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EXPRESSION OF INTEREST FOR
**TYGART LAKE STATE PARK WASTEWATER
TREATMENT AND LIFT STATION IMPROVEMENTS**

SOLICITATION NO.
AEOI 0310 DNR1900000013

June 14, 2019

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Ms. Angela White Negley
West Virginia Division of Natural Resources
Property And Procurement Office
324 4th Avenue
South Charleston, WV 25303

**RE: Expression of Interest for Tygart Lake State Park Wastewater Treatment and Lift Station Improvements,
Solicitation No. AEOI 0310 DNR1900000013**

Dear Ms. Negley,

As a leader in the water/wastewater industry, RK&K provides a full range of services for wastewater projects and programs serving public clients. We have a vast knowledge and understanding of necessary regulations, laws, ordinances, and requirements of state and local governmental agencies and authorities. For this reason, we are confident the team we have assembled for this contract will meet the West Virginia Department of Natural Resources (DNR) needs as we develop solutions for the Tygart Lake State Park Wastewater Treatment and Lift Station Improvement project. Additionally, our team offers complete services in the areas of process analysis and design, process mechanical, hydraulics, process control and instrumentation, biosolids, permitting and cost estimating. Working as an extension of your staff, we will work with your representatives to identify requirements, constraints, and opportunities at the onset of the project. We will emphasize ease of maintenance, improved reliability, and operational flexibility for each component of this project.

As Project Manager, John Cole, PE will be DNR's main point of contact and will lead RK&K's comprehensive team from our Keyser, WV office. He has been actively involved in the planning, design and construction of West Virginia's infrastructure projects for more than 18 years, providing industry leadership through addressing the region's infrastructure needs. John has diverse experience in project management and design of wastewater and water treatment plants, pumping stations, and distribution and collection systems. He is committed to identifying innovative and cost effective solutions to deliver this project in the most efficient means possible. Additionally, John will be backed by a team of highly qualified professionals each with ample experience in their specialized areas of expertise.

RK&K sincerely appreciates this opportunity to demonstrate our outstanding technical capabilities in providing engineering services, team innovation and unparalleled project commitment. The RK&K Team is enthusiastic about the opportunity to serve DNR on this important project and welcomes an opportunity to meet with the selection committee to discuss the project in more detail. If you have any questions regarding this proposal, please feel free to contact John Cole at 304.788.3370 or e-mail jcole@rkk.com.

Respectfully Submitted,

RK&K



Michael Myers, PE | Partner

FIRM OVERVIEW & QUALIFICATIONS





Tygart Lake State Park Main Treatment Plant

FIRM OVERVIEW & QUALIFICATIONS

ABOUT RK&K

Since our founding in 1923, RK&K has provided multi-discipline planning, design, and construction phase services to both public and private sector clients throughout the Southeast and Mid-Atlantic. Headquartered in Baltimore, MD—with offices in Charleston and Keyser, WV—we offer responsive people and creative solutions to a variety of projects from more than 26 offices located in nine states and Washington, DC.

RK&K’s technical expertise results in award-winning projects and places the firm at #68 on Engineering News Record’s 2019 listing of the Top 500 Design Firms. Our more than 1,400 team members collaborate with clients and teaming partners to achieve project goals while ensuring a commitment to quality. The firm is a limited liability partnership owned and operated by four equal partners and managed by executive directors and directors who lead and coordinate projects and staff, serve as liaisons with clients and subconsultants, and enhance projects with their vital technical expertise.

RK&K’s experience relevant to the evaluation, planning, design and construction management of wastewater collection, pumping, and treatment systems includes new construction, rehabilitation, upgrading and expansion of wastewater treatment plants, pumping stations, force mains and collection systems. Our Team is involved in numerous studies to evaluate the adequacy and condition of existing facilities and to develop and evaluate alternatives for new facilities to best meet current and future regulations and client needs.



ENVIRONMENTAL

Water/Wastewater, Water Resources, Natural/Cultural Resources, Solid & Hazardous Waste, and Geospatial/IT Solutions



UTILITIES

Natural Gas/Petroleum/Pipelines, Utility Coordination/Relocation, Cathodic Protection and Corrosion Engineering



CONSTRUCTION

Construction Management and Inspection, Program Management, and Support Services



TRANSPORTATION

Highways/Roadway, Structures, Traffic, Transit/Rail, and Planning



SITE DEVELOPMENT

Site Planning, Landscape Architecture and Surveying

“Without exception, we could not be treated with more respect and understanding of the needs and unique problems encountered in our projects. In short, we would be very hard pressed to manage and operate our systems without the resource of RK&K’s people behind us.”

- Douglas Brelsford, Frankfort Public Service District

WASTEWATER TREATMENT

RK&K has completed more than 100 wastewater treatment assignments, including the design of new treatment and pre-treatment systems, rehabilitations, expansions, upgrading, and process-modification systems. System and process capacities have ranged from 0.01 to 180 MGD and have been designed for a broad spectrum of sanitary and combined sanitary and industrial waste loads. Additionally, RK&K has successfully completed more than 30 significant industrial wastewater treatment assignments in the Mid-Atlantic and Southeastern Regions.

LIFT STATIONS/PUMP STATIONS

Since 2000, we have evaluated, designed and/or constructed hundreds of pumping stations ranging in size from 20 gpm to 460 MGD. Among the many pumping stations planned and designed by RK&K, there are examples of high-, medium- and low-head facilities employing horizontal, suction-lift, and both close-coupled and extended-shaft vertical pump configurations, and submersible and dry-pit submersible pumping units. Stations have been designed for constant speed, single-speed units of varying stepped capacities and for adjustable speed units using variable frequency drives (VFDs) and other technologies. Controls have included float, probe, air bubbler, pressure transducer and ultrasonic sensing of wetwell levels for pump operating logic, with emergency pump-off override controls in response to low wetwell level, highbearing temperature, vibration level, motor over-current, and other operational parameters, with appropriate alarm and control telemetry. Hydraulic pressure transients have been managed and attenuated through controlled opening/closure of ball, cone, check and plug valves, air release/vacuum relief valves, surge relief valves, surge tanks, or combinations of these devices. Auxiliary systems include mechanical screening, sewage grinders, grit collection and washing; electric, hydraulic, electro-hydraulic, pneumatic and hydro-pneumatic actuator systems; compressed air systems; chlorine, hydrogen peroxide and ferrous sulfate feed for hydrogen sulfide control; activated carbon, biological and soil filters, ozone systems and packed tower chemical scrubbers for odor control; heating, ventilation, air conditioning, and

dehumidification systems; all types of instrumentation and control systems; emergency standby generators, and dual power supply systems.

RK&K's qualifications with wastewater system facility support services include:

Structural Engineering: RK&K offers experienced structural engineers capable of providing the services required for this project. Our structural engineering staff is well qualified in performing all phases of work, commencing with concept and feasibility studies through final design and construction phase services. With an extensive background in municipal facility projects, examples of structural services include treatment plants, well houses, pumping stations, storage tanks, utility tunnels and vaults, retaining walls, drainage structures, operations facilities, fuel handling facilities, and chemical storage facilities.

Mechanical Engineering: RK&K's mechanical design experience includes HVAC, dehumidification, piping, flow monitoring and valving systems for water and wastewater treatment plants and pumping stations; compressed air and odor control systems for treatment plants and pumping stations; and plumbing systems for various facilities. Automatic temperature and ventilation controls are designed in accordance with accepted code requirements for air change frequency and to maintain the comfort of operations and maintenance personnel. All mechanical equipment requirements are carefully accounted for when interfacing with the main facility control systems.

Electrical Engineering: RK&K has the in-house capabilities to design all types of electrical power distribution and control systems. The firm has provided complete design and construction phase services for various types of facilities throughout the Mid-Atlantic region. These facilities include water and wastewater treatment plants, pumping stations, well houses and natural gas regulating stations.

Designs have included low and medium voltage switchgear, complete power distribution systems, motor control centers,

pump controls, HVAC controls, standby emergency power generator systems, SCADA systems and lighting systems of all types.

Geotechnical Services: The RK&K geotechnical engineering department has been involved in the field investigations, analyses, and geotechnical report preparation for various municipal engineering facilities in excess of 30 years. During this period, numerous treatment plants, pumping stations, solid waste disposal facilities, earth and rock fill dams, levees, floodwalls, lagoons, water supply wells and water supply

Many of the systems designed have included the use of variable frequency drives to control pump speed, including customized multi step speed controls to limit piping fluid velocities under specific operating conditions. In most cases, RK&K's designs have included some level of back up control, ranging from redundant level/pressure sensing equipment, to full back up secondary controls providing automatic operating in the event of primary control failure. Other functions implemented in the design of pump control systems have been automatic valve timing/sequencing, seal water systems, automatic pump alternation, pump lockout circuitry,

"You guys have done a tremendous job above and beyond the call of duty. There is not enough words truly to express how I admire a company and the men who work for it to be concerned about the people along with the project. Thanks again for all your help and I am looking forward to working with you to get it to completion."

– Carol Brooks, Greater Marion Public Service District

reservoir projects have been investigated and final designs prepared. In addition, remedial measures and upgrades of existing facilities have been analyzed and geotechnical input provided for final design. For these projects, test borings and observation wells have established soil, rock, and groundwater conditions at the site which, when used in conjunction with laboratory test results where required, has resulted in the most practical foundation system or rehabilitation measures for the project.

Instrumentation/Control and SCADA Systems: RK&K has extensive experience in the evaluation and design of instrumentation and control systems of all types. RK&K has designed numerous water pumping facilities based on level control and pressure control for single and multi- pump applications ranging from a few horsepower to several hundred horsepower. Control systems utilized have included pre-engineered relay-based systems, custom designed relay-based systems, pre-engineered digital control systems, and custom designed systems using programmable logic controllers (PLCs). In each case, control systems have been integrated with the necessary alarm, telemetry and SCADA functions required for the application.

motor thermal monitoring and vibration monitoring. RK&K's involvement in the design of pumping control systems is often extended into the construction phase of a project, where troubleshooting and start up services have been provided to aid in the implementation of the design.

Operation, Maintenance and Start-up Services: RK&K's experience with operation and maintenance associated with water, wastewater and stormwater facilities includes a wide range of capabilities and services. These services include training of client staff and operators; preparation of detailed O&M manuals and standard operating procedures; plant evaluation, performance testing, and troubleshooting; and facility startup. RK&K is an innovator in the design and delivery of customized training programs for O&M personnel, many of which are often developed to address client specific concerns for facilities already in operation. RK&K has developed comprehensive SOPs, standard maintenance procedures, operator pocket guides, emergency response plans, operating placards, and other information for plant personnel. In addition, our Team provides recommendations to improve plant performance, energy and chemical system optimization, structural integrity and design life and equipment operation and reliability.

Regarding inventory management and control for municipal water, wastewater and stormwater facilities, RK&K often institutes as part of the O&M manual or standard operating procedures, a facility specific protocol for managing spare parts inventories, lubricants and equipment specific tools. These protocols are usually developed in conjunction with the client's operation and maintenance staff and can range from a three-ring binder containing the inventory listing, parts, identification numbers, and vendor codes to a complete computer database installed on a networked hardware system with terminals accessible at various system facilities.

Permitting: RK&K has extensive experience and close working relationships with numerous federal and state environmental agencies to obtain required permits. Through recent experience on projects for municipalities, RK&K's Team has developed a close working relationship with the WV Bureau of Health, WV Department of Environmental Protection; WV Department of Natural Resources Office of Land and Streams; WV State Historic Preservation Office; as well as US Fish and Wildlife and Army Corps of Engineers.

Environmental Assessments: The RK&K Team includes individuals experienced in identifying jurisdictional waters of the U.S., including the vegetation, soils and hydrology for wetland delineations. Several key and support staff members are U.S. Army Corps of Engineers' (COE) certified wetland delineators and/or professional wetland scientists. RK&K can assess functions and values of affected wetlands using techniques such as the Hollands Magee method, Soil Conservation Service Method, Hydrogeomorphic Classification method (HGM) Rapid Assessment Procedure (Magee Hollands Method) or other accepted methods.

RK&K has conducted several hundred wetland delineations and numerous functional assessments. Wetland delineations are performed in accordance with the 1987 COE Manual and have been approved by, and jurisdictional determinations have been obtained from various COE districts, including Baltimore and Norfolk.

RK&K includes professionals skilled in delineating and documenting stream conditions (physical and biological), submerged aquatic vegetation habitat and water quality conditions. RK&K has experience using a variety of methodologies for characterizing stream conditions including Rosgen Stream Classification, U.S.D.A.'s Stream Visual Assessment Protocol and EPA's Rapid Bioassessment Protocols.

