

# Statement of Qualifications

West Virginia Department of Environmental Protection

Morgan Highwall #46 Design

DEP16132

April 11, 2013

# HRG

**Herbert, Rowland & Grubic, Inc.**  
**Engineering & Related Services**

829 Fairmont Road, Suite 201  
Morgantown, WV 26501

(304) 284-9222

[www.hrg-inc.com](http://www.hrg-inc.com)

04/11/13 08:14:23 AM  
West Virginia Purchasing Division

N79°

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April 10, 2013

Frank Whittaker  
Department of Administration  
Purchasing Division  
2019 Washington Street, East  
P.O. Box 50130  
Charleston, WV 25305-0130

RE: Expression of Interest  
West Virginia Department of Environmental Protection  
DEP 16132 – Morgan Highwall #46 Design

Dear Mr. Whitaker:

Herbert, Rowland, & Grubic, Inc. (HRG) is pleased to submit for your consideration this proposal and "Expression of Interest" for the West Virginia Department of Environmental Protection (WVDEP), Office of Abandoned Mine Lands and Reclamation (AML&R) to provide engineering services for the Morgan Highwall #46 design project.

We have assembled a team of highly experienced personnel within the firm who have provided similar engineering services for numerous abandoned mine land reclamation and related projects over the years for a variety of clients including the West Virginia Department of Environmental Protection, the Pennsylvania Department of Environmental Protection, and the Ohio Department of Natural Resources. Our team is supplemented by two sub-consultants: *Geomechanics* from Elizabeth, PA, a leader in providing geotechnical engineering services for over 42 years for literally hundreds of projects involving abandoned mine lands and reclamation located throughout Appalachia; and *S&S Engineers, Inc.* from Charleston, WV, with experience in surveying of AMD facilities dating back to the 1980's.

We welcome the opportunity to present our credentials to you and look forward to the chance to discuss our approach and our capabilities with the selection committee. Please contact me at 304-284-9222 if you have any questions or if I can provide any clarifications regarding our proposal.

Sincerely,  
HERBERT, ROWLAND, & GRUBIC, INC.

A handwritten signature in black ink that reads "Samer". The signature is written in a cursive style with a long, sweeping underline that extends to the right.

Samer H. Petro, P.E.  
Office Manager/Senior Project Manager



Herbert, Rowland & Grubic, Inc.  
Engineering & Related Services

[ BUILDING RELATIONSHIPS.  
DESIGNING SOLUTIONS. ]

## CORPORATE OVERVIEW



Herbert, Rowland & Grubic, Inc. (HRG) is an engineering and related services firm. We serve the Mid-Atlantic and Mid-West states with a contingent of 227 engineers, surveyors, planners, finance professionals, project managers, right-of-way acquisition specialists, and program administrators and continue to be recognized annually as an *Engineering News-Record top 500* firm. HRG has been in business for 50 years building relationships and providing solutions to our clients. We have offices throughout Pennsylvania and West Virginia. The following is a brief summation that demonstrates HRG's unique qualifications to provide services to the West Virginia Department of Environmental Protection:

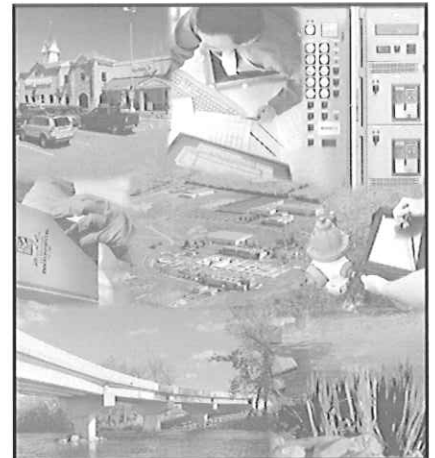
### Responsiveness and Commitment:

Several of our proposed team of experienced professionals West Virginia residents and are proud and eager to serve West Virginia and their community. This is an extension of the HRG culture where our staff is not focused solely on calculations and field data, but on people – our clients; the men, women, and children they serve; our employees; and the citizens of whom we share the local community. That's why we strive – before any plans are prepared – to get to know the needs of all stakeholders, so that we can design innovative solutions tailored to meet everyone's unique needs.

HRG's Morgantown, WV office is approximately 38 miles from Philippi, WV, and is the location where Brandon Meyers, our Project Manager, is based. With less than one hour of travel time, Brandon and the remainder of the Morgantown staff will be able to meet with WV DEP personnel whenever necessary to coordinate the details of any project or answer any questions you may have. In addition, our Cranberry Township and Harrisburg, PA office staff can easily respond and have an on-site presence within half working days' notice.

### Full Service Capabilities and Experience:

We are a 227 employee full service firm offering expertise in the areas of transportation, environmental site assessments, civil and water resources, water and wastewater, site design, surveying, and GIS. This broad range of capabilities further enhances our ability to serve you by enabling us to handle every project need in-house from the initial project concept to project delivery.



### Dedication to Quality Service:

It's especially desirable to hand over a project from start to finish to one firm when you know that firm possesses such strict standards for quality assurance and quality control as HRG does. In accordance with our quality control procedures, a project-specific QA/QC plan is developed for each undertaking that identifies project-specific communications procedures, schedule milestones, and checking milestones to be followed by all individuals. Our clients, including our higher education clients, can attest to the quality of our service.

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# FIRM CAPABILITIES

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Herbert, Rowland & Grubic, Inc.'s team of extremely experienced professionals, which includes several West Virginia registered professional engineers and surveyors, will work cohesively to meet and exceed your expectations. It is the experience and diverse background of our team members, working closely with our clients, that has ensured that our projects meet our clients' expectations and the needs of the communities that they serve. Made up of a diverse array of professional engineers, our team provides a "one-stop" resource that will provide you with **on-time quality services**. Our approach and methodology to provide all of the needed services, translates into a streamlined and seamless transition as projects progress from design to reality.

## Environmental:

Our Knowledgeable staff of geologists and environmental professionals is the first resource to consider for providing environmental studies, site assessments, permit applications, remedial investigations, land recycling solutions, regulatory compliance management and litigation support.

While project specifications may vary, we consistently adhere to protocols established through the ASTM Standard Practice E 1527-05 guidance. We've conducted hundreds of site assessments on projects ranging from undeveloped land to industrial facilities that have a long history of hazardous material usage, handling, and storage.

In addition, many state or federally funded projects require a different range of investigation and documentation in compliance with the National Environmental Policy Act (NEPA). HRG's extensive experience with this process allows us to effectively prepare and coordinate these investigations. We offer a full range of services covering the preparation of Categorical Exclusion Evaluations, Environmental Assessments and Environmental Impact Statements as well as public involvement, social resources, noise studies, and agency coordination.



For remedial investigations, we possess extensive experience performing characterization studies of sites contaminated by hazardous substances and petroleum products. For site where regulated substances are discovered, HRG has managed soil and groundwater remediation projects ranging from minor

contamination of soil by petroleum distillates to sites requiring recovery of nonaqueous liquids PCBs, and/or heavy metals impacting soils and groundwater. We employ remedial technologies only after careful consideration of cost benefit and technical reliability.

HRG is also experienced in developing and implementing approved plans for reuse of inactive industrial properties through state-run, voluntary cleanup programs, especially Pennsylvania's Land Recycling and Environmental Remediation Standards Act of 1995 (Act 2).



Our compliance management expertise includes Waste Management & Minimization, Air Quality, Water Quality, Hazardous Materials, and OSHA/Worker Right-to-Know requirements. We conduct training, perform environmental compliance evaluations for internal auditing purposes, develop and implement environmental and safety management plans, support preparation and submittal of permit applications, notifications, reports and correspondence related to numerous aspects of environmental and safety management.

We complete Preparedness, Prevention and Contingency (PPC) Plans and Spill Prevention, Control and Countermeasure (SPCC) Plans to comply with applicable regulatory requirements, minimize the impact your operation may have on the environment in the event of a release and develop best management practices to prevent such accidental releases.

HRG staff has extensive experience in all aspects of wetland investigations, from identification & delineation to mitigation design, construction oversight, and long-term monitoring. Where impacts are unavoidable, HRG offers a full range of services to help you obtain water obstruction and encroachment permits from the Department of Environmental Protection and Section 404 Permits from the U.S. Army Corps of Engineers.

Our experience with natural resources also includes watershed assessments, stream and habitat assessments, in-stream macro invertebrate studies, stream restoration and stabilization design, threatened and endangered species coordination. We also integrate the latest GIS technologies to enhance our studies.

### **Water Resources:**

HRG provides a wide array of waterways permitting and design services that are targeted at preserving our streams, rivers and watersheds. Our services help you comply with current state and federal regulations while ensuring that these water resources can be enjoyed by future generations.

Our comprehensive watershed management services include assessing water quality using techniques such as macro-invertebrate study, identifying sources of potential

runoff and pollution, designing Best Management Practices (BMPs), engineering stream restoration and stabilization measures, and preparing watershed assessments and river conservation plans. We also assist with the management of watershed alliances and help watershed organizations apply for the funding they need.

When wetlands will be impacted by a project, we identify and delineate these wetlands, prepare design alternatives to minimize the impact, and prepare the required permit applications if impact is unavoidable. We also design mitigation measures and complete construction and post-construction monitoring to ensure the continued survival of the aquatic life that inhabit these wetlands.

We also have extensive and relevant experience in the preparation of Phase I and Phase II Act 167 Watershed Stormwater Management Plans throughout Pennsylvania.



This experience has given us an in-depth understanding of the requirements of the Department of Environmental Protection (DEP) will have for this state funded program, which significantly enhances our efficiency in completing the projects.

HRG's experienced staff possesses years of experience assisting counties and local governments in developing ordinances to address water quantity, water quality and channel protection standards. We have subsequently also helped countless clients comply with these regulations on their commercial, residential and industrial projects.

As recognized experts on National Pollutant Discharge Elimination System (NPDES) permitting, we have conducted numerous presentations on NPDES regulations to government and industry throughout the region. We are also a recognized expert in obtaining NPDES Phase II permits from the Department of Environmental Protection for post-construction stormwater management facilities.

In addition, HRG provides services such as Hydrologic and Hydraulic Analysis in support of many projects. We use HEC-HMC hydrologic modeling and HEC-RAS hydraulic modeling and structure design, scour analysis, dam breach analysis, floodplain analysis, and erosion and sedimentation control design to help you obtain water obstruction and encroachment permits from the Department of Environmental Protection and Section 404 Permits from the U.S. Army Corps of Engineers.

### **Transportation:**

HRG's comprehensive array of traffic engineering services includes traffic impact studies, traffic signal design, congestion management studies and transportation planning. Our traffic studies, include an analysis of current and projected land use as well as thorough collection and analysis of existing traffic data. After identifying system

requirements, we apply state-of-the-art software to design the most cost-effective traffic systems that maximize efficiency and promote safety.

Our transportation engineers have completed hundreds of roadway designs of varying size and complexity – from interstate interchanges to bituminous overlays of local road. Our experience includes engineering services for dozens of large-scale improvement projects to enhance safety and increase capacity along major arterial roadways and interstates throughout the region.

Our engineers have completed more than 100 bridge replacements and rehabilitations. Our projects have ranged from locally sponsored, federally funded bridge replacements to state-owned, single- and multi-span structures traversing streams, highways and railroads. In addition, our Certified Bridge Safety Inspectors perform NBIS inspections to assess the physical integrity and structural adequacy of a wide variety of bridges.



Our staff provides comprehensive rail engineering services to private sector companies who rely on rail for transportation for their goods, public transportation agencies providing enhanced multi-modal access, and railroad lines that transport freight for industry. We understand the fast-paced nature of your business and the dollars that depend on rapid response; therefore, we provide quick turnaround on all plans and deliverables to keep your project on track.

### **Surveying/GPS:**

Dependable, accurate surveys are the foundation for successful planning, design and construction. At Herbert, Rowland & Grubic, Inc. (HRG) we use a wide range of state-of-the-art technologies to provide clients with the most accurate, up-to-date survey data and mapping.

Demanding project schedules and short turnaround times are not a problem with HRG's experienced surveyors and technology. We employ modern equipment such as Real Time Kinematic (RTK) Global Positioning System units to dramatically cut the time needed for data collection. These RTK units allow a single person to collect more information in a day than a two-person could in the same time period using conventional methods, providing greater efficiency and cost savings. In addition, GPS technology provides greater accuracy over large project areas.

Our land surveyors utilize total station equipment with electronic data collection in the field enabling us to directly transfer the data to a computerized drafting system. This decreases the time for plan preparation and reduces the opportunity for error. In addition, our surveyors are proficient in a wide array of conventional surveys, including

boundary and topographical surveys, American Land Title Association (ALTA) land title surveys, route surveys, highway surveys, record surveys, and construction surveys.

### Land Development:

Today, building commercial, residential and industrial developments is becoming more and more complex due to changing regulatory and environmental requirements. Developers and businesses need an engineering firm with technical expertise in a broad range of disciplines in order to expedite completion of their projects. Herbert, Rowland & Grubic, Inc. (HRG) is that firm. Our engineers combine their knowledge and expertise with proven project management skills to handle every aspect of the land development process. For our clients, this means an economical, functional, and aesthetically pleasing site design that is delivered on budget and on time, every time.



From site analysis and feasibility studies to construction administration, our multi-disciplinary staff of engineers, landscape architects, surveyors and environmental scientists provides complete concept-to-construction services. In addition to typical site design tasks, HRG offers a diverse accompaniment of capabilities in surveying, environmental studies, traffic analysis and roadway design, electrical engineering, and water and wastewater system design. Quality, innovative and cost-effective engineering, and water and wastewater system design.

HRG has Leadership in Energy and Environmental Design (LEED) accredited professionals on staff who plan and design sustainable, environmentally friendly spaces in which to live and work. Our capabilities include aesthetically pleasing streetscapes that become thriving town centers as well as greenways, recreational areas and Traditional Neighborhood Developments that encourage physical activity and interaction among neighbors.



From master planning and feasibility analysis through innovative design of plantings and infrastructure for environmental enhancement of the site, HRG provides the full breadth of land development and landscape architecture services.

Our staff utilizes a wide variety of software and equipment to maximize our efficiency in completing each project. This includes advanced Global Positioning System (GPS) surveying techniques to provide highly accurate survey data in less time than conventional methods as well

faster in order to meet your aggressive schedule. We also have online project collaboration software available to share project files, schedule meetings and assign tasks in a way that keeps everyone informed of project progress and keeps the project schedule and budget on track.



