ENGINEERING SERVICES FOR VARIOUS PROJECTS AND ON CALL SERVICES











October 17, 2022

Municipal Association of South Carolina Jake Broom, Chief Operating Officer PO Box 12109 Columbia, SC 29211

RE: MASC - Engineering Services for Various Projects and On Call Services JMT Job # 22-03195

Dear Mr. Broom,

Johnson, Mirmiran & Thompson, Inc., (JMT) is pleased to provide this proposal for professional engineering and related services for the above referenced project and on time. We appreciate the opportunity to partner with MASC to provide water and sewer system improvements to local governments on an on call basis.

At JMT, we believe in partnering with our clients to achieve their goals by sharing our expertise and working through the tough issues as a team. JMT has an extensive, 50+-year record of successfully performing similar services on an on-call basis for public agencies throughout South Carolina and the Eastern United States. JMT is a forward-thinking firm, always mindful of the future and long-term interests of our clients. We believe that we are successful because of the relationships we have created and cultivated and due to our inclusive decision making, which always involves the client. Your needs, priorities, and success directly impact the business decisions we make every day.

JMT will provide MASC and various local governments in South Carolina an experienced, reliable, and efficient team for these projects. We treat every project as if we are partners with our client and take ownership in every aspect of the project. We are a great selection for this project for the following reasons:

- We have extensive experience in similar projects throughout this region.
- We have the capacity knowledge, and technology to complete the projects quickly and efficiently.
- As a full service firm, we have immense experience with various types of projects and a thorough understanding of the professional standards and guidelines.
- We operate our company with the highest ethical standards, meeting our debts and obligations and producing quality services.

The key personnel assembled for this team are committed to meeting MASC's quality standards and schedule expectations. Our project manager, Jamie Noe, PE, has 18 years of experience and has served as project manager on various water system extensions and sewer rehabilitation projects. She will be the main point-of-contact and responsible for managing schedules, budgets, and resources. She is available by phone 854-202-9003 and/or by email at jdnoe@jmt.com.

V&M, a JMT Company, has been responsive, timely, and accurate in its performance to date, just like this submittal. We have consistently received good evaluations for the work we have performed. We encourage you to inquire about our professionalism, work quality, and responsiveness with our other clients with whom we have worked on these types of projects. Thank you again for the opportunity to submit our statement of qualifications.

Respectfully,

James O'Connor, PE Senior Vice President

STATEMENT OF UNDERSTANDING

We understand that the Municipal Association of South Carolina is seeking firms to provide engineering services for various local governments in South Carolina for the use of American Rescue Plan monies. JMT is able to provide preliminary design, final design, permitting, project cost opinions, surveying, bidding and negotiation services, construction administration services, and construction observation services as may be needed by the local governments.

TYPICAL PROJECT APPROACH

Task 1: Project Coordination

JMT will work closely with our Client to create a set of clear goals and client expectations at the beginning of the project. The first step after the contract is signed will be to set up a "Kick-Off Meeting" with our Client and other shareholders of the project. This meeting will be an essential part to this project as it sets the goals, vision, schedule, and budget for the project. During this time, we will work with our Client's staff to set up the project schedule (design, right-of-way acquisition and construction), communications, document delivery, and other pertinent project information. All this information will be summarized and formally submitted to the our Client in a Project Planning Report for review and approval by the Owner.

JMT will coordinate throughout this project development with our client representatives both verbally and documented. Our team's expertise in all phases of the preconstruction, project development and construction processes will aid in the preparation of a quality conceptual plan and construction plan set in accordance with appropriate and designated guidelines. JMT will gather and review all available Information including the current concept, existing utility information (with any proposed utility upgrades planned), property ownership information, existing water systems information, development/

zoning regulations, client goals, etc. If required, we will hold site meetings with client representatives to gain a better understanding of the local community concerns and to help in Identifying project design details to be filed in the Project Planning Report.

Task 2: Field Investigation

During the Preliminary Plan process, JMT will be performing survey and SUE services so that an accurate and detailed Base Plan can be generated for design purposes. JMT will perform property owner research, prepare letters (with Client approval), mail the letters, and make personal contacts (as much as possible) with each property owner, while gathering existing information and local knowledge from each property owner. The survey, performed by JMT will be based on SC Grid utilizing new GPS Dual-frequency receivers. JMT will establish a Control Baseline along each roadway entering the intersection such that the necessary topographical information can be obtained. Once control is established, JMT survey and SUE personnel will begin the topographic, property, DTM, SUE and Hydrographic surveys. We will collect all the topographic features impacted by potential design alternatives including, but not limited to, edge of pavement DTMs, centerlines, ditches, drainage structures, the bridge, the creek, sidewalks, buildings, utilities and appurtenances, signs, property corners, etc. Property owner contacts will be performed as needed prior to entering onto properties to perform survey work. The field surveys will depict all above ground features within the requested project limits including but not limited to structures, road features including edges and crown line, landscaped areas, trees with species and size, storm water drainage facilities including driveway pipe, ditches, and cross drains, water, and sewer structures, and all above ground and underground utility appurtenances. Property lines and right-of-way will be established by location of existing monuments. Surveyed

information will be tied to the South Carolina State Plane Coordinate System with the latest adjustments or to the requested datum desired. All surveyed projects will have a baseline control network with a minimum of two control monuments and vertical benchmarks when desired.

Task 3: Detailed Design Services

As part of the kick-off meeting, we will learn from the Client their goals and objectives, define what problems need to be addressed, collect information regarding utility preferences, and discuss what role each entity will play in the project. Coordination with applicable funding agencies will be incorporated into the kickoff meeting to address the agency's guidelines and project timeframe. Sources of funding and construction budget available will be revisited for project conformance.

