JAMES RIVER WATER AUTHORITY

PPEA

Unsolicited Proposal

Design and Construct | Water Supply System

Utilizing the James River

VOLUME I

May 9, 2014

ENGLISH

Since 1929

Wiley|Wilson®

Constant Progress

ENGLISH

Since 1909

May 9, 2014

Mr. Steven M. Nichols
County Administrator
Fluvanna County
132 Main Street
Post Office Box 540
Palmyra, Virginia 22963

RE: James River Water Authority Unsolicited PPEA Proposal

Dear Mr. Nichols:

English Construction (English) in association with Wiley|Wilson is pleased to submit an unsolicited proposal to provide professional design and construction services for the water supply system for Fluvanna County and the James River Water Authority. Our team has a long history of working together on successful projects similar to the JRWA project. The English|Wiley|Wilson team offers a wealth of utility project experience and we have assembled a team of qualified professionals who are familiar managing signature water and wastewater projects.

Highlights:

- Utility work represent one of the single largest sectors of our team's annual work program. We have successfully delivered an array of water and wastewater projects under the Design-Build delivery method.
- Our JRWA project team is highly experienced managing state-of-the-art water facilities and complex water systems.
- The English | Wiley|Wilson team offers a track record for successfully developing strategically planned, budget adhering PPEA Design-Build projects by partnering with the Authority and County officials, state review agencies, design teams and local utility entities within the respective communities we have served.
- We have a proven record of maximizing SWaM and local subcontractor participation.

We look forward to the prospect of being a member of the JRWA project team and we appreciate your time and consideration of the English Wiley|Wilson team's professional Design-Build services.

Cordially,

ENGLISH CONSTRUCTION CO., INC.

Henry G. Myers
Vice President / Executive Manager

WILEY | WILSON

C. Robert Mangrum, PE, BCEE
Vice President / Executive Manager

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In accordance with the Virginia Freedom of Information Act (FOIA) in the Code of Virginia, §2.2-3700 et seq. and as provided in §56-575.4(G); and with all other applicable statutes governing such matters, We are requesting that Volume II (in its entirety) of our submission under the Public-Private Education Infrastructure Act of 2002, be considered confidential and proprietary information.

executive summary

Since receiving the Request for a PPEA Conceptual Proposal our team has worked diligently on your behalf to respond to the requirements of the James River Water Authority water supply system.

English Construction Company, Inc. of Lynchburg is proud to lead the Design-Build team comprised of Wiley|Wilson of Lynchburg, and specialized subconsultants. Our team was developed in anticipation of providing the JRWA with an independent turnkey solution for their long term water needs. The combined strengths of this team represent local resources capable of fulfilling the Design-Build (DB) needs of JRWA. The strengths of this team are as follows:

- Extensive water resource development design and construction experience
- Alternative project delivery experience that is unsurpassed within the industry
- Local knowledge and resources to provide long-term project support

Basis of Design for Infrastructure Design

We propose to provide a new river water intake and pump station and raw water pipeline segment that will terminate in the vicinity of the Colonial Pipeline easement on the north side of State Route 6. In order to ensure a long term robust water system, our proposal will allow JRWA & Fluvanna County to immediately meet or easily upgrade all of the facilities to meet the Year 2050 demands projected by the respective Water Supply Plans.

Please see Volume II, Proprietary, Section 2.a. Project Description for our detailed design concepts.

History of Work Performed

English has led the State of Virginia in providing alternative delivery projects and has long been an industry leader in projects that involved partnering with an Owner to develop a concept into a solution. Our commitment to this process began before legislation was developed to allow governments to utilize alternative procurement, when English was providing project construction in an open-book design-build fashion with private owners.

executive summary

The Design-Build delivery method is an alternative delivery process that English has been working with for decades. Formal legislation was developed almost 20 years ago and at that time, allowed English to help construct the first highway project under Virginia's Public Private Transportation Act (PPTA) of 1995. Then over 10 years ago the Public Private Education Act (PPEA) of 2002 paved the way for English to provide the first alternative delivery educational facility.

Design Team

Wiley|Wilson is the premier designer of Central Virginia's infrastructure and has provided numerous past services in the JRWA region. Their local water resource development and treatment experience is vast and compliments the other members of the team.

Wiley|Wilson is a full-service multi-discipline A-E firm with a large, diverse staff that is available to work on the water treatment project. In addition, an industry expert, Dr. Billy Kornegay is included on the design team in anticipation of concerns associated with disinfection byproducts and for water treatment design expertise.

The local knowledge of the design team will be reflected in the value that will be brought to the project. The background knowledge of the project and the area that already exists within this team will save time and money during the execution of this project.

Project Familiarity

Our team has worked together on multiple past and current projects that demonstrate the teamwork and open-book relationship that will benefit the JRWA during the course of this project. Our team understands the history of Fluvanna County and the JRWA and the steps taken along the way leading to this project.

We are well versed in dealing with the state and local regulatory agencies and can assist the Authority in the pursuit and ultimate final approval of the project. Our current relationships with the stakeholders, within local government, and communities will be critical in paving the way for this project's success.

JAMES RIVER WATER AUTHORITY

PPEA

Unsolicited Proposal

Design and Construct I Water Supply System
Utilizing the James River

VOLUME I

TAB 1

a. Identify the legal structure of the firm or consortium of firms making the proposal. Identify the organizational structure for the project, the management approach and how each partner and major subcontractor in the structure fits into the overall team.

legal | organizational | management

English will serve as the prime contractor on the project and will be the James River Water Authority's primary point of contact. English will lead the construction team and will be responsible for the overall performance and quality of the work. We are a multi-disciplined construction firm that is a Class "A" heavy highway/utility contractor and we are licensed to operate in eight states throughout the Southeast U.S. with primary work in Virginia, North Carolina, and South Carolina. English's experienced staff will work with the Wilson | Wiley design team, along with our quality subcontractors to ensure the project meets all design and operational parameters. We maintain a staff of more than 600 employees forming construction and support teams that, under the leadership of 120 tenured personnel, have supported as many as 40 concurrent projects.

English focuses on green construction technologies, renewable energy, and protecting our environment on all projects. We are proud to have nine key management personnel who are Leadership in Energy and Environmental Design (LEED®) Accredited Professionals who understand the impacts of nitrogen and other pollutants in our waterways and the effects they have on our communities, quality of life, and future generations. English leads the way in constructing environmentally safe projects.

Wiley|Wilson will serve as lead designer for JRWA. Since completing their first project in 1901, Wiley|Wilson has grown into a multi-faceted organization providing architectural, engineering, and planning services. W|W is 100% employee-owned and continuously growing in numbers and abilities. The firm has the ability to deliver services under a comprehensive system that meets or exceeds the needs of each client from feasibility studies to commissioning. W|W is architects, engineers, planners, and commissioning agents who work closely together with you to solve each of your problems, large or small. Function, economy, aesthetics, and sustainability are blended into form by a team of Wiley|Wilson specialists who are committed to technical excellence and Constant Progress.


James River Water Authority
Design-Build Team
ENGLISH
Wiley|Wilson
Constant Progress
Design | Engineering Team
Wiley|Wilson
Constant Progress
Robert Mangrum, PE, BCEE
Project Manager
Bill Koregay, PH.D, PE
Environmental Process Consultant/
Water Treatment Plant Design
Tom Fitzgerald, PE
Keith Thompson, PE
Waterline Design
Robert Mangrum, PE, BCEE
Aaron Tice, PE
WTP Design
Tim Wagner, PE
Wetlands and Permitting
Bill Davidge, PE
Structural
Steve Bowman, PE
Electrical
Randy Vaughan, AIA
Architecture
Construction Team
ENGLISH
Henry Myers, VP
Executive Manager
Robert Halpin
Preconstruction Manager
Jordan Combs
Project Manager
Scott Bailey
Project Superintendent
Ned Halpin
Project Coordinator
Michael Scott
Safety Manager

The James River Water Authority communities have experienced recent development and population growth.

Wiley|Wilson has four offices located in Lynchburg, Richmond, and Alexandria, VA, and one in Atlanta, GA, and have maintained continuous operations in Lynchburg since 1901, in Richmond since 1926, Alexandria since 2003, and Atlanta since 2011. During this time, the firm has served governmental, private, and institutional clients on thousands of projects.

Wiley|Wilson has a staff of 153 personnel, 72 of whom are registered professionals and 33 are Leadership in Energy and Environmental Design (LEED) Accredited Professionals. Staff diversity has evolved over 113 years from a single consulting mechanical engineer to a diversified staff representing architecture, planning, and all traditional engineering disciplines as well as computer services personnel, computer aided design personnel, commissioning agents, surveyors, and construction administrators.

Wiley|Wilson is a Virginia-Certified Small Business (ID #010503), and as such, we also maintain a plan for the involvement of other small businesses; as well as, businesses owned by women and minorities.

MANAGEMENT APPROACH

The English W|W Project Management system provides a framework of project management processes and tools for integrating a sound project management methodology into the planning, monitoring, controlling and communicating of the requirements of our client's needs and projects. Our approach is intended to serve as a road map for the proactive integration of critical management activities throughout the project life cycle.

Plan for Adherence to Project Schedule
Our goal will be to proactively manage the design process using our experience on similar projects, our knowledge of federally funded project requirements and our strong project management system.

We will plan and institute a schedule of progress meetings with JRWA, English, W|W and stakeholders share appropriately for the project. We plan to update this schedule bi-weekly with the input of all team members.

Organization of the project input and decision making process and avoidance of rework are the keys to maintaining any schedule. So we pledge to "carry the torch" and stay ahead of this project during each step by maintaining effective lines of communication, going the extra mile and facilitating the information gathering and sharing process.

Plan for Schedule Recovery
Even the best-laid plans can be severely tested at a moment's notice due to unexpected events beyond everyone's control. Schedule recovery planning is essential when a schedule slippage occurs, for whatever
reason.

Our approach will be to proactively manage the project schedule and stay ahead on "critical path" schedule tasks.

Day-to-Day Communications
Successful management is based on the premise that the right information gets to the right people at the right time, so the right decisions can be made.

Timely and responsive communication among design team members, JRWA, Fluvanna County and stakeholders will be essential on this project. We plan to implement a communication plan as follows:

- Conduct regular internal and external coordination meetings and distribute action oriented meeting minutes promptly.
- Maintain an open issues log with regular follow-ups.
- Perform daily, in-house desk-to-desk management of team members to ensure everyone has what they need, knows what they must accomplish and when it must be finished.
- Maintain frequent and regular telephone and e-mail communication with Project Team members during each phase of the project.

Risk Assessment and Management

Risks are inherent in the construction of complex facilities such as this. Inclusion of appropriate budget and schedule contingencies will always be required to account for unforeseen conditions or unexpected requirements. We intend to participate in the management of these risks by pro-actively instituting the collaborative QA/QC program outlined above.

We will perform an initial risk assessment at the beginning of the project. This assessment will identify potential risks and appropriate responses and action plans for each, including assigning of responsibilities. It will also identify which risks are within the project teams control and which are not. Once we receive input and it is added to the assessment, this document will become the Project Risk Management Plan. This will be a living document that will be revised as the project progresses, with these revisions occurring at the QA/QC check periods at the end of each phase. This pre-planning of the risk management will allow not only prompt response in the event one of these risks materialize, but will also help facilitate avoiding the risks that fall within the project team's controls.

Communications Plan

Successful management is based on the premise that the right information gets to the right people at the right time so the right decisions can be made. We plan to implement a communication plan as follows:

- Conduct regular internal and external coordination meetings and distribute action-oriented meeting minutes promptly.
- Maintain an electronic based open issues log with regular follow-ups.
- Perform daily management of team members to ensure everyone has what they need, knows what they must accomplish and when it must be finished.
- Maintain frequent and regular telephone and e-mail communication with JRWA and project team members for the duration of the project.

One of the ways we facilitate communication, workflow, accountability and collaboration between the design team, client and core stakeholder group is by implementing a comprehensive web-based communication tool (FTP Site) for projects during the design phases. This tool will provide real time access for all team members and stakeholders to a password protected, secure project file that contains the following:

- Project organization chart and contact information
- Project correspondence
- Meeting minutes
- Open issues 1 action items
- Project schedule
- Project photos
- Project drawings and specifications

Design Build Management

The English & W|W Team believes the success of our work depends on the planning, research and communication that occurs at the onset of the project. By investing diligent effort in these activities up front we can significantly increase the technical, functional, and emotional success of the project.

Our efforts are focused on these main areas:

- Communication, internally amongst our various disciplines, but especially between the Project Team and the James River Water Authority. We know that client's satisfaction will only occur when the Project Team effectively communicates with the client.

The design process involves a translation of the client's expressed needs into the design, and that confirmation of the accuracy of that translation is the key to confirming effective communication.

- Applied Learning from past projects. Our success as professionals is based on our ability to bring to each successive project the lessons learned from our previous projects.
- Leadership within the context of Listening in fulfilling client expectations. The greatest value a design professional can bring to a client is an effective balancing of listening and leading.

An acceptable solution can only be created when we listen and respond to needs expressed by the client. A truly relevant and functional design can only be created when we hear and understand the reasons behind the expressed needs of our clients, and together with them work through the inherent challenges presented by existing constraints. This is design leadership.