[ BUILDING RELATIONSHIPS.  
DESIGNING SOLUTIONS. ]

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## MANAGEMENT & STAFFING

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The following is a brief overview of proposed key staff members who will be extensively involved in all WV DEP projects awarded to Herbert, Rowland & Grubic, Inc., including Morgan Highwall #46 design (DEP16132):

**Brandon Meyers** is a Natural Resources Regional Service Group with Herbert, Rowland & Grubic, Inc. (HRG), and will act as **Project Manager** for the WV DEP and your prime point of contact. Possessing several years of experience in the environmental field, Mr. Meyers is responsible for the management of projects involving collection and analysis of watershed data, wetland identification and delineation, wetland mitigation design, site work, reports, bog turtle habitat screening, natural gas well pad and pipeline development, Phase I Environmental Site Assessment research and reports, and coordination with PADEP, US Army Corps of Engineers and additional federal and state agencies.

**James B. Gue** is an Environmental Scientist with Herbert, Rowland & Grubic, Inc. His responsibilities include field studies and assessments involving collection and analysis of watershed data; Phase I Environmental Assessment research and reports; wetland identification and delineation, wetland mitigation design, site work reports; traffic noise monitoring, modeling, and analysis; and the preparation of local, state, and federal permit applications. He also provides assistance with the development of geographic information systems and computer-aided drafting. Mr. Gue brings over 30 years of experience with the Ohio Division of Natural Resources including a background in the Abandoned Mine Lands Program, through which he conducted extensive acid mine drainage investigations, mining and reclamation inspections to monitor compliance with State and Federal laws, recommended mitigation methods and designs for acid mine drainage mitigation projects via multiple passive treatment system methodologies, including aerobic and anaerobic wetlands; prepared Acid Mine Drainage Abatement and Treatment plans for environmentally devastated watersheds; coordinated start-ups and acted as liaison to public environmental restoration efforts at multiple impacted watersheds, among other various roles he played throughout his extensive career history.

**Douglas E. Welkel** is the Director of Civil Services for Herbert, Rowland & Grubic, Inc. (HRG). Mr. Welkel has extensive experience in the preparation of studies, design, plans, and specifications for various municipal and civil engineering projects. His skills include municipal planning, construction management, contract administration, storm water design, and site design.

**Samer H. Petro** is the Manager of the Morgantown office of Herbert, Rowland & Grubic, Inc. (HRG), he provides client contact, business development, engineering design, and project management of various activities ranging from environmental studies, location studies, and analyses of alternative structures and roadways to final design of new structures and new highways; removal, replacement, and rehabilitation of existing structures, highways, and water and wastewater treatment facilities; and construction-phase services. Samer's experience and expertise also includes strengthening historic and existing structures using fiber reinforced polymer (FRP) composite materials and nondestructive testing methods for highway bridges and transportation related structures. He routinely coordinates each aspect of contract administration, construction phase services, including periodic field inspections from the award of contracts to project close-out.

Appendix A

Insurance and Worker's Compensation Certification



**Herbert, Rowland & Grubic, Inc.**  
**Engineering & Related Services**



# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

06/11/2012

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).

<b>PRODUCER</b> JAMES B MURDOCH INSURANCE GROUP INC 4300 Carlisle Pike  Camp Hill, PA 17011	<b>CONTACT NAME:</b> PHONE (A/C, No, Ext): (717)737-9900		<b>FAX (A/C, No):</b>
	<b>E-MAIL ADDRESS:</b>		
		<b>INSURER(S) AFFORDING COVERAGE</b>	<b>NAIC #</b>
		INSURER A : ERIE INS EXCH	26271
<b>INSURED</b> Herbert Rowland & Grubic Inc 369 E Park Dr Harrisburg, PA 17111-2730		INSURER B : ERIE INS CO of NY	26271
		INSURER C : CNA (Schinnerer)	20443
		INSURER D :	
		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.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	<b>GENERAL LIABILITY</b> <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR  GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input type="checkbox"/> LOC			Q410150093	5/1/2012	5/1/2013	EACH OCCURRENCE	\$ 1000000
							DAMAGE TO RENTED PREMISES (Ea occurrence)	\$ 1000000
							MED EXP (Any one person)	\$ 5000
							PERSONAL & ADV INJURY	\$ 1000000
							GENERAL AGGREGATE	\$ 2000000
							PRODUCTS - COMP/OP AGG	\$ 2000000
								\$
A	<b>AUTOMOBILE LIABILITY</b> <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS			Q051502279	5/15/2012	5/15/2013	COMBINED SINGLE LIMIT (Ea accident)	\$ 1000000
							BODILY INJURY (Per person)	\$
							BODILY INJURY (Per accident)	\$
							PROPERTY DAMAGE (Per accident)	\$
								\$
A	<b>UMBRELLA LIAB</b> <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED 0 RETENTION \$			Q290170004	5/1/2012	5/1/2013	EACH OCCURRENCE	\$ 10000000
							AGGREGATE	\$ 10000000
								\$
B	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b> ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below		N/A	Q89-5100454	5/1/2012	5/1/2013	<input checked="" type="checkbox"/> WC STATUTORY LIMITS <input type="checkbox"/> OTHER	
							E.L. EACH ACCIDENT	\$ 100000
							E.L. DISEASE - EA EMPLOYEE	\$ 100000
							E.L. DISEASE - POLICY LIMIT	\$ 500000
C	Professional Liability			AEH 00-822-00-56	6/9/2012	6/9/2013	Per Claim Limit: \$5,000,000 Aggregate Limit: \$5,000,000	

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

**CERTIFICATE HOLDER****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 

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Appendix B

DEP16132 Signature Sheets and Affidavit





State of West Virginia  
 Department of Administration  
 Purchasing Division  
 2019 Washington Street East  
 Post Office Box 50130  
 Charleston, WV 25305-0130

**Solicitation**

NUMBER
DEP16132

PAGE
1

ADDRESS CORRESPONDENCE TO ATTENTION OF
FRANK WHITTAKER 304-558-2316

VENDOR

RFQ COPY  
 TYPE NAME/ADDRESS HERE  
*Herber, Rowland, & Grubic, Inc*  
*829 FAIRMONT ROAD, SUITE 201*  
*MORGANTOWN, WV 26501*

SHIP TO

ENVIRONMENTAL PROTECTION  
 DEPARTMENT OF  
 OFFICE OF AML&R  
 601 57TH STREET SE  
 CHARLESTON, WV  
 25304 304-926-0499

DATE PRINTED
03/04/2013

BID OPENING DATE: 04/04/2013 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
0001	1	JB		906-29		
	MORGAN HW #46			DESIGN		
EXPRESSION OF INTEREST  THE WEST VIRGINIA PURCHASING DIVISION, FOR THE AGENCY, THE WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, IS SOLICITING EXPRESSIONS OF INTEREST FOR PROFESSIONAL ENGINEERING DESIGN SERVICES AND CONSTRUCTION MONITORING SERVICES AT THE MORGAN HIGHWALL #46 PROJECT IN PRESTON COUNTY, WEST VIRGINIA, PER THE FOLLOWING BID REQUIREMENTS AND ATTACHED SPECIFICATIONS.						
***** THIS IS THE END OF RFQ DEP16132 ***** TOTAL: _____						

SIGNATURE <i>Samer Petro</i>	TELEPHONE 304.284-9222	DATE 4/10/2013
TITLE <i>Office Manager</i>	FEIN 23-1609730	ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO SOLICITATION, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

RFQ No. DEP 16132

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 exceeds five percent of the total contract amount.

**AFFIRMATION:** By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (W. Va. Code §61-5-3) that 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: Herbert, Rowland, & Grubic, INC.  
Authorized Signature: Samuel Petro Date: 4-10-13

State of West Virginia  
County of Morgantown, to-wit:  
Taken, subscribed, and sworn to before me this 10<sup>th</sup> day of April, 2013  
My Commission expires Feb. 28, 2021.

AFFIX SEAL HERE

NOTARY PUBLIC [Signature]  
Purchasing Affidavit (Revised 07/01/2012)



**ADDENDUM ACKNOWLEDGEMENT FORM**  
**SOLICITATION NO.:** DEP16132

**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.

Herbert, Rowland, & Grubiz, LLC

Company

Samir Petro

Authorized Signature

04/10/2013

Date

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

CERTIFICATION AND SIGNATURE PAGE

By signing below, I certify that I have reviewed this Solicitation in its entirety; understand the requirements, terms and conditions, and other information contained herein; that I am submitting this bid or proposal for review and consideration; that I am authorized by the bidder to execute this bid or any documents related thereto on bidder's behalf; that I am authorized to bind the bidder in a contractual relationship; and that to the best of my knowledge, the bidder has properly registered with any State agency that may require registration.

Herbert, Rowland, & Grubic, Inc.  
(Company)

Samer Petro  
(Authorized Signature)

SAMER H. PETRO, PE  
(Representative Name, Title)

304-284-9222      304-284-9223  
(Phone Number)                      (Fax Number)

04/10/2013  
(Date)

Appendix C

AML Consultant Confidential Qualification Questionnaire



**WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION  
AML CONSULTANT QUALIFICATION QUESTIONNAIRE**

Attachment "B"

PROJECT NAME Morgan Highwall #46		DATE (DAY, MONTH, YEAR) 10 April 2013		FEIN 23-1609730	
1. FIRM NAME Herbert, Rowland & Grubic, Inc.		2. HOME OFFICE BUSINESS ADDRESS 369 East Park Drive Harrisburg, PA 17111		3. FORMER FIRM NAME Herbert Associates, Inc.	
4. HOME OFFICE TELEPHONE (717)564-1121	5. ESTABLISHED (YEAR) 1962	6. TYPE OWNERSHIP Individual Partnership <u>Corporation</u> Joint-Venture		6a. WV REGISTERED DBE YES <u>NO</u>	
7. PRIMARY AML DESIGN OFFICE: ADDRESS/ TELEPHONE/ PERSON IN CHARGE/ NO. AML DESIGN PERSONNEL EACH OFFICE Herbert, Rowland & Grubic, Inc./Morgantown, WV/304.284.9222/Samer Petro, P.E./8					
8. NAMES OF PRINCIPAL OFFICERS OR MEMBERS OF FIRM Robert C. Grubic, P.E., President Albert T. Brulo, P.E., Senior VP/Chief Operations Officer Brian D. Emberg, P.E., Senior VP/Chief Technical Officer Bruce A. Yerger, P.E., Vice President/Chief Financial Officer Jason A. Fralick, P.E., Vice President, Central Region Andrew M. Kenworthy, P.E., Vice President, Eastern Region James M. Lopresti, P.E., Vice President, Western Region Russell F. McIntosh, Vice President			8a. NAME, TITLE, & TELEPHONE NUMBER - OTHER PRINCIPALS Christopher K. Bauer, P.E., PTOE, Director of Transportation Services, 717.564.1121 Edward A. Ellinger, P.E., Director of Water and Energy Services, 717.564.1121 Douglas E. Weikel, P.E., Director of Civil Services/Survey Services, 814.238.7117 Jamie B. Keener, AICP, Director of Land Development, Planning, and Federal Marketing Services, 717.564.1121 Paul E. Nachlas, P.G., Dir. of Environmental Services, 717.564.1121		
9. PERSONNEL BY DISCIPLINE					
44 ADMINISTRATIVE	0 ECOLOGISTS	6 LANDSCAPE ARCHITECTS	6 STRUCTURAL ENGINEERS		
0 ARCHITECTS	0 ECONOMISTS	1 MECHANICAL ENGINEERS	22 <b>SURVEYORS</b>		
0 BIOLOGIST	2 ELECTRICAL ENGINEERS	0 MINING ENGINEERS	16 TRAFFIC ENGINEERS		
28 CADD OPERATORS	3 ENVIRONMENTALISTS	0 PHOTOGRAMMETRISTS	9 OTHER		
0 CHEMICAL ENGINEERS	7 ESTIMATORS	1 PLANNERS: URBAN/REGIONAL			
20 CIVIL ENGINEERS	2 GEOLOGISTS	25 SANITARY ENGINEERS			
15 CONSTRUCTION INSPECTORS	0 HISTORIANS	0 SOILS ENGINEERS			
0 DESIGNERS	6 HYDROLOGISTS	0 SPECIFICATION WRITERS	217 TOTAL PERSONNEL		
4 DRAFTSMEN					
TOTAL NUMBER OF WV REGISTERED PROFESSIONAL ENGINEERS IN PRIMARY OFFICE: 3					
*RPEs other than Civil and Mining must provide supporting documentation that qualifies them to supervise and perform this type of work.					
10. HAS THIS JOINT-VENTURE WORKED TOGETHER BEFORE?      YES      NO      NOT APPLICABLE					

11. OUTSIDE KEY CONSULTANTS/SUB-CONSULTANTS ANTICIPATED TO BE USED. Attach "AML Consultant Qualification Questionnaire".

<p>NAME AND ADDRESS:          GEOMechanics, Inc.          600 Munir Drive, P.O. Box 386          Elizabeth, PA 15037-0386</p>	<p>SPECIALTY:          Geo-Technical Services</p>	<p>WORKED WITH BEFORE    <input checked="" type="checkbox"/> Yes  <input type="checkbox"/> No</p>
<p>NAME AND ADDRESS:          S&amp;S Engineers, Inc.          501 Eagle Mountain Road          Charleston, WV 25311</p>	<p>SPECIALTY:          Surveying Services</p>	<p>WORKED WITH BEFORE    <input checked="" type="checkbox"/> Yes  <input type="checkbox"/> No</p>
<p>NAME AND ADDRESS:</p>	<p>SPECIALTY:</p>	<p>WORKED WITH BEFORE    <input type="checkbox"/> Yes  <input type="checkbox"/> No</p>
<p>NAME AND ADDRESS:</p>	<p>SPECIALTY:</p>	<p>WORKED WITH BEFORE    <input type="checkbox"/> Yes  <input type="checkbox"/> No</p>
<p>NAME AND ADDRESS:</p>	<p>SPECIALTY:</p>	<p>WORKED WITH BEFORE    <input type="checkbox"/> Yes  <input type="checkbox"/> No</p>
<p>NAME AND ADDRESS:</p>	<p>SPECIALTY:</p>	<p>WORKED WITH BEFORE    <input type="checkbox"/> Yes  <input type="checkbox"/> No</p>
<p>NAME AND ADDRESS:</p>	<p>SPECIALTY:</p>	<p>WORKED WITH BEFORE    <input type="checkbox"/> Yes  <input type="checkbox"/> No</p>
<p>NAME AND ADDRESS:</p>	<p>SPECIALTY:</p>	<p>WORKED WITH BEFORE    <input type="checkbox"/> Yes  <input type="checkbox"/> No</p>
<p>NAME AND ADDRESS:</p>	<p>SPECIALTY:</p>	<p>WORKED WITH BEFORE    <input type="checkbox"/> Yes  <input type="checkbox"/> No</p>