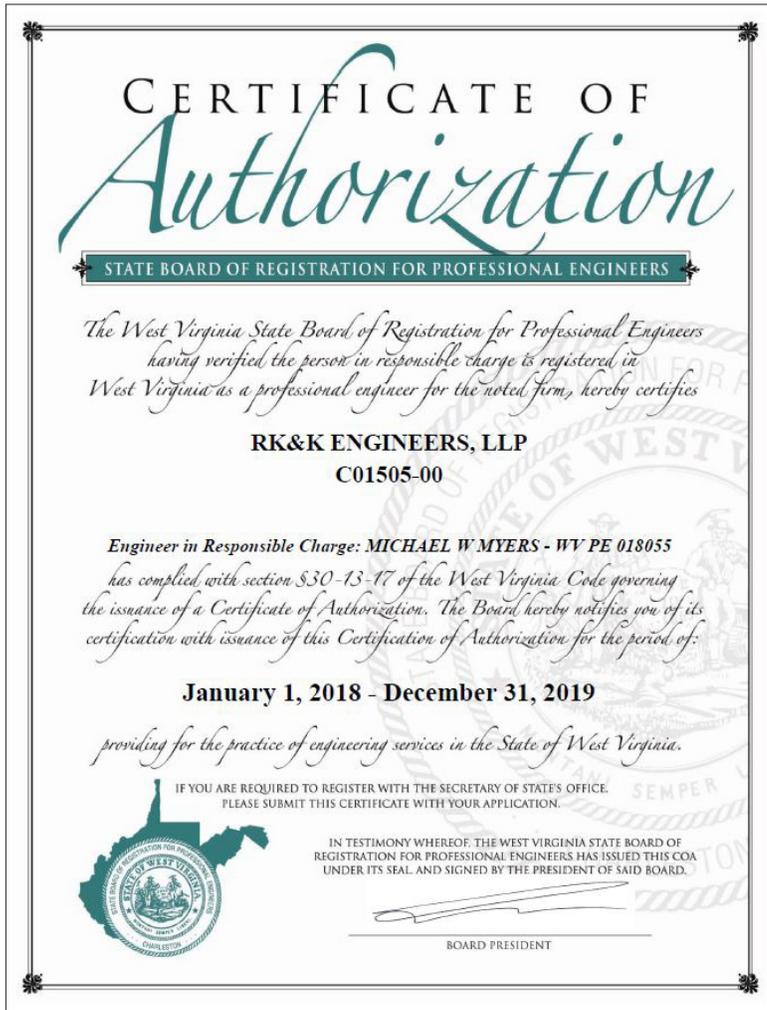
Our Team also has extensive experience in preparing ecological technical reports which include biological assessments prepared in compliance with the Endangered Species Act.

Construction Management and Inspection Services: RK&K's Construction Management and Inspections Department has been providing construction phase services for over 50 years involving hundreds of public works' projects with aggregate construction costs in the billions of dollars. Projects include water and wastewater treatment plants, pumping stations, water and sewer infrastructure, stormwater management, roadways, bridges, transit tunnels, subways, hydroelectric plants, marine facilities, and flood control facilities plus a variety of building projects. Many projects involve a full range of construction management/administration and inspection services from design, preconstruction, construction and post-construction phase, including materials testing, tests and start-up, claims resolution, CPM scheduling and contract close-out.

RK&K employs hundreds of construction engineering/inspection personnel of varying levels of expertise. RK&K's employees are knowledgeable about traditional as well as state-of-the art construction inspection practices and procedures and materials testing techniques. Many of RK&K's staff are NICET-certified, Troxler nuclear gauge trained, hold state erosion and sediment control certifications, are certified or approved by client's materials laboratories, and have solid backgrounds and expertise in field surveying and construction layout.

WEST VIRGINIA CERTIFICATES OF AUTHORIZATION

State Board of Registration
for Professional Engineers



West Virginia Board of
Professional Surveyors



CONCEPTS & PROPOSED METHODS OF APPROACH





Tygart Lake State Park Lodge Treatment Plant

CONCEPTS & PROPOSED METHODS OF APPROACH

PROJECT UNDERSTANDING

RK&K would like to extend appreciation to Jim Browning for coordinating RK&K's site meeting with park maintenance and operations personnel.

RK&K understands that the three identical lift stations are in need of replacement or rehabilitation. Lift station 1 serves the house boats at the marina and the bathroom near the lift station using a grinder pump. This lift station pumps directly to the main treatment plant. Lift station 2 serves the picnic area bathroom and pumps directly to the main treatment plant. Lift station 3 is currently being replaced per the design of S&S Engineers. RK&K's design for Lift station 1 and Lift station 2 will be consistent with S&S's design for Lift station 3 to maintain uniformity.

RK&K understands that the Lodge Plant is an 8 KGPD extended aeration plant built in the late 1990s. The plant treats wastewater from the lodge, including wastewater from the kitchen, restaurant, and lodge rooms. During peak seasons, issues are encountered meeting demand from the lodge. The accumulated solids at this site are periodically pumped out and hauled to the main treatment plant, and treated wastewater is discharged to the lake. The main treatment plant is a 20 KGPD extended aeration plant, built prior to the Lodge Plant. Lift stations 1, 2, and 3 are all pumped to this plant.

One of RK&K's first efforts will be to meet with the DNR to verify the proposed improvements and expectations for the project.

MANAGEMENT APPROACH

RK&K's assigned project manager for this project is John Cole, PE. As described in our proposal, Mr. Cole offers demonstrated wastewater project management and design experience involving simple to complex treatment designs. Mr. Cole will lead and coordinate a multidisciplinary team of specialists in multiple important facets of this project as well as necessary support services. Mr. Cole will be responsible for the overall project management and design efforts. RK&K's management approach is based on providing the following commitments to clients:

- Meeting established schedules and exceeding expectations by responding rapidly to client requests
- Manage multiple assignments simultaneously, if required
- Uphold quality of service through implementation of our in-house Quality Assurance and Quality Control (QA/QC) Program
- Dedicate the appropriate resources and experienced staff to meet accelerated schedules

COMMUNICATION PROCEDURES

At RK&K, we believe proactive communication with your staff is as important as interdepartmental coordination within our firm. For this reason, our Team will collaboratively work with representatives from DNR to deliver a cost-effective, detailed design to fit the specific needs of the Tygart Lake State Park

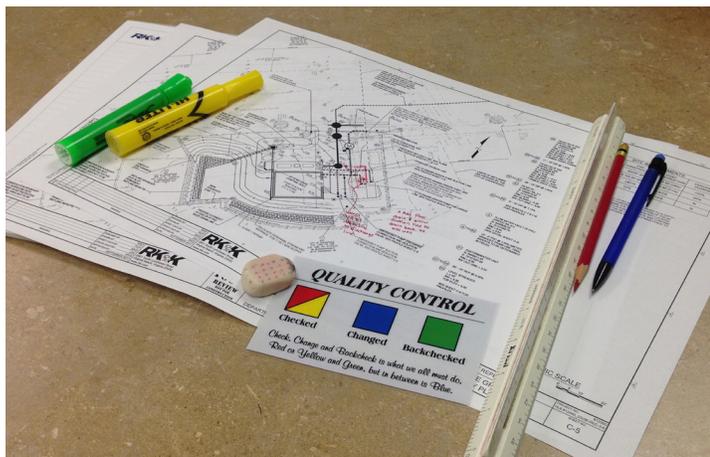
Wastewater System Repairs. We offer DNR an integrated project approach working closely with your representatives to comprehend a full understanding of project goals.

This interactive and collaborative process will be led by John Cole. From project initiation to project closeout, he will serve as the main contact, make sure that consensus is reached at each phase and that design solutions developed are responsive to DNR’s goals and needs.

Mr. Cole will maintain communication with DNR’s representatives at the onset of the project continuing through construction and post-construction services. He will be responsible for management of the Project Team ensuring all involved have a clear understanding of the scope, overall project goals, appropriate design criteria and environmental concerns. Mr. Cole, along with members of our Team, will communicate regularly with DNR during construction to ascertain existing systems are kept in operation while the new infrastructure is being constructed. Our on-site Team members will communicate with RK&K’s engineers and with the Park’s operators responding rapidly to DNR’s requests and project needs.

QUALITY ASSURANCE/QUALITY CONTROL

Mr. Cole will also implement project quality control functions with our proposed QA/QC officer, Bob Andryszak, PE ensuring all contract plans, specifications and engineering



calculations are reviewed and checked in accordance with RK&K’s quality control/assurance program. Every employee of RK&K understands that the prime responsibility for accuracy rests with the employee who initially performs the work, and that all other efforts beyond the initial work effort have a decreasing potential for effectiveness. To ensure accuracy and completeness, checking of computations, drawings, specifications, and cost estimates are performed in accordance with the guidelines and procedures contained in RK&K’s QA/QC manual.

PLAN TO ENSURE PROJECT STAYS WITHIN BUDGET

RK&K understands the importance of completing work on time and within budget, as well as accurately estimating construction costs. We follow a proven approach refined through the years to benefit from experienced gained. To control design costs, we rely on regular and clear communication throughout the Team to ensure all participants have a clear understanding of the project scope, schedule and the budget. Weekly status meetings, face to face conversations, and monthly project reports keep team members up to date on project progress and aware of any potential issues.

Project Managers track budgets using our accounting system, Deltek Vision, which records hours charged to a project in real-time—reducing the risk of going over budget. Project Managers also track budgets using an expenditure tracking spreadsheet which calculates the project’s “burn rate”—budget vs. actual amount of work remaining. Where there are issues, our Project Managers are proactive in making adjustments in order to get the budget back on track, and the Owner is notified immediately if a condition/circumstance exists affecting the budget of the project.

Construction cost estimates are prepared using an automated cost estimating system. As a quality management technique, we also calculate construction cost estimates by hand using bid items rather than rule-of-thumb. This approach has proven very effective.

PLAN TO ENSURE PROJECT IS DELIVERED ON SCHEDULE

The project schedule, with concurrence of DNR, will be set during the planning stage. Attention will be given to defining critical issues and any project constraints, developing a completion schedule, and incorporating key milestones. The schedule will be compressed where possible to meet key milestones and schedule constraints. We will account for schedule delays, including inclement weather, delivery of equipment and manpower in the project plan. Contract plans and specifications will be produced to account for these delays and assist in ensuring timely completion of construction. RK&K has a strong track record of developing project plans and specifications promptly while ensuring quality and accuracy is not sacrificed in the process.

The construction will be monitored by an on-site resident project representative who will work alongside the contractor’s personnel for the duration of the project. The resident project representative will be in constant contact with RK&K’s project manager bringing attention to potential delays so actions can be taken before it affects the schedule. Regular meetings and communication will be held with the Contractor and Owner to ensure all parties adhere to the schedule.

Based on the current and projected workloads of our Team, we can fully commit all necessary resources to facilitate the successful, timely delivery of design and construction services for this project. RK&K’s resources, including staff and

equipment at other offices, are at the disposal of our project Team. Because of our depth of staff, and our familiarity and proven approach to delivering professional services for similar projects, we are confident in our ability to deliver this project within schedule.

APPROACH TO PROJECT GOALS & OBJECTIVES

GOAL / OBJECTIVE #1: CONDITION ASSESSMENT & EVALUATION

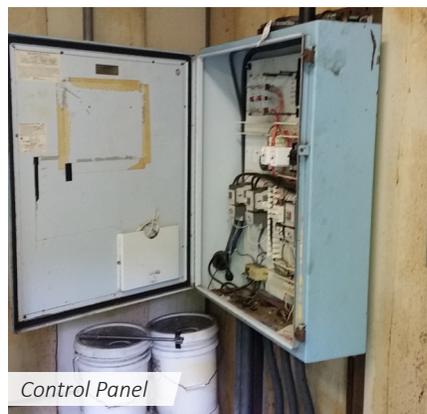
The RK&K Team will begin by gathering all available information on the wastewater plant and lift stations at Tygart Lake State Park, such as reviewing relevant existing plans. RK&K will follow the reviews by meeting with DNR’s operators, managers and others to obtain information.

After the initial discussion and reviews are completed, the team will meet with DNR’s representatives to present findings and preliminary recommendations for the project. In addition to presenting the results of the study, RK&K will solicit input from DNR at this or subsequent meetings. These meetings are essential to everyone’s understanding of the system’s needs and the resultant proposed project. These meetings also serve to reduce or eliminate future misunderstanding of the work to be completed.

Engineering Report: RK&K will proceed with development of a Facility Plan. This report is the first requirement in developing a sewer project to delineate project details. The report will include project description, and project cost



Tygart Lake State Park Main Treatment Plant Storage Building



Control Panel



Chemical Dosing Equipment

estimate necessary to present the project to DNR. Upon completion of the facility plan, RK&K will submit to DNR for review and approval.

■ GOAL / OBJECTIVE #2: DESIGN PHASE SERVICES

RK&K will provide all necessary services for the design of the project. Construction plans and specifications will be developed in accordance with current federal and state laws and codes and will be combined with the bidding and contract documents necessary to advertise the project for bid. During the design process, the RK&K Team will continue to meet frequently with DNR representatives to review progress and receive input.

Construction Plans and Specifications: Once the project is fully defined, RK&K will proceed with the development of construction plans and specifications. The plans and specifications will be prepared to support the various phases of the project. Upon completion, the plans will be combined with the bidding and contract documents necessary to advertise the project for bid. The plans will provide a detailed description of the work to be completed by the contractor. The plans will be supplemented by detailed specifications defining the method of completing the work and the material specifications. RK&K's detailed specifications have been refined over years of working within the State, incorporating the lessons learned from similar wastewater improvement projects.

During the development of the contract plans and specifications, the RK&K Team will meet frequently with DNR to review progress and receive input. Normally, plans for owner and regulatory agency review and comment are submitted at 60%, 90% and 100% completion status.

Preparation of Bidding and Contract Documents: With completion of the plans and specifications, we prepare contract and bidding documents in anticipation of advertising the project for bids. This complete package will be used to define the project requirements from a contractual

perspective for uniformity of requirements among all contractors.

Assembly of the contract and bidding documents completes the project package. While many of these documents are determined by funding agency requirements, RK&K will use the Engineers Joint Contract Document package as the basis of the contract documents.

