

# EXPRESSION OF INTEREST

## JOINT FORCES HEADQUARTERS AND CAMP DAWSON REDUNDANT WATER AND SEWAGE SYSTEMS PROJECT SOLICITATION NO. CEOI 0603 ADJ1700000004



*Prepared for:*

**West Virginia Army National Guard  
Division Engineering and Facilities  
Adjutant Generals Office  
2019 Washington Street East  
Charleston, West Virginia 25305**

*Prepared by:*

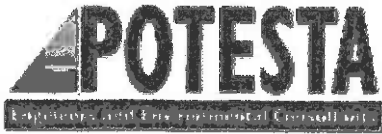
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Project No. 0101-16-0321

August 31, 2016

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WJ Purchasing Division

# POTESTA



# TRANSMITTAL MEMO

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**Date:** August 31, 2016  
**Project No.:** 0101-16-0321

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| <b>Remarks:</b> |   |

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**c:** \_\_\_\_\_

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# EXPRESSION OF INTEREST

## *Joint Forces Headquarters and Camp Dawson Redundant Water and Sewage Systems Project Solicitation No. CEOI 0603 ADJ1700000004*

### 1.0 INTRODUCTION

Potesta & Associates, Inc. (POTESTA) is pleased with the opportunity to present this Expression of Interest to the West Virginia Army National Guard Construction and Facilities Management Office (WVANG). These services will consist of completion of a system inventory and vulnerability assessment of the existing infrastructure systems located at the Joint Forces Headquarters within the Coonskin Complex in Charleston, West Virginia, and selected areas within Camp Dawson in Kingwood, West Virginia; and develop construction documents for providing a prioritized approach with conceptual costs for redundant water and sewage systems at these locations. This assessment will be altered to accommodate the facility's needs and meet current building codes.

### 1.1 Corporate Overview

POTESTA was founded in 1997 as a full service engineering and environmental consulting firm headquartered in Charleston, West Virginia. We have now expanded to a diverse staff of more than 100 experienced engineers, scientists, and support personnel with branch offices in Morgantown, West Virginia and Winchester, Virginia. Our clients include mining, manufacturing and chemical companies; utility companies; waste management companies; colleges/universities; land developers; attorneys; financial institutions; insurance companies; local, state and federal agencies; construction companies and architects.

POTESTA's staff is committed to delivering innovative, cost-effective solutions to meet our client's complex requirements. The firm's environmental department consists of biologists, geologists, chemists, environmental scientists and environmental engineers, many with advanced degrees (Masters and Ph.D. level). POTESTA's engineering department includes civil, geotechnical, environmental, mining and mechanical engineers. Our registered professional engineers have over 300 years experience among them and are supported by a capable team of engineers, designers, and surveyors.

Our firm is managed by two principals driving POTESTA forward with their experience and emphasis on exceeding expectations. Ronald R. Potesta, President, is a former Director of the West Virginia Division of Natural Resources and Dana L. Burns, P.E., Vice President of Engineering, has more than 30 years experience with civil, geotechnical, mining, and environmental engineering projects.



## **2.0 QUALIFICATIONS AND EXPERIENCE**

POTESTA is ready to commit our experienced staff to provide WVANG all of the services required to renovate the facilities located at and serving the Joint Forces Headquarters within the Coonskin Complex in Charleston, West Virginia, and selected areas within Camp Dawson in Kingwood, West Virginia to support elements of the WVANG Command. In addition to the engineering services, POTESTA is exceptionally well-positioned to offer environmental consulting and regulatory permitting services, which will be necessary for this project.

Quality is extremely important to POTESTA. We have won six “Gold Award in the American Council of Engineering Companies – West Virginia Section” engineering excellence awards competition and approximately 80 percent of our work is from repeat clients; we believe this attests to our commitment for a quality project.

### **2.1 Water and Wastewater Engineering**

POTESTA has 12 professional engineers on staff who can be dedicated to providing quality water and wastewater engineering services for the Joint Forces Headquarters and Camp Dawson Redundant Water and Sewage Systems Project. POTESTA has designed water and wastewater systems, designed major rehabilitation projects, reviewed developer plans for municipalities and public service districts, conducted flow monitoring, and coordinated smoke testing. POTESTA will work with the WVANG to provide cost effective services by visiting similar systems to incorporate the best features, while avoiding deficiencies found with those systems.

POTESTA’s water and wastewater design services include, but are not limited to:

- Feasibility Studies
- Conceptual Design/Final Design
- Wastewater Minimization Studies
- Bidding and Construction Documents
- Construction Monitoring
- Wastewater Audits
- Engineer’s Cost Estimates
- Small Flows Design
- Sewage Collection and Treatment
- Permitting/Regulatory Liaison
- Wastewater Treatment Plant Design
- Sewer Line Extensions
- Storage Tank Design
- Flow Measurement
- Surveying/Mapping
- Sampling/Modeling
- CSO
- Remediation Systems

POTESTA takes prides in our ability to provide our clients with innovative and concise engineering design packages that will allow more of the client’s money to be spent on actual construction rather than engineering design fees. POTESTA has the ability to complete every facet of the project from beginning to end, from the preliminary study through final design and construction observation/management. Frequent communication will be made with the WVANG and other design professionals to review the completed activities and obtain input for the design process.

The following professional services for water and wastewater-related projects that are routinely completed throughout the construction of our projects include, but are not limited to:

- **Surveying** – Includes mapping development, location of existing infrastructure, property acquisitions or transfers (i.e., right-of-ways), construction layout, measurement of construction quantities, etc. Surveys completed by POTEFTA are performed by or under the direction of a one of our three licensed professional surveyors. Surveys and mapping are completed to the standards outlined by the National Map Standards, as well as other applicable quality standards.
- **Geotechnical** – Includes subsurface explorations, foundation design recommendations, slope stability analysis, and retaining wall design. POTEFTA field engineers and geologists are familiar with the latest technologies to assist in the collection and analysis of soil and rock samples. Our knowledge of the proper procedures and familiarity with local conditions allow office and field personnel to adjust the investigation if any unanticipated field conditions are encountered. POTEFTA's geotechnical staff can evaluate the existing soil conditions, and determine the necessary construction methods so the improvements are constructed in a cost-efficient manner as specified.
- **Permitting** – Includes environmental site assessment, environmental impact statements, stormwater management permits, wetland delineation and mitigation permits, groundwater protection plans, spill prevention, control and countermeasure plans, floodplain management studies and permits, and emergency action. Our staff not only understands the technical details, but is very experienced in working with the various state, federal, and local regulatory agencies. We know the level of detail they require and can obtain the necessary approvals in a timely manner. POTEFTA has successfully completed multiple projects that required NPDES stormwater construction registration, NEPA compliance, U.S. Army Corps of Engineers permit, Public Land Corporation stream activity permit, West Virginia Division of Highways occupancy permits, etc.
- **Construction Contract Administration** – Includes survey layout, construction management, construction monitoring, record drawings and preparation, and bid evaluation assistance. POTEFTA maintains a database with bidding results from recent construction projects. This information allows our designers to develop accurate estimates of probable construction costs based on recent bids from local contractors. We pride ourselves on the accuracy of our cost estimates to be within an acceptable range of actual bid results obtained for projects. We routinely provide resident project representatives (RPRs) during construction to serve as the "eyes and ears" on behalf of the Owner to document the progress of the Contractor, observe and document the construction activities, and prepare record drawings. POTEFTA will also assist the WVANG with the bidding of the project, review of the bids, review of pay applications, and requests by the Contractor such as change order requests and requests to substitute equivalent products.

Additional information regarding POTE STA's wastewater engineering, civil engineering design, computer-aided drafting and design, construction monitoring, hydrology and hydraulics design, mixing zone analysis, permitting, surveying/mapping, and geotechnical engineering, is included in **Appendix A**.

## **2.2 Experience with Regulatory Agencies**

POTE STA has been working with the WVDEP, WVDOH, WVDOT, WVDHHR, and WVDNR since 1997 and Mr. Ronald R. Potesta, President of POTE STA and a former director of the West Virginia Department of Natural Resources, has the technical knowledge and expertise to be an asset on this project. Mr. Dana Burns, Vice President of POTE STA, has served as principal-in-charge or project manager on three open end contracts for WVDEP, AML from 1986 through 1997 totaling over 65 projects. In addition, Mr. Burns has served as the principal-in-charge for numerous other WVDEP, AML projects since 2003. POTE STA has assembled a team that has historically served state agencies on numerous projects around the State of West Virginia. In fact, our staff has 150+ years experience working on contracts with the State of West Virginia, including:

- *West Virginia Department of Environmental Protection, Office of Abandoned Mine Lands and Reclamation:* Design and bidding phase services for reclamation for abandoned mine lands projects throughout West Virginia since 2002.
- *West Virginia Department of Environmental Protection, Office of Waste Management:* Design, bidding and construction phase services for 8 landfill repair and closure projects in both Northern and Southern West Virginia since 1997.
- *West Virginia Division of Highways (WVDOH), Engineering Division:* (a) Asbestos inspection sampling services and report preparation, and development of contract documents for asbestos removal and disposal projects throughout West Virginia since 2002; (b) open-end agreement with the WVDOH for two years to provide natural resource services for NEPA compliance; (c) master service agreements to provide engineering services related to highway, bridge, and miscellaneous projects; (d) two master service agreements to provide surveying services; (e) engineering services as part of design-build for 3½ miles of the upgrade of Interstate 64 from four to six lanes; (f) geotechnical, surveying and civil site design associated with widening Jefferson Road for 1½ miles; and (g) maintenance of six year agreement to provide environmental assessment and remediation services.
- *West Virginia Division of Natural Resources:* Site grading, utilities, etc. for handicap accessible cabins and state parks, and restoration of 78 miles of North Bend Rail Trail.
- *West Virginia Department of Transportation, Materials Control, Soils and Testing Division:* Five year agreement for geotechnical services throughout the State of West Virginia.
- *West Virginia Department of Health and Human Resources, Office of Environmental Health Services, Source Water Assessment and Protection Program:* Three contracts for Source

Water Protection Plan services for 100+ communities throughout Southern, Northern, and Eastern West Virginia from 2002 to 2004 and 2009 to 2012.

### 2.3 Similar Past Projects

POTESTA's ongoing workload includes extensive work on sanitary sewer system projects. The following is a brief description of similar projects completed by POTESTA. **Appendix B** contains project abstracts of similar projects completed by POTESTA.

*\* Additional details are included in project abstracts in Appendix B.*

| Project   | Project Manager/Contact Information        | Type of Project                                | Project Goals and Objectives  |
|---|--|--|---|
| *Regional Intergovernmental Council<br><i>Kanawha County, WV</i>          | Terence Moran, P.E.<br>tcmoran@potesta.com | Source Water Analysis                          | Prepare an Engineering Study for Contingency Planning for seven SWPs.   |
| *Region VI Planning & Development Council<br><i>Various Locations, WV</i> | Terence Moran, P.E.<br>tcmoran@potesta.com | Source Water Analysis                          | Prepare Source Water Protection Plans for eight SWPs in northern West Virginia.   |
| *West Virginia American Water<br><i>Putnam County, WV</i>                 | Terence Moran, P.E.<br>tcmoran@potesta.com | Design of Water Line Extension                 | Design and develop bidding/construction documents for approximately 35,000 linear feet of water line along US Route 34, County Route 34/21 and County Route 48 in Putnam County.  |
| *Boone County PSD<br><i>Boone County, WV</i>                              | Terence Moran, P.E.<br>tcmoran@potesta.com | Design of Water Line Extension                 | Design, permitting, bidding, and construction phase services for a 30,000-linear foot water line extension to provide potable water service to approximately 130 commercial and residential customers along Mud River Road and Cox's Fork Road.     |
| *Preston County PSD2<br><i>Preston County, WV</i>                         | Dave Sharp, P.E.<br>dsharp@potesta.com     | Design of Water Line Extension and Replacement | Funding application, design, bidding/construction phase, permitting services for replacement and extension of 74,000 feet of water line, including a 260,000-gallon water storage tank, 280 GPM booster station and three pressure reducing valves. |

| <b>Project</b>  | <b>Project Manager/Contact Information</b> | <b>Type of Project</b>                                   | <b>Project Goals and Objectives</b>   |
|---|--|--|---|
| *City of Wellsburg<br><i>Brooke County, WV</i>                | Dave Sharp, P.E.<br>dsharp@potesta.com     | Water Line Replacement and Water Treatment Plant Upgrade | Overall system needs assessment, opinion of cost of upgrades, design, bid documents, construction administration services for 1,000,000-gallon reservoir and 4,200 feet of existing water line.   |
| *City of Philippi<br><i>Barbour County, WV</i>                | Terence Moran, P.E.<br>tcmoran@potesta.com | Upgrade of Potable Water Distribution System             | Study, design, bidding and construction phase services for a project involving upgrades and construction monitoring to their existing potable water distribution system, including 402,000-gallon and 16,000-gallon water storage tanks, three booster stations and 3,800 feet of water line. |
| *West Virginia American Water<br><i>Wyoming County, WV</i>    | Terence Moran, P.E.<br>tcmoran@potesta.com | Water System Inventory                                   | Inventory of water system that serves the Town of Pineville.  |
| *Putnam County Commission/WVAW<br><i>Putnam County, WV</i>    | Terence Moran, P.E.<br>tcmoran@potesta.com | Design of Water Line Extension                           | Design, bid/construction phase services for 11,000 feet of waterline along Fisher Ridge Road.   |
| *West Virginia Division of Highways<br><i>Wood County, WV</i> | Terence Moran, P.E.<br>tcmoran@potesta.com | Evaluation of WWTP                                       | Evaluation of replacing the Mineral Wells Rest Area Wastewater Treatment Plant, including evaluating multiple options including using a lift station/force main to direct sewage to the Mineral Wells Public Service District.  |
| Crosiers Sanitary Service, Inc.<br><i>Fayette County, WV</i>  | Terence Moran, P.E.<br>tcmoran@potesta.com | Design of New WWTP Package                               | Permitting and design phase services for modular moving bed bioreactor/membrane filtration WWTP   |
| North American River Runners<br><i>Fayette County, WV</i>     | Terence Moran, P.E.<br>tcmoran@potesta.com | Rehabilitation of WWTP                                   | Design and permitting services for upgrade to package WWTP  |
| *American Electric Power (AEP)<br><i>Kanawha County, WV</i>   | Pat Taylor, P.E.<br>pataylor@potesta.com   | Design and Permitting of WWTP                            | Evaluation of existing WWTP and design and permitting of a new peat moss WWTP facility for the London Locks Hydroelectric Plant.  |
| *Charles Town Racing and Slots<br><i>Jefferson County, WV</i> | Dana Burns, P.E.<br>dlburns@potesta.com    | Design and Permitting of WWTP                            | Design and permitting of an initial capacity 250,000-gallon per day Sequence Batch Reactor (SBR) type WWTP (expandable to 375,000 gpd) for a gaming resort facility in Jefferson County, West Virginia.   |

| Project   | Project Manager/Contact Information      | Type of Project                               | Project Goals and Objectives   |
|---|--|---|--|
| *Huntington Sanitary Board<br><i>Cabell County, WV</i>    | Pat Taylor, P.E.<br>pataylor@potesta.com | Long-Term Improvement Plan for Sanitary Board | General agreement with the Huntington Sanitary Board (HSB) to perform services related to their long-term improvement plan. Redesign of conversion of four ejector stations to submersible pump stations; design, bidding, and construction management of combined sewer replacement involving 3,000 LF of 24"-36" pipe; design of 54-inch HDPE force main; evaluation of the mixing zone for the wastewater treatment plant discharge; design of a new HDPE effluent line, diffuser, and air chamber. |
| Thorn Hill Development<br><i>Jefferson County, WV</i>     | Dana Burns, P.E.<br>dlburns@potesta.com  | Design and Permitting of WWTP                 | Design and permitting of a 50,000-gallon per day Membrane Bioreactor (MBR) type WWTP (expandable to 225,000 gpd) for a residential development in Jefferson County, West Virginia. The design included approximately 5,180 linear feet of force main and gravity sanitary sewer collection line and a pump station.  |
| Tackley Mill Development<br><i>Jefferson County, WV</i>   | Dana Burns, P.E.<br>dlburns@potesta.com  | Design and Permitting of WWTP                 | Design and permitting of a 25,000-gallon per day Membrane Bioreactor (MBR) type WWTP (expandable to 1,000,000 gpd) for a residential development in Jefferson County, West Virginia. The design included approximately 17,000 linear feet of force main effluent discharge line and a pump station.  |
| *Berkeley Springs Development<br><i>Morgan County, WV</i> | Mark Kiser, P.E.<br>dmkiser@potesta.com  | Design and Permitting of WWTP                 | Design and permitting of a 440,000-gallon per day membrane bioreactor type WWTP for a large residential development in Berkeley County, West Virginia. The design included over 18,000 feet of gravity sewer line with sizes ranging from 8-inch to 15-inch and 5,800 feet of 8-inch force main and 85 feet of 2-inch force main. POTESTA also provided design for a water treatment plant and water distribution system for the development.  |

| Project  | Project Manager/Contact Information        | Type of Project                  | Project Goals and Objectives   |
|--|--|----------------------------------|--|
| *ECOLAB<br><i>Berkeley County, WV</i>                                | Terence Moran, P.E.<br>tcmoran@potesta.com | Evaluation of Pre-Treatment WWTP | Evaluation and recommendations for the pretreatment of ECOLAB's effluent prior to discharge to the Berkeley County Public Service Sewer District's (BCPSSD) industrial wastewater treatment plant. The evaluation focused on bringing the effluent into compliance with permit limitations.                            |
| *West Virginia American Water<br><i>Fayette County, WV</i>           | Terence Moran, P.E.<br>tcmoran@potesta.com | Rehabilitation of WWTP           | Evaluation of existing sanitary wastewater system and providing recommendations for areas of rehabilitation and improvement in O&M practices for the City of Oak Hill, West Virginia WWTP.   |
| *CNX RCPC, LLC<br><i>Monongalia County, West Virginia</i>            | Dave Sharp, P.E.<br>dsharp@potesta.com     | Evaluation of WWTP               | Evaluation of Hunting Hills Residential Development Sanitary Sewer System.   |
| *Salt Rock Sewer Public Service District<br><i>Cabell County, WV</i> | Terence Moran, P.E.<br>tcmoran@potesta.com | Engineering for Sewage Systems   | Conceptual engineering for on-site sewage systems for residents of Holiday Park. The treatment plant was failing and complaints had been filed with the West Virginia Public Service Commission.   |
| *West Virginia American Water<br><i>Greenbrier County, WV</i>        | Terence Moran, P.E.<br>tcmoran@potesta.com | Evaluation of WWTP               | Evaluation of sanitary wastewater system and providing recommendations for areas of rehabilitation and improvement in O&M practices for the Town of White Sulphur Springs, West Virginia WWTP.   |
| *Old Standard Development<br><i>Jefferson County, WV</i>             | Dana Burns, P.E.<br>dlburns@potesta.com    | Design and Permitting of WWTP    | Design and permitting of a 50,000-gallon per day Membrane Bioreactor (MBR) type WWTP (expandable to 250,000 gpd) for a large residential development in Jefferson County, West Virginia. The design included nearly 10,000 linear feet of force main and gravity sanitary sewer collection line and two pump stations. |
| *Tucker County Development Authority<br><i>Tucker County, WV</i>     | Dave Sharp, P.E.<br>dsharp@potesta.com     | New Sewer Line                   | Design, permitting, and construction administration/ observation of approximately 8,000 linear feet of water line and 8,000 linear feet of sewer line to extend service from the Town of Davis to the new Tucker County Industrial Park.   |

| <b>Project</b>   | <b>Project Manager/Contact Information</b>   | <b>Type of Project</b>                                  | <b>Project Goals and Objectives</b>   |
|--|--|---|---|
| *Pocahontas County Public Service District/Wastewater Management, Inc.<br><i>Pocahontas County, WV</i> | Dave Sharp, P.E.<br>dsharp@potesta.com       | Evaluation of Sanitary Sewer System                     | Evaluation of Hawthorn Loop Sanitary Sewer System, including observing pipe via CCTV, review previous engineering studies, identifying defects, and developing preliminary estimate of construction costs for rehabilitation. |
| Boone County Public Service District<br><i>Boone County, WV</i>  | Terence Moran, P.E.<br>tcmoran@potesta.com   | Rehabilitation of Sanitary Collection System Sewer Line | Provide design, permitting, bidding, and construction phase services for 3,700 feet of gravity sewer line replacement, and rehabilitation of two pump stations.   |
| *Salt Rock Sewer Public Service District<br><i>Cabell County, WV</i>                                   | Terence Moran, P.E.<br>tcmoran@potesta.com   | Odor Control Study                                      | Odor control study mandated by the West Virginia Public Service Commission. Complaints arose after a proposed lift station site was modified to include a "headworks" facility.   |
| *Town of Handley<br><i>Kanawha County, WV</i>  | Pat Taylor, P.E.<br>pataylor@potesta.com     | Design and Construction of Sewer System                 | Provide design and construction phase services for rehabilitation of their 1980's sewer system.   |
| Boone County Public Service District<br><i>Boone County, WV</i>  | Terence Moran, P.E.<br>tcmoran@potesta.com   | Design of WWTP  | Design, permitting, bidding, and construction phase services for upgrade of the Danville Wastewater Treatment Plant.  |
| *Steptoe & Johnson PLLC/Berkeley County Public Sewer Service District<br><i>Berkeley County, WV</i>    | Terence Moran, P.E.<br>tcmoran@potesta.com   | Disinfection of WWTP                                    | Provide an evaluation and subsequent affidavit regarding disinfection at Berkeley County Public Sewer Service District's Marlowe Town Center package wastewater treatment plant.  |
| *Town of Ceredo<br><i>Wayne County, WV</i>   | Terence Moran, P.E.<br>tcmoran@potesta.com   | Upgrade to Sanitary Sewer System                        | Design, permitting, and construction phase services for an upgrade to the sanitary sewer system. The design phase included identifying the need to upgrade piping sizes and pumping rates.                                    |
| *Town of Ceredo<br><i>Wayne County, WV</i>   | Terence Moran, P.E.<br>tcmoran@potesta.com   | Asset Management Plan                                   | Prepare an Asset Management Plan that was required as part of a sanitary sewer system upgrade funded by the Clean Water State Revolving Fund.   |
| Carmeuse Lime & Stone<br><i>Frederick County, VA</i>   | Joe Knechtel, P.E.<br>kjknechtel@potesta.com | WWTP  | Permitting, design, and construction oversight services for a wastewater treatment plant and a water treatment plant in Winchester, Virginia.   |



| <b>Project</b>  | <b>Project Manager/Contact Information</b>   | <b>Type of Project</b>   | <b>Project Goals and Objectives</b>  |
|---|--|--|--|
| *ZMM, Inc.<br><i>McDowell County, WV</i>                                      | Mark Kiser, P.E.<br>dmkiser@potesta.com      | Collection System and Upgrade to the Existing Vacuum Collection System | Design, permitting, bidding, and certain construction phase services associated with a collection system associated with two new schools of the same site, and the associated upgrade of the Town of Bradshaw's existing vacuum collection system.               |
| *Boy Scouts of America<br><i>Pocahontas County, WV</i>                        | Chris Grose<br>cagrose@potesta.com           | Replacement of Sanitary Sewer Collection System and WWTP               | Design of replacement sanitary sewer collection system and design of new sewage stabilization lagoon at Dilley's Mill Boy Scout Camp in Pocahontas County, West Virginia.  |
| Private Individual<br><i>Greenbrier County, WV</i>                            | Dana Burns, P.E.<br>dlburns@potesta.com      | Replacement Study for Treatment Plant                                  | Design and preparation of drawings and cost estimate for replacement study for 25,000 gpd package treatment plant in Lewisburg, West Virginia.   |
| *Timberwolf Development Corporation<br><i>Kanawha County, WV</i>              | Mark Kiser, P.E.<br>dmkiser@potesta.com      | Design and Construction of Sanitary Sewer Systems                      | Design and construction observation of water supply and sanitary sewer systems for Yorketown Subdivision, Charleston, West Virginia.   |
| Union Carbide Corporation<br><i>Kanawha County, WV</i>                        | Doug Bowe, P.E.<br>dwbowe@potesta.com        | Sewer Line   | Evaluated 300,000 linear feet of combined process/storm sewer water and designed a new system using a gravity and force main combination system for Union Carbide's South Charleston and Institute plants and their Technical Center, Charleston, West Virginia. |
| Cloverleaf Environmental Consulting<br><i>Loudoun and Clarke Counties, VA</i> | Joe Knechtel, P.E.<br>kjknechtel@potesta.com | Repair of Failed AOSS System   | Design and permitting of 600 gpd multi-flow treatment and drip irrigation system (AOSS) for a repair of a failed residential conventional system in a rural, residential areas in Purcellville, Leesburg, and Berryville, Virginia.                              |
| Cloverleaf Environmental Consulting<br><i>Clarke County, VA</i>               | Joe Knechtel, P.E.<br>kjknechtel@potesta.com | Repair of Failed AOSS System   | Design and permitting of 450 gpd multi-flow treatment and drip irrigation system (AOSS) for a repair of a failed residential conventional system in a rural, residential areas in Bluemont, Virginia.  |

| Project  | Project Manager/Contact Information          | Type of Project                            | Project Goals and Objectives   |
|--|--|--|--|
| Summit at Cheat Lake<br><i>Monongalia County, WV</i>                 | Pat Taylor, P.E.<br>pataylor@potesta.com     | Design of Sanitary Sewer Collection System | Design of a sanitary sewer collection system, incorporating 13,500 linear feet of 8-inch gravity sewer line, as well as 2,500 linear feet of 1.5-inch and 2-inch force main line from three pump stations. |
| US Customs & Border Protection Agency<br><i>Jefferson County, WV</i> | Joe Knechtel, P.E.<br>kjknachtel@potesta.com | Design of WWTP                             | Feasibility study of "living tree" treatment plant, designed 50,000 gpd wastewater treatment plant with UV/aeration post treatment, designed gray water system, and prepared permit applications.          |

## 2.4 References

POTESTA is providing references from past and current clients. Our references can attest to POTESTA's professionalism, experience and expertise, and ability to deliver engineering consulting services in an accurate, efficient, and cost-effective manner.

| Client                                  | Contact Name                   | Contact Number |
|---|--------------------------------|----------------|
| Huntington Sanitary Board               | Wes Leek, Executive Director   | (304) 781-1912 |
| Town of Handley                         | Essie Ford, Mayor              | (304) 442-5100 |
| Town of Ceredo                          | Otis Adkins, Mayor             | (304) 453-1041 |
| Boone County Public Service District    | Nancy Shreve                   | (304) 369-2622 |
| Salt Rock Sewer Public Service District | Ruby Griffith, General Manager | (304) 743-6945 |

## 3.0 STAFF QUALIFICATIONS AND EXPERIENCE

POTESTA has assembled a project team that is highly qualified and unprecedented in West Virginia for being able to complete wastewater projects. Our project management staff has managed hundreds of projects and understands what it takes to bring ideas to fruition through cost-effective and often innovative designs. We take pride in our ability to work with our clients from the conceptual idea through the construction process, which is the most critical part of the project.

Mr. Dana L. Burns, P.E., Vice President at POTESTA, will serve as principal-in-charge for this project. As such, he will direct POTESTA's staff, answer questions, address problems encountered and review the project budget. Mr. Burns has over 36 years of experience with civil and environmental engineering projects, including working on projects funded by Small Cities Block Grant, United States Department of Agriculture-Rural Utility Services (USDA-RUS), AML, United States Department of Commerce - Economic Development Administration, West

Virginia Infrastructure and Jobs Development Council, and others. This experience includes serving as a project manager for various sanitary sewer projects, industrial wastewater projects, water supply system extensions, water extension feasibility studies, and numerous West Virginia American Water projects. In addition to providing technical guidance throughout the project, Mr. Burns will be responsible for maintaining the schedule and budget for the project.

Mr. Mark A. Sankoff, P.E., will serve as project manager for this project. Mr. Sankoff has over 33 years of experience in civil engineering, with particular emphasis on water/wastewater projects. As the past Director of Engineering at West Virginia American Water, he served as project manager for numerous water projects, including the Kanawha County 2000 Water Project, installing over 100 miles of water main, six tanks and six boosters serving over 1,700 families. Mr. Sankoff's experience for sewer projects include the design and construction of sewer stations, pump stations, force mains, and sewer collection systems. He has also been responsible for the design, plans, specifications, regulatory approval, bidding and bond sale, and construction management of wastewater treatment plants.

Mr. Terence C. Moran, P.E., has over 26 years of experience on civil engineering projects, with particular emphasis on water/wastewater projects. Mr. Moran has served as the project manager/project engineer for 100+ water/wastewater projects, including preliminary engineering, environmental assessments, funding applications, hydraulic analysis, booster and lift station design, storage tank design, line sizing, design of treatment systems, drawings, specifications, cost estimates, bid documents, "shop drawing" review, construction management and construction inspection. Mr. Moran has completed water/wastewater projects in Barbour, Boone, Brooke, Cabell, Fayette, Greenbrier, Hardy, Harrison, Jefferson, Kanawha, Lincoln, Logan, Monongalia, Morgan, Pocahontas, Nicholas, Preston, Putnam, Raleigh, Randolph, Tucker, Wyoming, and Upshur counties in West Virginia.

Mr. Pat Taylor, P.E., has substantial experience with state regulatory and funding programs. Mr. Taylor will serve as a liaison with the West Virginia Infrastructure and Jobs Development Council, and the West Virginia Bureau for Public Health. Mr. Taylor was a manager at West Virginia's Bureau for Public Health. His responsibilities included managing of the West Virginia Drinking Water Treatment Revolving Fund (DWTRF), the state water and sewer construction permitting program and the capacity development program. He also sat on the West Virginia Infrastructure and Jobs Development Council, overseeing the Council's water technical committee, sitting on the sewer technical committee and also being a member of the council's funding committee. On a routine basis, Mr. Taylor worked with coordination of all funding agencies.

Mr. D. Mark Kiser, P.E., has over 31 years of experience in civil engineering, with particular emphasis on design and construction administration. He has served clients on many water and wastewater projects. Mr. Kiser will serve on an as needed technical basis for this project. Mr. Kiser has successfully managed various water and wastewater projects, including recent projects with a combined contract value in the millions of dollars. These projects included 180,000 feet of gravity and pressure piping systems.

POTESTA's proposed construction technicians include Robert Lamm and Mike Whitman. Mr. Lamm has extensive experience with construction observation for potable water systems as well as sanitary sewer and wastewater treatment facilities. Most recently he completed construction observation for a 14,000 LF water main replacement project in Kanawha County. Mr. Whitman has 25 years experience with public water and sewer construction project oversight.

The personnel listed above are available to work on this project immediately upon notice to proceed. **Appendix C** of this proposal includes resumes of key individuals who are anticipated to work on this project. Copies of staff certifications and degrees applicable are in **Appendix D**.

### **3.1 Proposed Staffing Plan**

POTESTA's principal-in-charge will be responsible for contract management (administration) and shall coordinate and direct all aspects of the project. The principal-in-charge will review the proposed project, assign a project manager, assemble a project team and appoint key staff to develop a proposed scope of work. The principal-in-charge and project manager will visit all of the sites with the WVANG to review site conditions and the proposed services to be completed and guide the preparation of a detailed proposal and cost estimate. A written proposal, including a detailed scope of services and an associated man-hour and cost estimate, will then be prepared and submitted to the WVANG for review. The project manager will review the proposal with the WVANG, including a task-by-task discussion of work items and the related costs. Upon the WVANG's approval of the proposal, the project manager will arrange for the start of project activities. The principal-in-charge will provide the project manager the required staff necessary to complete the project activities, will review the project budget and schedule during performance of the project, and will provide a final QA/QC review of the documents prior to submittal to the WVANG. Day-to-day project activities for this project will be performed under the direction of our project manager. The project manager will develop a detailed step-by-step project work plan so that the project activities are completed in a correct manner, on budget, and on time. They will also review work products at intermediate points and prior to project completion. They will conduct project status reports which may include weekly meetings, memos, or telephone calls with the WVANG's project manager as required. The project manager will supervise the day to day work in progress, will coordinate with POTESTA's subconsultants and subcontractors (e.g., geotechnical drilling and laboratory services) to provide necessary services, and review work products at intermediate points and prior to submittal to the WVANG. POTESTA will utilize the appropriate classification of staff to conduct activities required for the project. Our normal method of staffing projects is to assign a small project team with total responsibility for completion of the work to the client's satisfaction and budget. Where necessary, the team can draw on the expertise available within POTESTA's large staff. POTESTA offers a large staff with the efficiency and rates normally associated with a small firm.