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.) Petro, Samer H. Morgantown Office Manager/Contract Manager	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE: 0	YEARS OF AML RELATED DESIGN EXPERIENCE: 10	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 0
Brief Explanation of Responsibilities Provides client contact, business development, operations management, engineering design, and project management of various activities ranging from environmental studies, location studies, and analyses of alternative structures and roadways to final design of new structures and new highways, and water and wastewater treatment facilities, and construction-phase services.			
EDUCATION (Degree, Year, Specialization) B.S., 1987, Civil Engineering M.S., 1993, Civil Engineering			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS American Society of Engineers Association of Bridge Construction & Design American Concrete Institute		REGISTRATION (Type, Year, State) P.E., 2003, West Virginia P.E., 2001, Ohio	

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.) Weikel, Douglas E. Director of Civil Services	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE: 0	YEARS OF AML RELATED DESIGN EXPERIENCE: 0	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 21
Brief Explanation of Responsibilities Responsible for maintaining the general technical project standards, for executing the Quality Management Plan for Civil and Survey groups as well as developing company-wide strategy for those groups. In addition, provides client and project management for various projects involving stormwater management, wastewater conveyance and treatment, water resource design, and construction management.			
EDUCATION (Degree, Year, Specialization) B.S., 1988, Civil Engineering B.S., 1995, Physics			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS Pennsylvania State Associate of Township Supervisors		REGISTRATION (Type, Year, State) P.E., 1997, Pennsylvania	

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Gue, James B. Environmental Scientist II	30	30	10

Brief Explanation of Responsibilities: Responsibilities include field studies and assessments involving collection and analysis of watershed data; Phase I Environmental Assessment research and reports; wetland identification and delineation, wetland mitigation design, site work reports; traffic noise monitoring, modeling, and analysis; and the preparation of local, state, and federal permits applications. As a former 30 year employee of the ODNR Abandoned Mine Lands Section, responsibilities included the planning, monitoring and developing of abandoned mine land reclamation projects. Public health and safety projects were related to strip mine highwall elimination and spoil bank stabilization; deep mine related projects involved shaft closures sensitive to bat habitat issues and GOB pile fires; Mine drainage contaminated water supply projects involved private well replacements and public water line installations; investigated and recommended mitigation designs for acid mine drainage projects.

EDUCATION (Degree, Year, Specialization)  
B.S. from Kent State University, 1981, Natural Resource Conservation

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

REGISTRATION (Type, Year, State)

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Warden, Richard W. Natural Resources Engineer	33	33	0

Brief Explanation of Responsibilities  
30 years' experience in AML projects and various other projects to support Ohio DNR facilities. Experience also included geotechnical subsurface investigations and slope stability analysis.

EDUCATION (Degree, Year, Specialization)

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

REGISTRATION (Type, Year, State)  
P.E., Ohio

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	Tukel, Murat Environmental/Civil Engineer	YEARS OF AML DESIGN EXPERIENCE: 4	YEARS OF AML RELATED DESIGN EXPERIENCE: 12

**Brief Explanation of Responsibilities**  
 Responsible for developing, planning and designing mine reclamation projects, contract preparation and bidding, cost estimates, budgeting, contractor selection, and oversight of construction activities.

**EDUCATION (Degree, Year, Specialization)**  
 B.S., 1989, Environmental Engineering  
 M.S., 1991, Civil Engineering  
 M.B.A., 1998, Business

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	REGISTRATION (Type, Year, State) P.E., Ohio
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13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	Swisher, David M. Water & Energy Regional Service Group Manager	YEARS OF AML DESIGN EXPERIENCE: 0	YEARS OF AML RELATED DESIGN EXPERIENCE: 0

**Brief Explanation of Responsibilities**  
 Responsible for managing environmental engineering projects including: planning, permitting, design, construction administration, financial analyses, and project financing of water and wastewater infrastructure projects.

**EDUCATION (Degree, Year, Specialization)**  
 B.S. from The Pennsylvania State University, 2001, Civil and Environmental Engineering  
 M.S. from The Pennsylvania State University, 2002, Environmental Engineering

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS American Water Works Association Construction Specifications Institute Pennsylvania Municipal Authority Association Pennsylvania Water Environmental Association Water Environment Federation	REGISTRATION (Type, Year, State) P.E., Pennsylvania
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13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Rusnak, John Civil Project Manager/Team Leader	0	0	20

**Brief Explanation of Responsibilities**  
 Responsible for overseeing staff in the development of design concepts, preparing preliminary and final design drawings, developing technical specifications and bid documentation, and attending meetings and preparing, reviewing and delivering budgets for municipal clients. Also, provides oversight during construction and monitors project costs.

**EDUCATION (Degree, Year, Specialization)**  
 B.S., 1989, Civil Engineering

**MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS**  
 American Society of Civil Engineers

**REGISTRATION (Type, Year, State)**  
 P.E., 1995, Pennsylvania

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Meyers, Brandon Natural Resource Regional Service Group Manager	0	13	0

**Brief Explanation of Responsibilities**  
 Responsible for the management of projects involving stream restoration, collection and analysis of watershed data, wetland identification and delineation, wetland mitigation design, threatened and endangered species investigations, natural gas well pad and pipeline development, Phase I Environmental Site Assessments, and US Army Corps of Engineers and state agency permits.

**EDUCATION (Degree, Year, Specialization)**  
 B.S., Environmental Science, Edinboro University, 2003

**MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS**  
 Pennsylvania Council of Professional Geologists

**REGISTRATION (Type, Year, State)**

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.)

Varner, Roger B.  
Land Development Staff Professional

YEARS OF EXPERIENCE

YEARS OF AML DESIGN EXPERIENCE:

0

YEARS OF AML RELATED DESIGN EXPERIENCE: 20

YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 20

Brief Explanation of Responsibilities

Responsible for a variety of environmental engineering and permitting tasks and business development for oil and gas clients and land development clients. Such tasks include private and public water source investigation, sampling and analysis protocol, preparation of permit applications and plans for oil and gas well development sites, water management and planning studies for oil and gas well hydro-fracturing and production needs, and providing field investigation and inspection services for environmental projects. Mr. Varner has significant experience in water and wastewater facilities planning, federal, state, and regional permitting services, and preparation of regulatory reports and documents.

EDUCATION (Degree, Year, Specialization)

B.S., 1989, Civil Engineering

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

American Society of Civil Engineers

REGISTRATION (Type, Year, State)

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.)

Stonebraker, Chad E.  
Land Development Senior CADD Technician

YEARS OF EXPERIENCE

YEARS OF AML DESIGN EXPERIENCE:

1

YEARS OF AML RELATED DESIGN EXPERIENCE: 13

YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 1

Brief Explanation of Responsibilities

Responsibilities include assisting the project manager in design, preparing Land Development plans, profiles, sections and details. Proficient with AutoCAD Civil3D 2011 and MicroStation software for base map and construction layout plan.

EDUCATION (Degree, Year, Specialization)

A.S.T., 2000, Computer Aided Drafting

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

REGISTRATION (Type, Year, State)

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Cardosi, Andrew D. Transportation Regional Service Group Manager	0	11	0

**Brief Explanation of Responsibilities**  
 Responsible for preparation of contracts and proposals, including development of technical scopes of work; project budgeting and cost estimating; bid documents preparation; contract administration; scheduling and planning updates for municipal reviews of land development and subdivision plans; Highway Occupancy Permit plan reviews; roadway design in areas such as roadway geometry, pavement design and analysis, drainage design and management, maintenance and protection of traffic plans, right-of-way plans; utility coordination; and construction inspection.

**EDUCATION (Degree, Year, Specialization)**  
 B.S. from The Pennsylvania State University, 2001

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	REGISTRATION (Type, Year, State)
American Society of Civil Engineers American Society of Highway Engineers - Mid Allegheny	P.E., PA P.E., WV



15. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS THE DESIGNATED ENGINEER OF RECORD

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
2013 Township Wide Sewer Rehabilitation South Park, PA	South Park Township, PA 2675 Brownsville Road South Park, PA 15129	Design, Contract Administration, and Construction Observation	\$250,000.00	0% (In Progress)
2013 Borough Wide Sewer Rehabilitation Bellevue Borough, PA	Bellevue Borough 537 Bayne Avenue Pittsburgh, PA 15202	Design, Contract Administration, and Construction Observation	\$175,000.00	0% (In Progress)
Forebay Maintenance Sediment Removal Cranberry Township, PA	Sherwood Oaks 100 Norman Drive Cranberry Township, PA 16066	Design, Engineering Permit, Site Investigation, and Surveying	\$11,000.00	5% (In Progress)
Pike Run Bridge #11 Replacement Washington Co., PA	Washington County Planning Commission 100 West Beau Street Washington, PA 15301	Surveying, H&H Studies, Categorical Exclusion Evaluation (CEE), Bridge Design, E&S Control Plan, Waterway Permits	\$555,000.00	60% (In Progress)
Chartier's Bridge #61 Replacement Washington Co., PA	Washington County Planning Commission 100 West Beau Street Washington, PA 15301	Surveying, H&H Studies, Categorical Exclusion Evaluation (CEE), Bridge Design, E&S Control Plan, Waterway Permits	\$375,000.00	40% (In Progress)
TOTAL NUMBER OF PROJECTS: 5			TOTAL ESTIMATED CONSTRUCTION COSTS: \$1,366,000.00	



## 17. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM WAS THE DESIGNATED ENGINEER OF RECORD

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
Upgrade Water Source and Distribution System Torrance, PA	PA-DAS c/o Torrance State Hospital 121 Longview Drive Derry Township Torrance, PA 15779	\$620,000.00	2007	YES
West End Pond Renovation Venango County, PA	Clarion University Venango Campus 1801 West First Street Oil City, PA 16215	\$900,000.00	2010	YES
Venango Campus Drainage Improvements Venango County, PA		\$750,000.00	2012	YES
Township Wide Sanitary Sewer Rehabilitation Projects South Park, PA	South Park Township 2675 Brownsville Road South Park, PA 15129	(For Years 2008 through 2012) >\$1,000,000.00	2008- 2012	YES
Borough Sewer Repair Projects Bellevue Borough, PA	Bellevue Borough 537 Bayne Avenue Pittsburgh, PA 15202	(For Years 2008 through 2012) >\$750,000.00	2008- 2012	YES
County Act 167 Stormwater Management Plan Venango, PA	Venango County Planning Commission 1168 Liberty Street Franklin, PA 16323	>\$150,000.00	2010	YES
County Act 167 Stormwater Management Plan Butler County, PA	Butler County Planning Commission Butler, PA	>\$110,000.00	2010	YES
County Act 167 Stormwater Management Plan Washington County, PA	Washington County Planning Commission 100 West Beau Street Suite 701 Washington, PA 15301	>\$138,000.00	2010	YES

18. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM HAS BEEN A SUB-CONSULTANT TO OTHER FIRMS (INDICATE PHASE OF WORK FOR WHICH YOUR FIRM WAS RESPONSIBLE)

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST OF YOUR FIRM'S PORTION	YEAR	CONSTRUCTED (YES OR NO)	FIRM ASSOCIATED WITH

19. Use this space to provide any additional information or description of resources supporting your firm's qualifications to perform work for the West Virginia Abandoned Mine Lands Program.

20. The foregoing is a statement of facts.

Signature: Samir Petro Title: OFFICE MANAGER Date: 4/10/2013  
 Printed Name: SAMIR PETRO

Appendix D

AML and Related Project Experience Matrix



**Herbert, Rowland & Grubic, Inc.**  
**Engineering & Related Services**

**AML and RELATED PROJECT EXPERIENCE MATRIX**

PROJECT	Exp. Basis C=Corp. P=Personal	Additional Info Provided in Section (a)	PROJECT EXPERIENCE REQUIREMENTS														PRIMARY STAFF PARTICIPATION/CAPACITY *** M=Management P=Professional					
			Abandoned Surface Mine Reclamation	Abandoned Deep Mine Reclamation	Portal/Shaft Closure	Hydrologic/Hydraulic Design/Eval.	Remining Evaluation	Mine/Refuse Fire Abatement	Subsidence Investigation Mitigation	Hazardous Waste Disposal	Project Specifications	Water Quality Evaluation/Mitigation/Re placement	Construction Inspection/Management	Water Treatment	Equipment/Structure Removal	Stream Restoration	Geotechnical/Stability	James Gue	Mural Turkel	Richard Warden	Andrew Longenecker	Andrew Cardosi
Andy Myers Mine Subsidence (ST-Os-19)	P			X					X		X		X			X	P					
Applegrove Road Mine Stabilization (ST-PI-23)	P			X					X		X		X			X	P					
Belden Phase II (CR-Rs-19)	P		X			X				X	X		X	X		X	P					
Bergholz East Highwall (JF-Rs-11)	P		X							X		X					P					
Dean Miller Highwall (TS-Sn-27)	P		X							X		X					P					
Dick Rose Highwall (CL-Md-20)	P		X							X		X					P					
Dobson Road (CL-Fn-06)	P									X		X					P					
Dover 3 (SM-Nc-02)	P			X						X						X	P					
Dusty Quinn Sinkhole (JF-Sp-11)	P				X				X	X		X				X	P					
Ellsworth Coal Refuse (MH-EI-01)	P		X				X			X		X	X	X			P					
Harsha South (CR-Rs-11)	P		X				X			X		X	X				P					
Hayes Highwall (CL-MI-03)	P		X							X		X					P					
Huff Run 32 Pits AMD (CR-Rs-15)	P		X				X			X		X	X				P					
J.B. Drift Entry/Subsidence (ST-Os-23)	P				X				X	X		X					P					
Lattavo (TS-Lw-07)	P		X				X		X	X		X	X				P					
Martin Subsidence (SM-Sp-04)	P				X		X		X	X		X					P					
Masury Mine Subsidence (TR-BI-06)	P				X		X		X	X		X					P					
Mill Rock Road Highwall (CL-Un-11)	P		X							X		X	X				P					
Mineral Ridge (MH-Au-08)	P			X	X				X	X		X				X	P					
Mineral -Zoar Road AMD (TS-Sn-23)	P						X			X		X	X				P					
North Canton Sinkhole (ST-PI-26)	P				X				X	X		X				X	P					
Richard Beaver HW (CL-Md-19)	P		X							X		X	X				P					
Salem Small Projects 2005 (UP-Sa-2005)	P				X		X		X	X		X				X	P					
Salem Small Projects 2006 (UP-Sa-2006)	P				X		X		X	X		X				X	P					
Senff Road Slope Repair (WN-Pt-05)	P		X			X				X		X				X	P					