We will work with the utility to collect and review all existing system data, as-builts, etc. and assess the best, most cost-efficient solution. Once the desired option has been identified, work will begin to prepare the necessary plans and specifications needed for permitting and construction. The Owner/Utility will be provided with periodic updates on the project status to include, at a minimum, a 50% draft submittal and a 90% draft submittal. Once the 90% draft package has been approved, it will be finalized and submitted for review and approval to the DHEC and Funding Agency. An updated pre-bid construction cost estimate will be provided prior to bidding.

Upon approval, the project will be advertised for bid. During this period, we will address the contractor's questions and issue project addenda as needed. We

will provide Owner/Utility and Funding Agency with bid advertising and opening services and provide a review/recommendation of the selected contractor/bid.

Upon award of the project, a pre-construction conference will be held. During the pre-construction conference any special requirements from the Funding Agency, Client's special instructions, and Contractor's questions will be addressed.

During construction, we will review and process contractor's pay request, review and approve equipment construction shop drawings, keep track of the project schedule and critical milestones, conduct periodic site visits (besides the daily services of the engineer's resident field representative) to assess project progress and quality control, and attend monthly progress meetings with the contractor and Owner/Utility.

The resident field representative will keep/record vital construction information such as weather reports, work conducted daily, crew size and type of work performed, along with special observations and plan deviations. The field representative will inform the Engineer and Owner if a project deviation is noted and coordinate such an effort to meet everyone's understanding and acceptance. Any change orders and plan



deviations will be processed through the proper project management channels per standard guidelines. Near project completion, the JMT will assist the Client with "punch-list" items.

Upon the project completion, the JMT will verify that the improvements were properly installed per the contract documents. Manufacturer's certifications and warranties will be collected along with the Contractor's workmanship warranty. As-built drawings, project shop drawings, Operation and Maintenance manuals, field reports, certifications, warranties, and all other applicable paperwork will be provided to the Owner for file purposes. The Engineer will also assist the Funding Agency in closing out the project and obtaining all necessary documents to do so.

Task 4: Permitting Services

Environmental approvals will be necessary prior to easement acquisition. After preliminary engineering, a National Environmental Policy Act (NEPA) Environmental Review Record will be needed in order to meet of 24 CFR Part 58. Accordingly, the NEPA process will be conducted to HUD standards. JMT will submit a Preliminary Information Form to SC State Historic Preservation Office (SHPO). This coordination will serve to determine any potential limitations for the proposed work as well as any documentation required to ensure the project complies with Section 106.

Extra attention will be given to project aspects that could affect structures or features which are contributing elements to the national register historic district.

- Water/Wastewater Construction Permit from SCDHEC. Along with the permit application to construct, V&M will develop an engineering report which demonstrates the proposed system will be a 'viable water system' pursuant to SCDHEC R. 61-58.1(b)(4).
- SCDOT Encroachment Permit We will work on obtaining the necessary SCDOT Encroachment Permit(s) as needed for the completion of the project.

FIRM OVERVIEW

JMT is an employee-owned, multi-disciplinary consulting firm which provides a range of engineering, surveying, real-estate acquisition, project management, inspection, technical, and support service to public agencies throughout the Eastern United States. Our team combines the benefits of broad, regional, and extensive water utility experience with a local presence and the abilities of a full-service firm. JMT has built a reputation as an innovative and imaginative partner with several leading water utilities. Our ideas have helped our clients implement projects with a view toward streamlined approaches, appropriate application of technology, and continuous improvement.

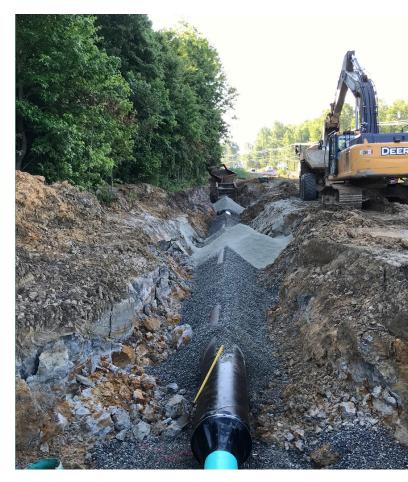
As a 100% employee-owned firm, JMT's staff has a special relationship with our clients. Because we own the company, you are investing in us with every project we undertake. That motivation ensures that you get our full commitment, every time. JMT has expertise in planning, design, and construction phase services for all modes of transportation design projects working with Federal, state, and local agencies on a wide range and scale. Our emphasis on quality results from the individual dedication that drives each employee as well as the corporate commitment that we make when we accept any assignment large or small.

#**60 ENR** Top 500 A/E Firm **+2,000** EMPLOYEES

In January 2022, Vaughn and Melton Consulting Engineers, merged with JMT. With the addition of V&M creates a staff of over 2,000 employee-owners across the United States. We pride ourselves on delivering long-term solutions for water main replacements that require specialized expertise to deliver projects utilizing the "right services" to ensure extended lifespan for water mains. To demonstrate our experience, we have presented several example projects that incorporate all the aspects that will be key to the successful delivery of the project including small diameter water main design, geotechnical, survey, subsurface utility engineering (SUE), right-of-way (ROW), traffic and maintenance of traffic engineering, environmental permitting, and services during construction. These projects were completed by the same key personnel presented for this project in the qualifications presented.