The Engineers Joint Contract Documents Committee (EJCDC) is an undertaking of the American Consulting Engineers Council (ACEC), the American Society of Civil Engineers (ASCE) and the National Society of Professional Engineers (NSPE). EJCDC has developed and periodically updates a set of documents representing the latest and best thinking of practicing engineers and legal counsel on contractual relations between the parties involved in construction-related projects. These documents have been endorsed and recommended by the various funding agencies in West Virginia.

The EJCDC documents are standard contract documents utilizing carefully drawn language to define the respective responsibilities of the parties with respect to construction related projects based upon "test of time" experience. These documents are the industry model for professional engineering services and construction processes. The documents spell out accepted division of duties and responsibilities of the Engineer, Owner and Contractor and represent the culmination of legal precedent and expert review.

Following preparation of the complete construction document package, updated permits will be obtained from the Department of Health, Department of Environmental Protection and other applicable entities before going to bid. All necessary rights-of-way or easements must be acquired. RK&K will prepare the permit applications for DNR's submittal and will provide any technical assistance required during the review process. RK&K is licensed to survey and prepared to assist the DNR in securing easement(s) and right-of-way(s). Although these approvals are straightforward, they will take time. All of this is dependent on the source of funding for the project.

Upon obtaining the construction permits from the applicable entities and permission from funding agencies and Public Service Commission, the project will be ready for advertisement.

■ GOAL / OBJECTIVE #3: CONSTRUCTION CONTRACT ADMINISTRATION

Bidding Phase Assistance

With approval of DNR, the project can proceed to bid advertisement. An Invitation to Bid is normally advertised for three to four weeks to allow sufficient time for contractors to assemble prices and prepare a competitive bid. During that time, RK&K will conduct a pre-bid meeting with the contractors to review the project and answer any questions. Addenda will be issued as necessary to clarify any element of the project.

The project will be advertised for bids in accordance with state law and agency requirements. Projects are normally advertised in the local and regional newspapers. Advertisement in the Charleston or adjacent newspapers is also recommended to reach a wide audience of contractors. In addition to newspapers, plans will be placed with Dodge Reports, West Virginia Contractors Association and other plan rooms in the West Virginia area. The objective is to alert as many contractors as possible and increase competition towards securing a low bid for the project.

At a specified date and time, bids will be collected at a designated location. RK&K will then assist DNR in opening and reviewing bids. The apparent low bidder will be announced at the end of the meeting.

Evaluation of Bids Received

After the bids are opened, RK&K will review each submittal package in detail. This review includes verifying the math is correct and that all documentation required is satisfactory including evaluation of financial assets, current workload, previous projects and discussions with clients and engineers who have worked with the contractor.

After the comprehensive review is completed, RK&K will make a recommendation to award the contract to the selected contractor. At this stage, RK&K will prepare the "Notice of Award" and "Contract Agreement" to send to the contractor. After the contractor signs the contract agreement and returns it along with the payment and performance bonds and any other required documents, RK&K will issue, with DNR approval, a "Notice to Proceed." A contractor normally has ten days to begin construction after receipt of this notice.

Monitoring & Inspection of Construction Activities

RK&K will provide the necessary contract administration services to ensure the project is constructed in compliance with the plans and specifications. Project Manager, Mr. Cole, will serve as the communication link between DNR and the contractor. He will conduct monthly progress meetings with the contractor and DNR to review progress and resolve any problems that may arise. At the completion of the project, he will conduct a walk-through inspection with DNR's representatives and the contractor, prepare a punch list of items to be completed and conduct a final inspection after work is complete. He, along with our Team members, will provide technical assistance during the one-year warranty period to resolve any problems that may occur. Near the end of the warranty period, RK&K will conduct a final inspection of the facility with the DNR. Any problems or defects noted will be sent to the contractor for correction.

RK&K will provide full-time inspection on the project, if desired by DNR. RK&K employees are knowledgeable about traditional as well as state-of-the-art-construction inspection practices/procedures and materials testing techniques. DNR will be provided the opportunity to approve the inspector recommended by RK&K for the work. The project inspector will be provided with necessary assistance from RK&K's project manager to ensure the project is completed in accordance with the plans and specifications.

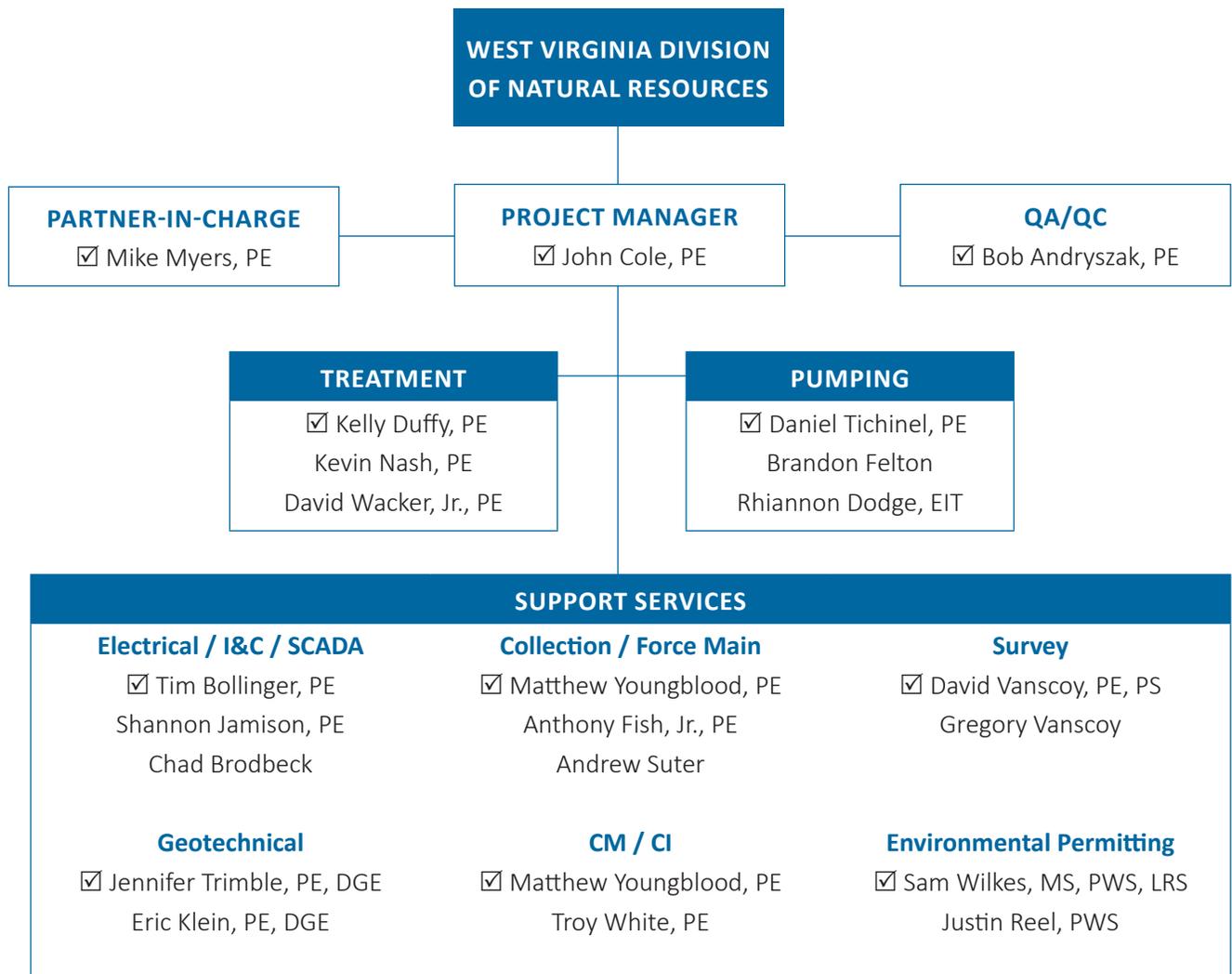
STAFF QUALIFICATIONS





STAFF QUALIFICATIONS

The RK&K Team selected for this contract offer an extensive and diversified range of expertise in the planning, design and construction of a variety of engineering and construction administration services. They bring a unique mix of skills, experience and a history of working together on dozens of wastewater infrastructure projects. **We have included full resumes for all key staff and qualification statements for non-key staff. Copies of staff licenses can be located starting on page 37.**



☑ - Key Personnel



JOHN COLE, PE | PROJECT MANAGER

Years of Experience: 18

Education: BS, Civil Engineering Technology, Fairmont State College, 2001

Licenses/Certifications: Professional Engineer: WV #17949, also registered in MD, OH & VA

QUALIFICATION STATEMENT

Mr. Cole has been actively involved in the planning, design and construction of West Virginia's infrastructure projects for more than 18 years, providing industry leadership through addressing the region's infrastructure needs. He has diverse experience in design of water and wastewater treatment plants, pumping stations, distribution and collection systems and subdivision development. His responsibilities include full project delivery including feasibility studies, design, construction plans and specifications, cost estimating, construction administration inspection and engineering.

PROJECT EXPERIENCE

Town of Oakland Sewer Improvements, Oakland, MD: Project Manager responsible for the design of various sewer line replacements, I&I flow monitoring and smoke testing, and the installation of a bar screen at the Town's main pump station upstream of the wastewater treatment plant. The project included preparation of both a Preliminary Engineering Report (PER) and Environmental Report (ER) for submission to USDA Rural Utility Service (RUS) for funding.

Inflow & Infiltration Study, Mineral County, WV: Project Manager responsible for overseeing flow monitoring and smoke testing efforts for locating sources of inflow and infiltration entering the collection system.

Carolina & Idamay Sewer System Replacement Project, Marion County, WV: Project Engineer responsible for the inflow and infiltration study; preparation of conceptual design to replace a failing vacuum collection system; overseeing design of approximately 25,200 LF of gravity sewer, 9,500 LF of pressure sewer, 7,400 LF of force main and two sewage pump stations.

Northern Mineral County Regional Sewer System, Mineral County, WV: Project Engineer responsible for assisting in the development of the facilities plan recommending a regional sewer project consisting of a new 1.2 MGD WWTP, 40 miles of sewer collection, 2.5 miles of sewer rehabilitation, three miles of sewer force mains, and 10 sewage pump stations; coordinated efforts involved in the funding and permitting process. During the phase 1 design he was responsible for coordinating and overseeing design of the WWTP including the influent pump station, mechanical fine screen, vortex grit unit, Aqua SBR's, post-equalization, automatic backwashing filters, aerobic digesters and a belt filter press.

On-Call Water & Sewer Projects, Charles Town, WV: Project Manager responsible for overseeing design and construction phase services for various water and sewer on-call projects. Projects included design and construction of new sewage lift stations; modifications to existing sewage lift stations; over 10 miles of water mains and sewage force mains; improvements to two of the three WWTP's; improvements to the WTP, including a 1 MG water storage tank; construction of three emergency back-up generators; painting of several elevated water storage tanks.

Tusawilla WWTP, Charles Town, WV: Project Manager responsible for coordinating evaluations for optimizing the start-up of a new Four Stage Bardenpho membrane bioreactor facility designed for BNR treatment. Oversaw the design and construction of the effluent pump station and 5,600 LF of 8-inch force main including the telemetry system for operating the pumps.



MIKE MYERS, PE | PARTNER-IN-CHARGE

Years of Experience: 34

Education: MA, Management, Webster University, 1989; BS, Civil Engineering, Pennsylvania State University, 1985

Licenses/Certifications: Professional Engineer: WV #018055, also registered in DC, DE, FL, MD, NC, PA, TX, VA, WV

QUALIFICATION STATEMENT

Mr. Myers is responsible for RK&K's municipal water/wastewater engineering and utility design practice firmwide and will ensure adequate resources are made available. He has extensive experience with water, wastewater and stormwater infrastructure improvement projects. He has served as a project manager and designer on many technically diverse planning, study and design projects throughout the Mid-Atlantic Region and Southeastern Regions.

PROJECT EXPERIENCE

Northern Mineral County Regional Sewer System, Mineral County, WV: Partner-in-Charge responsible for this \$39M regional sewer system project which includes over 40 miles of sewer collection; 10 pump stations and a new 1.20 MGD wastewater treatment plant including biological nutrient removal.

Inflow & Infiltration Study, Mineral County, WV: Partner-in-Charge of project involving flow monitoring and smoke testing to locate sources of inflow and infiltration entering the collection system.

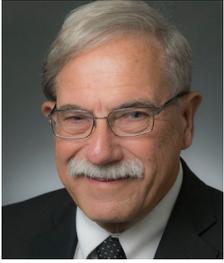
On-Call Water & Sewer Projects, Charles Town, WV: Partner-in-Charge responsible for overseeing design and construction of various water and sewer on-call projects. Projects have included the design of new sewage lift stations, modifications to an existing sewage lift station, design of over 20,000 LF of sewage force mains, and overseeing painting of two elevated water storage tanks and a water treatment plant.

DB Water & Sewer Deficiencies Correction, Martinsburg, WV: Partner-in-Charge for project involving major improvements to the water and sewer system at the VA Medical Center in Martinsburg, WV. RK&K assisted with improvements involving new and replacement water and sewer lines, removal and reclamation of existing abandoned water and sewer infrastructure and rehabilitation and replacement of existing sewer collection system.

Greensboro Regional Wastewater System, Carolina County, MD: Partner-in-Charge for evaluating numerous alternatives to provide a centralized wastewater treatment system for a rural area in the northern part of the County. The project was funded in part by the U.S. Department of Agriculture (USDA) Rural Utility Service (RUS). RK&K prepared a Preliminary Engineering Report (PER) and an Environmental Report in accordance with RUS criteria to assist in securing these funds. RK&K designed a new 0.332-MGD WWTP to achieve enhanced nutrient removal (ENR) limits. A sequencing batch reactor (SBR) followed by continuous backwash sand filters were used to achieve the nutrient reduction goals. Grit removal, UV disinfection, methanol and alum feed facilities were provided. RK&K also designed force mains and pumping stations for the collection/conveyance system.