Design Build Team Commitment

Our commitment to you:

- Provide enthusiastic and positive team leadership that will foster a team spirit of positive attitudes, enthusiastic participation, willing cooperation and genuine personal interest.
- Ensure that we develop the correct project understanding and clearly understand all scope items.
- Communicate with members of the project team, making sure that the JRWA is informed at all times.
- Deliver the project design on time and on budget.
- Design building systems and components that are cost effective to operate and maintain.
- Produce quality documents that will accurately reflect design decisions made and provide a basis for quality design and construction in future phases.
- Provide Team members who will follow the project all the way through to completion.

Henry L. Lanum, Jr. | Water Filtration Plant Technology Upgrade
ENGLISH CONSTRUCTION

b. Describe the experience of the firm or consortium of firms making the proposal and the key principals involved in the proposed project including experience with projects of comparable size and complexity. Describe the length of time in business, business experience, public sector experience and other engagements of the firm or consortium of firms. Include the identity of any firms that will provide design, construction and completion guarantees and warranties, and a description of such guarantees and warranties.

project team experience

Our team is comprised of two primary firms that will be responsible for the design and construction of the JRWA project. English will serve as the builder, provide project oversight and will lead our team. Wiley|Wilson will serve as project designer and will serve as a subconsultant to English. English will manage the Design-Build firm(s) with direction from a key point of contact within each firm.

ENGLISH CONSTRUCTION COMPANY, INC.

English Construction Company, Inc. is a third generation family-owned business with a tradition of excellence dating back to 1909. Over the last century, English has grown steadily, adding advanced skills, resources and technology to embrace new opportunities along the way. The company's areas of expertise have expanded through the years to include, water supply and wastewater treatment facilities, monumental structures, civil, utility and industrial projects.

Today, English is a multi-disciplined construction firm licensed in eight states throughout the Southeast, with its primary work being performed in Virginia, North Carolina and South Carolina. Working under the leadership of 120 tenured personnel, English's staff of 600 employees have sustained as many as 40 concurrent projects.

The company supports its field staff and projects with a fleet of equipment that is one of the largest in the Mid-Atlantic region.

English's diversity, tenured office, and top-notch field personnel have contributed to the company's solid financial strength, which is evident by its 60-year relationship with the same bonding company. Throughout English Construction's dynamic history, the company has never outgrown the values and mission that have made it successful since its inception in 1909.

KEY PRINCIPAL

Henry Myers, Vice President, will manage the English team and assume total responsibility for each individual to ensure their performance, required time and dedication to the collaborative efforts between the county the design team and stakeholders throughout the life of the project.

KEY PRINCIPAL
HENRY G. MYERS
Vice President
ENGLISH CONSTRUCTION COMPANY, INC.
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Lynchburg, Virginia 24505
Telephone | 434-845-0301
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EMAIL | hmyers@englishconst.com
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project team experience

KEY PRINCIPAL
C. Robert L. Mangrum, P.E., BCEE
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127 Nationwide Drive
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www.wileywilson.com

WILEY|WILSON

Since completing our first project in 1901, Wiley|Wilson has grown into a multi-faceted organization providing architectural, engineering, and planning services. We are 100% employee-owned and continuously growing in numbers and abilities. We deliver our services under a comprehensive system that meets or exceeds the needs of each client from feasibility studies to commissioning. We are architects, engineers, planners, and commissioning agents who work closely together with you to solve each of your problems, large or small. Function, economy, aesthetics, and sustainability are blended into form by a team of Wiley|Wilson specialists who are committed to technical excellence and Constant Progress.

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Wiley|Wilson has a staff of 153 personnel, 72 of whom are registered professionals and 33 are Leadership in Energy and Environmental Design (LEED) Accredited Professionals. Our staff diversity has evolved over 113 years from a single consulting mechanical engineer to a diversified staff representing architecture, planning, and all traditional engineering disciplines as well as computer services personnel, computer aided design personnel, commissioning agents, surveyors, and construction administrators.

Wiley|Wilson is a Virginia-Certified Small Business (ID #010503), and as such, we also maintain a plan for the involvement of other small businesses; as well as, businesses owned by women and minorities.

The English | Wiley|Wilson team has significant experience providing professional services related to the various facilities and technologies that make up the backbone of a water storage system.

HENRY MYERS
Executive Manager

Henry Myers joined English in June 1998 after completing his Bachelors degree at the University of Virginia in Civil Engineering. He brings 16 years of construction experience and has been involved in all aspects of construction from field engineer, project coordinator, superintendent and presently executive project manager and vice president /utilities division manager. Henry has worked on a variety of projects where his organizational and problem-solving skills have proven valuable in bringing projects to successful completion. He has also delivered a variety of projects using various procurement methods including Design-Build, Negotiated, and Competitive Bid. Henry's experience as executive manager on Virginia Commonwealth projects will provide invaluable experience in terms of knowing the necessary steps required for reviews, the time-lines required for reviews, inspections and other critical tasks. His experience on water and wastewater projects has helped him understand the critical aspects of working around municipal facilities, with regard to grading, infrastructure, regulatory requirements, etc.

EDUCATION

Masters of Business Administration, Lynchburg College, 2005
Bachelor of Science, Civil Engineering, University of Virginia, 1997

REGISTRATIONS

Class A Contractor's License in Virginia & North Carolina

MEMBERSHIP | AFFILIATIONS

American Society of Civil Engineers
Design-Build Institute of America

SELECTED PROJECT EXPERIENCE

- Clevengers Village Water Treatment Plant and Well Pump Installations, Culpeper County, VA (with Wiley | Wilson)
- County of Buckingham Water Treatment Plant, Dillwyn, VA
- South Church Street Water Treatment Facility, Smithfield, VA
- Town of Front Royal Water Treatment Plant Upgrades, Front Royal, VA
- Henry L. Lanum, Jr. Water Filtration Plant Technology Upgrade, Amherst, VA
- North Fork Regional Pump Station and Camelot Pump Station, Charlottesville, VA
- Charles City Road Sewage Pumping Station, Henrico County, VA
- Town of Orange Wastewater Treatment Plant, Orange, VA (with Wiley | Wilson)
- Moneta Wastewater Treatment Plant & Collection System, Moneta, VA
- C. N. Chitty Booster Pumping Station Electrical and Pump Upgrades, Winston-Salem, NC
- C-N-W Regional Wastewater Treatment Plant Expansion, Wise County, VA
- Richmond Wastewater Treatment Plant, Nutrient Reduction Program Contract 5, Richmond, VA
- Clifton Forge Wastewater Treatment Plant, Clifton Forge, VA
- Neuse River Wastewater Treatment Plant Expansion to 75 MGD, Blower Expansion, Contract 1, Raleigh, NC
- Parham Landing Wastewater Treatment Plant Upgrade, New Kent County, VA
- Nutrient Removal Upgrade Project, Lexington-Rockbridge Regional WQCF, Lexington, VA
- Fredericksburg Wastewater Treatment Plant Upgrade, Fredericksburg, VA
- Westside Wastewater Treatment Plant Upgrades, High Point, NC
- Mt. Jackson Wastewater Treatment Plant, Mt. Jackson, VA
- Middle River Wastewater Treatment Plant Upgrades, Verona, VA
- Town of Lovettsville Wastewater Treatment Plant Upgrades, Lovettsville, VA
- St. Brides Correctional Center Wastewater Treatment Plant Upgrade, Chesapeake, VA

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Since 1909

ROBERT HALPIN
Preconstruction Manager

Mr. Halpin joined English Construction in 1981 and has served the firm in various capacities, including project superintendent and project manager. His experience includes estimating for utility and building projects. Robert is experienced in identifying opportunities for alternative materials, systems and methods that save dollars while maintaining design intent and desired quality standards. Along with the estimating team, Robert will create the baseline budget estimate, generate subcontractor interest, and will work closely with the architect/engineering staff as the design evolves to produce detailed estimates and alternative options analyses.

EDUCATION

Bachelor of Science, Forest Engineering
College of Environmental
Science and Forestry
State University of New York at Syracuse

REGISTRATIONS | CERTIFICATIONS

C.P.R.
First Aid
Osha Scaffold Training
Environmental Controls State of Virginia
Traffic Control V.D.O.T.
State of Virginia-Field Concrete Tech
Virginia Erosion & Sedimentation
Responsible Land Disturber

MEMBERSHIP | AFFILIATIONS

American Water Works Association

SELECTED PROJECT EXPERIENCE

- North Fork Regional Pump Station and Camelot Pump Station, Charlottesville, VA
- Clevengers Village Water Treatment Plant and Well Pump Installations, Culpeper County, VA (with Wiley | Wilson)
- County of Buckingham Water Treatment Plant, Dillwyn, VA
- South Church Street Water Treatment Facility, Smithfield, VA
- Town of Front Royal Water Treatment Plant Upgrades, Front Royal, VA
- Henry L. Lanum, Jr. Water Filtration Plant Technology Upgrade, Amherst, VA
- Water Treatment Plant, Salem, VA
- Water Treatment Plant Improvements, Altavista, VA
- Water Treatment Plant Improvements, Gretna, VA
- Water Treatment Plant Improvements, Radford, VA
- Water Treatment Plant Improvements Reidsville, NC
- Water Treatment Plant Sedimentation Basins Upgrade, Richmond, VA
- Water Treatment Plant Chemical Systems Expansion, Richmond, VA
- Town of Orange Wastewater Treatment Plant, Orange, VA (with Wiley | Wilson)
- C. N. Chitty Booster Pumping Station Electrical and Pump Upgrades, Winston-Salem, NC
- C-N-W Regional Wastewater Treatment Plant Expansion, Wise County, VA
- Richmond Wastewater Treatment Plant, Nutrient Reduction Program Contract 5, Richmond, VA
- Charles City Road Sewage Pumping Station, Henrico County, VA
- Clifton Forge Wastewater Treatment Plant, Clifton Forge, VA
- Neuse River Wastewater Treatment Plant Expansion to 75 MGD, Blower Expansion, Contract 1, Raleigh, NC
- Parham Landing Wastewater Treatment Plant Upgrade, New Kent County, VA
- Nutrient Removal Upgrade Project, Lexington-Rockbridge Regional WQCF, Lexington, VA
- Fredericksburg Wastewater Treatment Plant Upgrade, Fredericksburg, VA
- Westside Wastewater Treatment Plant Upgrades, High Point, NC
- Mt. Jackson Wastewater Treatment Plant, Mt. Jackson, VA

JORDAN COMBS
Project Manager

Jordan Combs is a 2008 graduate of Virginia Military Institute and holds a Bachelors degree in Civil and Environmental Engineering. Jordan began his construction career in 2008 and then joined English in December of 2012. He brings a solid background of experience in maintaining key client relationships and handling all aspects of project activity as well as experience in water and wastewater treatment processes, which include conventional and advanced treatment processes. For JRWA, Jordan's responsibilities assist project executive Henry Myers in project management, evaluations, project profitability, A/R, Q/C, and management of the project team members.

EDUCATION
Bachelor of Science, Civil and Environmental Engineering
Virginia Military Institute, 2008

REGISTRATIONS
PE, Virginia
0402050848

MEMBERSHIP | AFFILIATIONS
American Society of Civil Engineers Member
Water Environment Federation
Member #17770572

SELECTED PROJECT EXPERIENCE

- Invista S.A.R.L. Waynesboro Plant, Waynesboro, VA
- Coeburn-Norton-Wise Regional Wastewater Treatment Plant Expansion, Wise County, VA
- Grottoes Wastewater Treatment Plant Improvements, Grottoes, VA

Prior Experience

- North Fork Pump Station and Force Main, Town of New Market, VA
- Mason Avenue Force Mains and Sewers, Town of Cape Charles, VA
- Wastewater Treatment Plant Enhanced Nutrient Removal Upgrade and Expansion, Town of Cape Charles, VA
- Massanutten Public Service Corporation | Sludge Storage Tank, McGaheysville, VA
- Nutrient Removal Upgrade Project Maury Service Authority, Lexington, VA
- Dorsey Road Water Treatment Plant Repairs | Anne Arundel County, MD

SCOTT BAILEY
Project Superintendent

Scott Bailey brings more than 20 years of experience in the construction industry on a vast array of construction projects. His 20 year history has evolved into a resume that includes a broad-base construction knowledge of projects ranging from wastewater treatment plants to residential, commercial and industrial building. Prior to joining English Construction, Scott was heavily involved on the Zion Crossroads wastewater treatment plant located in Gordonsville, Virginia. The project entailed an array of activities that included the construction of 4 electrial buildings and a, 200,000 gallon B&R tank. Scott applies his hands-on experience by keeping a meticulous eye on schedule, budget and quality control. His experience and training include various specialized trades and crafts such as pipe-fitting, cement testing and inspection, rigging and a 30 hour VOSHA safety certification. Scott operates a wide variety of construction equipment including everything from a backhoe to several varieties of cranes, all giving him additional value to any jobsite or project that he delivers.