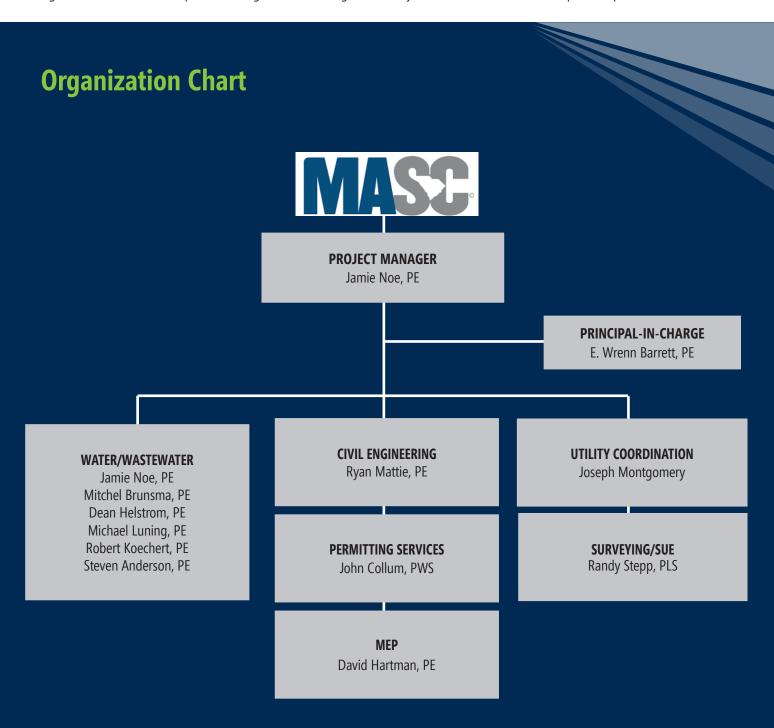
JMT supports public agencies throughout South Carolina and the region on many on-call contracts for engineering services. Our organizational reporting structure is designed to facilitate interdepartmental teamwork for small and large assignments. Our ability to meet deadlines is demonstrated perhaps most simply with the statements that more than 90% of our contracts are with repeat clients, our list of award-winning projects grows longer every year, and we consistently receive written commendations complementing our outstanding quality of work. JMT's reputation resides firmly on the continued high level of quality and service that we deliver.

Our local JMT team of water and geotechnical engineers and designers are familiar with the local standards, specifications, and stakeholders to successfully deliver this project. JMT's Water Division which has been providing water services nationally for 25+ years. Our Water Division includes 60+ water engineers and designers that bring extensive experience through their work with the clients / projects. Additionally, JMT's Quality Management System (QMS) is certified in adherence to ISO 9001:2015 and follows strict quality assurance and quality control measures for every project we undertake.



Work Management Plan/Experience of Proposed Personnel

JMT's professional and support staff draw from their experience and diverse backgrounds to bring innovation and creativity to every project. Our practical knowledge comes from years of work in many engineering disciplines and projects are led by seasoned staff, managed by experienced professionals, and produced by young engineers and scientists with fresh and contemporary ideas and solutions. Our offices work closely together, regardless of project location, with other professionals in the water and wastewater and civil engineering industry, and we continuously seek a diversified project team. JMT consistently provides training in all required areas for our personnel, including SUE, survey and CEI crews, and continuously seeks new avenues for improving our efficiency and technical abilities. We understand that in order to have a successfully completed project, it is imperative to have a management process that is perfected and an approach that is both clear and flexible, and backed by a trained and qualified staff. JMT has provided this level of work from conceptual planning through to construction administration for federal and state-funded local and state-wide projects ranging from small rural water systems to multi-million dollar regional treatment plants across the Southeast. We pride ourselves on being proactive in accomplishing project goals while working with the contractors and owners to attain the highest standard of services possible. Our staff has developed a keen awareness of challenges that can be encountered, and are adept at identifying these challenges from project beginning with concept through to construction. This experience has given our staff a greater ability to work with others to develop and implement solutions.





Jamie Noe, PE Project Manager, Water/Sewer Engineer

Education: BS, Civil Engineering, 2004, University of Kentucky

Registrations: Professional Engineer, 2011, SC #35876; KY #27988; TN #121853; NC #047349

Location: North Charleston, SC

Ms. Noe joined Vaughn and Melton with more than 12 years of engineering related experience. She graduated from the University of Kentucky, College of Engineering in May 2004. She has experience with hydraulic modeling for both water and sewer systems, performing capacity analysis for sewer systems, project oversight for water lines & tanks, preparing cost estimates, designing water lines, pump stations, & tanks, shop drawing review, assisting with surveying, submitting grant applications, & working with state and federal agencies to obtain project funding. Her most recent responsibilities include acting as Project Manager for various water system extensions and sewer rehabilitation projects.

Asheville Regional Airport | Asheville, NC: This project consisted of a study to investigate and assess the existing conditions of the water distribution system. The study included modeling the system, providing a hydraulic analysis, make recommendations, prepare cost opinions, and life-cycle costing. I provided a preliminary design for a waterline replacement, including calculations for determining line size in order to meet pressure and flow needs. Based upon study, we are currently designing for construction those recommendations.

Ridge Spring Wastewater Collection System Rehabilitation | Ridge Spring, SC: This project includes the rehabilitation of nearly 9,000LF of existing 8-inch and 10-inch gravity sewer and 42 manholes. The project includes cleaning, videoing and manhole inspection, preliminary engineering report, wetland delineation and permitting, sewer system rehabilitation, and construction administration, observation and post-construction services.

St. George Water System Improvements | St. George, SC: Project Engineer/Project Manager. This project has three major components Building and Material Management Facilities, Line Replacement and Upgrades, and Well House Improvements. The Building and Material Management Facilities components in rehab of the existing facilities and installing SCADA workstation. The Line Replacements component includes the construction of 19 separate line extensions totaling nearly 27,100 linear feet of waterline, installation of approximately 560 automatic read meters and upgrade of approximately 40 hydrants within the system. The Well House Improvements portion includes upgrade of pumps, instrumentation, SCADA, disinfection systems, install generators, install pressure filters, and install mixing systems to the existing tanks. Ms. Noe's role for this project as Project Engineer for the design of the Line Replacement component and Project Manager for the project as a whole. She is currently designing the water line extensions, including performing calculations to determine the required pipe size to meet the pressure and flow needs. Her role as Project Manager requires her to coordinate the work of the sub consultants.