Tapscott Maintenance (CR-Fx-06)	P				X		X		X		X					X	P							
Thomas Road Subsidence (SM-Tv-07)	P				X		X		X		X							P						
Toronto Mine Drain (JF-Ic-12)	P				X	X	X		X		X							P						
Turturice Highwall (CL-EI-27)	P		X				X			X	X							P						
Weaver Mine Subsidence (ST-Pk-03)	P				X		X		X		X							P						
Applegate Road (CL-Wa-01)	P		X				X			X	X							P						
State RT. 165 (MH-Bv-03)	P		X				X			X	X							P						
Frost Highwall (CI-Fr-02)	P		X				X			X	X							P						
Black Diamond Shafts (MH-MI-01)	P				X				X		X					X		P						
Eastern Mine Shaft Reclamation (JF-St-06)	P				X				X		X					X		P						
Columbiana County Clay Portals (CL-Lp-01)	P				X				X		X					X		P						
East Liverpool Mine Opening (CL-Lp-02)	P				X				X		X					X		P						
Briar Road (CR-Rs-02)	P		X				X			X	X							P						
Parsons Mine Fire (JF-Sp-03)	P		X						X		X							P						
New Buffalo Shaft (MH-Bv-04)	P				X				X		X					X		P						
Roach Run Entries (JF-Rs-04)	P				X				X		X					X		P						
Palmyra Shafts (PT-Pm-02)	P				X				X		X					X		P						
Carlson Reclamation Project (CL-Un-02)	P		X				X			X	X					X		P						
Squaw Creek - Vienna Township Shafts (TR-Vn-01)	P				X				X		X					X		P						
Sheets Highwall (JF-Kn-15)	P		X				X			X	X					X		P						
East Fairfield Coal / Petersburg (MH-Sp-02)	P		X				X			X	X			X		X		P						
Sugarcreek Clay & Limestone (TS-Ab-01)	P		X				X			X	X					X		P						
Red Malcuitt Inc. (TS-Fn-01)	P		X				X			X	X					X		P						
Malvern West Reclamation (ST-Sn-01)	P		X				X			X	X					X		P						
Spanson Drive (TS-MI-03)	P		X				X			X	X					X		P						
Kollar Shafts (ST-Bh-02)	P				X				X		X					X		P						
Mt. Vernon Ave (ST-Mk-01)	P		X				X			X	X					X		P						
Ellesmere Ave. IV (ST-Nc-09-E)	P				X						X					X		P						
Tuscarawas County Road 14 (TS-Xx-03)	P		X				X			X	X					X		P						
Kellog Reclamation (CL-Ws-02)	P				X						X					X		P						
Mineral Ridge Subsidence (TR-Wf-02)	P				X						X					X		P						



Sponseller (ST-Sn-02)	P		X				X				X	X				X	P					
Rogers Highwall (CL-EI-04)	P		X				X				X	X				X	P					
Shook Subsidence (MH-AU-01)	P			X							X	X				X	P					
Vienna Shafts (TR-Vn-01)	P				X				X		X	X				X	P					
Linden AMD (CR-Rs-04)	P		X			X							X		X		P					
Tumbull Subsidence (CL-Un-04)	P			X							X	X				X	P					
New Springfield Church (MH-Sp-09)	P		X				X				X	X				X	P					
Maple Highwall Phase 2 Reclamation	P		X								X	X				X		M				
Cherry Valley Coke Ovens Reclamation	P			X	X	X			X		X	X		X	X	X		M				
Hawkins Road Tipple Removal	P				X		X			X	X	X		X				M				
Wolfe Shaft Reclamation	P				X				X		X	X						M				
Oakview Drive Subsidence	P			X					X		X	X				X		M				
Voorhees Highwall Reclamation	P		X								X	X						M				
Weaver Highwall Reclamation	P						X				X	X						M				
Quaker Raceway Portal Closure	P		X		X						X	X						M				
Viny Reclamation	P		X			X					X	X	X					M				
Galther Highwall Reclamation	P		X			X					X	X						M				
Ferrebee Subsidence	P				X	X			X		X	X						M				
Mount Tabor Church Mine Drainage Remediation	P					X	X				X	X	X					M				
Brown Hill Road Subsidence	P					X			X		X	X						M				
Duladahn Mine Drainage Remediation	P					X					X	X	X			X		M				
Clinton Mine Opening Portal Closure	P				X						X	X	X					M				
SR165 Maintenance	P						X		X		X	X						M				
Brier Ridge Burning Gob Pile - Jefferson County	P		X					X			X	X	X					P				
Wills Creek Tipple - Coshocto County	P		X	X		X					X	X	X	X	X	X		P				
Stratton Mine Opening - Jefferson County	P		X	X	X						X	X						P				
Patton Run Reclamation Project - Belmont County	P		X			X					X	X			X	X		P				
Kirkendall Highwall Emergency - Athens County	P		X	X	X	X					X	X						P				
Cassingham Emergency - Coshocto County	P		X	X		X					X	X						P				
Roush Highwall Emergency Project	P		X								X	X						P				
W/T Gravel Mine Openings	P		X	X							X	X						P				

Acree Landslide	P		X			X					X		X						P			
Cherry Hill Burning Gob - Guemsey County	P		X					X			X		X						P			
Lavender Gob Pile - Meigs County	P		X					X			X		X						P			
Ironman Enterprises - Coshocton County	P		X			X					X		X			X			P			
Hutt Coal Forfeitures - Coshocton County	P		X			X					X		X			X			P			
Pike Run Bridge #11 - Washington County, PA	P					X					X											M
Chartier's Bridge #61 - Washington County, PA						X					X											M

- \* List whether project experience is corporate or personnel based or both.
- \*\* Use this area to provide specific sections or pages if needed for reference.
- \*\*\* List Primary Design personnel and their functional capacity for the projects listed.

Attachment "C"

Appendix E

Team Resumes



**Herbert, Rowland & Grubic, Inc.**  
**Engineering & Related Services**



**SAMER H. PETRO, P.E.**  
Office Manager/Senior Project Manager

As Manager of the Morgantown office of Herbert, Rowland & Grubic, Inc. (HRG), Samer provides client contact, business development, engineering design, and project management of various activities ranging from environmental studies, and analyses of alternative structures to final design of new structures and new highways; removal, replacement, and rehabilitation of existing structures, highways, and water and wastewater treatment facilities; and construction-phase services. Experience also includes coordination of large multi-discipline projects involving site/civil, structural, MEP, construction administration, and other services. Samer's experience and expertise also includes strengthening historic and existing structures using fiber reinforced polymer (FRP) composite materials. He routinely coordinates each aspect of contract administration, construction phase services, including periodic field inspections from the award of contracts to project close-out.

**RELATED EXPERIENCE**

Prior to joining HRG in 2012, Mr. Petro served as the WV Operations Manager and Senior Project Manager for Gannett Fleming, Inc in Morgantown, WV. In this role, Mr. Petro was involved in various aspects for the following selected projects:

**Wastewater Treatment Plant Expansion, Grove City, PA**, Borough of Grove City. Senior Structural Engineer responsible for the structural design, including mat foundations, concrete walls, structural slabs, stairs, and the checking of the structural drawings for the expansion of a wastewater treatment plant from 3.0 mgd to 4.0 mgd. The project includes the installation of a new headworks facility, overflow pond, secondary clarifiers, and replacement of existing equipment. Estimated construction cost is \$10.8 million.

**Water Treatment Plant Design, New Bethlehem, PA**, Redbank Valley Municipal Authority. Senior Structural Engineer responsible for the structural design, including mat foundations, concrete walls, structural slabs, steel framing, and the checking of structural drawings of a 0.80 mgd surface-water treatment plant and 0.4 Mgal water-storage tank. Equipment for the plant includes a vertical turbine pump, chemical feed equipment, sedimentation, filtration, sludge pumping, sludge holding tanks, and sludge dewatering.

**Morgantown Personal Rapid Transit (MPRT) Facilities Master Plan, Morgantown, WV**, West Virginia University (WVU), Project Director responsible for overall project execution and QA review of critical tasks including the structural inspection of the MPRT stations and maintenance facilities (seven structures total). The project involved creating a facilities master plan for a five mile long automated people mover known as the Morgantown Personal Rapid Transit System (MPRT) which operates between the various campuses of West Virginia University. The master plan also provided an assessment of existing facilities conditions, options for future improvements, public involvement and financial planning. Responsibilities also included significant coordination with various disciplines (site/civil, structural, electrical, transit, planning) and stakeholders.

**EDUCATION:**

B.S., Civil Engineering, West Virginia University, 1987

M.S., Civil Engineering, West Virginia University, 1993

**LICENSE(S):**

Professional Engineer, WV  
Professional Engineer, OH  
Professional Engineer, PA

## PETRO

- Headsville Bridge Replacement, Mineral County, WV, West Virginia Department of Transportation, Division of Highways
- Dolls Run Bridge Replacement, Monongalia County, WV, West Virginia Department of Transportation, Division of Highways
- Morgantown Personal Rapid Transit (MPRT) Facilities Master Plan, Morgantown, WV, West Virginia University
- SR 28 over Yutes Run Bridge, Pennsylvania Department of Transportation, District 11
- SR 19 Morrisville Bridge, Pennsylvania Department of Transportation, District 12
- Purple Line over Anacostia River Bridge, Maryland Transit Administration (MTA)
- Automated Train Guideway, Phoenix, AZ, City of Phoenix Sky Harbor International Airport
- North Shore Connector, Pittsburgh, PA, Port Authority of Allegheny County
- 19th Avenue Bridge, City of Phoenix, AZ
- 16th Street Bridge, City of Phoenix, AZ
- Thunderbird Road over Cave Creek, City of Phoenix, AZ
- Washington Street Pedestrian Bridge, Phoenix, AZ, City of Phoenix Sky Harbor International Airport
- King's Covered Bridge, Pennsylvania Department of Transportation, District 09
- Evansdale Campus Bridge - Garage, Morgantown, WV, West Virginia University

Prior to joining Gannett Fleming in 2004, Mr. Petro worked with the College of Engineering and Mineral Resources with West Virginia University in Morgantown, WV, as a research structural engineer. His responsibilities included a wide variety of bridge design, rehabilitation, and structural investigation using nondestructive intelligent devices, involving steel, concrete, engineered wood, and fiber reinforced polymer (FRP) composite materials for the following projects:

- Wood Bridge, Barbour County, WV, West Virginia Department of Transportation, District 7
- Railroad Bridge, Moorefield, WV, West Virginia Department of Transportation, State Rail Authority

Mr. Petro's experience also includes several years with DMJM/Harris (Presently AECOM) in Morgantown, WV as a Project Bridge Engineer. During this time his responsibilities included structural design activities for the following projects:

- Elkins Bypass, Elkins, WV, West Virginia Department of Transportation
- Mon/Fayette I-68 Interchange and Expressway, Morgantown, WV, West Virginia Department of Transportation
- Mon/Fayette I-68 Interchange and Expressway, Morgantown, WV, West Virginia Department of Transportation

### PUBLICATION(S) AND PAPER(S)

Petro S.H., "First-class upgrade: Series of bridges in Phoenix Strengthened Successfully." Roads & Bridges Magazine, May 2010.

Petro et al. "Integral Abutments and Jointless Bridges (IAJB) 2004 Survey Summary". FHWA Conference: Integral Abutments and Jointless Bridges (IAJB), Baltimore, Maryland, 2005.

Petro et al. "Saving Covered Bridges with Glass Fiber Reinforced Polymers," APT Bulletin, The Journal of the Association for Preservation Technology, 2004.

### PROFESSIONAL MEMBERSHIP(S)

American Concrete Institute (ACI): Member of ACI 440 Committee

American Society of Civil Engineers (ASCE)

Association for Bridge Construction and Design (ABCD)

## **DOUGLAS E. WEIKEL, P.E.**

**Mifflinburg Borough, Union County, PA** – Role: Borough Engineer. Responsible for completing various services including:

- Market and Fifth Street Reconstruction Project - Design of roadway reconstruction that included waterline, sewer line, and storm sewer replacement/upgrades
- Fourth Street Stormwater - Design of stormwater system reconstruction within PennDOT roadway
- Cherry Street Reconstruction - Design of roadway reconstruction that includes waterline, sewer line, storm sewer replacement/upgrades, and intersection and access improvements
- Haney Park Complex Improvements - Design of recreational park improvements
- Bulk Storage Building - Construction administration for a new salt storage building
- Downtown Improvement Project - Assisted the Borough in obtaining Transportation Enhancement funding
- Designed project involving the reconstruction of the sidewalks through the Business District, widening SR 45, and courtyard improvements.
- Maple Street Water & Sewer Improvements – Design and construction management of 1150 lf of new waterline and 400 lf of new sewer lines.
- 10th Street Slip Lining – Design of 1000 lf of sanitary sewer slip lining.
- Community Park Parking Lot Reconstruction – Design of stormwater system improvement system and parking lot/entrance road reconstruction.
- 308 Market Street Parking Lot – Design of parking facility.
- Market Street Reconstruction Project – Design of total roadway reconstruction.
- Safe Routes to School Project - Assisted the Borough in obtaining PennDOT funding. Designed project involving the construction of the sidewalks through residential areas to two schools.
- Site design that included a joint DEP-ACOE permit for expansion of WWTP facility within the floodway of Buffalo Run.

**Lewisburg Borough, Union County, PA** – Role: Project Manager. Responsible for designing of street reconstruction projects which included storm sewer study and construction.

**Unionville Water System, Unionville Borough, PA** – Role: Project Manager. Responsible for consulting services and liaison for the Borough's reservoir lining project to alleviate existing leakage causing capacity problems and development of a new supply well.