Frankfort PSD Water System, Wiley Ford, WV: Partner-in-Charge for the water system evaluation, upgrades/improvements and extension projects for the FPSD's water system.

On-Call Water System Improvements, Berkeley County, WV: Partner-in-Charge of a water audit project with the primary goal of identifying the causes of excessively high-water losses in the County's Northern Service Area.

**BOB ANDRYSZAK, PE | QA/QC****Years of Experience:** 44**Education:** BS, Civil Engineering, John Hopkins University, 1979; BA, Geography & Environmental Engineering, John Hopkins University, 1974**Licenses/Certifications:** Professional Engineer: MD #21237, also registered in DE, NC & VA**QUALIFICATION STATEMENT**

Mr. Andryszak has extensive wastewater engineering experience serving as a project manager responsible for providing study, design and construction services for numerous treatment plants and pumping stations. His experience encompasses liquid treatment using both activated sludge and attached growth processes, extensive biological nutrient removal systems, anaerobic digesters and various biosolids dewatering systems. He served on the Water Environment Federation's Task Forces on Nutrient Removal, Pumping and Municipal Treatment. Mr. Andryszak has presented multiple technical papers at regional wastewater conferences and the national WEFTEC conference.

PROJECT EXPERIENCE

Greensboro Regional Wastewater System, Carolina County, MD: Project Manager for the evaluation of numerous alternatives to provide a centralized wastewater treatment system for a rural area in the northern part of the County. The project was funded in part by the USDA Rural Utility Service. RK&K prepared a PER and an Environmental Report in accordance with RUS criteria to assist in securing these funds. RK&K designed a new 0.332-MGD wastewater treatment plant in Greensboro, Maryland to achieve ENR limits. A sequencing batch reactor followed by continuous backwash sand filters was used to achieve the nutrient reduction goals. Grit removal, UV disinfection, methanol, and alum feed facilities were provided. RK&K also designed force mains and pumping stations for the collection/conveyance system.

Fritz Island WWTP Improvements, Reading, PA: Project Manager responsible for the design of \$140M improvements to the liquids and solids systems, including conversion from the trickling filter process to the activated sludge process. Improvements addressed the primary clarifiers, biological treatment system, disinfection, effluent outfall, sludge thickening, anaerobic digesters, sludge storage, sludge dewatering and appurtenant work. A new administration building and plant maintenance building were part of the project, and a Maintenance of Plant Operations (MOPO) was developed. The wastewater was relatively high in strength with a significant industrial component. Testing was performed to determine nitrification rates using the Low F/M SBR Method.

Powhatan WWTP Upgrades, State Farm, VA: Director-in-Charge for the nutrient removal upgrade design for the 0.465-MGD facility owned and operated by the Department of Corrections. Reactor improvements, new denitrification filters and chemical feed systems were provided.

Dorsey Run WWTP Improvements, Anne Arundel County, MD: Project Manager for a \$3.9M improvements project including replacement equipment and upgraded process control. Improvements include new influent screens, upgraded aeration system, rebuild of clarifiers, filter rehabilitation and sludge storage improvements. Oversaw preparation of the Preliminary Engineering Report.



KELLY DUFFY, PE | TREATMENT

Years of Experience: 21

Education: MS, Environmental Engineering, University of Massachusetts, Amherst, 1998; BS, Agricultural and Biological Engineering, Cornell University, 1996

Licenses/Certifications: Professional Engineer: MD #27799

QUALIFICATION STATEMENT

Ms. Duffy is a Senior Manager for RK&K's Wastewater Sector and has 21 years of wastewater collection and treatment engineering experience. Her experience encompasses project phase from planning, design, and construction administration services. She has been involved with wastewater treatment plant and collection system projects through various project phases. She has completed several wastewater treatment plant designs, most of which were designed for nutrient removal. Many of the projects she has completed were small to medium sized facilities with a focus on providing a cost effective, reliable facility with maintenance requirements consistent with staffing. She has worked on all project phases including Preliminary Engineering Reports, final design and construction phase services.

PROJECT EXPERIENCE

Northern Mineral County Regional Sewer System, Mineral County, WV: Project Engineer responsible for preliminary design and equipment selection for a new 0.6-MGD WWTP designed for BNR treatment. The preliminary design included an evaluation of treatment technologies, including SBR, oxidation ditch and wave oxidation systems. The SBR treatment system was selected, and a subsequent evaluation of SBR vendor systems was performed. Denitrification filters were provided. All plant processes were designed including headworks, chemical feed, disinfection, aerobic digestion and sludge dewatering using a belt filter press and liquid polymer feed system.

On-Call Water & Sewer General Services, Jefferson County, WV: Project Engineer for on-call engineering services contract for water and sewer related projects. Responsible for an evaluation of operational improvements at the Tuscowilla WWTP, including modifications to the MBR facility. Also, responsible for an evaluation of upgrades to the Charles Town WWTP.

Frankfort PSD Wiley Ford Sewer Project, Wiley Ford, WV: Project Engineer. Assisted in a Facility Plan evaluation of 0.5 and 1.0 MGD BNR treatment facilities for a new WWTP. The Facility Plan included an evaluation of using three technologies for BNR treatment: oxidation ditches, Biolac- type wave oxidation treatment, and SBR treatment. The WWTP evaluation also included unit processes for screening, grit removal, clarification, chlorination, dechlorination, sludge thickening, and sludge dewatering with a belt filter press.

WWTP Upgrade, Hampshire County, WV: Project Engineer responsible for upgrade of treatment plant using the wave oxidation treatment system. The upgrade included replacing and adding treatment basin aeration equipment, providing aeration of a sludge storage basin to prevent freezing, providing new blowers, and the addition of a new forty-foot diameter clarifier. Upgrades improve treatment and allows incoming flows to increase to the original plant design capacity of 0.2 MGD.

Greensboro Regional Wastewater System, Carolina County, MD: Lead Engineer for new sanitary wastewater collection, conveyance and treatment facilities. The Town of Greensboro constructed, owns and operates the facilities in the project which consist of: 1) a sewer collection system in Goldsboro; 2) a conveyance system from Goldsboro to Greensboro; 3) a new 0.332 MGD wastewater treatment plant in Greensboro; and 4) a conveyance system to transport wastewater from Greensboro to its new WWTP. Ms. Duffy was responsible for the design phase of the treatment facility and construction phase for three of the five separate construction contracts.



DANIEL TICHINEL, PE | PUMPING

Years of Experience: 8

Education: BS, Civil Engineering, Bucknell University, 2010

Licenses/Certifications: Professional Engineer: WV #022476, also registered in MD

QUALIFICATION STATEMENT

Mr. Tichinel has eight years of civil engineering experience with an emphasis on water and wastewater infrastructure. His experience includes preparation of preliminary engineering reports (PER) and environmental reports (ER), the design of water distribution systems and sanitary sewer systems, including pump stations and collection and conveyance system evaluation, pump station rehabilitation design, new pump station design, pressure reducing stations, water treatment plant design, storage tank design, and pipeline replacement/realignment projects.

PROJECT EXPERIENCE

Deep Creek WWTP Preliminary Engineering Report / Environmental Reports, Garrett County, MD: Project Engineer responsible for preparation of a PER & ER for the 2.2 MGD Deep Creek Lake WWTP Enhanced Nutrient Removal upgrade.

Trout Run WWTP Preliminary Engineering Report / Environmental Reports, Garrett County, MD: Project Engineer responsible for preparation of a PER & ER for the 0.9 MGD Trout Run WWTP Enhanced Nutrient Removal upgrade.

Phase B Distribution System Improvements, Berkeley County, WV: Project Engineer responsible for design of 1,830 LF of 12-inch CL 51 DIP water line and 2,390 LF of 16-inch CL 51 DIP water line within residential areas of the County to improve the overall hydraulics of the water system.

Puzzley Run Water Treatment Plant, Grantsville, MD: Project Engineer responsible for design of a 100,000 gpd water treatment plant. The design included the treatment facilities, site layout and associated mechanical equipment. The project achieved the client's desired treatment capacity while minimizing the site's disturbance area.

Preliminary Engineering Report, Luke, MD: Project Engineer responsible for preparing a PER to examine the feasibility and probable costs for various water distribution and water supply alternatives to improve the Town's water supply and service. Preparation of the report involved evaluating three different water distribution alternatives and six different water source options for the Town.

Water System Upgrade Contract 3, Water Treatment Plant Improvements, Fort Ashby, WV: Project Engineer responsible for design of numerous improvements including water filter and valve upgrades; sediment basin upgrades and maintenance; raw water and grinder pump upgrades maintenance; dewatering pump station upgrades; 1500 SF storage facility, intake maintenance, plant painting.

Water System Improvements Contract 4, Waterline Construction & Pump Station, Fort Ashby, WV: Project Engineer responsible for the design of a new 150-gpm pump station along Painter Hollow Road. The project alleviated low pressure problems within the Sunrise Heights and Deerfield Estates subdivisions and eliminated the need for two booster stations and two deteriorated water storage tanks.



TIM BOLLINGER, PE | ELECTRICAL / I&C / SCADA

Years of Experience: 41

Education: BS, Civil Engineering, Bucknell University, 1977

Licenses/Certifications: Professional Engineer: MD #50811, also registered in NC, PA, VA

QUALIFICATION STATEMENT

Mr. Bollinger's career involves the study and design of electrical systems, instrumentation & control (I&C) systems, and supervisory control and data acquisition (SCADA) systems for a variety of government, sanitary, civil, commercial and private projects. He has performed instrumentation and process control system design for treatment plants and pumping stations, including variable frequency drives (VFDs), programmable logic controller (PLC) systems, SCADA systems, remote telemetry, computer systems, and human machine interface (HMI) software.

PROJECT EXPERIENCE

Northern Mineral County Regional Sewer System, New Mineral County, WV: Electrical/I&C Engineer responsible for providing the electrical design for the WWTP, which included a main distribution switchboard with automatic transfer switch, diesel emergency generator, power distribution, underground duct banks, lighting design and an electrical grounding system. Designed a Process Control System for the WWTP consisting of motor control centers, variable frequency drives, control panels, instrumentation, a PLC System, and HMI software. The PLC System consisted of three Allen-Bradley CompactLogix PLCs, and three operator interface touch screens. The HMI software utilized for the project was Rockwell Software View SE. The project included a new horizontal open-channel UV system.

Elk Neck State Park Wastewater Treatment Plant Phase I Upgrade, Cecil County, MD: Electrical/I&C Engineer responsible for assisting on the design-build project for an interim upgrade to an existing extended aeration activated sludge plant. The interim upgrade includes new influent pumping, flow equalization, aeration and ultraviolet radiation disinfection.

On-Call Water & Sewer General Services, Jefferson County, WV: Electrical/I&C Engineer for on-call engineering services for water and sewer related projects for the Charles Town Utility Board (CTUB).

Patapsco Wastewater Treatment Plant ENR Facilities, Baltimore, MD: Electrical/I&C Engineer. Final Design services for the 90 MGD ENR facilities at Patapsco WWTP. ENR facilities designed to treat the effluent from the existing secondary treatment system.

Coliseum Drive Pressure Reducing Station & Off-line Storage Facility, Hampton, VA: Electrical/I&C Engineer for an in-line pressure reducing sewage pumping station to relieve discharge pressures for multiple sewage pumping stations in the City of Hampton. Facility features in-line quad-plex pumping, duplex tank drain pumps, automated controls, variable frequency drives, automated control and isolation valves and standby power generator.

Vint Hill Wastewater Treatment Plant Upgrade, Warrenton, VA: Electrical/I&C Engineer Upgrade and expansion of an existing trickling filter treatment plant. Plant improvements include new screen and grit removal, SBRs filtration, ultraviolet radiation disinfection, and sludge digestion and dewatering. The design capacity of the upgrade facility is 0.6 MGD. Recently completed Phase 2 PER for expanding the facility to 0.9 MGD.



MATTHEW YOUNGBLOOD, PE | COLLECTION / FORCE MAIN; CM / CI

Years of Experience: 12

Education: BS, Civil Engineering, West Virginia University, 2006

Licenses/Certifications: Professional Engineer: WV #021676

QUALIFICATION STATEMENT

Mr. Youngblood has experience with municipal wastewater/water treatment design and collection system infrastructure. His skills include facilities planning, preliminary study and design of water and wastewater facilities, water distribution network and sewer network, and construction management services.

PROJECT EXPERIENCE

Carolina & Idamay Sewer System Replacement, Marion County, WV: Project Engineer responsible for assisting with the inflow and infiltration study with sewer camera inspections. Designer on vacuum sewer line relocation to improve the efficiency of the sewer collection system in the Town of Idamay. Also assisted with design to replace the vacuum system with gravity and force main sewer system.

Oakland Water Distribution System Study, Oakland, MD: Project Engineer responsible for the design of waterline replacements on numerous streets in Oakland, which included the design of booster stations to provide adequate pressure to water customers within the system.

Lonaconing Water Line Extension, Allegany County, MD: Designer responsible for assisting on four water improvement projects including new lines and line replacement and construction management in the Towns of Midland, Barton and Lonaconing.

Lonaconing Water System Improvements, Koontz Run Dam, Allegany County, MD: Construction Engineer responsible for assisting with the replacement of Koontz Run Dam. Existing earth dam was replaced with three-million-gallon pre-fabricated concrete tank.