POTESTA's proposed project organization chart is contained in **Appendix E**.

### **3.2 Communication with Owner**

POTESTA's point of contact for the Joint Forces Headquarters and Camp Dawson Redundant Water and Sewage Systems Project will be Mr. Terence Moran, P.E., Senior Engineer. The following is his contact information:

Address: Potesta & Associates, Inc.  
7012 MacCorkle Avenue, SE  
Charleston, West Virginia 25304  
Phone: (304) 342-1400 Fax: (304) 343-9031  
Email: tcmoran@potesta.com

Mr. Moran can send electronic communication weekly to update the WVANG on the project status. POTESTA's headquarters is in close proximity to the Joint Forces Headquarters Charleston office which will facilitate immediate response to your needs and allow meetings to be attended within a minutes' notice. Mr. Moran can attend face-to-face meetings, as necessary.

### **4.0 PROJECT APPROACH**

Based upon POTESTA's understanding of the scope of services, we have outlined our typical approach to wastewater projects. This clear plan has been used in past projects that met the owner's and project budget, as well as the project constructed in the time allotted in the contract documents.

#### **▪ Development of Scope of Services**

POTESTA will work with the WVANG to develop a successful approach to the project. Input will also be considered from the funding agencies and WVDEP, if necessary. Items such as smoke testing and video recording of the system will be scheduled and performed.

#### **▪ Preliminary Engineering Study**

POTESTA will perform the preliminary engineering study based on the scope of services developed in conjunction with the WVANG. The preliminary engineering study will assess alternatives for design and construction of the proposed sanitary sewer collection lines, treatment facility, and related appurtenances for the Joint Forces Headquarters and Camp Dawson water and waste water systems. The results of the preliminary study will be presented to the WVANG for review and comment on the proposed design alternatives. The preliminary study would include estimates of probable construction costs for the proposed construction alternatives.

- **Final Design and Specifications**

POTESTA will proceed with the final design and preparation of project specifications for the project once the WVANG has reviewed the preliminary design and we have received comments on the same, and the necessary funding has been obtained. The design can be flexible and POTESTA will adjust the design accordingly as the situation and/or funding may dictate. Construction drawings and specifications will be prepared for regulatory and funding agencies and the WVANG's review and approval prior to advertisement and bidding.

- **Construction Cost Estimate**

POTESTA will prepare a preliminary estimate of probable construction cost broken down by major work items. The preliminary estimate will be submitted with a draft submittal of the drawings and specifications. A final estimate of probable construction cost will be prepared and submitted with the draft drawings. The final estimate will be used for evaluation of project costs and subsequent contractor bids.

- **Permitting**

Several permits and/or permit modifications may be required for the proposed project. These may include a NPDES General Stormwater Permit, a modification to the facility's NPDES permit, West Virginia Department of Transportation Highway Occupancy Permit, Public Land Corporation Stream Activity Permit, US Army Corps of Engineers Nationwide Permit (NWP 12), and a West Virginia Department of Health Permit and a West Virginia Department of Environmental Protection Permit.

- **Bidding Documents Preparation/Bidding Assistance**

POTESTA will prepare a construction bid form and required bidding (i.e., contract) documents, and will assist the WVANG in the appropriate procedures regarding advertisement and procurement of bids. POTESTA will also help present the project at public meetings, and assist with the pre-bid conference for contractors. Upon receipt of bids, POTESTA will aid the WVANG in evaluation of the bids for cost, completeness and qualifications.

- **Construction Administration/Observation**

After bid evaluation and contractor selection by the WVANG, POTESTA proposes to complete the following construction administration and observation tasks during construction. The scope of services described below is based in part on terms and requirements of the *Standard General Conditions of the Construction Contract*, prepared by the Engineers Joint Contract Documents Committee, which has been used for other projects and is assumed to be used as the basis of the contract between the WVANG and the contractor.

- ◆ Review contract documents, particularly items that were not prepared by POTESTA, such as the agreement, general conditions, supplementary conditions, specification special conditions, and engineering specifications.
- ◆ Review, meet, comment on and accept contractor's preliminary (and subsequent adjustments to) progress schedule, preliminary schedule of shop drawing and sample submittals, and preliminary schedule of values (for progress payments).
- ◆ Attend pre-construction conference.
- ◆ Review underground facilities not shown on contract documents to determine potential changes to contract documents.
- ◆ Review substitutes and "or equal" items, and issue written acceptance/denials.
- ◆ Review and approve shop drawings and samples (if required), including review of revised shop drawings if necessary.
- ◆ Review contractor work plan, if required by specification special conditions.
- ◆ Attend progress meetings and additional meetings as needed.
- ◆ Issue written clarifications or interpretations of the requirements of the contract documents, including issuance of additional specifications and drawings.
- ◆ Provide a nearly full-time representative to observe construction for compliance with the contract documents, and observe testing by the contractor and record results on appropriate forms.
- ◆ Prepare weekly reports summarizing construction activities.
- ◆ Prepare change orders for the work, including issuance of additional specifications and drawings, if necessary.
- ◆ Review contractor invoices (i.e., Applications for Payment) and issue written recommendations for payment or denial.
- ◆ Issue Certificate of Substantial Completion to the WVANG, as typically required by the contract documents.
- ◆ Provide record drawings showing "as-built" features.

#### **4.1 Project Budget Control**

The project manager will be responsible for monitoring the project budget and keeping the principal-in-charge informed of its status. POTEESTA's staff enters time into POTEESTA's Clearview InFocus computer software on a daily and/or weekly basis. POTEESTA's project managers can access InFocus at any time, thus allowing "real-time" control of project costs. In addition, field representatives routinely keep track of subcontractor costs on a daily basis. Thus we can, in effect, keep track of the total project costs on a weekly basis. Our subcontractors commonly invoice at monthly intervals and there is seldom a discrepancy between our field representative's pay items and our subcontractor's invoice.

#### **4.2 Schedule Control**

Direct responsibility for schedule control lies with the project manager. Initially, the project manager will review schedule requirements to see how they can be achieved given the anticipated scope of work. As the project progresses, the project manager will monitor progress and compare it with the established schedule on a weekly basis keeping the principal-in-charge aware of the schedule's status. In this manner, the principal-in-charge can make staff adjustments to allow the project manager to maintain the project schedule. If circumstances develop that make it impossible to maintain the project schedule, the project manager will contact the WVANG's project manager to develop a mutually acceptable adjustment to the schedule and/or work plan.

#### **4.3 Quality Assurance/Quality Control**

Submittals to the WVANG will be reviewed and commented on by the project manager and the principal-in-charge prior to submittal to the WVANG. Both the project managers and the principal-in-charge have worked on numerous State of West Virginia projects, and thus understand the level of detail and expectations for State government projects. POTEESTA utilizes standardized Quality Assurance/Quality Control (QA/QC) practices such as consistency checks, color coding of checked copies/calculations, and review of method of measurements versus quantity tallies to insure QA/QC expectations are met.

### **5.0 REQUIRED DOCUMENTS**

**Appendix F** contains the executed CEOI 0603 ADJ1700000004 solicitation forms, certification and signature page, addendum acknowledgement form, purchasing affidavit, and insurance certificate.



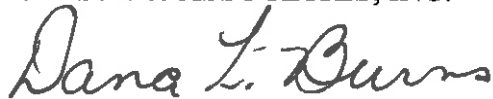
## 6.0 CLOSING

We look forward to continuing to serve the WVANG and complete the renovation of water and wastewater systems for the Joint Forces Headquarters and Camp Dawson Redundant Water and Sewage Systems Project. Our commitment is to provide quality service, rapid response and project completion, and to exceed your expectations for services performed under this project. We believe the track record of our professionals demonstrates our ability and commitment.

We look forward to an interview to better acquaint you with our capabilities and plan.

Respectfully submitted,

POTESTA & ASSOCIATES, INC.

A handwritten signature in black ink that reads "Dana L. Burns". The signature is written in a cursive, flowing style.

Dana L. Burns, PE  
Vice President

DLB:JJB/clr

# POTESTA & ASSOCIATES, INC.

## *Water and Wastewater Engineering*

Our professional staff is dedicated to providing quality engineering services for various types of water treatment and distribution systems, as well as wastewater management, collection and treatment systems. The following is a list of some of the services Potesta & Associates, Inc. is capable of providing:



- Remediation Systems
- Landfill Leachate Treatment
- Storage Tank Design
- Flow Measurement
- Surveying/GPS and Mapping
- Permitting and Regulatory Liaison
- Combined Sewer Overflow (CSO) Management, Sampling and Modeling

### STORMWATER MANAGEMENT

- Hydraulic Conveyance Structure Design (Culverts, Channels, Drop Inlets, Etc.)
- Stormwater Retention/Detention Pond Design
- Stormwater Pond Modeling
- Floodplain Identification and Management Strategies
- Hydrologic and Hydraulic Analysis and Evaluations and Modeling
- Construction Monitoring
- Surveying
- Permitting and Regulatory Liaison

### WATER AND WASTEWATER DESIGN

- Feasibility Studies
- Conceptual Design
- Final Design
- Bidding and Construction
- Construction Monitoring
- Wastewater Audits
- Wastewater Minimization Studies
- Engineer's Cost Estimates
- Small Flows Design (Traditional and Innovative Treatment Systems for Low Volume Flows)
- Sewage Collection and Treatment
- Water Treatment and Distribution
- Industrial Wastewater Treatment
- Wastewater Treatment Plant Design
- Water Treatment Plant Design
- Water and Sewer Line Extensions



### POTESTA & ASSOCIATES, INC.

7012 MacCorkle Avenue, SE, Charleston, West Virginia 25304  
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Regional Offices: Morgantown, WV and Winchester, VA

Potesta & Associates, Inc. (POTESTA) helps clients evaluate and plan projects by completing the following types of preliminary evaluations and analyses.

- Phase I Environmental Site Assessments
- Floodplain Determination
- Geotechnical Explorations Including Soil, Bedrock, and Groundwater Characterization
- Foundation Recommendations
- Monitoring Well Systems and Site Characterization Plans
- Boundary, Topographical and Photogrammetric Surveys
- Utility Planning
- Earthwork Evaluations Including Volume Analysis
- Opinion of Probable Costs/Engineer's Construction Cost Estimates

Once the project has been determined feasible, POTESTA's design professionals complete preliminary and final designs. Frequent communication is made with the client and any other design professionals to review completed activities and obtain input for the design process. Our goal is to provide our services to achieve or exceed our clients' expectations.

Our design services include:

- Erosion and Sediment Control Plans
- Earth Retaining Structures Design
- Geometric Site Layout
- Grading and Drainage Plans, Including Excavation and Fill Optimization
- Access Road Design
- Hydraulic Structure Design
- Water and Sewer Design
- Slope Stability Analysis
- Subsurface Drainage System Design
- Construction Drawings, Specifications and Contract Document Preparation

POTESTA offers experienced environmental engineers and scientists to prepare applications for various environmental permits that may be required. These services include:

- Stormwater Management Permit/Erosion and Sediment Control Plans
- Office of Air Quality Permit to Construct
- Wetland Delineation and Permits
- National Pollutant Discharge Elimination System (NPDES) Permits
- Floodplain Management Permits
- Groundwater Protection Plans
- Spill Prevention, Control and Countermeasure Plans
- Environmental Site Assessments
- Environmental Impact Statements

POTESTA routinely provides professional services throughout construction of our projects. These services include survey layout, construction management, construction monitoring, record drawing preparation, and bid evaluation assistance.



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# POTESTA & ASSOCIATES, INC.

## *Computer-Aided Drafting and Design*

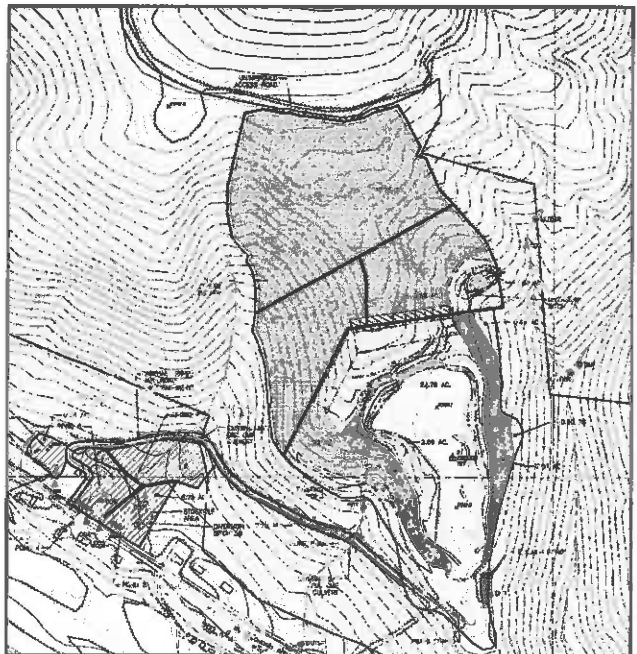
The Potesta & Associates, Inc. (POTESTA) computer-aided drafting and design (CADD) department provides state-of-the-art design and drafting services for in-house engineering and environmental consulting projects. We also provide personnel to clients who have a temporary need for additional drafting manpower. These services may be performed at your location or our office as required.

The CADD department utilizes the latest drafting/design software and computer hardware to maintain productivity at the high levels that clients demand and expect. We utilize the latest version in AutoCAD Civil 3D civil/survey design software to prepare, revise, and manipulate drawings and engineering data efficiently. Drawings and figures are produced using a Hewlett Packard 4000 and 5500 color ink jet plotters. POTESTA's experienced and trained professionals allow clients' projects and assignments to be completed rapidly and at reasonable cost.



Our CADD services include:

- Survey data manipulation including development of topographic mapping, cross sections, profiles, isopach drawings, etc.
- Site design including grading plans, drainage plans, utilities plans, right-of-way plans, etc.
- Roadway design.
- Water and sewer design.
- Permit drawings, maps, and exhibits.
- Earthwork and planimetric quantity development.
- Two and three dimensional graphics.



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Potesta & Associates, Inc. (POTESTA) provides construction monitoring and construction management services to assist clients in achieving regulatory and contractual compliance, to document that contractor activities are in compliance with design requirements, and to serve as an extension of clients' staff. POTESTA can provide full-time or part-time field services utilizing one or more engineers or technicians.

Regulatory compliance is often best documented by providing full-time construction monitoring services for a construction project. POTESTA can assist clients in observation of construction activities and documenting compliance. Our typical involvement in such projects includes:

- Conducting a pre-construction review of design and contract documents to identify potential problem areas, and consultation with the owner or client to develop strategies or procedures to avoid anticipated problems.
- Assistance in contractor selection. POTESTA can recommend construction contractors who specialize in the type of work associated with the project and can assist in bid evaluation by reviewing proposed quantities, unit costs, lump sum costs, and any proposed exceptions or qualifiers for the project. POTESTA can conduct pre-bid conferences to help contractors understand project requirements. We can also conduct pre-construction conferences prior to the start of the project to help establish lines of communication, review detailed plans, discuss testing requirements and establish proper reporting procedures.

- POTESTA can provide surveying for construction layout, measurement for payment quantities, and documentation of as-built conditions. Survey results are downloaded to form computer-aided drafting (CAD) drawings allowing the efficient preparation of record drawings and any subsequent evaluations required.
- Construction monitoring can include field testing to document compliance such as field density tests, concrete testing, sampling of materials for laboratory analysis, and documentation of site conditions and work performed on a daily basis or as required.
- Preparation of summary of construction reports, including photographs, videotape documentation, test results, daily construction logs, industrial hygiene monitoring, and other documentation as may be required by the client.
- Preparation of certifications as may be required.



# POTESTA & ASSOCIATES, INC.

## *Hydrology and Hydraulics Design*

Our engineers have extensive experience in the application of hydrology and hydraulic principles to the design of real world systems. These applications include:

- Drainage Structure Sizing
  - Stream Relocations
  - Culverts
  - Channels
- Pond and Dam Design
  - Sediment Ponds and Basins
  - Spillways
  - Design/Rehabilitation
  - Slurry Impoundments
  - Lagoons
  - Dams
- Detention and Retention Systems
  - Ponds
  - Pipes
  - Underground Bladders
- Stormwater Management System Design
- Floodplain Management Permits/Approval
- Floodway Studies
  - FEMA (Federal Emergency Management Agency)
  - NFIP (National Flood Insurance Program)
  - Flood Elevation Surveys/Certifications
  - Flood Routing
- Dam Break Analysis
- Hydrology Surveys
- Stream Gauging
- Rainfall and Flow Data Collection
- Stormwater Drainage System Design
- Pressure Pipe Systems
- Stream Restoration Plans
- Natural Stream Channel Design/Restoration
- Expert Witness Testimony

To complete these types of applications, our engineers, scientists, and surveyors work jointly to develop an effective and economical solution to your situation. Their analyses use widely accepted computer models.



Potesta & Associates, Inc. typically uses the following computer modeling programs:

- HEC-RAS
- HEC-HMS
- TR-20/TR-55
- StormCAD
- CulvertMaster
- FlowMaster
- PondPack
- CORMIX

We have provided these services to a wide variety of public and private sector clients. Our staff not only understands the technical details, but is very experienced in working with the various state, federal, and local regulatory agencies. We know the level of detail they require and can obtain the necessary approvals in a timely manner.



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# POTESTA & ASSOCIATES, INC.

## *Mixing Zone Analysis and Diffuser Design*

Potesta & Associates, Inc. (POTESTA) has extensive experience in providing regulatory mixing zone analysis, as well as design and construction phase services for outfalls and diffusers. POTESTA can assist in every phase of the project from the data collection, modeling and conceptual design through final design, permitting, bidding, construction, and post-construction sampling and verification. Our projects proceed in an expedited manner to allow for compliance with permit deadlines. POTESTA's technical capabilities include:

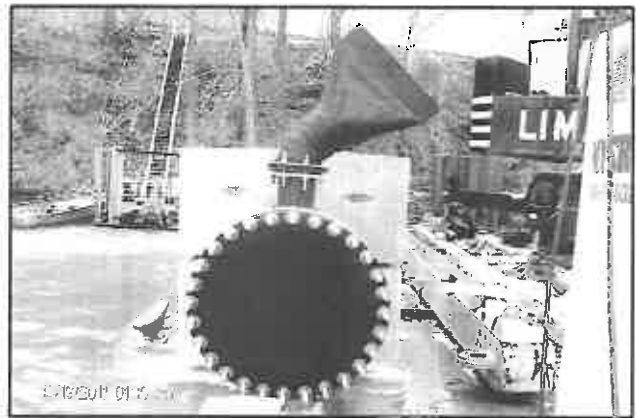
- Ambient and Effluent Data Collection
- Mixing Zone Modeling and Associated Studies
- Topographic Mapping, Including River Bottom
- Effluent Line/Diffuser Designs
- NPDES Permit Application/Section 404 Permits
- Wastewater Treatment Plant Designs
- Water Quality Assessments
- Environmental Impact Studies
- Construction Observation
- Mixing Zone Verifications



### **MIXING ZONES**

Mixing zones are often used in discharge situations where effluent quality does not meet water quality standards. Diffuser projects generally start with an evaluation study followed by conceptual design using a mixing model. POTESTA has worked with pollutants such as metals and organic chemicals, as well as "narrative" type standards regarding visual

discharges, etc. Mixing zone modeling is typically completed at POTESTA using the Cornell Mixing Zone Expert System (CORMIX) and CORHYD softwares.



### **DIFFUSER DESIGN**

POTESTA works closely with the client to identify cost-effective and appropriate diffuser designs. Common diffuser design goals include:

- Adequate Dilution and Velocity
- Ability to Discharge Peak Flow
- Equal Flow Distribution Among Ports
- Prevention of Sediment and Debris Intrusion
- Meeting Regulatory Standards

Once the design is complete, POTESTA works closely with state and federal regulatory agencies to prepare and gain approval for the necessary permit applications, such as NPDES and Section 404 permit applications.

POTESTA can perform construction observation of the installation of the diffuser for conformance to design requirements, including diver observation of the installed diffuser.

No matter the size or complexity of your water resource issue, POTESTA can help provide an integrated solution.



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Potesta & Associates, Inc. (POTESTA) offers its clients exceptional expertise and experience when it comes to the permitting process, including all phases of application preparation, negotiations, modifications, compliance and renewal at all levels of government. Our permit services cover air, mining (coal and quarries), water and waste disposal permits.

### **AIR**

Our firm offers complete air permitting and consulting services to assist industry in complying with today's complex air quality regulations. Our staff has experience in identifying, characterizing and permitting air pollution sources for a variety of industries, including:

- Coating Operations
- Petroleum and Petrochemical Operations
- Chemical Manufacturing
- Manufacturing Facilities
- Mining
- Quarries
- Natural Gas Compressor Stations
- Electric Utilities

Our air quality experts have comprehensive knowledge of federal, state and local regulations, as well as experience in complex Title V applications. Our services include identification of potential air pollution sources, development of control strategies, preparation of permit applications, emissions inventories, compliance audits and regulatory liaison.

At both the state and federal levels, we help clients interpret and comply with air regulations, including the New Source Performance Standards (NSPS) and National Emissions Standards for Hazardous Air Pollutants (NESHAPS). We can suggest emissions control strategies to meet both current and anticipated regulations, including BACT, MACT and LAER.

### **MINING**

In recent years, mining permits have become increasingly complex, requiring diverse expertise in mining techniques, engineering, environmental regulations, benthic studies, hydrogeology and hydrology. Our staff has broad experience in providing innovative solutions to various mining problems.



Although the objective of a permit application is to receive agency approval in a timely manner, the client does not benefit if the application does not allow for effective operations. We work with our clients to ensure that your operational needs are met while allowing for essential flexibility. Several members of our staff have mining industry experience, and they understand the requirements vital to an effective operation.

From the beginning of the permit process, POTESTA involves the reviewing agency to allow its concerns to be addressed prior to submittal of the application. Often, this reduces the amount of review comments and revisions which could slow the approval process. Our thorough knowledge of the various phases and requirements of the permitting process, coupled with our technical



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Our surveyors are experienced in many aspects of surveying such as topographic mapping, boundary surveys (rural/farms, city lots, and subdivisions), ALTA surveys, control surveys, flood certificate surveys, well location surveys, construction surveys for layout of work, record drawings, and quantity measurements. Related areas include courthouse research, preparation of right-of-way plans, and verification of property owners. Potesta & Associates, Inc. (POTESTA) has licensed professional surveyors registered in West Virginia, North Carolina, South Carolina, Ohio, Virginia, and Pennsylvania. Their total combined surveying experience comes to well over 50 years.

POTESTA's surveyors use state-of-the-art equipment such as Topcon total stations, Trimble R-8 GNSS, and SMI data collectors with SMI software. Autodesk Civil 3D reduction and design software is used.

POTESTA is equipped with modern surveying instruments, allowing efficient data processing and accurate gathering of field information. Total station instruments equipped with data collectors are utilized for complete field-to-office automation allowing for high levels of productivity in the field. The latest versions of software are then used to process survey data and create drawings or required end products. These products can be supplied to our clients in AutoCAD and/or Microstation format.

Small topographic mapping projects can be completed in-house using the aforementioned process. Larger projects are better suited for mapping using aerial photography.

POTESTA can provide the necessary surveying required for establishing ground control for aerial mapping. As a quality control measure, aerial mapping is field checked for accuracy by surveying cross sections or random points.



Surveys completed by POTESTA are performed by or under the direction of a professional licensed surveyor. Surveys and mapping are completed to the standards outlined by the National Map Standards, as well as other applicable quality standards.

Our staff is experienced in global positioning surveys (GPS). GPS equipment, Trimble R-8 GNSS, and existing base stations are among POTESTA's surveying tools. Based upon the site location and ultimate use of the survey information, a recommendation is made to the client as to whether or not traditional survey or GPS is most applicable to their project.



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Potesta & Associates, Inc.'s (POTESTA) engineers and geologists have extensive experience related to the geotechnical engineering and geological disciplines. These areas include subsurface explorations, monitoring well and piezometer installations, foundation design recommendations, slope stability analysis, retaining walls, and remedial designs as they relate to construction, mining, waste disposal, environmental remediation, and other projects.

### **SUBSURFACE EXPLORATIONS**

POTESTA's diverse staff of engineers and geologists is experienced in the many different facets of subsurface explorations. Our usual procedure is to attend an initial meeting with the client to establish requirements and expectations, conduct a preliminary site reconnaissance, and develop a recommended exploration program for your review and approval. Supplemental information from the local area is then obtained from readily available sources to assist the engineer or geologist in making final recommendations.



POTESTA can provide field engineers and geologists who are knowledgeable using the latest technologies to assist in collecting and analyzing samples. Our knowledge of the proper procedures and familiarity with local conditions allows office

and field personnel to adjust the exploration plan if unanticipated field conditions are found.

Our staff is familiar with the following items which can be associated with subsurface exploration:

- Drilling and Rock Coring Techniques (augers, rotary bits, Geoprobe™, etc.)
- Sample Collection Methods (split spoons, shelly tubes, Geoprobe™ sleeves, etc.)
- Classification and Logging of Soil and Rock Samples
- Monitoring Well and Piezometer Installation

### **SLOPE STABILITY ANALYSIS AND REMEDIAL DESIGN**

Slope stability is often a major concern during the design and construction phases of many projects, especially those located in the Appalachian terrain. POTESTA's engineers are familiar with the various methods utilized to predict slope stability and are capable of performing the related analyses. Slope stability is critical for many projects such as analysis of existing or proposed soil embankments, rock fills, dam analysis and design, landfill design and operation, assessing the causation of slope failure, and designing remedial measures. Analyses can involve circular or sliding block methods, interface friction angles, and estimation of the strength parameters of the soil or rock. Slope stability analyses are performed on one of the most technologically advanced computer programs available and can be modified using site specific data.

POTESTA's engineers can also develop preventive measures during initial project design or recommendations to repair slope failures. Based upon the project circumstances, our engineers will consider various remedial measures such as regrading the site to obtain more suitable conditions, management of groundwater, and design of retaining structures. Our staff is familiar with a wide variety



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# **SOURCE WATER PROTECTION PLAN UPDATE: ENGINEERING STUDY FOR CONTINGENCY PLANNING FOR SEVEN SOURCE WATER PROVIDERS**

*Regional Intergovernmental Council  
South Charleston, West Virginia*

The Source Water Protection Act contained in West Virginia Senate Bill 373 and Legislative Rule 64CSR3 require Source Water Providers (SWP) to update their Source Water Protection Plan in response to the January 9, 2014 Freedom Industries chemical leak which contaminated the drinking water for approximately 300,000 West Virginia residents. Potesta & Associates, Inc. (POTESTA) was retained by the Regional Intergovernmental Council in South Charleston to prepare an Engineering Study for Contingency Planning, which is a component required in the Updated Source Water Assessment and Protection Plan Report, for seven SWPs.



The Engineering Study for Contingency Planning examines and analyzes the technical and economic feasibility of each of the following options to provide continued safe and reliable public water service in the event the SWP's primary source of supply is no longer available (i.e., single source analysis). POTESTA utilized a feasibility matrix provided by the West Virginia Department of Health and Human Resources to rank alternative source water options listed below based on economic, technical and environmental criteria:

1. Backup Intake or well from a substantially different location or water source.
2. Construction of raw or treated water storage capacity to provide at least two days of system storage based on the plant's maximum level of production experienced within the past year.
3. Creation or construction of operational interconnection(s) with another SWP to receive its water from a different source.
4. Creation or construction of alternative source water options.

In addition to the single source analysis, POTESTA examined existing water system information to assist SWPs with contingency planning including the SWP's ability to: isolate or divert contaminated water, switch to an alternative water source or surface water intake, close its water supply (including estimating maximum duration of closure based on existing storage capacity), implement an early warning monitoring system, operate during a power outage, assess unaccounted for water, and meet future water supply demands. Results were summarized in a report and POTESTA presented the final report at a public meeting for each SWP.



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# UPDATE OF SOURCE WATER PROTECTION PLAN

## *Region VI Planning & Development Council Various Locations, West Virginia*

The Source Water Protection Act (contained in West Virginia Senate Bill 373) and Legislative Rule 64CSR3 require Source Water Providers (SWPs) to update their Source Water Protection Plans in response to the January 9, 2014 Freedom Industries chemical leak which contaminated the drinking water for approximately 300,000 West Virginia residents. Potesta & Associates, Inc. (POTESTA) was retained by the Region VI Planning & Development Council to prepare Source Water Protection Plans for eight SWPs in northern West Virginia.

Included in our scope of services was:

- Reviewing reports previously prepared by the West Virginia Department of Health and Human Resources (WVDHHR) and/or the SWPs.
- Meeting with each SWP to identify source water concerns, develop management strategies, create a communication and monitoring plan, and update education and outreach strategies.
- Forming a source water protection team to allow for local review of the source water protection plans, including review by local government, emergency planning, and health department officials, as well as business owners and residents.
- Developing GIS-based mapping of the Source Water Protection Area (SWPA) and Potential Sources of Significant Contamination (PSSC).
- Prioritizing PSSCs and developing actionable management strategies to reduce the associated risks.
- Leading source water protection plan meetings and public meetings for plan development.
- Presenting the Source Water Protection Plan at a public forum (e.g., town council, board meeting, etc.) and answering questions on the plan.



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# BUFF'S BRANCH/TRACE FORK WATER LINE EXTENSION

*West Virginia American Water  
Putnam County, West Virginia*

Potesta & Associates, Inc. (POTESTA) was retained by West Virginia American Water (WVAW) to prepare a design and develop bidding/construction documents for approximately 35,000 linear feet of 8-inch, 12-inch, and 16-inch diameter water line following United States Route 34, and County Routes 34/21 and 48 in Putnam County, West Virginia. POTESTA utilized USGS topographic mapping enlarged to create base mapping for the project.

POTESTA performed field reconnaissance and coordination with public and private utilities to establish locations of underground utilities. Road drainage culverts were also added to the plan drawings.

Based on topography, existing utilities, and required service connection locations, POTESTA selected the proposed water line location and prepared plan view drawings. The plan drawings included the proposed line location, type, and size; valve locations; hydrant locations; connection details; meter settings; road crossings; and stream crossings.



POTESTA developed bid quantities and an engineer's cost estimate and developed a bid form using WVAW approved format. POTESTA was also responsible for preparing permit applications to the West Virginia Department of Health, West Virginia Division of Highways, and West Virginia Division of Natural Resources Public Lands Corporation.



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# MUD RIVER ROAD/COX'S FORK ROAD WATER LINE EXTENSION – PHASE I

*Boone County Public Service District  
Boone County, West Virginia*

Potesta & Associates, Inc. (POTESTA) was retained by Boone County Public Service District (BCPSD) to provide design, permitting, bidding, and construction phase services for a 30,000-linear foot water line extension, including 8-inch, 6-inch, and 2-inch pipe. The project was proposed to provide potable water service to approximately 130 commercial and residential customers. Included in this project was:



1. Preparing construction drawings that presented the proposed water line extension (including valves, casing, pipe, etc.).
2. Completing a hydraulic evaluation of the proposed water line, including evaluation of fire flow capacities.
3. Preparing permit applications to the West Virginia Division of Highways, West Virginia Department of Health and Human Resources, West Virginia Public Land Corporation, United States Army Corps of Engineers, and the West Virginia Department of Environmental Protection.
4. Preparing Contract Documents and providing assistance during the bidding of the project.
5. Observing construction from the beginning of the project until substantial completion.
6. Preparing a change order for pipe installation via Horizontal Direction Drilling (HDD) in lieu of trench installation to avoid a large amount of pavement restoration.

The project was funded by the West Virginia Infrastructure & Jobs Development Council (WVIJDC), Boone County Commission, and United Housing and Urban Development.

The project was completed under budget.



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# HOWESVILLE AREA WATER LINE EXTENSION PROJECT

*Preston County Public Service District #2  
Howesville, Preston County, West Virginia*

Potesta & Associates, Inc. (POTESTA) was retained by the Preston County Public Service District #2 to provide professional engineering services for the Howesville Area Water Line Extension in Preston County. POTESTA's services included:



1. Preparing a West Virginia Infrastructure and Jobs Development Council application (WVIJDC) and associated preliminary engineering report (PER) for funding agency purposes for a West Virginia Department of Environmental Protection AML eligible project.
2. Preparing construction drawings which include replacement and extension of 74,000 feet of water line, including a 260,000-gallon water storage tank, a 280 GPM booster station, and three pressure reducing valves.
3. Preparing an environmental impact statement for the federally funded project that resulted in a finding of no significant impact (FONSI).
4. Preparing a preliminary estimate of probable construction cost.