**Rowe Road Stormwater Improvements, Union County, PA** – Role: Project Manager. Responsible for the hydrologic and hydraulic study a subwatershed of the West Branch of the Susquehanna River as well as the design of improvements. Project entailed a subwatershed that drains 120 acres with undeveloped agricultural lands in the upper reaches and residential areas in the lower reaches. The drainage channel was severely modified over the past decades through development with many culverts and bridges which were all analyzed. The channel modifications resulted in flooding, erosion and maintenance problems. The constructed project included several hundred feet of storm sewer to upgrade existing facilities and over ½ mile of channel improvements to provide relief of a flood prone area.

**Fox Township, Elk County, PA** - Role: Design Engineer. Responsible for the design and permitting of stormwater management. Project entailed design of drainage systems through several neighborhoods in the township.

**Petersburg Borough, Huntingdon County, PA** – Role: Project Manager. Responsible for developing a stormwater management plan. Project entailed analysis and recommendations for storm sewer replacements and prioritization of projects for existing storm sewer system for the Borough of Petersburg.

## DOUGLAS E. WEIKEL, P.E.

### WASTEWATER COLLECTION AND TREATMENT

University Area Joint Authority, State College, PA – Role: Project Manager. Responsible for projects including the following:

- Beneficial Reuse Wetlands – planning and design for the extension and permitting of the reclaimed wastewater transmission and distribution to a created stream augmentation and constructed wetland.
- Beneficial Reuse Project - Design engineer for portions of the 3.0 MGD expansion of the wastewater treatment plant. Responsibilities include site improvements, septage receiving station, main raw sewage pumping station, RAS/WAS pump station, chemical additions, tertiary filtration system improvements, drain pump stations, two constructed wetlands, and composting and solids dewatering improvements
- Microfiltration Project, Phase 1 - Design of a building and site improvements for microfiltration and reverse osmosis pilot testing
- Constructed Wetlands Pilot Testing - Design of a two cell constructed wetlands to be used as a pilot test of full-scale design features
- Pine Grove Mills Sewer Extension - Fast-track design of a 15,400-foot sewer extension including pump station and award-winning building
- Sycamore Lane Sewer Replacement - Design of sanitary sewer replacement with two stream crossings
- Western Inner Loop Sewer Relocation - Design of sanitary sewer relocation for PennDOT highway project
- Sewer Extension Reviews - Responsible for compliance reviews of many sewer extensions to the Authority's system
- Houserville I/I Study - Responsible for data acquisition and analysis for a 36-inch RCP sewer interceptor

### CONSTRUCTION

**Stage 6 Additions and Modifications - Beneficial Reuse for University Area Joint Authority, Centre County, PA** - Role: Project Manager. Responsible for resident engineer for expansion of existing wastewater treatment facility to a total 9.0 MGD wastewater treatment and reuse. Project costs were in excess of \$55 million. Conventional facility design included screening and degritting, primary settling, biological nutrient removal, secondary clarification, monomedia granular filtration, and ultraviolet disinfection. Solids handling design included rapid sludge blending, centrifugation, and composting. Advanced treatment included microfiltration, reverse osmosis, corrosion control and pH adjustment, ultraviolet disinfection, and on-site generation of sodium hypochlorite for residual disinfectant.

**Woodward Township Sewage and Water Authority, Clearfield County, PA** – Role: Project Manager. Responsible for performing construction administration and resident project representative services for an upgrade to a water treatment facility that included new backwash pumps, finish water pumps, replacement of control valves, concrete tank rehabilitation, new soda ash feed system with storage silo and pneumatic feed system, and other miscellaneous items.

### TRAINING

- Best Management Practices Manual Training, Pennsylvania Department of Environmental Protection, 2007
- Construction Outreach 10-hour Safety Consulting Services, Eichelbergers, Inc., 2006
- Pennsylvania Stormwater Management Symposium, Villanova University, 2009
- Project Managers Bootcamp, PSMJ Resources, 2006

### PROFESSIONAL MEMBERSHIP(S)

Pennsylvania State Association of Township Supervisors

## JAMES B. GUE

During this time period Mr. Gue duties also included: reporting regional program activity progress and recommending improvements to supervisors; providing field-related program information to assist in budget preparations; assisting in the development and implementation program policy, rules and procedures; providing coordination and communication among programs, divisions, districts and other governmental agencies; providing media for the general public that require total accountability, immediate response and accessibility; providing assistance to private citizens, industry representatives and governmental agencies relative to environmental findings and analyses; preparing research papers relative to acid mine drainage research and construction projects; developing educational materials, newsletters and environmental programs; and providing testimony for court and administrative hearings.

From 1986 to 2008, Mr. Gue was an Environmental Specialist 2 for the ODNR Abandoned Mine Lands Program. In this position his responsibilities included: planning, monitoring, reviewing and assisting in the comprehensive development of projects related to abandoned mine land reclamation projects; investigating eligibility of mine related public complaints; utilizing GPS and GIS technologies including ARCGIS and ARCMAP in compilation of a state-wide abandoned mineland inventory; conducting and preparing environmental assessment and categorical exclusion applications including wetlands identifications and delineations, endangered species assessments and archaeological site reviews; and submitting and revising environmental assessment approvals as coordinated with the Federal and State EPAs, Army Corps of Engineers Buffalo and Huntington districts, Department of the Interior's Office of Surface Mining and the US Fish and Wildlife Service. Mr. Gue also coordinated and submitted applications for Army Corp of Engineers 404 and State of Ohio EPA 401 water quality permits, ensured compliance with Army Corp of Engineers nationwide 27 water quality permits, prepared and submitted State of Ohio EPA approvable storm water permits, devised storm water permit inspection reporting methods, and conducted storm water permit compliance inspections and submitted pertinent reports.

Also during this time period, Mr. Gue was responsible for: conducting extensive acid mine drainage investigations and recommending mitigation methods and designs for acid mine drainage mitigation projects via multiple passive treatment system methodologies, including aerobic and anaerobic wetlands; preparing Acid Mine Drainage Abatement and Treatment plans for environmentally devastated watersheds; coordinating start-ups and acted as liaison to public environmental restoration efforts at multiple impacted watersheds; assisting public health and safety project designs and developing best-fit site layouts; preparing grant requests and reports for state and federal EPA funding; maintaining databases for all aspects of work; and overseeing project contracts, construction inspection, tracked construction costs, approved contractor payment estimates and submitted related reports.

From 1982 to 1986 Mr. Gue was a Reclamation Specialist 1. He job duties consisted of conducting mining and reclamation inspections to monitor compliance with State and Federal laws, assisting in State permit application reviews and revisions, conducting investigations of violations, preparing comments regarding state policy and program requirements, and preparing technical reports and maintaining files.

## TRAINING

- Acid Forming Materials 1, Department of the Interior, Office of Surface Mining
- Acid Forming Materials 2, Department of the Interior, Office of Surface Mining
- AMDTreat for Acid Mine Drainage Treatment Estimation, Department of the Interior, Office of Surface Mining
- Analysis of Aquifer Characteristics with AQTESOLV, Department of the Interior, Office of Surface Mining
- ArcGIS for Mining and Reclamation, Department of the Interior, Office of Surface Mining
- ArcPad Software and Use of Attribute Fields for the Abandoned Mines Inventories, ODNR, GIS Section
- ArcView for Mining and Reclamation, Department of the Interior, Office of Surface Mining
- Completing the Ohio Historic Inventory, State of Ohio Historic Preservation Office
- CPR Safety Training, Safety Consulting Services
- Designing Gates and Closures for Endangered Bat Hibernaculum, Department of the Interior, Office of Surface Mining
- Engineering Principles for Program Personnel, Department of the Interior, Office of Surface Mining
- Evaluation of Deep Mine Bat Hibernaculum, US Fish and Wildlife Service
- Field Identification of Potential Roost Trees Used by Indiana Bats, US Fish and Wildlife Service
- Geology and Geochemistry of Acid Forming Materials, Department of the Interior, Office of Surface Mining
- Ground Water Monitoring Well Installation and Groundwater Sampling, Nielsen Environment Field School

## JAMES B. GUE

- Groundwater Modeling and Analysis with Groundwater Vistas, Department of the Interior, Office of Surface Mining
- Identification and Preservation of Threatened and Endangered Bat Habitat, ODNR, Division of Wildlife and Bat Conservation International
- Identification, Mapping, and Inventory of Ohio Soils, ODNR Division of Soil and Water
- Introduction to Grant Writing, Crossroads Resource Conservation and Development
- NEPA Procedures, Department of the Interior, Office of Surface Mining
- Ohio EPA General Construction Stormwater Permit Workshop, Ohio Environmental Protection Agency
- Passive Treatment Theory and Application, Department of the Interior, Office of Surface Mining
- Physical and Chemical Properties of Soil, Department of the Interior, Office of Surface Mining
- Project Management, Department of the Interior, Office of Surface Mining
- Safety Standown, Chesapeake Energy
- Site Assessment and Construction Management: Waters of the US, Chesapeake Energy
- TerraSync Software for the Trimble GeoExplorer, Herbert, Rowland & Grubic, Inc.
- Trimble GeoExplorer GPS for Positioning and Geolocation, Herbert, Rowland & Grubic, Inc.
- Trimble Juno GPS for Location and Inventory of Abandoned Mines, ODNR, GIS Section
- Water Quality Analysis Using Aquachem, Department of the Interior, Office of Surface Mining
- Wetlands Awareness Course, United States of the Interior, National Technical Training Program
- Wildlife Habitat Enhancement, Wildlife Habitat Council

## **RICHARD W. WARDEN, P.E.**

tasks for his position. Designs often included slope stability computations for landslide repairs and verifying Approximate Original Contour (AOC) for forfeiture projects.

From 1984 to 1986 Mr. Warden worked with the Office of Chief Engineer with the Ohio DNR. He was responsible for civil engineering tasks related to various projects to support Ohio DNR facilities. These projects included roadways, water supply systems, dam rehabilitation, public dock facilities and infrastructure for state operated buildings.

From 1979 to 1984 Mr. Warden worked with the Division of Water, Dam Safety Program through the Ohio DNR. He was responsible for evaluation of dams for structural, geotechnical and hydraulic and hydrologic adequacy.

### **TRAINING**

Erosion and Sedimentation Control, American Society of Civil Engineers

Water Surface Profiling and Floodplain Analysis Seminar, American Society of Civil Engineers

Expert Witness Training, OSMRE NTTP

Underground Mining Technology, OSMRE NTTP

AML Design Workshop: Subsidence, OSMRE NTTP

SEDCAD 4, OSMRE TIPS

Instructor Training Course, OSMRE NTTP

Fed Projects & Historic Preservation Law, OSMRE NTTP

AML Design Workshop: Subsidence, OSMRE NTTP



**DAVID M. SWISHER, P.E.**

Water & Energy Regional Service Group Manager

Mr. Swisher is a regional service group manager with Herbert, Rowland & Grubic, Inc. (HRG) responsible for managing environmental engineering projects including: planning, permitting, design, construction administration, financial analyses, and project financing of water and wastewater infrastructure projects.

### WASTEWATER FACILITIES PLANNING

**Act 537 Plan for Woodward Township, Clearfield County, PA** – Role: Project Manager. Responsible for the completion of a multi-municipal Act 537 Sewage Facilities Plan. Project entailed a review of on-lot sewage needs in two municipalities including a variety of structural alternatives. The Act 537 Plan Update recommended the construction of a sanitary sewer extension to serve approximately 250 EDUs to alleviate public health problems associated with malfunctioning on-lot disposal systems.

**Act 537 Plan for Centre Region, Centre County, PA** – Role: Assistant Project Manager. Responsible for assisting in the update of a multi-municipal Act 537 Sewage Facilities Plan. Project entailed a review of on-lot sewage needs in six municipalities including a variety of decentralized and non-discharge alternatives. Act 537 Plan Update also included a dynamic model of the major components of the Sanitary Sewer System, with peak instantaneous flow modeling to beyond 20 MGD.

**Act 537 Plan for Spring Township, Centre County, PA** – Role: Assistant Project Manager. Responsible for the completion of an Act 537 Sewage Facilities Plan. Project entailed implementation of a Township-wide Sewage Management Plan (SMP) and extension of public sewers in the Sunnyside and Greens Valley Areas.

Pardee. Project entailed evaluation of over 20 different structural alternatives, including remote treatment facilities and alternative collection technologies such as vacuum sewers.

**Minor Act 537 Plan for Potter Township, Centre County, PA** – Role: Assistant Project Manager. Responsible for the completion of a Minor Act 537 Sewage Facilities Plan. Project entailed use of a Component 3m Sewage Facilities Planning Module for extension of public sewer system to serve approximately 70 EDUs.

### WASTEWATER COLLECTION AND TREATMENT

**Wastewater Treatment Plant Upgrades for Borough of Mifflinburg, Union County, PA** – Role: Design Engineer. Responsible for design, permitting and generation of contract documents. Project entailed construction of a new headworks facilities at an existing 1.2 MGD WWTP. The new headworks facilities included a series of fine screens to provide pretreatment for the membrane bioreactor process, a vortex grit removal system, influent flow metering, screenings handling equipment and raw wastewater pumping designed for a peak flow rate of 9.0 MGD.

#### EDUCATION:

M.S., Environmental Engineering, The Pennsylvania State University, 2002

B.S., Civil and Environmental Engineering, The Pennsylvania State University, 2001

#### LICENSE(S):

Professional Engineer, PA

#### CERTIFICATION(S):

Construction Document Technologist

Water System Operator, PADEP

Water Treatment Plant Operator, Class B

## DAVID M. SWISHER, P.E.

**Wastewater Treatment Plant Re-rate for Woodward Township Sewage and Water Authority, Clearfield County, PA** – Role: Design Engineer. Responsible for the preparation of a NPDES and Water Quality Management Part II Permit. Project entailed re-rating of existing facilities from 0.385 MGD to 0.560 MGD. This re-rate included an analysis of the influent pumping station, equalization basin, aeration units, aerobic digesters, and chlorination facilities. A hydraulic profile and mass balance were also prepared for the treatment plant.

**Wastewater Treatment Plant Re-rate for Hemlock Municipal Sewer Cooperative, Columbia County, PA** – Role: Design Engineer. Responsible for preparation of a NPDES and Water Quality Management Part II Permit. Project entailed organic rerating of the existing facilities. This re-rate included an analysis of the clarifiers, aeration units and aerobic digesters. A mass balance was also prepared for the treatment plant.

**10th Street Sanitary Sewer Repair for Borough of Mifflinburg, Union County, PA** – Role: Design Engineer. Responsible for the rehabilitation of 1,000 lineal feet of sanitary sewer through cured-in-place piping and manhole lining.

