MASC
Municipal Association of South Carolina℠

MUNICIPAL ASSOCIATION OF SOUTH CAROLINA
STATEMENT OF QUALIFICATIONS

ENGINEERING SERVICES FOR VARIOUS PROJECTS AND ON CALL SERVICES

OCTOBER 17, 2022

Wooten

COVER LETTER

October 17, 2022

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

RE: RFQ–Engineering Services for Various Projects and On Call Services

Dear Mr. Broom,

Community Services, such as infrastructure, are a vital part of any community and are necessary for it to thrive. The Municipal Association of South Carolina takes great care to provide services, programs and tools to the municipal governments within South Carolina ensuring that the citizens have a community that they can remain proud of. One way that the MASC continues to provide this high level of service is by looking ahead and creating a list of qualified engineering firms that will be made available to local municipal governments. This request for qualifications from Professional Engineering firms is that process in action. We recognize the importance of this process and it is with this in mind that we submit our Statement of Qualifications to be considered for the subject Civil Engineering Services.

The Wooten Company was founded in 1936 in Raleigh, North Carolina and has been working since this time in the public sector helping local governments with their infrastructure needs. Being committed to this sector over all of these years, and working in many IDC type arrangements, has allowed us to develop a deep understanding of the needs and desires of our clients. We understand both the technical components and the budgeting factors involved in this work. This has allowed us to develop trusting relationships that are necessary when working with an engineering partner. This is a main objective of our company. In 2015, we began actively offering this type of engineering assistance in South Carolina and opened an office in Columbia in 2016.

Our proposed team for your project will be led out of our Columbia office. The project manager, John Stephens, PE who serves as our Columbia Regional Office Manager, has a high level of familiarity with this type of work and has assembled an experienced team that is committed to delivering successful projects. We also have access to valuable partners that we can call on to support John and our internal team dependent on the project.

We believe that the following qualities stand out most about our team:

- **Local Familiarity**: Our work in the region has afforded us a good familiarity with the area.
- **Close Proximity**: Being located in Columbia allows us the ability to provide a high level of service. That is, we can be responsive and available to meet your needs as they arise.
- **Technical Expertise**: Our company and this team have a wide knowledge of the type of work proposed.

We appreciate this opportunity to submit our qualifications to you for review. We are excited about the prospect of developing a long-standing relationship and will strive to always provide high quality engineering services. As you review our qualifications, please let me know if you should have any questions or need additional information.

Best Regards,

THE WOOTEN COMPANY

W. Brian Johnson, PE – Vice President
120 N. Boylan Ave.
Raleigh, NC 27603

John Stephens, PE – Columbia Regional Manager
1411 Gervais Street. Third Floor, Ste. 315
Columbia, SC 29201

FIRM PROFILE

The Wooten Company is a privately held, multi-disciplinary firm with 100 employees focused on providing municipal engineering, surveying, and architectural services. Founded in 1936 and incorporated in 1949 in North Carolina, L.E. Wooten and Company (dba The Wooten Company) is now in its 86th year of continuous operation and is licensed by the States of South Carolina and North Carolina to practice engineering and surveying (SC Certificate of Authorization Number 5119; NC Certificate of Registration F-0115).

A comprehensive range of capabilities including environmental engineering, general civil engineering, geomatics, mechanical engineering, electrical engineering, plumbing engineering, and architecture affords our clients a singular point of contact for a majority of their infrastructure needs, and therefore efficient and reliable solutions that keep the taxpayer front of mind.

SPECIALTIES

- Water booster pumping, storage and distribution
- Water and wastewater treatment
- Wastewater pump stations and collection
- Site/Civil design
- Stormwater conveyance and treatment
- Roadway design and pavement condition survey
- Infrastructure planning
- Preliminary engineering and environmental assessment documents
- Surveying and Geographic Information Systems
- Water/Wastewater system modeling
- Mechanical and HVAC design
- Electrical design

ROOTED IN COLUMBIA, INVESTED IN SOUTH CAROLINA

With lifelong ties to South Carolina, John Stephens heads Wooten's regional office in the Palmetto State capital. He first gained an associate degree in Architectural Engineering Technology from Midlands Technical College before going on to earn a BS in Civil Engineering from the University of South Carolina. John joined Wooten in 2021 after the firm acquired the company he founded, Crescent Engineering, LLC. He brings 20+ years of industry knowledge to serve clients across South Carolina and finds it rewarding to see the finished product of teamwork.

COLUMBIA REGIONAL OFFICE

1411 Gervais St., Suite 315
Columbia, SC 29201
(803) 978-2488

WOOTEN HEADQUARTERS

120 N. Boylan Avenue
Raleigh, NC 27603
(919) 828-0531

PROJECT APPROACH

Below is a breakdown of our general approach to our projects; however, each project is evaluated at its inception for its distinctive characteristics.