Rogersville Water Age Study | Rogersville, TN: Project Manager. The study was to develop a comprehensive water system assessment to investigate water quality parameters and system operations that may impact disinfection byproduct formation throughout the entire water system (distribution and treatment). The study included developing a hydraulic model, creating a system-wide sampling protocol, assessing tank utilization, evaluating system flushing operations and assessing corrosion control practices, examining source water parameters and ultimately, making operational recommendations in terms of improving water quality parameters and reducing water age.



Joseph Montgomery
Utility Coordination

Education: BS, Biology

Certifications: CEPSCI, SCDOT Earthworks, SCDOT Asphalt Roadway Tech., Hazmat, Nuclear Gauge Certs.

Affiliations: SCRWA, SCEC, APWA, ACEC

Location: Columbia, SC



Mitchel Brunsma, PE Water/Wastewater Engineer

Education: BS, Civil Engineering

Registrations: Professional Engineer: TN#112801; KY#19887

Technical Training: KY PIPE Hydraulic Analysis Training

Location: Middlesborom KY

Mr. Montgomery has worked in the transportation industry over 20 years in South Carolina as a roadway inspector, and as a project manager. He has extensive experience on SCDOT "C" Fund roadway projects, including bid documents, estimates, inspections and required SCDOT "C" Fund Program submittal requirements and documentation. He also has experience with flood recovery operations including, road damage assessments and working with federal and state agencies, FEMA, and SCEMD.

On-Call Road Design | Spartanburg County, SC: V&M is providing contract administration, construction administration, roadway/parking design, surveying, utility coordination, pedestrian safety, multi-modal design, and conceptual design. **Mr. Montgomery** is the lead utility coordinator.

On-Call Road Design | Chesterfield, SC: Mr. Montgomery is the Project Manager for this Indefinite Delivery Contract for Chesterfield County, which to date has included seven roadway design projects completed or in construction. He oversees V&M's work in providing project coordination and management, survey, roadway and hydro design, easements, utility coordination, plan development, construction documents, and cost estimates, C-Fund documentation, permitting, bidding, and construction management.

SCDOT Emergency Bridge Replacement Package 2A | Dillon & Marlboro Counties, SC: V&M provided SUE, utility coordination, hydrology, and right of way (ROW) services for the replacement of three bridges: 1) S-33 Davids Millpond Road over Naked Creek; 2) S-51 East Academy Street over tributary to Reedy Creek; and 3) S-400 Level Green Church Road over Herndon Branch. Mr. Montgomery was the lead utility coordinator on this design-build project.

SC 3 (Marlboro Ave) Corridor Enhancement & Pedestrian Accommodations | Barnwell County, SC: Mr. Montgomery is the lead utility coordinator and is leading the public involvement requirements. Duties include holding meetings with citizens, elected officials, and Barnwell County, and the SCDOT.

Since joining the firm in 1993, Mr. Brunsma has managed numerous projects from design through construction. He has over 28 years of experience in water/wastewater design and routinely provides consulting services for county governments, municipalities, utility districts and private developers. Services include project funding assistance, oversight of the construction package containing permitting, design, specifications, bidding documents, and construction plan sets, and construction administration. Mitch has experience working with various state/federal funding sources. He currently heads V&M's utility design/relocation department in the Middlesboro office.

2012, **2014**, **2016**, **2018 CDBG Waterline Extensions** | **Claiborne County**, **TN:** Project Management/Design. Duties included preliminary cost estimates, CDBG applications coordination with the East Tennessee Development District, design, and construction administration for various waterline extensions that provided potable water to over 190 homes throughout rural areas of Claiborne County.

2020 Waterline Extensions | Claiborne County, TN: Project Management/Design. This \$500,000 County funded waterline extension project was initiated by Claiborne County to cover sparsely populated areas within the County to better situate them for future CDBG grant project applications in those rural areas. Duties included planning estimates, design, and construction administration.

Little Sycamore ARC Waterline Extension – Phases 1 & 2 | Claiborne County, TN: Project Management/Design. Duties included preliminary cost estimates, preliminary engineering reports, ARC application coordination with the East Tennessee Development District, design and construction administration for this 5.2-mile waterline extension that served approximately 60 residents in the Little Sycamore Community.

Boone's Ridge Water Line Extension Project | Bell County, KY: Project Management/Design. Duties included preliminary cost estimates, permitting, design, and construction administration. This project included over 6 miles of 8", 6", and 4" polyethylene waterline, 2 water booster pumping stations, a 150,000 gallon water storage tank, a pressure reducing station, remote telemetry and associated appurtenances to serve a new tourism development on an abandoned strip mine in rural Bell County, KY.



Dean Helstrom, PEWater/Wastewater Engineer **Education:** BS, Civil Engineering

Registrations: Professional Engineer SC

Certifications: SWPPP Design Certification

Affiliations: National Society of Professional Engineers (NSPE); American Water Works Association (AWWA)

Location: Johnson City, TN



Michael Luning, PE
Water/Wastewater Engineer
Education: BS, Civil Engineering
Registrations: Professional Engineer

Location: Virginia Beach, VA

Mr. Helstrom began his engineering career in 1997 and has been responsible for taking various projects from their conception through design, bidding, construction, administration to completion. He has experience in a variety of public and private engineering projects, including street, highway, ADA sidewalk, parking lot improvements; water supply & treatment, distribution; stormwater drainage and management facilities; wastewater collection and treatment systems with an emphasis on I & I reduction; municipal swimming pools, and a variety of site designs. He is also SWPPP Design certified.

