Commerce Community Development Block Grant (CDBG), Kansas Department of Transportation (KDOT), USDA - Rural Development, and other government agencies. Due to our professional approach, efficient services, and reliable communications, BG has an extensive list of projects completed using various grants and loan funds. Involving all of BG Consultant's amenities and strengths is how we are able to see that your vision results in reality.

Communication to City Commission, city leaders and public works staff is always a priority. BG Consultants understands that the most important component of a successful on-call engineering contract is to assure open communication with our client. Therefore, a cornerstone of our service is to incorporate shared decision making, open discussion, and frequent communication. Based on our experience and success, we believe a carefully planned approach tailored to your projects is key to keeping these projects on schedule and economic in their development. We understand that our services

Below is a listing of our current On Call clientele:

CITY ENGINEER FOR:

- Americus
- Auburn
- Baldwin City
- Council Grove
- De Soto
- Edgerton
- Emporia
- Emporia MSWL
- Eureka
- Fredonia
- Hiawatha
- Highland
- Howard
- Leavenworth Waterworks
- Linn Valley
- Linwood
- Lyndon
- Mayetta
- Olpe
- Osage City
- Osawatomie
- Ottawa
- Perry

- Sedan
- Silver Lake
- St George
- Strong City
- Tonganoxie
- Troy
- Wathena

COUNTY ENGINEERING FOR:

- Anderson
- Anderson RWD #5
- Brown
- Chase RWD #1
- Franklin RWD #4
- Jefferson RWD #12
- Lyon
- Lyon RWD #1
- Lyon RWD #2
- Nemaha Landfill
- Norton Landfill
- Osage RWD #8
- Republic Highway
- Riley Landfill Gas Monitoring
- Riley Road and Bridge

- Rush
- Rush MSW Landfill

STATE AGENCIES FOR:

- KU MEP
- ESU Architecture
- KDWP Architecture
- KDWP Civil
- KDWP MEP
- KSARNG Architecture
- KSARNG Civil
- KSDOC Architecture
- KSDOC MEP
- KU Surveying
- PSU MEP

PRIVATE BUSINESS FOR:

- Apple Tree Homes
- Cargill
- Evergy
- Farrar
- Garber Property
- Hamm
- J Webb
- The Curtain Property Company

typically make decisions that directly impact a community, both residents and businesses. BG's culture is based around a community perspective - caring about our clients and assisting their prosperity. This perspective is why we are so successful in our repeat clientele throughout Kansas.

If you select BG Consultants for this contract, we will always be available to the City for "On-Call" duties and will personally sit down with the City Commission and City Staff in order to understand the needs of the community and the direction the City intends to develop. We will assess the issues, formulate a plan and again sit down with City stakeholders to work toward plausible and fiscally responsible solutions to the issues at hand. We will also involve our technical experts from within the company when their expertise meets the needs and goals of the administrative or project objective. When necessary, and at the City's discretion, we will meet with the public to gather or disseminate information.

Our assembled project team has extensive experience serving as a liaison between our clients and various funding agencies and regulatory governmental agencies. Our experience includes projects funded by multiple agencies that were completed within budget and on time. We will provide project services from the Manhattan Office and conduct frequent meetings with

our clients to review project developments as they occur.

BG Consultants works in close contact with a number of municipalities through our City Engineering contracts. We understand that city engineering is all about solving problems. BG Consultants has multiple professionals on staff with experience working in local governments, providing us with an insight not many firms have. The cities that we provide on-call engineering services have come to rely upon our technical resources, our rich City Engineering experience, and our commitment to their best interests.

"When looking for any type of engineering advice, design or consultation, BG Consultants has been our 'go to' source for precise, accurate information. Always there, always available, BG Consultants have been just a phone call away for the City of Eureka."

- Ian Martell, Former City Administrator for City of Eureka

THANK YOU
For considering us!



BG CONSULTANTS
ENGINEERS · ARCHITECTS · SURVEYORS

Manhattan
785.537.7448

Lawrence
785.749.4474

Emporia
620.343.7842

STATEMENT OF QUALIFICATIONS

ENGINEERING SERVICES

CITY OF GARNETT, KANSAS

DECEMBER 2023

TABLE OF CONTENTS

A. Firm Overview 1

B. Services and Project Experience

 Bridges. 2

 Transportation Engineering. 7

 Structural Engineering and Historic Rehabilitation. 12

 Surveying 18

 Aviation 23

 Construction Observation 28

 Stormwater Management and Hydrology. 31

 Utility Infrastructure Design and Engineering 36

 Landscape Architecture 42

 Planning. 46

C. Rate Schedule 49



December 14, 2023



TRAVIS WILSON

City Manager
City of Garnett, Kansas
P.O. Box H – 131 West 5th Avenue
Garnett, Kansas 66032

RE: STATEMENT OF QUALIFICATIONS FOR ENGINEERING SERVICES

Dear Mr. Wilson and City of Garnett Commission:

In response to your request for our firm's qualifications, we are happy to have the opportunity to share our expertise and demonstrate how we can be a valuable partner in achieving the goals and objectives of your community. Our following Statement of Qualifications provides a comprehensive overview of McClure, our wide array of services, and the qualifications of our team members.

We are excited about the opportunity to continue our partnership with you. Our commitment to delivering top-tier engineering services to the City of Garnett remains unwavering. We have developed a familiarity with Garnett and its challenges, and our experienced team works to ensure that every project is executed with precision, quality, and excellence.

We approach every project with a deep commitment to delivering exceptional results, and our team's dedication to serving The City of Garnett is no exception. We are eager to continue our collaboration, using our extensive experience and expertise to deliver engineering solutions that not only meet, but exceed your expectations.

Please do not hesitate to contact me if you have any questions or require additional information. We are available at your convenience and can be reached at **913.522.2786** or **meblen@mcclurevision.com**.

Thank you for considering our Statement of Qualifications. We look forward to the opportunity to be of service to The City of Garnett and to contribute to the future success of your community.

On Behalf of Our Team,

MATT EBLEN, PE, LEED AP

Client Liaison and Primary Contact
O 816.756.0444 **M** 913.522.2786
E meblen@mcclurevision.com

A. FIRM OVERVIEW

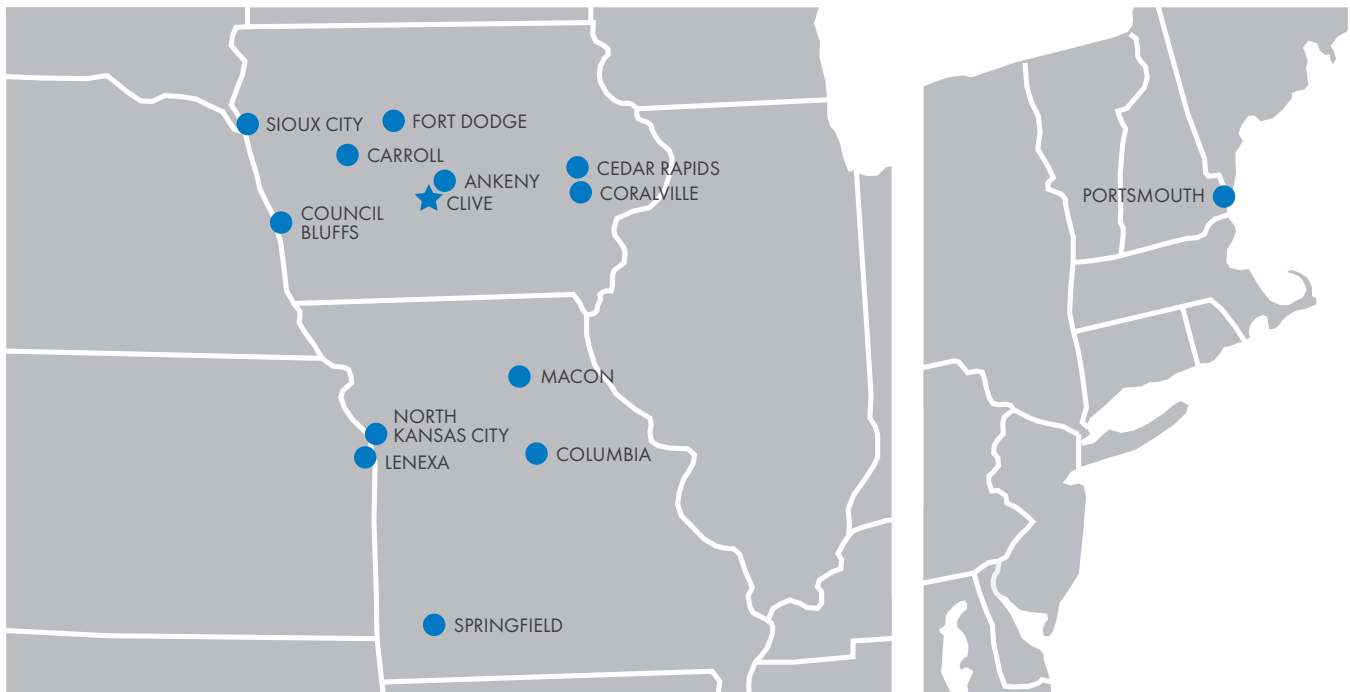


MORE THAN ENGINEERING. MAKING LIVES BETTER.

At McClure, we're driven to make lives better. We think like owners. Engineering your vision to reality. We help you navigate opportunities like funding and building public support for a project. We're always adding value and imagining what's possible. Our engineering and planning expertise includes transportation, aviation, structures, water, wastewater, stormwater management, environmental, land development, landscape architecture, construction observation, administration, surveying, and community development.