Upon successfully securing project funding, POTESTA's services included preparing bidding documents, attending pre-bid and pre-construction meetings, assisting with the review of bids received, and construction administration. The construction administration phase is to include review of shop drawings, responses to requests for information, processing change orders (as necessary), review of pay applications, attending project progress meetings, and on-site resident project representation (RPR) services to represent the Owner in the field during construction to monitor progress, prepare daily field observation logs, and check for compliance with the construction/contract documents.



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# WATER SYSTEM IMPROVEMENT PROJECT

*City of Wellsburg  
Wellsburg, West Virginia*

Potesta & Associates, Inc. (POTESTA) was retained by the City of Wellsburg's Combined Water and Sewer Board (CWSB) to assist with the preparation of a preliminary engineering report (PER) and application to the West Virginia Infrastructure and Jobs Development Council (IJDC) for funding for a water system improvement project. The project included the replacement of a floating cover on the CWSB's existing 1,000,000-gallon reservoir, the replacement and upgrade of approximately 4,200 linear feet of existing water line located in a section of the City that was experiencing



*Upflow Clarifier Prior to Replacement*

consistent low pressure issues, and an upgrade to the City's existing water treatment plant that was constructed over 50 years ago. The plant upgrades included renovation of the upflow clarifier, filter system, various electrical improvements, valve replacements, as well as upgrades to the chemical feed, chlorination, and control systems.



*Reservoir Floating Cover Replacement*

POTESTA's initial scope of services included the preparation of an overall system needs assessment which included a review of the treatment plant, distribution system, booster stations, tanks, telemetry, operational issues, etc. A report was generated that provided a complete list of needs for the CWSB. POTESTA also prepared an opinion of cost associated with the proposed upgrades and prioritized the list based on the financial capabilities of the CWSB. Once the needs were prioritized and funding options considered based on the desired increase to user

rates, POTESTA assisted the CWSB with obtaining funding for the \$2,100,000 project. POTESTA then performed detailed design, prepared design plans and construction documents including bid and contract documents, and performed construction administration. The construction administration included reviewing shop drawing submittals, review of pay applications, preparation of change orders as necessary, and providing a resident project representative (RPR) on-site during construction to document compliance with the design plans.



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# WATER DISTRIBUTION SYSTEM UPGRADE

*City of Philippi  
Philippi, West Virginia*

Potesta & Associates, Inc. (POTESTA) was retained by the City of Philippi for study phase, design phase, bidding phase and construction phase services for a project involving upgrades and construction monitoring to their existing potable water distribution system.

The project included the following:

- 402,000 Gallon Storage Tank and Valve Vault
- 16,000 Gallon Storage Tank and Valve Vault
- Upgrade of Existing 160 GPM Booster to 285 GPM Booster Station
- 350 GPM Booster Station
- 50 GPM Booster Station
- 1,800 Feet of 8-inch HDPE Pipe
- 2,000 Feet of 6-inch HDPE Pipe
- Flow Metering Station
- Control Via Fiber Optic



*402,000-Gallon Water Storage Tank*

POTESTA prepared a preliminary engineering report and compiled the information necessary for a funding application with the United States Department of Agriculture - Rural Utilities Service (USDA-RUS). Additional services included final design of the project components, preparation of construction drawings and technical specifications, permit applications, and construction monitoring.



*50 GPM Booster Station*

Included in the design phase was coordination of location of needed fire flow tests, and utilization of hydrant test data to “calibrate” existing system.

Initial construction was completed under budget, allowing for additional construction including replacement of a railroad and river crossing.



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# PRELIMINARY INVENTORY OF TOWN OF PINEVILLE WATER SYSTEM

*West Virginia American Water  
Pineville, West Virginia*

The Town of Pineville operates a public water system that provides water to approximately 1,175 customers in and around Pineville. Included in the water system is a water treatment plant, water storage tanks, and booster stations. West Virginia American Water (WVAW) retained Potesta & Associates, Inc. (POTESTA) to prepare a preliminary inventory of the Town of Pineville water system.

To complete the preliminary inventory, POTESTA:

- Reviewed information on the Pineville water system provided by WVAW.
- Reviewed West Virginia Bureau for Public Health (WVBPH) files on the water system.
- Met with Pineville water system officials to review and discuss the existing water system, including a “tour” of the water system, with particular emphasis on observation of the water treatment plant, water storage tanks and booster stations.
- Reviewed the latest copy of the WVBPH Sanitary Survey of the Pineville water system.
- Contacted the West Virginia Public Service Commission to identify customer complaints.
- Contacted the WVBPH to discuss concerns they may have regarding the water system, including identification of Administrative Orders.
- Contacted WVAW employees familiar with the water system to discuss concerns they may have.
- Prepared a report summarizing the preliminary inventory.



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# FISHER RIDGE WATER LINE EXTENSION PHASE II

## *Putnam County Commission/West Virginia American Water Putnam County, West Virginia*

Potesta & Associates, Inc. (POTESTA) was retained by the Putnam County Commission and West Virginia American Water (WVAW) to provide professional services for the Fisher Ridge Water Line Extension, Phase II in Putnam County. POTESTA's services included:

1. Revised existing construction drawings to depict construction of 11,000 linear feet of 8-inch diameter water line along Fisher Ridge Road.
2. Prepared an environmental impact statement for the federally funded project that resulted in a finding of no significant impact (FONSI).
3. Identified and collated bidding document, as required by the funding agency.
4. Prepared a preliminary estimate of probable construction cost.
5. Prepared a West Virginia Infrastructure and Job Development Council application and associated preliminary engineering report for funding agency purposes.
6. Assisted with pre-bid meeting.
7. Completed construction administration/observation services including:
  - Attended meetings as needed.
  - Assisted with review of change orders.
  - Provided a nearly full-time representative to observe construction.
  - Reviewed contractor invoices and made recommendations regarding payment.
  - Prepared weekly reports summarizing construction activities.
  - Provided record drawings showing "as built" features.



Construction proceeded smoothly and the water line was installed. Throughout the project, POTESTA interacted with WVAW, the West Virginia Division of Highways and other entities with an interest in the project.



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# MINERAL WELLS REST AREA WASTEWATER TREATMENT PLANT

*West Virginia Division of Highways  
Wood County, West Virginia*

Potesta & Associates, Inc. (POTESTA) was retained by the West Virginia Division of Highways (WVDOH) to evaluate sewage disposal options for their rest area along Interstate 77 near Mineral Wells in Wood County, West Virginia. The rest area was being served by a 30-year old package wastewater treatment plant (WWTP); discharge was not consistently meeting National Pollutant Discharge Elimination System effluent limitations and the WWTP was difficult to maintain due to its age and lack of readily available spare parts.

The objective of the evaluation was to provide the WVDOH with an estimate of necessary capital and operation/maintenance costs and advantages/disadvantages, and provide POTESTA's recommendations to assist the WVDOH in the selection of an appropriate wastewater disposal option.

The following options were evaluated:

Option 1: Replace the existing WWTP with a recirculating sand filter.

Option 2: Pump the sewage to the Mineral Wells Public Service District.

Based on our evaluation, POTESTA recommended to the WVDOH that they should pipe the sewage to the Minerals Wells Public Service District.



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# LONDON LOCKS HYDROELECTRIC PLANT

## *American Electric Power Company Kanawha County, West Virginia*

Potesta & Associates, Inc. (POTESTA) was retained by American Electric Power Company (AEP) in regards to replacing their existing wastewater treatment aeration package plant. POTESTA provided the following services.

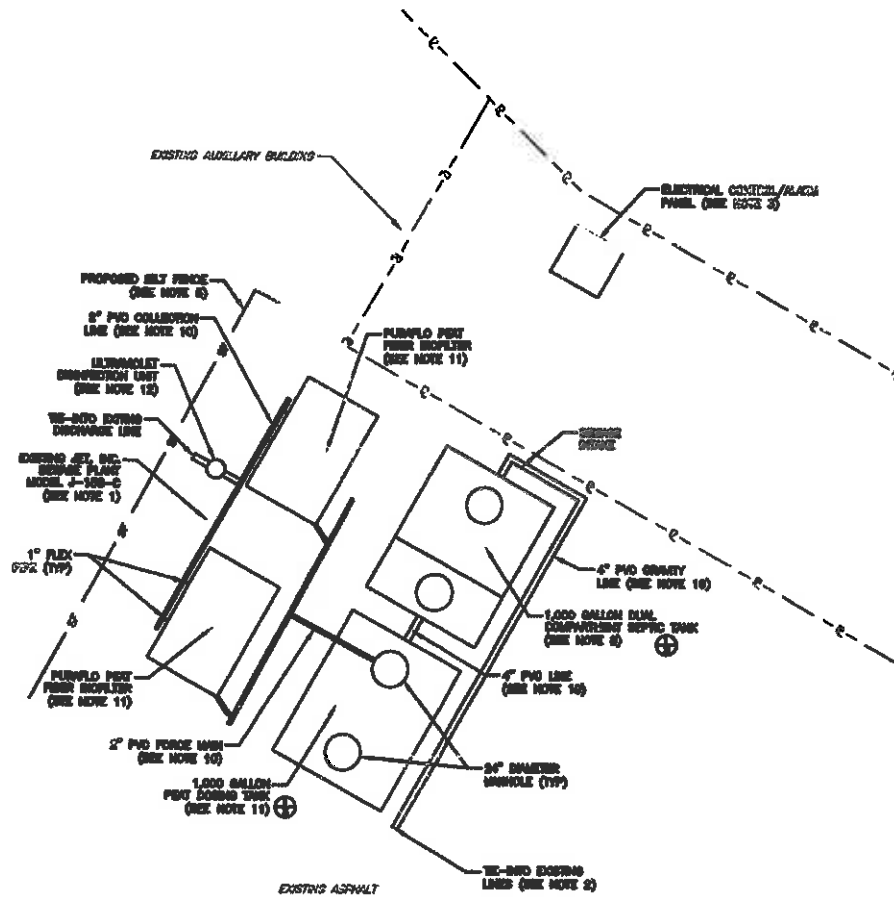
- Assisted AEP in the design and bidding and installing of a grinder pump station and force main to replace the package plant. The force main was to be located via boring under the existing railroad track and West Virginia Division of Highways' roadway. When the bids for the project were deemed excessive for the company, POTESTA continued to assist AEP.
- Evaluated wastewater options including: (1) installing a holding tank to store the wastewater from the London Locks electric generation plant which would then be hauled to the nearest public wastewater treatment facility; (2) installing modifications to the existing wastewater treatment facility in order to meet AEP's National Pollutant Discharge Elimination System (NPDES) Permit Discharge Limits; (3) replacing the existing wastewater treatment facility with a new plant in order to meet AEP's NPDES permit discharge limits; and (4) installing a leach field for treatment thereby not having an NPDES discharge point.
- Evaluated various types of aeration package plants and peat systems and recommended a peat system.



# LONDON LOCKS HYDROELECTRIC PLANT

Page 2

- Designed the specifications for a peat wastewater treatment plant. POTESTA then assisted AEP in preparing the Major Modification Application to the existing Individual Industrial permit for submittal to the West Virginia Department of Environmental Protection (WVDEP) and provided general assistance during the WVDEP and Kanawha County Health Department permit review and approval process.



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# ***CHARLES TOWN RACES & SLOTS WASTEWATER TREATMENT PLANT (WWTP)***

***Charles Town, Jefferson County, West Virginia***

Potesta & Associates, Inc. (POTESTA) was retained by PNGI Charles Town Gaming LLC to provide professional services for the design and permitting of a wastewater treatment plant (WWTP) in Jefferson County, West Virginia. The WWTP is to treat waste from the Charles Town Races & Slots race track and gaming resort. The facility is required due to the race track's planned expansion and the local Public Service District's lack of additional capacity.



*Wastewater treatment plant*

The planned expansion included waste flow from horse washing stalls, race track grandstands, restaurants, gaming facilities and hotels. A gravity main provides influent to the WWTP where a lift station and screening is provided. The WWTP for this project is based on a sequencing batch reactors (SBR) process supplied by Aqua-Aerobics Systems, Inc. Tertiary filtration and chemical treatment (ferric chloride and polymer) is provided to meet Chesapeake Bay standards for nutrient removal. Post-treatment with ultraviolet disinfection and aeration was also incorporated into the WWTP. The facility is designed to meet an initial design daily flow of 250,000 gallons

which can be increased to 325,000 gallons per day. Buildings were provided to house the headworks equipment, blowers, emergency generator, tertiary filter and ultraviolet unit and the motor control center, laboratory, office and garage.

POTESTA's responsibilities included:

1. Evaluation of existing WWTP to serve proposed development.
2. Preparation of permit applications including the Waste Load Allocation, West Virginia Department of Environment Protection NPDES permit for discharge into the Flowing Springs Run, West Virginia Department of Health to construct the WWTP, and CSX railroad crossing
3. Conducting a wetland delineation.
4. Site design of the WWTP.
5. Specifying and selecting treatment and other associated equipment.
6. Design, detailed construction drawings and technical specifications for the WWTP.
7. Assistance during construction.

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# HUNTINGTON SANITARY BOARD

## *Huntington, West Virginia*

POTESTA currently has a general agreement with the Huntington Sanitary Board (HSB) to perform services related to the Board's implementation of their Long-Term Control Plan, Water Treatment Plant Modernization Plan, and Storm Water Management Utility Establishment/Operation. This agreement has been comprised of multiple work orders for improvement of Huntington's combined sewer system.

Currently, POTESTA has concluded or is in the process of the following work:

- Redesign of conversion of four ejector stations to submersible pump stations to include altering design from a cast-in-place concrete cap to allow building to remain. Design included new hatches and hoisting, ventilation equipment, heating, bypass features, and oversight of electrical design.
- Design, bidding, and construction management of combined sewer replacement project on 13th Street West and 19th Street, which includes a combination of full trench replacement and trench-less technology pipe lining for approximately 3,000 feet of 24 through 36-inch pipe.
- Flow monitoring and preliminary and final design for a new sewage lift station (approximately 31,000 gpm) to replace an existing antiquated station which pumps the majority of Huntington's wastewater to the treatment plant.
- Design, bidding, and construction management of a pump around bypass system at the 13<sup>th</sup> Street West pump.
- Assistance to the HSB regarding the CSO long-term control plan's implementation schedule.
- Management of preparation of wastewater treatment plant incinerator failure analysis.





- Environmental remediation of fly ash lagoon through West Virginia Voluntary Remediation Program and design of Bioretention Basin at WWTP for treatment of stormwater fitting “green” project criteria.
- Management of study and preparation of Preliminary Engineer Report for replacement of Huntington’s primary pump station facility, including geotechnical evaluation.
- Evaluation of the mixing zone for the wastewater treatment plant discharge into the Ohio River through computer analysis. Based on the analysis, it was determined that the effluent line required a diffuser to allow for adequate mixing at the discharge.
- Design of 54-inch HDPE force main to replace the existing 54-inch PCCP force main that transports the entire HSB’s flow and had failed due to a build up of hydrogen sulfide gas at the top of the pipe at the forcemain’s crossing of the Huntington flood levee prior to the pipes entrance to the WWTP.
- Design of a new HDPE effluent line, diffuser, and air chamber located in the Ohio River to replace 50-year-old existing effluent line which failed due to excessive weight of fill placed on its corrugated metal pipe.



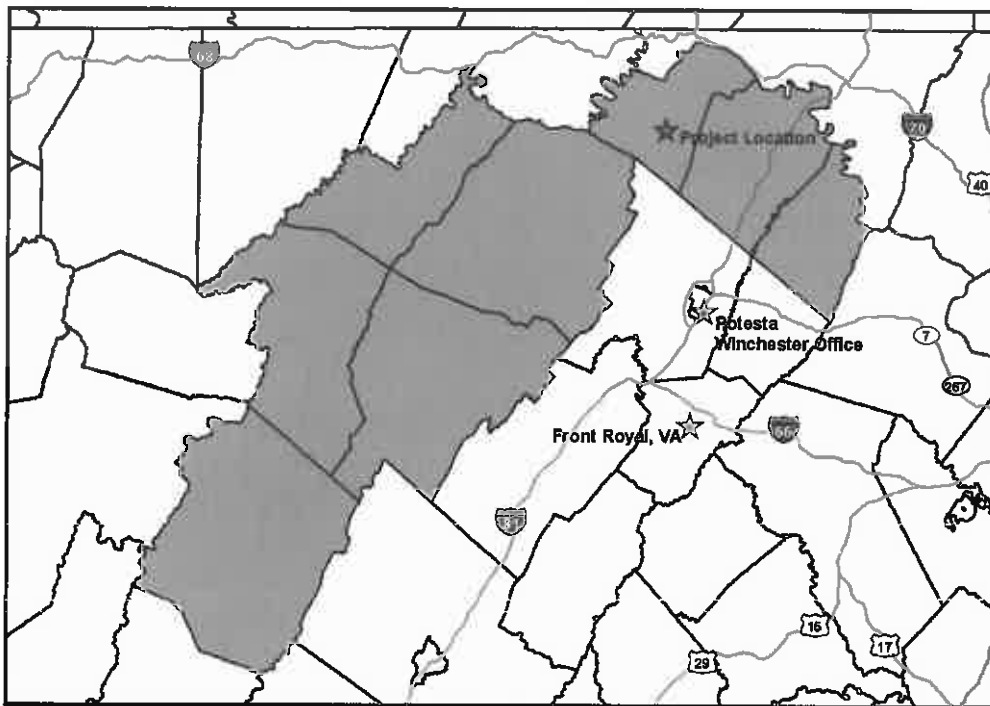
# PUBLIC WATER SUPPLY SYSTEM THE VILLAGES AT COOLFONT

*Berkeley Springs Development, LLC*  
*Morgan County, West Virginia*

Potesta & Associates, Inc. (POTESTA) was retained by Berkeley Springs Development, LLC to prepare the design of a public water supply system to provide service to approximately 1,300 customers, including commercial customers, at the proposed Villages at Coolfont located on a road off of U.S. Route 522 in Morgan County, West Virginia. Included in proposed construction was:

- Three Water Supply Wells
- One Water Treatment Plant (0.432 MGD)
- Two 316,000-Gallon Water Storage Tanks
- 75,000-Feet of Water Line
- Fire Hydrants, Gate Valves, and Other Appurtenances

As part of the design, POTESTA utilized computer hydraulic modeling to confirm that proposed line sizes allowed for anticipated operating conditions to meet regulatory standards. In addition, POTESTA utilized the computer hydraulic modeling to optimize the size of water lines, to provide savings and improve predicted water quality.



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# EVALUATION OF INDUSTRIAL WASTEWATER TREATMENT PLANT ECOLAB

## *Berkeley County, West Virginia*

Potesta & Associates, Inc. (POTESTA) was retained by ECOLAB to evaluate the Industrial Wastewater Treatment Plant (ITP) in Berkeley County, West Virginia. The ECOLAB facility manufactures sanitizers, lotions and other products. Wastewater from the facility is pretreated by adjusting pH, removing foam, and dechlorinating. The pretreated wastewater is then discharged to the ITP, which is operated by the Berkeley County Public Service Sewer District (BCPSSD). The effluent from the ITP had exceeded limitations for some parameters numerous times. ECOLAB's discharge to the ITP had also exceeded limits per a BCPSSD/ECOLAB agreement on numerous occasions. ECOLAB requested POTESTA's assistance in evaluating the ITP.



*Aerobic digester tank (left) and SBR tank (right)*

The ITP consists of the following equipment: equalizer tank, sequential batch reactor tank, aerobic digester tank, treatment tank, blower building, control building, piping valves and other appurtenances. Tasks completed as part of the evaluation included: meeting with ECOLAB, BCPSSD, and West Virginia Department of Environmental Protection (WVDEP) officials to review and discuss the ITP, including a tour of the ITP and on-site operations evaluation; meeting with ECOLAB officials to discuss pretreatment efforts, view their pretreatment

facility; and review historical data provided by ECOLAB, BCPSSD, and WVDEP; and preparation of a report summarizing the evaluation and recommendations.

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# EVALUATION OF SANITARY WASTEWATER SYSTEM-CITY OF OAK HILL

## West Virginia-American Water Company

### *Oak Hill, West Virginia*

Potesta & Associates, Inc. (POTESTA) was retained by West Virginia-American Water Company (WVAWC) to evaluate the condition of the collection system and wastewater treatment plants (WWTPs) in the City of Oak Hill, evaluate current operation and maintenance (O&M) practices for the collection system and WWTPs, and provide recommendations on potential areas for rehabilitation and improvement in O&M practices for the Oak Hill Sanitary Collection and Treatment System.

Tasks completed as part of the preliminary evaluation included: file review at the West Virginia Department of Environmental Protection (WVDEP) Division of Water and Waste Management (DWWM); meeting with Oak Hill Sanitary Wastewater System personnel to review and discuss the existing sanitary wastewater system, including tours of the collection system and WWTPs; meetings with WVDEP-DWWM officials; preparation of a summary of five years of Discharge Monitoring Reports; preparation of a preliminary list of prioritized areas for sewer system evaluation study and/or rehabilitation; and preparation of a report summarizing the findings of the preliminary evaluation and providing recommendations.



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# EVALUATION OF SANITARY SEWER SYSTEM FOR HUNTING HILLS RESIDENTIAL DEVELOPMENT

*CNX RCPC, LLC*  
*Monongalia County, West Virginia*

Potesta & Associates, Inc. was retained by CNX RCPC, LLC to complete an evaluation of Hunting Hills Residential Development Sanitary Sewer System. Included in the scope of services was:

- Reviewed violations from the West Virginia Department of Environmental Protection, and preliminarily evaluated existing package plant and determined it was in a state of disrepair.
- Designed a new plant including permit level drawings and all associated permits to bring it back in to compliance.
- Performed an Inflow and Infiltration Study to evaluate problems with the sanitary collection system.
- Performed smoke testing on the sanitary collection system.
- Observed 2,200 feet of sanitary collection system pipe via CCTV (i.e., camera).
- Identified defect in the pipeline, including offset joints, cracks and breaks, and direct connections.
- Developed a preliminary estimate of a construction cost for rehabilitation.



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# HOLIDAY PARK ON-SITE SEWAGE SYSTEM

*Salt Rock Sewer Public Service District  
Padero Drive, Ona, West Virginia*

Potesta & Associates, Inc. (POTESTA) was retained by the Salt Rock Sewer Public Service District to provide conceptual engineering for on-site sewage systems for residents of Holiday Park in rural Cabell County, West Virginia. The residents of Holiday Park were being served by a failing package treatment plant and complaints had been filed with the West Virginia Public Service Commission (PSC).



*Failing Package Treatment Plant*

Specific services provided by POTESTA on this project included:

- Meeting on-site with the client and the Cabell-Huntington Health Department.
- Identifying that approximately 36 homes existed in Holiday Park that were being served by the failing package treatment plant.
- Developing a conceptual plan for on-site sewage systems, consisting of 12 single-home septic tank/leach bed systems and eight larger septic tank/leach beds serving three homes each.
- Preparing estimates of construction cost and total project cost.
- Communicating results with client and PSC staff.



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# EVALUATION OF SANITARY WASTEWATER SYSTEM - CITY OF WHITE SULPHUR SPRINGS

West Virginia-American Water Company

*White Sulphur Springs, West Virginia*

Potesta & Associates, Inc. (POTESTA) was retained by West Virginia-American Water Company (WVAWC) to evaluate the condition of the existing collection system and wastewater treatment plant (WWTP) in the City of White Sulphur Springs, evaluate current operation and maintenance (O&M) practices for the collection system and WWTP, and provide recommendations on potential areas for rehabilitation and improvement in O&M practices.

Tasks completed as part of the preliminary evaluation included: file review at the West Virginia Department of Environmental Protection (WVDEP) Division of Water and Waste Management (DWWM); meeting with White Sulphur Springs Sanitary System officials to review and discuss the existing sanitary wastewater system, including tours of the collection system and WWTP; meetings with WVDEP-DWWM officials; preparation of a summary of five years of Discharge Monitoring Reports (DMRs); preparation of a preliminary list of prioritized areas for sewer system evaluation study and/or rehabilitation; and preparation of a report summarizing the findings of the preliminary evaluation and providing recommendations.



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# OLD STANDARD DEVELOPMENT SEWER LINE AND WASTEWATER TREATMENT PLANT

*Old Standard Development LLC  
Millville, Jefferson County, West Virginia*



Potesta & Associates, Inc. (POTESTA) was retained by Old Standard Development LLC to provide professional services for the design of a sanitary sewer collection line and wastewater treatment plant (WWTP) in Jefferson County, West Virginia. The project consists of a sanitary sewer collection line extending from a housing development to a WWTP with an effluent discharge line to the Shenandoah River. The collection line begins with a pump station located at the Sheridan housing development and extends along U.S. Route 340 to

County Route 27 (Bloomery Road) where the line continues toward the WWTP located on the site of the Old Standard Quarry. The effluent line will then extend onto the Old Standard Quarry property, under the CSX railroad and discharge into the Shenandoah River. The sewer collection line consists of approximately 7,300 linear feet of force main and approximately 4,370 linear feet of gravity sewer line. A gravity discharge line carries effluent from WWTP approximately 1,380 linear feet to an outfall into the Shenandoah River. The WWTP for this project is based on an activated sludge membrane bioreactor (MBR) process supplied by Enviroquip, Inc. of Austin, Texas. The plant is designed to treat a daily average flow of 50,000 gallons per day and is expandable to 250,000 gallons per day.

POTESTA responsibilities included:

- Preparation of the design, construction drawings and technical specifications for the sanitary collection and effluent line, including the lift station.
- Geotechnical investigation and foundation recommendations for the WWTP building enclosure.
- Site design of the WWTP.
- Preparation of the design, construction drawings and technical specifications for the WWTP headworks including the pre-treatment, flow equalization and the lift station facilities and onsite sludge storage.
- Preparation of permit applications including the Waste Load Allocation, West Virginia Department of Environment Protection NPDES permit for discharge into the Shenandoah River, West Virginia Department of Health to construct the collection line and WWTP, CSX railroad crossing and the West Virginia Department of Highways for road crossings, highway entrance and use of right-of way.
- Coordination of sub-consultants for the design of the foundations, heating, lighting and ventilation systems for the WWTP building enclosure and emergency backup power for the WWTP.



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# TUCKER COUNTY INDUSTRIAL PARK CONSTRUCTION OF ADDITIONAL WATER AND SEWER LINE

## Tucker County Development Authority

### *Tucker County, West Virginia*

After completion of initial construction at the Tucker County Industrial Park, additional monies remained. The owner, Tucker County Development Authority, authorized Potesta & Associates, Inc. (POTESTA) to prepare bidding documents for construction of additional water and sewer lines at the site, using the remaining monies. More specifically, POTESTA:

1. Completed ground survey to develop topographic mapping to reflect "as-constructed" conditions after the first phase.
2. Prepared drawings and specifications depicting the construction of an additional 1,000 feet of gravity sewer line including five manholes, and 500 feet of additional water line, including construction through wetlands and across a stream.
3. Prepared permit applications for crossing of the stream and wetlands, and to obtain approval from the West Virginia Bureau for Public Health.
4. Prepared bidding documents and coordinated obtaining approval from the United States Economic Development Agency.
5. Presented the project at a pre-bid meeting.
6. Compiled contractor bid information.
7. Provided construction phase services, including attending a preconstruction meeting, reviewing and commenting on shop drawings on manholes, pipe and other materials; and providing nearly full-time construction observation services.



The additional water and sewer lines were successfully installed.

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# EVALUATION OF SANITARY SEWER SYSTEM

*Pocahontas County Public Service District/Wastewater Management, Inc.  
Pocahontas County, West Virginia*

Potesta & Associates, Inc. (POTESTA) was retained by Wastewater Management, Inc. to complete an evaluation of Pocahontas County Public Service District's Hawthorn Loop Sanitary Sewer System. Included in the scope of services was:

- Observed 6,200 feet of pipe via CCTV (i.e., camera).
- Reviewed previous engineering studies.
- Identified defect in the pipeline, including "humps," "swags," orality issues, broken or separated pipe, and incorrect grades.
- Developed a preliminary estimate of a construction cost for rehabilitation.



*Manhole Identified for Replacement*



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# ODOR CONTROL STUDY

## *Salt Rock Sewer Public Service District Cabell County, West Virginia*

Potesta & Associates, Inc. (POTESTA) was retained by Salt Rock Sewer Public Service District (Salt Rock) to complete an odor control study mandated by the West Virginia Public Service Commission (WVPSC). The WVPSC had required that Salt Rock complete the study after complaints arose after a proposed lift station site was modified to include a “headworks” facility. The “headworks” facility included a screening unit and grit chamber. To complete the study, POTESTA:

- Reviewed project documentation.
- Reviewed sewage flow, hydrogen sulfide (H<sub>2</sub>S), and chemical dosing data.
- Visited the project site 10+ times to record observations.
- Estimated capital and operation/maintenance costs for three options (chemicals only, enclosure of facilities, or relocation of facilities) to reduce odors. Included in this was sizing of key components.
- Prepared a report summarizing the findings and providing recommendations.

In addition, POTESTA provided support by responding to additional requests from the WVPSC.

Project was completed using funding from the Clean Water State Revolving Fund (CWSRF).



*“Headworks” Facility with Scrubber Unit*



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# DESIGN AND CONSTRUCTION OF SEWER REHABILITATION

## *Town of Handley*

*Handley, Kanawha County, West Virginia*

Potesta & Associates, Inc. (POTESTA) was retained by the Town of Handley (Handley) to provide design and construction phase services for rehabilitation of their 1980s sewer system. Handley had constant problems with their pump stations over the years, as well as one station being intermittently flooded which caused electrical and pump failure. POTESTA's services included:

- Assisted in obtaining funds for field work and preliminary engineering report.
- Assisted the Town of Handley and the Regional Development Council in obtaining a Small Cities Block Grant (SCBG).
- Worked continuously to keep system operating by bidding smaller projects for servicing while waiting for funding.
- Designed total rehabilitation to the three pump stations (including permanent and mobile generators).
- Designed pipe and valve replacement.
- Assisted in obtaining an SCBG construction grant.
- Able to obtain other necessary equipment with excess money from grant funding.



*Before: Upper Drive Lift Station*



*After: Upper Drive Lift Station*



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# EVALUATION OF REPLACEMENT OF ULTRAVIOLET LIGHT (UV) DISINFECTION SYSTEM WITH CHLORINATION TABLET DISINFECTION SYSTEM

*Steptoe & Johnson PLLC/Berkeley County Public Sewer Service District  
Berkeley County, West Virginia*

Potesta & Associates, Inc. (POTESTA) was retained by a law firm to provide an evaluation and subsequent affidavit regarding disinfection at Berkeley County Public Sewer Service District's (BCPSSD) 50,000 gallon per day (GPD) Marlowe Town Center package wastewater treatment plant (WWTP). The WWTP, using UV disinfection, had frequent exceedances of its fecal coliform limitation of the National Pollutant Discharge Elimination System (NPDES) permit. POTESTA provided the following services:

- Visited the WWTP site.
- Reviewed the compliance history of the WWTP.
- Reviewed operation and maintenance practices being employed at the WWTP.
- Prepared an affidavit that concluded compliance would substantially improve using chlorination tablets in lieu of UV disinfection methods.



*New Chlorine Contact Basin,  
Under Construction*



*Existing UV Unit*



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# SANITARY SEWER SYSTEM UPGRADES

*Town of Ceredo  
Wayne County, West Virginia*

Potesta & Associates, Inc. (POTESTA) was retained by the Town of Ceredo to provide design, permitting and construction phase services for an upgrade to their sanitary sewer system. The design phase included identifying the need to upgrade piping sizes and pumping rates. The project construction included:

- Replacement of 8-inch gravity line with 12-inch gravity line.
- Replacement of 2-inch force main line with 4-inch force main line.
- Upgrade of a pump station via replacement of 35 GPM submersible pumps with a new 100 GPM vacuum primed pump station.



After construction, POTESTA completed an Asset Management Plan for the sanitary system.

Project was completed within budgeted amounts using funding from the Clean Water State Revolving Fund (CWSRF).