REFERENCES

Mr. Gary Weddle
VA Department of Corrections
6900 Atmore Drive, Room 2034
Richmond, VA 23225
804.674.3102 ext. 1223
gary.weddle@vadoc.virginia.gov

Mr. Paul S. Hunt, CCM
Construction Manager, Arcadis
8001 Franklin Farms Dr. #233
Richmond, Virginia 23229
804.339.8309
Paul.Hunt@arcadis-us.com

SELECTED PROJECT EXPERIENCE

Zion Crossroads Wastewater Treatment Plant, Gordonsville, VA
The scope of work covered by these specifications consisted of labor, equipment, materials and all work for necessary for the construction of the proposed 4 electrical buildings, 1 dewatering building, 2 clarifier tanks, 1 RAS/WAS building, 200,000 gallon B&R tank, 1 Filter building, new UV structure, post aeration, new head works site grading, installation of piping and metering systems, monitoring systems, in accordance with the grades, limits, locations & details as shown on the drawings & as specified.
Contract Amount: $10.5 million

Liberty Ridge Well Facility, Williamsburg, VA
The scope of work covered by these specifications consist of furnishing all labor, equipment, materials & performing all work necessary for the construction of the proposed buildings, tanks, site grading, installation of piping and metering systems, monitoring systems, well pumps, disinfection systems, booster pumps, site work, emergency power, drainage & related misc. work at the Liberty Ridge Well Facility in accordance with the grades, limits, locations & details as shown on the drawings & as specified.
Contract Amount: $2 million

CSO #12 Solids & Floatable Control Regulator & CSO #31 Peripheral In-Line Flow Equalization, Henrico, VA
This segment of the City of Richmond, Combined Sewer Overflow Control program included installation of peripheral in-line flow equalization at the Oakwood Interceptor (CSO #31) and a Solids and Floatable Control Regulator for CSO #12. CSO #31 work also entailed rehabilitation of approximately 3,700 linear feet of 30-inch intercepting sewer line with cure-in-place-pipe (CIPP).

NED HALPIN
Project Coordinator

As project coordinator, Ned will manage the day-to-day activities of the project for the James River Water Authority and will work in consultation with Jordan Combs, project manager. Ned will coordinate the transmission of submittals and will act as liaison among English, the subcontractors, architects, and owner. He has over 25 years of construction-related experience on projects ranging from water, wastewater treatment and conveyance facilities to interstate highway and bridgework. His duties began as survey party chief and have progressed to project manager. Responsibilities include monthly pay estimates, planning work schedules for the labor forces, change order estimates, correspondence, shop drawing submittal coordination, and other contract administration duties. He has experience with construction management tools including CPM Scheduling, Expedieition and Sage Timberline document tracking software and cost estimating.

EDUCATION

Bachelor of Science
Civil Engineering
Brigham Young University, 1987

Associate of Applied Science
Construction Technology,
Tompkins-Cortland Community
College, Cortland, NY, 1977

SELECTED PROJECT EXPERIENCE

- County of Buckingham Water Treatment Plant, Dillwyn, VA
- Parham Landing Wastewater Treatment Plant, New Kent, VA
- Meadow Event Park, State Fair of VA
- Randolph-Macon College Student Housing, Ashland, VA

Prior Experience

- Water Treatment Plant, Henrico, VA
- Water Treatment Plant, City of Richmond, VA
- Wastewater Treatment Plant, City of Richmond, VA
- Wastewater Treatment Plant, Henrico, VA
- Massaponax Gravity Sewer, Spotsylvania, VA
- Orange County Wastewater Treatment Plant Upgrades, Orange, VA
- Powhite Toll Road, Richmond, VA
- Route 28, Northern VA
- Dulles Airport, Washington, DC

MICHAEL SCOTT
Safety Manager

Mr. Scott joined English in 2010 and serves as the firm's safety manager. Mike's sole responsibility is to ensure that English's work is performed safely, and that all projects remain compliant with all applicable state requirements and support the English Safety Manual. His experience in the safety field has ranged from complicated bridge and roadway projects to structural building, including tremendous fall protection experience and issues on large excavation operations. Mike came to English from Skanska after having served as Environmental Health and Safety Coordinator for seven (7) years. During that time, he was responsible for the safety management of multiple job sites ranging in access of $140 million dollars (i.e. inspect for job safety violations and environmental hazards, working with subcontractors to develop site specific safety plans, investigate and document incidents of injury if occurred).

EDUCATION
Tunstall High School

CERTIFICATIONS
Competent Person Training for Trenching, Confined Space and Scaffolding

Competent Person/Authorized Worker Fall Protection

Electrical Safety Training NFPA 70E

Fork Lift Operator Training Certified

CPR/First Aid Instructor

NCDOT WZTC Flagger & Instructor

OSHA 10 & 30 Hour

OSHA Crane Standard (Zurich)

Underground Utility Damage Prevention Training

- County of Buckingham Water Treatment Plant, Dillwyn, VA
- South Church Street Water Treatment Facility, Smithfield, VA
- Henry L. Lanum, Jr. Water Filtration Plant Technology Upgrade, Amherst, VA
- Orange County Wastewater Treatment Plant Upgrades, Orange, VA

ROB MANGRUM, PE, BCEE
Project Manager

Rob is a registered engineer and is board certified by the American Academy of Environmental Engineers. He has experience in advanced wastewater BNR process evaluations, bench-scale and pilot plant evaluations, preliminary engineering reports, and detailed design and construction administration of municipal wastewater biological nutrient removal and tertiary treatment facilities to meet strict effluent nutrient limits (TN < 3 mg/l; TP < 0.1 mg/l). Rob's biological nutrient removal experience includes design of four stage and five stage Bardenpho systems, 5-cycle sequencing batch reactor systems, and MLE systems followed by attached growth deep-bed denitrifcation filters. His tertiary treatment experience includes physical-chemical processes used to achieve low (< 0.1 mg/l) effluent phosphorus concentrations and membrane bioreactors (MBR) to achieve limit of technology limits for both TN and TP. Rob also has a wide range of experience in solids handling, thickening, dewatering and many treatment methods employed to achieve both Class A and B standards for municipal sludges. He also has experience in conveyance and collection system design and modeling.

EDUCATION

Master of Science, Environmental Engineering
Virginia Tech, 1998
Bachelor of Science, Civil Engineering
Clemson University, 1994

REGISTRATIONS

Professional Engineer in Virginia & Florida

MEMBERSHIP | AFFILIATIONS

Water Environment Federation
Board Certified Environmental Engineer (BCEE) in Wastewater Treatment by the American Academy of Environmental Engineers - AAEE (certified in 2003)
Virginia Water Environment Association

SELECTED PROJECT EXPERIENCE

- City of Harrisonburg North River Pump Station Upgrade, Harrisonburg, VA
- City of Lynchburg Carroll Avenue Pump Station, Lynchburg, VA
- Town of Broadway Plains Mill Spring Water Treatment Plant, Broadway, VA (With English Construction)
- City of Lynchburg Abert Water Treatment Plant (10 MGD) Rehabilitation Project, Lynchburg, VA
- Town of Strasburg Membrane WTP Engineering Report (1.5 MG), Strasburg, VA
- Town of Keysville Water Supply and Treatment Evaluation and Upgrade Projects, Keysville, VA
- City of Lynchburg Evaluation and Design of New High Pressure Zone that also Facilitates a Sustained 7 MGD Back-Feed to the College Hill WTP, Lynchburg, VA
- Town of Orange Consultation for Modifications to the WTP, Orange, VA
- City of Lynchburg 1061 Emergency Transfer Project, Lynchburg, VA
- City of Lynchburg Wingate Tank No. 2, Lynchburg, VA
- City of Bedford Local Limits Evaluation, Bedford, VA
- Culpeper County Greens Corner Advanced Wastewater Treatment Plant Membrane Bioreactor (0.1 MGD), Culpeper, VA (with English Construction)
- Powhatan County SBR Evaluation (0.25 MGD), Powhatan, VA
- City of Lynchburg Combined Sewer Overflow Projects, Lynchburg, VA

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BILL KOREGAY, PH.D, PE

Environmental Process Consultant/Water Treatment Plant Design

Bill has a broad range of environmental engineering experience in academia, industry and the consulting field including extensive research, pilot studies, and process design. Wastewater process experience involves physical/chemical and biological processes including the development of rational design models for trickling filters and rotating biological contractors. Extensive experience with carbon adsorption, regeneration and nitrification. Water process experience involves conventional processes plus high rate filtration, ozonation and carbon adsorption. Follows development of new regulations under the Safe Drinking Water Act (SDWA) closely, and is involved with major pilot studies to comply with present and pending regulations.

EDUCATION

Ph.D. Environmental Systems Engineering, Clemson University, 1969

Master of Science, Water Resources Engineering
Clemson University, 1964

BSCE, Civil Engineering
Virginia Military Institute, 1959

REGISTRATIONS

Professional Engineer in Virginia & Georgia

MEMBERSHIP | AFFILIATIONS

Water Environment Federation

Virginia Water Pollution Control Association

SELECTED PROJECT EXPERIENCE

- Town of Red Springs Activated Carbon Evaluation for the Removal of Whole Effluent Toxicity, Red Springs, NC
- Town of Star Town of Red Springs for the Removal of Whole Effluent Toxicity, Star, NC
- Salt Lake City Value Engineering for the Expansion of the Little Cottonwood Creek Water Treatment Plant (150 MGD), Salt Lake City, UT
- Parsons Engineering Science, Inc., Assist with the process design for 400 water treatment plants in Iraq
- City of Williamsburg Water Treatment Plant evaluation to improve performance and ensure compliance with the SDWA, Williamsburg, VA
- Town of Culpeper Groundwater Treatment Process for the removal of iron, manganese, radon, and radium to comply with the SDWA and increase capacity, Culpeper, VA

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TOM FITZGERALD, PE
Senior Civil Engineer/Waterline Design

Tom has 22 Years of comprehensive civil and environmental engineering design, construction and operations experience in the Mid-Atlantic and European regions. His design experience includes design, construction, operation, and maintenance of water, wastewater and solid waste infrastructure serving a variety of municipal and industrial needs. Water system experience includes new source development, capital option studies, pump station design, treatment process upgrades, residuals handling, distribution analysis, storage tank upgrades, and distribution improvements. He has designed numerous wastewater system improvements, including network extensions, gravity and force main collection system upgrades, treatment plant additions, lift station designs, wet weather flow abatement designs and comprehensive non-point source pollution control plans. Solid and hazardous waste experience includes inert debris landfill site management, RCRA TSDF operation, CERCLA site management, remedial action designs, UST management, and recycling and landfill system improvement.

EDUCATION
Bachelor of Science, Civil Engineering-Water Resources
University of South Carolina, 1990

REGISTRATIONS
Professional Engineer in Virginia, DC, Maryland, North Carolina, South Carolina,

MEMBERSHIP | AFFILIATIONS
American Academy of Environmental Engineers
American Water Works Association
Virginia Municipal Stormwater Association

SELECTED PROJECT EXPERIENCE

- City of Harrisonburg North River Pump Station Upgrade, Harrisonburg, VA
- City of Harrisonburg Intake and Pumping Station at South Fork Shenandoah River (8 MGD), Harrisonburg, VA
- City of Harrisonburg High Zone Water Modeling, Harrisonburg, VA
- City of Harrisonburg Raw Water Pumping Station (8 MGD), Harrisonburg, VA
- City of Harrisonburg North River Pump Station Study Assessment Management Plan, Harrisonburg, VA
- City of Harrisonburg Parkview Water System Improvements, Harrisonburg, VA
- City of Harrisonburg Comprehensive Water System Engineering, Harrisonburg, VA
- City of Harrisonburg Finished Water Reservoir Replacement, (22 MGD) Harrisonburg, VA
- City of Harrisonburg Finished Water Storage Tank, Harrisonburg, VA
- City of Harrisonburg Raw Waterline Design, Harrisonburg, VA
- Nelson County Service Authority Water Tank, Pump Station, and Pipeline Environmental Review and Preliminary Engineering Report, Lovingston, VA
- City of Lynchburg Abert Water Treatment Plant Chemical Feed Improvements, Lynchburg, VA
- RAF Croughton Replacement Water Treatment Facility and Source Development, United Kingdom
- Marine Corps Station System Engineer and Water Board Chairman, Cherry Point, NC

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AARON TICE, PE

Project Civil Engineer/Water Treatment Plant Design

Aaron's hydraulic modeling experience includes developing, calibrating, and evaluating water system hydraulic models using EPANET and WaterCAD/GEMS hydraulic modeling packages. Municipal engineering experience includes study and design of water distribution systems, pumping stations, pressure zones and system expansions.

Hydraulic modeling of water distribution systems focuses on application of hydraulic modeling to optimize water distribution system pressure distribution, fire flow delivery capability and maximizing existing assets to efficiently expand water systems.

Water distribution system experience includes waterline design, evaluating new water storage tank sites, developing and calibrating system models, and application of hydraulic modeling to optimize water distribution system pressure distribution and fire flow delivery capability and modeling.