Since 1956, McClure has grown to a firm of over **260** professionals in **fourteen** offices located in Ankeny, Carroll, Cedar Rapids, Clive (headquarters), Coralville, Council Bluffs, Fort Dodge, and Sioux City, Iowa; North Kansas City, Macon, Columbia, and Springfield, Missouri; Lenexa, Kansas; and Portsmouth, New Hampshire. McClure has **seventy** Professional Engineers, **twelve** Professional Land Surveyors, **two** Licensed Landscape Architects, **five** LEED Accredited Professionals, **two** Certified Envision Sustainability Professionals, and **one** AICP Certified Planner.

Our team members embrace our core values — integrity, kindness, innovation, commitment, and fun. We are committed to providing outstanding project delivery services, personal communication, and innovative and cost-effective design. If you've got a vision, we've got the team to bring it to life. When you choose McClure, you're choosing a partner with an unmatched depth of experience, all the specialists you need, and a passion for building great communities. *It's time to get to work.*



CLIENT LIAISON AND PRIMARY CONTACT

MATT EBLEN, PE, LEED AP

1700 Swift Street, Suite 100, North Kansas City, MO 64116

[E meblen@mcclurevision.com](mailto:meblen@mcclurevision.com) [O 816.756.0444](tel:816.756.0444) [C 913.522.2786](tel:913.522.2786)

B. SERVICES AND PROJECT EXPERIENCE

BRIDGES



KEEPING PEOPLE CONNECTED AND COMMUNITIES THRIVING.

It's more than a county bridge. It's the road to a better economy. A pathway for kids to get to school. A bond that connects people. With more than 60 years of transportation and bridge engineering expertise, our mission is simple: Keep people connected and communities thriving. We inspect, design, and repair a multitude of bridges, including steel and concrete I-beam, prestressed concrete, metal truss, steel, and concrete culverts, metal arch, and concrete arch structures. Finding the right partner can help you find the right funding in times of limited budgets. That's why we think beyond the specs and the structure. Doing everything we can to keep your community more livable and viable.

WHERE WE MAKE AN IMPACT:

General Bridge Services

- Coatings and Corrosion Consultation
- Conceptual and Preliminary Design
- Construction Administration and Observation
- Feasibility Studies
- Final Design (ASD, LFD, and LRFD)
- Fracture Critical Bridge Inspection
- Load Rating (ASR, LFR, and LRFR)
- Routine Inspection and Condition Evaluation

Inspection, Design, and Repair

- Culverts
- Foundations (Spread and Deep)
- Pre-Stressed Concrete Reinforced Concrete

- Retaining Walls
- Seismic Design
- Steel (Plate, Girder, and Wide Flange)
- Truss

Support Services

- Geotechnical Design
- Hydraulics
- Maintenance of Traffic
- Right-of-Way Acquisition
- Roadway
- Safety
- Survey with LiDAR
- Utility

PROJECT HISTORY

K32 OVER KANSAS RIVER DECK EVALUATION – WYANDOTTE COUNTY, KS

McClure conducted a comprehensive bridge deck survey assessing the deck condition of the K32 bridge over the Kansas River in Wyandotte County, Kansas. A variety of methods were employed to provide a detailed evaluation of the bridge's condition, including visual inspections, drone-mounted thermal imaging, and deck core drilling. McClure meticulously documented the bridge's overall state in a report, including a comprehensive account of the condition of the driving lanes, barriers, light bolsters, and the deck's underside. The data gathered and included in the report will assist KDOT in determining the necessary repair actions for the bridge and will be pivotal for prioritizing and planning repair and maintenance strategies, ensuring the longevity and safety of their bridge infrastructure. **Reference: Dominique Shannon, State Bridge Design Engineer, 785.296.4203, dominique.shannon@ks.gov**

I-70 WB TO I-435 NB RAMP DECK OVERLAY – WYANDOTTE COUNTY, KS

McClure provided deck overlay and repair plans for the I-70 WB to I-435 NB ramp over I-435 NB exit to State Avenue in Wyandotte County, Kansas, showcasing our commitment to precision and safety. Detailed construction layouts, deck patching details and sequences, bridge approach pavement undermining repair details and traffic control plans were provided. Our unique value addition included a thorough evaluation of the bridge deck in the field prior to developing the repair plans, where we employed manual chain-dragging techniques to identify areas of deck delamination and deterioration, ensuring the plans addressed all critical issues effectively, enhancing the project's quality and durability. **Reference: Dominique Shannon, State Bridge Design Engineer, 785.296.4203, dominique.shannon@ks.gov**



OSAGE VALLEY ROAD BRIDGE 1400000 BRO-B027(18) – COOPER COUNTY, MO

The existing bridge on Osage Valley Road was a steel truss structure which is considered fracture critical. McClure personnel had previously inspected the bridge for MoDOT within their fracture critical bridge inspection program. The County completed a repair recommendation provided by McClure to keep the bridge operational, but with a load posting. The County decided to replace the structure utilizing their BRO funds. McClure provided survey, hydraulic analysis, permits, geotechnical design, preliminary layout, and final bridge design. McClure provided construction staking, materials testing, and construction observation services during construction. The final design includes a single-span structure with steel H-piles for the substructure

and precast prestressed concrete NU70 girders for the superstructure with a concrete deck. The 136'-6" single-span structure allows for increased hydraulic capacity and reduced potential for scouring. The proposed structure has increased width for two-way traffic and large agricultural equipment. **Reference: George Monk, Presiding Commissioner, 660.882.2228, george.monk@coopercountymo.gov**



COUNTY ROAD 405 BRIDGE # BRO-NBIL-B099(22) – SCOTLAND COUNTY, MO

The existing Low Water Crossing (LWC) on County Road 405 was a concrete structure with steel culverts designed to pass low flow events. The crossing replaced an existing bridge in the 1980s, providing a cost-effective solution at the time. Scotland County determined the crossing was not functioning as intended due to the frequency of overtopping and elected to utilize their BRO funds to replace the structure with a bridge. McClure provided survey, hydraulic analysis, permits, geotechnical design, preliminary layout, and final bridge design. McClure also provided materials testing, and construction observation services during construction. The final design includes a single span structure with steel H-piles for the substructure

and precast prestressed concrete NU70 girders for the superstructure with a concrete deck. The 145'-1" single-span structure allows for increased hydraulic capacity and reduced potential for scour. The proposed structure also has increased width for two-way traffic and large agricultural equipment. **Reference: Duane Ebling, Presiding Commissioner, 660.465.7027, scotland.county@sos.mo.gov**



BRIDGE 3480010 BRO-B105 REPLACEMENT SULLIVAN COUNTY, MO

McClure provided survey, hydraulic analysis, permits, preliminary and final bridge design, geotechnical design, materials testing, and construction observation services to replace Bridge No. 3480010 utilizing the BRO program. Our sub-consultant, Terracon provided geotechnical investigation services to aid in the design of the substructure elements. The existing structure was a three-span wooden deck bridge over Mussel Fork Creek in Sullivan County, Missouri and had been closed due to a shifted pier and structural deficiencies. The final design included a two-span structure with cast-in-place concrete piles for the substructure and steel plate girders for the superstructure with a concrete deck. Reducing to a two-span structure has allowed for

increased hydraulic capacity and reduced potential for scour. Additional width provided by the new structure allows for two-way traffic and large agricultural equipment as well. **Reference: Chris May, Presiding Commissioner, 660.265.3434, sccomm@windstream.net**



BRIDGE #1310005 REPLACEMENT LINCOLN COUNTY, MO

McClure was hired by Lincoln County to design a replacement structure on 5th Street in Elsberry, MO using Off-System Bridge Replacement and Rehabilitation Program (BRO) funds. With the structure located within the city limits and on a city street, McClure helped coordinate between the county and city throughout the project. The design consisted of precast concrete box girders on a Geosynthetic Reinforced Soil Integrated Bridge System abutments keyed into limestone. The innovative design uses masonry blocks, geotextile fabric and gravel in layers to create a rigid bearing surface to support the superstructure. The GRS-IBS Abutment also reduces the potential for scour. The

new structure is longer to provide increased water flow, wider for a safer passage, and increased guardrail length for better protection for the traveling public. McClure also provided survey, hydraulic analysis, right-of-way negotiation services, utility coordination, geotechnical engineering, bidding assistance, construction observation, materials testing coordination, and permitting services. **Reference: Eric Tapley, County Road and Bridge Supervisor, 636.528.6300, etapley@lincolncountyhighwydept.com**



MEIER ROAD BRIDGE 2580019 OVER BOB'S CREEK LINCOLN COUNTY, MO

McClure provided survey, permitting, geotechnical investigation and design, preliminary, and final design services for the replacement of Bridge No. 2580019 on Meier Road using the BRO program to obtain Soft-Match Credit. The existing structure was a single-span steel girder bridge, with a concrete deck, and needed replacement due to roadway and structural deficiencies. The final design included a W33 x 118 Steel Girder Superstructure with concrete deck on integral concrete abutments. The bridge was laid out with a 10 degree skew and a running grade of 2.88%. The roadway design included modified bridge approach slabs, a 9-inch asphalt pavement section, and a curved alignment approaching on one side. The structure's

new alignment and greater width will accommodate for larger local and agricultural vehicular traffic. **Reference: Joe Kaimann, Presiding Commissioner of Lincoln County, 636.528.6300, jkaimann@lcclerk.com**

KEY PERSONNEL

McClure has developed a project team that is not only competent and capable of providing The City of Garnett with an exemplary project, but a team whose experiences are also proven to complement one another. Each team member was strategically selected because of their extensive experience in their field and area of expertise, and previous experience with similar projects.