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# ASSET MANAGEMENT PLAN

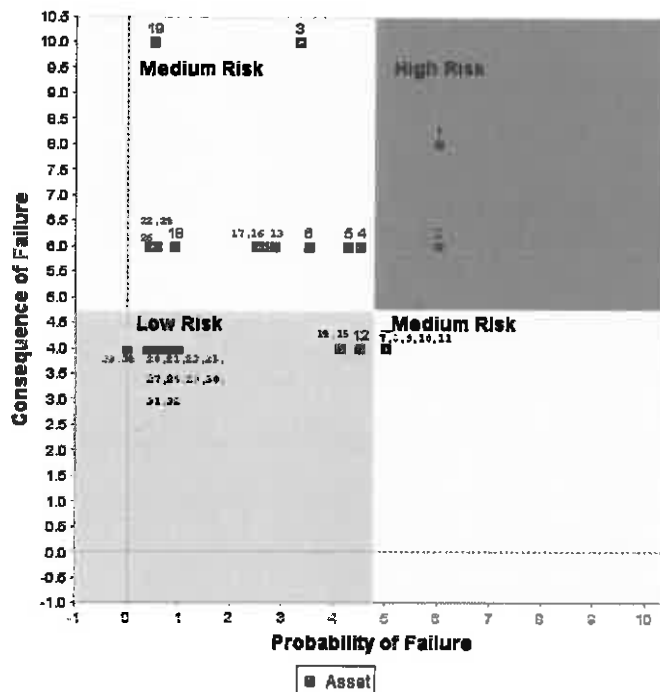
*Town of Ceredo  
Wayne County, West Virginia*

Potesta & Associates, Inc. (POTESTA) was retained by the Town of Ceredo to prepare an Asset Management Plan, required as part of a sanitary sewer system upgrade funded by the Clean Water State Revolving Fund (CWSRF). Our effort included:

- Met on-site and reviewed the system with Town of Ceredo personnel.
- Development of asset inventory, including gravity lines, force mains, pump stations, etc.
- Identification of level of service and critical assets.
- Identification of asset redundancy, probability of failure, consequence of failure, maintenance cost, expected effective life, and replacement costs.
- Preparation of Long-Term Funding Plan.

The United States Environmental Protection Agency (USEPA) Check-up Program for Small Systems (CUP\$\$) program was used for preparing inventories, financial evaluations, etc.

POTESTA prepared the plan, received CWSRF's approval, and presented the plan in a public setting.



*Figure from CUP\$\$ Report*



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# UPGRADE OF TOWN OF BRADSHAW VACUUM/SEWAGE COLLECTION SYSTEMS FOR NEW SCHOOLS

***ZMM, Inc.***  
***McDowell County, West Virginia***

Potesta & Associates, Inc. (POTESTA) was retained by ZMM, Inc. to provide design, permitting, bidding and certain construction phase services associated with (a) a collection system associated with two new schools of the same site, and (b) the associated upgrade of the Town of Bradshaw's existing vacuum collection system. Construction included:

- Upgrading an existing single valve vacuum system buffer tank to a triple valve buffer tank.
- Upgrading an existing vacuum pump station by adding a third 10-horsepower (HP) pump.
- Installing an approximate 11,500-gallon equalization tank, with duplex 45 gallons per minute (GPM) pumps with variable frequency drives (VFDs).
- Relocating approximately 200 feet of grinder pump system pipeline.
- Installing approximately 1,500 feet of force main.
- Installing approximately 1,800 feet of 8-inch gravity sanitary sewer line.

The project was completed and went into service with completion of the schools.



***Equalization Tank/Pump Station During Construction***



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# BOY SCOUT CAMP WATER AND SEWER SYSTEMS AT DILLEY'S MILL

*Buckskin Council – Boy Scouts of America  
Pocahontas County, West Virginia*

Potesta & Associates, Inc. (POTESTA) worked with the Buckskin Council of the Boy Scouts of America (BSA), the West Virginia Department of Environmental Protection (WVDEP) and the West Virginia Department of Health and Human Resources (WVDHHR) to correct problems with the existing drinking water and sanitary sewer systems at the Buckskin Reservation at Dilley's Mill, Pocahontas County, West Virginia.

After problems were discovered at the camp, the BSA asked POTESTA to review the sanitary sewer system and make recommendations regarding the upgrade and replacement of the existing lines. POTESTA was also asked to evaluate the existing sewage lagoon to determine if the facility was of adequate size. A site review of well locations, tank site, sewage treatment lagoon and alignment and location of both water and sewer lines was completed, and a report on problems identified and recommendations for correction was submitted to the BSA.

POTESTA provided administration and oversight of closure and abandonment of two of the camp's drinking water wells and the drilling of a replacement potable water well. Evaluation, recommendations and a master plan for replacement of the existing sanitary sewer system were provided by POTESTA engineers. The camp's sewage treatment lagoon was evaluated and recommendations were made for completely rehabilitating the lagoon to meet current regulatory standards.

POTESTA provided regulatory liaison and assistance with the forms required for well closure and abandonment, installation of a replacement well and replacement of the existing sewer system. Bid packages were developed for the required work and POTESTA worked closely with the BSA to issue and administer the contract with the successful bidder. After evaluation, the sewage lagoon was found to need replacement, and POTESTA worked with the BSA to provide design and construction of the replacement facility.



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# GETTYSBURG SUBDIVISION SANITARY SEWER LINE EXTENSION

*Timberwolf Development Corporation  
Kanawha County, West Virginia*

Potesta & Associates, Inc. (POTESTA) was retained by Timberwolf Development Corporation (Timberwolf) to provide engineering design, permitting, and construction monitoring for a gravity sewer line extension as part of development of an 18-lot subdivision. POTESTA's effort included:

- Engineering design of 1,200-foot, 8-inch gravity sanitary sewer line; a duplex grinder pump station with a 48-inch diameter wet well; and 740 feet of 3-inch force main.
- Obtained permits from West Virginia Division of Highways, West Virginia Office of Environmental Health Services, West Virginia Bureau of Public Health, and West Virginia Department of Environmental Protection.
- Prepared construction drawings and technical specifications.
- Provided daily construction monitoring.
- Submitted weekly progress reports to Charleston Sanitary Board (CSB) throughout sanitary sewer line construction.
- Coordinated with CSB to obtain acceptance of sanitary sewer line upon project completion.



*Manhole During Construction*



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# YORKTOWNE SUBDIVISION

*Timberwolf Development Corporation  
Charleston, West Virginia*

Timberwolfe Development Corporation, with the assistance of Potesta & Associates, Inc. (POTESTA), developed a new residential community on 30 acres within a half mile of the Southridge retail center off U.S. Route 119. The development of the 50 home sites for single-family residential use was part of an overall master plan for this land, a mixed use, retail, commercial office and residential development on the southwest side of Charleston.

POTESTA prepared designs for lot layout, streets, storm, sanitary and water utility extensions, and a sanitary sewer lift station. POTESTA provided survey platting of the subdivision; represented the developer before the Charleston Planning Commission, West Virginia Public Service Commission and the Charleston Sanitary Board; and obtained the necessary permits from the West Virginia Department of Health and Charleston Sanitary Board.

Construction monitoring of the utilities and road work was also provided.



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# WATER DISTRIBUTION SYSTEM UPGRADES

*Town of Ceredo  
Wayne County, West Virginia*

Potesta & Associates, Inc. (POTESTA) was retained by the Town of Ceredo to provide design, permitting, bidding and construction phase services for a \$2,700,000 upgrade to the town's water distribution system. Included in the design was field testing to develop "C" values for modeling of existing water distribution system. Hydraulic modeling included Extended Period Simulation (EPS) computer modeling, to confirm acceptable tank turnover.

Construction included:

- Replacement of approximately 22,000 feet of water line, including replacement of crossings of highways and railroads, replacement of fire hydrants and reconnection of service settings.
- Replacement of an existing below grade reservoir with two new aboveground water storage tanks.
- Installation of a telemetry control system and automatic control valve to regulate the flow from the source of supply (City of Kenova).
- Installation of a new booster station to address low pressures.
- Abandonment of an existing booster station and replacement with a renovated booster station relocated from another part of the distribution system.



*New booster station during construction.*



*Replacement of water line along US Route 60.*



*Two new water storage tanks.*

As part of the project, POTESTA worked closely with the Town of Ceredo to identify what the town's priorities were, and developed a design to address those priorities. In addition, POTESTA identified a source of funding (Drinking Water Treatment Revolving Fund) and assisted the Town of Ceredo in obtaining a commitment for this funding. Construction was completed under the \$2,700,000 in project funding, allowing for additional upgrades to be designed and constructed.



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# PRELIMINARY ENGINEERING REPORT FOSTER AREA SANITARY SEWER COLLECTION SYSTEM EXTENSION – PHASE 1

*Boone County Public Service District  
West Virginia*

Potesta & Associates, Inc. (POTESTA) was retained by Boone County Public Service District (BCPSD) to provide a preliminary engineering report evaluating an extension of sewer service along State Route 3 to approximately Phase 1 only potential customers.



*Existing Package WWTP to be Abandoned*

Included in this project was:

1. Evaluating existing situation for BCPSD comprised of current customer usage, distribution and collection systems, and need for sewer service extension.
2. Identified three package wastewater treatment plants (WWTP) that could be abandoned.
3. Collected and evaluated historical flow data at the WWTP.
4. Reviewed capacity for various components of the WWTP, relative to the proposed extension.
5. Prepared estimates for future population growth by considering full buildout in project area (up to 580 potential customers).
6. Inventoried permits and certificates required to complete project.

Prepared detailed preliminary estimate of construction cost including 21,500 feet of gravity collection system, 4,200 feet of force main, 600-foot bore and jack crossing of Corridor G, and five pump stations.



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# CONSTRUCTION OBSERVATION OF RELOCATED SEWER LINE

*Boone County Public Service District  
Boone County, West Virginia*

Potesta & Associates, Inc. (POTESTA) was retained by Boone County Public Service District (BCPSD) to provide construction observation services during relocation of a sewer line adjacent to Boone Memorial Hospital (BMH). The relocation was required due to a BMH expansion.

The following items summarize our effort:

- Provided nearly full time construction technician to observe the relocation of the sewer line.
- Confirmed and documented that: (1) repairs to damaged joints were made when necessary, (2) the pipeline was installed using a laser to insure proper grade, and (3) crossings of water lines were properly cased with the correct casing length and number/spacing of spacers.
- Verified adequate compaction of backfill.
- Documented deviations from plans and notable events. For example, POTESTA documented when the contractor determined that it was desirable to move a manhole 284 feet to accommodate the pipe being out of alignment; these changes were recorded.
- Submitted daily field activity logs to BCPSD.



*Sanitary Sewer Line Encasement at Water Line Crossing*



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## **EDUCATION**

- M.S. Civil Engineering, 1979  
West Virginia University
- B.S. Civil Engineering, 1978  
West Virginia University

## **EMPLOYMENT HISTORY**

- 1997-Present Potesta & Associates, Inc.  
1994-1997 Terradon  
1979-1994 GAI Consultants, Inc.  
1978-1979 West Virginia University  
1976-1977 West Virginia Department of Highways  
(summers)

## **PROFESSIONAL REGISTRATIONS**

Professional Engineer – West Virginia, Illinois

Professional Surveyor – West Virginia

## **PROFESSIONAL CERTIFICATIONS**

40-Hour Health and Safety Training

## **SERVICE ON BOARDS AND COMMISSIONS**

Environmental/Technical Committee member – West Virginia Coal Association

Environmental Committee member – Kentucky Coal Association

Past Board of Directors member and current Waste Team Chairman on the Environmental Safety and Health Committee – West Virginia Manufacturers Association

Environmental and Safety Committee member – Independent Oil and Gas Association of West Virginia

Environmental Committee member – West Virginia Oil and Natural Gas Association

Past President – West Virginia Society of Professional Engineers, Professional Engineers in Private Practice

Past President and past Board of Directors member – American Council of Engineering Companies West Virginia Chapter

Past Chairman of Transportation Committee – American Council of Engineering Companies West Virginia Chapter

Past Board of Directors member – Society of American Military Engineers Huntington Post

Member Committee D-18 on Soil and Rock – American Society for Testing and Materials (ASTM)

## **PROFESSIONAL AFFILIATIONS**

American Society of Civil Engineers  
National Society of Professional Engineers  
WV Society of Professional Surveyors

## **AREAS OF SPECIALIZATION**

Management of design and permitting of civil, environmental, geotechnical, and mining engineering projects. Siting, design, and permitting of industrial and municipal waste disposal sites; reclamation of abandoned mine lands; and development of stormwater management plans and groundwater sampling programs. Environmental/reclamation liability assessments. Development of site plans for commercial and industrial facilities including hydrologic and hydraulic analyses. Expert witness testimony. Directs engineering division including day-to-day operation of headquarters and three branch offices concerning staffing, coordination, training,

business development; and overall management of technical and support staff.

## PROFESSIONAL EXPERIENCE

### Civil/Site Design

Utility extension, site grading plans, stormwater management, roadway design, and permitting for site development:

- Residential subdivisions
- Commercial developments

University of Charleston – Principal-in-Charge for the following projects:

- Development of topographic mapping of campus
- Evaluation of storm sewer system
- Civil site services – UC Pharmacy School, New Hall, Middle Hall, and Brotherton Hall
- Design of new campus entrance roadway

Marshall University – Principal-in-Charge for the following projects:

- 400 bed housing project
- Biotechnology Center
- Fifth Avenue parking and 6<sup>th</sup> Avenue parking facility
- Jomie Jazz Center
- Childcare Center
- Mid-Ohio Valley Center
- Campus landscape master use plan
- Campus improvements project
- MU Graduate College South Charleston campus
- Student Center and Henderson Center
- Bookstore addition
- University Heights

Glenville State University – Principal-in-Charge for the following projects:

- Student Residence Hall
- Athletic Convocation Center and Forestry/Survey Class Center

West Virginia University – Principal-in-Charge for a sidewalk repair project located near Allen Hall on the Evansdale Campus in Morgantown, West Virginia.

The Villages at Coolfont – Principal-in-Charge to provide environmental and engineering consulting services for the redevelopment of the Coolfont Recreation property in Morgan County, West Virginia to create a second home community with high-end amenities.

- Phase I Environmental Site Assessment
- American Land Title Association (ALTA) boundary and property survey of 997 acres
- Completed an assessment of the facility's sanitary sewer wastewater treatment plant to facilitate acquisition of the property.
- Participated in week long planning charrette with client, land planners, and other design consultants to assess characteristics of property, identify opportunities and constraints, obtain input from local residents and businesses, and develop design guidelines.
- Land use plan including 1,300 homes, a village center, spa, expansion of an existing lake, a proposed second lake, walking/hiking/biking trails, and the necessary infrastructure.
- Civil engineering design for potable water and wastewater treatment facilities.
- Selected source well locations, drilled 3 source test wells, and completed field testing and permitting.
- Designed 300 gallon per minute potable water treatment plant.
- Designed 2- 316,000 gallon water storage tanks and 75,000 LF of distribution system.
- Completed the design and permitting for a 448,000 gallon per day membrane bioreactor wastewater treatment plant, including the design of a 70,000 LF collection system.
- Assisted with permitting required for the development of the new lake and upgrades/expansion of the existing lake (included were Section 404 individual permit and Section 401 water quality certification).
- Prepared roadway and stormwater management plans, including typical pavement sections, road profiles, geometric layout plan, culvert and drop inlet sizing, drainage conveyance pipe and channel profiles, and miscellaneous stormwater management details.

City of Charleston – Inspection and preparation of rehabilitation design for Parking Garage No. 1.

Tucker County Industrial Park – Principal-in-Charge for the design which included water and sewer lines,



stormwater management design, roadway design, pavement design, site grading plan, master plan, and geotechnical exploration/foundation recommendations.

Principal-in-Charge for site grading plans, stormwater management system, site surveying, roadway/parking lot design, wetland delineation/mitigation, and construction monitoring for the 400,000 square foot Coldwater Creek distribution center in Parkersburg, West Virginia.

Principal-in-Charge for the civil/site design for the new Sissonville Middle School in Kanawha County, West Virginia. Project included site grading plan with more than 230,000 cubic yards of earthwork to obtain 20 acres of level ground for a 74,000 square foot school, football field, soccer field, baseball field, access roadways, and parking areas. Project included utility designs for water service and sanitary and sewer. Stormwater collection systems and erosion and sediment control plan/permit completed.

Principal-in-Charge for civil/site design for new Riverview High School and Bradshaw Elementary School in McDowell County, West Virginia. Project included 2,500 linear feet of relocated WV Route 80, relocation of 1,200 feet of Oozley Branch, and site work (grading, stormwater drainage, geotechnical recommendations, sanitary sewer, water, and electrical services) to serve the two schools. Project design included site survey, geotechnical exploration, foundation recommendations, design of excavation slopes, layout of schools, parking areas and athletic fields, utility design, roadway relocations plans, and stream relocations plans. Responsible for the design and preparation of contract bid documents (specifications and drawings) for civil/site work. POTEITA served as a subconsultant to ZMM on this project.

Principal-in-Charge for civil/site design and permitting associated with the construction of three synthetic fuel pellet plants in McDowell County, Nicholas County, and Kanawha County, West Virginia. Project included developing synthetic fuel manufacturing facilities on inactive surface mining sites. Services included subsurface exploration, foundation recommendations, grading plans, stormwater management plans, preparation of permit applications, and construction monitoring for site grading and foundation construction. The McDowell County site included a water source study to identify and select water sources for the manufacturing process. The three plants had a construction cost of \$25 million. Project

was a design/build arrangement with POTEITA working directly for the owner.

Carmeuse Lime & Stone – Principal-in-Charge of engineering and environmental services for the expansion of current quarry operations at Winchester quarry in Winchester, Virginia. The expansion includes the addition of two new vertical lime kilns and associated equipment, increasing their current aggregate crushing operation, and expanding their rail system to allow for increased shipping of product.

- Design included grading, stormwater management, and an access road crossing for a rail loop encircling the lime kilns and aggregate crushing areas with rail spurs for loading and unloading of product to connect to two mainline rail carriers.
- The total project track length consists of approximately 29,000 linear feet of rail.
- The design of the rail expansion includes trackside ditches, culverts, stormwater management systems, gas line relocations and crossings, rail crossings, and internal plant roadways, as well as grading for the expanded aggregate plant and lime kilns.
- Additional designs included civil/site services for a new office building and design of the sanitary water treatment system for this building.
- Acquired the necessary approvals to construct this project, such as approvals from local planning and zoning, inspections, health departments, and state governments such as Virginia Department of Transportation, Department of Environmental Quality (DEQ) and Department of Mining and Mineral Extraction (DMME).
- Conducted wetland delineations, developed reports, and completed applications to the Norfolk District (Northern Virginia field office) of the United States Army Corps of Engineers (USACE).

Development of specifications for a sand mound treatment system in the U.S. Air Training Center near Pittsburgh, Pennsylvania.

#### Water Lines, Water Storage Tanks, and Water Treatment Plants

New extensions and replacement of existing lines:

- Cassity Fork Water Supply Extension Project – Randolph County, WV (Project Manager)

- Godby Branch Water Supply Extension Project – Logan County, WV (Project Manager)
- Beaver Creek Water Supply Extension – Upshur County, WV (Project Manager)
- Buff Creek/Trace Fork – Putnam County, WV (Principal-in-Charge)
- Route 60 – Putnam County, WV (Principal-in-Charge)
- Boone County PSD numerous extensions – Boone County, WV (Principal-in-Charge)

West Virginia American Water Company – Principal-in-Charge for construction administration/monitoring for Poca River Water line Extension Project, Cabell County Water Line Extension Project, Contract No. 7, Spite Road Water Line Extension Project, and Fisher Ridge Water Line Extension Project. Work included construction monitoring, preparation of weekly reports, review of contractor submittals, review of contractor invoices, and preparation of records drawings for 100,000+ linear feet of water line extensions.

City of Philippi – Principal-in-Charge for municipal water system upgrade project. Work included design of two replacement booster stations, two new water storage tanks, new pumps for an existing booster station, a 1,500-foot water line extension, and telemetry systems. Drawings, specifications, and a cost estimate were prepared.

Principal in charge for design of multiple water line extensions including design of water storage tanks, booster stations, pressure reducing valves, master meters, and telemetry systems. Work included surveying, subsurface explorations, hydraulic design, preparation of drawings, specifications, cost estimates and permit applications, and assistance with bidding in West Virginia, including:

- 10-Mile-South Putnam Water Supply Extension project – Lincoln and Putnam Counties, WV
- 5-Mile-Cline Hollow, Younger Drive, Left Hand Fork of Lens Creek, and Emmons-Grippe Water Supply Extension Project – Kanawha County, WV

West Virginia American Water Company – Principal-in-Charge for Residuals Handling Facility project at the 32 MGD Kanawha Valley Water Treatment Plant, including coordination design consultant. Design included sludge pumping station, 950,000-gallon reinforced concrete gravity thickener, two belt filter presses, chemical feed

systems, plate settler, and associated control and piping. Work included preparing design concept, surveying, subsurface exploration, preparation of drawings, specifications, cost estimate and permit applications, conductance of pre-bid public relations meeting, evaluation of bids, construction observation, review of contractor submittals, review of change order requests, and review of contractor invoices.

West Virginia American Water Company – Principal-in-Charge for evaluation of Town of Pineville water treatment plant and water distribution system, including observation of system during site visit, records review, discussions with regulatory officials, and issuance of findings in a report.

Tucker County Development Authority – Principal-in-Charge for design of approximately 10,000 feet of water line and sewer line to serve an industrial park, including a lift station. Drawings, specifications, and a cost estimate were prepared. Also performed construction administration services.

West Virginia Bureau for Public Health – Principal-in-Charge for services associated with Source Water Assessment Protection Plans (SWAPP) for 38 public water systems throughout West Virginia. Services provided included windshield surveys to identify and locate (via GPS) potential contaminant sources (PCS's), review of regulatory databases, entering data into Access database, and preparation of summary reports.

City of Philippi – Principal-in-Charge for relocation of water lines due to proposed roadway. Relocation included approximately 4,000 feet of 1-inch to 12-inch diameter pipe, fire hydrants, meters, and valves. Prepared construction drawings, specifications, and quantities.

West Virginia American Water Company – Principal-in-Charge for hydraulic analysis for water supply extensions (total of 23 miles) in Cabell County, West Virginia, including line sizing and design of booster station and PRVs.

Management of design, permitting, and construction monitoring of more than 40 miles of new waterline serving rural communities in southern West Virginia.

West Virginia Department of Abandoned Mine Lands – Detailed design and preparation of construction drawings, specifications, contractor's bid sheet, and engineer's cost

estimate for six-mile water line extension including fire protection. Project included 90,000-gallon water tank, booster station, and pressure relief valves. Extension tied into Norton Harding Jimtown PSD System and served town of Cassity in Randolph County.

West Virginia Department of Abandoned Mine Lands – Detailed design and preparation of construction drawings, specifications, contractor’s bid sheet, and engineer’s cost estimate for a half-mile water line extension to serve Beaver Creek near Junior in Randolph County.

West Virginia Department of Abandoned Mine Lands– Management of four Phase II water studies and five Phase I water studies to determine if water supplies had been affected by coal mining. Work included resident interviews, mine map searches, area reconnaissance, obtaining water samples, reviewing water analysis data, preparing conceptual designs and associated costs and preparation of summary report.

Sewer Lines and WWTPs

Washington County Industrial Development Agency – Design of a holding tank and ventilation system vault near Houston, Pennsylvania.

West Virginia American Water Company – Principal-in-Charge for evaluation of wastewater collections systems and treatment plants for two municipalities (Oak Hill and White Sulphur Springs) in West Virginia. Included were site visits to observe system, discussions with system operators and regulatory officials, records review, compilation of DMR data and issuance of findings in reports.

Geotechnical

Subsurface exploration, evaluation, and design of remedial measure for landslides:

- Soldier beam and lagging retaining walls
- Gabion walls
- Grade/drain/compact in-place
- Geo-grid reinforcement with grade/drain/compact in-place

Plasma Processing Corporation – Management of subsurface exploration and preparation of soils report near Ravenswood, West Virginia.

West Virginia University – Principal-in-Charge for the following projects:

- WVU Intermodal Parking Garage on the Medical Center Campus – geotechnical and civil engineering
- WVU Engineering Building – geotechnical evaluation

Principal-in-Charge for Williamson Landslide Project involving an abandoned mine land site. Geotechnical exploration and design of 480-foot long soldier beam and lagging retaining wall with tiebacks to support loose mine spoil backfill along the edge of a previously mined area with steep terrain. Project was required to protect an existing 125-bed nursing home facility.

Landfills/Solid Waste/Waste Disposal

Design and permitting of new landfills and development of cell closure plans:

Municipal Landfills –

- West Virginia Solid Waste Management Board/Monongalia County Sanitary Landfill – Morgantown, WV
- North Folk Landfill – Wheeling, West Virginia
- Disposal Service, Inc. Landfill – Hurricane, WV
- Sycamore Landfill, Inc. – Hurricane, WV
- City of Charleston Landfill – Charleston, WV
- Mingo County Landfill – Mingo County, WV
- Omar Landfill – Omar, WV
- Pocahontas County Landfill – Marlinton, WV
- HAM Sanitary Landfill – Peterstown, WV
- Kanawha- Western Landfill – Cross Lanes, WV
- S&S Landfill – West Milford, WV
- Brooke County Landfill – Brooke County, WV
- Wetzel County Landfill – Wetzel County, WV
- WVDEP’s Landfill Closure Assistance Program
  - Montgomery Sanitary Landfill – Montgomery, WV
  - Wyoming County Sanitary Landfill – Pineville, WV
  - Jackson County Sanitary Landfill – Ripley, WV
  - City of Moundsville Landfill – Charleston, WV

Industrial Solid Waste (Fly Ash, Bottom Ash, Scrubber Sludge) –

- Mobay Hazardous Waste Landfill – Natrium, WV
- American Cyanamid (4 projects) – Willow Island, WV
- Client confidential – Parkersburg, WV
- Monsanto Company (multiple projects) – Nitro, WV

- Harrison Power Station – Haywood, WV
- Fort Martin Power Station – Morgantown, WV
- Mount Storm Power Station – Mount Storm, WV
- Keystone Power Station – Elderton, PA
- New Castle Power Station – New Castle, PA
- Conemaugh Power Station – New Florence, PA
- Alcoa Corporation – Newsburg, IN
- Portsmouth Power Station – Portsmouth, VA
- F.B. Culley Power Station – Newburgh, IN
- Hatfield Power Station – Masontown, PA
- Armstrong Power Station – Armstrong County, PA
- Cheswick Power Station – Springdale, PA

Design, permitting, economic analyses, and preparation of construction bid documents for coal ash/refuse sites including HDPE and PVC liner systems:

- Virginia Electric and Power Company
  - Portsmouth Power Station ash pond to dry fill conversion project
  - Mount Storm Interim Ash Site
- Pennsylvania Electric Company
  - Keystone Coal Ash/Coal Refuse Site
- Allegheny Power Station
  - Hatfield Ash Site

WVDEP Office of Waste Management – Development construction drawings, technical specifications, contractor's bid sheet and engineer's cost estimate for closure of Montgomery Sanitary Landfill. Work included leachate collection system, cap and double walled leachate tank.

WVDEP Office of Waste Management – Development of construction drawings, technical specifications, contractor's bid sheet, and engineer's cost estimate for final closure of the Wyoming County Landfill. Work included site assessment, double walled leachate tank, pump station, and connection of leachate line to Center Public Service District sanitary sewer.

WVDEP Office of Waste Management – Development of interim closure plans including leachate collection system, adequacy of groundwater monitoring wells and soil cover for the Jackson County Landfill and the City of Moundsville Landfill.

WV Solid Waste Management Board's Monongalia County Sanitary Landfill – Management of three liner expansions, borrow area determination, minor permit modifications, 1.6 MG double-lined leachate pond design,

construction monitoring, and investigation of future alternatives.

Disposal Services, Inc. – Evaluation of landfill expansion and leachate minimization. Preparation of permit application for Phase I Cell 3 and Phase II including drawings, specifications, and CQA manual. Preparation of construction drawings for Phase I Cell 3 Stage I and management of construction monitoring. Preparation of erosion and sedimentation control plan, soldier beam and lagging retaining wall, gabion basket retaining wall, and assistance on FERC permit to relocate gas line in Hurricane, West Virginia.

S&S Landfill – Preparation of Landfill Expansion Revisions, permit revisions, and permit negotiation. Detailed review of hydrogeology and groundwater flow regime. Management of QA/QC for landfill expansion including clay/synthetic liner system, double walled leachate tank, sedimentation pond, drainage channels, and associated facilities in Harrison County, West Virginia.

Pocahontas County Solid Waste Authority – Management of miscellaneous services including preliminary closure plan, evaluation of leachate treatment alternatives, repair of tear in synthetic liner, preparation of annual reports, and surveying for Pocahontas County Landfill in Marlinton, West Virginia.

Kanawha County Solid Waste Authority – Investigation of potential landfill fire at Kanawha Western Landfill. Detailed geologic and hydrologic studies, monitoring well installation, and preparation of associated sections of landfill permits.

- North Fork Landfill – Wheeling, WV
- Sycamore Landfill – Hurricane, WV

Rhone-Poulenc Ag Company – Management of non-hazardous industrial landfill design project involving design report, technical specifications, construction drawings, QA/QC manual, operation manual, permit application, and environmental assessment. Included meetings with EPA Region 3 and WV Division of Natural Resources. Also three site selection studies. Complete geologic and hydrogeologic investigations including installation of monitoring wells.

Tennessee Valley Authority – Economic analyses of wet versus dry disposal processes, including conveyor belts, trucks, and sluicing by pipe for fly ash and bottom ash.

Pennsylvania Electric Company – Evaluation of natural and synthetic liner systems for coal ash/coal refuse sites. Preparation of permit applications for the New Castle ash site and Mitchell scrubber sludge disposal site:

- Pennsylvania Power Company
- Allegheny Power System

Coordinator of the compilation of data for a RCRA Part B permit application for a hazardous waste transfer facility in Parkersburg, West Virginia including SPCC plan.

Sludge sampling programs at the Institute, West Virginia plant of Union Carbide Corporation and the Tri-State Terminal of Ashland Petroleum Company.

Siting studies, including environmental impacts and economic analyses, for industrial waste and coal ash/refuse sites:

- Peabody Coal Company – slurry impoundment
- Rhone Poulenc Ag Company – 3 sites for industrial landfill
- Virginia Electric and Power Company – Mt. Storm Power Station
- Southern Indiana Gas and Electric Company – 4 sites at F.B. Culley Station
- Alocia Generating Corporation – 7 sites at Warrick Station

American Cyanamid Company – Management of QA/QC monitoring program for the first RCRA industrial waste impoundment in EPA Region 3. Composite liner system consisted of 3-foot soil-bentonite liner and two 60-mil HDPE synthetic liners separated by HDPE drainage net. Provided on-site testing laboratory. Daily and weekly project reports were provided. Prepared summary report and necessary “certifications” for submittal to WV Division of Natural Resources and EPA in Willow Island, West Virginia.

American Cyanamid Company – Management of QA/QC monitoring program for a stormwater retention basin consisting of 3’ soil bentonite liner with concrete overlay. Daily, weekly, and project summary reports were prepared in Willow Island, West Virginia.

American Cyanamid Company – Preparation of plans, specifications, and permit application for the closure of an industrial waste disposal site. The capping system

included geogrid to assist in supporting the overlying HDPE liner and soil cap in Willow Island, West Virginia. Electric Power Research Institute – Preparation of the Coal Ash Disposal Manual and various manuals for the High Volume/Low Technology Fly Ash Utilization Program.

Electric Power Research Institute – Development of a computer program that provides a detailed cost estimate for a coal ash disposal area.

Rhone Poulenc Ag Company – Evaluation of settling characteristics for an emergency fly ash disposal pond and design of associated modifications at a plant in Institute, West Virginia.

American Cyanamid Company – Management of QA/QC monitoring for a closure of a 3-acre hazardous waste disposal area with sludge stabilization and an HDPE cap. Provided an on-site testing laboratory, daily and weekly project reports, a summary report, and agency required certifications in Willow Island, West Virginia.

American Cyanamid Company – Management of QA/QC monitoring for the stabilization and capping of 10-acre hazardous waste equalization basin in Willow Island, West Virginia.

Rhone Poulenc Ag Company – Sampling/sounding of two basins containing sludge from secondary biological treatment of industrial wastewater and subsequent determination of sludge quantities.

Development of alternative truck transportation cost schemes:

- Industrial and Hazardous Waste Management Study – Allegheny County, PA
- Holcomb, KA Power Station – Sunflower Electric Cooperative
- Portsmouth Station remote ash structural fill – Virginia Electric and Power Company

#### Roadway Design

Principal-in-Charge for design of new entrance roadway to the University of Charleston and the utility extension, surveying, and general civil engineering for a 440-bed dormitory. Project was a design/build.

West Virginia Divisions of Highways – Inspection of bridge and highway construction.

Managed numerous industrial access roads. Roadways were designed for the private sector. Design was coordinated with and approved by the West Virginia Division of Highways and roadways were accepted into the state transportation system.