EDUCATION

Master of Science, Environmental Engineering Michigan Technological University, 2006

Bachelor of Science, Environmental Engineering Michigan Technological University, 2005

REGISTRATIONS

Professional Engineer in Virginia

MEMBERSHIP | AFFILIATIONS

American Academy of Environmental Engineers

Water Environment Federation

American Water Works Association

SELECTED PROJECT EXPERIENCE

- City of Lynchburg Carroll Avenue Pump Station, Lynchburg, VA
- City of Lynchburg 1005 Pressure Zone Improvements Study, Lynchburg, VA
- Town of Broadway Raw Water Pump Station and Raw Water Transmission Line Broadway, VA
- City of Lynchburg Wards Ferry Pump Station, Lynchburg, VA
- Nelson County Service Authority Water Tank, Pump Station, and Pipeline Environmental Review and Preliminary Engineering Report, Lovingston, VA
- Town of Broadway Plains Mill Spring Water Treatment Plant (2 MGD), Raw Water Pump Station, and Raw Water Transmission Line, Broadway, VA
- City of Williamsburg Raw Water Intake, Williamsburg, VA
- City of Harrisonburg Water System Evaluation, Harrisonburg, VA
- Town of Tappahannock Water Distribution System Study, Tappahannock, VA
- Town of Keysville Water Supply and Treatment Evaluation and Upgrade Projects, Keysville, VA
- City of Lynchburg 1061 Emergency Transfer Project, Lynchburg, VA
- City of Lynchburg Wingate Tank No. 2, Lynchburg, VA
- New Kent County Water System Evaluation, New Kent, VA
- City of Harrisonburg Raw Water Study, Harrisonburg, VA
- Town of Altavista Raw Water Supply Line, Altavista, VA
- Halifax County Service Authority Cowford Road Pump Station an Forcemain, South Boston, VA
- City of Harrisonburg Parkview Water System Improvements, Harrisonburg, VA

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KEITH THOMPSON, PE, LEED AP BD+C, ENV SP

Civil Engineer/Waterline Design

Keith's design experience includes evaluation and design of gravity storm and sanitary sewers, street improvements, site improvements, waterline upgrades, extended detention ponds, sanitary sewer interceptors, combined sewer overflow solutions, and sanitary sewer rehabilitation.

He has served as design engineer on multiple City of Lynchburg Combined Sewer Overflow projects which included 63,000 feet of 8-inch to 30-inch gravity sewer and 27,000 feet of 8-inch to 24-inch sanitary sewer rehabilitation

EDUCATION

Bachelor of Science, Civil Engineering Technology
Old Dominion University, 2002
AA&S, Education, Central Virginia Community College, 2001
Associates in Applied Science
Civil/Architectural Engineering Technology, Central Virginia Community College, 2000

REGISTRATIONS

Professional Engineer in Virginia

MEMBERSHIP | AFFILIATIONS

Virginia Municipal Stormwater Association

SELECTED PROJECT EXPERIENCE

- City of Lynchburg Waterline Replacement Projects, Lynchburg, VA
- City of Lynchburg Jefferson Street North and Bluff Walk Waterline Replacement, New Storm Sewers and Sanitary Sewer Infrastructure, Lynchburg, VA
- City of Lynchburg Burton Creek Interceptor, Lynchburg, VA
- City of Lynchburg Horseford Waterline, Lynchburg, VA
- City of Lynchburg Long Term Control Plan Water Quality Monitoring, Lynchburg, VA
- City of Lynchburg Long Term Control Plan Water Quality Sampling Program, Lynchburg, VA
- City of Lynchburg CSO Inspection Ineligible Water, Lynchburg, VA
- Randolph College Rainleader Disconnect Project, Lynchburg, VA
- City of Lynchburg CSO Water Design, Lynchburg, VA
- City of Lynchburg CSO Inspection Ineligible Sewer, Lynchburg, VA
- Halifax County Service Authority Cowford Road Pump Station an Forcemain, South Boston, VA

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TIM WAGNER, PE
Civil Engineer/Wetlands and Permitting

Tim has specialized in site development planning and the design of site concept plans; industrial site selection studies; wetland delineation and permitting; stormwater system and stormwater management design; and water and sewer infrastructure studies and design.

Tim's experience in site planning and design has ranged from residential subdivisions to retail developments, industrial parks, and facilities. Being the leader in site development for the firm, Tim is involved in all aspects of site planning and design including; master planning, surveying, site layout, grading, utilities, landscaping, permitting, bidding, construction administration, and construction inspection.

EDUCATION
BS, Civil Engineering
Virginia Tech, 1989

REGISTRATIONS
Professional Engineer in
Virginia, North Carolina, West Virginia

MEMBERSHIP | AFFILIATIONS
American Academy of Environmental Engineers
American Water Works Association
Virginia Municipal Stormwater Association

SELECTED PROJECT EXPERIENCE

- Halifax Banister River Gateway Wetland Delineation and Joint Permit Application, Halifax, VA
- Hanover County Department of Public Utilities Lower Opossum Creek Sewerage Improvements Wetland and Permitting, Hanover County, VA
- Henrico County Storm Drainage Projects Wetland Investigations and Permitting Henrico County, VA
- The Home Depot Lynchburg/Creekside Drive Wetland Monitoring, Lynchburg, VA
- Arey Lake Goodyear Tire and Rubber Wetland Delineation around an Existing Lake, Danville, VA
- Henry County Commonwealth Crossing Business Centre Megasite Waterline Extension and Wetlands and Permitting, Henry County, VA
- Henry County Patriot Centre at Beaver Creek Waterlines, Erosion and Sediment Control, and Wetland Delineation and Permitting, Henry County, VA
- Orange County Water Supply Plan, Orange, VA
- Town of Clarksville Water System Study, Clarksville, VA
- City of Lynchburg Water Quality Improvement Grants, Lynchburg, VA
- Hanover County Department of Public Utilities Route 1 Waterline, Hanover County, VA
- Town of Hurt Booster Pump Station Improvements, Hurt, VA
- Town of Amherst Waterline Engineering Design, Amherst, VA

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BILL DAVIDGE, PE
Structural Engineer

Bill has designed a variety of structure types including dams; industrial facilities; office buildings; highway and railway bridges long and short span; transit facilities; institutional facilities; water storage, treatment, and pumping facilities; wastewater pumping facilities; supports of excavation; and building and bridge renovations.

His experience includes inspection, structural analysis, emergency response, construction administration, project management, design for anti-terrorism, and forensic consulting. He has been responsible for design or multi-disciplinary management for many projects including those listed below.

EDUCATION
MS, Structural Engineering
George Washington University, 1977
BS, Civil Engineering
University of Virginia, 1973

REGISTRATIONS
Professional Engineer in Virginia, Maryland, North Carolina, Georgia, California

MEMBERSHIP | AFFILIATIONS
American Society of Civil Engineers
National Society of Professional Engineers
Virginia Society of Professional Engineers
Joint ASCE/ACI Committee on Concrete Bridge Design
Virginia Section, Institute of Transportation Engineers

SELECTED PROJECT EXPERIENCE

- City of Harrisonburg North River Pump Station Upgrade, Harrisonburg, VA
- City of Lynchburg Wards Ferry Road Pump Station, Lynchburg, VA
- City of Newport News Pump Station Rehabilitation, Newport News, VA
- City of Williamsburg Structural Design of Filter Plant Addition, in Ground Basins, Flumes, 3-story Building Addition, and Chlorine Cylinder Handling System, Williamsburg, VA
- Appomattox River Water Authority Structural Modifications to Existing Concrete Basins and Design of New Basins, Petersburg, VA
- City of Bedford, Materials Handling System for a New Hydroelectric Generating Facility, Bedford VA
- City of Harrisonburg Structural Design for 2.5 MG Standpipe Foundation and Valve House, Harrisonburg, VA
- Hanover County Structural Recommendations for Repairs to Steel Water Tank, Hanover County, VA
- City of Newport News Structural Design of Newmarket Creek Drainage Improvements, Newport News, VA

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STEVE BOWMAN, PE
Electrical Engineer

Steve's has experience at all levels of electrical power systems design, with medium voltage distribution systems analysis, design, and protection; as well as, master planning efforts for these systems. He has designed low voltage electrical systems for buildings, both new facilities and renovations

Prior to joining Wiley|Wilson, Steve was employed by Allegheny Power System and by International Technical Assistance Group, where his experience was in power transmission system design, distribution system planning, design, and protection.

Steve also has experience designing industrial power and controls systems, water and wastewater plant electrical systems, outdoor lighting systems, and electronic security systems, which have included access control, closed circuit television (CCTV), and perimeter security systems.

EDUCATION
BS, Electrical Engineering
Virginia Tech, 1990

REGISTRATIONS
Professional Engineer in Virginia, DC, Maryland, North Carolina, Pennsylvania

MEMBERSHIP | AFFILIATIONS
Institute of Electrical and Electronic Engineers

SELECTED PROJECT EXPERIENCE

- Nelson County Service Authority Water Tank, Pump Station, and Pipeline Environmental Review and Preliminary Engineering Report, Lovingston, VA
- Campbell County Utilities & Service Authority Yellow Branch and Lynbrook Pump Stations Electrical Power Systems, Campbell County, VA
- Campbell County Utilities & Service Authority Spring Hill Sewer Electrical Power System for Two Pumping Stations, Campbell County, VA
- Campbell County Utilities & Service Authority Liberty Village Pump Station Electrical Power Systems, Campbell County, VA
- City of Lynchburg Mill Lane Pump Station Replacement and Electrical Study, Lynchburg, VA
- City of Lynchburg Abert Pump Station Electrical Study, Lynchburg, VA
- City of Newport News Pump Station, Newport News, VA
- City of Lynchburg College Hill Water Treatment Plant Electrical Modifications Pump Replacement Project, Lynchburg, VA
- City of Roanoke Crystal Springs Water Treatment Plant (5.0 MG) Electrical Power System, Roanoke, VA (With English Construction)
- City of Lynchburg Wastewater Treatment Plant (15 MGD) Arc Flash Hazard Analysis, Lynchburg, VA
- Department of Veterans Affairs Medical Center Salisbury Water Tower Electrical Design, Salisbury, NC

RANDY VAUGHAN, AIA, LEED AP BD+C
Architect

Randy's responsibilities include firm management, project management, and technical production and review. He is active in all phases of the practice of architecture, including master planning, schematic design, design development, construction documents, and construction administration His experience has included leading multi-discipline teams for green field facilities, additions, and renovations of commercial, educational, governmental, and industrial facilities

EDUCATION
Bachelor of Architecture
Virginia Tech, 1981

REGISTRATIONS
Professional Architect in
Virginia, North Carolina, South Carolina

MEMBERSHIP | AFFILIATIONS
American Institute of Architects

SELECTED PROJECT EXPERIENCE

- Smyth County E-911 Renovation Design Services, Marion, VA
- Tazewell County Space Needs Study, Tazewell, VA
- City of Portsmouth Emergency Communication Center, Portsmouth, VA
- Hanover County Emergency Communication Center, Hanover, VA
- Nelson County Courts Needs Assessment, New Judicial Center and Public Safety Building, Lovingston, VA
- Powhatan County Space Needs Study for Governmental and Security Needs, Powhatan, VA
- Bedford Area Welcome Center, Bedford, VA
- Goochland County Emergency Communication Center, Goochland, VA
- Region 2000 The Center for Advanced Engineering and Research Educational Center, Bedford, VA
- Smyth County Administration Building, Marion, VA
- Montgomery County Public Safety Building, Christiansburg, VA

project team experience

The experience and past performance of our team members is demonstrated by the project write-ups provided on the following pages. Projects describe a sampling of our individual firm's experience as well as projects where our design-build team has joint experience.

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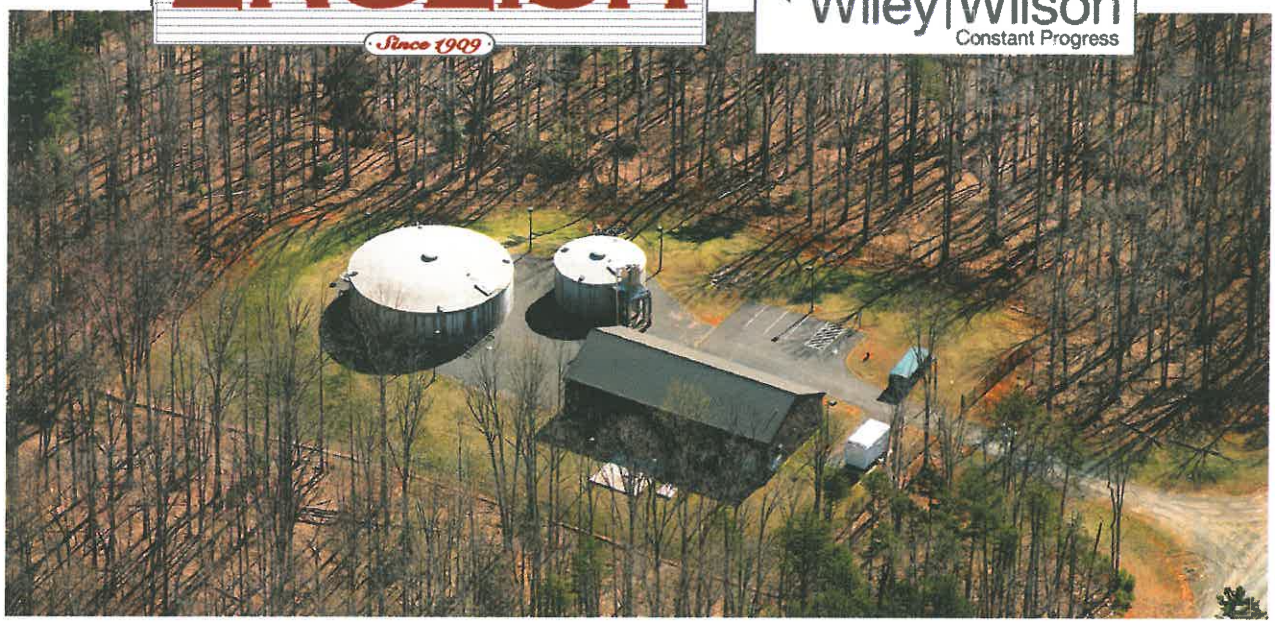

Clevengers Village Water Treatment Plant

Clevengers Village Well and Pump Installations

CULPEPER COUNTY, VIRGINIA

OWNER | Culpeper County, VA
118 West Davis Street
Suite 101
Culpeper, VA 22701
Paul Howard | 540-947-1901

ENGINEERS | WILEY|WILSON
PO Box 877
Lynchburg, VA 24505
Dennis Knight, Jr. PE | 434-947-1901

CONTRACT TYPE | AMOUNT | CAPACITY
Design-Bid-Build | $5,722,264 | 600 GPM

COMPLETION DATE | June 2008

English Construction and Wiley | Wilson performed services for Culpeper County that included planning, design and construction of a new 600 GPM water treatment plant to treat well water. The plant was designed to remove iron, manganese, radon, and arsenic to meet drinking water standards.