From our office in North Kansas City we will be able to readily meet with your staff and representatives for planning and design phases, easily attend meetings for any public input, and as any projects move into construction we also intend to manage any construction and project commissioning from this office. Supporting our key personnel is a well-established team of project managers, engineers, surveyors, and on-site project representatives within the McClure organization, available to serve the City as needed.



REGISTRATION(S)

PE: IA, KS, MO, OK

EDUCATION

MBA, William Woods University

BS, Civil Engineering University of Missouri

YEARS OF EXPERIENCE

17

AARON MCVICKER, PE PROJECT MANAGER AND HYDRAULICS ENGINEER

Aaron has more than 17 years of experience and currently serves as Project Manager and Hydraulics Lead on McClure's Bridge Team. He has experience in roadway design and design review for structures owned by Missouri Department of Transportation's (MoDOT) Local Public Agencies. Aaron's project management is centered around effective communication with the client. He spent six years with MoDOT and successfully brought roadway realignment, bridge replacement, roadway rehabilitation, pedestrian access (ADA), intersection, on-call guardrail, and hydrologic design projects from design through the construction phase. Aaron is a certified Bridge Inspection Team Lead and has completed the following National Highway Institute (NHI) courses—130054: Engineering Concepts for Bridge Inspectors, 130055: Safety Inspection of In-Service Bridges, 130078: Fracture Critical Inspection Techniques for Steel Bridges, and OSHA and Fall Protection training.

RELATED PROJECT EXPERIENCE:

- Afton Road Bridge 0190003 Soft-Match Credit, Linn County, MO
- Osage Valley Road Bridge 1400000 BRO-B027(18), Cooper County, MO
- Bridge 3480010 BRO-B105 Replacement, Sullivan County, MO
- Multiple FEMA Bridge Replacements, Lincoln County, MO
- GRS-IBS Bridge Replacement 3670020 BRO-B088 (22), Randolph County, MO
- GRS-IBS Old Five Road Bridge Replacement 3350025 (SMC), Morgan County, MO
- Bridge 2170011 Replacement (SMC), Scotland County, MOMilitary Road over Big Sioux River Rehabilitation, Sioux City, IA*



REGISTRATION(S)

PE: IA, KS, MO, OH

EDUCATION

BS, Civil Engineering Iowa State University

YEARS OF EXPERIENCE

23

CHAD MEYER, PE BRIDGE TEAM LEADER AND QA/QC

Chad has more than 20 years of experience specializing in the design and rehabilitation of steel, prestressed, and reinforced concrete bridges, culverts, and other transportation-related structures. He has served as both Project Manager and Senior Bridge Engineer on numerous structures designed for the Iowa DOT, as well as several counties and municipalities throughout Iowa. His experience encapsulates the full spectrum of the project life cycle, from conceptual/preliminary design through final design and construction. Chad has extensive experience in bridge inspection, condition rating and deck surveys for several Iowa counties and municipalities.

RELATED PROJECT EXPERIENCE:

- Osage Valley Road Bridge 1400000 BRO-B027(18), Cooper County, MO
- Ashworth over I-80 Preliminary and Final Bridge Design, West Des Moines, IA
- Manufacturing Drive Reconstruction Preliminary and Final Bridge Design, Clinton, IA
- Grand Avenue over Sugar Creek Preliminary and Final Bridge Design, West Des Moines, IA
- Mills Civic Parkway over Sugar Creek Preliminary and Final Bridge Design, West Des Moines, IA
- North 15th Street over Butler Creek Preliminary and Final Bridge Design, Adel, IA



JONAH HEER, PE PROJECT ENGINEER

Jonah has been involved in wide variety of civil engineering projects. While enrolled at Iowa State University, Jonah interned at the Iowa Department of Transportation as a design engineer where he gained knowledge and background in Iowa DOT standards and processes. Since graduating and beginning work at McClure, he has continued to work on Iowa DOT projects gaining experience in survey and as a designer, with an emphasis on structural design and geotechnical design for roadway and bridge projects. He has experience in reinforcement design, geometric design of roadways, and DNR and USACE permitting processes. His varied experience gives him a versatility that makes him a valuable asset for projects involving multiple disciplines.

REGISTRATION(S)

PE: IA

EDUCATION

BS, Civil Engineering
Iowa State University

YEARS OF EXPERIENCE

5

RELATED PROJECT EXPERIENCE:

- Center Street ADA Improvements and Overlay – Iowa DOT, Delta, IA
- IA 2 PPCB Bridge Replacement – Iowa DOT, Donnellson, IA
- US 34 Concept Design – Iowa DOT, Ottumwa, IA
- Seawall Repair – Iowa DNR, Arnolds Park, IA
- Oneota Dr PPCB Bridge Replacement, Decorah, IA
- IA HWY 1 RCP Culvert Replacement – Iowa DOT, Keosauqua, IA



JEREMY BASINGER ENGINEERING TECHNICIAN

Jeremy has 25 years of structural and civil design experience. He is responsible for site evaluations, developing design drawings, construction administration, observation, and material testing. Whatever his role, Jeremy works to create functional, economic, and most importantly, safe structures. Since joining McClure in 2008, he has inspected existing structures to record structural framing to be analyzed, assuring compliance with current codes. He has also worked closely with large industrial facilities on multiple structural evaluations, developing repair plans to produce structural design drawings to repair these facilities under McClure engineering supervision. His experience also includes pipe and box culvert replacement, bridge replacement, low water crossings, sidewalk improvements, and community storm shelters. Jeremy has experience working with scissor lifts and boom lifts typically used during structural inspections. He is familiar working with a Positector UTC ultrasonic thickness gauge used for structural analysis and inspection of existing conditions.

REGISTRATION(S)

MoDOT Concrete Field
Sample & Testing

MoDOT Local Public
Agency Basic Training

EDUCATION

AS, Design Drafting
Linn State Technical
College

YEARS OF EXPERIENCE

26

RELATED PROJECT EXPERIENCE:

- Osage Valley Road Bridge 1400000 BRO-B027(18), Cooper County, MO
- Fisk Avenue Trail Improvements, Moberly, MO
- Simon Boulevard and Summit Drive, Holts Summit, MO
- South Summit Drive Sidewalk Improvements, Holts Summit, MO
- Halifax Road Sidewalk and Storm Drainage, Holts Summit, MO
- Katy Trail Bridge over US Highway 50, Sedalia, MO



KIMBERLY KOENIGS PERMITTING SPECIALIST

Kimberly is a Permitting Specialist and Project Coordinator for McClure's Bridge Team. She directs professional staff regarding the required permits to ensure compliance with local, state, and federal standards. Her strong technical background, experience with data analysis, working knowledge of systems and organization skills, have supported her in mastering the art of applying and coordinating permits within the principles of safe and reliable design for McClure's clients. She is also responsible for preparing submittals, land owner meeting preparation, advertising for bids, preparing progress invoices and reimbursement requests with the counties, Local Public Agencies (LPA) and state transportation departments.

REGISTRATION(S)

MoDOT Local Agencies
Basic Training Certificate

EDUCATION

BS, Business, Kansas
State University

YEARS OF EXPERIENCE

20

RELATED PROJECT EXPERIENCE:

- Osage Valley Road Bridge 1400000 BRO-B027(18), Cooper County, MO
- Bridge Replacement, BRO-B008 (15); Bridge No. 0210010, Benton County, MO
- Bridge Replacement, BRO-B014 (25); Bridge No. 444016, Callaway County, MO
- Soft Match Credit, Bridge Replacement; Bridge No. 2300017, Cass County, MO
- Johnson County J. 5-10.0 Bridge, Johnson County, KS
- KCP&L Utility Bridge Inspection, Kansas City, MO
- On-Call Services, North Kansas City, MO



TRANSPORTATION ENGINEERING

DRIVING GROWTH IN YOUR COMMUNITY.

Most people look at roads as a means to get from Point A to B. McClure considers transportation as a way to make lives better by connecting people. It's not just about concrete and asphalt. A smart and safe transportation system is an economic lifeline for communities, critical in attracting and retaining talent for businesses. So, while we work like engineers in executing your transportation project—we also think like city managers and developers, looking for ways to increase the impact and return on your investment.

We consider public engagement an essential element of our standard of service on every project. This means we actively listen to comments from our clients, the community, and other stakeholders, so we can understand their questions or concerns. You want to see your community grow and thrive. Our engineers and traffic specialists share your vision, connecting people with prosperity.