1. PRELIMINARY ENGINEERING

- Coordinate and conduct project kickoff meeting
- Obtain available data and engage stakeholders
- Develop and vet design or study alternatives
- Consider physical and socio-economical impacts
- Develop preliminary engineering report, technical memoranda, and/or preliminary design review with the Client.
- Coordinate with regulatory agencies

2. DESIGN DEVELOPMENT

- Perform environmental / geotechnical investigations
- Perform topographical and boundary surveying services
- Conduct subsurface utility engineering analyses
- Develop construction documents (30%, 60%, Final), Prepare Easement/Property Mapping
- Hold project review workshops with Client
- Prepare detailed project cost opinion
- Submit permits and encroachments
- Perform constructability review

3. FINAL DESIGN/BIDDING

- Incorporate the Client's final review comments
- Secure final permit approvals
- Obtain final approval from the Client
- Prepare for advertising and bidding
- Host pre-bid conference, issue addenda, open bids
- Tabulate bid results, submit award recommendation, prepare contract documents
- Coordinate Easement Acquisition with Client

4. CONSTRUCTION ADMINISTRATION & OBSERVATION

- Hold pre-construction conference
- Oversee contractor's work product
- Facilitate communication among stakeholders
- Deliver within schedule and budget constraints
- Review equipment submittals and pay applications
- Coordinate progress meetings
- Keep the Client's staff apprised of project progression

5. COMMISSIONING & STARTUP (IF APPLICABLE)

- Prepare summary schedule of equipment startup
- Assist the Client's staff putting equipment into operation
- Troubleshoot process performance issues
- Provide operator orientation and assistance
- Provide technical assistance during warranty period

6. PROJECT CLOSEOUT

- Conduct preliminary and final walkthroughs
- Process contractor's closeout paperwork
- Prepare construction record drawings
- Submit hard and electronic copies of requested project documentation
- Closeout project

STAFFING CONFIGURATION

We offer a comprehensive team with support from multiple practices capable of delivering the project types identified in the Association's Request for Qualifications. Our program manager, John Stephens, has the ability to assign tasks internally based on capacity and need, and is positioned to provide responsive service.

MASC
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PRINCIPAL

Brian Johnson, PE
Raleigh, NC

QA/QC

John Grey, PE
Winston-Salem, NC

PROGRAM / PROJECT MANAGER

John Stephens, PE
Columbia, SC

WATER / SEWER

Daniel Mosher, PE
Project Engineer
Columbia, SC

Dave Malinauskas, PE
Project Engineer
Raleigh, NC

John Nixon, EI
Project Engineer Assistant
Columbia, SC

Lee Cockrell, EI
Project Engineer Assistant
Columbia, SC

Bradley Faulk
CAD Designer
Columbia, SC

TREATMENT

Miles Galloway, PE
Project Manager
Raleigh, NC

Carl Scharfe, PE
Project Engineer
Raleigh, NC

David Bennett, PE
Project Engineer
Raleigh, NC

Genevieve Versteeg, PE
Project Engineer
Raleigh, NC

Patrick Donaghy
CAD Designer
Raleigh, NC

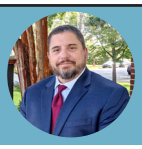
FUNDING

Kevin Richards
Community Development Lead
Greenville, NC

Jessie Walker
Funding Specialist
Columbia, SC

Kaite Fisher
Funding Specialist
Raleigh, NC

RESUMES



JOHN STEPHENS, PE

Program Manager / Project Manager

John Stephens is the Columbia Regional Office Manager for the Wooten Company. John began his engineering experience in Columbia, SC in 1996. He has worked on both public and private projects ranging from small to large commercial, residential, institutional, industrial, municipal, medical, and various other land development projects throughout South Carolina. During his career he has been able to create great relationships with municipalities, government entities, contractors, architects, developers and other consultants. John's project responsibilities include preliminary studies, design, permitting, and construction administration, and the details included with each project phase.

Education:
AAS, Architectural Engineering Technology, Midlands Technical College
BS, Civil Engineering, University of South Carolina
Registrations:
Professional Engineer, SC

BRIAN JOHNSON, PE

Principal

Brian Johnson, PE, is the Director of Engineering Services for The Wooten Company as well as a member of Wooten's Board of Directors. Since 1996 Brian has applied his engineering expertise to provide planning, analysis, and design of many infrastructure projects for local governments throughout North Carolina and South Carolina. Brian's project responsibilities have included preliminary studies, design, permitting, and construction administration, and the details included with each project phase. In addition to his departmental duties, he continues to work as a Senior Project Manager working on projects from inception to completion, working closely with clients to ensure they receive a quality project, on time and within budget. Maintaining client satisfaction and a quality project are his ultimate goals.

Education:
BS, Civil Engineering, NCSU
Masters of Civil Engineering, NCSU
Registrations:
Professional Engineer, NC, SC; LEED AP

JOHN GREY, PE

QA/QC

Joining The Wooten Company in 1998 to open the firm's Asheboro Branch Office, John Grey now has over 30 years of experience in the design and construction administration phases of water distribution projects and wastewater collection projects, water and wastewater treatment projects and site development projects. Recently having moved this office, John provides oversight and management on a variety of disciplines for the Winston-Salem Regional Office of The Wooten Company, ranging from project funding strategy, to design, bidding and all the way through construction contract administration and observation services. His team's focus is on municipal clients in the Piedmont of North Carolina, where environmental stewardship, cost-effective designs and economic development are constants in every infrastructure project they perform.