### WATER RESOURCES PLANNING AND SOURCE DEVELOPMENT

**Water System Improvements Feasibility Study for the Suburban Lock Haven Water Authority, Clinton County, PA** – Role: Project Manager. Responsible for the completion of a Water Feasibility Study. Project entailed evaluation of the existing water distribution system facilities and to make recommendations on any identified deficiencies. The Study involved the creation of a hydraulic water model of the existing system to identify the source of recurring low water pressures and lack of fire protection. The Study included several alternatives for upgrading the water system, and ultimately recommended the construction of approximately 15,000 linear feet of waterline and a water booster station to provide looping and redundancy within the system.

**Water Supply Well Development for the Haines Woodward Municipal Authority, Haines Township, Centre County, PA** – Role: Project Manager. Responsible for design and permitting. Project entailed design services for a new drinking water supply well. The water supply well was developed with a safe yield of 45 gpm and included the design of flow metering/control devices and modifications to the existing chlorination facilities.

### WATER SYSTEM MODELING

**System-Wide Model for Williamsport Municipal Water Authority, Lycoming County, PA** – Role: Project Manager. Responsible for the completion of a hydraulic water model for the entire Authority water system. The existing water distribution system consisted of seven different pressure zones, six water booster stations, nine water storage tanks and over 200 miles of distribution piping. Project entailed completion of hydraulic model, including a detailed analysis of the existing system and recommendations to improve fire flows and pressures within the system to support future development.

**Water System Modeling for Carlisle Barracks and Army War College, Cumberland County, PA** – Role: Water Systems Engineer. Responsible for the completion of a hydraulic model. Project entailed modeling of an existing water distribution system consisting of approximately 38,000 linear feet of waterline. The hydraulic analysis included modeling of pressure districts, fire flows, and a future interconnection with an adjacent community water system.

**Water System Modeling for University Area Joint Authority, Centre County, PA** – Role: Water Systems Engineer. Responsible for the completion of a hydraulic model. Project entailed modeling of the beneficial reuse transmission main, which included modeling of pressure districts and fire flows.

**Transient Analysis for City of Lancaster, Lancaster County, PA** – Role: Water Systems Engineer. Responsible for the completion of a hydraulic model. Project entailed modeling of a 42-inch steel forcemain to predict transients that may develop within the pipeline at flows up to 40 MGD. Transient modeling software was utilized to model sudden changes in flow that could result in damaging pressure changes and velocity waves within the piping system.

**DAVID M. SWISHER, P.E.**

## **WATER TREATMENT**

**Membrane Filtration Pilot Test for The Pennsylvania State University, Centre County, PA** – Role: Water Systems Engineer. Responsible for the design, construction, and operation of a pilot test facility utilizing numerous water treatment technologies. Project entailed a 2-month pilot test utilizing two (2) low pressure ultrafiltration systems, two (2) low pressure submerged ultrafiltration systems, one (1) conventional filtration system (including coagulation, flocculation, sedimentation and sand filtration), two (2) reverse osmosis systems, a powdered activated carbon feed system, and four (4) granular activated carbon columns.

## **WATER DISTRIBUTION AND STORAGE**

**Lycoming Mall Interconnection for the Lycoming County Water and Sewer Authority, Lycoming County, PA** - Role: Project Manager. Responsible for design, permitting, generation of contract documents and construction administration. Project entailed design of approximately 1,000 linear feet of 12-inch waterline, a 2.2 MGD water booster station, and associated system improvements.

**Grey Fox Plaza Waterline & Storage Tank for Lycoming County Water and Sewer Authority, Lycoming County, PA** - Role: Project Manager. Responsible for design, permitting, generation of contract documents and construction administration. Project entailed design of approximately 16,000 linear feet of 8-inch and 12-inch waterline, a 200,000-gallon welded steel elevated storage tank, and associated system improvements.



**JOHN RUSNAK, P.E.**

Civil Senior Project Manager/Team Leader

Mr. Rusnak is a civil regional service group manager with Herbert, Rowland & Grubic, Inc. (HRG). Mr. Rusnak is responsible for overseeing staff in the development of design concepts, preparing preliminary and final design drawings, developing technical specifications and bid documentation, and attending meetings and delivering budgets for municipal clients. Mr. Rusnak also provides oversight during construction and monitors project costs.

**COUNTY STORMWATER MANAGEMENT PLANS (ACT 167)**

**Act 167 Plan, Phase I and Phase II, Washington County, PA** – Role: Project Manager. Responsible for compiling and reviewing work involving the Phase I Scope of Study and the Phase II Stormwater Management Plan. Project entailed the facilitation of public outreach meetings with PA DEP and Washington County Planning Commission to gather public endorsement and provide education on the Act 167 Plan and process under Phase I. Acted as Project Manager for the Phase II Plan overseeing compilation of problem area information, coordinating meetings, reviewing Draft Plan Reports and Model Ordinance.

**Act 167 Plan, Phase I and II, Butler County, PA** – Role: Project Manager. Responsible for drafting and reviewing work involving the Phase I Scope of Study and the Phase II Stormwater Management Plan, including facilitation of public outreach meetings with PA DEP and Butler County Planning Commission.

Project entailed gathering public endorsements and providing education on the Act 167 Plan and process under Phase I. Also acted as Project Manager for the Phase II Plan overseeing compilation of problem area information, coordinating meetings, reviewing Draft Plan Reports and Model Ordinance.

**Act 167 Plan, Phase II, Venango County, PA** – Role: Project Manager. Responsible for drafting and reviewing work involving the Phase I Scope of Study and the Phase II Stormwater Management Plan, including facilitation of public outreach meetings with PA DEP and Venango County Planning Commission. Project entailed gathering public endorsements and providing education on the Act 167 Plan and process. Also acted as Project Manager for the Phase II Plan overseeing compilation of problem area information, coordinating meetings, reviewing Draft Plan Reports and Model Ordinance.

**MISCELLANEOUS PROJECT EXPERIENCE**

**Borough of Ambridge Municipal Authority, Borough of Ambridge, Beaver County, PA** – Role: Civil Engineer. Responsible for providing design oversight and project administration. Project entailed services for the Belt Filter Press Room Ventilation Upgrade, 2003 Sanitary Sewer System Minor Repair Project, and the Park Road Sanitary Sewer and Force Main Project.

**Western Kelly Boulevard 2002 Stormwater Study and 2006 Study Update, Slippery Rock Borough, Butler County, PA** – Role: Civil Engineer. Responsible for performing stormwater analysis. Project entailed analysis of a 52-acre area within Borough limits. Made recommendations and provided construction costs estimates addressing adequacy of existing facilities to handle current and

**EDUCATION:**

B.S., Civil Engineering, The Pennsylvania State University, 1989

**LICENSE(S):**

Professional Engineer, PA

**CERTIFICATION(S):**

Certified Construction Documents Technologist, CDT

## JOHN RUSNAK, P.E.

future rainfall events.

**Upgrade Water Source and Distribution System, Pennsylvania Department of General Services (DGS)/Torrance State Hospital, Blairsville, PA** – Role: Project Manager. Responsible for providing design, oversight, project management and administration for the construction of a 600 GPM water booster pump station and distribution system improvements. Project entailed updating the raw water chemical feed system at the water treatment plant.

**West End Pond Renovation Project, Venango Campus of Clarion University, Oil City, PA** – Role: Project Manager. Responsible for taking concept designs through final design and construction. Project entailed applying for permits and providing design and construction phase oversight, project management and administration for renovation of a 2.5 acre pond on the Clarion University of Pennsylvania, Venango County Branch Campus, as well as addressing accessibility issues associated with pond and campus property.

### RELATED EXPERIENCE

From 1993 to April 2002, Mr. Rusnak was a municipal engineering representative with Michael Baker, Jr., Inc. in Beaver, PA. His duties included engineering design and oversight of staff; project and financial management; construction monitoring; grant, loan, and permit application and administration; land development and subdivision plan review; ordinance drafting and review; resident compliant resolution; preparation of project bid documents and technical specifications; and meeting attendance. Clients/projects managed during this time period include: Borough Engineer, Borough of Baden; Township Engineer, Rochester Township; Township Engineer, New Sewickley Township; and Authority Engineer, New Sewickley Township Municipal Authority.

From 1989 to 1993, Mr. Rusnak was a project engineer with Uni-Tec Consulting Engineers, Inc. in State College, PA. He was responsible for various municipal-related projects, specifically water storage and distribution, groundwater remediation, and road rehabilitation and reconstruction projects. He performed state-funded grant and loan application work related to municipal projects.

During the summers of 1987 and 1988 while attending Penn State University, Mr. Rusnak was a summer intern with Universal Technical, Inc. in State College, PA, serving as the construction inspector on various sewerage and water distribution system upgrade projects.

During the summer of 1986 while attending Penn State University, Mr. Rusnak was a summer intern with Mid-Atlantic Engineering, Inc. in Scranton, PA, serving as concrete, asphalt, and construction materials testing technician.

### TRAINING

- Basics in Complying with Underground and Aboveground Storage Tanks, The Pennsylvania Chamber of Business & Industry
- Municipal Engineers Fall Education Seminiar, PSATS
- Project Management for Engineers, PMI Registered Education Provider

### COMMUNITY SERVICE

Mr. Rusnak served as a board member and past President for the Glen Eden Homes Association (GEHA) located in Cranberry Township, Butler County, PA. Under his direction, the board was responsible for overseeing budget, maintenance, and day-to-day operations of the 400 residential unit association.

### PROFESSIONAL MEMBERSHIP(S)

American Society of Civil Engineers



## BRANDON T. MEYERS

NATURAL RESOURCES REGIONAL SERVICE GROUP MANAGER

Mr. Meyers is a Natural Resources Regional Service Group Manager with Herbert, Rowland & Grubic, Inc. (HRG). His responsibilities include field studies and assessments involving collection and analysis of watershed data; Phase I Environmental Site Assessment research and reports; wetland identification and delineation, wetland mitigation design, site work, reports, bog turtle habitat screening, natural gas well pad and pipeline development, Phase I Environmental Site Assessment research and reports and coordination with PADEP, US Army Corps of Engineers and additional federal and state agencies.

### NATURAL GAS DEVELOPMENT EXPERIENCE

**Natural Gas Well Pad Development, Statewide, PA** – Role: Environmental Scientist. Responsible for initial site reconnaissance, wetland identification and delineation, pad and infrastructure location selection on the basis of environmental constraints, preparation of PADEP Chapter 105 General Permit applications, PNDI clearances and mitigation site selection. Projects involved numerous wells from northeast to northwest Pennsylvania.

**Natural Gas Well Pipeline Development, Bradford and Susquehanna Counties, PA** – Role: Environmental Scientist. Responsible for wetland identification and delineation, route selection on the basis of environmental constraints, preparation PADEP Chapter 105 General Permit applications and PNDI clearances. Project involved a ten mile collector line servicing eleven wells

**Natural Gas Well Pipeline Development, Clearfield County, PA** – Role: Environmental Scientist. Responsible for initial site reconnaissance, wetland identification and delineation. Coordination with existing pipeline right of way, location selection on the basis of environmental constraints, coordination of environmental staff, preparation of PADEP Chapter 105 General Permit applications.

**Natural Gas Well Pad Development, Ohio** – Role: Environmental Scientist. Responsible for initial site reconnaissance, wetland identification and delineation, pad and infrastructure location selection on the basis of environmental constraints, preparation of permit applications, threatened and endangered species clearances and mitigation site selection. Projects involved numerous well sites in eastern Ohio.

**Natural Gas Well Pad Development, West Virginia** – Role: Environmental Scientist. Responsible for initial site reconnaissance, wetland identification and delineation, pad and infrastructure location selection on the basis of environmental constraints, preparation of permit applications, threatened and endangered species clearances and mitigation site selection. Projects involved numerous well sites in northern West Virginia.

### EDUCATION:

B.S., Environmental Science,  
Edinboro University, 2003

### CERTIFICATION(S):

OSHA 40-Hour HAZWOPER,  
Compliance Solutions  
Occupational Trainers, Inc.

# BRANDON T. MEYERS

## ADDITIONAL PROJECT EXPERIENCE

**NPDES Phase II: Permit Year 3 - 7 Activities, Susquehanna Township, Dauphin County, PA; Steelton Borough, Dauphin County, PA; East Lampeter Township, Lancaster County, PA:**

- Minimum Control Measure No. 1 - Public Education and Outreach
- Minimum Control Measure No. 2 - Public Involvement and Participation
- Minimum Control Measure No. 3 - Illicit Discharge Detection and Elimination
- Minimum Control Measure No. 4 - Construction Stormwater Runoff Management
- Minimum Control Measure No. 5 - Post-Construction Stormwater Runoff Management
- Minimum Control Measure No. 6 - Pollution Prevention and Good Housekeeping, Municipal Operations and Maintenance
- Annual Reporting

**Willard Tract Property Environmental Site Assessment, Silver Spring Township, Cumberland County, PA** - Role: Environmental Scientist. Responsible for assisting with site assessment and report preparation. Project entailed performing a Phase I Environmental Site Assessment to determine if potential environmental liabilities existed at the subject property.

**Hollidaysburg Veterans Home Wetland Absence/Presence, Allegheny Township, Blair County, PA** - Role: Environmental Scientist. Responsible for assisting with absence/presence and report preparation. Project entailed environmental engineering services including a site reconnaissance to determine the absence/presence of wetlands within a site slated for development.

**Northampton County Community College Wetland Absence/Presence, Pocono Township, Monroe County, PA** - Role: Environmental Scientist. Responsible for assisting with absence/presence and report preparation. Project entailed environmental engineering services including a site reconnaissance to determine the absence/presence of wetlands within a site slated for development.

**Walnut Street/Progress Avenue Intersection Improvements, Susquehanna Township, Dauphin County, PA** - Role: Environmental Scientist. Responsible for assisting with noise monitoring for a major urban road improvement project as well as completing census data research and analysis. Project entailed environmental engineering services including environmental investigations covering preparation of Level 2 Categorical Exclusion and Phase I Environmental Site Assessment.

**First Park Hazleton Wetland Delineation, City of Hazleton, Luzerne County, PA** - Role: Environmental Scientist. Responsible for wetland delineation, Jurisdictional Determination and preparation of Joint Permit Application. Project entailed wetland mitigation design for a 140-acre former mine site.