Northern Mineral County Regional Sewer System, Phase 1 Collection System, WWTP (CM/CI), Mineral County, WV: Construction Engineer responsible for assisting with this new regional sewer collection system which includes over 20 miles of sewer collection lines. Provided engineering oversight of 0.6 MGD Wastewater Treatment Plant to serve Northern Mineral County.

Northern Mineral County Regional Sewer System, Phase 2 Collection System, Mineral County, WV: Construction Engineer for the new gravity collection and force main sewage system to replace individual septic systems and the old collection system which was in non-compliance with state regulations. The project included a river crossing and installation of three duplex pump stations with auto-dial alarm systems. Both portable and permanent generators were provided as part of the project.

Romney Collection System Replacement, Phase 1, Hampshire County, WV: Assisted in the construction management of the sewer collection system replacement project.

Tuscan Ridge Subdivision Site Development, Atlantic Land Corporation, Davis, WV: Assisted with design of roadway layout, which included sizing culverts for drainage in the subdivision. Also assisted with the design and layout of the water and sewer utilities.



DAVID VANSCOY, PE, PS | SURVEY

Years of Experience: 46

Education: MS, Structural Engineering, West Virginia University, 1972; BS, Civil Engineering, West Virginia Institute of Technology, 1970

Licenses/Certifications: Professional Engineer: WV #006649, also registered in MD; Professional Land Surveyor: WV #1228

QUALIFICATION STATEMENT

Mr. Vanscoy has experience with the design and management of diverse civil engineering projects including wastewater collection and treatment facilities, water distribution and treatment facilities, streets/roadways and site development. Mr. Vanscoy is highly skilled in working with multidisciplinary teams on large, complex projects to ensure seamless interfaces between disciplines, as well as interfacing with local interests involved in smaller projects in ensuring that their needs are met.

PROJECT EXPERIENCE

Carolina & Idamay Sewer System Replacement Project, Marion County, WV: Director in Charge responsible for performing an evaluation of a relatively new vacuum collection system for Communities of Idamay and Carolina which suffered from inability to function properly. The study resulted in design and construction engineering services for the elimination of failing vacuum collection system and construction of 6,300 LF of pressure sewer. Also performed Inflow and Infiltration Study as part of this project.

Northern Mineral County Regional Sewer System Phase 1 Wastewater Treatment Plant (Design and CM/CI), Mineral County, WV: Director in Charge responsible for a \$39M regional sewer system project which included over 40 miles of sewer collection; 10 pump stations and a new 1.20 MGD wastewater treatment plant including biological nutrient removal.

Wiley Ford Sewer Project, Wiley Ford, WV: Director in Charge responsible for design, contract plans and specifications, construction engineering and inspection services and obtaining funding for the new Wiley Ford Sewer System. The project provides wastewater collection services for over 450 resident and commercial customers. The collection system consists of over 55,000 feet of collection lines, 6,600 feet of force main, and nearly 12,000 feet of service laterals. The system contains 273 manholes and 48 cleanouts. Construction bids were \$1.1M below the engineer's estimate. Also included in the system were three duplex pumping stations and an 8-inch force main under the Potomac River to discharge into the City of Cumberland system.

Ridgeley Sewer System Evaluation, Mineral County, WV: Director in Charge responsible for evaluating the existing Ridgeley Sewer System and developing plans to correct the considerable problems with backups and clogged and failed lines. Following the study, a facility plan was prepared which described the proposed \$1.96M project. This facility plan was then used to prepare a funding application to the West Virginia Infrastructure and Jobs Development Council.

Keyser Sewer Improvements, Keyser, WV: Project Manager for this \$5.5M upgrade to the sewage collection system and wastewater treatment plant. He was responsible for the design of the \$2M sewerage collection system including the replacement of nearly 24,000 LF of 8-inch and 12-inch lines, and 6,000 feet of service laterals. Over 6,500 LF of 8-inch sewer was replaced by pipe bursting technique. Mr. Vanscoy was also responsible for the design of a new disinfection system capable of handling at least 5.5 MGD discharge. As a result of these projects, the City of Keyser Wastewater Treatment Plant was given the "Most Improved Wastewater Treatment Plant- over 1 MGD" award by the State of West Virginia Department of Environmental Protection.



JENNIFER TRIMBLE, PE, DGE | GEOTECHNICAL

Years of Experience: 20

Education: MS, Civil Engineering, West Virginia University, 1999; BS, Civil Engineering, West Virginia University, 1998

Licenses/Certifications: Professional Engineer: WV #021553, also registered in DC, DE, MD, PA, VA; Diplomate of Geotechnical Engineering, National Designation #1329

QUALIFICATION STATEMENT

Ms. Trimble is responsible for planning and directing geotechnical explorations, preparation of geotechnical engineering reports, geotechnical analyses, conducting technical reviews, developing plans/specifications, and providing QA/QC in support of highways, rail transit lines, buildings, water and wastewater facilities and other civil engineering projects. Technical experience includes evaluation of subsurface conditions, in-situ testing, conducting seismic refraction studies, verifying groundwater levels, evaluating risks in potential sinkhole areas, and providing recommendations with respect to geotechnical engineering considerations.

PROJECT EXPERIENCE

Northern Mineral County Regional Sewer System, Phase 1 WWTP Design, Mineral County, WV: Geotechnical Engineer responsible for assisting in the design of a new 0.6 MGD WWTP. Design included reinforced concrete SBR's, filtration facilities, influent pumping station, UV disinfection, chemical feed systems, sludge digestion and sludge dewatering. Design included reinforced concrete retaining walls and foundations for precast concrete facilities buildings.

Swan Point Wastewater Pumping & Water Reclamation Facilities, Charles County, MD: Geotechnical Engineer for construction of a new 0.3 MGD wastewater treatment facility, pumping stations, oxidation ditch, clarifier, UV radiation structure, filter structure, and influent and effluent force mains, provided Geotechnical Engineering Services. Foundations for the new eight structures consisted of approximately 900 tapered driven timber piles with an allowable capacity of 30-kips. Conducted one static pile load test and three Pile Dynamic Tests (PDA) on production piles.

Back River Wastewater Treatment Plant Digester Renovations (SC 8526), Baltimore, MD: Geotechnical Engineer for the study, design and construction phase services to upgrade from the conventional high rate (CHR) digester process to the two-phase (acid-gas) anaerobic digestion process (two-phase process) with additional thickening facilities Phosphorus removal was achieved primarily through multi-point chemical addition at the primary and secondary clarifiers.

On-Call Sanitary Engineering Services, Baltimore, MD: Geotechnical Engineer. Provided geotechnical engineering recommendations and provided construction phase services for 72 MGD pump station that extended 50 feet below grade. Interceptor consisted of 15,600 feet of 54-inch force main, including 1,900-foot pile supported force main across the Back River, 430 feet of 90-inch diameter tunnel under AMTRAK and MD 150, support of excavation, and deformation monitoring of nearby structures. Provided and reviewed pile driving criteria and other construction phase services such as review of contractor submittals for monitoring adjacent structures during construction.

Stony Run Wastewater Diversion Pumping Station & Force Main, Baltimore City, MD: Geotechnical Engineer. Prepared Geotechnical Engineering Report and prepared Contract Documents for construction of a 26 MGD pump station and two stage construction MSE walls. Provided geotechnical recommendations for approximately 75-ft deep rock excavation adjacent to a historic bridge supported by shallow foundations and piles and 100-year old arched culvert.



SAM WILKES, PWS, LRS | ENVIRONMENTAL PERMITTING

Years of Experience: 22

Education: BS, Earth & Environmental Science, Wilkes University, 1996; MS, Environmental Science & Policy, John Hopkins University, 2003

Licenses/Certifications: Licensed Remediation Specialist: WV #295; Professional Wetland Scientists #1395

QUALIFICATION STATEMENT

Mr. Wilkes has more than 22 years of consulting experience as a project manager and senior environmental scientist providing technical support to watershed management, restoration, natural resource conservation, and hazardous materials programs. He brings experience providing oversight and managing field teams and contractors collecting wetland, stream quality, environmental media data, and general site condition data for site characterization.

PROJECT EXPERIENCE

Kanawha Valley Regional Transportation Authority, Charleston, WV: Project Engineer responsible for investigating and closing out the WVDEP case files for a leaking underground storage tank through the UECA program. Provided staff oversight and quality control to employees and subcontractors conducting the field investigation, data validation and risk assessment.

Wyoming County Economic Development Authority, WV: Project Engineer for the former Lusk Lumber Treatment Plant Brownfield Site (WVVRP#16005). Under the supervision of a Licensed Remediation Specialists, provided review and summary of previous investigations, composed sampling and analysis plan to address data gaps in previous investigations, coordinated with WVDEP Brownfields Staff.

AU Associates, Logan County, WV: Project Engineer responsible for performing a Phase I ESA on a property to be purchased and developed for senior housing. Discovered potential USTs in 1950s Sandborn Maps, which triggered a Phase II ESA with ground penetrating radar (GPR) survey. The GPR survey revealed anomalies, which led to geoprobe subsurface sampling. Numerous soil samples indicted presence of petroleum hydrocarbons. Advised client against purchasing property and to turn over documents to the County and WVDEP as an abandoned UST Case. Client redesigned the building footprint from single story to three-story. Advised client to conduct additional environmental sampling along property line to ensure that no contamination plume was moving toward the remainder of the property.

Aboveground Storage Tank (WV Senate Bills 373 and 423 Implementation), WV: Project Manager supporting numerous clients by conducting time critical visual inspections of approximately 2,000 ASTs throughout the state. Six inspectors were in the field for two months while an office support staff was processing daily reports from the inspectors into inspection logs and photo logs, reviewing and providing recommendations for each AST. The inspection documentation resulted in a "Fit for Service", "Not Fit for Service", or "Fit with Required Repairs" determination for each tank. In addition, completed spill prevention, response plans for submittal to the WVDEP.

West Virginia Source Water Protection Plans, WV: Project Manager providing assistance in the development of over 20 source water protection plans for community drinking water systems throughout the state of WV for WVDHHR. Conducted meetings with public water systems, assessed potential threats to the source water, suggested preventative and mitigation strategies and developed source water protection plans.



KEVIN NASH, PE | TREATMENT

Years of Experience: 12

Education: BS, Biomechanical Engineering, Virginia Polytechnic Institute and State University, 2007

Licenses/Certifications: Professional Engineer: GA, MD, NC, VA

Mr. Nash has experience with wastewater treatment projects from study through construction and he brings significant project experience throughout the region. His technical work encompasses evaluating process equipment, hydraulic analyses, design of complex hydraulic structures, engineering design and construction of specialized facilities for ballasted activated sludge systems, nutrient removal projects and biosolids projects. He utilizes Building Information Modeling technology to assist clients in visualizing projects early in the design process. Mr. Nash has presented multiple technical papers at regional wastewater conferences and the national WEFTEC conference. He also has experience in the pre-procurement of process equipment and systems.



DAVID WACKER, JR., PE | TREATMENT

Years of Experience: 5

Education: MS, Environmental Engineering, Bucknell University, 2014; BS, Physics, Moravian College, 2012

Licenses/Certifications: Professional Engineer: MD

Mr. Wacker's experience includes the study, troubleshooting and design of WWTPs and collection systems. His knowledge of biological processes was developed through his postgraduate work where he studied anaerobic treatment of municipal wastewater and performed extensive laboratory research. He has conducted numerous on-site process evaluations and laboratory testing at a variety of WWTPs across the Mid-Atlantic Region. His experience includes troubleshooting BNR/ENR processes, anaerobic digester systems and membrane bioreactors; BNR/ENR process modeling and evaluations; sludge dewatering design; biosolids thermal dryer design, odor control design and troubleshooting; chemical feed design; heat recovery study and design; wastewater disinfection; hydraulic studies, anaerobic digester start-up and wastewater collection system design.



BRANDON FELTON | PUMPING

Years of Experience: 13

Education: BS, Mechanical Engineering, West Virginia University, 2006

Mr. Felton's career started in the water and wastewater industry as a maintenance worker for the Frankfort Public Service District in 2003. Since joining RK&K in 2006, Mr. Felton has developed experience in design of equipment pertaining to water, wastewater and HVAC systems. He has provided engineering services for wastewater treatment plants and pumping stations throughout the state of West Virginia.



RHIANNON DODGE, EIT | PUMPING

Years of Experience: 1

Education: BS, Mechanical Engineering, University of Delaware, 2018

Licenses/Certifications: Engineering Intern: WV #10203

Ms. Dodge has experience with sewer collection system evaluation and transportation enhancement projects. Her experience includes sewer system rehabilitation efforts, feasibility studies, cost estimating, surveying, utility locating and identifying, GIS mapping and design-build projects. Her recent experience includes providing engineering services for the New Creek PSD Inflow and Infiltration Study in New Creek, WV and Inflow and Infiltration Study in the Town of Oakland, MD.



SHANNON JAMISON, PE | ELECTRICAL / I&C

Years of Experience: 14

Education: BS, Electrical Engineering, Pennsylvania State University, 2001

Licenses/Certifications: Professional Engineer: PA

Ms. Jamison serves as an Senior Project/Electrical Engineer responsible for studying and designing electrical systems for a variety of sanitary, civil, commercial and private projects. She performs electrical, instrumentation and process control design for systems including programmable controllers, remote monitoring and control systems, and personal computer operation. She is proficient in CADD, computers and computer technology. She has experience in the design and construction administration of electrical and I&C systems for wastewater treatment facilities.