Education:
BS, Civil Engineering, NCSU
Registrations:
Professional Engineer, NC

MILES GALLOWAY, PE

Project Manager

Miles Galloway is The Wooten Company's Environmental Practice Leader in Raleigh. Since 2011, Miles has applied his educational background and experience to assist clients in the evaluation of water treatment and wastewater treatment processes, planning and evaluation of capital improvement needs, and development of projects from conception to design to address both expansion needs or to meet regulatory compliance. Miles also has assisted many clients with obtaining both State and Federal funding through various funding programs and has been involved in both the design stages and the preliminary analysis of many engineering projects. Miles' educational background gives him a unique understanding in the fundamentals of engineering, and biological/chemical processes in the application of engineering process systems.

Education:
BS, Biological Engineering, NCSU
Registrations:
Professional Engineer, NC, SC

RESUMES

DANIEL MOSHER, PE

Project Engineer

Daniel Mosher is a Senior Project Engineer in The Wooten Company's Columbia office. He has over eight years of design experience in land development and water resources engineering. His design experience includes the analysis and design of numerous stormwater conveyance and management systems for commercial sites and single-family and multi-family residential developments. His duties include design, analysis, and permitting coordination. Daniel has the ability to draw a distinct connection between engineering concepts, theory, and practical design and analysis, as demonstrated in his book: Civil Engineering Basics: Water, Wastewater, and Stormwater Conveyance.

Education:
BS, Civil Engineering Associate Science, University of South Carolina
Registrations:
Professional Engineer, SC

DAVE MALINAUSKAS, PE

Project Engineer

Dave Malinauskas is The Wooten Company's Water Resources Practice Leader in Raleigh. Having been in the industry since 1999, Dave has gained extensive experience with the planning and design of municipal water/wastewater utilities, including master planning, stakeholder engagement, easement coordination, and project management. His background includes hydraulic model development; utilities routing analysis; planning and design of water and wastewater systems and their appurtenances; permitting; and construction administration and observation. Further, Dave brings a strong track record of customer service and understanding of client needs, having worked in both the public and private sectors. This perspective also allows Dave to better understand client needs as well as mitigate impacts of projects on the community.

Education:
BS, Environmental Engineering, NCSU
Registrations:
Professional Engineer, NC

CARL SCHARFE, PE

Project Engineer

Joining The Wooten Company in 2013, Carl Scharfe brought with him 30 years of professional experience in the management of wastewater collection and treatment and water treatment projects from the conceptual design stage through final construction. Mr. Scharfe has strong experience in process design, project management, client interaction and regulatory approvals. He has been the project manager on numerous engineering studies/plans/reports for wastewater and water treatment facilities. He has presented at conferences and seminars for the past 15 years on topics ranging from sewer design and rehabilitation to inflow/infiltration to wastewater treatment process design.

Education:
BS, Public Affairs, Environmental Sciences, Indiana University
MS, Environmental Engineering, The University of Texas
Registrations:
Professional Engineer, NC

DAVID BENNETT, PE

Project Engineer

With 12 years of prior experience, David Bennett joined The Wooten Company in 2018 to further bolster the firm's treatment and transportation solutions for water and wastewater. David's past experience includes research assistance in wastewater treatment operations at Clemson University, as well as contract work for the Department of Energy where he managed intense regulatory oversight during area closures. His education in chemical engineering combined with a background in public sector consulting allows David to offer his projects the technical understanding necessary to design reliable solutions while ensuring that they can be implemented efficiently and cost-effectively.

Education:
BS, Chemical Engineering w/Environmental Engineering Minor, Clemson University
Registrations:
Professional Engineer, NC, SC, TX

RESUMES

GENEVIEVE VERSTEEG, PE

Project Engineer

Genevieve Versteeg who recently graduated at the top of her class upon completion of an undergraduate degree in Environmental Engineering, is a recent addition to our Civil Practice Team joining The Wooten Company in 2017. Her role for this project will be providing assistance to the Project Engineer in the development of project alternatives. Genevieve's experience ranges from quantitative analysis to evaluation of wastewater treatment process design for small-scale industrial waste.

Education:
BS, Environmental Engineering, NCSU
Registrations:
Professional Engineer, NC

JOHN NIXON, EI

Project Engineer Assistant

John Nixon is an EIT with Wooten's Columbia, SC office. He joined the company in June 2022 after graduating in December 2019 with a bachelor's degree from the University of South Carolina in Civil Engineering. John started his career working in construction with SCDOT and then with Chao & Associates to learn civil site development design. Through these experiences he has become efficient with stormwater calculations, Civil 3D design work, and has obtained knowledge of how these designs are put into effect in the field. He works under the supervision of John Stephens, PE.

Education:
BS, Civil Engineering, University of South Carolina
Registrations:
Engineering Intern

LEE COCKRELL, EI

Project Engineer Assistant

Lee Cockrell is an EIT for The Wooten Company at the Columbia office. He joined the company in August, 2022. Lee has two years of land development experience in the private sector. Lee also has one year's experience working for the Department of Defense at Fort Jackson, SC in their public works department. He works under the supervision of John Stephens, PE.