WHERE WE MAKE AN IMPACT:

- ADA Compliance
- Asset Management
- Bridge Design and Inspection
- Capital Improvement Plan (CIP) Preparation
- Construction Administration
- Corridor Analysis/Redevelopment
- Geographic Information Systems (GIS)
- Geotechnical Engineering
- Grant Funding Applications
- Institutional Roadway Design
- Intelligent Transportation System (ITS)
- Multimodal Facilities
- Municipal Roadway Design
- Pavement Engineering and Management
- Pedestrian Trails
- Primary and Non-Primary Highways
- Rail Design
- Right-of-Way Acquisition
- Special Assessment Assistance
- Streetscape and Downtown Revitalization
- Traffic Incident Management Services
- Traffic Operations
- Transportation Planning

PROJECT HISTORY



CLEAR CREEK PARKWAY – SHAWNEE, KS

The City of Shawnee selected McClure for the preliminary concept, design, and construction services for the Clear Creek Parkway Improvements. Phase I included site evaluations, surveys, and research. Phase II included preliminary design-based off-site studies and reports, along with a preliminary construction cost estimate. Phase III incorporated preliminary designs with the City's feedback, submitting the detailed design and construction plans to the City, attending City meetings, and the bid process. Phase IV included services, inspections, staking, business and property owner's liaison, as-built drawings, traffic control plans, and signage and pavement markings. Highlights of the project include the extension of Gleason Road from the south and the midpoint

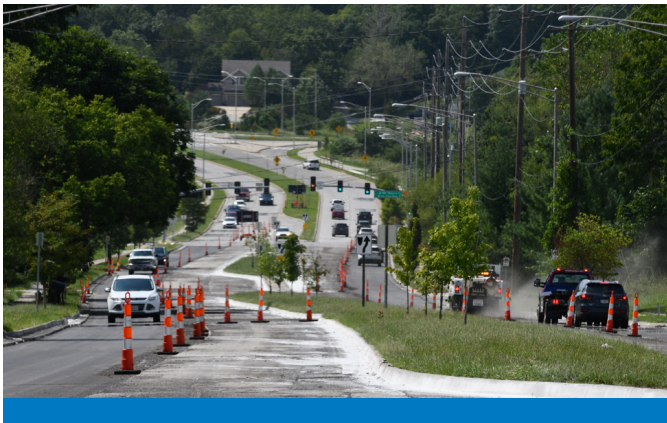
intersects with a roundabout at Clear Creek Parkway, along with greater motor vehicle connectivity within the corridor, enhancement of the City's recreation trails, and multiple connections to new and future facilities. **Reference: Paul Lindstrom, PE, Project Engineer, 913.742.6234, plindstrom@cityofshawnee.org**



PASEO & INDEPENDENCE AVE GATEWAY REALIGNMENT AND RECONSTRUCTION – KANSAS CITY, MO

For this multidisciplinary, multidepartmental, multiagency project, McClure led a team with 13 subconsultants, developed a master transportation plan and implemented a combined sewer remediation plan for the 19-block area around the intersection. The project was funded from numerous sources, including a federal grant under MoDOT's Local Public Agency guidelines, and involved coordination and completion of a Traffic Safety and Operations report for impacts to the I-35 access ramps. McClure worked in tandem with the Kansas City University of Medical and Biosciences (KCUMB) on the northwest quadrant of the intersection to include a landscaped storm water quality basin in the public right-of-way. This project

greatly improved access for cyclists, pedestrians, and transit users by better connecting neighborhoods, businesses, and the university through the improved intersection. It also removed combined sanitary sewers, added stormwater detention, "smart" technology capabilities, and worked with the art community on developing a "gateway" to Kansas City's Historic Northeast. **Reference: James Wang, PE, ENV SP, Project Manager, City of Kansas City, 816.513.7622, james.wang@kcmo.org**



NW 68TH STREET RECONSTRUCTION – KANSAS CITY, MO

Kansas City, Missouri Public Works Department identified 1.3 miles of NW 68th Street between Waukomis Drive and US 169 as needing significant roadway improvements within a corridor that had crumbling pavement, curbs and sidewalks. Design and construction both came in ahead of schedule and under budget. From notice-to-proceed through acceptance of construction by the City, our team needed fewer than 7 months to deliver \$3 million of work. This included replacing monolithic curbs with two-foot curb and gutter, milling existing concrete and overlaying with specialized asphalt designed for long life, sidewalk repair, rehabbing a bike trail, repairing existing storm sewers, installing all-new ADA-compliant ramps and placing new pavement markings. This was all accomplished without

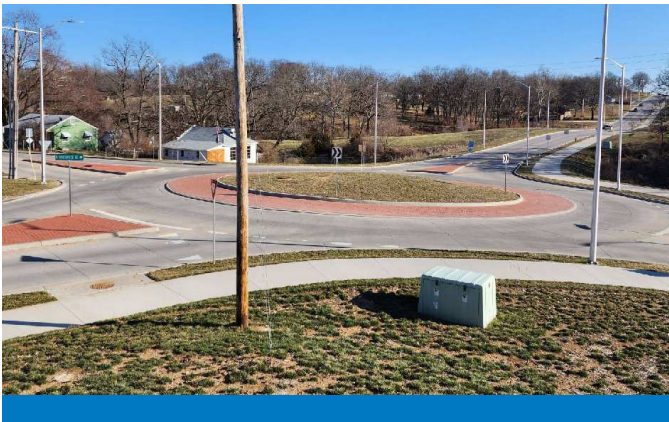
closing the road. For our highly appreciated efforts, the Design-Build Institute of America awarded us its *Mid-America Region Excellence Award for Civil Infrastructure*. **Reference: Patty Hilderbrand, KC Public Works, 816.513.2576, patty.hilderbrand@kcmo.org**



BUSINESS HIGHWAY 61/ 161 ROUNDABOUT – BOWLING GREEN, MO

This project replaced an existing four-way stop on Business 61/Court Street and Highway 161 in Bowling Green. The previous intersection had a level of service of F and was the cause of significant delays and backups multiple times a day. The delays adversely impacted access to businesses at the intersection and contributed to overall congestion. This project was a cost-share between the City of Bowling Green and MoDOT. McClure collaborated with the City and MoDOT and developed the plan for applying for MoDOT's cost-share program. McClure wrote the report, applied for the funding on behalf of the City, and worked with all entities to secure a 50/50 split in funding for a \$1.5M project. The

new roundabout includes replacement of an existing box culvert as well as new street lighting of the intersection. **Reference:** Linda Luebrecht, City Clerk/Administrator, City of Bowling Green, Missouri, 573.324.5451, lluebrecht@bowlinggreen-mo.gov



NW NORTHWOOD RD (52ND TO 59TH ST DESIGN) – KANSAS CITY, MO

McClure provided design and survey services to improve Northwood Road from 52nd Street to 59th Terrace in Kansas City, Missouri. The improvements include improving steep grades and crest hills, widening the street, providing sidewalk and/or trail, replacing water mains, and constructing a new roundabout at 56th Street. Specifically, this 4740' improved roadway has a 24' typical section with curb and gutter, enclosed drainage, new street lighting and an improved intersection and crosswalks by Southeast Elementary School. The project included new retaining walls and sidewalks. Traffic control and specifications were designed to provide access to

residents at all times. Utility relocation caused significant redesign efforts when KCMO Water Services decided to change its design concept midway through design. Soon after those changes were made, KC City Council directed Public Works to adjust the typical section, which changed all cross-sections, drainage offsets, etc. McClure worked through the changes to provide a set of plans that bid for less than the Engineer's estimate and had very few changes. **Reference:** Chad Thompson, Capital Projects Engineer, 816.513.2738, chad.thompson@kcmo.org

KEY PERSONNEL

McClure has developed a project team that is not only competent and capable of providing The City of Garnett with an exemplary project, but a team whose experiences are also proven to complement one another. Each team member was strategically selected because of their extensive experience in their field and area of expertise, and previous experience with similar projects.

From our office in North Kansas City we will be able to readily meet with your staff and representatives for planning and design phases, easily attend meetings for any public input, and as any projects move into construction we also intend to manage any construction and project commissioning from this office. Supporting our key personnel is a well-established team of project managers, engineers, surveyors, and on-site project representatives within the McClure organization, available to serve the City as needed.



JUSTIN VOGEL, PE VICE PRESIDENT, TRANSPORTATION

As McClure's Vice President of Transportation, Justin's focus has centered around both design and construction. His engineering experience includes roadway design (urban and rural), paving, grading, wastewater, stormwater, water distribution, project administration, and construction services. At McClure, Justin is responsible for building relationships for success with the clients and leading McClure's transportation group, including aviation, bridge, and transportation disciplines.

REGISTRATION(S)

PE: IA

EDUCATION

BS, Civil Engineering
Iowa State University

YEARS OF EXPERIENCE

20

RELATED PROJECT EXPERIENCE:

- Manufacturing Drive Reconstruction, Clinton, IA
- NW 18th Street Reconstruction, Ankeny, IA
- Plywood Trail, Sioux City, Le Mars, Merrill, and Hinton, IA
- Kings Highway Reconstruction, Sioux City, IA
- Benton Street Rehabilitation, Iowa City, IA
- 10th Avenue North Reconstruction, Fort Dodge, IA
- Military Road over Big Sioux River Rehabilitation, Sioux City, IA*
- 18th Street Viaduct, Sioux City, IA*

**Project completed under previous employment*



SCOTT PORT, PE TEAM LEADER, TRANSPORTATION

Scott is a licensed Professional Engineer with 17 years of experience designing federal, state, and locally funded projects. His responsibilities have included quality assurance and quality control, project management, planning, rural and urban roadway design, municipal utility and storm water improvement design, complex staging and phasing design, contract document development, client, agency, and utility coordination, facilitating public involvement, right-of-way and easement acquisitions, environmental reviews and mitigations, utility and NPDES permitting, and construction administration. Scott has a reputation of providing strong technical and management skills with experiences that include urban and rural roadway reconstruction and rehabilitation projects ranging from local streets to arterial and collector roadways, roundabouts, trails, streambank stabilizations, wetland and detention basins, permeable pavers, intersection widening and reconstruction involving signalization, interstate reconstruction and widening, and interchange reconstruction, including the State of Iowa's second diverging diamond interchange.