Sneedville Wastewater System Improvements (Phase 2, 3, 5 & 6) | Sneedville, TN: Project Manager responsible for providing Phases 2-3 with project management, communication, and oversight for the construction of the blowers, plant piping, and project closeout. Phase 5 responsibilities included managing the PER and Environmental Report for obtaining the grant. The project was funded through the US Department of Agriculture Rural Development. Phase 6 responsibilities included completing a PER for assisting the City of Sneedville and First Tennessee Development District for grant funding.

Surgoinsville Sewer Collection System Extension | Surgoinsville, TN: Project Manager for designing Surgoinsville's sewer system extension to Johnson Estates. Services included assisting the Town with engineering, design, and project inspections in compliance with EECBG program requirements and working with the First Tennessee Development District for project management. The design included 4,000 LF of effluent collection lines, 17 STEG Systems, one Step System, one Duplex Step System, and 23,000 LF of force mains.

NCDOT Water & Sewer Utility Relocation Plans | Harnett, Chowan, Johnston Counties, NC: Utility Relocator for nine utility relocation projects for water and sewer for a Design-Build Bridge Replacement contract.

Mr. Luning has 42 years of experience in the planning, regulation, design, construction, operation, and maintenance of water and wastewater distribution, storage, collection, and treatment facilities throughout Virginia. He has managed a variety of complex, multidisciplinary water and wastewater projects, including those involved with water and wastewater system mapping, evaluation, and rehabilitation. Has extensive experience in the planning, design, and operations of all aspects of water and wastewater utility systems. Mr. Luning has worked with many municipal, state, and federal clients, including VDOT, NAVFAC, and COE. He is a Vice President in JMT's Virginia Beach office where he leads the Environmental and Facilities Section.

Fripp Island Watermain | Beaufort County, SC: Project Manager responsible for planning, assisting in funding acquisition, design and construction administration for the installation of approximately 7,200 feet of 10-inch diameter water main along US 21 Sea Island Parkway in Beaufort Co, SC. Approximately 4,000 feet of pipe was installed via HDD. The project was under a strict time schedule as part of a SCDOT bridge relocation project. Assisted owner in acquisition of revolving loan fund approval for project. Responsible for advertising, bidding, award of contract and supervision of construction administration and inspection. Over a 6-month period completed design of project and acquired permits from SCDHEC, ACOE, SCDOT and Costal Zone Management.

Ray Street Water and Sewer Improvements CDBG Project| Elizabeth City, NC: Project Manager. Mr. Luning performed field investigations and alternative analyses leading to the preparation of plans and specifications for the replacement of existing water and sewer infrastructure. The design was completed for three separate projects under this contact, including those on Pearl Street, Roanoke Avenue, and South Road Street, which involved a total 5,200 feet of water main and 4,800 feet of gravity sewer.



Robert Koechert, PE, ENV SP
Water/Wastewater Engineer
Education: BS, Civil Engineering

Registrations: Professional Engineer CO, FL, PA, MD, DE, KY, OH, IN, NY

Location: Newark, DE



Steven Anderson, PE Water/Wastewater Engineer Certification- Mechanical Engineering

Registrations: Registered Professional Engineer, MD

Location: Hunt Valley, MD

Mr. Koechert has been involved in many facets of water engineering over the past 25 years His experience has included energy audits, facility planning and design, capital planning, design reviews, and inspections of water and wastewater treatment facilities, pumping stations, and collection/distribution systems, general site design, and rural and urban infrastructure projects. Most recently Mr. Koechert has led several contracts that have involved pipeline routing studies and alignment selection, site assessments for new or existing facilities, and the evaluation and selection of pumps, blowers, and pipe materials. Mr. Koechert provides regional support to many of JMT's water clients by bringing perspective from other regions and assigning the right staff for your projects.

Girard Avenue Pipe Alternatives Evaluation | Philadelphia, PA. Project Manager. The Philadelphia Water Department (PWD) owns and operates a 48-inch transmission main from the East Park Booster Pumping Station that transfers water from Center City to West Philadelphia and provides the only back-up supply should the Belmont Plant fail. PWD requested that JMT perform an inspection of the support rollers for the portion of the main within the Girard Avenue Bridge crossing above a major interstate (I-76), two arterial roadways, and the Schuylkill River constructed in the early 1950s. Mr. Koechert provided oversight of the alternatives evaluation and led all Core Review Committee meetings that combined PWD's operations, planning, and engineering. His role included coordination with subconsultants and assurance to quality standards developed as part of the project management plan.

Small Water Main Replacement | Allegheny County, PA. QA/QC Manager. JMT prepared the design of four neighborhoods of water mains ranging from 6 inches to 16 inches to replace aging infrastructure and improve reliability, hydraulic conditions, and water quality. Mr. Koechert provided independent QC checks of the water main designs at 60% and 90% design submittals.

Mr. Anderson is a senior project manager with more than 38 years of engineering design experience with water and wastewater projects. His expertise includes civil site, mechanical, and process design, including process and equipment selection, instrumentation, controls and operations of water and wastewater facilities and pumping stations. Mr. Anderson's specialty expertise is in providing senior level management for water and wastewater project development in the conceptual phase, and design, and construction phase services. He is highly technical and has assembled instructional seminars for mentoring young engineers.

Monocacy WTP Upgrade | City of Fredrick, MD: Sr. Project Manager. Mr. Anderson has provided project management, lead design oversight, and QA / VE and startup and commissioning services throughout the Design Build Contract with Mid-Atlantic Utilities, Inc. Work associated with the 3 MGD surface water treatment plant has included a multidisciplinary expansion and rehabilitation of raw water intake and pumping station, sedimentation basin, with new flocculators, sludge collection and effluent tube settlers, filter upgrades, and finished water pumping with plant chemical and auxiliary system upgrades.