**I-78 / I-81 Logistics Park, Union Township, Lebanon County, PA** - Role: Environmental Scientist. Responsible for wetland delineation, stream characterization and habitat assessment. Project entailed environmental engineering services including Phase I Environmental Site Assessment, wetland mitigation design and coordination with DEP/US Army Corps of Engineers for a 270-acre site.

**5th Street / University Drive, Lower Swatara Township, Dauphin County, PA** - Role: Environmental Scientist. Responsible for assisting with wetland delineation, Phase I Environmental Site Assessment and permit applications. Project entailed environmental engineering services including Phase I Environmental Site Assessment and Level 2 Categorical Exclusion for a road improvement project located within a delisted Superfund site.

## BRANDON T. MEYERS

**Kohn Road Reconstruction for Susquehanna Township Board of Commissioners, Susquehanna Township, Dauphin County, PA** – Role: Environmental Scientist. Responsible for wetland delineation, stream characterization, habitat assessment and yearly monitoring of stream and wetland mitigation area as per state and federal permits. A State Water Obstruction and Encroachment permit and Federal Section 404 permit were obtained for an aerial pedestrian bridge crossing, wetland impacts, and stream re-alignment. Project entailed accomplishing geometric and safety improvements to upgrade Kohn Road to a collector functional roadway classification.

**Chartiers #61 Bridge Replacement for Pennsylvania Department of Transportation, District 12-0, City of Washington, Washington County, PA** – Role: Environmental Scientist. Responsible PennDOT specific Phase I Environmental Site Assessment and assisting with obtaining a State Water Obstruction and Encroachment and a Federal Section 404 permit through the Joint Permit Application process. Project entailed a bridge replacement.

**Butler VA Outpatient Care Facility, Butler Township, Butler County, PA** – Role: Environmental Scientist. Responsible for wetland delineation, wetland mitigation design, PNDI clearances and compiling and obtaining the Water Obstruction and Encroachment Permit Application and Section 404 Clean Water Act PASPGP-4 Permit for proposed wetland and stream impacts. Project entailed environmental and engineering services associated with the construction of an outpatient care facility adjacent to the existing VA Butler Facility.

### RELATED EXPERIENCE

From May 2003 to August 2003, Mr. Meyers worked for the Department of Environmental Protection, Harrisburg, PA, on the Student Internship Program. His responsibilities were as follows:

- Assisted with the research, development, and implementation of the Citizen's Volunteer Monitoring Program, as well as the "Stream Re-leaf" program.
- Obtained water samples from various streams, rivers, and lakes within central Pennsylvania and performed water quality tests to determine water purity and identify potential pollutants and species of macro-invertebrates found within the water bodies.
- Made extensive use of the GIS software, printed maps, and educated peers on the use of programs.
- Met with, recruited, taught, and trained volunteers from the community for the Citizen's Volunteer program, which helped inform communities of potential threats to their water sources and how to prevent environmental damage.
- Received commendations from supervisors, co-workers, and program volunteers for exceptional resourcefulness, patience, and willingness to help others.
- Laboratory experience includes the dissection of various organisms, plasma preparation of DNA, restriction mapping of DNA (utilizing agarose gel), and developing and maintaining various lab cultures. Field experience includes identifying various vertebrate mammals, fish, and amphibians, as well as types of trees and fungi.

### TRAINING

- USFWS Indiana Bat Habitat Identification Training, 2012
- Bog Turtle Phase I Habitat Training, Skelly & Loy, Inc.
- Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual Training, Pennsylvania Association of Professional Soil Scientists
- OSHA 10-Hour Training, Eichelbergers, Inc.
- OSHA 8-Hour HAZWOPER Refresher, Eichelbergers, Inc.
- Wetland Delineation and Management Training, Richard Chinn Environmental Training, Inc.

### PROFESSIONAL MEMBERSHIP(S)

Pennsylvania Council of Professional Geologists

## **ROGER B. VARNER, P.E.**

**NPDES Phase II MS4 Permits and Annual Report Preparation** - Role: Staff Professional. Reviewed client's municipal separate storm sewer (MS4) permits and provided comments and recommendations on implementation of the MS4 program and preparation of the annual reports for the following municipalities:

- South Park Township, Allegheny County, PA
- Summit Township, Erie County, PA
- Bellevue Borough, Allegheny County, PA

**Additional Municipal NPDES Permit Application Services** - Role: Assistant Project Manager. Provided permit renewal services, including preparation of all PA DEP forms, Act 14 notification letters, wastewater facilities process flow schematic and site plans, coordination of all applicable analytical sampling and analysis for the treated effluent discharge and documentation on industrial users for the following authorities:

- Evans City Borough Water & Sewer Authority, Butler County, PA
- New Eagle Borough Municipal Sewer Authority, Washington County, PA
- Fairchance Georges Joint Municipal Sewage Authority, Fayette County, PA

### **WASTEWATER FACILITIES PLANNING**

**Act 537 Sewage Facilities Plan Reviews & Recommendations, Jackson Township, Butler County, PA** - Role: Staff Professional. Responsible for providing adequacy review of several Component 3 & Component 3S Planning Modules for residential subdivisions and commercial developments in Jackson Township. Project entailed preparing review letters and provided recommendations to meet township ordinances and state regulations.

### **WASTEWATER SYSTEMS DESIGN**

**Desdemona Avenue Sewer Separation Design Project, Pittsburgh Water & Sewer Authority, Allegheny County, PA** - Role: Assistant Project Manager. Responsible for assisting in providing design services, field investigations, PA One Call, project manual preparation and design drawing review, construction site visits and project meetings for the installation of a separate sanitary sewer line and conversion of the combined sewer to a storm sewer to serve 20 homes.

**Sanitary Sewer System Repair Project Phase 2, Borough of Ambridge Municipal Authority Beaver County, PA** - Role: Assistant Project Manager. Responsible for providing design services, performed field investigations and performed engineering services to repair and replace several segments of sanitary sewer in Ambridge Borough in an effort to reduce infiltration and inflow. Design included trenchless technology for sewer lining, manhole replacement and repair, storm water separation, sewer replacement and utility coordination.

### **WASTE & WASTEWATER SYSTEMS EVALUATIONS AND REHABILITATIONS**

**Water Treatment Plant Feasibility Study, Evans City Borough, Butler County, PA** - Role: Staff Professional. Responsible for assisting in the preparation of a feasibility study per consent order by the PA DEP for improvements to the performance of the water treatment plant or by recommending potable water through bulk water service. Prepared a request for proposal (RFP) package for companies to bid for bulk water service to the distribution system, reviewed the RFP bids, made recommendation to the client, and assisted in writing the feasibility study including preparing cost estimates for submittal to PA DEP.

## **ROGER B. VARNER, P.E.**

**Sanitary Sewer Rehabilitation, Township of South Park, Allegheny County, PA** - Role: Staff Professional. Responsible for preparing contract documents and permit preparation services to reline and rehabilitate sanitary sewers using trenchless technology in order to reduce infiltration/inflow according to the Township's Corrective Action Plan.

### **ENVIRONMENTAL ENGINEERING**

**Laboratory Accreditation Program Preparation, Borough of New Eagle Municipal Authority, Washington County, PA** - Role: Project Manager. Responsible for assisting the wastewater treatment plant supervisor in preparing a Laboratory Accreditation Program for the on-site laboratory to meet requirements of the state's laboratory accreditation regulations. Project entailed an audit of the laboratory and recommended changes to meet the new regulations. Prepared the Quality Manual, the Standard Operating Procedures Manual, laboratory bench top forms and prepared and submitted the Laboratory Accreditation Application for approval and renewal.

### **TRAINING**

- Basics in Complying with Underground and Aboveground Storage Tanks, The Pennsylvania Chamber of Business and Industry
- Disinfection By-Products Rule for Small Systems Course, PA DEP
- Managing Marcellus Program #3: Pipeline, Local Gov. Academy
- Non-Domestic Wastewater Forum
- Oil & Gas Management Industry Training Workshop, PA DEP
- OSHA - Construction Outreach Safety, Safety Consulting Services
- Process and Product Application Seminar, Aqua-Aerobic Systems, Inc.
- Pump Maintenance & Troubleshooting, The Gorman Rupp Company
- Segmental Retaining Walls Construction Processes (continuing education course), National Concrete Masonry Association



**CHAD E. STONEBRAKER**  
Senior Land Development CADD Technician

Mr. Stonebraker is a Senior Land Development CADD Technician with Herbert, Rowland & Grubic, Inc. (HRG). His responsibilities include assisting the project manager in design, preparing Land Development plans, profiles, sections and details. He is proficient with AutoCAD Civil3D 2011 and Microstation software for base map and construction layout plan preparation. Prior to joining HRG, Mr. Stonebraker worked as a Senior CADD Technician designer for 12 years.

**PROJECT EXPERIENCE**

**Cross Creek Shelter, Washington County, PA** – CADD Technician responsible for assisting in the design and plan preparation for a new shelter, restroom, parking and access road.

**South Wade Avenue Bridge Replacement, Washington County, PA** – CADD Technician responsible for assisting in the design and plan preparation for South Wade Avenue bridge replacement.

**Natural Gas Well Pad Development, Marshall, Preston, Taylor and Wetzel Counties, West Virginia** - CADD Technician responsible design, drafting, boundary and topographic surveying to support the preparation of required regulatory permitting including WV DOH Encroachment Permits and Maintenance Agreements, Erosion and Sediment Control plans and Well Location Plats for the development of Marcellus Shale natural gas well pad sites.

**Chesapeake Energy Corporation** – Role: CADD Technician. Responsible for assisting in the design and plans preparation for several new natural gas well pads using Civil 3D software.

**Habitat for Humanity** – Role: CADD Technician. Responsible for preparing a subdivision plat and sidewalk layout.

**RELATED EXPERIENCE**

Senior CADD Technician responsible for creating drawings for water, wastewater, geotechnical, environmental, transportation, and structural projects. Types of drawings include sections, cross sections, plan sheets, profiles, boring plans, details, and various types of drawing plan sets. Familiar with various CADD software packages including AutoCAD, MicroStation V8, and InRoads SelectCAD.

**Sunny Side UP – City of Morgantown** – Role: CADD Technician. Responsible for assisting with Construction Observation, Quantities coordination with the contractor and the design and plans preparation for a StreetScape project along Grant Avenue.

**King's Covered Bridge, Somerset County, PA, Southern Alleghenies Conservancy/Simone Collins Landscape Architecture.**-CADD Technician responsible for developing structural drawings for a covered bridge based on field measurements. The 120-foot structure is historically significant because it retains its original features from 1845. The preservation and

**EDUCATION:**

A.S.T., Computer Aided Drafting, Pittsburgh Technical Institute, 2000

**LICENSE(S):**

**CERTIFICATION(S):**

Basic First Aid, Safety Consulting Services

Blood borne Pathogens, Eichelbergers, Inc.

Emergency Action Planning, Hand and Power Tools, Hazard Identification, Incident Reporting & Investigation, Eichelbergers, Inc.

Graphic Communication, Preston Vocational Center

## CHAD STONEBRAKER

**Department of Transportation, Division of Highways.** - Technician assisting in the field reconnaissance of a biological assessment of the Indiana Bat. The biological assessment evaluated the potential impacts of a proposed two-lane highway on available summer habitat in the project study area. The U.S. Fish and Wildlife Service issued a Biological Opinion.

**King Coal Highway, Mingo County, WV, West Virginia Department of Transportation, Division of Highways.** - CADD Technician responsible for preparing and revising plans, profiles, cross sections, and details associated with preliminary and final design of a 3.3-mile section of a new 96-mile-long, four-lane divided highway with partially controlled access.

**Sharon Heights Connector, Mingo County, WV, West Virginia Department of Transportation, Division of Highways.** - CADD Technician responsible for preparing and revising plans, profiles, cross sections, and details associated with the preliminary and final design of a 1.5-mile connector highway. The highway consists of a two-lane roadway with climbing lanes for trucks and connects U.S. Route 52 near Sharon Heights to the King Coal Highway. Used InRoads SelectCAD to create various alignment alternatives under the supervision of the project engineer.

**Environmental Assessment, Enterprise-Eldora Connector, U.S. Route 19 to I-79, Harrison and Marion Counties, WV, West Virginia Department of Transportation, Division of Highways.** - CADD Technician assisting with the preparation of an environmental assessment plan. The Enterprise-Eldora Connector consists of approximately three miles of two-lane roadway and connect U.S. Route 19 at Enterprise in Harrison County to I-79 in the vicinity of Eldora in Marion County.

From 2000 to 2011, Mr. Stonebraker was a Senior Technician employed by Gannett Fleming. His responsibilities included site, bridge, and municipal and highway design.

From 1999 to 2000, Mr. Stonebraker was a CADD Technical employed by Hanlon Electric Company. Using AutoCAD 2000 Mr. Stonebraker was responsible for revising drawings.

From 1992 to 1994, Mr. Stonebraker was a Seaman Apprentice with the United States Navy.

### TRAINING

Safety Training, Safety Consulting Services

### PUBLICATION(S) AND PAPER(S)

"How to Hack DTMs with InRoads" BE Magazine Volume 5, Issue 3

### PRESENTATION(S) AND LECTURE(S)

Presented at the Bentley Conference, 2007, Baltimore, MD



**ANDREW D. CARDOSI, P.E.**

Transportation Regional Service Group Manager/OM

Mr. Cardosi is office manager and service group manager with Herbert, Rowland & Grubic, Inc. (HRG). In this capacity, he is responsible for providing technical guidance and supervision. He is primarily responsible for preparation of contracts and proposals, including development of technical scopes of work; project budgeting and cost estimating; bid documents preparation; contract administration; scheduling and planning updates for municipal and transportation projects; municipal reviews of land development and subdivision plans; Highway Occupancy Permit plan reviews; roadway design in areas such as roadway geometry, pavement design and analysis, drainage design and management, maintenance and protection of traffic plans, right-of-way plans; utility coordination; and construction inspection.

**MUNICIPAL ENGINEERING**

Reviews and provides comments on the site development plan packages submitted as part of the land development process for the following municipalities:

- Cranberry Township, Butler County, PA
- Jackson Township, Butler County, PA
- Greenville Borough, Mercer County, PA
- Pine Township, Allegheny County, PA
- Middlesex Township, Butler County, PA
- Girard Township, Erie County, PA

**Greenville Main Street Enhancement, Greenville Borough, Mercer County, PA -** Role: Transportation Engineer. Responsible for assisting in the construction administration of the PennDOT ECMS Construction Contract for the Main Street "streetscape improvements" on behalf of the Borough. Project entailed monitoring construction and quantities, shop drawing review, interpreting contract language and coordinating work between various contractors, inspectors and PennDOT.