CHAD BRODBECK | ELECTRICAL / I&C

Years of Experience: 19

Education: AS, Computer Aided Drafting & Design

Mr. Brodbeck's career has involved the design of electrical systems, and instrumentation and control systems for a variety of municipal, sanitary, civil, commercial and private projects. He has provided engineering services for several wastewater treatment plants and pumping stations throughout the Mid-Atlantic Region. His recent experience includes providing electrical engineering services for the Charles Town Utility Board On-Call Water and Sewer Task 19B- 2016 Sewer project that included the construction of three new sewer lift stations.



ANTHONY FISH, JR, PE | COLLECTION / FORCE MAIN

Years of Experience: 25

Education: BS, Civil Engineering, West Virginia Institute of Technology, 1992; AS, Drafting & Design Engineering Technology, West Virginia Institute of Technology, 1987

Licenses/Certifications: Professional Engineer: WV #016201

Mr. Fish recently joined RK&K as Senior Project Engineer in RK&K's newly opened Charleston, WV office. Mr. Fish brings 25 years of experience as a civil engineer, including experience on projects in West Virginia, with strong design and project management skills. Qualified in all phases of project development, his experience includes problem identification, conceptual solutions, cost estimating, preliminary and final design, plan production, contract development, work selection, contract administration, construction inspection and field engineering. Before joining RK&K, Mr. Fish was the Assistant City Engineer for the City of Charleston, West Virginia (2003-2016) where he managed small, medium and large design and construction projects.



ANDREW SUTER | COLLECTION / FORCE MAIN

Years of Experience: 13

Education: BS, Civil Engineering, West Virginia University, 2007

Mr. Suter has experience with wastewater & water systems, stormwater management, hydraulic modeling, storm sewer systems, water quality and sediment control designs. Andrew's recent project experience includes providing engineering services for several wastewater system improvement projects including the New Creek Inflow & Infiltration (I&I) Study for New Creek PSD in Mineral County, WV and the Carolina and Idamay Sewer System Replacement Project for the Greater Marion PSD in Marion County, WV.



GREG VANSKOY | SURVEY

Years of Experience: 23

Mr. Vanscoy has experience as a drafter, surveyor and sewer inspector. He performs various types of surveying including boundary surveys, topographic surveys for all design projects and construction stakeout surveying. He also performs much of the research requirements needed for boundary surveys. Mr. Vanscoy served as the Survey Technician for the Northern Mineral County Regional Sewer System project in Mineral, WV and the Charles Town Utility Board On-Call Water and Sewer Task 19B- 2016 Sewer project in Jefferson County, WV.



ERIC KLEIN, PE, DGE | GEOTECHNICAL

Years of Experience: 34

Education: MS, Civil Engineering, John Hopkins University, 1998; BS, Civil Engineering, Iowa State University, 1983

Licenses/Certifications: Professional Engineer: WV #021569, also registered in DC, DE, MD, NC, PA, VA; Diplomate of Geotechnical Engineering

Mr. Klein is experienced in the management and development of subsurface exploration programs, geotechnical recommendations, preparation of construction documents, cost estimates, and construction phase services. He is involved in a variety of projects including bridges, railways & subways, roadways, airports, excavation support systems, retaining walls, underpinning, SWM, reinforced soil slopes, MSE's, slope stability analysis. He is also experienced in using in situ testing such as the pressuremeter, dilatometer, cone penetrometer, double-ring infiltrometer, and geophysics such as seismic refraction and EM conductivity.



TROY WHITE, PE | CM / CI

Years of Experience: 20

Education: AA, Civil Engineering, Potomac State College of WVU, 1994; AA, Mechanical Engineering, Potomac State College of WVU, 1998; BS, Civil Engineering, West Virginia University College of Engineering, 1999

Licenses/Certifications: Professional Engineer: WV #016872, also registered in FL, MD, VA

Mr. White is a Construction Manager with RK&K's construction management/inspections group. He is knowledgeable of engineering construction principles and practices, highway construction process; quality assurance and quality control methods; and roadway, structures, drainage, and environmental engineering principles. He previously served as WVDOH's area construction engineer in the Eastern Panhandle Construction Office, where he performed constructability reviews and oversaw construction activities and personnel for multiple projects. He is experienced in special provisions and specifications; project estimating and scheduling, construction inspection, QA/QC, and safety management. He has provided technical assistance, public and agency coordination on many projects varying in complexities, and is knowledgeable of Microstation, Inroads, Site Manager, Project Wise, and Primavera.



JUSTIN REEL, PWS | ENVIRONMENTAL PERMITTING

Years of Experience: 23

Education: BS, Biology, James Madison University, 1995

Licenses/Certifications: Professional Wetland Scientist #2554

Mr. Reel is an environmental scientist project manager and brings experience conducting and managing field study permit assessments, review of permit conditions and mitigation design. He is well-versed in project planning, permitting, wetland design, wetland and stream mitigation monitoring, water quality monitoring, TMDL, wetland and aquatic ecology, and lotic and estuary habitat assessments.

PAST EXPERIENCE WITH SIMILAR PROJECTS



Past Experience
with Similar Projects





PAST EXPERIENCE WITH SIMILAR PROJECTS

RK&K and our local West Virginia staff are proud of our record of consistently being reselected for new contracts by existing clients—a testament to the quality of work we provide as well as our ability to deliver projects on time and within budget. The quotes below, provided by our clients, attest to the high quality of services that RK&K consistently provides.

“RK&K has been contracted to provide miscellaneous civil engineering services...In every case the quality of work has been exceptional and it was performed on time and within the fee originally negotiated.”

“RK&K has raised the bar as to the quality of work the City expects from its consultants.”

“RK&K’s approach has been thorough and professional...RK&K has worked to anticipate our needs and responded in a prompt manner.”

“It is obvious that your team is very focused on the overall program schedule and any milestone deadline...I like that you always include schedule information on the agendas or are ready to talk about it before the conclusion of the meeting.”

For confirmation about the quality of our work, we invite you to contact the clients listed here for whom we have recently completed related work.

References

Jeremy Shingler, General Manager

E: ncpsdvw@gmail.com | P: 304.790.9333

New Creek Public Service District | 4242 New Creek Highway, Keyser, WV 26726

Gwen Evans, Executive Coordinator

E: townfoak@gmail.com | P: 301.334.2691

Town of Oakland | 15 South Third Street, Oakland, MD 21550

Carol Brooks, Manager

E: mommaredsquirrel@msn.com | 304.287.2244

Greater Marion Public Service District | 44 Aberdeen Drive, Worthington, WV 26591

Jerry Frantz, Treasurer

E: jerryfrantz@frontier.com | P: 304.738.9552

Frankfort Public Service District | 5 County Route 28/10, Ridgeley, WV 26753

Kelley Sanders, General Manager

E: uwpsdkelley@gmail.com | 304.464.5121

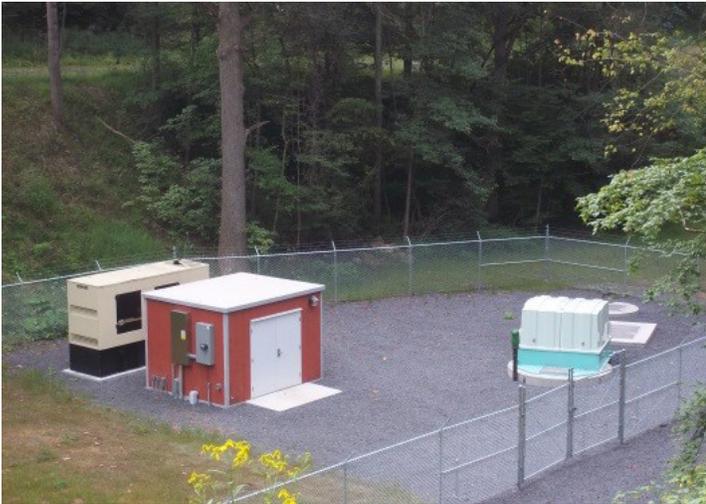
Union Williams PSD | 5121 Union Williams PSD, PO Box 243 Waverly, WV 26184

The following pages highlight our experience with similar projects.

CAROLINA & IDAMAY SEWER SYSTEM REPLACEMENT

Marion County, WV

ABOUT THE PROJECT



Client: Greater Marion Public Service District (GMPSD)

Contact: Carol Brooks | 44 Aberdeen Drive, Worthington,
WV 26591 | 304.287.2244 | mommaredsquirrel@msn.
com

Team Member Involvement: John Cole, Dave Vanscoy,
Matt Youngblood, Brandon Felton, Andrew Suter

RK&K performed a study focusing on the collection systems within the Communities of Carolina and Idamay. The study consisted of evaluating the vacuum collection system that was constructed in 2000, which replaced an older gravity collection system and eliminated two individual treatment facilities.

The Community's sewer system – constructed in 2000 and consisting primarily of vacuum collection – was failing, causing very unreliable service to the customers of the GMPSD. Significant inflow and infiltration flows from the customers contributed to the problems. The GMPSD consulted RK&K and it was determined that the best solution was to replace the existing vacuum collection system with a conventional gravity collection system.

In addition to converting the existing vacuum collection system to gravity, a sewage pumping station was required to convey the sewage to the community of Carolina for further

transfer and treatment. The Idamay pumping station was designed to handle a peak flow of 130 gpm at 370-ft. TDH. Due to the high operating head situation, a Smith & Loveless wet well mounted pump station utilizing Duplex Twin – 50 HP vacuum prime pumps mounted in series was used. The pump station conveys sewage through dual 4-inch C900 PVC/Class 305 force mains protected by surge relief valves that relieve high surge pressures by diverting sewage back to the wet well when force main pressures exceed the pre-set surge pressure set point of the relief valve.

This project featured two unique aspects: (1) elimination of a relatively new failing vacuum collection system and (2) construction of 6,300 LF of pressure sewer. Due to the topography of the region and in an effort to minimize the size of the pumps within the Carolina Pump Station, the pumps were designed to convey sewage 50-ft in elevation above the pump station. From the high point, the sewage will flow by gravity/pressure sewer through a vertical drop of nearly 350-ft. The pressure sewer portion is the result of the alignment crossing under the West Fork River just prior to the Worthington WWTP.

WASTEWATER TREATMENT PLANTS PER & ER PREPARATION

Garrett County, MD

ABOUT THE PROJECT



Client: Board of County Commissioners of Garrett County, MD

Contact: Bobby Witt | 2008 Maryland Highway, Suite 2, Oakland, MD 21550 | 301.334.7485 | bwitt@garrettcountry.org

Team Member Involvement: John Cole, Daniel Tichinel, Kelly Duffy, Kevin Nash

RK&K prepared Preliminary Engineering Reports (PER) & Environmental Reports (ER) to examine the feasibility and probable costs for an Enhanced Nutrient Removal (ENR) Upgrade to the Trout Run Waste Water Treatment Plant (WWTP) and Deep Creek Lake WWTP.

Deep Creek Lake WWTP: Preparation of the reports involved evaluating three process technologies for the ENR upgrade. The challenge presented to RK&K was to identify an ENR process that would perform to permit limits in the cool climate of Garrett County and would be acceptable to MDE. RK&K met the challenge by completing a thorough analysis of influent data and recommending a reconfiguration of the existing Orbal Oxidation Ditch. The report also included recommendations that would allow the WWTP to meet the current discharge permit. RK&K is currently assisting the Utilities Division with attaining funding from Maryland Department of Environment through the Bay Restoration Fund.

Trout Run WWTP: The scope of the reports included evaluating two alternatives for the proposed ENR upgrade. Each alternative included analyzing three biological process technologies to achieve the ENR goal. Alternative 1 involved evaluating upgrades to the existing Trout Run WWTP for ENR. Alternative 2 involved upgrading the existing Oakland WWTP for ENR to serve as a Regional WWTP for the Town of Oakland and Trout Run service areas. Alternative 2 also included an evaluation of five options to convey waste water from the existing Trout Run WWTP to the proposed Oakland Regional WWTP. Considering Trout Run WWTP and Oakland WWTP sit adjacent to the Little Youghiogeny River, identifying an economical and sustainable conveyance option that would meet current Maryland Department of Environment (MDE) wetland and waterways construction regulations was challenging. RK&K recommended a viable sewer force main conveyance option that has the lowest Life Cycle Costs and environmental impacts.

NORTHERN MINERAL COUNTY REGIONAL SEWER SYSTEM

Mineral County, WV

ABOUT THE PROJECT



Client: Frankfort Public Service District (FPSD)

Contact: Rae Corwell | PO Box 80, Wiley Ford, WV 26753 | 304.738.9552 | rcorwellfpsd@atlanticbb.net

Team Member Involvement: John Cole, Dave Vanscoy, Matt Youngblood

In 2001, the Mineral County Commission requested the FPSD investigate the feasibility of developing a sewage collection and treatment system in northern Mineral County. RK&K was hired to conduct the sewer feasibility study.

The objective of the study was to define sewage treatment needs from the perspective of a public health and safety aspect, while ensuring the environmental health of local waterways. The study area covered approximately 35 square miles and fourteen sewage treatment plants with affiliated infrastructure. Eleven of the sewer systems had serious systemic deficiencies, which resulted in raw sewage spills, lethal toxicity to aquatic life, sewage backups into structures, improper treatment and violations of the facilities' respective National Pollutant Discharge Elimination System (NPDES) permits.

The project area contained 2,576 customers representing 3,058 equivalent dwelling units, both residential and commercial. Sewage service for those residents and businesses was provided by the Fort Ashby wastewater treatment plant, 13 other individual treatment plants, and individual septic systems.