- Relocation of State Route 80 for construction of new elementary and high schools at Bradshaw in McDowell County, WV – ZMM Architects
- Industrial park access road and County Route upgrade in Kenna, WV – Jackson County Development Authority and Double C Enterprises
- National Industrial Lumber access road in Amma, WV – Roane County Economic Development Authority
- Tucker County Industrial Park access road in Davis, WV – Tucker County Development Authority
- Luigino's access road in Parkersburg, WV – Wood County Development Authority
- Design of new entrance road to University of Charleston and redesign of MacCorkle Avenue (State Route 61) intersection/turn lanes in Charleston, WV – University of Charleston
- Entrance road, bus loop, and emergency exit roadway for new Sissonville Middle School in Sissonville, WV – N-Visions Architects
- Entrance road and bus loop for Trap Hill Middle School in Raleigh County, WV

WV Division of Highways – Managed environmental permitting, surveying, and design of four-lane 1.25-mile North Bridgeport Connector Road from Interstate 79 Jerry Dove Interchange to Benedum Airport in Bridgeport, West Virginia.

WV Division of Highways under open-end agreements for:

- Landslides and slope stability projects
- Surveying
- Asbestos services

WV Division of Highways – Managed geotechnical, environmental, right-of-way, and survey work performed as a subconsultant for various projects.

- King Coal Highway (section near Pineville, WV)
- Sharon Heights Connector
- Eldora and Enterprise Connector
- Dundon Bridge
- Martha Truss Bridge

- Martha Concrete Girder Bridge
- Upgrade of three bridges on Interstate 81
- Corridor H (section near Kerns, WV)
- Corridor D (section near Washington, WV)

### Oil and Gas

Columbia Gas Transmission Corporation – Management of consulting services for environmental report preparation and FERC permit applications for various natural gas pipeline projects.

Principal-in-Charge of well pad design, access road layout, landslide remediation design, evaluation of water supply sources and distribution systems, design of water treatment systems, impoundment design, stormwater management plans, permitting, AST inspections, surveying, and SPCC Plans for various major gas clients in the Marcellus and Utica formations.

- Stone Energy
- EQT
- Chesapeake
- Gastar
- NiSource

### Storage Tanks

Principal-in-Charge of the registration, preparation of spill prevention response plans, and inspection of aboveground storage tanks (ASTs) for over 500 ASTs for numerous clients, including:

- NiSource
- Rubberlite
- CI Thornburg
- Tetra Technologies
- CAMC
- Interstate Hardwood
- Central Supply

Closure of aboveground storage tanks, including preparation of documentation for regulatory agency and sample acquisition and analyses:

- Rhone-Poulenc Ag Company – Institute, WV
- American Cyanamid Company – Willow Island, WV

Investigation of contamination from underground storage tanks and hydrocarbon spills. Included preparation of

necessary regulatory forms, sample acquisition and analyses, and meeting with regulatory agency.

- West Virginia Division of Natural Resources – various projects under Master Agreement
- Goldman Associates
- Vandalia Mining Company
- Marshall University

**Mining**

Peabody Coal Company – Evaluation of potential stream flow attributed to long-wall deep mining subsidence in minimal overburden areas in southern West Virginia. Responsibilities included the review of mine maps, stream reconnaissance studies, and the establishment of three in-stream V-notch weirs. The weirs were monitored and maintained during a seasonal study period to generate direct flow measurements. The WVDEP also prepared a study for the site that was reviewed and comments prepared for the results.

Principal-in-Charge on numerous Independent Third Party Audits at sites for various coal producers. Independent Third Party Reviews of mines/complexes were undertaken with a thorough review to assess compliance of the operation to various federal statues and equivalent to state laws. Specific areas of review included are generally determined by the needs of the client or the requirements of governmental agencies and have included an assessment of the client's compliance with the following:

- Clean Air Act
- Clean Water Act
- Resource Conservation and Recovery Act
- Safe Drinking Water Act
- Toxic Substance Control Act
- Comprehensive Environmental Response, Compensation and Liability Act
- Emergency Planning and Community Right to Know Act
- Federal Insecticide, Fungicide and Rodenticide Act
- Oil Pollution Act
- Mine Safety and Health Administration
- Surface Mining and Reclamation Act
- National Pollution Discharge Elimination System
- Others as required

Development of reclamation plans for over 70 projects including landslides, mine fires, acid mine drainage, mine

subsidence, refuse piles, water supply systems, and asbestos abatement. Projects were completed for West Virginia Division of Energy, West Virginia Division of Environmental Protection, Virginia Abandoned Mine Lands, and Ohio Department of Natural Resources and include the following:

- Duncan Hill Subsidence
- Beckley Subsidence
- Jonben (Haga) Subsidence
- Holden (Padgett) Subsidence
- Gray and Iaquina Subsidence
- St. John's Road Subsidence
- Route 19/28 Subsidence
- Mt. Hope Subsidence
- Huffman Street Subsidence
- Morgantown Airport Drainage/Subsidence
- Fairmont East Subsidence
- Fairmont IV Subsidence
- Cheyenne Sales Company Reclamation
- Little Whitestick Refuse
- Crany Mine Dump
- Morgan Mine Fire
- MacArthur Phase 2 Subsidence
- Lake Lynn Complex
- MacArthur Mine Subsidence
- East Lynn II
- Flipping Hollow Complex
- Sundial (Hatfield) Refuse Piles
- Mill Creek Refuse Pile
- John's Branch Coal Refuse Dam
- Jessop Highway #10
- Lando (Edwards) Drainage
- Taylorville (Cantrell) Drainage
- Borderland (Matney) Portals
- Peach Ridge Complex
- Measle Fork Refuse
- Georges Creek Portals
- Putney Impoundment
- Kopperston (John's Branch) Refuse Emergency
- Marmet (Wells Drive) Landslide Emergency
- Marmet (Clark) Drainage
- Pringle Run #2
- Mountain Run Refuse and Portals
- Fairmont East Mine Drainage
- May Portal (Virginia Abandoned Mine Lands)
- Williamson (Hatfield) Landslide
- Georges Creek (Lucas) Rockslide
- Rachel Refuse
- Grass Run Refuse
- Allen Sheridan Hazardous Facility (asbestos)

- Elk City- Century- Volga Phase I/II Water Study
  - Camp Mohonegan Regrade
  - Comfort Run Coal Company (asbestos)
  - Allen AMD
  - Cora Mine Drainage No. II
  - Covey Creek Mine Fire
  - Vivian Refuse Pile
  - Summerlee Refuse Pile (won 1996 southern reclamation award)
  - Kimball Refuse Pile (won 1995 southern reclamation award)
  - Hampden (Smith) Landslide
  - Bear Run Refuse (won 1994 Ducks Unlimited award)
  - Charleston (Ratcliffe) Landslide
  - Garrison Complex
  - Mulberry Fork (Stover) Landslide
  - Courtright Highway
  - Belle Landslide
  - Minden Drilling
  - Kitchen/Gibson Landslide
  - High Coal Tipple
  - Omar Refuse Pile (won reclamation of the year award)
  - Logan Drainage
  - Switzer Adams/Robinson Drainage
  - Follansbee Drainage
  - Hawkins AMD
  - Vargo Drainage
  - Duck Creek Landslide
  - Kistler Mine Fire
  - Turner Douglas Complex
  - Buffalo Creek No. 5 Refuse
  - Dawmont Mine Facility
  - Helen (Lewis) Refuse
  - Upshur 10/15 Drainage
  - Webster County Water Studies
  - Jaeger Water Feasibility Study
  - Burnwell, Standard, and Collinsdale Water Line Extension
  - Clay-Roane PSD Water Feasibility Study
  - Burnsville PSD Water Feasibility Study
  - Brandonville/Pisgah Water Feasibility Study
  - Cuzzart/4-H Water Feasibility Study
  - Hudson/Mt. Nebo Water Feasibility Study
  - Phase I Water Studies Brooke and Fayette Counties
    - Gauley River PSD – Belva
    - Hammond PSD – Wellsburg
    - New Haven Chamber of Commerce – Hico
  - Mill Creek Regional Water Project Phase II Water Study (Boone, Lincoln, and Logan Counties)
  - Godby Branch Phase II Water Study
  - Madison Street Portals/Fairview Route 218 Portals
  - Putnam County Phase I Water Studies
    - Heizer Creek
    - Manila Creek
  - Boone County Phase I Water Studies
    - Jeffrey Area – Jeffery, Hewett Creek, Seacoal
    - Ottawa Area – Ottawa, Greenview, Missouri Fork, Meadow Fork, Aleshire Branch, Dent Fork, Mike's Fork
  - Phase II Water Feasibility Studies
    - Logan County – Cow Creek, Crooked Creek, Upper Rum Creek
  - Phase I Water Studies for Logan County
    - Pecks Mill – Godby Heights Communities
    - Cow Creek – Sarah Ann – Crystal Blocks Communities
    - Upper Rum Creek Community
    - Clothier Community
    - Crooked Creek Community
    - Godby Branch
    - Whitman Creek – Holden Project
  - Beaver Creek Waterline Extension: Phase II Water Project
  - Cassity Fork Water Supply Extension: Phase II Water Project
- Subsurface explorations, subsidence monitoring, review of a coal reserve analysis, site plans, preblast/presubsidence surveys, hydrologic analyses, preparation of mining permits, and design and permitting of coal slurry impoundments for coal mining companies in West Virginia, Virginia, Kentucky, Ohio, and Maryland.
- Peabody Coal Company
  - Eastern Associated Coal Company
  - Southern Ohio Coal Company
  - Island Creek Corporation
  - Massey Coal Services
  - Appalachian Mining, Inc.
  - Oneida Coal Company
  - Old Ben Coal Company
  - Mettiki Coal Company
  - Shafer Brothers Coal Co.
  - LP Minerals
- Management of fly ash utilization permits for various coal companies:
- Rawl Sales, Inc.
  - Elk Run Coal Company
  - Appalachian Mining, Inc.
  - Peerless Eagle Coal Company



Managed subsurface investigation, foundation design, and development of mine stabilization program for NASA's Independent Verification and Validation Center in Fairmont, West Virginia.

Monongahela Power Company – Development of fly ash flowable fill specification for submittal to WV Division of Highways in Fairmont, West Virginia.

Computer modeling of groundwater movement of contaminants resulting from underground coal gasification.

#### NPDES Industrial/Municipal Permitting

Completed National Pollutant Discharge Elimination System (NPDES) renewal permitting and associated agency negotiations for several facilities.

Plasma Processing Corporation – Management of numerous projects in Ravenswood, West Virginia including:

- Subsurface exploration and preparation of soils report
- NPDES Permit
- Development of sampling program for Plasma to follow in obtaining samples for NPDES Stormwater Analyses
- Development of hazardous waste operations manual
- Acquisition of WV Air Pollution Commission permits
- Environmental audit of facility operations

#### Hydrology and Hydraulics

City of Charleston – Hydrologic and hydraulic analyses of South Ruffner Watershed. Project analyzed various storm events and presented conceptual recommendations to reduce effects of these storms.

U.S. Army Corps of Engineers, Jacksonville District – Determination of watershed areas along the Suwannee River Basin.

#### Groundwater

Dilley's Mill -- Principal-in-Charge for review of regional groundwater information for a summer Boy Scout camp facility to locate and construct a replacement drinking water well for the facility. Responsibilities included the development and review of existing facility usage,

determination of the location and depth of the proposed water well and design of the well to meet with the requirements of the State of West Virginia Department of Health standards. Design of sewage collection system and synthetic lined sewage treatment lagoon including permitting.

Groundwater sampling programs:

- Herr's Island – Urban Redevelopment Authority of Pittsburgh
- Robertshaw Controls in New Stanton, PA
- New Castle Power Station
- Pennsylvania Power Company
- Portsmouth Power Station
- Virginia Electric and Power Company
- Rhone Poulenc Ag Company – Institute, WV

Management of pump tests:

- Peabody Coal Company – Bim, WV
- Southern Ohio Coal Company – Meigs County, OH
- Rhone-Poulenc Ag Company – Institute, WV

Rhone Poulenc Ag Company – Development of specification manual for conducting soil and groundwater sampling programs. Manual detailed decontamination methods and proper handling/disposal methods in Institute, West Virginia.

#### Air Pollution/Air Services

Principal-in-Charge for internal and external methane gas monitoring at nursing home facility in Boone County, West Virginia.

Urban Redevelopment Authority of Pittsburgh – Preliminary and detailed air pollution modeling for Pittsburgh's convention center complex and for the Washington Heights development.

Eastern Associated Coal Corporation – Management of certified emission statements for 11 coal preparation plants and air emission inventories for 8 coal preparation plants for submittal to the West Virginia Office of Air Quality.

Nicholson Construction Company – Operation permit from West Virginia Air Pollution Control Commission for cement/grout portable batch plant for mine subsidence control project in Follansbee, West Virginia.

**Stream/Wetland Delineation, Permitting and Mitigation**

Columbia Gas Transmission Corporation – Management of stream stabilization and restoration plan for segment of East Fork of Queer Creek in Hocking County, Ohio.

**Environmental Assessments/Impact Statements**

Management of numerous environmental assessments for property transactions:

- Arch Coal – Multiple WV Tracts ESA (60,500 acres)
- Massey Coal Services – Red Cedar Surface Mine (850 acres)
- Duke Energy – Chicopee Environmental Audit (6,000 acres)
- Pittston Coal Management Group – Phase I ESA (6,000 acres)
- Massey Coal Co. – Hampton Site, Spruce Laurel (130 acres)
- Eastern Associated/Peabody Coal – Phase I ESA (1,035 acres)
- Eastern Associated Coal – Environmental Due Diligence for Active and Closed Operations in KY and WV (100,000 acres)
- Peabody Coal – Multi-state Environmental Audit in WY, CO, NM, AZ, Western KY, IN, IL (250,000+ acres)
- Peabody Coal – Environmental Due Diligence for Properties in IL and IN (150,000+ acres)
- AMVEST Mineral Services – Phase I ESA (8,000 acres)
- Peabody Energy Corp. – Phase I ESA on Putnam Property (1,036 acres)
- Arch Coal – Environmental Compliance Audit in KY, WV, and VA (150,000+ acres)
- Massey – Consolidated Coal Co. Holden Complex (5,500 acres)
- Massey – Environmental/Reclamation Liability Assessment for Northland Resources (150 acres)
- Peabody Coal – Phase I ESA for Imperial Coal and Turner Properties (5,400 acres)
- Peabody Group – Environmental/Reclamation Liabilities for Kanawha Eagle, LLC Permits in Boone and Kanawha Counties, WV (350 acres)

Principal-in-charge for the Coalfields Industrial Site Survey performed for the West Virginia Development Office. Study identified and evaluated more than 1,000 former and current mining sites for use as industrial sites. McDowell County was one of six included in the study. The study considered accessibility, utility status and distance of required extensions, topography, site size, and etc.

West Virginia Division of Highways – Coordination of Environmental Impact Statement for Route 19 upgrade from Summersville to Interstate 79 in Braxton County and New River Parkway from Sandstone Falls on I-64 to near Athens on I-77.



## EDUCATION

- M.S. Civil Engineering, 1989  
West Virginia University
- B.S. Civil Engineering, 1987  
West Virginia University

## EMPLOYMENT HISTORY

- 1999-Present Potesta & Associates, Inc.  
1989-1999 GAI Consultants  
1987-1989 West Virginia University  
1985-1987 West Virginia Division of Highways  
(summers)

## PROFESSIONAL REGISTRATION

Professional Engineer – West Virginia, Virginia

## PROFESSIONAL CERTIFICATION

Troxler Moisture-Density Gauge  
American Red Cross Standard First Aid and CPR  
OSHA 40-Hour Hazardous Waste Worker Training

## AREAS OF SPECIALIZATION

Water and wastewater engineering and permitting; preparation of studies, design calculations, drawings, technical specifications, and cost estimates; bidding phase services; and construction phase services, including construction administration.

## PROFESSIONAL EXPERIENCE

### Water Lines, Water Storage Tanks, and Water Treatment Plants

Project Manager/Project Engineer for more than 70 water supply projects involving design and, permitting of water treatment facilities, water line extensions, water storage tanks, booster stations, chlorine boosters, pressure reducing valve stations, service connections and providing fire flow demands. Tasks include client/contract management; mapping development; hydraulic design; geotechnical investigations; preparation of drawings, specifications, and cost estimates; and preparation of Bureau of Public Health, Public Lands Corporation, United States Army Corps of Engineers, West Virginia Division of Highways, and NPDES permit applications.

- Projects funded by federal, state and private funding including small cities block grant, United States Department of Agriculture, Rural Economic Development Agency, Drinking Water Treatment Revolving Fund (DWTRF), West Virginia Infrastructure and Job Development Council, Congressional Supplemental Appropriations (SAP), Abandoned Mine lands, United States Army Corps of Engineers, Governor's office funding, county commissions and private funding.

West Virginia Bureau for Public Health – Project Manager for 3 contracts for source water protection:

- Source water reports for 133 public water systems
- Preparation and presentation of state-wide source water awareness symposiums
- Source water assessment and protection plan reports for 60 public water systems

Town of Ceredo – Project Manager for 20,000 feet of water line replacement, water tanks, telemetry, and booster stations.

Boone County Public Service District – Project Manager for 15+ water supply extension projects in Boone County District from 2004 to present. Included were Preliminary Engineering Reports (PER), and design bidding and construction phase tasks.

Project Manager for Mill Creek Regional Water Supply Extension Project. Design included 34 miles of waterline, booster stations, tanks, and a water treatment plant. Included design of storm water ditches and culverts, and crossings of a railroad. Approval was obtained from CSX Transportation, WVDOH, PLC, USCOE, and West Virginia Bureau for Public Health. Deliverables included drawings, specifications, and cost estimates.

- West Virginia Division of Environmental Protection
- Logan County Public Service District

West Virginia American Water – Project Manager for construction administration/monitoring for the Poca River Road Waterline Extension Project; Cabell County Waterline Extension Project, Contract No. 7; Spite Road Waterline Extension Project; and Fisher Ridge Waterline Extension Project. Work included construction monitoring, preparation of weekly reports, review of contractor submittals, review of contractor invoices, and preparation of record drawings for 100,000+ linear feet of waterline extensions.

City of Philippi – Project Manager for municipal water system upgrade project. Work included design of two replacement booster stations, two new water storage tanks, new pumps for an existing booster station, a 1,500-foot waterline extension, and telemetry systems. Drawings, specifications, and a cost estimate were prepared.

West Virginia American Water – Design of main line pressure reducing valve and vault for the Glenwood Avenue Extension of the Cabell County Waterline Extension Project, Contract No. 6. Work included hydraulic sizing and preparation of drawing.

West Virginia American Water – Design, permitting, bidding and contract documents, and construction phase services for residuals handling facility at largest water treatment plant in West Virginia, including 1,000,000 gallon gravity thickener, sludge pumping stations, two belt filter presses, and a plate settler.

West Virginia Department of Environmental Protection – Project Manager/Project Engineer for design of multiple waterline extension in West Virginia. Included was design of six water storage tanks, five booster stations, pressure reducing valves, master meters, and telemetry systems. Work included surveying, subsurface explorations, hydraulic design, preparation of drawings,

specifications, cost estimates, and permit applications, and assistance with bidding. Representative projects included:

- 10-Mile-South Putnam Water Supply Extension Project in Lincoln and Putnam Counties;
- 5-Mile-Cline Hollow, Younger Drive, Left Hand Fork of Lens Creek, and Emmons-Grippe Water Supply Extension project in Kanawha County;
- 2.5-Mile Godby Branch Water Supply Extension Project in Logan County;
- 20-Mile Cow Creek-Sarah Ann Water Supply Extension project in Logan County;
- 8-Mile Cassity Fork Water Supply Extension project in Randolph County; and
- 10-Mile Olive/Marshville/Catfish Hollow Water Supply Extension project in Harrison County

Tucker County Development Authority – Project Engineer for design of approximately 10,000 feet of water line and sewer line to serve an industrial park, including a lift station. Drawings, specifications, and a cost estimate were prepared. Also performed construction administration services.

West Virginia Division of Environmental Protection - Project Engineer for preparation of conceptual design and cost estimate for the Mill Creek – Isom Community (Logan County Public Service District) Water Supply Extension Project.

Town of Pineville – Evaluation of water treatment plant and water distribution system, including observation of system during site visit, records review, discussions with regulatory officials, and issuance of findings in a report.

West Virginia Division of Environmental Protection – Project Manager for technical review of the Gauley River Area Waterline Extension proposed by the Gauley River Public Service District and the Heizer/Manilla Creek Waterline Extension proposed by West Virginia American Water. Included hydraulic analysis, evaluation of line size, review of drawings and specifications, and reporting on the evaluation in letter format.

City of Philippi – Relocation of waterlines due to proposed roadway. Relocation included approximately 4,000 feet of 1-inch to 12-inch diameter pipe, fire hydrants, meters, and valves. Prepared construction drawings, specifications, and quantities.

Short Line Public Service District/Harrison County Planning Commission – Project Manager for feasibility/rates analysis study for the proposed Reynoldsville, Wallace, and Clarksburg Water Supply Extension Project. Included evaluation of six options at multiple loan/grant funding scenarios.

West Virginia American Water – Hydraulic analysis for water supply extensions (total of 23 miles) in Cabell County, West Virginia, including line sizing and design of booster station and PRVs.

West Virginia Division of Environmental Protection – Project Manager/Project Engineer for numerous conceptual waterline designs for 20 unserved areas (between 1991 and 1996) in coal mining areas in West Virginia. Included hydraulic evaluation, booster station, and water storage tanks sizing, waterline sizing, and estimation of construction cost. Work completed in Barbour, Boone, Brooke, Fayette, Harrison, Lincoln, Logan, Putnam, and Randolph Counties.

West Virginia Division of Environmental Protection – Project Manager for design of booster station upgrade for the Clinton Water Association's Ringgold pump station, including preparation of drawings, specifications, and cost estimate.

West Virginia Department of Energy – Groundwater contamination study for drinking water wells near Cassity, Randolph County, West Virginia, including water supply inventory of over 50 residents, collecting and analyzing well and surface water samples, and researching records to determine the percentage of homes whose water supply had been degraded by acid mine drainage.

Public Utility General – Project Manager for construction administration including preconstruction meetings, shop drawing review, coordination with construction technician team(s), contractor pay application review, public record drawings, and public interface for 15+ water and wastewater utility and/or infrastructure projects including utility line extension and upgrades, construction and modifications of treatment facilities. Clients include municipalities, public service districts, industry, county development authorities and private utilities. Construction included water and sewer lines, booster stations, tanks, lift stations, vacuum sewer stations, treatment basins, dewatering equipment, clarifiers,

chemical fee systems, buildings associated with treatment systems, outfall modifications, and diffusers.

#### Sewer Lines and WWTPs

Project Manager for more than 30 wastewater projects, including municipal sanitary sewer treatment systems, industrial pretreatment systems, modification of sewer treatment plants, outfall modifications including diffuser installation, and upgrades to municipal collection systems. Also included were completions of studies mandated by the West Virginia Public Service Commission.

- Projects funded by State Revolving Fund (SRF), West Virginia Infrastructure and Jobs Development Council, United States Economic Development Agency and Private Funding sources.

Boone County Public Service District – Preliminary engineering, funding application, and final design for WWTP upgrade. Funding proposed through the Clean Water State Revolving Fund (SRF).

- Mechanical bar screen replacement
- Grit removal system replacement
- Mechanical aerator replacement
- Addition of third clarifier
- RAS pump addition
- UV unit replacement
- Belt filter press replacement
- Wash water system upgrade
- Other upgrades

Town of Ceredo – Perform design, bidding, and construction phase services for upgrade of existing sanitary sewer collection system, including upgrades to gravity and force main lines, and a lift station. Funding was thru the Clean Water State Revolving Fund (SRF).

Salt Rock Sewer Public Service District Master Service Agreement:

- Specification for WWTP wash line
- Preparation of NPDES modification for sludge disposal from a publicly owned treatment works
- Preparation of odor control study mandated by the West Virginia Public Service Commission (WVPSA)
- Preparation of cost estimates for requests for service
- Evaluation of lift station overflows

Town of Ceredo – Evaluation of remaining capacity of grinder pump system.

Town of Moorefield – Study on costs of \$30,000,000 sanitary sewer system (plant and collection system).

South Putnam Public Service District – Evaluation of conversion of industrial wastewater treatment to a publicly owned treatment works.

West Virginia American Water – Assessment of City of Oak Hill and City of White Sulphur Springs publicly owned treatment works (POTW) to recommend improvements in operation and maintenance.

Town of Bradshaw – Design of collection system for two new schools, and design, permitting, bidding, and certain construction phase services for equalization basin/lift station, and upgrades to vacuum station and buffer tanks.

Tucker County Development Authority – Design, permitting, bidding, and construction phase services for gravity collection system, force main, and lift station for industrial park.

Boone County Public Service District – Preliminary engineering report for collection system and sequencing bench reactor (SBR) wastewater treatment plant for the Town of Nellus.

MDG Homes – Preparation of hydraulic calculations and record drawings for variable grade effluent sewer system at large development in eastern panhandle.

Client Confidential – Coordination of treatability study for industrial treatment plant.

Design of numerous sanitary sewer extensions associated with private developers, including design of gravity and force main lines and lift stations, including approvals by local public utilities such as Jefferson Utilities, and approvals by West Virginia Department of Environmental Protection.

Pocahontas County Public Service District/Wastewater Management – Study on replacement of Hawthorn Loop Sanitary Sewer System.

Stephoe & Johnson/York Bronze Company – Design of batch chemical pretreatment system for bronze facility in northern West Virginia. Included were sizing of units and

building to house treatment system, and preparation of drawings, specifications, and cost estimate.

Columbia Gas Transmission Corporation:

- Design of sump/pump and storage tank to allow treatment and storing of waste water; and negotiation with hauler and POTW to allow disposal of waste water at Files Creek Compressor Station.
- Design of an oil/water separator, sump/pump, and storage tank to allow treatment and storing of waste water; and negotiation with hauler and POTW to allow disposal of waste water at Cleveland Compressor Station.
- Design of a waste water treatment plant for compliance with a compressor station's NPDES permit. Included was preparation of facilities preliminary and final engineering plans, selection of treatment (chemical precipitation, activated carbon and filtration), and detailed drawings and specifications.
- Evaluation of effectiveness of existing ozonator/activated carbon wastewater treatment system at a natural gas compressor station. Evaluation included 30-day composite sampling plan of wastewater, compilation of results, comparison with treatment system capacity, and issuance of findings in a report. Also included was issuance of a report summarizing technical feasibility and costs for alternate treatment options.
- Project Manager for conceptual design of oil/water separator at the Crawford Compressor Station in Ohio.

Tetra Technology – Preparation of operation and maintenance manual for a waste water treatment plant at the Yak Tunnel Superfund site in Leadville, Colorado.

Project Engineer for design and permitting of sanitary waste water treatment system for coal mines in Logan and Raleigh Counties, West Virginia. Included was preparation of drawings and specifications.

- Eastern Associated Coal Corp.
- Rum Creek Coal Sales

West Virginia Department of Environmental Protection, LCAP – Design of 1.2 miles of pressure and gravity sewer line at the Jackson County Landfill to convey landfill leachate to an existing sanitary collection system. Included were provisions for servicing residences along

the pathway, hydraulic sizing, and preparation of drawings, specifications and a cost estimate.

### Mining

Estimation of AMD treatability and treatment costs at multiple mining sites in West Virginia as part of preacquisition site assessments, including records review of 303(d) TMDL list.

Eastern Associated Coal Corporation – Project Manager for oversight of water supply inventory of structures over a 3200-acre SMCRA permit expansion (during 1994-1995) of the Federal No. 2 longwall deep mine in Monongalia County, West Virginia. Included were negotiations with the West Virginia Division of Environmental Protection (WVDEP) of the locations of permanent surface and groundwater monitoring points.

Eastern Associated Coal Corporation – Project Manager for design of Guyses Run AMD facility. Design included a 3,000,000-gallon pond, 180 feet of relocated stream, and stream crossings. Included was regulatory approval from USCOE, PLC, and WVDEP. Deliverables included drawings, specifications, and a cost estimate.

Pre-mining, pre-blast surveys, including field investigations and report preparation, for various coal companies in Ohio, Virginia and West Virginia.

- Elk Run Coal Company
- Island Creek Coal Corporation
- Oneida Coal Company
- Southern Ohio Coal Company

Eastern Associated Coal Corporation – Project Manager for preparation for SMCRA Incidental Boundary Revision and NPDES permit modification applications for addition of 3.7 million gallon mine drainage treatment pond at Martinka Coal Company's Guyses Run AMD facility.

Old Ben Coal Company – Project Engineer for preparation of PHC statement for SMCRA permit application for the Nile Stone Slurry Impoundment in Mingo County, West Virginia.

Southern Ohio Coal Company – Project Manager for water supply interviews with occupants of 70 structures in Gallia, Meigs, and Vinton Counties, Ohio.

Meadow River Coal Company – Project Manager for water supply inventory of 37 structures over a deep mine in Fayette County, West Virginia, and preparation of subsequent SMCRA permit revision to incorporate water supply inventory to existing permit.

Eastern Associated Coal Corporation – Project Engineer for identification of permanent groundwater and surface water monitoring points including negotiation of locations with the West Virginia Division of Environmental Protection (WVDEP) for 1750-acre and 3,200-acre SMCRA permit expansions of the Federal No. 2 longwall deep mine in Monongalia County, West Virginia.

Rum Creek Coal Sales, Inc. – Project Engineer for preparation of probable hydrologic consequences (PHC) statement for SMCRA permit application for below drainage deep mine in Logan County, West Virginia.

Eastern Associated Coal Corporation – Project Engineer for preparation of probable hydrologic consequences (PHC) statement for SMCRA permit application for 5000+ acre Montcoal Eagle longwall deep mine, including establishment of permanent surface and ground water monitoring points.

Ranger Fuel Corporation – Project Manager for SMCRA Incidental Boundary Revision (IBR) for new face-up and portal at the Clinton No. 4 mine in Boone County, West Virginia.

Southern Ohio Coal Company – Completion of drawdown field tests and estimation of well yields for over 12 wells.

West Virginia Division of Environmental Protection – Project Manager for evaluation and design of passive AMD treatment system at the Owings Mine Complex site in Harrison County, West Virginia. Included were detailed sampling plan, issuance of pre-construction water quality report, and preparation of construction drawings, specifications, and cost estimate.

West Virginia Division of Environmental Protection – Project Manager for Harris AMD reclamation project. Design included 400 feet of ditch, one culvert, manholes, 500 feet of subsurface drains, and sealing of mine portals. Deliverables included drawings, specifications, and a cost estimate.

Southern Ohio Coal Company – Project Manager for preparation of SMCRA permit application for the remaining life of the Meigs No. 2 and No. 31 mines in Ohio, including inventory of water supplies of over 200 residents.

**Abandoned Mine Lands**

West Virginia Division of Environmental Protection – Project Manager for Left Hand Fork reclamation project. Design included 1,600 feet of storm water ditch, 1,900 feet of riprap toe protection, culverts, relocation of a road, and regrading of refuse. Regulatory approval was obtained. Deliverables included drawings, specifications, and a cost estimate

West Virginia Division of Environmental Protection – Project Manager for reclamation design for the Owings Mine Complex site in Harrison County, West Virginia. Design included 8,300 feet of storm water ditch (including relocation of stream), 1,000 feet of culvert/subsurface drains, manholes, and a box culvert in addition to reclamation of refuse piles and sealing of mine portals. Deliverables included drawings, specifications, and a cost estimate. Included was interaction with the WVDOH, and obtainment of USCOE approval for relocation of a stream.

West Virginia Division of Environmental Protection – Project Manager for the Majesty Mine Complex project. Design included storm water ditches, stream relocations, culverts, and regrading of refuse piles and sealing of mine portals. Regulatory approval from the WVDOH and USCOE were obtained. Deliverables included drawings, specifications, and a cost estimate.

West Virginia Department of Energy – Abandoned Mine Lands – Stabilization program for mine subsidence at the Doug Gray Site in Fairmont, West Virginia, including a subsurface investigation, development of an injection plan, preparation of construction quantities, and a pre-bid meeting.

West Virginia Division of Environmental Protection – Project Manager for stabilization program for mine subsidence at the Glen Morgan (Lilly) site in Raleigh County, West Virginia, and the Mainella Site in Marion County, West Virginia. Included were development of injection plan, construction drawings and specifications, and cost estimate.

Assisted on St. John's Road Subsidence Project, Brooke County, West Virginia. Subsurface investigation and development of specifications and construction drawings for remedial work on mine subsidence affecting 30 acres and 50 homes were conducted.

Project Engineer for Holden (Padgett) Subsidence Project, Whitman Junction, West Virginia. The project included subsurface investigation to determine extent of mine workings, development of stabilization plan, including drainage channels/pipes and mine seals. Construction documents were prepared, and participation in pre-bid and pre-construction meetings was completed.