REGISTRATION(S)

PE: IA

EDUCATION

BS, Civil Engineering
Iowa State University

YEARS OF EXPERIENCE

17

RELATED PROJECT EXPERIENCE:

- McKinley Avenue Reconstruction – SW 9th Street to S Union Drive, Des Moines, IA
- NW 18th Street Reconstruction from NW Ash Drive to N Ankeny Boulevard, Ankeny, IA
- SW State Street Reconstruction, Southbound Lanes, Ankeny, IA
- I-35 and E. First Street Interchange Reconstruction, Ankeny, IA*
- S. 85th Street – Mills Civic Parkway to Cascade Road, West Des Moines, IA*
- Indianola Avenue Reconstruction – US Highway 69 to Army Post Road, Des Moines, IA*
- SE 8th Street Reconstruction – Phase 1 and Phase 2, Ankeny, IA*
- North 15th Street Bridge Reconstruction, Adel, IA

**Project completed under previous employment*



REGISTRATION(S)

PE: IA

EDUCATION

BS, Civil Engineering
Iowa State University

YEARS OF EXPERIENCE

8

COLTON HOFFMAN, PE DESIGN ENGINEER

Colton is a design engineer on McClure's Transportation team. His experience includes design and inspection of rural and urban road reconstructions, HMA overlays, sanitary sewer, water main, storm sewer, and ADA sidewalk projects. He has gained an expertise in urban drainage design as well as corridor modeling throughout his career. His great communication skills aid in keeping all project aspects running smoothly.

RELATED PROJECT EXPERIENCE:

- West Kings Highway Bridge Replacement, Sioux City, IA
- McKinley Avenue Reconstruction from S. Union to SW 9th St., Des Moines, IA
- Line Creek Trail Connector, Riverside, MO
- NW 18th Street Reconstruction, Ankeny, IA
- Scotch Ridge Road Improvements, Carlisle, IA
- Manufacturing Drive Reconstruction, Clinton, IA
- SW State Street Reconstruction, Ankeny, IA



REGISTRATION(S)

PE: IA

EDUCATION

BS, Civil Engineering
Iowa State University

YEARS OF EXPERIENCE

15

BRIAN SANDBERG, PE SENIOR PROJECT ENGINEER

Brian has over a decade of civil engineering experience as a construction administrator, field observer, design engineer and project manager for roadway and utility projects. Brian's field experience complements his skills as a design engineer. Brian has designed municipal and highway roadway projects from earthwork and utility installation to the pavement and surface restoration. Additionally, he has experience designing and constructing single and multilane roundabouts. He has experience completing hydraulic design on several bridge and culvert projects. Brian also has inspected and managed construction on both local and Iowa DOT projects.

RELATED PROJECT EXPERIENCE:

- Manufacturing Drive Reconstruction, Clinton, IA
- Locust Road Improvements, Decorah, IA
- Asphalt Overlay Improvements, Waukee, IA
- Story Drive Bridge Replacement, Marion County, IA
- E. Merle Hibbs Boulevard East Extension, Marshalltown, IA
- Quarry Street Stormwater and Sidewalk Improvements, Decorah, IA



STRUCTURAL ENGINEERING AND HISTORIC REHABILITATION

HELPING BUILDINGS STAND TALL AND STAND OUT.

You want to make buildings that make an impact. We can bring your ideas to life. At McClure, we think beyond concrete and steel, creating innovative structures that wow with design. And functionality. We restore buildings to their former glory. And adapt historical buildings to a modern world.

You can rely on us for speed and responsiveness when fast action is critical to the success of your project. And you'll appreciate our ability to anticipate problems before they occur. We think like owners, partners, and entrepreneurs, always looking for better ways to make your vision even better. You want to create livable spaces where memories are made—or kept alive. Let's build on those ideas together.

WHERE WE MAKE AN IMPACT:

- Blast and Progressive Collapse Resistant Structures (D.O.D.)
- Post-Tensioned Structures
- Complex CFS Framing with Radiused Surfaces
- Engineer of Record Architectural Services
- Full Building Systems Designed with Cold-Formed Steel (CFS)
- Historic Rehab and Repurposing
- Industrial and Manufacturing Structural Services
- Licensed in 48 States plus District of Columbia
- Modular and Prefabrication Design
- Non-Bearing CFS Cladding and Wall Systems
- Peer Reviews and Expert Witness
- Reinforced Concrete including Precast and Prestressed
- Special Analysis—Vibration, Instrumentation, Testing, High Seismic, etc.
- Specially Designed CFS Roof and Floor Open Web Trusses
- Storm Shelters and Hardened Structures
- Structural Evaluations, Insurance, and Property Assessments
- Value Engineering Solutions including Design-Build Experience



HISTORIC REHABILITATION AND REPURPOSING

KEEPING HISTORY ALIVE.

Historic structures can still offer meaningful roles in communities across the country. It doesn't matter whether you have new plans for old properties or if they deserve to stand on historical value alone. If you're looking to revitalize quality architecture, consider McClure for historic rehab and repurposing.

We know that such delicate renovation projects are more likely to progress with the help of expert engineers. The team at McClure can apply years of experience renovating historic buildings to ensure your own project's requirements are met. We can help refurbish structural elements while maintaining the original vibrant feel of the property.

McCLURE'S STANDARDS OF QUALITY FOR HISTORIC REHAB PROJECTS

McClure can bring extensive project experience to your next historic renovation. We've collaborated with developers and institutions across the country on projects like restoring the Missouri Governor's mansion. We've also helped revitalize multiple larger-scale properties such as campus facilities, theaters and more.

McClure's extensive experience with historic materials including masonry, steel and cast iron, timber, and other common materials of the past, along with a strong knowledge of historic construction techniques, allows us to work together with owners and architects to creatively solve your challenges within the constraints and opportunities of the historic appearance of the structure.

PROJECT HISTORY



LEGENDS 267 – KANSAS CITY, KANSAS

Legends 267 is a 267-unit multifamily market rate apartment community underway at eight stories tall Type II-A residential construction spanning 509,221 total square feet on top of a 620-space Type I-A parking garage, with three types of onebedrooms and four types of two-bedrooms. Legends will be the only urban style apartment mid-rise in the neighborhood. McClure is the structural engineer of record responsible for the superstructure and concrete parking structure. Project challenges included the large slope across site resulted in extremely high soil pressures on the subterranean parking levels. Balancing the necessary structure to resist these loads with the required number of

parking spaces required nearly constant communication between McClure, the Architect, and the precast engineer. Another challenge was the lateral system for the superstructure consists of strap braced CFS shear walls, but the layout of those walls saw them aligning with podium double tees stems. As a result, McClure developed a unique solution to bridge between stems by embedding structural steel without compromising the flexural and shear capacity of the composite topping slab.

Reference: Rosemann Associates – Available upon request



ON-CALL STRUCTURAL ENGINEERING SERVICES, UNIVERSITY OF MISSOURI – COLUMBIA, MO

McClure has provided on-call structural engineering services for the University of Missouri for over 10 years. General services include the evaluation of existing structures and interpretation of as-built drawings for current structural conditions. Services include analysis, reports, modifications, and other coordination during construction for miscellaneous project around campus. The Lafferre Hall project addressed the concrete deterioration that was present on the cast in place concrete ceiling. McClure completed a structural observation and report. The MURR Access Hatch Loading

project included the observation of a steel plate access at the Missouri University Research Reactor (MURR) facility in order to evaluate the hatch and its supports for their structural load-carrying capacity. **Reference: Jennifer Sullivan Project Manager, 573.882.8376, sullivanjl@missouri.edu**



HANCHER AUDITORIUM, UNIVERSITY OF IOWA – IOWA CITY, IOWA

The project included the design of all CFS exterior components, including the design of wall cladding systems, soffits, and specialized connections to the superstructure. Elements were designed for specified wind loads and unique conditions all around the building. McClure provided construction documents and details throughout the project as needed to keep the project on schedule. McClure was brought onto this project as the specialized engineer for design all of the components and cladding CFS elements on the project. This project required high-level coordination of all structural elements due to the geometry and architectural features of the building. McClure's experience with special detailing of CFS systems

was necessary to make the project go smoothly. McClure worked directly for the construction team to ensure the project stayed on schedule. McClure was often asked to provide quick responses and solutions for field conditions as they came up.

Reference: Jeff Montague, Radius Track Corporation, 763.795.8885, jeff@radiustrack.com

PROJECT HISTORY

HISTORIC REHABILITATION AND REPURPOSING

BLUE NOTE THEATER

COLUMBIA, MISSOURI

Structural repair to the historic 1920 Star Theater in Columbia. The project included design of new speaker support system and miscellaneous structural repairs.

J HUSTON TAVERN

ARROW ROCK, MISSOURI

Analysis and repair of fire damage and addition of historic kitchen to 1820s tavern building.