Construction administration included submittal reviews, site visits, progress meetings, contractor RFI responses, review of contractor's requests for payment, final completion and record drawings.

- Source water studies
- Preliminary design
- Fast-track specs
- Chemical feed design
- Hypochlorite disinfection
- Building design
- Site planning and design
- Design-build coordination
- Cost estimating
- County liaison

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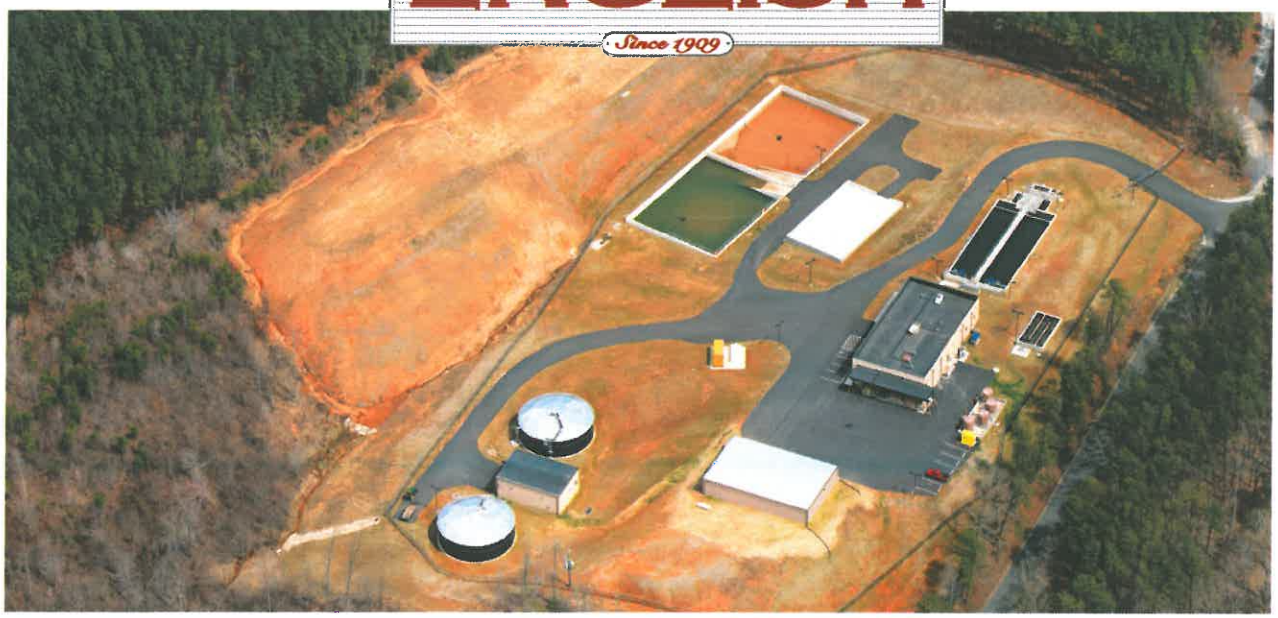

Buckingham County Water Treatment Plant

DILLWYN, VIRGINIA

OWNER | County of Buckingham
13360 West James Anderson Highway
Buckingham, VA 23921
Mike Markley | 434-969-5021

ENGINEER | Arcadis
1100 Welborne Drive, Suite 100
Richmond, VA 23229
Kurt Weishaar | 804-740-0181

CONTRACT TYPE | AMOUNT | CAPACITY
Design-Bid-Build | $10,643,629 | 1.65 MGD |
Pump Station 52 acres

COMPLETION DATE | February 2013

The Buckingham Water Treatment Plant project consisted of the construction of a new 1.65 MGD water treatment plant located at two separate sites. The Raw Water Pump Station (RWPS) is adjacent to the county's 52-acre reservoir and is a cast-in-place concrete structure. The Water Treatment Plant work included the filter building, sedimentation basins with flocculator and flash mix tanks, two clear wells, finished water pump station, finished water line, and numerous yard pipe systems.

The Water Treatment Plant (WTP), which is ¼-mile from the reservoir is situated on a green site. The RWPS work includes a raw water intake structure, screen structure, pump station and main.

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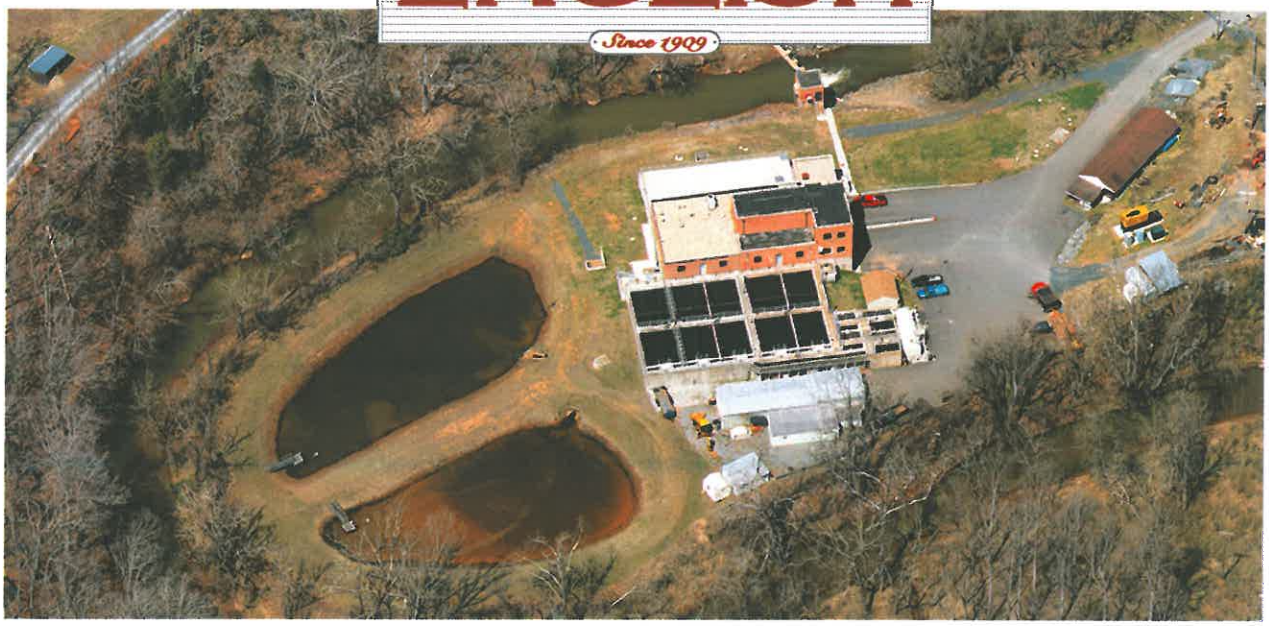

Henry L. Lanum, Jr.
Water Filtration Plant Technology Upgrade

AMHERST COUNTY, VIRGINIA

English completed upgrades to a water filtration plant including new cast-in-place reinforced concrete clearwell, building expansion and furnishings, electrical service upgrades, vertical turbine pumps, top entry mixers, suction manifold type sludge collection equipment, tube settlers, filter bottoms and filter air scour equipment, dry chemical feed equipment, instrumentation and controls.

OWNER | Amherst County, VA
Amherst County Service Authority
113 Phelps Road
Madison Heights, VA 24572
Dan French | 434-845-1606

ENGINEERS | Arcadis
One Centerview Drive
Suite 208
Greensboro, NC 27407
David Cain | 336-292-2271

CONTRACT TYPE | AMOUNT
Design-Bid-Build | $6,550,650

COMPLETION DATE | March 2012

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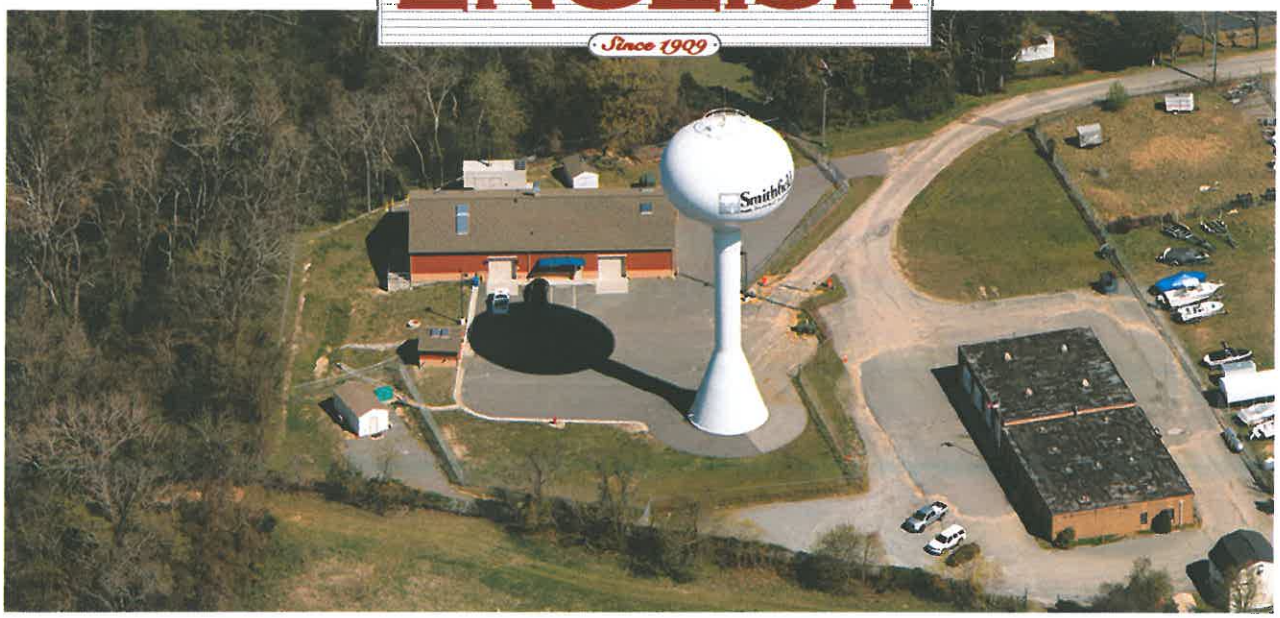

South Church Street Water Treatment Facility

SMITHFIELD, VIRGINIA

OWNER | Town of Smithfield, VA
PO Box 246
Smithfield, VA 23431
Peter Stephenson | 757-365-4200

ENGINEER | Buchart-Horn, Inc.
3700 Koppers Street
Suite 305
Dan Cargnel | 410-247-3501

CONTRACT TYPE | AMOUNT
Design-Bid-Build | $2,787,552

COMPLETION DATE | November 2011

English Construction served as the General Contractor for the new reverse osmosis (RO) treatment facility for the Town of Smithfield. Designed to remove fluoride (and TDS) from the water at an initial capacity 2.1 MGD, the system has an ability to double the capacity accommodated in the design. As a result, approximately 30% of raw water is by-passed around the RO system and blended with treated water to produce a finished water containing approximately 1.0 mg/l of fluoride.

Because the distribution system was not previously designed to be supplied from a single point, but from several smaller supply wells, the Town has lacked a backbone of larger water mains. To support this challenge, a new elevated water storage tank designed by Buchart Horn, Inc. was constructed and a new 12" water main that previously served the western part of the Town was also constructed. The treatment facility also received a booster pump system to energize system pressure during periods of high demand.

The treatment facility includes two 2,000GPM water supply wells (one stand-by), scale inhibitor feed, cartridge filters, one reverse osmosis skid and feed pump, lime feed, sodium hypochlorite feed, a clearwell, high service pumps, and the distribution system booster pumps. All equipment is housed in a single 4,500sf treatment building while a separate 400sf concentrate pump station pumps the concentrate to the sanitary sewer.

The existing well pump remained functional during construction of the new facility.

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Water Treatment Plant Upgrade

FRONT ROYAL, VIRGINIA

OWNER | Town of Front Royal
Mr. Steve Burke, P.E.
16 North Royal Avenue
Front Royal, VA 22630-1560 | 540- 635-9127

ENGINEERS | Royer Malcolm Pirnie
1100 Welborne Drive, Suite 100
Richmond, VA 23229
Herbert Wiley | 804-740-0181

CONTRACT TYPE | AMOUNT | CAPACITY
Design-Bid-Build | $9,248,600 | 6 MGD

COMPLETION DATE | 2009

This project consisted of a modification to the existing water treatment plant from 3 MGD (million gallons per day) to 6 MGD with provisions for a future expansion to 7.5 MGD. Current modifications included a new settling basin, flash mixer, and three flocculators. This addition provided the plant with a preliminary settling basin and a polishing basin. Each basin has an automatic solids removal system.