RK&K evaluated the collection system and treatment plant specifications necessary for comprehensive sewage collection and disposal in the project area. Development of a facility plan for the proposal ensued.

During the design, the FPSD submitted a plan for the entire regional sewer system that envisioned the elimination of the fourteen existing wastewater treatment facilities, which would be superseded by the construction of a 1.2 MGD WWTP, 63 miles of sewer lines (diameters ranging from 6- to 21-inch), and 14 sewage lift stations divided among nine sewer sheds covering 35 square miles.

The challenge of obtaining adequate funding while maintaining affordable user rates within any single fiscal year became apparent early in the design process. A recommendation was made to divide the entire project into multiple phases—increasing the likelihood of incrementally securing the project funding necessary for construction.

Phase I: Phase I included construction of approximately 13 miles of interceptor sewer lines (8- to 21-inches in diameter), one remote sewage pump station, and the construction of a 0.6 MGD regional wastewater treatment plant. The total population served by this phase of the project is nearly 7,500 people, representing approximately twenty-five percent of the Mineral County population.

Northern Mineral County Regional Sewer System Description Continued...

Significant challenges in permitting, funding, design and construction were overcome to provide a cost-effective treatment method of meeting State nutrient loading limitations while minimizing the impact to the surrounding area and the financial burden on the District's customers. The Sequencing Batch Reactor (SBR) biological process was utilized as the primary means of treatment, incorporating both chemical addition to enhance the nitrification process, and filtration to enhance phosphorus removal. This design resulted in the FPSD plant becoming the first treatment facility to be specifically designed, constructed, and placed into successful operation within the State of West Virginia in accordance with the State's limitations on nutrient loadings (5 mg/L of total nitrogen and 0.5 mg/L of total phosphorus) entering the Chesapeake Bay. The treatment plant process comprises an influent pumping station, a rotating mechanical fine screen, vortex grit removal, SBRs, continuous backwash up-flow sand filters, UV disinfection, cascade aeration, aerobic digestion, and belt-filter-press. Concurrent with construction of the plant's processing components, an operations building complete with testing laboratory was erected, as were chemical storage facilities and a maintenance garage. In recognition of this design, the FPSD project received a 2011 Silver Award for Engineering Excellence from the American Council of Engineering Companies of West Virginia. Despite challenging site conditions, the wastewater treatment plant (WWTP) was operational in June of 2011 (15 months after Notice to Proceed).



Phase II: The second phase included the addition of 800 new customers, elimination of the five remaining antecedent wastewater treatment facilities, and construction of six remote sewage pump stations and an additional 30 miles of sewer collection lines. Additionally, the treatment capacity of the new WWTP was expanded from 0.6 MGD to 1.2 MGD. The WWTP expansion involved the construction of two additional SBR tanks, one digester, four more sand filters, and additional UV disinfection capacity. Phase II of the regional project was completed in April of 2016 (13 months after Notice to Proceed).

Funding: Due to the high anticipated cost (in excess of \$52M), the regional project was divided into multiple phases in an effort to secure the necessary funding. Phase I of the project cost approximately \$18.22M, while Phase II cost \$26.95M. The planned third phase of the project has an estimated construction cost of \$16M.

Associated Work: Phases I and II of this project necessitated the acquisition of several private sewer systems, a wastewater treatment plant site, and 7 pump station sites. RK&K completed land surveys, prepared plats and legal descriptions, and supported attorney and owner during the procurement process. In addition to these acquisitions, 111 right-of-way easements were required for Phase I, and Phase II required over 800 easement agreements. RK&K coordinated the acquisition process among attorney, right-of-way agents, and owner. In a limited number of instances where land was acquired through the mechanism of eminent domain, RK&K provided court testimony.

ON-CALL WATER & SEWER TASK 19B, 2016 SEWER PROJECT

Jefferson County, WV

ABOUT THE PROJECT



Client: Charles Town Utility Board (CTUB)

Contact: Joe Burris | 832 S. George Street, Charles Town, WV 25414 | 304.676.6890

Team Member Involvement: John Cole, Brandon Felton

The 2016 Sewer Project consists of construction of three new sewer lift stations and associated gravity collection and force mains for conveying raw sewage collected from both the, Sanitary Associates Sewer Service Area and Willow Springs Sewer Service Area, to the existing Charles Town WWTP for treatment. The project also included the demolition of three existing sewage lift stations, two of which were failing; modifications to an existing sewage lift station; and demolition of the existing Willow Spring WWTP to comply with a consent order from the WV Department of Environmental Protection.

Prior to the project, sewage from the Sanitary Associates Service Area gravity sewer fed into to the adjacent Jefferson County Public Service District (PSD) sewer utility for eventual transportation to the Charles Town WWTP for eventual treatment. Two sewage lift stations within the service area were failing and required complete replacement. In addition, one of the District's sewer lift stations exceeded design

capacity resulting in sewage backups. To assist the PSD, CTUB redirected the sewage collected from the two failing lift stations to the Willow Spring Service Area—removing approximately 40,000 gpd of sewage from the PSD's lift station.

Sewage within the former Willow Spring Service Area was treated at the Willow Springs WWTP, a 100,000 gpd package aeration treatment facility. With the additional sewage flows from the Sanitary Associates Service Area, and operational issues with the WWTP, the CTUB decided to decommission the plant and redirect all sewage flows to the Charles Town WWTP.

The project involved the design and construction of three new sewage lift stations, each with emergency back-up generators and bypass connection capabilities; construction of approximately 4,700-LF of 12-inch diameter gravity sewer collection; construction of approximately 9,400-LF of 6-inch diameter sewer force main; installation of a sewer SCADA system; construction of 580-LF of 24-inch diameter steel casing under two separate 4-lane divided highways; and modifications to an existing sewer lift station.

INFLOW & INFILTRATION STUDY

New Creek, WV

ABOUT THE PROJECT



Client: New Creek Public Service District

Contact: Jeremy Shingler | PO Box 32, New Creek, WV 26743 | 304.788.5475 | shingler2107@gmail.com

Team Member Involvement: John Cole, Andrew Suter, Rhiannon Dodge

With the approval from the WV Public Service Commission (WV PSC) to change the billing conditions between the New Creek Public Service District (PSD) and City of Keyser from water consumption to metered sewer flow, the New Creek PSD experienced a significant increase in treatment cost due to actual flows. Therefore, the New Creek Public Service District retained RK&K as engineering consultant to perform a study of Inflow and Infiltration (I&I) entering the sewer collection system.

New Creek's sewer system, consisting of approximately 694 manholes and 24 miles of sewer line, dates to 1977. Over the years, the system has seen limited maintenance resulting in excess stormwater entering the system through various locations such as broken main lines, connected downspouts, improper pipe seals, and loose manhole covers. Without repairs and remediation, NCPD's bill from the City of Keyser will continue to increase, with eventual increase in

sewer rates. The inflow and infiltration study will determine the causes of the excess water through three different aspects of investigation: engineering document scanning and digitizing, flow monitoring, and smoke testing.

Engineering Document Scanning and Digitizing: To effectively analyze the collection system, all known sewer plans pertaining to the collection system were collected, scanned, and digitized to allow the preparation of a single sewer system overview map. RK&K prepared a large-scale overview map for displaying on an interior wall of the PSD office. In addition, digital files were provided to the PSD for future reference.

Flow Monitoring: Portable flow monitors purchased from Greyline Instruments Inc. were used to monitor and record significant rain events at different manhole locations. The meters recorded level and velocity, and produced a flow chart in gal/min. Flows were compared to rain and time to narrow down possible I&I sources on specific sewer line branches.

Smoke Testing: Smoke testing was conducted during dry periods to ensure that smoke could be detected above ground if it escaped the sewer lines. Testing was performed with a smoke blower, sewer pipe plugs, marker flags, and a video camera to document any illegal connections, broken sewer lines, etc. Locations to place the blower, determined from smoke testing, were chosen ahead of time to test specific sections of sewer line efficiently. During the test, illegal downspout connections, broken/missing cleanout caps, foundation drains, unsealed manholes, and broken main and lateral lines were discovered. With video evidence, the PSD can now notify each property owner regarding issues and required remediation, as well as address any problems that are the PSD's responsibility.

TOWN OF OAKLAND I&I STUDY

Oakland, MD

ABOUT THE PROJECT



Client: Town of Oakland

Contact: Gwen Evans | 15 South Third Street, Oakland, MD 21550 | 301.334.2691 | townof oak@gmail.com

Team Member Involvement: John Cole, Rhiannon Dodge, Dave Vanscoy, Andrew Suter

locations. Multiple measurements, ranging from depth of manhole, diameter of pipes entering and exiting the manhole, and drop connection heights were recorded. Inlet locations were referenced with respect to their position to the outlet pipe and flow levels were noted at the time of inspections. Weather and time of day were also noted. After all necessary items were recorded, each manhole was given a rating from one to five—classifying each manhole’s condition—one being good and five being poor.

Flow Monitoring: Portable flow meters were used to monitor and record flows during significant rain events at various manhole locations. The meters recorded level, velocity and temperature, but could produce a flow chart in gallons per minute for practicality. Flows were compared to rain and time to narrow down possible I&I sources on specific sewer lines. When televising the sewer lines later in the study, a more specific area could be chosen based on flow monitoring results rather than televising the entire collection system, in turn, reducing costs.

Smoke Testing: This portion of the study was conducted during dry periods, typically in the summer months, to ensure smoke could be detected above ground if it escaped the sewer lines. Testing was performed with a smoke blower, sewer pipe plugs, marker flags and a video camera to document any illegal connections, broken pipes, etc. Predetermined locations to place the blower were chosen ahead of time to test specific sections of sewer line efficiently. During the test, illegal downspout connections, broken/missing clean out caps were the most common issue. The most frequent problem was illegally connected foundation drains and/or driveway drains. With video evidence, the Town was able to notify each property owner about the issues and required remediation, as well as address any problems that were the Town’s responsibility.

RK&K performed Inflow and Infiltration (I&I) study due to high levels of water entering into the sewer system during rain events, leading to overflowing manholes and overloading the treatment plant. Oakland’s sewer system dates back to 1909, and some of the original pipe and manholes are still in operation today. Excess stormwater can enter the sewer system through old and vulnerable terracotta pipes and brick-formed manholes. In addition, water can enter the system through illegally connected downspouts, improper pipe seals, and loose manhole covers. The I&I Study will determine the cause of excess water through the following investigation techniques:

Manhole Inspections: This portion of the I&I study consisted of surface inspections at 436 manholes. Covers were removed, and photos taken of the surface/environment around the cover for reference and of each pipe connection entering the manhole. Photos were also taken at damaged or leaking

GREATER MARION PSD I&I STUDY

Marion County, WV

ABOUT THE PROJECT



Client: Greater Marion Public Service District

Contact: Carol Brooks | 44 Aberdeen Drive, Worthington, WV 26591 | 304.287.2244 | mommaredsquirrel@msn.com

Team Member Involvement: John Cole, Matt Youngblood, Dave Vanscoy, Andrew Suter

RK&K performed an Inflow & Infiltration (I&I) Study of its sewer collection system, with a focus on the collection systems within the Communities of Carolina and Idamay, and to propose corrections to eliminate I&I where possible.

The communities of Carolina and Idamay originally had separate sewer systems. Each system consisted of a gravity design with terracotta pipe and brick manholes that conveyed sewage to the towns' individual WWTPs. Between 1998 and 2000 the GMPSD was formed and a new vacuum collection system was constructed in Carolina, Idamay, and adjacent Kellytown, and connected to Worthington's existing vacuum system. From the beginning, the new vacuum system had problems, with most of these being attributed to excessive I&I flows. The failing vacuum system was replaced in 2014 with a gravity system that conveys sewage to Worthington WWTP via force mains from two pump stations in each outlying community. The Community of Kellytown is still connected to the Worthington Vacuum Station via vacuum sewer.

Five study components were required to properly investigate the I&I problems found in both communities. The components are as follows:

- Main line sewer video inspection - used to identify conditions of the main lines and any possible sources of I&I.
- Smoke testing - conducted to locate illegal connections or possible breaks in the sewer lines
- Cleanout installation/lateral inspection - utilized at locations warranting further investigation through video inspection of properties lateral lines.
- Individual house inspections, including in-house plumbing inspection - used when a lateral line showed evidence of I&I flow.
- Flow monitoring - employed throughout study to monitor flow and progress toward I&I reduction.

This project featured two unique aspects:

- The study of a vacuum system that was converted back into a gravity system, with various aspects of the vacuum system still existing and allowing I&I flow.
- Concurrent analyses of two communities' independent sewer systems with different types of I&I issues in each. One required over 70 cleanout installations with mainline issues in streams/springs while the other required less than 30 cleanout installations but had broken/damaged vacuum system equipment left connected to system.

As shown in the tables below, we consistently deliver projects on time and within budgets required by our clients. For further explanation on how we are able to meet these goals, please see our Approach Section.