BLOSSER HOUSE

MALTA BEND, MISSOURI

The 6,500 sf home and 10,000 sf barn project consisted of design of extensive masonry repairs including grout injection and Kevlar fiber wrap, design of repair to rotted floor and roof framing, strengthening of undersized roof framing, and design of new elevator shaft within the existing building. New structural design for reconstructed carriage house supported on helical piers to prevent damage to existing tree roots. Material testing and analysis of existing cottonwood timber framed barn. Design of reinforcing and repair to barn framing to upgrade to assembly occupancy including stair and elevator addition.

MISSOURI GOVERNOR'S MANSION

STATE OF MISSOURI

Restoration of two-level porch and miscellaneous design to support installation of new HVAC system on 1830s Missouri Governor's mansion.

KEMPER PARK, RESTORATION OF SCIENCE BUILDING

BOONVILLE, MISSOURI

Complete restoration of three story, 1920s academic building including addition of new egress exits, masonry restoration.

DOUGLAS HIGH SCHOOL

COLUMBIA, MISSOURI

Full masonry restoration including addition of new openings and reconstruction of parapets.

22 N 10TH STREET

COLUMBIA, MISSOURI

Conversion of 10,000 sf former mechanics shop and car dealership from 1910s to premier event space including design of new lateral force-resisting system to accommodate a new event space. Project included full masonry restoration, replacement of interior load-bearing structure with new steel braced frames, addition of multiple large windows on all sides with new support steel, removal of former mezzanine level to create vestibule with new skylight framing.

202 HIGH STREET

JEFFERSON CITY, MISSOURI

Stabilization and weatherproofing of existing party wall of three-level brick one-part retail building from the 1890s after the collapse of the adjoining property.

STEDMAN HALL RENOVATION AT CENTRAL METHODIST UNIVERSITY

FAYETTE, MISSOURI

Restoration and renovation of 1930s 70,000 sf classroom building including conversion of theater-seating lecture halls, replacement of elevators, relocation of main entrance and creation of entry lobby, and the addition of one pedestrian entry bridge and reconstruction of the existing bridge.

C. MAXWELL STANLEY HYDRAULICS LABORATORY AT THE UNIVERSITY OF IOWA

IOWA CITY, IOWA

Built in the 1920s, the hydraulics laboratory at the University of Iowa is recognized as a National Historic Civil Engineering Landmark by ASCE. McClure evaluated spalling of the gunite skin layer and provided repair and remediation recommendations.

KEY PERSONNEL

McClure has developed a project team that is not only competent and capable of providing The City of Garnett with an exemplary project, but a team whose experiences are also proven to complement one another. Each team member was strategically selected because of their extensive experience in their field and area of expertise, and previous experience with similar projects.

From our office in North Kansas City we will be able to readily meet with your staff and representatives for planning and design phases, easily attend meetings for any public input, and as any projects move into construction we also intend to manage any construction and project commissioning from this office. Supporting our key personnel is a well-established team of project managers, engineers, surveyors, and on-site project representatives within the McClure organization, available to serve the City as needed.



CODY DAILEY, PE, SE VICE PRESIDENT, STRUCTURAL

Cody brings 18 years of structural engineering experience includes full calculations and construction document production of multistory steel structures, residential structures, structures with irregular lateral systems, multistory wood diaphragm construction, and multistory cold-formed steel structures. He also has experience with steel moment frames, concrete structures, precast concrete elements and structures (hollowcore, beams, and columns). Cody's experience includes retrofitting of existing structures, evaluation reports of existing structures, load rating existing structures, design of specially loaded structures, and damage evaluation of catastrophic events.

REGISTRATIONS

PE: IA, KS, MO and 23 other states

SE: AZ, IL, NE, NV, OK, UT

EDUCATION

MS, Structural Engineering
University of Missouri

BS, Civil Engineering
University of Missouri

YEARS OF EXPERIENCE

18

RELATED PROJECT EXPERIENCE:

- Water Treatment Improvements and Reverse Osmosis (RO) Plant, Fort Dodge, IA
- Water Treatment Improvements and Reverse Osmosis (RO) Plant, Adel, IA
- The Deacon, University of Cincinnati, Cincinnati, OH
- Center City District, Michigan State University, East Lansing, MI
- Northshore 770 Apartments, Northbrook, IL
- Clarendale of Clayton Senior Living, Clayton, MO
- Wayne State University Dorms, Detroit, MI
- Spirit Living, Berkley, CA
- Harborage of Germantown, Memphis, TN
- Stonecrest of McCandless, McCandless, PA
- Aloft Hotel, Phoenix, AZ



JOSH VALENTI, PE LEAD STRUCTURAL DESIGNER

Josh has 13 years of structural engineering experience. He is familiar with several different design materials and structural systems. He has performed partial or complete structural design for building structures including single and multistory residential structures, retail buildings, industrial warehouses, agricultural facilities, and offices. He has also designed several non-building structures such as steel towers, below grade concrete pits and tunnels, industrial bridges, foundations, equipment supports and platforms. In addition to structural design, he has experience with structural inspections, condition assessment reports, site and equipment layout, and production of documents for construction. He also has knowledge with construction methods, and frequently works with architects, contractors, and fabricators to provide economic solutions and accommodate the needs of the client while maintaining structural integrity and code compliance of the structure.

REGISTRATIONS

PE: MO, SD

EDUCATION

BS, Engineering Technology
Pittsburgh State University

YEARS OF EXPERIENCE

13

RELATED PROJECT EXPERIENCE:

- Maumelle Senior Living Center, Maumelle, AR
- Amour and Troost, Apartments, Kansas City, MO
- Welcome House, Recovery Residence, Kansas City, MO
- Origin Hotel, Kansas City, MO
- Evansdale Wastewater Treatment Plant Improvements, Evansdale, IA
- CGB New Grain Facility, Falls City, NE*
- Board of Trade Parking Garage Repairs, Kansas City, MO*



CELESTE SPICKERT, PE STRUCTURAL ENGINEER

Celeste brings 20 years of professional structural engineering expertise to this project, having previously worked on a wide variety of projects. She has experience utilizing concrete, steel, masonry, light gauge steel, precast concrete and wood design. Her wealth of experience includes leading the design of small, one-story buildings to eight-story structures with multiple framing systems. Celeste works hand and hand with the architect, civil and mechanical engineers to provide the best product for the client. She is experienced in all types of construction materials to solve the client's needs. Her expertise in engineering and architecture will help to bring together the design concept and coordination with all other engineering trades.

REGISTRATIONS

PE: MO, KS

EDUCATION

BS, Architectural
Engineering
University of Kansas

YEARS OF EXPERIENCE

20

RELATED PROJECT EXPERIENCE:

- Structural On-Call, University of Missouri, Columbia, MO
- 2019 Structural Observations, University of Missouri, Columbia, MO
- Stankowski Field Light Pole Observation, University of Missouri, Columbia, MO
- Conley Road and Tiger Avenue Light, University of Missouri, Columbia, MO
- Gans Creek Cross Country Course, Columbia, MO
- Phi MU Sorority Fire Escape, University of Missouri, Columbia, MO
- Turner Avenue Parking Garage, University of Missouri, Columbia, MO
- Conley Avenue Garage, University of Missouri, Columbia, MO
- Football Training Facility, University of Missouri, Columbia, MO



ISAAC CUNDIFF, EI STRUCTURAL DESIGNER

Isaac is a structural designer at McClure with experience in nearly all aspects of structural design. He has extensive experience in cold formed steel design as well as experience designing steel, CMU, and wood structures. Most of Isaac's design work has been completed on new cold formed steel load bearing structures. However, he also has experience designing aluminum balconies, steel frames, foundations, and load rating existing structures.

RELATED PROJECT EXPERIENCE:

- Coshocton Grain Mill, Coshocton, OH
- Ingredion Rooftop Structure, North Kansas City, MO
- Clarendale of Clayton, Clayton, MO
- Kirksville Aquatic Center, Kirksville, MO
- Lucas Museum of Narrative Arts, Los Angeles, CA
- Coronado Springs Resort, Orlando, FL
- Jefferson City Public High School Expansion, Jefferson City, MO
- Mercy Clinics Pods, Barnhart, MO

REGISTRATIONS

EI: MO

EDUCATION

MS, Civil Engineering
University of Missouri

BS, Civil Engineering
University of Missouri

YEARS OF EXPERIENCE

7



SURVEYING

THE FIRST STEP FOR LASTING SUCCESS.

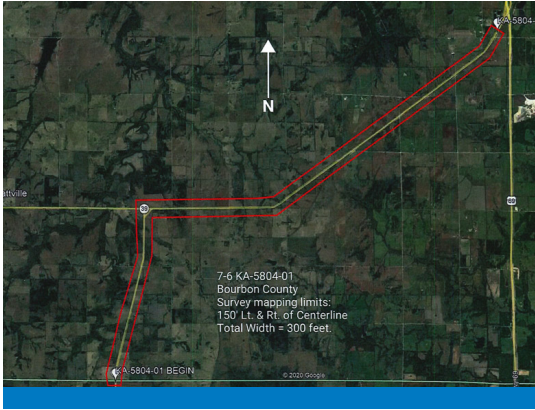
Before land becomes a treatment plant, pump station, or a route to convey water or wastewater, McClure surveyors are there, gathering critical data that becomes the foundation for achieving your vision.

Our team uses a high-tech approach to surveying. Using state-of-the-art surveying and remote sensing technology, we conduct a wide variety of construction, design, and pipeline surveying projects for clients of all sizes. Not just land surveys, but drone surveys and bathymetric surveys too. We analyze the data and deliver it in traditional, plan-view survey drawings, complex BIM models, and renderings. Even drone animations and time-lapse videos of construction sites. The information you receive at the start informs every decision you make along the way. Trust McClure for surveying expertise that ensures the safety and success of your project.