Education:
BS, Civil and Environmental Engineering, University of South Carolina
Registrations:
Engineering Intern

BRAD FAULK

CAD Designer

Bradley Faulk has over 10 years' experience in industrial, commercial and residential engineering and construction. He has worked as an Engineering Technician, CAD Technician, and Field Engineer. He spent six years at the VC Summer Units 2 & 3 Nuclear Construction Project overseeing the layout and installation of the site's numerous underground utilities. Prior to the nuclear project he spent six years with two other local engineering consulting firms gaining experience in site design including utilities, grading, drainage and erosion control.

Education:
AAS, Civil Engineering Technologies, Midland Technical College

RESUMES

PATRICK DONAGHY

CAD Designer

Patrick Donaghy has experience since 1991 in designing water and wastewater treatment systems. He has worked as Designer and CAD Specialist on numerous plants in and around North Carolina, as well as participating in some large joint venture plant designs for the cities of New York and Boston. Mr. Donaghy brings a strong background and understanding of engineering and architectural design offering years of hands-on experience in designs and modern technology used in today's water and wastewater treatment, collection, and distribution systems. His knowledge and experience is a valuable asset in forming a design team for treatment systems.

Education:
AAS, Architectural Technology, Wake Technical Community College
BS, Civil Engineering Technology, UNC - Charlotte

KEVIN RICHARDS

Community Development Lead

Kevin Richards joined the Wooten Company in September of 2022. Kevin previously worked with the Mid-East Commission (Region Q Council of Governments) for 25 ½ years as the Director of Planning, Economic Development and Community Services. His duties included grant writing and administration for all types of economic development projects. He has successfully written and/or administered 132 grants totaling more than $50 million in grant funding and $108 million in total project costs. He has worked with local governments, business owners and several different grant agencies.

Education:
BS, Urban and Regional Planning, Eastern Carolina University

JESSIE WALKER

Funding Specialist

Jessie Walker brings more than 25 years' experience working with communities as our Funding Programs Specialist. Jessie specializes in CDBG projects including Housing rehab and infrastructure projects. She is also familiar with the Environmental Assessment requirements and can complete those as needed.

Education:
BS, Human Services, Springfield College
MA, Nonprofit Leadership Institute at Francis Marion University

KATIE FISHER

Funding Specialist

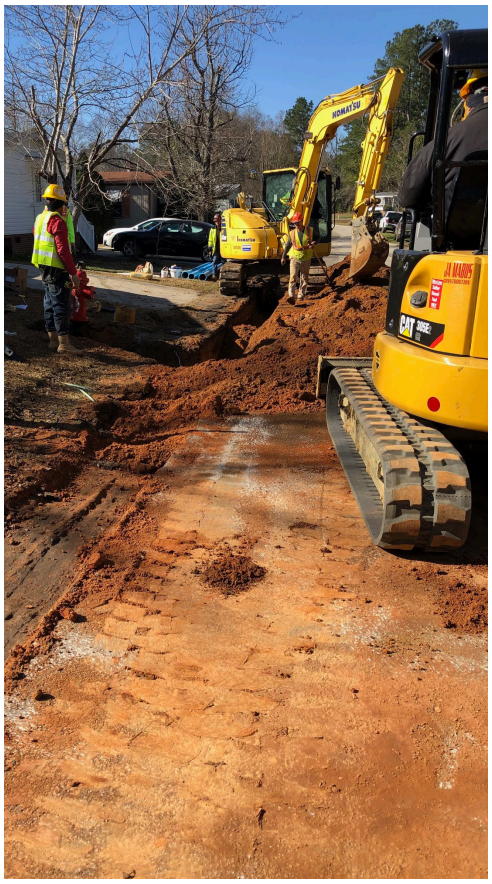
Katie Fisher joined the Wooten Company in August of 2021 after completing her master's degree in public administration. Katie serves as The Wooten Company's Community Development Coordinator. She is experienced in grant applications and administration with CDBG, USDA, Industrial Development Fund-Utility Account, Rural Transformation Grants, NC Commerce, NCDEQ drinking water and wastewater grants, NCDOT grants and other funding sources. She is committed to finding resources and strategically navigating communities through grant processes.

Education:
Masters in Public Administration, University of North Carolina Wilmington
BA, Psychology, University of North Carolina Wilmington

RELEVANT EXPERIENCE – WATER / SEWER

CITY OF AIKEN - BONNIVIEW AND WOODSIDE WATER LINE REPLACEMENTS

Contact: Mike Przybylowicz, Engineering & Utilities Director, 803.642.7610



Beginning in early 2018, The Wooten Company was tapped to provide design, permitting and construction services to the City of Aiken in conjunction with replacement of water distribution mains. The scopes of these two project areas had been identified by field staff due to high occurrences of failure and extensive maintenance requirements.