Demonstrated Ability to Meet Schedules

	DESIGN		BID/AWARD		CONSTRUCTION	
	<i>Initial</i>		<i>Initial</i>		<i>Initial</i>	
On-Call Water & Sewer Task 19B Charles Town, WV	<i>Initial</i>	8 months	<i>Initial</i>	3 months	<i>Initial</i>	7 months
	<i>Actual</i>	8 months	<i>Actual</i>	2 months	<i>Actual</i>	10 months
Northern Mineral County Regional Sewer System Mineral County, WV	<i>Initial</i>	12 months	<i>Initial</i>	3 months	<i>Initial</i>	12 months
	<i>Actual</i>	11 months	<i>Actual</i>	3 months	<i>Actual</i>	16 months
Greater Marion PSD I&I Study Marion County, WV	<i>Initial</i>	12 months	<i>Initial</i>	3 months	<i>Initial</i>	10 months
	<i>Actual</i>	9 months	<i>Actual</i>	4 months	<i>Actual</i>	12 months



Demonstrated Ability to Stay Within Budget

	DESIGN		BID/AWARD	
	<i>Initial</i>		<i>Estimate</i>	
On-Call Water & Sewer Task 19B Charles Town, WV	<i>Initial</i>	\$385,115	<i>Estimate</i>	\$2,800,000
	<i>Actual</i>	\$382,234	<i>Bid Average</i>	\$2,400,000
Northern Mineral County Regional Sewer System Mineral County, WV	<i>Initial</i>	\$2,150,000	<i>Estimate</i>	\$15,200,000
	<i>Actual</i>	\$2,120,000	<i>Bid Average</i>	\$14,700,000
Greater Marion PSD I&I Study Marion County, WV	<i>Initial</i>	\$545,579	<i>Estimate</i>	\$5,000,000
	<i>Actual</i>	\$545,579	<i>Bid Average</i>	\$4,360,000

KEY PERSONNEL LICENSES



Key Personnel Licenses



**West Virginia State Board of Registration
for Professional Engineers**

**JOHN W. COLE
WV PE #017949**

This is to certify that the above named PROFESSIONAL ENGINEER has met the requirements of the law, is duly registered and is entitled to practice engineering in the State of West Virginia.

EXPIRES December 31, 2020



LICENSE * REGISTRATION * CERTIFICATION * PERMIT
STATE OF MARYLAND
DEPARTMENT OF LABOR, LICENSING AND REGULATION
STATE BOARD FOR PROFESSIONAL ENGINEERS
CERTIFIES THAT:
KELLY CHEEK DUFFY

IS AN AUTHORIZED: **05 - PROFESSIONAL ENGINEER**

LIC/REG/CERT 27799	EXPIRATION 07-18-2020	EFFECTIVE N/A	CONTROL NO. 5209933
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Signature of Bearer: *Kelly M. Schultz* Secretary DLLR

WHERE REQUIRED BY LAW THIS MUST BE CONSPICUOUSLY DISPLAYED IN OFFICE TO WHICH IT APPLIES



**West Virginia State Board of Registration
for Professional Engineers**

**MICHAEL W. MYERS
WV PE #018055**

This is to certify that the above named PROFESSIONAL ENGINEER has met the requirements of the law, is duly registered and is entitled to practice engineering in the State of West Virginia.

EXPIRES December 31, 2020



**West Virginia State Board of Registration
for Professional Engineers**

**DANIEL WAYNE TICHINEL
WV PE #022476**

This is to certify that the above named PROFESSIONAL ENGINEER has met the requirements of the law, is duly registered and is entitled to practice engineering in the State of West Virginia.

EXPIRES December 31, 2020



LICENSE * REGISTRATION * CERTIFICATION * PERMIT
STATE OF MARYLAND
DEPARTMENT OF LABOR, LICENSING AND REGULATION
STATE BOARD FOR PROFESSIONAL ENGINEERS
CERTIFIES THAT:
ROBERT JOSEPH ANDRYSZAK

IS AN AUTHORIZED: **05 - PROFESSIONAL ENGINEER**

LIC/REG/CERT 12420	EXPIRATION 04-20-2021	EFFECTIVE N/A	CONTROL NO. 5353359
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Signature of Bearer: *James E. Rydzkowski* Acting Secretary DLLR

WHERE REQUIRED BY LAW THIS MUST BE CONSPICUOUSLY DISPLAYED IN OFFICE TO WHICH IT APPLIES



LICENSE * REGISTRATION * CERTIFICATION * PERMIT
STATE OF MARYLAND
DEPARTMENT OF LABOR, LICENSING AND REGULATION
STATE BOARD FOR PROFESSIONAL ENGINEERS
CERTIFIES THAT:
DAVID TIMOTHY BOLLINGER

IS AN AUTHORIZED: **05 - PROFESSIONAL ENGINEER**

LIC/REG/CERT 50811	EXPIRATION 06-14-2019	EFFECTIVE N/A	CONTROL NO. 5028459
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Signature of Bearer: *Kelly M. Schultz* Secretary DLLR

WHERE REQUIRED BY LAW THIS MUST BE CONSPICUOUSLY DISPLAYED IN OFFICE TO WHICH IT APPLIES



**West Virginia State Board of Registration
for Professional Engineers**

MATTHEW JOSEPH YOUNGBLOOD
WV PE #021676

This is to certify that the above named PROFESSIONAL ENGINEER has met the requirements of the law, is duly registered and is entitled to practice engineering in the State of West Virginia.

EXPIRES December 31, 2020



**West Virginia State Board of Registration
for Professional Engineers**

JENNIFER LYNN TRIMBLE
WV PE #021553

This is to certify that the above named PROFESSIONAL ENGINEER has met the requirements of the law, is duly registered and is entitled to practice engineering in the State of West Virginia.

EXPIRES December 31, 2020



**West Virginia State Board of Registration
for Professional Engineers**

DAVID G. VANSKOY
WV PE #006649

This is to certify that the above named PROFESSIONAL ENGINEER has met the requirements of the law, is duly registered and is entitled to practice engineering in the State of West Virginia.

EXPIRES December 31, 2020

Renewal



West Virginia
Department of
Environmental Protection

WILKES, SAMUEL PETER
Licensed Remediation Specialist
Registration Number: 295

[Signature]
Director, Division of Land Restoration

09/15/2018 - 09/30/2020
Date Issued - Date Expires

2019 WEST VIRGINIA PROFESSIONAL SURVEYOR 2019

The West Virginia Board of Professional Surveyors certifies that the individual listed below is a PROFESSIONAL SURVEYOR who has qualified for a license under Chapter 30, Article 13A, Code of West Virginia, and has met the requirements for license renewal for the period ending June 30, 2019.

DAVID G. VANSKOY, P.S. #1228

Issued July 1, 2018 Expires June 30, 2019

Board Members:
Mild Snapp, P.S., Chairman
Nelson Douglas, PE, P.S., Secretary
Tom Rayburn, P.S.
Sefton Stewart, P.S.
Douglas McElwee, Eq.

[Signatures]
Executive Director
Kris Justice

2019 State of West Virginia Board of Professional Surveyors DAVID G. VANSKOY WV P.S. Lic. # 1228 Is a PROFESSIONAL SURVEYOR who has qualified for a license under Chapter 30, Article 13A, Code of West Virginia, and has met the requirements for license renewal for the period ending June 30, 2019.	Continuing Education §23CSR2 2019 PDH Summary Hours Carried Over 8 Hours Claimed 16 Applied to 2018-2019 8 Approved Carry-Over 8 Minimum Standards 2018 Professional Ethics 2018	State of West Virginia Board of Professional Surveyors 1124 Smith Street, Suite B127C Charleston, WV 25301 Phone (304) 558-0350 Fax (304) 558-0352 Website: www.wvbps.wv.gov Email: wvbps@wv.gov
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**Society of Wetland Scientists
Professional Certification Program, Inc**

renews the designation
Professional Wetland Scientist

For
Samuel P. Wilkes

In recognition of all the professional requirements approved by the Society of Wetland Scientists Certification Renewal Program, and verified by the Society's Certification Renewal Review Panel. Professional Wetland Scientist Number 1395 issued on 7/23/2003 and recertified on 2/14/2018. Due to recertify again by 7/23/2023.

[Signatures]
James E. Perry, PhD, PWS
President
Pat Frost, PWS
Certification Renewal Chair



REQUIRED FORMS



The required forms listed below can be found on the following pages.

1. Expression of Interest Cover page
2. Purchasing Affidavit
3. Designated Contact, Certification and Signature Form
4. Addendum Acknowledgment Form

RK&K's Proposed Exceptions To The Agency Terms & Conditions

Insert following text here: after providing reasonable time to cure

18. CANCELLATION: The Chief Procurement Officer reserves the right to cancel this Contract ~~immediately~~ upon written notice to the vendor if the materials or workmanship supplied do not conform to the specifications contained in the Contract. The Chief Procurement Office may also cancel any purchase or Contract upon thirty (30) days written notice to the Vendor in accordance with West Virginia Division of Natural Resources Series IV Purchasing Guidelines and Procedures, § 5.2.

Insert following text here: agrees

27. WARRANTY: The Vendor ~~expressly warrants~~ that the goods ~~and/or services~~ covered by this Contract will: (a) conform to the specifications, drawings, samples, or other description furnished or specified by the Agency; (b) be merchantable and fit for the purpose intended; and (c) be free from defect in material and workmanship.

Insert following text here: All services shall be performed with a degree of care and skill normally employed by members of the Vendor's profession performing similar service on similar projects under similar circumstances at the same time and in the same locality.

Insert following text here: negligent, reckless, or intentionally wrongful

37. INDEMNIFICATION: The Vendor agrees to indemnify, defend, and hold harmless the State and the Agency, their officers, and employees from and against: (1) Any claims or losses for services rendered by any subcontractor, person, or firm performing or supplying services, materials, or supplies in connection with the performance of the Contract; (2) Any claims or losses resulting to any person or entity injured or damaged by the Vendor, its officers, employees, or subcontractors by the publication, translation, reproduction, delivery, performance, use, or disposition of any data used under the Contract in a manner not authorized by the Contract, or by Federal or State statutes or regulations; and (3) Any failure of the Vendor, its officers, employees, or subcontractors to observe State and Federal laws including, but not limited to, labor and wage and hour laws.

Insert following text here: negligent, reckless, or intentionally wrongful



**State of West Virginia
Expression of Interest
Architect/Engr**

Procurement Folder : 581628

Document Description : A/E for Tygart Lake SP Wastewater Systems Repairs

Procurement Type : Agency Contract - Fixed Amt

Date Issued	Solicitation Closes	Solicitation No	Version	Phase
2019-05-14	2019-06-14 13:30:00	AEOI 0310 DNR190000013	1	Draft

SUBMIT RESPONSES TO:	VENDOR
BID RESPONSE DIVISION OF NATURAL RESOURCES PROPERTY & PROCUREMENT OFFICE 324 4TH AVE SOUTH CHARLESTON WV 25303-1228 US	Vendor Name, Address and Telephone

FOR INFORMATION CONTACT THE BUYER
 Angela W Negley
 (304) 558-3397
 angela.w.negley@wv.gov

Signature X  **FEIN #** 52-0599112 **DATE** June 13, 2019

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

CONSTRUCTION CONTRACTS: Under W. Va. Code § 5-22-1(i), the contracting public entity shall not award a construction contract to any bidder that is known to be in default on any monetary obligation owed to the state or a political subdivision of the state, including, but not limited to, obligations related to payroll taxes, property taxes, sales and use taxes, fire service fees, or other fines or fees.

ALL CONTRACTS: Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

EXCEPTION: The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

DEFINITIONS:

“Debt” means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

“Employer default” means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

“Related party” means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceeds five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (W. Va. Code §61-5-3) that: (1) for construction contracts, the vendor is not in default on any monetary obligation owed to the state or a political subdivision of the state, and (2) for all other contracts, that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

WITNESS THE FOLLOWING SIGNATURE:

Vendor's Name: RK&K

Authorized Signature:  Date: June 13, 2019

State of Virginia

County of Virginia Beach, to-wit:

Taken, subscribed, and sworn to before me this 13th day of June, 2019.

My Commission expires OCTOBER 31, 2020.

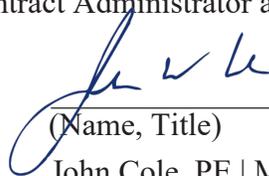
AFFIX SEAL HERE



NOTARY PUBLIC



DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.



(Name, Title)

John Cole, PE | Manager, Municipal Engineering

(Printed Name and Title)

159 Plaza Drive, Keyser, WV 26726

(Address)

304.788.3370 / 304.488.3577

(Phone Number) / (Fax Number)

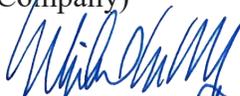
jcole@rkk.com

(email address)

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

RK&K

(Company)



(Authorized Signature) (Representative Name, Title)

Michael W. Myers | Partner

(Printed Name and Title of Authorized Representative)

June 13, 2019

(Date)

410.462.9208 / 410.728.2834

(Phone Number) (Fax Number)

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: AEOI DNR19*13

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:
(Check the box next to each addendum received)

- | | |
|--|--|
| <input checked="" type="checkbox"/> Addendum No. 1 | <input type="checkbox"/> Addendum No. 6 |
| <input checked="" type="checkbox"/> Addendum No. 2 | <input type="checkbox"/> Addendum No. 7 |
| <input checked="" type="checkbox"/> Addendum No. 3 | <input type="checkbox"/> Addendum No. 8 |
| <input type="checkbox"/> Addendum No. 4 | <input type="checkbox"/> Addendum No. 9 |
| <input type="checkbox"/> Addendum No. 5 | <input type="checkbox"/> Addendum No. 10 |

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

RK&K

Company


Authorized Signature
June 13, 2019

Date

NOTE: This addendum acknowledgment should be submitted with the bid to expedite document processing.

RK&K



818 Quarrier Street
Charleston, WV 25301
P: 681.319.9000

159 Plaza Drive
Keyser, WV 26726
P: 304.788.3370

www.rkk.com