WHERE WE MAKE AN IMPACT:

- 3D High-Definition Scanning (HDS) Surveys
- ALTA/ACSM Land Title Surveys
- Bathymetric Surveys
- BIM Modeling
- Boundary Surveys
- Construction Staking
- Drone (Unmanned Aerial Vehicle or UAV) Surveys: Imaging, Videography, and Photogrammetry
- Forensic Scanning
- Hydraulic Grade Line Elevation Confirmations
- Legal Surveys—Easements, Acquisitions, Boundary Retracements, Platting
- Pipeline Alignment Design and Plan Preparation
- Pipeline Surveys—Preliminary, Routing, Staking, and As-Built
- Topographic Surveys

PROJECT HISTORY



KANSAS DEPARTMENT OF TRANSPORTATION: HIGHWAY K-7 BOURBON COUNTY, KANSAS

McClure is a prequalified land surveying consultant for the Kansas DOT. In the fall of 2020, McClure was retained to do preliminary design survey and right-of-way establishment for more than 11 miles of Highway K-7 in rural Bourbon County, Kansas, near Fort Scott. This project was particularly challenging because it was a 55-mph zone with no existing shoulders on the roadway to escape the continual traffic. Our team maintained property owner notification logs, retraced all of the existing section lines and roadway centerline, and provided a complete survey product to the design team at KDOT. Multiple crews were used to situate traffic control signage and improve crew member safety throughout the duration of the project.

Reference: Bill Haverkamp, PS, Chief, Bureau of Right-of-Way, 785.296.0305, bill.haverkamp@ks.gov



KANSAS DEPARTMENT OF TRANSPORTATION: HIGHWAY K-27 WALLACE COUNTY, KANSAS

The KDOT selected McClure to provide Land Surveying and Mapping of approximately 5.5 miles of K-27 in Wallace County. This project was conducted for KDOT's consideration of adding shoulders and pavement rehabilitation. This project included surveying of three (3) bridge structures as well. This project's tasks consisted of establishing Horizontal and Vertical Control, retracement of the existing Alignment and Right-of-Way, and a full topography survey to establish a digital surface model. McClure incorporated Aerial LiDAR and Photogrammetry data sets acquired with an Unmanned Aerial System (UAS) and Mobile Mapping LiDAR data sets

to evaluate reducing labor effort and minimizing safety concerns encountered with traditional Field Survey methods. These data sets proved that use of these emerging technologies can be a significant cost savings and can minimize safety concerns.

Reference: Ron Feldkamp, PS, Survey Coordinator, 785.296.5100, ron.feldkamp@ks.gov

SECTION CORNER RESTORATION PROJECT – LIBERTY MO

Our SKW team (acquired by McClure in 2018) participated in a section corner restoration project in Liberty, MO. SKW conducted courthouse and field research to recover or re-establish 38 section corners within the City limits. SKW performed GPS surveys in accordance with the Specifications for Determining State Plane Coordinates of P.L.S.S. corners, utilizing GPS to tie corner locations to existing Clay County control, and provided Missouri State Plane coordinates for each corner. In addition, SKW prepared and filed land corner registration documents with the Division of Natural Resources for each corner position.

Reference: Contact the City of Liberty, MO

VARIOUS WATERLINE EXTENSIONS AND IMPROVEMENT PROJECTS – LIBERTY, MO

Our SKW team was retained to provide field survey and design engineering services for several waterline extensions and replacements in Liberty including:

- **ES-M (Hillcrest) Waterline** - Approximately 650 feet of 8-inch waterline along Hillcrest Street, between Thornton Street and Reed Street.
- **ES-J(3) (Highway. H) Waterline** - Approximately 1,200 feet of 8-inch waterline extension, from the previous 12-inch waterline improvements along State Highway H, under Highway H and south to the north end of La Frenz Road, connecting to the existing 4-inch waterline.
- **ES-B (Gallatin St) Waterline** - Approximately 1,335 feet of 12-inch waterline along Gallatin Street, from Mississippi Street south to Mill Street, providing cross connections to the 6-inch, 8-inch, and 12-inch waterlines running east/west. Approximately 265 feet of 8-inch waterline along Mississippi Street, between Gallatin Street east to North Main Street.
- **Liberty Triangle (Highway 291) Waterline** - Approximately 3,190 feet of 8-inch waterline replacement along N. 291 Highway, from N. Stewart Road south to W. Kansas Street. **Reference:** Contact the City of Liberty, MO



20-INCH NATURAL GAS PIPELINE PROJECT FOR SPIRE INC. KANSAS CITY, MISSOURI

Spire Inc. retained McClure to provide complete design services for a 20-inch natural gas pipeline. McClure provided Spire Inc. with a route analysis at the very beginning to determine the preferred path through the City. This was completed by multiple meetings with surrounding municipalities, spending countless hours collecting utility data, and collecting data for future City project areas to avoid. McClure was able to begin survey work and design work on all phases spanning multiple years. Each phase of this 20-mile pipeline provides unique challenges specific to each phase. Success on a project of this magnitude is only possible with constant communication with all parties. Working along-

side Spire Inc. with weekly meetings has proven to be instrumental in maintaining the overall project schedule. Across all phases of this 20-mile pipeline, McClure completed land surveying, easement exhibits, and construction plans on behalf of the Spire. **Reference: Chris Collins, Spire Inc., 205.326.8100, chris.collins@spireenergy.com**



MIDAMERICAN ENERGY SUBSTATION – BOONEVILLE, IOWA

Hooper Corporation contracted McClure to provide topographic surveying services of MidAmerican Energy's Booneville Road Substation near Des Moines, Iowa. The project tasks were to secure an accurate Bare Earth Surface Model of the entire existing substation grounds and to model existing Transmission Poles, Transmission Lines entering and existing the substation, and other related substation equipment. McClure deployed their UAS (Drone), an Aerial Mapping System, being a DJI Matrice 300 which incorporates a 45 MP ZENMUSE P1 image camera sensor and a ZENMUSE L1 LiDAR sensor. McClure also utilized a VX&S Series Total Station and Trimble GPS to achieve the goals for this project. The data sets of each of

these Three (3) survey instruments was combined to generate an accurate surface model of the existing grounds, as well as modeling of all planimetric features and a classified point cloud of all the above ground improvements and vegetation. **Reference: Eric Schneider, Project Manager, Electric Power Division - Substation, Hooper Corp., 608.237.3386, eschneider@hoopercorp.com**



INTERSTATE 80/380 INTERCHANGE – CORALVILLE, IOWA

McClure's Survey Team is providing construction staking services for the reconstruction of Interstates 80 and 380 near Coralville, Iowa. The current work includes 18 concurrent bridge reconstructions all within the same interchange. One of the bridges is a massive, 2700 LF, 22-span flyover bridge connecting eastbound I-80 to northbound I-380. The remaining 17 bridges are all being constructed simultaneously by a team of bridge contractors gathered from all over the state of Iowa. Our team has mobilized multiple survey crews to handle the demands of this project and keep all of the contractors running smoothly and on-schedule. The field crews are backed up by a team of project managers who are responsible for QA/QC of the staking data for the structures,

and managing the flow of information and requests for information from the design team at the Iowa DOT. Time is a critical component on this project, as all work is scheduled for completion prior to the kickoff of the 2020 college football season this fall. **Reference: Robert Cramer, Cramer and Associates, 515.265.1447**

KEY PERSONNEL

McClure has developed a project team that is not only competent and capable of providing The City of Garnett with an exemplary project, but a team whose experiences are also proven to complement one another. Each team member was strategically selected because of their extensive experience in their field and area of expertise, and previous experience with similar projects.

From our office in North Kansas City we will be able to readily meet with your staff and representatives for planning and design phases, easily attend meetings for any public input, and as any projects move into construction we also intend to manage any construction and project commissioning from this office. Supporting our key personnel is a well-established team of project managers, engineers, surveyors, and on-site project representatives within the McClure organization, available to serve the City as needed.



CRAIG CHANEY, PS SURVEY PROJECT MANAGER

Craig lives just 20 miles north of Garnett and is very familiar with Garnett and Anderson County. His responsibilities include overseeing services for both internal and external clients. With 39 years of experience in the land surveying field, he has vast experience, including aerial data acquisition utilizing both Unmanned Aerial Systems (UAS) or drones and manned fixed-wing (airplane) and rotocraft (helicopter) platforms. Across the states of Kansas and Missouri, Craig has provided support services to projects for a wide range of clients including the Kansas and Missouri Departments of Transportation and the United States Army Corps of Engineers. Craig has also worked with state and municipal parks and recreation departments, electric and natural gas utilities companies, oil and renewable energy industries, and many other private development and real estate companies.- He has provided Boundary, Topographic, Mapping and Easement and/or Rights-of-Way Surveys for numerous municipalities in Kansas.