The first area, Bonniview Estates includes the installation of nearly 4,000 linear feet of new 6" water main to replace existing asbestos cement (AC) distribution mains. The second area, Hidden Haven includes the installation of approximately 4,200 linear feet of new 6" water main to replace existing 4" thin wall PVC which was originally constructed in utility corridors located along the rear of existing lots.

Coordinating with City staff to verify existing facility configurations during the design phase along with coordination with both City staff and the Contractor(s) during construction were instrumental to the success of these projects. As can be the case when working with existing infrastructure, numerous occurrences of unanticipated items were uncovered in the field.

These new mains provide service to the 139 existing customers formerly served by the old mains which were subject to failures and disruptions of water service to these neighborhoods.

Planning and design for these projects required focus on the fact that water service must be maintained to the residents of these neighborhoods. Carefully planning activation of new mains, connection of existing services to the new mains, and abandonment of the existing mains ensured impacts to City customers were minimized.

TOWN OF SMITHFIELD - DURWOOD STEPHENSON WATER LINE - PHASE II

Contact: Ted Credle, PE, Director of Public Utilities, 919.934.2116

The Wooten Company provided services for a critical water line improvements project to better serve residential and industrial growth. The Town of Smithfield identified a need to improve hydraulic performance and resiliency within its water system to better serve the western side of the Neuse River within the Town's service area. As a second phase to a larger water system improvements project, this linear project includes over 3,000 LF of 16" water main largely installed via horizontal directional drill under the Neuse River, Poplar Creek, and adjacent wetlands connecting existing dead-end mains to provide system resiliency/redundancy and improved water quality and pressure for the Town of Smithfield. The project was bid with an alternate that included two shorter drills with open cut through wetlands allowing the client to compare contractor pricing of the two installation methods.

RELEVANT EXPERIENCE – WATER / SEWER

NEWBERRY COUNTY WATER AND SEWER AUTHORITY - HIGHWAY 34 WATER LINE RELOCATION

Contact: Brent Richardson, Manager, 803.276.7020

As a result of SCDOT's plans to replace an existing bridge over a Norfolk and Southern railroad line, Newberry County Water and Sewer Authority was contacted regarding the relocation of their water infrastructure within the project corridor. Realizing an opportunity to eliminate approximately 1400 linear feet of 10-inch asbestos cement water main from that system, the Authority staff developed a concept for relocation in conjunction with the bridge project. Chad Easter was contacted to take the staff's concept to design and construction level documents to allow the relocation to be approved by DOT and also constructed in conjunction with the roadway project. The project is currently in the permitting phase and is expected to be ready to go to construction in accordance with the DOT's project letting schedule, which is currently being established.

JOINT MUNICIPAL WATER AND SEWER COMMISSION - PELION WATER MAIN REPLACEMENT

Contact: Guy Schmoltze, Engineering and Construction Manager, 803.359.8373

The Wooten Company was contracted by Joint Municipal Water and Sewer Commission (JMWSC) to provide an Environmental Assessment and Engineering Services for construction of approximately 4,300 linear feet of 8" water line in the Town of Pelion to replace old and undersized water lines. The project was funded by CDBG and The Wooten Company assisted in obtaining a FONSI for the project. The Engineering services included survey, design, permitting, bidding, and construction services for the project. The project is currently under construction.

LANCASTER COUNTY WATER & SEWER DISTRICT - MARVIN ROAD

Contact: Wes Carter, Operations Manager, 803.416.5277

The Wooten Company was contracted by Lancaster County Water and Sewer District (LCWSD) to provide the engineering services for construction of approximately 2,300 linear feet of 12-inch water main, 250 linear feet of 12-inch sanitary sewer force main and 650 linear feet of 8-inch sanitary sewer force main. The engineering services included survey, design, permitting, bidding and construction services for the project. The project is currently in final design.

RELEVANT EXPERIENCE – WATER / SEWER

CITY OF AIKEN – GEM LAKES AND WOODSIDE SANITARY SEWER PUMPING STATIONS, SUPER OXYGENATION IMPLEMENTATION

Contact: Mike Przybylowicz, Engineering & Utilities Director, 803.642.7610

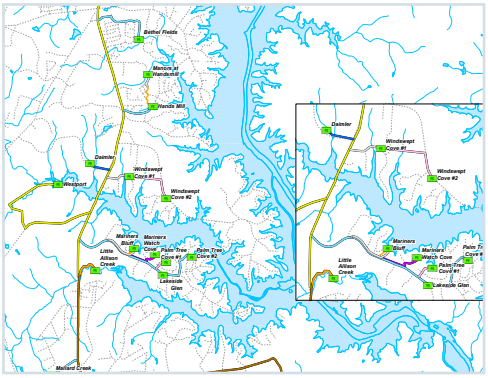
The Wooten Company provided engineering services associated with then implementation of previously selected technology to replace costly chemical feed systems to control odor and corrosion with systems to saturate the sanitary sewer flow with oxygen to control odor and corrosion. A component of the effort included Civil site design, electrical design and generation of a technical specification for the super oxygenation system to allow competitive bidding as required by RIA, who contributed funding to the project. The technical specification also incorporated performance verification procedures to protect the City from sub-par performance of the system following the City's investment in installation.