Fulton Maple Lawn Water System Improvements | Howard County, MD: Project Manager. Mr. Anderson has provided planning, management, design oversight, and QA / VE services for the staged 630 Zone water system improvements at Fulton, MD. The project included zone modeling to identify piping system improvements to support 630 Zone staged booster pump station and elevated water tank additions. The project included 12,000 LF of 12" watermain and 1,000 LF of 16" watermain, upgrade of the Rte. 216 BPS, and the addition of the 2.5 MGD Maple Lawn BPS and 0.50 MG spheroid elevated water storage tank (EWST) to support future zone pressure and demands. The new BPS and EWST required land acquisition, County, State Highway and MDE permitting. The project required integration of the County PrimeX SCADA controls and DPW security access systems.



Ryan Mattie, PE Civil Engineer **Education:** BS, Civil Engineering

Registrations: Professional Engineer SC, NC, GA, CO, PA

Location: Charleston, SC



Randy Stepp, PLS Survey

Education - AAS, Civil Engineering

Registration - Professional Land Surveyor - SC # 27461

Location: North Charleston, SC

Mr. Mattie has over 15 years of experience in planning and design for a variety of projects including Site Design, Roadway and Drainage Design, Stormwater BMP and Water Quality design, and SWPPPs. He has the knowledge and understanding of the various design techniques, guidelines and requirements including erosion and sediment control design, drainage and conveyance system design and analysis, BMP Retrofitting and basin routing, site grading and layout, NPDES / MS4 permitting, horizontal and vertical design elements of roads and ADA compatibility of sites. He is familiar with the various guidelines and agencies throughout the Lowcountry and SC with regards to NPDES, MS4 and DHEC / OCRM regulations. Stormwater experience includes design of low impact development (LID) best management practices (BMPs) including bioretention facilities, raingardens, bioswales and permeable pavements for various public agencies. In addition, he has knowledge and experience with drainage and stormwater design as well as LID BMPs in areas of limited right of way and urban spaces.

Drainage and Stormwater Improvements | Fripp Island, SC: Project Manager. JMT has performed several tasks for the Fripp Island POA in Beaufort County. The projects were all related to drainage problems within the POA and work include field investigations, recommendations, reports and designs based on these recommendations. Some solutions included several small stormwater pump stations, gravity conveyance systems and general grading solutions for overland conveyance. JMT also performed environmental permitting related to these tasks where necessary. Mr. Mattie is acting as the client / project manager for JMT.

Flagpole & Gatehouse Pump Stations & Force Mains | Fripp **Island, SC:** JMT was tasked with helping the POA address some of the drainage concerns near the front entrance of the island. In conjunction with the Gatehouse Improvement project, JMT was tasked with designing two pump stations similar to the ones at Marlin Dr. and Wahoo Dr. In addition to the pump stations, JMT designed a series of gravity conveyance systems to tie into these stations.

Mr. Stepp has 27 years of experience as a surveyor. His grasp of a project schedule and timely product deliverables is predicated on the need for an accurate and complete survey to keep the project moving forward. His latest, relevant projects include water, wastewater, and stormwater survey with GIS mapping and database components, as well as On-Call SUE services and location surveys for DOT, counties, cities, and utilities. His expertise includes using GPS and conventional surveying technology to perform SUE work and hydraulic/hydrologic surveys for flood studies, No-Rise Studies, CLOMRs, and LOMRs. He is experienced at using all technology types, from field equipment to software, including Microstation, GEOPAK, and AutoCAD Civil 3D.

Wastewater System Surveys | Greenville, SC: The City of Greenville's sanitary sewer system consists of 332 miles of existing sanitary sewer mains. This project's primary objective was to collect utility hole and pipe data on the existing system sufficient for capacity analysis and modeling future growth requirements. The Team provided utility hole and pipe survey data and a GIS database documenting the information. The V&M survey team used one-two full-time survey/SUE crews to complete Phases I—V, including 9,394 utility holes and their associated pipes. Mr. Stepp was the Project Manager.

Wastewater Collection System Manhole Survey IDC | Columbia, **SC:** Providing survey services supporting the City's Clean Water 2020 Program, Mr. Stepp is the Project Manager/Point of Contact overseeing utility hole locates, data collection on system assets, data management, and GIS updates. The Team has provided survey, data collection, and management on over 6,000 utility holes.



David Hartman, PE Electrical Engineer

Education: BS, Electrical Engineering

Registrations: Professional Engineer SC, VA, DC, MD, PA

Location: Charleston, SC



John Collum, PWS
Environmental

Education - MS/Biological Sciences,
BS/Earth and Environmental Resources
Management

Registration - Professional Wetland Scientist

Location: Columbia, SC

Mr. Hartman has 30 years of experience in providing engineering design services and project management leadership for both private and public sector MEP projects. Project types where he has served in a key role include Federal, Municipal, Civic, K-12, Higher Education, Healthcare, Industrial, Institutional, Retail, Mixed-Use Residential, and Non-Profit. Mr. Hartman serves as project manager for several active engineering design and construction administration contracts and provides leadership to JMT's MEP Section in SC. In addition to MEP engineering consulting, he worked in the U.S. power utility industry for nearly a decade, and in South Asia where he provided renewable energy and energy utilization asset management consulting services for several years.

Trex Building No. 3 Electric Service Upgrade | Winchester,

VA: Project Manager/Lead Electrical Engineer. Responsible for securing and managing the contract with the Trex Corporation, as well as executing the electrical engineering design for required primary and secondary electrical service upgrades to increase electrical capacity by 5 MVA to the Building No. 3 manufacturing center. Performed all necessary design calculations, laying out of the electrical improvements, quality control management of the design documents, and coordination efforts with the Owner's representatives, local power company, site civil and structural engineering subconsultants.