REGISTRATION(S)

PS: KS

Remote FAA Pilot:
14 CFR Part 107
Certification

YEARS OF EXPERIENCE

39

RELATED PROJECT EXPERIENCE:

- Cedar Valley Reservoir Auxiliary Spillway Repair, Garnett, KS
- Kansas Highway 27 – KDOT, Wallace County, KS
- Kansas Highway 8 – KDOT, Smith County, KS
- US Highway 400 – KDOT, Wilson County, KS*
- US Highway 400 – KDOT, Greenwood County, KS*
- Kansas Highway 34 – Bluff Creek Bridge, Clark County, KS*
- Kansas Highway 7, Crawford County, KS*
- I-35 at 87th to 75th St., Bridge Replacements and Lane Expansions, Overland Park, KS*

**Project completed under previous employment*



LEE "TUFF" HERMRECK, PS LAND SURVEYOR

Lee has many years of experience in field services and surveying. He began his career as an instrument operator before earning his land survey license. He has worked as a survey crew leader, field coordinator and project manager on boundary, topographic, ALTA surveys and construction staking projects ranging from dense urban areas to rivers, corn fields and undeveloped forests. His extensive project experience includes bridges, highways, streets and parking lots; storm and sanitary sewers; water lines; office, commercial and residential development; and education and medical facilities. A safety-minded individual, Lee supervises multiple survey crews and works closely with individual clients and McClure project managers to schedule travel and crews throughout the Kansas City metro area.

REGISTRATION(S)

PS: KS

Veriforce Certified
OSHA 10 Hour Training

YEARS OF EXPERIENCE

45

RELATED PROJECT EXPERIENCE:

- Dayton Creek Spring Hill, KS
- Nottingham Forest Overland Park, KS
- Quail Valley Overland Park, KS
- Summercrest Overland Park, KS
- Shannon Valley Overland Park, KS
- Hunters Ridge Overland Park, KS
- Indian Creek Estates Overland Park, KS
- Kensington Manor Overland Park, KS
- Mission Farms Leawood, KS
- Patrician Woods Leawood KS



HORACE (SKIP) DUTTON, LSIT SURVEY PROJECT MANAGER

Horace, or Skip, as he prefers, serves Survey Project Manager in McClure's North Kansas City, Missouri office, managing large pipeline projects where he is responsible for assisting field crews, importing preliminary points, creating base maps, laying out and designing pipeline routes, preparing HDD bore calculations and design, processing all the as-built survey data - creating as-built spreadsheets, responding to client requests, compiling the pipe tally, and producing as-built deliverables. His experience prior to joining McClure in 2009 involved working as a technician on a 66-mile crude oil pipeline project and providing CAD services for boundary and topographic surveys, route surveys, descriptions, plats and contour mapping.

REGISTRATIONS

LSIT

EDUCATION

AA, Civil Engineering
Valencia College

YEARS OF EXPERIENCE

17

RELATED PROJECT EXPERIENCE:

- Spire KC Header – West Leg, Approx. 20 mi., Kansas City, MO
- Ameresco Landfill Project, 6 miles, Edwardsville, IL
- Courbet CS Pipelines, 12 miles, Duncan, OK
- Tinker Interconnect, 7 miles, Oklahoma City, OK
- Nighthawk Header, 11.6 Miles, Tuttle, OK
- Wald Ranch Discharge, 8.5 miles, Geary, OK
- Spire Hawthorne Lateral Route Analysis, 1.5 mi, Kansas City, MO
- Spire KC Header–West Leg Route Analysis, Approx. 20 mi., Kansas City, MO



TYLER SUDDUTH, LSIT LAND SURVEYOR

Tyler manages all aspects of McClure's Evergy projects, from client communication, research, instructions/assisting field crews, instructions/assisting CAD technicians, and reviewing the final product before it goes to final review. He also manages most of the ALTA/NSPS Survey updates from previous clients, or potential clients purchasing commercial properties. Tyler worked in the field for 9 years, managing all aspects of projects as a crew chief, and he worked as a CAD technician for a year before joining McClure a year ago.

REGISTRATIONS

LSIT

OSHA 10-Hour Training

EDUCATION

Surveying Coursework -
University of Wyoming

YEARS OF EXPERIENCE

10

RELATED PROJECT EXPERIENCE:

- Park Hill Lead Innovation Studio, Kansas City, MO
- NKC Levee, NKC, MO
- 143rd & Blackbob Survey, Olathe, KS
- 6711 Birmingham ALTA, Kansas City, MO
- Hawthorn Transmission Line Easements, Kansas City to Independence, MO
- BNSF Duct Bank, Gardner, KS
- 139th Street, Grandview, MO
- 123rd, Leawood, KS
- 33 Site Solar Portfolio, Illinois
- K10 & Ridgeview Survey

AVIATION



HELPING LOCAL ECONOMIES SOAR.

With four licensed pilots on our team, we not only design and build runways. We pilot them too. McClure has been practicing private aviation since Jon McClure began the firm in 1956. You might say aviation is part of our DNA and culture. And this passion gives us a unique insight into the issues facing airports today.

With national and international experience, our team understands various local, state, and federal regulations. We partner with the FAA and state agencies to help you find the funding you need (over the past five years we've obtained over \$56M in grants for our clients). And we'll be there throughout the project, making sure you stay up to date on everchanging regulations. Local aviation is vital to business and economies. Essential to moving people, products, and services. Let us help your community soar.

WHERE WE MAKE AN IMPACT:

Airport Planning

- Airport GIS System (AGIS)
- Airport Layout Plans
- Airspace Management
- Capital Improvement Planning
- DOT/FAA Grant Administration
- Master Planning

Airport Design

- Aircraft Hangar, Terminals, SRE Buildings
- Airfield Lighting and Navigational Aids
- Landside (Parking Lots and Entrance Roads)
- Pavement Management
- Runways, Taxiways, and Aprons

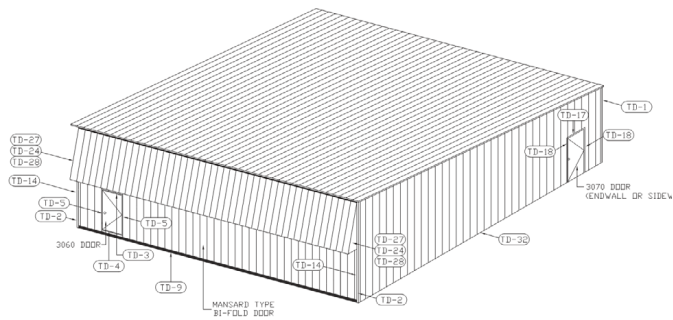
Airport Construction

- Construction Administration
- Construction Staking
- On-Site Construction Observation

Environmental

- Environmental Studies/NEPA Documentation
- Land-Use Studies

PROJECT HISTORY



BOX HANGAR CONSTRUCTION & AIRPORT LAYOUT PLAN (ALP) UPDATE – BOWLING GREEN MUNICIPAL AIRPORT, BOWLING GREEN, MO

McClure assisted the Bowling Green Municipal Airport with the design and construction of a two-unit box hangar, including an update to the Airport's Layout Plan (ALP) drawings to show existing conditions following construction of the hangar on the ALP that was previously prepared in 2005 by another airport consultant. The airport has a constantly expanding and vibrant aviation tenant community and FBO services. New aircraft storage facilities are in demand while existing hangars are in need of renovation or replacement. As a result, the City hired McClure for the design, bidding, and construction administration services to construct a two-

unit box hangar, including an update to their existing Airport Master Plan to show existing conditions. McClure coordinated and worked closely with Missouri Department of Transportation Aviation personnel, including Millicent Parker, Darrell Goth, and Andrew Hanks to complete the hangar design and construction requirements for the project, including the update to the ALP as a result of the hangar construction. **Reference: Linda Luebrecht, City Administrator, 573.324.5451**



AIRPORT LAYOUT PLAN (ALP) REVISIONS & MASTER PLAN ADDENDUM – DAVENPORT MUNICIPAL AIRPORT, DAVENPORT, IA

McClure assisted the Davenport Municipal Airport with airport planning services including revisions to the Airport's Layout Plan (ALP) drawings and issuing an addendum report to their existing Master Plan which was recently prepared in 2012 by another airport consultant. As the leading economic impact general aviation Airport in Iowa, the City of Davenport desired to enhance their 2012 Master Plan which was considered lackluster and shortsighted. As a result, the City hired McClure for recommendations to bolster their existing Airport Master Plan and provide the framework needed to leverage economic development opportunities. The existing Master Plan limited the ultimate Runway 15/33 length to 6,900 feet based solely off Gulfstream-IV performance characteristics.

McClure worked closely with the FAA to justify a longer ultimate Runway 15/33 length of 7,201 feet which provided greater flexibility of other large business jets beyond the G-IV such as the Challenger 600, Citation X, and Hawker 800. **Reference: Tom Vesalga, Airport Manager, 563.326.7783**



TAXIWAY A&C NORTH RECONSTRUCTION/ TAXIWAY B, C, & T-HANGAR TAXILANES – ANKENY REGIONAL AIRPORT, ANKENY, IA

As one of the busiest airports in Iowa, McClure understood the importance of maintaining operations during construction on the airfield. A well-executed construction phasing plan began with developing an understanding for the Airport's specific needs as well as close cooperation with the FAA. The result was a construction phasing plan that minimized the impact to Runways 18/36 and Runway 4/22. To further accommodate the Airport and its 85 based aircraft in the seven T-Hangars, McClure conducted numerous coordination meetings with the Airport to develop a phasing plan that allowed for the tenants of the T-Hangars to utilize the Airport via a temporary

turf taxilane while Taxiway C North was under construction, minimizing the economic impact from construction on the airfield. **Reference: Paul Moritz, Airport Manager, 515.208.3891, pmoritz@ankenyiowa.gov**