Support was provided by the Wooten Company to also include development of documentation to satisfy RIA requirements, coordination of approvals with regulatory authorities, evaluating questions from bidders and providing clarification via addenda to the bidding documents, certification of bid results as well as supporting City staff with part time Construction Administration and Observation. The project is currently on line and we are supporting the City in the performance verification process.

YORK COUNTY – WESTERN SEWER PUMPING STATION CAPACITY EVALUATION

Contact: Barry McKinnon, PE, Utility Program Manager, 803.818.5781

The Wooten Company was contracted to evaluate existing sanitary sewer pumping stations with York County's Western Sewer System to determine and track ultimate capacity considering existing and proposed components with the current system configuration. The evaluation analyzed current flows from existing services at each pumping station and projected capacity available to support future development. A hydraulic model of the force main system was developed, as well as a flow tracking spreadsheet, for the County to use as a tool to track capacity needs in this growing portion of their wastewater system.



CITY OF AIKEN – SOUTHSIDE SANITARY SEWER LIFT STATION EVALUATION

Contact: Mike Przybylowicz, Engineering & Utilities Director, 803.642.7610

With replacement of site piping at the Southside Sanitary Sewer Lift Station as an active Capital Improvement Project, The Wooten Company was asked for a proposal to complete the work. Upon evaluation of the City's goal, it was recommended that an evaluation of the condition of the existing piping be performed with non-destructive testing means to verify the need proceed with this investment. The result was that at a minimal cost to the City, the condition of the existing piping was confirmed to be in satisfactory condition, allowing it to remain in service for the foreseeable future, freeing up the City's capital funds for more pressing needs.

RELEVANT EXPERIENCE – WATER / SEWER

CITY OF AIKEN - HIGHWAY 1 GRAVITY SEWER CROSSING I-20

Contact: Mike Przybylowicz, Engineering & Utilities Director, 803.642.7610

To support Economic Development in the vicinity of the I-20 and Highway 1 interchange located on the north side of Aiken, the City desired to extend sewer service across the interstate to the currently unserved north side. The Wooten Company was able to assist the City with evaluation of the ability to extend gravity sewer across the Interstate. Buy-in was achieved from SCDOT through meeting to review preliminary options. SCDOT's buy-in early in the process made design and permitting of the work much smoother. The project is currently under construction and expected to be completed within approximately 90 days. The Wooten Company has had the opportunity to provide preliminary and final design services, permitting, bidding support and is currently providing part-time Construction Administration and Observation for the 3,740 LF of 12-inch gravity sewer.

CITY OF AIKEN - SHILOH SPRINGS LIME SLURRY SYSTEM

Contact: Mike Przybylowicz, Engineering & Utilities Director, 803.642.7610

The Wooten Company provided engineering services associated with then implementation of previously selected technology to replace a labor intensive bag lime feed system at the City's Shiloh Springs Water Treatment Facility with more efficient and automated lime slurry feed system. A component of the effort included Civil site design, electrical design, structural design and generation of a technical specification for the lime slurry system to allow competitive bidding. Assistance during bidding as well and part-time construction Administration and Observation were also provided.

LANCASTER COUNTY WATER & SEWER DISTRICT - RUM CREEK FORCE MAIN RELOCATION

Contact: Wes Carter, Project Engineer, 803.416.5277

Lancaster County Water and Sewer District is faced with the need to provide additional wastewater service capacity within the drainage basin served by the Rum Creek Lift Station. District staff identified the desired solution as relocation of the Rum Creek Lift Station force main discharge from its current location, discharging into a gravity interceptor within the basin to an existing force main located within an adjacent drainage basin. The Wooten Company was contracted by the District to provide design, permitting and bidding services for the project which includes approximately 5,200 linear feet of 12-inch force main. Provided with the District's concept, services provided by The Wooten Company include; evaluation of alternative alignments, surveying through a local surveying company for right-of-way confirmation, design topography and easement mapping, development of construction drawings, use District standards to generate construction specification and bidding documents, permitting, and bidding support. Additionally, evaluation of system operation under the proposed scenario which includes three lift stations sharing a common force main was also evaluated via hydraulic modeling. Modeling was used to predict the operating conditions which would result at each of the lift stations. From the predicted operating conditions under various scenarios, existing pump curves were used to present the range of operation anticipated at each site for presentation to the respective owner of each facility.