Sodium hypochlorite replaced the existing gaseous chlorine as the plant's disinfectant. This feed system is now housed in a new Chemical Feed building, along with various chemical feed systems and a maintenance shop. This new building separates the chemical storage and handling operations from the Filter Building. The existing Filter Building was expanded to provide new offices, a conference room, operator locker and shower facilities, an expanded laboratory, bacteriological laboratory and various filter upgrades.

Baffling was installed in the plant's three existing clearwells. All meters and instrumentation were upgraded. These devices report to a new plant computer which enables the operators to more efficiently control the plant's operation. An emergency generator, as well as a separate garage/storage building was also a part of the upgrade.

Design of new facility was completed in March 2006. Construction was completed in July 2009.

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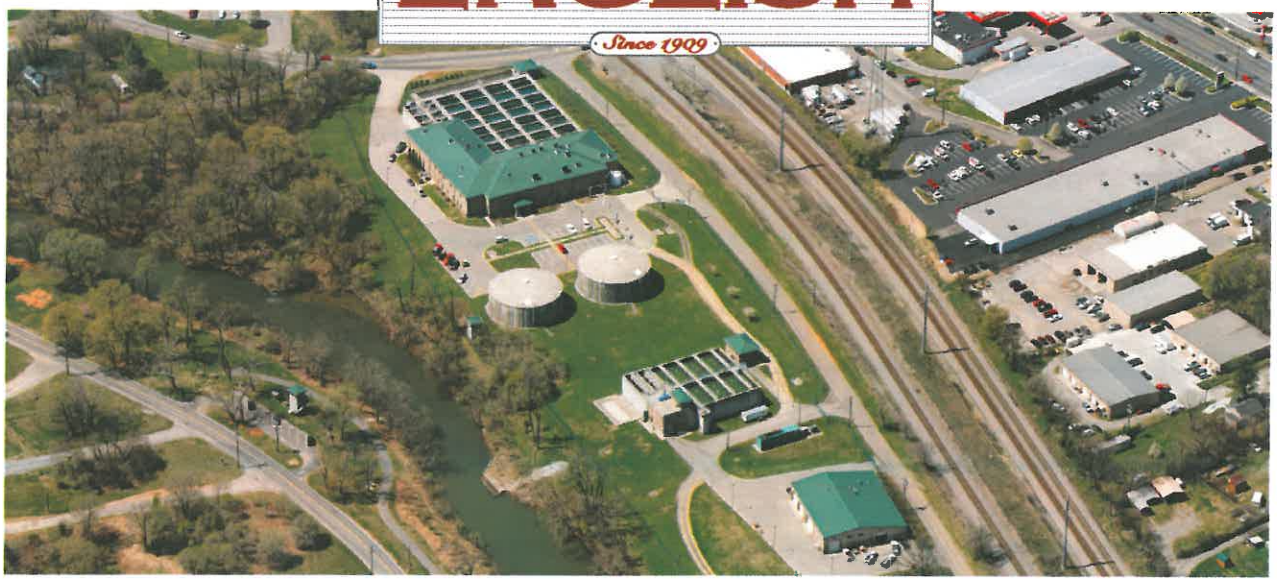


10 MGD Water Treatment Plant

SALEM, VIRGINIA

OWNER | City of Salem, VA
Purchasing Department
114 North Broad Street
Salem, VA 24153
Wesley Graham | 540-375-3029

ARCHITECTS | Arcadis, Inc.
One Centerview Drive
Suite 208
Greensboro, NC 27407
William T. Russell, Jr., PE | 336-292-2271

CONTRACT TYPE | AMOUNT | CAPACITY
Design-Bid-Build | $20,355,149 | 10MGD

COMPLETION DATE | March 2005

English constructed a new state-of-the-art water treatment facility, capable of producing 10 million gallons of drinking water a day for the City of Salem. The plant draws water from the Roanoke River and from three on-site ground water wells, which produce two million gallons per day and contribute to the water drawn from the Roanoke River as the sources of water for treatment. The plant offers a state-of-the-art SCADA (Supervisory Control and Data Acquisition) System which gives the water treatment operators the ability to monitor the status of every part of the water treatment process from a total of 19 remote sites in the City at all times. Site work included paving and approximately 2,000lf of off-site 24" watermain, 130lf of 18" river crossing main, and 130lf of 16" river crossing main. HVAC and MEP structures were provided. The electrical work included power distribution system, lighting, instrumentation and control systems. Additional features included power distribution system, raceway systems and a system integrator that provides PLC ethernet based SCADA.

A state-of-the-art microbiological lab also was incorporated into the new water treatment plant, as well as office space for staff as well as administrative offices, a pump room and electrical coil room. In addition, there are 6 other small utility buildings. The plant was designed with the flexibility to meet future drinking water regulations and to meet Salem's water needs well into the 21st century.

The new plant provides additional advantages over the old treatment plants with generator capabilities of powering the plant for several days during emergency conditions, large pre-settling basins and special sludge removal units that are designed to help aid in the water treatment process.

The City of Salem is proud to report that drinking water treated by the City of Salem Water Department met all federal and state standards for drinking water during most recent studies.

ENGLISH CONSTRUCTION | WILEY | WILSON

Virginia's First Utility PPEA/Design Build
Moneta Wastewater Treatment Plant
Moneta VA
$10,250,000

Utility PPEA/Design Build
Chatham Detention Facility
Wastewater Treatment Facility
Chatham, VA
$2,938,590

Utility PPEA/Design Build
Deerfield Detention Facility
Wastewater Treatment Plant Facility
Emporia, VA
$4,266,552

Utility PPEA/Design Build
Fredericksburg WWTP Upgrades
Fredericksburg, VA
$3,711,000

Utility PPEA/Design Build
Montvale Wastewater Treatment Plant
Bedford County, VA
$800,000

PPEA/Design Build
Stafford County Public Safety Building
Stafford, VA
$26,000,000

PPEA/Design Build
Fredericksburg Police Headquarters
Fredericksburg, VA
$8,616,821

PPEA/Design Build
Roanoke County Public Safety Building
Roanoke, VA
$18,346,554

PPEA/Design Build
New River Valley Regional Jail Expansion
Dublin, VA
$52,000,000

PPEA/Design Build
Roanoke Multi-Generational Recreation Center
Roanoke, VA
$19,589,000

PPEA/Design Build
School Facilities for Grades 6 – 12 for
Northumberland Co. Public Schools
Northumberland Co., VA
$32,499,000

PPEA/Design Build
Lafayette Upper Elementary School
Fredericksburg, VA
$12,788,527

PPEA/Design Build
Grayson County Prison
Independence, VA
$14,664,859

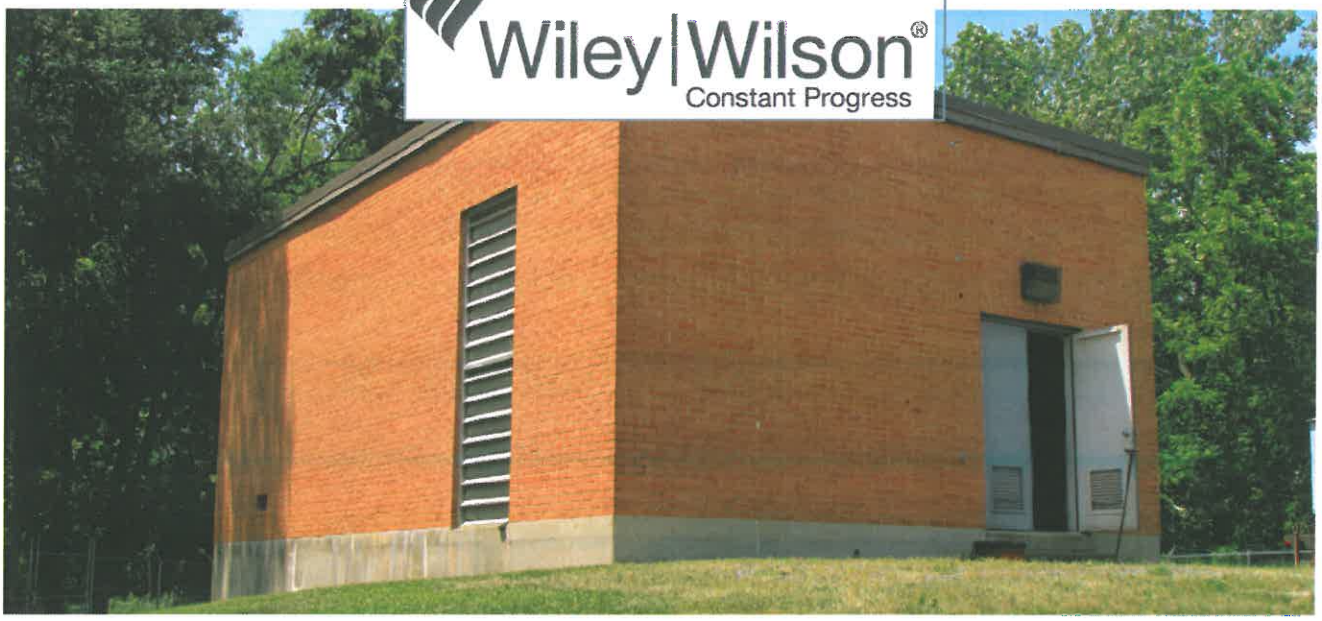
PPEA/Design Build
Cosby Road High School
Chesterfield, VA
$39,490,000

PPEA/Design Build
New James Monroe High School
Fredericksburg, VA
$33,118,391

PPEA/Design Build
Meherrin Regional Jail
Brunswick County, VA
$43,440,000

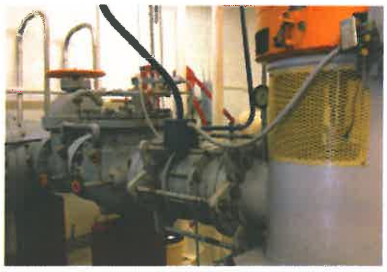
PPEA/Design Build
New Patrick County Jail Facility
Stuart, VA
$10,732,000

Wiley|Wilson®
Constant Progress



North River Pump Station

HARRISONBURG, VIRGINIA



OWNER | City of Harrisonburg, VA
Director of Public Utilities
2155 Beery Road
Harrisonburg, VA 22801
Mike Collins | 540-435-1759

CONTRACT TYPE | Indefinite Term Contract

AMOUNT | $122,950

CAPACITY | N/A

COMPLETION DATE | Ongoing

Wiley|Wilson designed the pump station upgrades to optimize efficiency and asset utilization. The work included a pump building addition to house a VFD motor control center and new electrical configuration to operate the system at 480V; including a generator transfer switch, building SCADA interface and miscellaneous equipment replacements for the City's primary raw water pumping station.

Wiley|Wilson is currently providing construction administration services for the North River pump station including shop drawing reviews, responding to RFI's, monthly project meetings, and record drawing compilation over a 6-month construction period.

Project highlights included the following:

- New intake control vault for control of sediment and debris entering the clearwell
- New ventilation system for the clearwell
- New sediment ventilation system for the clearwell
- New SCADA tower for remote telemetry to the pump station
- Planning and zoning permits
- Bid documents
- Construction phase services
- Shop drawing review
- On-site project review meetings

South River Intake and Pump Station

HARRISONBURG, VIRGINIA

OWNER | City of Harrisonburg, VA
Director of Public Utilities
2155 Beery Road
Harrisonburg, VA 22801
Mike Collins | 540-435-1759

CONTRACT TYPE | Indefinite Term Contract

AMOUNT | $56,672

CAPACITY | N/A

COMPLETION DATE | 2010

Wiley|Wilson has worked with the City to develop a new 8 MGD raw water source on the South Fork of the Shenandoah River, including design of new intake structure, intake pump station, 11 miles of 24-inch raw water main, including an intermediate booster pump station. Work included new source permitting, routing and alignment alternatives analysis, easement preparation, hydraulic modeling, and final detailed design.

Preliminary Engineering Report

- Source water alternatives analysis
- Routing alternatives analysis and hydraulic modeling
- Project scoping and phase development
- Preliminary cost estimates
- Design recommendations

Design

- Design of intake structure and "wet" construction permitting
- Preparation of easement plats and descriptions.
- Coordination with VDOT for work along roadways
- Design of two 8-mgd pump stations
- Plan and profile drawings for 11 miles of 24-inch main

Raw Water Pump Replacement

WILLIAMSBURG, VIRGINIA

OWNER | City of Williamsburg, VA
Department of Public Works and Utilities
401 Lafayette Street
Williamsburg, VA 23185
Clayton Daniel | 757-220-6140

CONTRACT TYPE | Engineering Services

AMOUNT | $29,200

CAPACITY | N/A

COMPLETION DATE | 2012

The City of Williamsburg currently owns and operates two raw water pump stations that pump water from the Waller Mill Reservoir to the City's water treatment plant. Raw Pump Station No. 1 was built when the original water treatment facility was constructed in 1944 and currently contains three 1.0-MGD pumps. Raw Pump Station No. 2 was constructed by the City sometime after the 1956 plant expansion. Over the years, there have been several upgrades and expansions to the treatment facility.