Assisted on Jonben (Haga) Subsidence Project, Jonben, West Virginia. Subsidence control on an emergency basis including sinkhole backfilling and drainage control. Project included drilling to determine the extent of mining and subsidence, field surveying to develop topographic mapping and development of a backfilling and drainage plan.

West Virginia Division of Environmental Protection – Project Manager for 380 residence water supply inventory (including sampling) as part of the Phase II Water feasibility study for the New Haven Study Area in Fayette County, West Virginia.

West Virginia Division of Environmental Protection – Project Manager for 600 resident water supply inventory (including sampling) as part of the Phase II Water feasibility study for the Mill Creek Study Area in Boone, Lincoln, and Logan Counties, West Virginia.

West Virginia Division of Environmental Protection – Project Manager for 200+ residence water supply inventory as part of the Phase II water feasibility study for the Gauley River Study Area in Fayette and Nicholas Counties, West Virginia.

West Virginia Department of Energy – Abandoned Mine Lands – Project Manager for Phase II groundwater contamination study for drinking water wells in the Crooked Creek, Cow Creek, and Upper Rum Creek communities in Logan County, West Virginia. Work included water supply inventories of 250+ residences, collection and analyzing surface and well water samples, researching water quality records, designing and costing remedial measures, and calculating the percent of wells that had been degraded by mining activity.



Environmental Assessments/Impact Statements

Environmental site assessments, including record searches and field investigations, for numerous sites in West Virginia, Virginia, Ohio, and North Carolina.

Specialization in large acre tracts, typically ranging from 1,000 acres to 65,000 acres, including coal properties.

- Dominion Resources
- Goldman Associates
- DiMucci Development
- FDIC
- Rhone-Poulenc Ag Company
- GSA
- General Electric
- West Virginia University
- Peabody Coal Company
- Massey Coal Services
- Kanawha County Solid Waste Authority
- Capel, Incorporated
- Plasma Processing Corporation
- Sun Bank South Florida
- Vaughan Railroad Company
- Foodland
- Jackson & Kelly
- Spilman, Thomas and Battle

University of North Carolina – Preparation of an Environmental Assessment showing no significant environmental impact for a proposed 1,400-foot television tower near Chapel Hill, North Carolina.

West Virginia Division of Highways – Project Engineer for completion of hazardous waste portion of environmental assessment for 22 miles of proposed upgrade to US 19, north of Summersville, West Virginia. Included site reconnaissance, interviews, and records search to identify potential hazardous waste sites along path of proposed upgrade.

Storage Tanks

Project Engineer for sampling associated with an underground storage tank removal at a site in Harrison County, West Virginia.

West Virginia Division of Environmental Protection – Project Engineer for sampling associated with two

abandoned underground storage tanks at a former mine site in Harrison County, West Virginia.

Goldman Associates – Project Engineer for closure, sampling, and remediation activities associated with an UST closure at a commercial establishment.

Contamination assessment for leaking UST at a coal facility in southern West Virginia, including multiple aquifer well installations, preparation of corrective action plan, and subsequent installation of air sparging system and oil/water separator.

West Virginia Department of Natural Resources – Contamination assessment for leaking underground storage tanks at the Rite Way Packette site in Jesse, West Virginia.

Project Engineer for excavation and off-site disposal of contaminated soil associated with a UST gasoline leak at a coal preparation facility in Kentucky.

Plasma Processing Corporation – Preparation of an underground injection control (UIC) permit application for a secondary aluminum facility.

Hazardous Waste/RCRA/Corrective Action

Project Engineer for PCB sampling at numerous mine sites in McDowell, Nicholas, Raleigh, and Wyoming Counties, West Virginia.

Project Engineer for excavation and off-site disposal of a diesel fuel spill on a slurry impoundment in Kentucky.

Project Engineer for guidance of contamination assessment and remediation activities with a fuel spill at a waste transfer facility in South Carolina.

Island Creek Corporation – Contamination assessment for petroleum products, battery acid, and PCBs at a coal preparation plant in Kentucky.

Feasibility study for future disposal options of residual wet waste from steam plants at a chemical plant in West Virginia.

**Remediation**

Marshall University – Project Engineer for closure, sampling, and remediation activities associated with an UST closure at a new football stadium.

Project Engineer for remediation activities for a diesel fuel spill at a tank farm at a coal preparation plant in Kentucky.

Project Engineer for three PCB site remediations by excavation and off-site disposal at a coal preparation plant in Kentucky.

Vandalia Mining Corporation – Project Engineer for a contamination assessment and remedial activities a hydraulic fuel spill in Clay County, West Virginia.

**Landfills/Solid Waste/Waste Disposal**

Project Manager/Project Engineer for study, design, bidding, and construction phase services for 10+ solid waste disposal projects, including lined cell development and closures.

S&S Grading, Inc.:

- Renegotiation of a municipal waste water treatment plant NPDES permit, including preparation of corrective action plan for facility, to allow for acceptance of more landfill leachate.
- Project Engineer for preparation of revised Part 2 permit application for S&S Landfill in Harrison County, West Virginia. Work included design of landfill facilities including storm water structures, drawings, permit application text, NPDES permit application, and negotiations with the WVDEP until permit issuance.
- Project Manager for preparation of construction documents for Phase 1, 2, 2B and 3 expansions of the S&S Landfill in Harrison County, West Virginia. Work included design of liner system and storm water drainage structures, drawings, specifications, quantities, assistance in bidding and contractor selection.
- Project Manager for construction monitoring of the Phase 1, 2, 2B and 3 expansions of S&S Landfill in Harrison County, West Virginia. Work included regular meetings with contractor, preparation of weekly progress reports, preparation of liner system certifications, and submittal to the WVDEP of final

certification. Included was construction monitoring of storm water drainage structures.

- Project Manager for preparation of drawings and specification for closure of the old S&S Landfill in Harrison County, West Virginia. Work also included designing proposed grade, storm water structures, landfill cap features, and preparation of quantities.
- Design of a landfill leachate pump station, force main, and primary and secondary containment tanks, including preparation of drawings, technical specifications, quantities, and a cost estimate.
- Renegotiation of a municipal waste water treatment plant NPDES permit, including preparation of corrective action plan for facility, to allow for acceptance of more landfill leachate.
- Project manager for design of valve vault for leachate handling facilities at the S&S Landfill in Harrison County, West Virginia.
- Project manager for construction of additional sedimentation pond at the S&S Landfill in Harrison County, West Virginia.
- Project engineer for permit modifications to allow alternate landfill liner systems at the S&S Landfill in Harrison County, West Virginia.

West Virginia Solid Waste Management Board – Technical review of proposed batch treatment plant/sludge handling equipment for treating landfill leachate.

Feasibility study for future disposal options of residual wet waste from steam plants at a chemical plant in West Virginia.

West Virginia Division of Environmental Protection, LCAP – Assistance with QA/QC review for construction drawings and specifications for the Central Landfill project in Braxton County, West Virginia and the Mingo County Landfill project in Mingo County, West Virginia.

West Virginia Division of Environmental Protection, LCAP – Preparation of construction drawings and specifications for the leachate collection and storage facilities for the closure of the Fleming Landfill in Kanawha County, West Virginia.

West Virginia Solid Waste Management Board – Preparation of an NPDES permit application for a municipal solid waste landfill near Morgantown, West Virginia.

Project manager for preparation of annual cross sections depicting liner elevations, existing elevations, and cap elevations for S&S Landfill in Harrison County, West Virginia and the Carolina Grading, Inc. landfill in South Carolina from 1995 to 1999. Work also included estimating volume of waste disposed, and volume of air space remaining.

- S&S Grading, Inc.
- Carolina Grading, Inc.

Carolina Grading, Inc. – Project manager for redesign of landfill subbase elevations to allow increased airspace at Carolina Grading landfill in South Carolina.

Eastern Environmental Services, Inc. – Project manager for estimation of remaining airspace volume at the Bayside of Marion Landfill in Florida and at a landfill in Maryland.

West Virginia Solid Waste Management Board – Project engineer for study evaluating seven alternatives for future operation of the Monongalia County Landfill.

#### Air Pollution/Air Services

Plasma Processing Corporation – Preparation of air pollution control permit applications, permit modifications, and compliance testing for secondary aluminum facilities in West Virginia and Tennessee.

Preparation of an air pollution control permit (construction and operating) applications for loadouts, coal preparation plants, and associated areas of coal preparation plants including coal handling equipment, refuse conveyor, stockpiles, rotary breaker and silos.

- Peabody Coal Company
- Meadow River Coal Company

#### NPDES Industrial/Municipal Permitting

Project Manager for the acquisition of NPDES permits for construction activities for multiple civil engineering projects, including sanitary sewer collection systems and water supply extensions.

Project Manager for compilation of storm water sampling plans/kits for NPDES permit applications:

- Columbia Gas Transmission Corporation

- Plasma Processing Corporation

Preparation of Stormwater Pollution Prevention Plans (SWPPs) required by NPDES permits for natural gas compressor stations and secondary aluminum facilities:

- Columbia Gas Transmission Corporation
- Plasma Processing Corporation

Preparation of NPDES permit applications for industrial sites, and regulatory liaison associated with the applications:

- Municipal and industrial waste landfills – West Virginia Solid Waste Management Board, S & S Grading, Inc., and Rhone Poulenc, AG
- Water treatment plant – West Virginia Department of Environmental Protection/Logan County Public Service District, and West Virginia-American Water Company
- Secondary aluminum facility – Plasma Processing Corporation

Design of outfall modifications, including diffuser systems on outfalls. Included were hydraulic sizing and preparation of drawings, specifications and cost estimates. Some projects included bidding and construction phase services.

- City of South Charleston WWTP
- Allegheny Energy Services
- Cytec Industries Inc.
- Consol Energy, Inc.
- Akzo Nobel Chemicals
- Kureha, Inc.
- CNX Gas
- Patriot Coal
- Bayer Crop Science
- Momentive, LLC

Served on West Virginia Manufacturer's Association Committee to prepare guidance document for preparing Groundwater Protection Plans (GPP's) for facilities regulated by NPDES permits.

Columbia Gas Transmission Corporation:

- Project Manager for preparation of template Groundwater Protection Plan to cover 50+ natural gas industry facilities in West Virginia. Included was

preparation of hard copy and digital format version for use by facility personnel.

- Preparation of comments on draft NPDES permits including negotiations on revising permit conditions for multiple natural gas compressor stations in West Virginia.
- Preparation of report evaluating and recommending disposal options for water at Crawford Compressor Station in Ohio, including subsequent negotiations for direct discharge of water without NPDES permit.
- Project Manager for preparation of State of New York SPDES permit application for the Greenwood Storage Field.
- Preparation of default mixing zone model to allow for proposed increase in iron NPDES limits at the Cobb Compressor Station in Kanawha County, West Virginia.

#### Roadway Design

WVDEP and Logan County Public Service District – Project Manager for the design and layout of the relocated West Virginia County Route 12 (including approval from WVDOH) as part of the water treatment plant site of the Mill Creek Regional Water Supply Extension in Logan County, West Virginia. The design included roadway alignment (including vertical and horizontal curvature, right-of-way, and horizontal clearance with respect to structures), surface and subsurface drainage (including hydraulic calculations and channel and culvert sizing), fill embankment design, cut slope layout, and specifications for pavement, gravel, guardrail, drop inlets, and drainage structures. In addition, the project included compiling technical specifications including WVDOH standard specifications.

Martinka Coal Company – Project Manager for design of an access road associated with a new 3,700,000-gallon pond at a deep mine in northern West Virginia. Project included subsurface investigation, hydrology calculations, channel and culvert design, cut/fill balance, low water crossing design, embankment design, and selection of road surfacing material. Deliverables included specifications, including references to WVDOH specifications. USCOE and Public Lands Corporation permits were obtained.

S&S Grading, Inc. – Project Manager for design of an access road associated with a closure cap on an old landfill in Harrison County, West Virginia. Project included site grading, hydrology calculations, channel and culvert design, design of subsurface drains under the road, cut/fill balance, embankment design, and selection of road surfacing material. Deliverables included drawings and technical specifications, including references to WVDOH specifications. Roadway quantities were estimated.

Ranger Fuel Corporation – Design of an access road for a new deep mine portal at the Clinton No. 4 Mine in Boone County, West Virginia. Project included site grading, hydrology calculations, channel and culvert design, cut/fill balance, and selection of road surfacing material. Deliverables included drawings and specifications. Regulatory approval was obtained.



## EDUCATION

B.S. Civil Engineering, 1982  
West Virginia University

## EMPLOYMENT HISTORY

|              |                                     |
|--------------|-------------------------------------|
| 2011-Present | Potesta & Associates, Inc.          |
| 1991-2011    | West Virginia American Water        |
| 1988-1991    | Dunn Engineers, Inc.                |
| 1982-1988    | Kelley, Gidley, Blair & Wolfe, Inc. |

## PROFESSIONAL REGISTRATIONS

Professional Engineer – West Virginia  
Professional Surveyor – West Virginia

## PROFESSIONAL AFFILIATIONS

American Water Works Association  
National Society of Professional Engineers

## AREAS OF SPECIALIZATION

Water including design of water mains, water storage tanks, booster stations, pressure reducing stations, advanced metering infrastructure – (AMI) and Automated Meter Reading – (AMR) systems. Extensive knowledge in water distribution systems operation and maintenance.

## PROFESSIONAL EXPERIENCE

### Water Lines, Water Storage Tanks, and Water Treatment Plants

Responsible for engineering at West Virginia American Water (WVAW):

- Supervising an engineering staff of eight, working in conjunction with other departments at WVAW.
- Developing and prioritizing multiple capital projects while developing and managing the multi-million capital budget for West Virginia. Budgeting includes developing and creating large investment projects, multiple public private partnerships and several acquisitions.
- Involved in multiple operational issues/projects including non-revenue water reduction, comprehensive planning studies including interconnection studies to combine operations to increase efficiencies.
- Worked on the automation of Bluestone Water plant which is intended to be the first one shift automated and unattended surface water treatment plant in West Virginia.
- Design of multiple pressure reducing stations and booster stations.
- Overseeing a \$1.5+ million per year tank painting program.
- Managed tank painting program, which included evaluating, prioritizing, draining and refilling tanks, tank inspections, preparation of contract documents, bidding, bid evaluations, contract awards, scheduling, taking tanks out of service while maintaining uninterrupted service to customers.
- Responsible for over 300 tanks in the largest water system in West Virginia.

Responsible for the Fayette AMI project, a \$4.3 million dollar meter replacement/automation project to automate almost 12,000 water meters in Fayette County, West Virginia. This project was part of an EPA Green Project and the project was successfully publically bid using a performance specification using stimulus money. Methods were developed to economically work through terrain issues as it related to radio signals to develop a successful project. The project successfully incorporated acoustic listening devices to monitor the distribution system at night to reduce non-revenue water in the Fayette water system.

City of Glenville – Project Manager for the study, design, bidding, and construction phase services for project involving upgrades and construction monitoring to their existing potable treatment and water distribution system.

Town of Mills Creek – Project Manager for the design, permitting, preparation of construction plans, specs, and bidding documents, and construction administration/observation services for the construction of two backwash ponds behind the existing water treatment plant.

Responsible for the project management to complete the WVAW building complex at 1600 Pennsylvania Avenue, Charleston, West Virginia. Provided oversight of the building complex for all operation and maintenance items, as well as liaison with the leasees.

Project Manager of the Kanawha Valley to Montgomery Interconnection Project design which included over 20 miles of 20-inch to 12-inch water mains, two relay booster stations, one storage tank, Kanawha River Crossing, railroad crossings, two pressure reducing stations and radio telemetry.

Project Manager for the EPA IDSE disinfection project to develop the computer water models for the Charleston and Huntington water systems which calibrated the two largest water distribution systems in West Virginia.

Project Manager for the Kanawha County IDB Water Project 2000 which served 33 areas and brought water to over 1,740 families. The total project cost of over \$22 million included over 100 miles of water mains, five boosters and six water storage tanks of various sizes. Oversaw the design work of six consultants, including acquiring the rights-of-way, the bidding of 12 water main contracts, and the construction of those contracts with five consultants handling five contractors, while managing the bidding and construction of the above boosters and water storage tanks.

Prepared specifications and plans for numerous water main extensions, water storage tanks, boosters and hydro pneumatic booster stations and pressure regulating stations including site work, other utilities, and property acquisition, including bidding, project and construction management.

Parcoal Project, Webster County, consisting of 8-inch water main extension and a 160,000-gallon water storage tank using an ARC Grant.

Southridge Development Project consisting of 16-inch water main extension to serve the Southridge Development on Corridor G.

Responsible for the 55-person department that maintained the Kanawha Valley water distribution system, which repaired an average of 1,500 main breaks per year up to 30-inch PCCP:

- Responsible for providing new water services – the department made an average of 850 taps per year
- Oversaw the leak survey effort to reduce unaccounted for water – developed a system to check night flow in systems using existing telemetry to determine leakage and direct efforts to maximize finding and fixing those leaks
- Coordinated the small diameter main replacement program which averaged over one million dollars per year
- Comprehensive supervisory experience between union and non-union personnel – responsible for five supervisors
- Assisted in union negotiations – developing a process to equalize overtime within the distribution department Worked with the Manager to develop 24-hour coverage shifts to provide better customer service and reduce O&M costs, including a 12-hour shift schedule using four foremen to provide round the clock coverage
- Served as the liaison with Kanawha County Commission and KCRDA on new water projects to serve un-served areas

Oversaw the completion of the construction of the Consolidated Office Complex for WVAW's corporate headquarters in Charleston in 1997 to 1999.

Kanawha County Water Main Extension Project consisting of waterlines, booster, a 200,000-gallon water storage tank, and four pressure-regulating stations for the Campbells Creek area of Kanawha Valley.

Quarry Creek Subdivision consisting of vertical turbine booster station and a 330,000-gallon water storage tank, with an elevated storage tank bid option and water lines.

Kellys Creek Project consisting of 16-inch water main extension, booster station, and water storage tank along Route 60 using WVDEP, AML funding.

Little Sandy, Aarons Fork and Edens Fork Projects. Construction of water mains, a booster station and a

160,000-gallon storage tank utilizing two Small Cities Block Grants with KCDRA.

Summers-Mercer Water Project included design of an 8-inch water main to Hinton and a 24-inch water main from the new Bluestone plant to Princeton, including the pressure reducing stations along with the 300,000-gallon water storage tank near Pipestem.

Designed and constructed multiple small water main extensions, working with developers, customers and small contractors to serve new subdivisions and unserved areas.

#### *Sewer Lines and WWTPs*

Project Manager for the replacement of the Wastewater Treatment Plant at Point Pleasant, West Virginia. This included being responsible for design, plans, specifications, regulatory approval, bidding and bond sale, and construction management.

Inspection of wastewater collection systems, writing Operation and Maintenance Manuals, Facility Plans, and Grant Applications for various clients.

Project Manager for the Big Sandy Sewer Public Service District Vacuum System Project, which included the design and construction of three vacuum sewer stations, two sewage pump stations, a 9-mile force main, and the vacuum sewer collection system. Responsibilities of the above involved the preparations of engineering contracts, planning reports, plans and specifications, bid documents, operation and maintenance manuals, and change orders for state and federally funded wastewater and water projects. The process involved cost-effective analysis, public relations, technical writing, and public speaking.

Project Engineer for the Logan Wastewater Interceptor Project, the Town of Barboursville Lagoon Improvements, and the Philippi Wastewater Project including a new Oxidation Ditch Plant, renovation of an existing pump station, sewer main replacement design, and construction. Experience included designing wastewater treatment plants, sludge handling facilities including belt filter presses, wastewater collectors and pumping systems, site developments, access roads, and combined sewer overflow (CSO) facilities.



## EDUCATION

M.S. Engineering Management, 2006  
Marshall University

B.S. Civil Engineering, 1988  
University of Florida

Administration – United States Air Force Technical  
School

## EMPLOYMENT HISTORY

|              |   |
|--------------|---|
| 2007-Present | Potesta & Associates, Inc.                |
| 2000-2007    | WV Dept. of Health and Human<br>Resources |
| 1997-2000    | Summit Engineering, Inc.                  |
| 1997         | Pyramid Consultants, Inc.                 |
| 1995-1997    | Haworth, Meyer and Boleyn, Inc.           |
| 1989-1995    | GAI Consultants, Inc.                     |
| 1979-1983    | United States Air Force                   |

## PROFESSIONAL REGISTRATION

Professional Engineer – West Virginia

## AREAS OF SPECIALIZATION

Drinking water and wastewater including funding coordination; hydrologic and hydraulic analysis including dam break; chemical and municipal solid waste disposal; surface coal mining; limestone quarry mining; abandoned mine lands reclamation; and site development.

## PROFESSIONAL EXPERIENCE

### Sewer Lines and WWTPs

Huntington Sanitary Board – Client Manager for oversight of designed construction of the following:

- Design, bidding, and construction management of combined sewer replacement project on 13<sup>th</sup> Street West and 19<sup>th</sup> Street, which included a combination of full trench replacement and trench-less technology pipe lining (cured-in-place pipe) for approximately 3,000 feet of 24 through 36-inch pipe.
- Redesign, bidding, and construction management of conversion of four ejector stations to submersible pump stations to include altering design from a cast-in-place concrete cap to allow building to remain. Design included new hatches and hoisting, ventilation equipment, heating, bypass features, and oversight of electrical design.
- 13<sup>th</sup> Street Pump Station – design, bidding, and construction management of installation of 30-inch bypass on 48-inch prestressed concrete cylinder pipe and replacement of 2-24" failing 90 degree discharge pipe bends, including air release valves. Project included installations of water stops in existing 48" pipe and coordination with the WVDEP to discharge into river during construction work.
- Assistance regarding the CSO long-term control plan's implementation schedule and lead participation development of asset management plan.
- Preparation of wastewater treatment plant incinerator failure analysis and replacement analysis.
- Environmental remediation of fly ash lagoon through West Virginia Voluntary Remediation Program and design of bioretention basin at WWTP for treatment of stormwater fitting "green" project criteria.
- Management of study and preparation of Preliminary Engineer Report for replacement of Huntington's primary 33 MGD pump station facility (13<sup>th</sup> Street).
- Evaluation of the mixing zone for the Wastewater Treatment Plant discharge.
- Replacement of 54" of PCCP force main crossing flood level at WWTP entrance.
- Design, bidding, and construction management of replacement of 54-inch CMP effluent line with 48-inch HDPE line and diffuser at WWTP, including installation of connection vault, degassing manhole, two manholes, and overflow channel and



rehabilitation of existing pipe at entrance to effluent line with ecocast lining.

- Design, bidding, and construction management of installation of new septage receiving and vacuum truck discharge station to include truck operator control station to allow flow measurement and billing, new access road and pump station to tie-into force main.

Town of Handley -- Design of complete rehabilitation of three existing pump stations to include raising elevation of one station above flood plain level.

University of Charleston -- Design engineer on rehabilitation of sanitary and stormwater system to include the design and construction of precise bore and jack of two sections main truck line (approximately 500 feet) under the existing main entrance area so that existing old trees, entrance walkways, and vegetation were not disturbed. Due to flat slope lines and requirement of line to meet existing manhole elevations, lines were accurate to a 1/100<sup>th</sup> foot.

Developed 201 Facilities Plan for \$28 million wastewater collection and treatment project in Logan County, West Virginia.

Summit at Cheat Lake Residential Development -- Design of package plant and gravity inflow sewer lines, 2,500 linear feet of 1.5-inch and 2-inch force main line from three pump stations for 120-acre, 95-lot residential development at Cheat Lake in Monongalia County, West Virginia.

American Electric Power Company:

- London Locks, West Virginia and Clayton Lake, Virginia -- Peat Sanitary Sewer Treatment System, including sediment basin, peat treatment, and UV system

Water Lines, Water Storage Tanks, and Water Treatment Plants

West Virginia Bureau for Public Health

- West Virginia Infrastructure and Jobs Development Council:
  - Oversight of water technical review committee for infrastructure water projects
  - Member of sewer committee and sitting member of the Funding and Infrastructure Council

- Oversight of technical assistance/review for infrastructure water projects and wastewater preliminary applications Represented Bureau of Public Health in committee and council meetings
- Sitting member of consolidation committee
- Permitting Program -- Directed review and issuance of public water and wastewater, public swimming pool, agricultural waste construction permits and water vending machine permits.
- Drinking Water Treatment Revolving Fund and State Tribal Assistance Grant Programs:
  - Oversight of loan and grant administration, including technical and financial review
  - Project selection
  - Coordination with appropriate federal and state agencies (environmental and funding) and public water systems
  - Coordination of bid advertising, loan closing, construction administration (processing of invoices, change orders, etc.)
  - Water system adherence to loan conditions
  - Preparation of program grant applications and reports to EPA including: annual reports, disadvantaged business enterprise reports, and intended use plans
  - Oversight of 2 percent technical assistance grant with the West Virginia Rural Water Association, which provides continuing education to water treatment plant operators
  - Oversight of the 4 percent administrative set-aside to Water Development Authority in financial management of the Drinking Water Treatment Revolving Fund
  - Directed, assessed, reported on and provided assistance on the technical, financial and management capabilities of public waters systems
  - Responsible for the oversight of program adherence to capacity development strategy, Governor's report, and annual reports to the EPA.

Project engineer on multiple waterline extension projects, including WVDEP-AML projects in central and southern West Virginia. Projects contained waterline, tank and booster station design, preparation of contract bid documents, and construction management.

Villages of Coolfont -- Project Engineer for design, including three raw water wells drilling and development, field testing and design of 300 gallon per minute potable ionization water treatment plant to serve 1300-home village center and spa, three deep wells and raw water transmission lines. Water treatment plan was designed to treat hard water.

Webster County Commission, Countywide Water Study – Secured grant from the West Virginia Bureau for Public Health to conduct county wide study to include consolidation of county service providers in order to provide better service to customers in Webster County, West Virginia. Prepared preliminary engineering reports to provide service to Erbacon and Route 82 areas of Webster County.

### Oil and Gas

In-house consultant with major FERC regulated natural gas transmission company – Developed environmental management plans for natural gas pipeline and storage projects to accompany construction drawings which included environmental controls including stream and wetland crossings, sediment and erosion controls, road access. Prepared FERC application documents containing plans and specifications; conducted onsite monitoring and site visits to make sure contractor was in compliance with plans.

Classified Natural Gas Production Company – Conducted water studies of ground, deep mine, and surface water sources to determine most feasible source to provide water for impoundments within the Marcellus shall basin in West Virginia in order to conduct fracking operations to obtain natural gas. After the water source was selected by the company conducted design of the raw water pump system and transmission line to the impoundment.

### Hydrology and Hydraulics

City of Charleston – Stormwater analysis on existing and future developments of residential watershed in Charleston, West Virginia. Preliminary design of channels, culverts, and flood detention structures. Preparation of design report in which various alternative hydraulic structures were compared with respect to cost and constructability.

Preliminary design of a stormwater management system and grading plans for a regional mall in Western Pennsylvania. Evaluation of several drainage alternatives and pond designs for a site containing numerous wetlands.

Analysis and design of stormwater management for six separate sites, two of them shopping centers, including storm channels, surface and subsurface stormwater detention facilities, culverts, and pipe sizing design.

Design, installation, monitoring and analysis of data from a stream gage for a water supply study of a power generating plant owned by an independent power company.

Pennsylvania Department of Transportation – Drainage structure designs for various projects to include hydrologic analysis, storm channel and detention pond design.

Private Dam Owners – Hydrologic and hydraulic analysis on various private dams within West Virginia to determine impacts from multiple storm events on dam principal and emergency spillways, overtopping and impacts to downstream structures, including dam break conditions using HEC-HMS and HEC-RAS computer programs.

### Civil/Site Design

Vaughan Railroad – Preparation of construction specifications for railroad line construction, including erosion and sediment control, culvert installation and subgrade compaction.

U.S. Army Corps of Engineers – Participated in utility relocation planning for two local flood protection projects for Petersburg and Moorefield, West Virginia to include utility relocation design and quantity and cost estimation.

### Abandoned Mine Lands

West Virginia Department of Environmental Protection – Analysis and design of stormwater channels, culverts, energy dissipation systems, and dewatering underdrain systems for two landslides and two coal refuse regrading projects.

West Virginia Department of Environmental Protection, Abandoned Mine Lands (WVDEP-AML) (Ducks Unlimited Award Winner) – Primary engineer for Bear Run project, consisting of regrading of three coarse coal refuse piles, and re-establishing eight fine coal refuse impoundments with breached embankments into wetland areas, each connected by a designed stream channel in Gilmer County, West Virginia. Project included preparation of conceptual report based on field reconnaissance for Bear Run abandoned mine reclamation project; and evaluation of several hydrologic reclamation alternatives to include wetland and channel locations and re-establishment of impoundments. Project also included

hydrology and final design of grading plans to include slope stability, and hydraulic structures to include channels, culverts, impoundments and spillways, dewatering underdrains, and energy dissipation systems, and quantity and cost analysis.

Virginia Department of Mines, Minerals, and Energy, Ely Creek and Davis Wetland Acid Mine Drainage projects – Design of passive treatment systems for highly acidic mine water with high iron laden water. One treatment systems contained a bentonite slurry wall, natural well system, anoxic limestone subsurface treatment, and treatment settling ponds with phylorremediation through the use of plants. Another treatment system used the existing limestone channel and a polishing pond with wood curtain.

Virginia Department of Mines, Minerals, and Energy, Bevins Landslide – Design of stabilization/removal of a slide using soil nailing and grout wall, removal and disposal of slide material, installation of temporary and permanent drainage control measures, and upgrade of the existing entrance roadway onto the mine bench where the Bevins residence is located in Buchanan County, Virginia.

### Mining

Performed design analysis, permitting, and technical support/review in the preparation of surface and underground coal mine permits, including mine planning, incidental boundary revisions, hydraulic/hydrologic design, fill design, surface water runoff analysis, and geologic analysis. (Two permits were for 1,400 and 1,700-acre surface mines.)

Managed office/technical support staff on various coal-related projects, including the design, plan and permit preparation, cost estimates, hydrologic/hydraulic design, valley fill design/quantification and slope stability and belt-line layout.

Complete hydrologic/hydraulic design of two coal refuse slurry impoundments, including design/permit preparation for sedimentation ponds, collection/diversion channels, slurry pond decant systems, under drain systems, filter diaphragm systems and emergency spillways.

West Virginia Division of Highways – Performed mineral appraisals to determine potential financial impacts to coal reserves and mining due to construction of new roadways.

Classified Coal Company – Performed peer review on design of a deep coal mine dewatering project in which water flow ranging from 3,500 GPM to 8,500 GPM was being pumped down hill in Western Pennsylvania. Review considered water separation, water hammer, development of negative pressures due to water evaporation and water release/vacuum valves, and use of pigging stations. Analysis subsequently led to the design a pressure sustaining valve system to control the water in the pipeline and energy dissipater at the end of the pipeline, design of a retaining wall around dissipater, and design of outfall structure to discharge water into Monongahela River.

Classified Limestone Mining Company – Designed and permitted proposed limestone quarry including quarry layout, sequence of quarry operations, sediment controls (channels and ponds), and reclamation. Project was located in southwestern Pennsylvania.

Analysis and design of diesel-generated electric pump system for decant of slurry water for coal refuse impoundment.

### Landfills/Solid Waste/Waste Disposal

For municipal and industrial landfills, performed engineering for various proposed and existing landfills to include design for leachate impoundments, expansions and new permits comprising of plans and specifications and coordination of field activities associated with earth moving for construction.

Key participant in engineering management of solid waste landfill in Monongalia County, West Virginia, including analysis of technical and economic alternatives of the storage and expansion capacity of landfill and feasibility study of solid waste alternatives to include recycling, transfer station, composting facility and expansion to a composite liner system.

Design of leachate impoundment for landfill, including specifications and drawings. Coordinated field activities associated with earth moving for construction of HDPE composite liner system.

Analysis and design of capping system and appurtenant hydraulic structures for landfill, and preparation of grading plans, detail drawings, specifications, cost analysis, and application for closure. Alternative synthetic liner systems were evaluated in the capping system design, including analysis of slope stability.

Design of two solid waste and one industrial waste landfills, including analysis of sedimentation controls and hydrologic analysis, design of liner system, sediment and leachate ponds, decant structures, sedimentation channels, grading and underdrain system. Also provided drawings and specifications for design and permitting package.

American Cyanamid – Analysis of infiltration characteristics of cover materials for closure of an industrial sludge basin using Hydrologic Evaluation of Landfill Performance model computer system.