RELEVANT EXPERIENCE – TREATMENT

BRUNSWICK REGIONAL WATER AND SEWER H2GO - NEW GROUNDWATER SUPPLY AND REVERSE OSMOSIS WATER TREATMENT PLANT

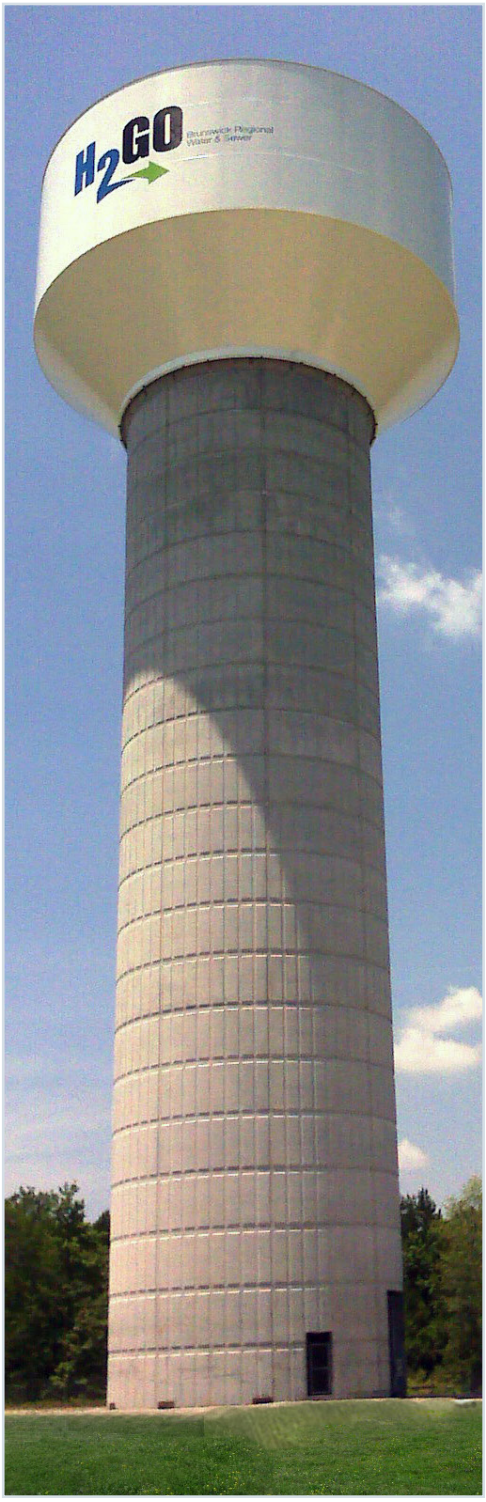
Contact: Bob Walker, Executive Director, 910.371.9949

In 2016, The Wooten Company was selected to design a 4 MGD Reverse Osmosis Water Treatment Plant for Brunswick Regional Water and Sewer H2GO. This plant will treat raw water from well sites throughout their service area.

Since the new RO Plant would allow H2GO to disconnect from the current County supply and serve their customers with their own treated water, H2GO's WaterGEMS model was updated and calibrated and used to determine the effects of the RO Plant on the system. Near term improvements along with future/long term improvements were identified throughout the system to allow H2GO to transition to a self-sufficient system.

As part of this project, Brunswick Regional H2GO conducted a Reverse Osmosis (RO) Pilot Plant Project from November 2015 to February 2016 to validate the performance of the process and obtain data for permitting. The Wooten Team assisted in all aspects of this pilot study. A procurement bid specification was prepared to allow RO manufacturer's to bid to provide the RO equipment skid for a 3-month leasing period. A RO pilot equipment specification and P&ID was developed for the procurement to set the performance requirements and minimum equipment standards. The Wooten team assisted H2GO in contracting with the successful bidder, reviewing shop drawings, designing and bringing sanitary sewer to the site (for pilot plant water discharge), coordinating utility requirements between H2GO and the supplier, reviewing pay requests for the leasing, and in enforcing provisions of the procurement document for supplier provided products and services. The RO equipment was successfully used and then returned to the supplier at the end of the pilot study. An RO Pilot Test report was prepared with RO design criteria.

The RO WTP was designed using water quality analysis from test wells and the RO Pilot Test results. The RO plant capacity as bid in 2020 was 4 MGD and as project construction commenced it was determined that the plant capacity needed to immediately increase to 6 MGD based upon the addition of 3,000 customers from the Town of Leland into H2GO's water system. The RO WTP includes antiscalant chemical feed (for scale control), cartridge filters (to remove particles), three 400 HP RO feed pumps, three 2-MGD RO units, carbon dioxide acid feed, calcite contactors (for alkalinity and hardness addition), fluoride feed, caustic feed, and polyphosphate feed. The plant also includes two (2) 1 MG finished water storage tanks and four high service pumps. The site layout, site piping, and RO building were designed for expansion of capacity to 8 MGD by addition of one more RO skid unit, one more high service pump, and one additional calcite contactor tank. The RO WTP is currently under construction.



RELEVANT EXPERIENCE – TREATMENT

TOWN OF SMITHFIELD - WATER TREATMENT PLANT UPGRADE

Contact: Ted Credle, Director of Public Utilities, 919.934.2798

The Town of Smithfield owns and operates a conventional water treatment plant that serves the Town of Smithfield and also provides wholesale water to Johnston County. The current water treatment plant has a capacity of 6.2 mgd. To meet increasing demand, a study was conducted to determine the necessary improvements at the water treatment plant to provide a future treatment capacity of up to 8.3 mgd.

Engineering design for plant expansion to 8.3 mgd commenced in June 2018 and the following improvements are being provided: new raw and settled water pumps, expansion of the raw water reservoir, new flash mixer, new PAC feed system, new conventional sedimentation train with filter, installation of sludge collection equipment in the sedimentation basins (existing and new), installation of air scour in the filters, new clearwell storage, additional backwash storage tank, additional sludge dewatering screw, new finished water pumps, and new emergency generator.