Raw Pump Station No. 2 contains two pumps that provide 3.5-MGD each and one 350-GPM pump. The 3.5-MGD pumps became inoperable; therefore, in able to provide continued reliable raw water supply to the water treatment plant, Wiley|Wilson designed the replacement pumps for both 3.5-MGD pumps and removed the existing 350-GPM pump from service. Flexibility of the raw water pumping capacity was achieved by installing variable frequency drives (VFDs) with both new pumps so that the flow rate could be modulated and used with the three 1.0-MGD pumps in Raw Pump Station No. 1 to better match the water treatment plant production with water system demands. In addition to the new pumps, other improvements were made to provide better operational and maintenance access to the new pumps and to provide a safer working area for the water treatment plant personnel.

Wintergreen Resort
Raw Water Pump Station

WINTERGREEN, VIRGINIA

OWNER | Wintergreen Resorts, Inc.
Assistant Ski Area Manager
PO Box 706
Wintergreen, VA 22958
Jay Roberts | 434-325-8067

CONTRACT TYPE | Engineering Services

AMOUNT | $209,841

CAPACITY | 750 GPM

COMPLETION DATE | 2013

Wiley|Wilson designed a 5 million gallon water storage tank and 4,000 GPM high pressure (>700 PSI) pump station to supply water to mountain top water treatment plant, snowmaking equipment and golf course irrigation. The team functioned as the design engineer and construction manager to facilitate work between the Owner's on-site forces, tank contractor, civil site contractor, and pump station contractor.

The project was delivered with a unique owner-engineer-contractor team that met a compressed project schedule to commission the pump station within 120 days of groundbreaking.

The pump station consisted of five main pumps each rated at 750 GPM and 700 PSI. Our team conducted hydraulic surge and pressure analysis to ensure pipe rating and system safeguards provide reliable and robust water supply for multiple end users. The pump station was provided with multiple fail safe high pressure and surge control devices.

The pump station electrical requirements included VFD harmonic analysis for 450-HP VFDs, new 4,000A service installation and arc-flash hazard analysis.

The preferred tank site required grading over 70 feet vertically and 150 feet horizontally (see photos) into the side of the adjacent mountain. This required coordinated blasting and excavation to ensure continued operation of adjacent electrical sub-station and raw water storage tank.

project team experience

We have assembled a project team that has expertise in the following categories:

- Water treatment and distribution systems
- Elevated and ground storage tanks
- Sewerage systems
- Wastewater collection and treatment
- Infiltration and inflow studies and remediation
- Rate studies, asset inventories, and bond reports
- Dams, reservoirs, and intake structures
- Flood control
- Site design
- Low impact development
- Parking facilities
- Stormwater management
- Highways and roads
- Transportation systems
- Pumping stations
- Operations and maintenance plans
- Plant and pump station
- Startup assistance

GUARANTEES AND WARRANTIES

English Construction Company, Inc. will provide all bonding, guarantees and warranties associated with the project. Wiley|Wilson will be the designer of record for the project. All materials and workmanship will be warranted for a period of one year from substantial completion.

Spotsylvania County American Central Tank
WILEY|WILSON

c. Provide the names, addresses, and telephone numbers of person within the firm or consortium of firms who may be contacted for further information.

KEY PRINCIPAL
HENRY G. MYERS
Vice President
ENGLISH CONSTRUCTION COMPANY, INC.
PO Box P-7000
Lynchburg, Virginia 24505
Telephone | 434-845-0301
Facsimile | 434-845-0306
EMAIL | hmyers@englishconst.com
www.englishconst.com

KEY PRINCIPAL
C. Robert L. Mangrum, P.E., BCEE
Vice President, Civil/Water Resources
Wiley|Wilson
127 Nationwide Drive
Lynchburg, VA 24502-4272
434.947.1643 Direct
434.665.1515 Mobile
Rmangrum@wileywilson.com
www.wileywilson.com

d. Provide a current or most recently audited financial statement of the firm or firms and each partner with an equity interest of twenty percent or greater.

financials

Please see (Volume II containing English Construction's and Wiley | Wilson's financial information. This information is deemed Proprietary and Confidential.

e. Identify any persons known to the proposer who would be obligated to disqualify themselves from participation in any transaction arising from or in connection to the project pursuant to the Virginia State and Local Government Conflict of Interests Act, Chapter 31 (§ 2.2-3100 et seq.) of Title 2.2.

conflicts of interest

No person associated with the proposer would be obligated to disqualify themselves from participation in this transaction arising from the Virginia State and Local Government Conflict of Interest Act, Chapter 31 (§2.2-3100 et seq.) of Title 2.2.

JAMES RIVER WATER AUTHORITY

PPEA

Unsolicited Proposal

Design and Construct I Water Supply System
Utilizing the James River

VOLUME I

TAB 2

a. Provide a description of the project, including the conceptual design. Describe the proposed project in sufficient detail so that type and intent of the project, the location, and the communities that may be affected are clearly identified.

project characteristics

Basis of Design for Infrastructure Design

We propose to provide raw water withdrawal and conveyance facilities designed to meet the future demands that were projected by the Louisa County and Fluvanna County Water Supply Plans. In order to ensure a long term robust water system, our proposal will allow JRWA & Louisa County to immediately meet or easily upgrade all of the facilities to meet the Year 2050 demands projected by the respective Water Supply Plans.

The raw water facilities withdrawal and conveyance (intake, pump station and pipeline) will be designed to immediately meet the 20 year demands for the Louisa County Zion Crossroads, Ferncliff and Shannon Hills service areas and the Fluvanna County Zion Crossroads service area. The design will allow JRWA & Louisa County to easily upgrade the raw water facilities to meet the Year 2050 demands in these service areas as well provide water to the Fluvanna County Columbia, Fork Union and Palmyra service areas in accordance with the Water Withdrawal Permit.

b. Identify and fully describe any work to be performed by the Authority.

authority involvement

The English / Wiley|Wilson team highlights the following work and responsibilities to the James River Water Authority:

1. Project Funding
2. Environmental Phase Assessments if required.
3. Permanent easements and construction easements.
4. Land acquisition.
5. Independent construction inspection.
6. Independent Geotechnical and Materials Inspection/ Reporting during construction.
7. Special inspections.
8. Rock.
9. Geotechnical investigations and resulting requirements.
10. Unsuitable soils.
11. The County of Fluvanna and Louisa County permit fees.
12. Supply of potable water from existing connections the existing water systems for construction and testing purposes to the extent available.
13. Initial fill of chemicals.
14. New permanent electrical services required to power the new Raw Pump Station and Water Treatment Plant.
15. Permit fees associated with re-issuance and relocation of the raw water withdrawal and construction permits.
16. Permit fees for railroad crossings.

c. Include a list of all federal, state, and local permits and approvals required for the project and a schedule for obtaining such permits and approvals.

permitting

The English / Wiley|Wilson team highlights the following Permitting requirements:

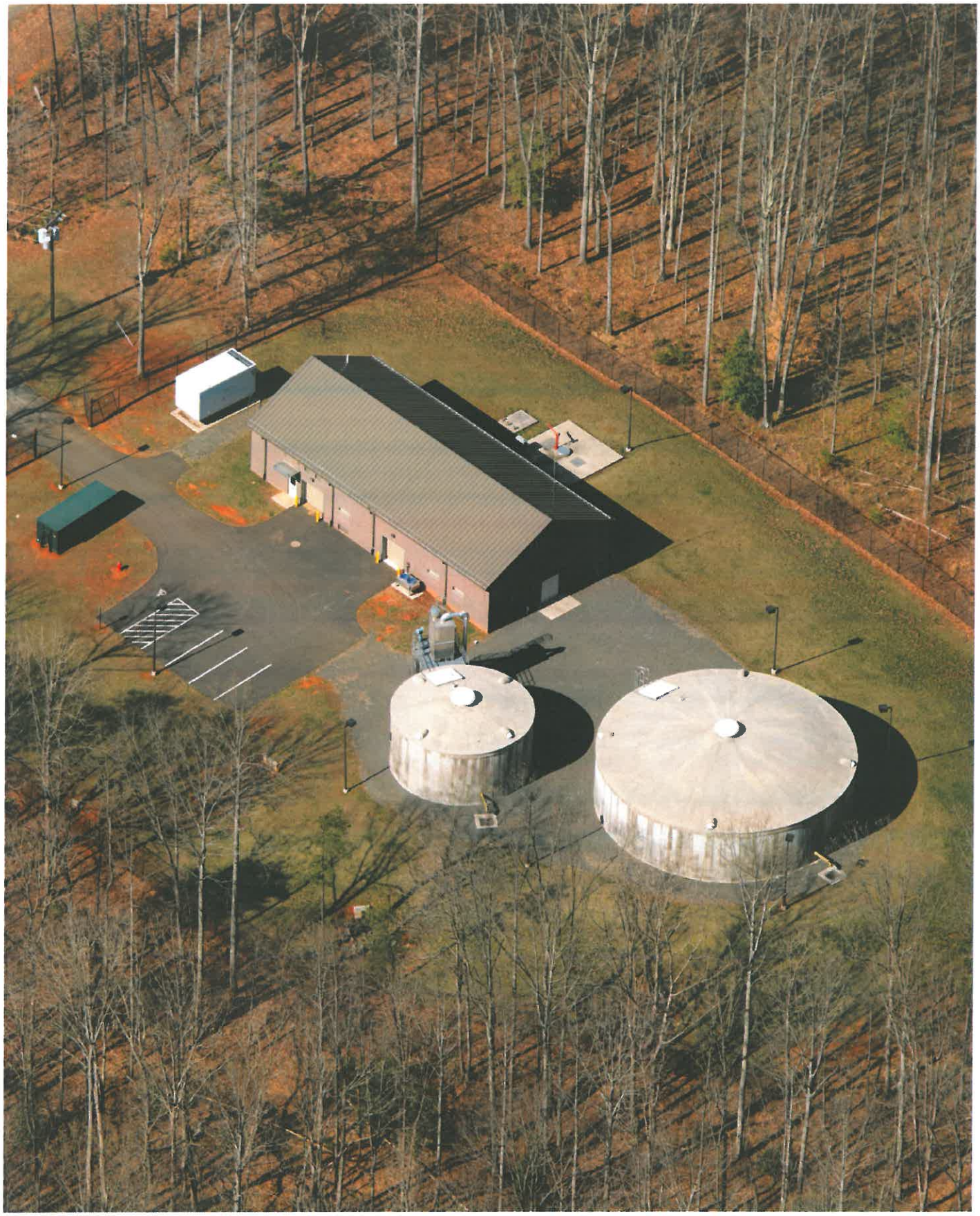
1. VDH Certificate to Construct (CTC), obtain prior to construction.
2. VDH Certificat to Operate (CTO); obtain at completion of project.
3. VDEQ withdrawal Permit Modification; obtain prior to construction.
4. USACE Nationwide 12 Permit; obtain prior to construction.
5. USACE construction permit for new intake.
6. VDOT Land Use Permit; obtain prior to construction.
7. VDH Waterworks Construction Permit; obtain prior to construction.
8. VDH Waterworks Operation Permit; obtain at completion.
9. County Land Disturbance Permit; obtain prior to construction.
10. Railroad Crossing Permit.
12. Virginia Stormwater Management Program (VSMP) Permit; obtain prior to construction.

Mt. Jackson Wastewater Treatment Plant | Mt. Jackson, VA
ENGLISH CONSTRUCTION

d. Identify any anticipated adverse social, economic, and environmental impacts of the project. Specify the strategies or actions to mitigate known impacts of the project.

adverse impacts

There are no anticipated adverse social, economic or environmental impacts of the project.



Clevengers Village Water Treatment Plant | Culper County, VA
ENGLISH CONSTRUCTION | WILEY|WILSON

e. Identify the projected positive social, economic, and environmental impacts of the project.

positive impacts

With nearly 20 years of planning in the making, the JRWA and Fluvanna County anticipate a water source that will accommodate the future needs of this growing community that includes Zion Crossroads, Ferncliff and Shannon Hill. In the past, Zion Crossroads has relied on the Green Springs well system located in the Green Springs Historic District. The James River Water Project also provides a reliable water source to Fluvanna County and will reduce the reliance on the Rivanna River. The James River project minimizes the stress on well systems throughout both counties.

The new system is a state-of-the art improvement and will produce higher levels of water service, while also protecting the potential waterborne threats to the water source; a result which reduces concern for waterborne diseases, disinfection by-products and safeguards the environmental ecosystems.

f. Identify the proposed schedule for the work on the project, including the estimated time for completion.

project schedule

The English | WJW Team believes that the project schedule is a critical component of the overall project. English Construction utilizes Primavera P6 as the tool of choice for creating and monitoring the progress of the project. A full time in-house PMI-SP certified scheduling professional meets with each project team initially to create the schedule and then on a monthly basis to update and evaluate the progress. Combining activities for design services, permitting, submittals, review and material procurement into one complete schedule allows the impact of each activity's progress on another to be monitored.

A preliminary schedule for this project has been provided with this proposal to allow this team's perspective of the overall project time-line to be visualized.