FBI Training Center "Hogan's Alley" MEP Renovations | Quantico,

VA: Project Manager. Responsible for leading the design effort to renovate the building mechanical and electrical systems for the FBI's primary training center (town mock-up) in Quantico, Virginia, including full HVAC system replacements with enhanced exhaust systems and required power and lighting upgrades. Provided overall design document production and quality control oversight, as well as consulting to the prime design-build contractor for the most effective construction work plan and required phasing of construction. Design team disciplines involved and managed included architectural, site civil, mechanical and electrical to renovate the various building types that were part of the training center - townhomes, restaurants, motel, pharmacy, bank, and retail offices.

Mr. Collum has 21 years of experience facilitating environmental approvals and construction permits for public infrastructure projects. He is highly adept at directing projects over (or around) environmental hurdles. He is experienced in navigating the National Environmental Policy Act (NEPA) for projects receiving federal funding from many different federal agencies (including FAA, FHWA, HUD and VA), NPDES construction permits from Small, Medium, and Large MS4s and SCDHEC, FEMA No-impact certifications and Map Revisions, and managing the wetlands permitting and mitigation process with the US Army Corps of Engineers.

Whiskey Road Drainage Project | Aiken County, SC:

Environmental Manager. The Whiskey Road Regional Corridor Project includes drainage improvements, streetscape and access control improvements for safety. Currently, JMT is moving the long-awaited project forward with the needed drainage improvement. Mr. Collum is responsible for overseeing environmental field investigations, alternatives, environmental (wetlands and stormwater) permitting and mitigation.

Langly Pond Dam Retrofit | Aiken County, SC: Environmental Manager. During the project development process, the spillway began to fail and the project qualified for funding through FEMA. As the result this project was put on a fast track schedule to be completed as quickly as possible. Mr. Collum was responsible for identifying and coordinating with state and federal agency representatives who are decision-makers for permitting the excavation and disposal of the contaminated material beneath the surface layer in the pond. Additional tasks include site visits with regulatory agency personnel and development of a USACE wetlands permit application package for improving a road along the pond.

ST. GEORGE - USDA-RD - WATER SYSTEM IMPROVEMENTS

St. George, South Carolina



JMT (Formerly Vaughn & Melton) is providing design through construction phase services for improvements and upgrades to the water system, including new water distribution buildings, line replacements, meters, and well house improvements for water supply and treatment. Field surveys represented the project area for the upgrade of 27,100 linear feet of new and existing line. Field surveys covered the area from centerline of the road to the margin of right of way.

Research was conducted on right of way ownership and location of waterlines on private property easements. For the town-wide waterline system, we located existing water meters, water valves, fire hydrants, and water line at survey point intervals between 200 and 300 feet. Topographic surveys were prepared, and wetlands, streams, and jurisdictional ditches were surveyed.



Petersbrug, VA

JMT was selected by the City of Petersburg to provide professional engineering services for water and wastewater projects. We have prepared the Cities AWIA plan and submittal. This effort included a desktop emergency response effort. We have most recently prepared an application for a BBBRC grant, which was awarded on September 2, 2022. The funds provided by this grant combined with other funding will be used to provide needed improvements to the City water and wastewater systems. These improvements will affect Prince George County in the Route 460 corridor. As this project is larger and more complex than the City is familiar with the City asked JMT to lead the project in the role of Program Manager.



Client/Owner: Town of St. George, SC Contact: Honorable Kevin Hart, Mayor Phone: 843-563-3032 Email: mayor@townofstgeorgesc.org

OR

Contact: Dion Straub, Water Superintendent Phone: 843-563-7112 Email: stgeorgewaterdept@yahoo.com

Client/Owner: Department of Utilities and Public Works Contact: Mr. Paul Johnson Phone: 804-733-2300

Email: pjohnson@petersburg-va.org







On-Call Professional Services — Department of Public Works Elizabeth City, NC

Client: Elizabeth City, NC

Reference: Dwan Bell, PE 252-337-6628 dbell@cityofec.com JMT is providing water and sewer engineering services on an as-needed basis to department of works in Elizabeth City, North Carlina. The scope of these services includes—but is not limited to—feasibility analyses, grant support, environmental impact analyses, cost estimates, rate analyses, hydraulic modeling, groundwater and surface water hydrology modeling, asset evaluation, surveying, design, bidding assistance, construction administration, testing, and inspection.

SSES | JMT identified excessive inflow and infiltration (I&I) entering the sewage collection system. By proactively managing the sewer system, Elizabeth City plans to identify and alleviate excessive inflow and infiltration. To support this goal, JMT developed a four-step approach for identifying I&I on a limited grant-funded budget. This effort included use of CCTV, monitoring station run time, and conducting field observations and analyses. As a result, the city was able to develop more projects to reduce I&I in the future.

Pump Station Improvements 2020 | JMT is designing various repairs to nine different wastewater pumping stations. These improvements are related to make the stations less susceptible to flooding. JMT's designs for these stations include replacing or raising hatches and control panels, along with constructing several watertight manhole frames and installing permanent diesel standby-pumps. Designs also include replacing and/or repairing the roof, door, and windows on two of the stations.

Ray St Water and Sewer Main Replacement | JMT designed new replacement water and wastewater mains for two-blocks of residential area. Designs include street improvements, manhole replacements, water mater replacements, and new fire hydrants.

Site Plan Review, Staff Augmentation | JMT is assisting the City in reviewing development plans for water, wastewater, and stormwater system impacts. To date, we have provided reviews for a new medical facility, major retail store, and several commercial spaces.

CDBG WATERLINE EXTENSIONS (2012, 2014, 2016, 2018

Clairborne County, TN

The Claiborne County Government selected JMT (Formerly V&M) in the fall of 2011 to help secure funding for a waterline extension to serve the Forge Ridge/Little Creek/Rosum Town areas of Claiborne County. JMT provided a preliminary engineering report and funding application assistance in cooperation with the East Tennessee Development District, which resulted in award of a \$500,000 2012 State of Tennessee Community Development Block Grant (CDBG). This initial project provided potable water to approximately 60 homes.