This project included upgrades to the main electrical utility service entrance and increased generator capacity. The expansion was constructed while maintaining continuous plant operations. The new generators are designed for use by the Town to perform peak load curtailment operations.

The Wooten company assisted the Town in funding by preparing an application for and gaining award of loan funding from the Clean Water State Revolving Fund (CWSRF). The project was bid and awarded and is under construction with a completion date of December 2022.

CMSD - WASTEWATER TREATMENT PLANT IMPROVEMENTS

Contact: Chuck Smithwick, District Manager, 252.524.5584

The Contentnea Metropolitan Sewerage District (CMSD) had a mid-1970s plant that served the Towns of Winterville, Ayden, and Grifton. The age of the system had left it struggling with high inflows, overflows and violations after heavy rains. The District was placed under a Consent Order that mandated repairs and upgrades. Additionally, the two-stage activated sludge process was running at the redline and enhanced nutrient removal was needed to meet the effluent limitations in the Neuse River Basin. Wooten helped develop a creative financing plan that packaged grant and loan funds between the District and its three member towns to pay for the improvements. Phase 1 included a new headworks with mechanical screen and screenings compactor, vortex grit removal and Parshall Flume, lift pump station, deep bed denitrification, UV disinfection, post aeration tank and outfall to Contentnea Creek. Phase 2 expanded the plant capacity to 3.5 mgd with five-stage biological nutrient removal, activated sludge process, secondary clarifiers, RAS/WAS pump station, sludge dewatering with dual screw presses and modifications to the existing basins for flow equalization and additional sludge stabilization/holding facilities. CMSD is now a leader in the Neuse River Compliance Association with exceptional total nitrogen and total phosphorous discharge concentrations. This project was funded by USDA-RD.

GRANT AND FUNDING EXPERIENCE

Our ability to locate and pursue funding for our clients is evident in that we have secured over $600 million for our clients during the last 37 years. Funding has been secured from Federal, State and Special Appropriation sources based on the type and magnitude of the project. Often times, we work with the funding agencies and our clients to 'package' programs that result in the least financial impact for our client's residents and customers.

We have extensive and successful experience in project development and grant writing for the following programs:

- American Rescue Plan Act (ARPA)
- USDA Rural Development
- Community Development Block Grant (CDBG Commerce & NCDEQ)
- Clean Water State Revolving Loan Fund (CWSRF)
- Drinking Water State Revolving Loan Fund (DWSRF)
- State Reserve Program (DWSRP & WWSRP)
- Asset Inventory & Assessment Grant (AIA)
- Merger/Regionalization Feasibility Grant (MRF)
- Clean Water Management Trust Fund (CWMTF)
- NC DEQ Technical Assistance Grant (TAG)
- NC Coastal Management Public Beach and Coastal Waterfront Access
- US Economic Development Administration (EDA)
- One North Carolina Fund (OneNC)
- NC Commerce Building Reuse
- NC Industrial Development Fund (IDF)
- Golden LEAF Foundation
- NC Tobacco Trust Fund
- NC Parks and Recreation Trust Fund (PARTF)
- Connect NC Bond
- Rural Economic Development Center
- NC Housing Finance Agency (NCHFA)
- NC DEQ High Unit Cost Grant (HUC)
- State Tribal Action Grants (STAG)

RELEVANT PROJECT EXPERIENCE

Below is a sample of recent projects that inlcude federal funding sources and demonstrate The Wooten Company's understanding and familiarity with federal funding requirements.

- Town of Pittsboro - Wastewater Transmission System Improvements (DWI-CWSRF)
- Town of Pembroke - Headworks Expansion (DWI-ARPA)
- Town of Pembroke - Wastewater Treatment Plant Expansion (DWI-ARPA, EDA)
- Town of Smithfield - Water Treatment Plant Expansion (DWI-DWSRF)
- Contentnea Metropolitan Sewerage District - Highway 11 Pump Station (DWI-CWSRF, GoldenLEAF)
- City of Oxford - 2017 Water and Sewer Improvements (USDA-RD)
- Town of Pembroke - Wastewater Treatment Plant Improvements (EDA)
- Town of Benson - Dutch Inn Pump Station Wastewater System Improvements (USDA-RD)
- Contentnea Metropolitan Sewerage District - Wastewater Treatment Plant Improvements (USDA-RD)
- Edgecombe County - Sewer to Speed and Vicinity (USDA-RD)
- Town of Wingate - Water System Improvements, Phase II (USDA-RD)
- Town of Norlina - Wastewater Pump Station Improvements (USDA-RD)
- City of Lumberton - Water Treatment Plant Flood Mitigation (FEMA)
- City of Limberton - Tandlewood Storm Drainage (EDA)

As a team devoted to supporting the health and welfare of communities throughout the Carolinas, we sincerely appreciate the opportunity to develop our working relationship with the Municipal Association of South Carolina. These referenced qualifications are the results of decades of hard work and commitment - a proud cornerstone of our practice - to the communities that we call home.