Please reference Proprietary Volume II, Section 2.f. Proposed Schedule, for our approach to the work.

g. Propose allocation of risk and liability for work completed beyond the agreement's completion date, and assurances for timely completion of the project.

risk and liability

One of the key benefits to a PPEA relationship is an equitable allocation of risks involved in the project. There are certain risks that the Contractor/ Engineer team is more suited to accept, and other risks that suitably fall to the Authority (referred in following table). By allocating these risks appropriately, the Contractor/Engineer ("contractor") team can provide a much better total price to the Owner.

The following is a summary of risks by category along with the proposed allocation of risk and located comments.

Risk	Description	Allocation	Comments
Financial	Financing	Owner	The County will borrow sufficient funds
Permits	State	Owner and Contractor	Final approval is dependent upon VDH schedule and requirements being satisfied
Permits	Local/County	Owner and Contractor	Final approval is dependent upon local/county schedule and requirements being satisfied
Design Assumptions	Listed in contract	Owner and Contractor	
Design	Final Design	Contractor	
Water Quality Quarantine	Performance	Contractor	
Power	New Service	Owner	Contractor will coordinate, owner pays for new power service
Material Cost	Commodity Price	Owner and Contractor	Include an escalation clause for major materials such as concrete and asphalt

Risk	Description	Allocation	Comments
Material Cost	Fluctuation	Owner and Contractor	
Safety	During construction	Contractor	
Third Party Construction Inspection		Owner	
Special Inspection		Owner	
Construction Quality		Contractor	
Security	Site Security	Contractor	
Start Up	Electrical Power (New Service)	Owner	New service to be provided
Chemicals	Initial Filling and consumption	Owner	Owner to provide chemicals to be used during start up and operation
Generator Diesel	Initial Filing and consumption	Owner	Owner to provide diesel for use during startup and in operation
Influent Water Quality	Treatability	Owner	Water influent characteristics are consistent with reports provided
Rock		Owner	Include unit price
Unsuitable Materials		Owner	Include unit price

h. State assumptions related to ownership, legal liability, law enforcement, and operation of the project and the existence of any restrictions on the Authority's use of the project.

assumptions | ownership | liability | operation

The English / Wiley|Wilson team highlights the following operational assumptions and restrictions:

- English/Wiley|Wilson will provide performance and payment bond
- JRWA will have responsibility for operation and maintenance of the facility following substantial completion
- JRWA will have responsibility for startup costs including but not limited to electrical and chemical consumption
- JRWA will pay for electrical service
- JRWA will pay for permits

i. Provide information relative to phased or partial openings of the proposed project prior to completion of the entire work.

phased | partial openings

Due to the "green field" new construction of the facility, there are no phased openings associated with the currently proposed project. Our detailed plan describes future capacity upgrades that will be constructed at the appropriate point during the County's growth and development. These future capacity upgrades can be constructed with minimal impact on the newly constructed facilities that are part of this proposal.

j. List any other assumptions relied on for the project to be successful.

assumptions for success

Assumptions for success:

- Successful easement procurement for the new piping alignment
- Successful property acquisition for the raw water pump station and water treatment plant
- Successful permitting process with Virginia Department of Health
- Successful permitting process with Army Corp of Engineers
- Successful permitting process with Virginia Department of Transportation and railroad

k. List any contingencies that must occur for the project to be successful.

contingencies for success

Please Reference Proprietary Volume II.

JAMES RIVER WATER AUTHORITY

PPEA

Unsolicited Proposal

Design and Construct I Water Supply System
Utilizing the James River

VOLUME I

TAB 3

a. Provide a preliminary estimate and estimating methodology of the cost of the work by phase, segment, or both.

estimate | methodology

Please reference Proprietary Volume II

b. Submit a plan for the development, financing, and operation of the project showing the anticipated schedule on which funds will be required. Describe the anticipated costs of and proposed sources and uses for such funds including any anticipated debt service costs. The operational plan should include appropriate staffing levels and associated costs. Include supporting due diligence studies, analyses, or reports.

project plan

Please reference Proprietary Volume II | Not Applicable

c. Include a list and discussion of assumptions underlying all major elements of the plan. Assumptions should include all significant fees associated with financing given the recommended financing approach. In addition complete disclosure of interest rate assumptions should be included. Any ongoing operational fees, if applicable, should also be disclosed as well as any assumptions with regard to increases in such fees.

assumptions of plan

Please reference Proprietary Volume II | Not Applicable

d. Identify the proposed risk factors and methods for dealing with these factors.

proposed risk factors

Please reference Proprietary Volume II | Not Applicable

e. Identify any local, state, or federal resources that the proposer contemplates requesting for the project. Describe the total commitment, if any, expected from governmental sources and the timing of any anticipated commitment. Such disclosure should include any direct or indirect guarantees or pledges of the Authority's credit or revenue.

resources

Please reference Proprietary Volume II | Not Applicable

f. Identify the amounts and the terms and conditions for any revenue sources.

terms and conditions

Please reference Proprietary Volume II | Not Applicable

g. Identify any aspect of the project that could disqualify the project from obtaining tax exempt financing.

contingencies for disqualification

Please reference Proprietary Volume II | Not Applicable

JAMES RIVER WATER AUTHORITY

PPEA

Unsolicited Proposal

Design and Construct I Water Supply System
Utilizing the James River

VOLUME I

TAB 4

a. Identify who will benefit from the project, how they will benefit, and how the project will benefit the overall community, region, or state.

project benefits

The James River Water Authority and its communities will experience significant benefits upon entering into a PPEA design-build contract with the English | Wiley|Wilson team. The Authority will be working with a team who has experience delivering projects such as this. This expertise ensures the success of this project from start to finish, based upon a fixed price and schedule that you will be comfortable with. Not only that, the project supports the future expansion of the Zion Crossroads, Ferncliff and Shannon Hill communities, which in turn generates additional tax revenue for the County.

Our team makes every effort to utilize local subcontractors and small businesses, which also supports the initiatives of our projects to provide opportunities for minority and women owned businesses. Our approach is proactive, and one where we have spent considerable time and energy examining ways to ensure opportunities for local subcontractors.

b. Identify any anticipated public support or opposition, as well as any anticipated government support or opposition, for the project.

public support

Support for this project will continue through the effort of these same entities along with a host of additional support from local businesses and residents along the rapidly growing corridor. Additional input will be provided by JRWA, The Virginia Department of Transportation, The Virginia Department of Environmental Quality and local developers.

c. Explain the strategy and plans that will be carried out to involve and inform the general public, business community, and governmental agencies in areas affected by the project.

public involvement

The utility infrastructure improvement will enable the County to provide a higher level of water service to the Community resulting in increased economic development and growth potential.

Our team understands that many shareholders are involved throughout the construction process. English Construction and Wiley|Wilson will work with the JRWA and all constituents to plan and deliver information to all parties involved. Our team will assist in a coordinated plan that includes an array of outreach opportunities through the duration of the project to keep all interested parties aware of progress and results.

d. Describe the anticipated significant benefits to the community, region or state, including anticipated benefits to the economic condition of the Authority and whether the project is critical to attracting or maintaining competitive industries and businesses to the area affected by the project or the surrounding region.

community benefits

The safety and welfare of the county and the community rely on future funding and support at every level. Primary benefits include:

- Protects the environment and ecosystems that provide nourishment and sustain plant and animal life.
- Supports economic growth.
- Reduces public health concerns regarding potential threats to water quality.

e. Describe compatibility with the local comprehensive plan, local infrastructure development plans, the capital improvements budget, or other government spending plan.

project benefit and compatibility

The proposed project is offered various alternates to allow the James River Water Authority flexibility of scaling the project to fit capital improvement and annual budgets.

The proposed project meets the requirements for the JRWA Comprehensive Plan and results in a reliable water supply system to the County's Zion Crossroads, Ferncliff, and Shannon Hill areas, while providing additional water sources to supplement the Green Springs wells system allowing for the Louisa County portion of the project to be constructed in accordance with October 1, 2013 agreement between the water authorities (JRWA and LCSA).

f. Provide a statement setting forth participation efforts that are intended to be undertaken in connection with this project with regard to the following types of businesses: (i) minority-owned businesses, (ii) woman-owned businesses, and (iii) small businesses.

minority participation

Introduction

The participation of minorities and women in business is an important issue and we firmly believe that every project undertaken has an advantage when maximum minority/female participation is achieved.

We take a proactive approach, and one where we have spent considerable time and energy examining ways to ensure opportunities. We look for ways to create opportunities for minorities and women that will provide successful outcomes for those participating in procuring and successfully completing future work.

A majority of English's utility construction projects are located in rural areas. In this environment, most of the "local" contractors are already at a disadvantage in that this type of program rarely comes to their community.

Our team's efforts to help "local vendors" and "local" qualified subcontractors complete and win portions of utility projects helps spend local "capital" tax dollars with the businesses who are asked to support local systems. Our strategy to encourage and promote minorities, women and veterans in the business environment includes internal and external participation from qualified subcontractors.

Internal Participation. Provides equal employment opportunities for all (Affirmative Action).

External Participation. At the contractor/subcontractor level for all our projects. Both Minority Business Enterprises (MBE) and Women Business Enterprises (WBE) will be considered as one and will be referred to as Disadvantaged Business Enterprises (DBE).

Internal Minority Participation

Commitment. Our team has sought qualified minority employees in an industry which has been slow to respond to these issues. Our team supports diversity and offers opportunity for all qualified personnel.

Policy. It is and will continue to be the policy of our team to ensure employment opportunities for all qualified persons without regard to race, color, religion, sex or national origin. This policy is applicable to all matters relating to hiring, recruiting, training, promotion, transfer and termination, except where sex is a "bona fide" occupational qualification, as interpreted under the Civil Rights Act of 1964 and Executive Order 11246.

minority participation

It is also the policy of English to ensure that all employment and promotional decisions are in accordance with principles of Equal Employment Opportunity; and that only valid requirements for such employment and promotional opportunities include, but are not limited to, education, training and/or experience. To ensure equal treatment for all, i.e., compensation, benefits, transfers, layoffs, rehiring, employer-sponsored training, education, tuition assistance, social or recreational programs shall be administered without regard to race, creed, color, sex or national origin.

English will not maintain or provide for employees, any segregated facilities at any of its establishments, nor does it permit employees to perform their services at any location, under its control, where segregated facilities are maintained.

It shall be known that the President, Chief Executive Officer and all management personnel of our firm wholly embrace the provision of the Civil rights Act of 1964, Executive Order 11246, and any amendments thereto.

External Minority Participation

Commitment. As part of our strategic plan, Disadvantaged Business Enterprise participation must be encouraged on all projects and we are committed to maximize DBE participation.

As a major provider of construction services, we have developed a comprehensive, but flexible, program to ensure DBE participation for projects. Each construction project is unique and brings challenges to the implementation of this program.

We have learned that with a creative approach, an awareness of potential areas of participation can be created by the contractor. The contractor must, through creative management, look for opportunities to accomplish the task of DBE participation with the subcontractors.

DBE participation can be encouraged, especially during project buy-out. Even a firm that is not a minority firm can obtain services (i.e., supplies, delivery, etc.) from a minority firm.

Policy. Our policy is to ensure Equal Employment Opportunity to all qualified persons without regard to race, color, religion, sex or national origin.

minority participation

We encourage all subcontractors and suppliers to attain the highest possible percentage of DBE participation.

Procedures. All subcontractors will be asked their DBE participation and we will maintain a DBE solicitation database and keep it current.

Plan. Each firm qualified as a DBE Subcontractor will be interviewed and information gathered regarding:

- Corporate general information
- Financial stability
- Previous projects
- References
- Initiated steps to create awareness among the project management staff of the availability and importance of the DBE Subcontractors

Methods for achieving minority participation on projects are outlined below.

A. We offer creative approaches to finding opportunities for DBE participation, including creative bid packaging and segmentation of work;

B. We maintain a minority solicitation database and a means to communicate with minority firms; Creative support of minority firms on bonding, estimating, accounting and management issues,including materials purchasing.

At the subcontractor, consultant and vendor levels, our team seeks two (2) types of DBE participation:

Independent DBE subcontractors, consultants and vendors solely responsible for specific areas of work, and joint venture partnerships between DBE's and established subcontractors, consultants and vendors.

In the first case, we act in a supportive role sharing our systems, capacities, management and accounting expertise to assist DBEs. In the latter, our team seeks to encourage productive joint venture partnerships based upon the same principles of mentorship as a general contractor. Above all, we seek to encourage participation by DBEs that will, when the project is complete, assist participating DBEs in procuring and successfully completing future work.

minority participation

We voluntarily establish and conduct a program which enables DBEs to be considered fairly as subcontractors and suppliers under our contracts.

We will provide adequate and timely consideration of the potential of known qualified DBEs in all "make or buy" decisions.

We will also assure that known DBEs will have an equitable opportunity to compete for subcontracts, particularly by arranging solicitations, time for the preparation of bids, quantities, specifications and delivery schedule so as to facilitate the participation of DBEs.

DBE Initiatives

Our team has worked with DBE firms in a variety of ways in the past. We have:

- Expedited weekly payment for work completed. In addition, we have provided joint checks and other credit enhancements.
- Provided technical assistance. Assistance has included take-offs, quantity surveys, plans and specifications review, suggestions for operating systems design, etc.
- Waived bonding requirements on DBE subcontracts. We have developed standard operating policies which include bonding of key subcontractors but have waived these to assist DBE subcontractors where acceptable.

Our team will continue to apply all of the above procedures to assist and enhance DBE utilization.