In 2013 the Claiborne County Government again selected JMT for funding application assistance and the preparation of a preliminary engineering report on a successfully secured 2014 CDBG waterline extension application. JMT provided design, construction administration, and resident inspection for this project that provided water to approximately 42 homes along Beason Ridge Road, Goin Road, Barker Road, and Fords Chapel Road in the Midway area of Claiborne County.

Following the completion of the 2014 CDBG project, Claiborne County chose JMT for engineering services in relation to the 2016 Community Development Block Grant (CDBG) waterline extension application which was funded during the summer of 2016. The project provided potable water service to approximately 40 homes in the Hopper Circle, Greasy Hollow, and Little Creek areas of the County.

After successful completion of the preceding 3 projects, the Claiborne County Government again chose to select V&M for engineering provisions on the 2018 CDBG-funded Goins Chapel, Greasy Hollow, Hunley Road, and Cole Road Waterline Extension. The project provided water to approximately 47 homes and was completed in early 2020.

2020 CLAIBORNE COUNTY WATERLINE EXTENSIONS

Clairborne County, TN

The Claiborne County Government selected JMT (Formerly V&M) for the 2020 Claiborne County Waterline Extensions Project that was funded using local funds. The project included waterline extensions along Pine Hill Road, Ironworks Road, Poplar Grove Road, and Thomas Road.

This \$500,000 project was initiated by Claiborne County to cover sparsely populated areas within the County to better situate the County for future CDBG grant applications in those rural areas. The project was completed during the summer of 2021.



Client/Owner: Claiborne County, TN Contact: Joe Brooks, County Mayor Phone: 423-626-5236 Email: countymayor@ claibornecountytn.gov

Client/Owner: Claiborne County, TN Contact: Joe Brooks, County Mayor Phone: 423-626-5236 Email: countymayor@ claibornecountytn.gov

MARSHALL COMPREHENSIVE WATER STUDY

Town of Marshall, NC

The Town of Marshall owns and operates the water treatment and distribution systems that serve customers inside and outside the corporate Town limits. As part of their strategic long- term planning efforts, the Town selected Vaughn and Melton Consulting Engineers to assess the condition of the current water system and to estimate/develop future water needs for the next 20 years. The existing system consists of 4 well sources, 2 tanks, and roughly 34 miles of distribution line, serving approximately 900 citizens. Each well pumps an average of 45 gpm and both can contribute a total flow of approximately 68,000 gpd.

The objectives of this project were met by conducting field and table-top investigations of the major system components and appurtenances, updating the GIS water system map, creating and calibrating a system-wide hydraulic model of the water distribution system, and collaborating with the Administrative personnel, regulatory staff, system operators, and maintenance staff concerning the system needs and future growth projections.

RIDGE SPRING WASTEWATER COLLECTION SYSTEM REHABILITATION

Ridge Spring, SC

This project includes the rehabilitation of nearly 9,000LF of existing 8-inch and 10-inch gravity sewer and 42 manholes. The project includes cleaning and videoing of manholes and gravity sewer, as well as, pipeline and manhole inspection by our certified NASSCO personnel. We prepared a Preliminary Engineering Report and aided with the submission of the CDBG grant. As part of the project we will conduct a wetlands delineation within the project area in accordance with the standards currently employed by the USACE. Based on the results of the CCTV work and the preliminary engineering report, V&M is providing design construction administration and resident project representative services for the rehabilitation of the failing gravity sewer collection system.

Client/Owner: Town of Marshall Contact: Mayor Nancy Allen Phone: 828-649-3031

Email: mayor@townofmarshall.org

Client/Owner: Ridge Sping Contact: Mayor Qwendolyn Etheredge Phone: 803-685-5511880303 Email: rsmayor@comporium.net

Experience with Federal Funding

Our staff has a wealth of experience with local, state, and federal grant programs, including the Community Development Block Grant (CDBG) program. JMT has extensive experience coordinating with various funding agencies including, but not limited to, USDA Rural Development, CDBG, Economic Development Administration, and the US EPA. Assistance will be available from the initial application throughout construction to the final close-out.

As a firm with a major presence in state and local government infrastructure sectors, we have completed grant applications and delivered grant-funded design projects to clients. This experience spans from grant identification and writing to technical review and implementation of planning and zoning requirements as well as permitting and reporting, monitoring, and compliance requirements of various grant programs.



Project Name	Funding Source*			
	CDBG	ARC	SRF	USDA RD
St. George Water System Improvements and Upgrades				Х
Kentucky & Virginia Ave. Utility Replacements	Х	Χ	Х	
Barbourville Sewer Rehabilitation			Х	
London Sewer Rehabilitation			Х	
Middlesboro WWTP Improvements Phase 1		Х		
Barbourville Boone Heights Water Storage Tanks Replacement		Χ		
Barbourville Wastewater Treatment Plant Expansion			Х	
Virginia Avenue/Courthouse Square Sewer/Storm Project [see KY&VA Ave above]	Х	Χ	Χ	
Claiborne County, TN Waterline Various Projects	Х	Х		
Sneedville Phase 5 - WWTP Improvements		Χ		Х
Sneedville Phase 6 - WWTP Improvements (I&I Investigation & Construction)	Х			
Bulls Gap WW Collection System Expansion		Χ		Х
Ridge Spring Wastewater Collection System Sewer Rehabilitation	Х			
TOTZ Waterline Extension and Plant Improvement, Cumberland KY	Х			
Little Sycamore Waterline Extension (Phase I and II), Claiborne County	Х	Х		
Powell Valley Water Storage Tank		Х		
Mooresburg U.DWater system Improvements				Х

* FUNDING SOURCE KEY

CDBG = Community Development Block Grant Funds-US Housing and Urban Development

ARC - Appalachian Regional Commission

SRF = State Revolving Fund

USDA RD = US Department of Agriculture Rural Development