**D. MARK KISER, P.E., L.R.S.**  
*Chief Engineer, Licensed Remediation Specialist*



**EDUCATION**

B.S. Civil Engineering, 1984  
West Virginia University

**EMPLOYMENT HISTORY**

1997-Present Potesta & Associates, Inc.  
1995-1997 Terradon Corporation  
1984-1995 GAI Consultants

**PROFESSIONAL REGISTRATION**

Professional Engineer – West Virginia, South Carolina  
Licensed Remediation Specialist – West Virginia

**PROFESSIONAL CERTIFICATION**

Hazardous Waste Site Operations and Superfund

Worker Protection Training, 40-Hour Training

Supervisory Training and Annual Refreshers

Troxler Nuclear Densometer Certification

**SERVICE ON BOARDS AND COMMISSIONS**

Commissioner – Sissonville Public Service District

**AREAS OF SPECIALIZATION**

Environmental assessments, environmental sampling and remedial programs, conceptual and final designs for chemical, utility, and municipal solid waste disposal sites, including liner systems, leachate management systems, stormwater management systems, operational plans and capping/closure systems, abandoned mine land reclamation projects, sludge stabilization and basin/pond closure projects, environmental permitting, hydrologic and hydraulic analyses, quality assurance/quality control monitoring.

**PROFESSIONAL EXPERIENCE**

Civil/ Site Design

Ridgeline, Inc./Cabela's – Retained by developer and Cabela's to provide civil engineering design services for a new Cabela's store in Charleston, West Virginia.

- ALTA survey
- Subsurface exploration
- Grading plan including balanced cut and fill for the building pad, parking fields, and access roads.
- Stormwater collection system design including curb inlets, catch basins, and culverts.
- Pavement design.
- Utility extension designs including sanitary sewer, potable water, fire service, natural gas, underground electric, underground telephone, and underground cable television.
- Permitting services
- Support for local approvals including approval from Charleston Municipal Planning Commission as a Development of Significant Impact, and building permit to allow construction to begin.
- MM-109 permit to allow for connection of the store's new roadway with the existing public roadway.

City of Charleston – Feasibility study for the replacement of the CSX Ramp in Charleston, West Virginia.

Villages at Coolfont – Project manager for project in Morgan County, West Virginia, which included planning, engineering, and permitting associated with developing a second home community on 1,000 acres near Berkeley Springs, West Virginia. Project included:

- Potable water supply source (wells), treatment plant, storage and distribution system
- 0.44 MGD MBR wastewater treatment plant and sanitary sewer collection system
- Community roadways and storm sewer systems
- Detailed plans for the water and wastewater treatment plants and the distribution allocation system serving the first 124 homes
- Permits were obtained for the water and wastewater plants

Project engineer for development of Suncrest Subdivision in Charleston, West Virginia. Project included engineering and permitting for a new residential subdivision including roadway, underground electric, telephone, cable, water, sanitary sewer and storm water. Sanitary sewer system was designed, constructed, and monitored under the terms of an alternate mainline extension agreement with the Charleston Sanitary Board.

Business and Industrial Development Corporation – Preparation of Utility Extension and Roadway Paving Plans for Southridge Centre - Phase 2 area. Project included preparation of bidding/construction drawings to provide natural gas, water, sanitary sewer, telephone, and cable television serving four commercial lots and a 50-lot proposed subdivision. All utilities were underground. The length of the project was approximately ½ mile. The project also included roadway paving and stormwater drainage.

Development of a conceptual development plan for a mixed use industrial park. The evaluation included developing preliminary alignments for two access roadways including earthwork requirements, drainage, subbase, and paving with preliminary cost estimates. Total length of road was over 5 miles. The evaluation also included preliminary layout of water and sewer service for a proposed 400-acre development.

Plasma Processing Corporation – Preparation of permit to construct and site development plan for a secondary aluminum processing facility startup in Jackson County, West Virginia.

Utility relocation plans required for site development, waterline, and sewer construction projects. Projects included determination of utility locations by records review, utility contacts, and surveying. Designs were prepared including locations, details, and pavement replacement. Design also included obtaining approvals

from West Virginia Division of Highways and the owners of the utilities.

#### Abandoned Mine Lands

West Virginia Division of Environmental Protection Abandoned Mine Lands (WVDEP AML) Reclamation – Project engineer/project manager for open-end contract from 1988 through 1995. Responsible for conceptual design, permit applications, etc. for the following projects:

- Duncan Hill No. 1 and No. 2 Subsidence
- Urso Subsidence
- Jonben Subsidence
- Doug Gray Subsidence
- Turner Douglas Complex
- Omar Refuse Piles (project won reclamation of the year award)
- Bear Run Refuse (project won 1994 Ducks Unlimited award)
- Kimberly Refuse Pile (project won 1995 southern reclamation award)
- Vivian Refuse Pile
- Summerlee Refuse Pile
- Godby Branch Water Extension
- Williamson (Elias) Landslide
- Lefthand Fork Burning Refuse
- Belle Landslide
- Harris Acid Mine Drainage
- Numerous Phase I and Phase II Water Quality Studies/Survey

WVDEP-AML – Detailed design and preparation of construction drawings, specifications, contractor's bid sheet, and engineer's cost estimate for a half-mile water line extension to serve Beaver Creek near Junior in Randolph County.

WVDEP-AML – Management of four Phase II water studies and five Phase I water studies to determine if water supplies had been affected by coal mining. Work included resident interviews, mine map searches, area reconnaissance, obtaining water samples, reviewing water analysis data, preparing conceptual designs and associated costs and preparation of summary report.

Subsurface investigation, surveying coal refuse reprocessing evaluation and report, and design of reclamation plan to stabilize and approximately 15-acre refuse pile at Buffalo Creek No. 5 in Marion County,

West Virginia. Developed plans, specifications, cost estimate, and calculations brief for drainage control and regrading plan.

Subsurface investigation, surveying and design for reclamation of three coal refuse piles and six mine entries. Design included replacement of a water well and related supply piping for the Town of Kimball. Completed preparation of plans, specifications, cost estimate, coal refuse report, West Virginia Department of Health permit for new well, and other supporting documents for reclaiming this large site with over ½ million cubic yards of regrading.

Subsurface investigation, surveying, coal refuse reprocessing evaluation, water quality monitoring, and design of a reclamation plan for a coal refuse pile, unreclaimed highwalls, and slurry and water treatment ponds in Lewis County, West Virginia. Plans, specifications, cost estimates, and calculations brief were completed for the project.

#### Environmental Assessments/Impact Statements

Rhone-Poulenc AG Company – Management and oversight of environmental assessment to identify any liabilities or soil/water degradation for a proposed industrial solid waste landfill. Investigation included drilling, sampling, monitoring well sampling, site reconnaissance, and historic records research to establish baseline soils and groundwater conditions. Results presented in a report.

West Virginia Division of Highways – Environmental Assessment for a 1.25-mile proposed four-lane divided highway in Bridgeport, West Virginia.

West Virginia Division of Highways – Environmental Impact Statement (EIS) for proposed Route 19 upgrade from Summersville, West Virginia to Interstate 79 in Braxton County, West Virginia. Project included evaluation of three alternatives over approximately 25 mile length. Responsibilities included hazardous waste section collection of general data used by other scientists, field reviews, and public meeting participation.

Assessment of environmental and reclamation liabilities associated with over 40 surface mine permits in western Virginia. Evaluation included PCB concerns, reclamation costs, underground and aboveground storage tanks, and acid mine drainage.

Massey Coal Service, Inc. – Assessment of environmental liabilities associated with a large tract of property including over 25 permitted mines and a coal preparation plant. Investigation included a review of permits and requirements, past environmental compliance record, walkover of each site, and development of estimated reclamation costs for each site. Report prepared to document results of the liability assessment.

Completion of environmental assessments and a preliminary design report for two inactive commercial solid waste disposal landfills located in Kanawha and Wyoming County, West Virginia. The environmental assessment included completion of a groundwater user's survey for residents located within ½ mile of each facility, drilling shallow groundwater monitoring wells to monitor flow along the soil/bedrock interface downgradient of each landfill, an extensive geotechnical soils/rock investigation, assessment of each facilities compliance with the solid waste management rules, and developing recommendations for a preliminary closure plan.

#### Mining

Eastern Associated Coal Corporation – Coal ash utilization study including five mining operations and four coal ash sources in Virginia and West Virginia. Study evaluated both surface and underground beneficial uses of ash to neutralize acidic drainage.

Project manager/engineer for the preparation of coal ash utilization permits for West Virginia mining operations. Permits included placing ash in the embankment of refuse disposal sites and placing ash with spoil backfill.

- Elk Run Coal Company
- Appalachian Mining, Inc.
- Peerless Eagle Coal Company
- Rawl Sales and Processing Company

Pace Carbon Fuels, LLC. – Consulting and permitting for the development of seven coal-based synthetic fuel manufacturing plants in West Virginia, Indiana, Kentucky, and Illinois. Project included obtaining pre-construction and operating permits for air, water and mining for the manufacturing plants and the feedstock coal recovery operations. Assignments included permit application preparation, assistance in locating and evaluating coal feedstock sites, construction monitoring,

Phase 1 environmental site assessments, and other miscellaneous engineering consulting functions.

Pennsylvania Electric Company – Yearly construction designs for lined coal ash and coal refuse disposal sites at the Keystone and Conemaugh power stations, including a synthetic liner system, groundwater and surface-water control, leachate collection, landfill development, and haul road design. Construction quantity and cost estimates and development of IBM-PC software for evaluating the storage capacity of the disposal sites.

**Landfills/Solid Waste/Waste Disposal**

DuPont Washington Works – Project Manager responsible for design, preparation of construction documents, and construction documents, and construction quality assurance monitoring for a 6.2-acre expansion of a piggyback of a leachate collection system at an industrial waste landfill.

Eastern Environmental Services, Inc. – Project engineer/project manager for finalizing a permit application for the S&S Landfill near Clarksburg, West Virginia. Components of the plan included a detailed staging and closure plan to comply with sediment control and leachate storage requirements. Successfully represented the landfill in a permit appeal hearing before the Water Resources Board. Prepared two construction/bid packages for constructing the initial 10 acres of the landfill.

Cytec Industries – Quality assurance/quality control monitoring for closure of a 10-acre SWMU containing biological treatment sludge. The contents of the basin were stabilized by mechanical mixing. Activities included supervision of testing, data evaluation, and a revised interim grading and drainage plan. Report and certification provided for WVDEP-OWM.

Cytec Industries – Closure plan and permit application for closure of a 5-acre industrial waste landfill. Steep slopes over a portion of the landfill necessitated the design of an innovative cap system and leachate collection system. Project also included closure and capping of a small pit containing tar residue.

Responsible for detailed hydrogeologic investigation and preparation of a major portion of the WVDEP Part A Solid Waste Disposal Permit Application for the Northfork Landfill near Wheeling, West Virginia. Project

included field reconnaissance and mapping of existing site conditions, rock corings, test pits, laboratory analysis of soils for potential construction materials, installation of four monitoring wells, and the corresponding analysis and evaluation of data for completing the Part A Application.

Responsible for hydrogeologic investigation and preparation of the WVDEP Part A Solid Waste Disposal Permit Application for the Sycamore Scenic Landfill in Putnam County, West Virginia. Work included coring, test pit, and laboratory analysis of soils; review of existing groundwater data; and analysis and evaluation of data for completing the Part A Application.

Project Manager responsible for construction quality assurance monitoring for three landfill expansions at Brooke County Sanitary Landfill, including 6.5 acres of composite liner.

Project Manager responsible for construction quality assurance monitoring for 0.8 acre composite liner expansion at Wetzel County Landfill.

Project Manager/Project Engineer for design of composite liner system expansion, design and construction quality assurance for a 2-acre final landfill cap, and design of a new access road serving Pocahontas County Landfill.

Chambers Development Company – Preparation of solid waste disposal permit applications for the Monroeville Landfill, Monroeville, Pennsylvania, and the Southern Alleghenies Landfill, Cambria County, Pennsylvania, both of which include a double synthetic liner system combined with a drainage net leak detection system to conform to Pennsylvania DER regulations.

Project manager/engineer for the West Virginia Division of Environmental Protection's landfill closure assistance program for 1997 through 2002. Responsible for conceptual design, field investigation, construction drawings, specifications, permit applications, etc., for the following projects:

- Wyoming County Landfill
- Jackson County Landfill
- Kanawha Western Landfill
- Monongalia County Sanitary Landfill
- Fayette County Landfill
- Fleming Sanitary Landfill



QA/QC monitoring oversight for a municipal waste landfill in Tazwell County, Virginia.

Design; preparation of drawings, technical specifications, and contract/bid documents; construction monitoring; air monitoring; sludge sampling and analysis; review and approval of a detailed health and safety plan; permitting; and other miscellaneous engineering services for the stabilization and closure of a 3-acre sludge basin and a 1-acre sludge pond. The project included management of a pilot-scale demonstration, procurement of stabilization reagents from multiple providers, and development of an adjacent soil borrow area.

Design; preparation of drawings, technical specifications, contractor's bid sheet, engineer's cost estimate, contract, and cap acceptability evaluation; evaluation of contractor bids, and construction monitoring associated with the capping and closure of a 2.5-acre cell of an industrial waste landfill facility. Cap included a multi-layer geocomposite system to minimize infiltration and the production and leachate to improve the areas groundwater quality.

Final design and preparation of construction drawings, detailed technical specifications, and engineer's construction cost estimate for the construction of a 1.9-million gallon double-lined pond and 5 acres of a landfill liner system. This project included development of an ultimate facility layout plan, a two year detailed development plan, and construction monitoring. Project also included negotiations with regulatory agency to obtain approval of the permit.

Response to regulatory agency review comments and redesign of a pond liner system and piggyback landfill liner system for a 20-acre landfill in West Virginia.

DuPont Environmental Remediation Services – Consulting regarding the design of a final cover/cap for an industrial waste landfill located in West Virginia.

West Virginia Public Service Commission – Site reconnaissance, development of alternative capping/closure systems, and preparation of engineer's cost estimates for the closure of two West Virginia municipal waste landfills in support of rate making testimony and hearings.

American Cyanamid Company – Project manager/engineer for independent quality

assurance/quality control monitoring associated with closure of a three acre SWMU consisting of a waste impoundment. Project included construction of an earthen buttress to improve slope stability, in-place waste stabilization using fly ash and kiln dust, and construction of a RCRA cap. Responsible for field design revisions to overcome problems, conformance testing, and preparation of certifications and a summary report. Project included sampling and analysis of raw and stabilized sludge.

American Cyanamid Company – Coordination of field activities associated with construction monitoring and laboratory testing for RCRA hazardous waste impoundment (the first permitted and constructed in EPA Region III) in Willow Island, West Virginia, including earth moving, construction of a soil-bentonite liner, monitoring of three, sealed double-ring infiltrometers, and construction of an HDPE double-lined impoundment.

Pennsylvania Electric Company – Field (construction) monitoring for development of a residual waste landfill including compaction testing for heavy earth moving, synthetic (PVC) liner installation, concrete testing, and other miscellaneous testing.

Virginia Power Company – Consultant for site development and construction of a fly ash disposal facility including a review of site operations, developing a maintenance program, compaction testing and review, and problem shooting.

Rhone-Poulenc Ag Company – Design and permitting for a proposed industrial solid waste landfill. Project included complete hydrogeologic evaluation including several borings and installation of seven monitoring wells; documentation of soils, geology, water quality and hydrogeology; detailed site design of leachate ponds, liner system, storm water collection system, access road, and capping/closure system. Multi-volume permit application prepared including Operations Manual, Quality Assurance/Quality Control Plan, Technical Specifications, Permit Application, and Design Drawings.

Rhone-Poulenc Ag Company – Leachate Minimization Study for a RCRA Hazardous Waste Landfill. Project included assessment of existing landfill operation and recommendations to reduce quantity of contaminated runoff from over 8 million gallons per year (MGY) to between 2 and 3 MGY. Detailed staging and operating plan, storm water management plan, and cost estimates prepared.

American Cyanamid Company – Closure plan and permit application for closure of a three acre surface impoundment containing sludge and tar. Stability concerns for an existing embankment containing the waste lead to the development of a lightweight cap. Subsurface investigation and field surveying completed. Closure application as required by the West Virginia Division of Environmental Protection provided.

Soundings and sampling of three basins containing sludge. Two basins contained sludge from secondary biological treatment of industrial wastewater. One basin contained petroleum product sludges. Sludge quantities determined from soundings and cross sections prepared. Samples obtained for laboratory analysis to characterize wastes.

- Rhone-Poulenc Ag Company
- Ashland Petroleum Company

Monongalia County Sanitary Landfill – Engineer responsible for expansions, planning, and upgrades for the Monongalia County Sanitary Landfill from 1990 through 1992. Activities included:

- Three expansions (seven acres total) of the landfill liner and leachate collection system, including grading, groundwater collection drains, landfill liner system and leachate drains, protective cover, and surface drainage control
- Construction monitoring
- Certification of landfill expansions
- Construction of a 1.6 million gallon leachate storage basin, including clay liner, double synthetic liner, synthetic drainage layer, protective cover, and drainage control devices
- Annual landfill volume reports, including surveyed cross sections
- Two borrow area investigations to identify clay liner sources
- Feasibility study for expansion and continued operation of the facility
- Final closure plan for the facility including a multi-layered cap and drainage control plan

Rhone-Poulenc AG Company – Evaluation of an emergency fly ash pond for a chemical plant in Institute, West Virginia. Recommendations, including conceptual design drawings and an engineer's cost estimate, to increase the settling efficiency of the pond. Special design elements, including a polymer feed system,

submerged manifold pipe, splitter dike, and an overflow weir.

Hampton-Clarke, Inc. – Project Manager for Independent Quality Assurance Testing (IQAT) services for removal of contaminated soils and placing clean soil backfill at the site of a former cullet pile disposal area.

### Stormwater

Expert witness for plaintiff damaged as a result of flooding caused by lack of maintenance at a culvert system in Westoreland, Wayne County, West Virginia.

Stormwater drainage plans for site development projects including pre- and post- development discharges, design of sediment control devices, preparation of stormwater general permit application, and consulting for numerous construction projects in West Virginia.

Evaluation of stormwater drainage system (culverts and channels) to alleviate flooding problems for a church in Kanawha County, West Virginia. Project included computer modeling to identify culvert capacities and to identify repair options.

Expert retained to support a property owner damaged as a result of flooding caused by downstream obstructions. Reviewed regulatory agency files, conducted site inspections, evaluated possible remedial measures, and provided support in anticipation of litigation.

Expert witness for plaintiff damaged as a result of flooding from upstream construction. Visited site to observe problem areas, reviewed construction practices/procedures, reviewed regulatory permits, and provided testimony as to the cause of flooding.

Developed stormwater management plans, including calculation of peak runoff rates, storm volumes, and design of stormwater management devices including culverts, ditches, sumps, ponds, principal pipe spillways, and emergency spillways for the following projects:

- Site development projects including commercial, retail, and industrial sites ranging from ¼ acre to more than 100 acres.
- Abandoned mine lands reclamation projects, including landslides, refuse piles, slurry ponds, and subsidence control projects.
- Commercial and industrial waste landfill projects.

- Roadway design projects.
- Other projects involving the disturbance of the ground surface.

Water Lines, Water Storage Tanks, and Water Treatment Plants

WVDEP-AML – Detailed design and preparation of construction drawings, specifications, contractor's bid sheet, and engineer's cost estimate for six-mile water line extension including fire protection. Included in project were 90,000 gallon water tank, booster station, and pressure relief valves. Extension tied into Norton Harding Jimtown PSD System and served town of Cassity in Randolph County.

Design for waterline extension projects including preparation of construction drawings, specifications, and engineer's cost estimates for the West Virginia Division of Environmental Protection, Office of Abandoned Mine Lands and Reclamation.

- Cassity Fork Waterline
- Beaver Creek Waterline Extension
- Godby Branch Waterline Extension

Design, preparation of construction drawings, preparation of permit applications, and other related activities for the construction of waterline projects. Line sizes ranged from 16 inches to 2 inches. Materials of construction included polyvinyl chloride and ductile iron pipe. Drawings included planimetric maps, topographic maps, and aerial photograph formats to depict proposed construction. Permit applications included Bureau of Public Health, Public lands Corporation Stream Activity Permits, Division of Highways Occupancy Permits, and General Storm Water NPDES Construction.

- Cabell County 2000 Project, 23 miles of new waterline construction, West Virginia American Water Company (WVAWC)
- Poca River Road Waterline Extension, 13 miles of new waterline construction, WVAWC
- Route 60 Contract 3 Waterline Extension, 3 miles of new waterline construction, WVAWC
- Buff Creek/Trace Fork Waterline Extension, 6 miles of new waterline construction, WVAWC
- Route 60 Contract 4 Waterline Extension, 2 miles of new waterline construction, WVAWC
- Yorktowne Subdivision, 3,000 linear feet of waterline serving a 50-lot subdivision.

ESAs (Phase I and II)

Numerous Phase I Environmental Site Assessments including reclamation liability assessments for mining and industrial properties in West Virginia and Kentucky. Projects typically focused on solid waste disposal practices, potential acid mine drainage discharges, underground storage tank status, areas of hydrocarbon soil contamination, PCB transformer concerns, and other environmental liabilities.

Phase II environmental site assessment for an abandoned mining complex located in Fayette County, West Virginia. The new owners wished to identify any liabilities and determine approximate clean-up costs for negotiations with the previous owners. The areas evaluated included two aerial tram head houses, a drum storage area, truck maintenance garage, mine machinery repair shop, two commercial properties, a lamp house, and other storage areas. Numerous areas of petroleum hydrocarbon contamination were identified and the extent of contamination documented. An on-site laboratory was used to expedite testing and establishing the boundary of areas requiring remediation. The results of the investigation were summarized in a report, including a detailed description of sampling and laboratory analysis methods, drawings showing sample locations, laboratory results, estimated volumes of contaminated soils, and recommendations for cleanup.

West Virginia Regional Jail and Correctional Facility Authority – Phase I Environmental Site Assessment to document potential liability for a tract being considered for a regional jail site in Kanawha County, West Virginia. Activities included historic records search, interviews, site reconnaissance and preparation of a report documenting the findings.

DiMucci Development – Phase I Environmental Site Assessment for property proposed for development as a strip mall.

The Multicare Companies, Inc. – Completion of eight Phase I Environmental Site Assessments for nursing and rehabilitation care facilities in West Virginia.

Virginia Electric Power Company – Assistance with site design and engineer's construction cost estimate for the remedial design of a CERCLIS waste disposal facility.

Phase I environmental site assessments for feedstock recovery sites associated with three coal-based synthetic fuel manufacturing plants. The feedstock recovery sites included numerous coal waste slurry impoundments, dry refuse piles, and mixed refuse disposal areas. Assessments focused on potential acid mine drainage problems, former waste disposal areas, and other mining-related environmental liabilities. A report was prepared detailing the findings for each site.

### Storage Tanks

Columbia Gas Transmission – Project manager for completion of over 350 AST Registrations, Inspections/Certifications, and site specific Spill Prevention Response Plans for 40 facilities.

- Followed the Aboveground Storage Tank Act §22-30 Title 47 Interpretive Rule Series 62 and the Draft Emergency Rule additionally conferring with the West Virginia Department of Environmental Protection (WVDEP) to establish accurate classification and compliance.
- Met all regulatory deadlines.
- Reviewed comprehensive electronic documentation comprising of completed inspection sheets, photographs, detailed deficiencies.
- Provided recommendations and schedule for abatement for deficient secondary containment structures.

Rhone-Poulenc AG Company – Geotechnical and environmental investigation for two proposed above-ground reinforced concrete tanks to serve as secondary wastewater treatment unit. Investigation included soil drilling, sampling, laboratory analysis for engineering properties, and analysis for contamination. Field survey completed to locate existing structures. Report prepared outlining soils/geology, environmental concerns and foundation recommendations.

Closure of 13 aboveground RCRA storage tanks. Closure services included review of agency approved closure plan to determine compliance items, visual inspection of tank interiors and earthen containment berm areas, review of rinsate analyses, review of soils testing analysis from berm areas, and preparation of closure documentation and certification.

- Rhone-Poulenc AG Company
- American Cyanamid Company

Cannelton, Inc. – Abandoned underground storage tank investigation including sampling of tank contents, geoprobe investigation, and field and laboratory analysis of soil samples.

### Sewer Lines and WWTPs

Project manager/project engineer for the Fleming Landfill Sanitary Sewer Extension project in Kanawha County, West Virginia. Project included design, permitting, construction monitoring, and certification of 9,900 linear feet of gravity and force main sanitary sewer, a new duplex pump station, and rehabilitation/upgrade of an existing pump station. The construction contract was over \$1 million. The completed sewer extension was turned over from the West Virginia Department of Environmental Protection to the Sissonville Public Service District for ownership and operations.

Project engineer for sanitary sewer system including 8 inch gravity sewer, pump station, and force main sewer serving the Gettysburg Subdivision in Charleston, West Virginia. Project included an alternate mainline extension agreement with Charleston Sanitary Board, construction monitoring, surveying, road design and subdivision plans.

Project manager/engineer for an industrial wastewater sewer extension. Project included design engineering, permitting, and construction monitoring associated with a 5 million gallon, double-lined storage impoundment, duplex pump station with 70 horsepower pumps, and 5,200 linear feet of force main sewer in Monongalia County, West Virginia.

Design, permitting and construction monitoring associated with a 138,000 gallon double containment storage tank, duplex pump station, and force main piping associated with closure of the Jackson County Sanitary Landfill near Ripley, West Virginia.

### Oil and Gas

Columbia Gas Transmission Corp – Project Manager for in-house consulting services provided for environmental reports and permit applications for natural gas pipeline transmission projects.

Columbia Gas Transmission – Field reconnaissance of approximately 16 miles of pipeline route, preparation of erosion and sediment control measures, and preparation of stream crossing permits for the NJET project.

**Spill Prevention, Control & Countermeasure Plans**

Union Carbide Corporation, South Charleston Plant – Audit of chemical manufacturing plant to determine compliance with the facility Spill Prevention Control and Countermeasures (SPCC) plan. Project included review of SPCC plan prepared by facility staff, on-site inspection of over 50 storage areas to ascertain compliance with the SPCC plan and pertinent regulations, preparation of a list of observed deficiencies, and certification of the SPCC plan by a professional engineer.

**Stream/Wetland Delineation, Permitting, and Mitigation**

Columbia Gas Transmission Corp – Design of stream stabilization and restoration plan for a section of East Fork of Queer Creek in Hocking County, Ohio. Project included obtaining 401/404 certification and preparation of a detailed construction plan.

## EDUCATION

A.S. Transportation Engineering Technician  
Fairmont State College, 2002

Charleston High School, 1989  
WVWEA O&M Short School

## EMPLOYMENT HISTORY

2003-Present Potesta & Associates, Inc.  
2002 CTL Engineering, Inc.  
2000-2001 Site-Blauvelt Engineers  
1998-2000 Triad Engineering, Inc.  
1989-1998 Kroger Company

## PROFESSIONAL CERTIFICATION

Certified Technician by the West Virginia Transportation Engineering Technician and Bridge Safety Inspector Certification Board  
WVDOH Compaction Inspector  
WVDOH Concrete Technician  
WVDOH Concrete Inspector  
WVDOH Asphalt Technician  
WVDOH Aggregate Inspector  
ACI Concrete Technician Grade 1

## AREAS OF SPECIALIZATION

Quality Assurance/Quality Control (QA/QC) construction monitoring for both public and private construction, including observation/evaluation for bearing capacity, foundation, water and sewer line construction, pre- and post-blast, reinforcement locations, concrete and asphalt drilling, structural steel and footing, wall and slab.

Sampling and testing of materials, including soils and concrete. Testing includes nuclear density, compaction testing of soil, stone and asphalt; one point proctor determinations, sand cone density tests, concrete/grout testing and cylinder/cube fabrication. Lab work includes standard proctors, gradations, 200 washes, sieves, liquid and plastic limits, moistures, hydrometers, soil classification, sample logging, and compressive strength testing.

## PROFESSIONAL EXPERIENCE

### Construction Monitoring

West Virginia American Water – Resident Project Representative (RPR) and QA/QC for sludge treatment facility at the Kanawha Valley Water Treatment Plant. Tasks included observation and testing for concrete, soil, block, steel, and utilities.

Buckskin Council of Boy Scouts of America – Steel inspection for the new headquarters facility of Buckskin Council in Charleston, West Virginia.

West Virginia Division of Highways (WVDOH) – QA/QC and testing for compaction of soil, stone, and asphalt at the Gilmer County Maintenance Garage.

Lakin Correctional Center – QA/QC and testing for soil, concrete, asphalt, and utilities at the multi-security female correctional facility in West Columbia, West Virginia.

WVDOH – Consultant Inspector to West Virginia WVDOH overseeing work and progress of contractors to assure that projects meet WVDOH specifications. Duties included preparing daily reports, documentation of payable quantities of completed items (e.g., 200 LF of 24" RCP @ \$5/LF = \$1,000), contractor progress, time and material monitoring of additional work not included in the contract, file maintenance, receiving documents, attending meetings and maintaining public safety, as well as field inspection. Projects included Dry Run Bridge job and I-64 Institute to Dunbar project (including four bridges).

Western Regional Jail and Correctional Facility– QA/QC and testing of concrete at one of the largest jails in the state of West Virginia located in Barboursville.

Fleming Landfill – RPR for installation of approximately 6,225 feet of 8-inch gravity line, 43 manholes (both less and greater than 8 feet in depth), a new pump station, and 3,500 feet of 4-inch force main the Sewer Line Project in Kanawha County, West Virginia. Construction included installation of an 8-inch HDPE effluent line and flow metering manhole to convey leachate from the Fleming Landfill to the local PSD, upgrade an existing pump station to handle the increased demand, and abandonment of an outdated pump station and force main.

West Virginia-American Water Company – RPR for Residuals project serving as a liaison to contractor and monitoring work for owner and engineer. Work included receiving materials, reviewing submittals and progress payments, drafting and issuing change orders, and preparing daily logs summarizing construction. Construction work included installation of sludge pumping station, 1,000,000 gallon concrete gravity thickener, plate settler, two 2.2-meter belt filter presses, chemical feed systems and conveyors, and a building to house equipment. Included was monitoring of pipe installation (e.g. backfill placement, pressure testing) for 25 different subsurface piping systems.

RPR for installation of approximately 9,000 linear feet of water line, a booster station, and a water storage tank at a coal mine complex in Logan County, West Virginia. Maintained daily logs of construction activities, verified pay requests, served as liaison with client, and developed record drawings.

RPR for installation of approximately 14,000 feet of 8-inch water line for the Fisher Ridge Phase II waterline extension in Putnam County, West Virginia. Maintained daily logs of construction activities, verified pay requests, served as liaison with client, and developed record drawings.

RPR for installation of approximately 11,000 feet of 8-inch, 6-inch, and 2-inch water line for the Mifflin-Sharpley waterline extension in Logan County, West Virginia. Included were upgrades to existing water line, a railroad crossing, and connections to the existing Logan County Public Service District Sharpley system. Maintained daily logs of construction activities, verified pay requests, served as a liaison with client, and developed record drawings.

3M – Project Field Superintendent for West Virginia Turnpike 3M striping contract for the last four years. Oversees the striping and legend work for the 87-mile toll road. As Field Superintendent, verifies the materials, quantity and quality control. Coordinates work of the contractor with WVDOH, West Virginia Turnpike and West Virginia State Police. Handles all communications between the parties.

RPR for installation of approximately 3,700 feet of 12-inch and 8-inch HDPE subsurface effluent piping system. Tasks included verifying that bedding and backfill compaction requirements were met, along with

requirements for pressure testing of installed pipeline and vacuum testing of manholes. Also, maintained daily logs of construction activities, informed client of progress and/or complications and developed record drawings.

Kokosing/Frucon – Field technician testing soil and concrete for Marmet Lock and Dam project. Also supervised Soils Lab. Field duties included job site documentation, sampling and testing of materials. Conducted nuclear density tests, sand cone density tests, one-point proctor determinations, concrete/grout testing and cylinder/cube fabrication.

Completed the following types of inspections:

- Asphalt placement and compaction
- Clearing and grubbing
- Concrete
- Fill placement and backfill
- Free draining base trench
- MSE wall
- Pipe installation, backfill and testing
- Piling
- Structure demolition
- Subgrade placement and compaction
- Superstructure steel
- Traffic control

Inspected and tested asphalt placement, concrete placement, soil and aggregate compaction.

Conducted core drilling, jobsite documentation, lab work, density tests, operating nuclear density gauges, fabricating concrete cylinders and conducting roller passes on stone.

Yeager Airport – Concrete experience includes inspection and testing of concrete treated base (CTB) and Rapid Set Concrete in Charleston, WV.

Drilling experience includes logging split spoons and rock core samples, pumping water and reclaiming drill sites.

#### Civil/Site Design

Work experience includes various site development projects including placement of water, sewer, gas, electrical and storm water utilities associated with development.

Surveying

Assisted with surveying projects, running levels, conducting right-of-way surveys, locating utilities, houses, buildings and driveways on plans, searching property deeds and will books, setting property and centerline stakes, TBMs and hard points. Also worked as a rodman.



## EDUCATION

Spencer High School  
Spencer, West Virginia

## EMPLOYMENT HISTORY

|              |  |
|--------------|--|
| 2015-Present | Potesta & Associates, Inc.             |
| 2002-2013    | S&S Engineers                          |
| 2005-2006    | Boyles & Hildreth Consulting Engineers |
| 2003-2004    | Thrasher Engineering                   |
| 1999-2001    | LedCor/360 Communications              |
| 1997-1998    | Bilco Construction                     |
| 1995-1996    | ST Pipeline, Inc.                      |
| 1994-1995    | Carl E. Smith, Inc.                    |
| 1993-1994    | CJ Hughes, Inc.                        |
| 1991-1993    | A&L Underground                        |

## AREAS OF SPECIALIZATION

Solid background in utilities construction and project supervision. Interpret specifications, track cost estimates and perform liaison activities between engineer, contractors as well as the public. Ability to make on site decisions for contractors when field adjustments need to be implemented during project construction. Complete monthly pay estimates and other management reports as needed. Obtain necessary permissions for construction on public & private land & utilities. Strong history of pipeline, utilities & telecommunications installation. Consistently exceed timelines & budget goals set by project engineer. Skilled in developing and implementing standardized policies and procedures.

## PROFESSIONAL EXPERIENCE

### Construction Monitoring

Huntington Sanitary Board – Resident project representative for construction work at the Huntington Waste Water Treatment Plant (WWTP). The project included construction of a septage receiving and vacuum truck discharge station; replacement of 54-inch prestressed concrete cylinder pipe force main over a flood levee (prior to the force main entering the WWTP); replacement of 24-inch ductile iron force main; replacement of 30-inch magmeter and vault and bypass; and construction of a 48-inch waste water treatment plant discharge pipe and pipe diffuser, concrete overflow channel, and other associated manholes, piping, etc. The project required installing a

major bypass to continue flow from the City of Huntington to the WWTP during the time of construction. Work tasks included:

- Acting as a liaison to the contractor and monitoring construction work for the Owner, specifically informing the construction manager of progress and project issues
- Reviewing material and equipment submittals
- Reviewing change orders
- Preparing daily logs summarizing construction
- Monitoring pipe testing
- Performing testing of concrete and soil backfill

Public water and sewer construction oversight:

- Assisted engineering and other personnel to solve operating problems.
- Conduct engineering site audits to collect structural and related site information.
- Conferred with engineering and technical personnel to resolve design, research and testing problems.
- Established and maintained relationships with engineering services, government agencies and public.
- Liaison for local contacts and engineering company.
- Monthly reporting of construction progress.
- On-site decisions of field adjustments.

### Surveying

Bridge construction and layout for public use:

- Assisted engineer in obtaining correct property lines and layout.
- Tested concrete samples for maintaining state and federal guidelines for bridge construction.
- Recorded measurements used E.D.M for stakeouts and grade setting.

### Oil & Gas

Gas pipeline transmission and installation:

- Multiple tasks associated with installation of gas pipeline.
- Shot ditch configurations.
- Bending pipe to fit configurations.
- General labor in cross country pipeline and in city work.

- Worked on transmission and distribution of pipeline projects.
- Fused poly pipe.
- Drove supply truck.

*Additional Experience*

Fiber optic installation:

- Communicated operational issues and changes to supervisor on regular basis.
- Understood and followed railway safety policies and procedures.
- Collaborated with other team members to ensure smooth work flow and efficient organization operations.
- Troubleshoot electrical and mechanical issues to ensure proper installation of fiber optic cable.



STATE BOARD OF EXAMINERS OF LAND SURVEYORS

To all to whom these presents shall come Greeting  
Know Ye That The State Board of Examiners of Land Surveyors  
of the State of West Virginia, reposing special confidence in the  
Intelligence, Integrity and Discretion of

**Dana L. Burns**

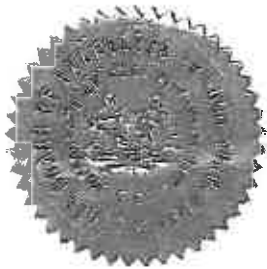
Does In Pursuance of Authority Vested In It  
by law, hereby certify that this person, having submitted  
satisfactory evidence of their ability and experience, is a

**Professional Surveyor**

License Number [REDACTED]

To Hold and use such title in the practice of their profession, subject  
to the conditions prescribed by law.

Given under the hand and the Seal of  
the Board this 21st day of August  
in the year of our Lord One Thousand  
Nine Hundred and Ninety-Five  
and of the State the One Hundred Thirty-Second year.



*[Signature]*  
Secretary

STATE BOARD OF EXAMINERS OF LAND SURVEYORS

*[Signature]*

*[Signature]*

# WEST VIRGINIA UNIVERSITY



THE GRADUATE SCHOOL

KNOW ALL PERSONS BY THESE PRESENTS  
THAT THE WEST VIRGINIA BOARD OF REGENTS  
UPON THE RECOMMENDATION OF THE FACULTY  
HAS CONFERRED UPON

DANA LEIGH BURNS

THE DEGREE OF

MASTER OF SCIENCE IN  
CIVIL ENGINEERING

WITH ALL THE RIGHTS, HONORS AND PRIVILEGES THEREUNTO  
APPERTAINING: WITNESS THE SEAL OF THE UNIVERSITY  
AND THE SIGNATURES OF ITS DULY AUTHORIZED OFFICERS  
HEREUNTO AFFIXED THIS TWENTY-SECOND DAY OF DECEMBER,  
NINETEEN HUNDRED SEVENTY-NINE.

*Wm. A. Budig*  
PRESIDENT OF THE UNIVERSITY

*Charles S. ...*  
DEAN OF THE COLLEGE

*W. S. ...*  
PRESIDENT, WEST VIRGINIA BOARD OF REGENTS

*Ben G. ...*  
CHANCELLOR, WEST VIRGINIA BOARD OF REGENTS



STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

To all to whom these presents shall come, Greeting

Know ye, That the State Board of Registration for Professional Engineers of the State of West Virginia, recognizing special confidence in the Intelligence, Integrity and Discretion of

Dana L. Burns

Does, in Pursuance of Authority Vested in it

by law, hereby certify that he having submitted satisfactory evidence of his ability and experience, is a

REGISTERED PROFESSIONAL ENGINEER

Registration Number [Redacted]

and use such title in the practice of his profession, subject to the conditions prescribed by law



Given under the hand and the Seal of the Board, at the Capitol in the City of Charleston this 11th day of Sept. in the year of our Lord One Thousand Nine Hundred and Eighty-Five and of the State the One Hundred Twenty-Second

STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

By Robert S. Scott, President  
Francis W. Hildy, Secretary  
Maurice P. Jackson  
Kenneth H. Moore





STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

To all to whom these presents shall come, Greeting

Know Ye That The State Board of Registration for Professional Engineers of the State of West Virginia, reposing special confidence in the Intelligence, Integrity and Discretion of

Terence C. Moran

Doth in Pursuance of an Act of the Legislature of this State, passed March 14th 1911

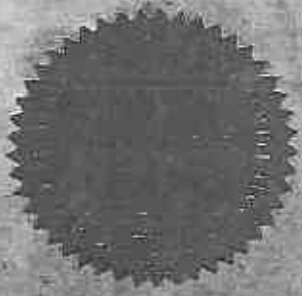
by law, hereby certify that he, having submitted satisfactory evidence of his ability and experience, is a

REGISTERED PROFESSIONAL ENGINEER

Registration Number [Redacted]

He shall and use such title in the practice of his profession, subject to the conditions prescribed by law

Given under the hand and the Seal of the Board at the Capitol in the City of Charleston this 12th day of Feb. 1911 year of our Lord One Thousand Nine Hundred and Ninety Two and of the State the One Hundred Thirty Second

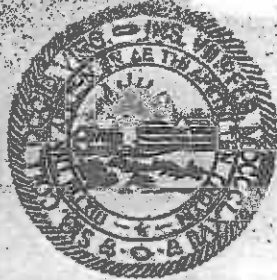


STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

[Signature] Secretary

[Signature] President

# WEST VIRGINIA UNIVERSITY



THE COLLEGE OF ENGINEERING

KNOW ALL PERSONS BY THESE PRESENTS  
THAT THE UNIVERSITY OF WEST VIRGINIA BOARD OF TRUSTEES  
UPON THE RECOMMENDATION OF THE FACULTY  
HAS CONFERRED UPON

TERENCE CATO MORAN

THE DEGREE OF

MASTER OF SCIENCE IN CIVIL ENGINEERING

WITH ALL THE RIGHTS, HONORS AND PRIVILEGES THEREUNTO  
APPERTAINING. WITNESS THE SEAL OF THE UNIVERSITY  
AND THE SIGNATURES OF ITS DULY AUTHORIZED OFFICERS  
HEREUNTO AFFIXED THIS TWENTY-SEVENTH DAY OF DECEMBER,  
NINETEEN HUNDRED EIGHTY-NINE.

*Del. L. Beckler*  
\_\_\_\_\_  
CHIEF OF THE UNIVERSITY

*David W. ...*  
\_\_\_\_\_  
CHIEF OF THE UNIVERSITY OF WEST VIRGINIA  
FOUNDED BY LEGISLATION

*Charles J. ...*  
\_\_\_\_\_  
CHIEF OF THE UNIVERSITY

*James W. ...*  
\_\_\_\_\_  
CHIEF OF THE UNIVERSITY OF WEST VIRGINIA  
FOUNDED BY LEGISLATION



# WEST VIRGINIA UNIVERSITY



THE COLLEGE OF ENGINEERING

KNOW ALL PERSONS BY THESE PRESENTS  
THAT THE WEST VIRGINIA BOARD OF REGENTS  
UPON THE RECOMMENDATION OF THE FACULTY  
HAS CONFERRED UPON

TERENCE CATO MORAN

THE DEGREE OF

BACHELOR OF SCIENCE IN CIVIL ENGINEERING  
CUM LAUDE

WITH ALL THE RIGHTS, HONORS AND PRIVILEGES THEREUNTO  
APPERTAINING. WITNESS THE SEAL OF THE UNIVERSITY  
AND THE SIGNATURES OF ITS DULY AUTHORIZED OFFICERS  
HEREUNTO AFFIXED THIS TWENTY-SIXTH DAY OF  
DECEMBER, NINETEEN HUNDRED EIGHTY-SEVEN

*Neil S. Beckler*  
PRESIDENT OF THE UNIVERSITY

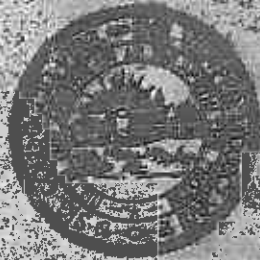
*Lawrence L. Lister, III*  
PRESIDENT OF THE BOARD OF REGENTS

*Carlisle J. Johnson*  
DEAN OF THE COLLEGE

*Samuel S. ...*  
CHIEF OF THE WEST VIRGINIA BOARD OF REGENTS



# WEST VIRGINIA UNIVERSITY



## COLLEGE OF ENGINEERING

KNOW ALL PERSONS BY THESE PRESENTS  
THAT THE WEST VIRGINIA BOARD OF REGENTS  
UPON THE RECOMMENDATION OF THE FACULTY  
HAS CONFERRED UPON

**MARK ALAN SANKOFF**

THE DEGREE OF

**BACHELOR OF SCIENCE IN CIVIL ENGINEERING**

WITH ALL THE RIGHTS, HONORS AND PRIVILEGES THEREUNTO  
APPERTAINING, AND WITH THE SEAL OF THE UNIVERSITY  
AND THE SIGNATURES OF ITS DULY AUTHORIZED OFFICERS  
HEREUNTO AFFIXED, THIS SIXTEENTH DAY OF MAY,  
NINETEEN HUNDRED EIGHTY TWO

  
PRESIDENT OF THE UNIVERSITY

  
PRESIDENT, WEST VIRGINIA BOARD OF REGENTS

  
DEAN OF THE COLLEGE

  
REGISTRAR, WEST VIRGINIA BOARD OF REGENTS



STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

To all to whom these presents shall come, Greeting

Know Ye That The State Board of Registration for Professional Engineers of the State of West Virginia, reposing special confidence in the Intelligence, Integrity and Discretion of

Mark A. Sankoff

DONE IN PURSUANCE OF AUTHORITY VESTED IN IT

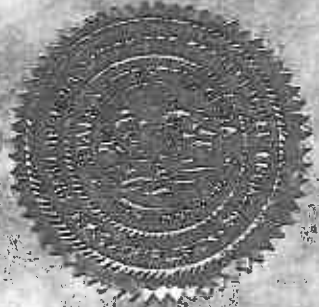
By having hereby certified that he having submitted satisfactory evidence of his ability and experience, is a

REGISTERED PROFESSIONAL ENGINEER

Registration Number [REDACTED]

and use the title in the practice of his profession, subject to the conditions...

Given under the hand and the seal of the Board at the Capitol in the City of Charleston this 23rd day of February in the year of our Lord One Thousand Nine Hundred and Eighty-Nine and of the State the One Hundred Twenty-Fifth.



STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

Secretary

Kenneth H. Miller

By: Arthur L. Smith





STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

To all to whom these presents shall come Greeting

Know Ye That The State Board of Registration for Professional Engineers of the State of West Virginia, reposing special confidence in the Intelligence, Integrity and Discretion of

Patrick A. Taylor

Does, in Pursuance of Authority Vested in it

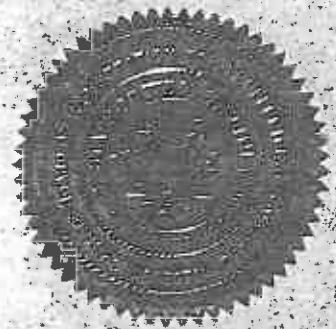
By Law, hereby certify that he having submitted satisfactory evidence of his ability and experience is a

REGISTERED PROFESSIONAL ENGINEER

Registration Number [Redacted]

To Hold and use such title in the practice of his profession, subject to the conditions prescribed by law.

Given under the hand and the Seal of the Board at the Capital in the City of Charleston this 2nd day of Aug in the year of our Lord One thousand Nine hundred and twenty Four and of the State the One thousand Thirty First



STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

Secretary: Kenneth H. Hanna  
President: [Signature]  
[Signature]

# The University of Florida

has conferred on

Patrick Alan Taylor

the degree

Bachelor of Science in Civil Engineering

and all the rights and privileges thereto appertaining.

In Witness Whereof, this diploma, duly signed, has been issued and the seal of the University affixed.

Granted by the Board of Regents upon recommendation of the Faculty of

The College of Engineering

at Gainesville, this seventeenth day of December, A.D. 1953.

*Robert J. ...*  
Registrar



*Franklin M. ...*  
President

*W. ...*



# Marshall University

The Marshall University Board of Governors  
upon the recommendation of the faculty of the  
**Graduate College**

has conferred upon

**Patrick Alan Taylor**

the degree of

**Master of Science in Engineering**

In Testimony Whereof, the signatures of the duly authorized officers of the  
Board of Governors and the Faculty of the University and the seal of the  
University have been affixed.

Given at Huntington, West Virginia, this twelfth day of December, 2006.

Marshall University Board of Governors

*Maria E. Kilduff*

Chairman

*[Signature]*

President of the University



*[Signature]*

President and Senior Vice President  
in Academic Affairs

*[Signature]*

# WEST VIRGINIA UNIVERSITY



THE COLLEGE OF ENGINEERING  
KNOW ALL PERSONS BY THESE PRESENTS  
THAT THE WEST VIRGINIA BOARD OF REGENTS  
UPON THE RECOMMENDATION OF THE FACULTY  
HAS CONFERRED UPON

**DAVID MARK KISER**

THE DEGREE OF  
**BACHELOR OF SCIENCE IN CIVIL ENGINEERING**  
SUMMA CUM LAUDE

WITH ALL THE RIGHTS, HONORS AND PRIVILEGES THEREUNTO  
APPERTAINING. WITNESS THE SEAL OF THE UNIVERSITY  
AND THE SIGNATURES OF ITS DULY AUTHORIZED OFFICERS:  
HEREUNTO AFFIXED THIS THIRTEENTH DAY OF  
MAY, NINETEEN HUNDRED EIGHTY-FOUR

*[Signature]*  
\_\_\_\_\_  
PRESIDENT OF THE COLLEGE

*[Signature]*  
\_\_\_\_\_  
PRESIDENT, WEST VIRG. BOARD OF REGENTS

*[Signature]*  
\_\_\_\_\_  
DEAN OF THE COLLEGE

*[Signature]*  
\_\_\_\_\_  
CHANCELLOR, WEST VIRG. BOARD OF REGENTS



STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

To all to whom these presents shall come, Greeting

Know Ye That The State Board of Registration for Professional Engineers, of the State of West Virginia, reposing special confidence in the Intelligence, Integrity, and Discretion of

David M. Kiser

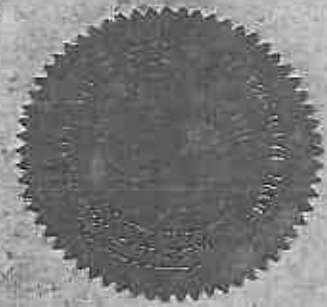
DOES, IN PURSUANCE OF AUTHORITY VESTED IN IT

by law, hereby certify that he having submitted satisfactory evidence of his ability and experience, is a

REGISTERED PROFESSIONAL ENGINEER

Registration Number [Redacted]

and use such title in the practice of his profession, subject to the conditions provided by law.



Given under the hand and the Seal of the Board, at the Capitol in the City of Charleston this 15th day of March in the year of our Lord One Thousand Nine Hundred and Ninety and of the State the One Hundred Twenty sixth.

STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

[Signature]

Secretary Kenneth H. Moore

Frank Kelly Clerk

**WV Army National Guard  
 Joint Forces Headquarters and Camp Dawson  
 Redundant Water and Sewer Systems Project**

**Principal-in-Charge**  
 Dana Burns, PE – 36 Years Experience

**Technical Support QA/QC Review**  
 Terence C. Moran, PE – 26 Years Experience

**Chief Engineer/Project Manager**  
 Mark A. Sankoff, PE – 33 Years Experience

**Engineering**  
 Field Reconnaissance, Site Characterization,  
 Design Engineering, Preparation of Construction  
 Documents, and Related Tasks

Christopher Grose, LRS – 25 Years Experience  
 Jarrett Smith, PE – 14 Years Experience  
 Jason Gandee – 11 Years Experience  
 Robert Ammirato, PE – 15 Years Experience  
 Patrick Taylor, PE – 23 Years Experience  
 Mark Isabell – 9 Years Experience  
 John Spencer – 34 Years Experience  
 Jordan Beard – 1 Years Experience  
 Jessica Boggs – 4 Years Experience  
 Angela Pugh – 7 Years Experience

**CADD Designers**

Michael Sankoff – 25 Years Experience  
 Russ Lester – 26 Years Experience  
 Brian Leedy – 19 Years Experience  
 Joe Martin – 21 Years Experience  
 Chuck Willis – 38 Years Experience  
 Chuck Bird – 22 Years Experience

**Clerical**

Charlene Racer  
 Melissa High  
 Rhonda Henson

**QA/QC Monitors**

QA/QC Monitoring of Cap

Robert Lamm – 17 Years Experience  
 Gary Bridgette – 12 Years Experience  
 Bill Cox – 17 Years Experience  
 Paul Kinzer – 1 Years Experience  
 Mike Whitman – 25 Years Experience

**Surveying**

Victor Dawson, PS – 34 Years Experience  
 Brad Starkey – 27 Years Experience  
 Charles Shaffer – 16 Years Experience  
 Rusty Hunter – 33 Years Experience  
 Howard Samples – 17 Years Experience  
 Richard Smith – 3 Years Experience  
 Greg Hodges – 20 Years Experience





Purchasing Division  
 2019 Washington Street East  
 Post Office Box 50130  
 Charleston, WV 25305-0130

State of West Virginia  
 Centralized Expression of Interest  
 02 – Architect/Engr

Proc Folder: 240128

Doc Description: Addendum 1-Redundant Water and Sewage Systems EOI Design

Proc Type: Central Contract - Fixed Amt

| Date Issued | Solicitation Closes    | Solicitation No         | Version |
|-------------|------------------------|-------------------------|---------|
| 2016-08-02  | 2016-08-31<br>13:30:00 | CEOI 0603 ADJ1700000004 | 2       |

**BID RECEIVING LOCATION**

BID CLERK  
 DEPARTMENT OF ADMINISTRATION  
 PURCHASING DIVISION  
 2019 WASHINGTON ST E  
 CHARLESTON WV 25305  
 US

**VENDOR**

Vendor Name, Address and Telephone Number:  
 Potesta & Associates, Inc.  
 7012 MacCorkle Avenue, SE  
 Charleston, WV 25304  
 (304) 342-1400

**FOR INFORMATION CONTACT THE BUYER**

Jessica S Chambers  
 (304) 558-0246  
 jessica.s.chambers@wv.gov

Signature X *Dana L. Burns* FEIN # 311509066

DATE August 31, 2016

All offers subject to all terms and conditions contained in this solicitation

**ADDITIONAL INFORMATION:**

Addendum

Addendum No.01 issued to publish and distribute the attached information to the vendor community.

\*\*\*\*\*

**Expression of Interest**

The West Virginia Purchasing Division is soliciting Expression(s) of Interest for the Agency, The West Virginia National Guard to provide design services to complete a system inventory and vulnerability assessment of the existing infrastructure for water and sewage systems at the Joint Forces Headquarters at the Coonskin Complex in Charleston, WV, and selected areas within Camp Dawson at Kingwood (Preston County), and to provide a prioritized approach with conceptual costs for redundant water and sewage systems at these locations.

| INVOICE TO  |         | SHIP TO   |          |
|---|---------|---|----------|
| DIVISION ENGINEERING & FACILITIES<br>ADJUTANT GENERALS OFFICE<br>1707 COONSKIN DR |         | DIVISION ENGINEERING & FACILITIES<br>ADJUTANT GENERALS OFFICE<br>1707 COONSKIN DR |          |
| CHARLESTON  | WV25311 | CHARLESTON  | WV 25311 |
| US  |         | US  |          |

| Line | Comm Ln Desc   | Qty | Unit Issue |
|------|--|-----|------------|
| 1    | Redundant Water and Sewage Systems EOI Design Services |     |            |

| Comm Code | Manufacturer | Specification | Model # |
|-----------|--------------|---------------|---------|
| 81101508  |              |               |         |

**Extended Description :**

CHARLESTON COONSKIN LOCATION-Professional engineering design services to develop construction documents to provide for a complete system inventory and vulnerability assessment of the existing infrastructure for water and sewage systems as needed, at the Joint Forces Headquarters Complex, located at 1703 Coonskin Drive, Charleston, WV 25311, and to provide a prioritized approach with conceptual costs for redundant water and sewage systems at this location per the attached documentation

| INVOICE TO  |         | SHIP TO   |               |
|---|---------|---|---------------|
| DIVISION ENGINEERING & FACILITIES<br>ADJUTANT GENERALS OFFICE<br>1707 COONSKIN DR |         | FACILITY MAINTENANCE MANAGER<br>CAMP DAWSON ARMY TRAINING SITE<br>240 ARMY RD |               |
| CHARLESTON  | WV25311 | KINGWOOD  | WV 26537-1077 |
| US  |         | US  |               |

| Line | Comm Ln Desc   | Qty | Unit Issue |
|------|--|-----|------------|
| 2    | Redundant Water and Sewage Systems EOI Design Services |     |            |

| Comm Code | Manufacturer | Specification | Model # |
|-----------|--------------|---------------|---------|
| 81101508  |              |               |         |

**Extended Description :**

CAMP DAWSON LOCATION- Professional engineering design services to develop construction documents to provide for a complete system inventory and vulnerability assessment of the existing infrastructure for water and sewage systems as needed, at selected areas within Camp Dawson at Kingwood (Preston County), and to provide a prioritized approach with conceptual costs for redundant water and sewage systems at this location per the attached documentation.

|              |                                |  |                              |
|--------------|--------------------------------|--|------------------------------|
| ADJ170000004 | <b>Document Phase</b><br>Final | <b>Document Description</b><br>Addendum 1-Redundant Water and Sewage<br>Systems EOI Design | <b>Page 3</b><br><b>of 3</b> |
|--------------|--------------------------------|--|------------------------------|

**ADDITIONAL TERMS AND CONDITIONS**

See attached document(s) for additional Terms and Conditions



Purchasing Divison  
 2019 Washington Street East  
 Post Office Box 50130  
 Charleston, WV 25305-0130

State of West Virginia  
 Centralized Expression of Interest  
 02 – Architect/Engr

Proc Folder: 240128

Doc Description: Redundant Water and Sewage Systems EOI Design Services

Proc Type: Central Contract - Fixed Amt

| Date Issued | Solicitation Closes    | Solicitation No         | Version |
|-------------|------------------------|-------------------------|---------|
| 2016-08-02  | 2016-09-01<br>13:30:00 | CEOI 0603 ADJ1700000004 | 1       |

**BID RECEIVING LOCATION**  
 BID CLERK  
 DEPARTMENT OF ADMINISTRATION  
 PURCHASING DIVISION  
 2019 WASHINGTON ST E  
 CHARLESTON WV 25305  
 US

**VENDOR**  
 Vendor Name, Address and Telephone Number:  
 Potesta & Associates, Inc.  
 7012 MacCorkle Avenue, SE  
 Charleston, WV 25304  
 (304) 342-1400

**FOR INFORMATION CONTACT THE BUYER**  
 Jessica S Chambers  
 (304) 558-0246  
 jessica.s.chambers@wv.gov

Signature X *Dana L Burns* FEIN # 311509066 DATE August 31, 2016  
 All offers subject to all terms and conditions contained in this solicitation

**ADDITIONAL INFORMATION:**

Expression of Interest

The West Virginia Purchasing Division is soliciting Expression(s) of Interest for the Agency, The West Virginia National Guard to provide design services to complete a system inventory and vulnerability assessment of the existing infrastructure for water and sewage systems at the Joint Forces Headquarters at the Coonskin Complex in Charleston, WV, and selected areas within Camp Dawson at Kingwood (Preston County), and to provide a prioritized approach with conceptual costs for redundant water and sewage systems at these locations.

| INVOICE TO  |         | SHIP TO   |          |
|---|---------|---|----------|
| DIVISION ENGINEERING & FACILITIES<br>ADJUTANT GENERALS OFFICE<br>1707 COONSKIN DR |         | DIVISION ENGINEERING & FACILITIES<br>ADJUTANT GENERALS OFFICE<br>1707 COONSKIN DR |          |
| CHARLESTON  | WV25311 | CHARLESTON  | WV 25311 |
| US  |         | US  |          |

| Line | Comm Ln Desc   | Qty | Unit Issue |
|------|--|-----|------------|
| 1    | Redundant Water and Sewage Systems EOI Design Services |     |            |

| Comm Code | Manufacturer | Specification | Model # |
|-----------|--------------|---------------|---------|
| 81101508  |              |               |         |

**Extended Description :**

CHARLESTON COONSKIN LOCATION-Professional engineering design services to develop construction documents to provide for a complete system inventory and vulnerability assessment of the existing infrastructure for water and sewage systems as needed, at the Joint Forces Headquarters Complex, located at 1703 Coonskin Drive, Charleston, WV 25311, and to provide a prioritized approach with conceptual costs for redundant water and sewage systems at this location per the attached documentation

| INVOICE TO  |         | SHIP TO   |               |
|---|---------|---|---------------|
| DIVISION ENGINEERING & FACILITIES<br>ADJUTANT GENERALS OFFICE<br>1707 COONSKIN DR |         | FACILITY MAINTENANCE MANAGER<br>CAMP DAWSON ARMY TRAINING SITE<br>240 ARMY RD |               |
| CHARLESTON  | WV25311 | KINGWOOD  | WV 26537-1077 |
| US  |         | US  |               |

| Line | Comm Ln Desc   | Qty | Unit Issue |
|------|--|-----|------------|
| 2    | Redundant Water and Sewage Systems EOI Design Services |     |            |

| Comm Code | Manufacturer | Specification | Model # |
|-----------|--------------|---------------|---------|
| 81101508  |              |               |         |

**Extended Description :**

CAMP DAWSON LOCATION- Professional engineering design services to develop construction documents to provide for a complete system inventory and vulnerability assessment of the existing infrastructure for water and sewage systems as needed, at selected areas within Camp Dawson at Kingwood (Preston County), and to provide a prioritized approach with conceptual costs for redundant water and sewage systems at this location per the attached documentation.

|              |                                |  |                              |
|--------------|--------------------------------|--|------------------------------|
| ADJ170000004 | <b>Document Phase</b><br>Final | <b>Document Description</b><br>Redundant Water and Sewage Systems EOI<br>Design Services | <b>Page 3</b><br><b>of 3</b> |
|--------------|--------------------------------|--|------------------------------|

**ADDITIONAL TERMS AND CONDITIONS**

See attached document(s) for additional Terms and Conditions

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

Dana L. Burns, PE, Vice President  
 (Name, Title)  
Dana L. Burns, PE, Vice President  
 (Printed Name and Title)  
7012 MacCorkle Avenue, SE, Charleston, WV 25304  
 (Address)  
(304) 342-1400 / (304) 343-9031  
 (Phone Number) / (Fax Number)  
dlburns@potesta.com  
 (email address)

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

Potesta & Associates, Inc.  
(Company)

Dana L. Burns, PE, Vice President *Dana L. Burns*  
(Authorized Signature) (Representative Name, Title)

Dana L. Burns, PE, Vice President  
(Printed Name and Title of Authorized Representative)

August 31, 2016  
(Date)

(304) 342-1400 / (304) 343-9031  
(Phone Number) (Fax Number)

**ADDENDUM ACKNOWLEDGEMENT FORM**  
**SOLICITATION NO.: CEOI 0603 ADJ1700000004**

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

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

**Addendum Numbers Received:**

(Check the box next to each addendum received)

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

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

\_\_\_\_\_  
Potesta & Associates, Inc.

Company

\_\_\_\_\_  
*Dana L. Burns*

Authorized Signature

\_\_\_\_\_  
August 31, 2016

Date

**NOTE:** This addendum acknowledgment should be submitted with the bid to expedite document processing.  
Revised 6/8/2012



ACORD™

Client#: 1114469

POTESASS

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

3/03/2016

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER: USI Ins Svcs C/L Charleston, 1 Hillcrest Drive East, Charleston, WV 25311, 304 347-0611. CONTACT NAME: Brenda Samples, PHONE: 304-347-0066, FAX: 304-347-0605, E-MAIL ADDRESS: brenda.samples@usi.biz. INSURER(S) AFFORDING COVERAGE: INSURER A: Travelers Indemnity Co. of Amer (25666), INSURER B: Travelers Property Cas. Co. of (25674), INSURER C: Farmington Casualty Company (41483), INSURER D: Lexington Insurance Company (19437), INSURER E: , INSURER F: .

COVERAGES CERTIFICATE NUMBER: REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

Table with columns: INSR LTR, TYPE OF INSURANCE, ADDL SUBR INSR, POLICY NUMBER, POLICY EFF (MM/DD/YYYY), POLICY EXP (MM/DD/YYYY), LIMITS. Rows include: A COMMERCIAL GENERAL LIABILITY (6308476376), B AUTOMOBILE LIABILITY (BA8G476339), B UMBRELLA LIAB (CUP8G476376), C WORKERS COMPENSATION AND EMPLOYERS' LIABILITY (UB8G5668511), D Professional Pollution (028174922).

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required) Evidence of Coverage for operations usual to Engineers and Environmental Consultants.

CERTIFICATE HOLDER: Potesta & Associates, Inc., 7012 MacCorkle Ave., SE, Charleston, WV 25304. CANCELLATION: SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE: [Signature]

STATE OF WEST VIRGINIA  
Purchasing Division

**PURCHASING AFFIDAVIT**

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

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

**DEFINITIONS:**

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

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

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

**AFFIRMATION:** By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (W. Va. Code §61-5-3) that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

**WITNESS THE FOLLOWING SIGNATURE:**

Vendor's Name: Potesta & Associates, Inc.

Authorized Signature: *Dana L. Burns* Date: August 31, 2016

State of West Virginia

County of Kanawha, to-wit:

Taken, subscribed, and sworn to before me this 31 day of August, 2016.

My Commission expires February 14, 2024.

**AFFIX SEAL HERE**

**NOTARY PUBLIC**

*Rhonda L. Henson*

*Purchasing Affidavit (Revised 08/01/2015)*