**Fairplain Road Reconstruction Project for County of Erie Department of Planning, Girard Township, Erie County, PA -** Role: Project Manager. Responsible for preliminary planning, project design, preparation of the construction plans and bid documents, and construction administration. Project entailed approximately one mile of asphalt overlay, shoulder stabilization, cross pipe replacement and a highway-rail grade crossing enhancement along Fairplain Road funded by Erie County through the Community Development Block Grant Program.

**Housing Demolitions Projects, Jackson Township, Butler County, PA -** Role: Project Manager. Responsible for construction administration, coordination between the contractor and all affected utilities, negotiating change orders, interpreting contract language, coordination between the contractor and the Township regarding property status, review and recommendation of payment applications, and daily photo documentation. Project entailed the demolition of

**EDUCATION:**

B.S., Civil Engineering, The Pennsylvania State University, 2001

**LICENSE(S):**

Professional Engineer, PA  
Professional Engineer, WV

**CERTIFICATION(S):**

Certified Wetland Delineator, Richard Chinn Environmental Training, Inc./Army Corps of Engineers



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**Project Manager**

**Education:**

Ph.D. (1988), Geotechnical Engineering, Iowa State University, Ames, IA  
M.S. (1983), Geotechnical Engineering, Michigan Technological University,  
Houghton, MI  
B.S. (1977), Civil Engineering, Bangladesh University of Engineering and Technol-  
ogy, Dhaka, Bangladesh

**Professional Affiliations:**

Professional Engineer, PA, 1990  
Professional Engineer, WV, 2010  
Professional Engineer, OH, 2011

**Summary of Experience:**

Dr. Kabir is Senior Geotechnical Engineer/Project Manager responsible for all techni-  
cal aspects of project design.

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**Detailed Project Experience:**

- 1990 to present, Project Engineer/Project Manager with GeoMechanics, Inc. Responsible for performing geotechnical analyses, preparation of reports, and the development of testing and analytical methods suitable to special projects.
- Served as project manager or supervising principal for subsurface explorations and geotechnical engineering investigations for over 10 sections of Interstate and Limited Access Freeways and the Light Rail Transit System (LRT) – Stage II and the North Shore Connector for the Port Authority of Allegheny County, PA. Specific aspects of design involved cut and fill slopes, temporary and permanent retaining structures, reclamation of abandoned surface mining, design of stabilization for weak ground and abandoned deep mines, pavement design, foundation support for bridges and drainage structures, underground parking garages, railroad stations and instrumentation for performance monitoring.
- Served as principal geotechnical engineer on several high-rise structures such as the 26-story 3 PNC Plaza and 40-story 4 PNC Plaza with three (3) levels of underground garages in Pittsburgh, PA. Special geotechnical issues involved design of deep foundations subjected to high downward and uplift forces, support of excavations extending below ground water table, underpinning of foundations of adjacent buildings and special ground improvement techniques.
- Responsible for geotechnical investigation and supervision during the construction phase of large shopping centers. Geotechnical considerations involved foundations support systems or variable foundation bearing medium, deep cuts and high fill embankments, earth retainage systems such as MSE walls, soil-nail walls, soldier beam-lagging walls, pavement design, blasting requirements and instrumentation programs.
- 1988 to 1990, Geotechnical Engineer for M.A. Iqbal Consulting Engineers, Reading, PA. Assignments included, but not limited to, subsurface soil investigation; design, analysis and selection of foundations; preparation of soils and foundation reports, and earthwork specification for one airport, one storage facility consisting of six silos, one water treatment plant and three shopping centers. Involved in slope stability, liner design, preparation of specification for a landfill in Cumberland, Pennsylvania.
- Developed instrumentation programs and supervised installation and monitoring of various types of instruments. These include inclinometers, piezometers, settlement rods, plates and remote sensors, bonded strain gages, etc. and provided data about embankment cut slopes and retaining structures behavior and performance.



**M. Andrew Lafferty, P.E.**

**Project Engineer**

**Education:**

M.S. in Civil Engineering, University of Pittsburgh (2003)  
B.S. in Civil Engineering, Penn State University (1997)

**Active Professional Registrations:**

Pennsylvania -- Civil Engineering (2007)

**Experience:**

15 Years with GeoMechanics, Inc.

**Detailed Project Experience:**

- Served as Project Engineer and/or Project Manager for geotechnical engineering studies involving analysis and design along with preparation of formal reports for commercial and residential developments, state prison additions, school additions, retaining structures and industrial foundations.
- Prepared geotechnical engineering reports, recommendations and specifications for highway, bridge, landslide, retaining wall, reinforced soil slope and commercial projects.
- Performed geotechnical engineering design for cut and fill slopes and structure foundations, including abandoned mine land reclamation and stabilization of abandoned deep mines, for major highway projects.
- Prepared specifications and construction drawings including special geotechnical treatments for highway projects.
- Prepared specifications and construction drawings for mine stabilization grouting programs and compaction grouting programs.
- Supervised subsurface boring contract during geotechnical engineering design phases for new highway projects including drilling and laboratory testing programs.
- Performed geotechnical analyses such as slope stability, settlement, bearing capacity, resilient modulus determination, pavement design, retaining wall design, reinforced soil slope design, pile design and caisson design.
- Performed evaluation of bearing capacity and settlement for a variety of deep foundation systems to include drilled shafts (caissons), H-piles, pipe and auger cast-in-place piles.
- Performed geotechnical analyses using computer software, such as DigiPro (inclinometer data), DARWin (pavement), STEDWin (slope stability), FHWA RSS (reinforced soil slope), SPILE (pile capacity), LPILE (lateral pile capacity and deflection) and GRLWEAP (pile driveability).
- Performed and coordinated site sampling and preparation of soil and rock samples for acid base accounting test program to be used in the determination of acid forming potential of exchange material. Performed alkaline quantity and application rate analysis for the treatment of potential acid forming material to be used in highway embankments.
- Supervised and coordinated field inspection personnel for phases of geotechnical construction.
- Performed data collection and reduction for monitoring instruments such as settlement monuments, pile load tests, vertical inclinometers and vibratory wire gauges.
- Performed and coordinated site sampling and preparation of soil and rock samples for laboratory testing programs.
- Served as resident geotechnical engineering technician on earthmoving projects that include housing developments, commercial buildings and several story office buildings. Work included in-situ testing of soil using Nuclear Densimeter and one-point proctor tests; concrete testing such as slump, air entrapment and preparation of testing cylinders; foundation inspection for strip footings, augercast piles and caissons; and instrument monitoring and data reduction for vertical inclinometers, settlement monitoring instruments and pile load tests.



**Walter M. Lorence, P.E.**

**Vice President / Senior Geotechnical Engineer**

**Education:**

B.S.C.E., 1970, Carnegie-Mellon University  
Post-Graduate Credits in Geotechnical Engineering,  
Carnegie-Mellon

University and University of Pittsburgh

**Continuing Education Courses:**

Current Practices in Pile Design and Installation  
Rapid Excavation and Tunneling  
Management of Uncontrolled Hazardous Waste Sites  
Geotextiles and Geomembranes in Construction  
Rock Mechanics in Civil and Mining Engineering

**Professional Affiliations:**

American Society of Highway Engineers  
American Society of Testing and Materials  
Society for Mining, Metallurgy, and Exploration, Inc.

**Project Assignment:**

Mr. Lorence is Senior Project Manager responsible for all phases of project development and is Technical Director of the AMRL-accredited laboratory of GeoMechanics, Inc.

**Professional Registration:**

Professional Engineer, Pennsylvania (1974)

**Detailed Project Experience:**

Mr. Lorence has 42 years of geotechnical engineering experience on projects located throughout the United States and in Asia. As a Principal of GeoMechanics, Inc., he is responsible for all phases of project development, beginning with client contact/proposal preparation and ending with design/ report submission and construction certification. He has served a Project Manager/Principle Investigator for projects involving all forms of intrusive (borings, test pits, DMT, penetrometer, pressuremeter, vane shear) and remote sensing (seismic refraction, electrical resistivity, VLF electromagnetic induction, electromagnetic conductivity) exploration techniques.

Mr. Lorence is Technical Director of the AMRL-accredited laboratory of GeoMechanics, Inc. and, as such, is knowledgeable about the various testing methods employed as well as the interpretation and application of the test results. Using the subsurface exploration and laboratory testing data, he has performed detailed geotechnical engineering analyses and has developed discrete recommendations for design and construction of earth and rockfill dams; Interstate and Class 1 highways; building and structure foundations; municipal, residual and hazardous waste disposal facilities; retaining walls and excavation supports; seepage and ground water control/ manipulation; and so on.

Mr. Lorence is also the Radiological Safety Officer of GeoMechanics, Inc.

Specific examples of project-related experience of Mr. Lorence are as follows:

- **PA Turnpike Open-End Contracts** - Mr. Lorence is currently serving and has recently served as Contract Manager for three (3) separate systemwide open-end contracts for geotechnical engineering services with the Pennsylvania Turnpike Commission. He is/was responsible for coordination with the PTC's geotechnical manager, preparation of Technical and Price Proposals for the individual Work Orders, assignment of technical and support staff, tracking progress, technical review of in-house work products and preparation of monthly invoices and progress reports.
- **Phase 3, 4 and 5 Student Housing and Vulcan Parking Garage, California University of PA** - Mr. Lorence served as Project Manager for all geotechnical aspects of design and construction of Residence Halls A through F and the Vulcan Parking Garage at the California University of Pennsylvania in California, Pennsylvania. Design services included directing detailed subsurface and mining investigation and laboratory testing programs; conducting bearing capacity, settlement, slope stability, mine subsidence prediction and heaving (mineralogical expansion) analyses; preparing recommendations for the type and depth of building foundations, allowable soil/rock pressures, type and extent of subsurface stabilization/ improvement; and preparing specifications for deep mine stabilization and for treatment of pyritic materials exposed at building subgrade. Construction services included supervision of monitoring and testing personnel for deep mine stabilization, treatment of pyritic materials, site grading and building foundation installation.
- **Consol Energy Center and Parking Garage** - Mr. Lorence recently served as Project Manager and Principal Investigator for geotechnical issues during the design and construction of this new multi-use arena that is the home of the Pittsburgh Penguins and the associated parking garage in the City of Pittsburgh, Pennsylvania. Spread footings bearing on competent bedrock were selected for the north portions of both structures. However, historic fill and building rubble to moderate depths and weak subcropping bedrock (claystone) were present under the south building areas; and high capacity (up to 1,400-ton service load) caissons socketed into bedrock were used to support the column loads.

Stringent differential settlement tolerances would normally have dictated the use of a structurally-supported floor slab for the ice surface. However, rammed aggregate piers were used to improve the load-carrying and settlement characteristics of the subsurface materials, including the historic fill and building rubble; and conventional slab-on-grade construction was used at a substantial cost savings.

- **PNC Park** - Mr. Lorence was Project Manager and Principal Investigator for geotechnical issues during the initial feasibility study, final design and during construction of this new baseball facility in the City of Pittsburgh, PA. Rubble fill and demolition wastes to moderate depths and weak subcropping bedrock (claystone) were primary considerations in selection of the appropriate type and depth of foundations for the park. High capacity (115-ton service load) augercast piles embedded 15 feet into dense fluvio-glacial sand and gravel were ultimately selected for support of ballpark foundations, and their capacity was verified by a series of pile load tests. The presence of a 10-foot diameter deteriorated combination sewer at shallow depths presented a unique challenge during construction. Mr. Lorence was responsible for the analysis and design of a timber matting system to protect the sewer during staging of the large erection cranes.
- **Ford City Bridge** - Mr. Lorence was Project Manager for the geotechnical engineering design and for consultation during construction of a 3-span bridge carrying State Route 128 over the Allegheny River in Ford City, PA. The 2 river pier foundations were designed as spread footings bearing on top of a 9-meter thick tremie concrete seal placed to bedrock. Problems were experienced during excavation and placement of the tremie seal at Pier 1. Confirmation drilling encountered up to 1 meter of river sediment between the tremie seal bottom and bedrock and a large zone within the tremie concrete where segregation had occurred, most likely due to loss of the tremie seal during concrete placement. High capacity pin piles (mini piles) socketed into bedrock were ultimately selected to bypass the tremie seal and to transfer the bridge foundation loads to the underlying competent sandstone bedrock. Mr. Lorence was responsible for consultation with PennDOT and the Contractor in selection of the method of rehabilitation, geotechnical review of the remedial design, supervision and monitoring of 2 pile load tests to confirm pile design capacity, and observation/documentation of production pile installation. The pile load tests were performed to 2.5 times the original design load. The Contractor was then permitted to modify the pin pile design to accommodate a safety factor of 2 applied to the maximum test load.
- **Alum Run Dam** - Mr. Lorence served as the Construction Manager and Engineer-of-Record during construction of Alum Run Dam, a 350' high slurry impounding dam in Eastern Ohio. His responsibilities included coordination with the Owner and the USACOE-appointed Board of Consultants, planning of the separate construction stages, preparation of plans and specifications for bidding of the various construction stages, design of modifications necessitated by field conditions and varying mine production rates, construction observation/documentation and construction certification. Mining operations were terminated prematurely, and construction was topped off at a height of 180 feet. The dam and reservoir were abandoned by reservoir filling, controlled embankment breaching and stream channel reconstruction.

#### **Publications:**

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Lorence, W.M., Alvi, J.M. and Murphy, B.J., "Augered Cast-in-Place Piles in Flood Plains", The Deep Foundations Institute Specialty Conference, Pittsburgh, Pennsylvania, 2001.

Lorence, W.M., Rudenko, D. and Ackerman, H.D., "Seismic Refraction Technique Applied to Highway Design in a Strip-Mined Area of Southwestern Pennsylvania", 42nd Annual Highway Geology Symposium, Albany, New York, 1991.

Lorence, W.M. and Alvi, J.M., "Anchored Earth Embankment Flood Protection and River Erosion", U.S. - Pakistan Binational Symposium on Mechanics of Alluvial Channels, Lahore, Pakistan, 1985.

**ASHOK M. SANGHAVI, P.E., DEE, QEP  
PRESIDENT**

As the president of the firm, he manages all the projects, assuring professional work and timely completion of work at reasonable fees. He has *hands on* experience in planning, design and construction management and troubleshooting activities in water supply, wastewater, and environmental fields. He has provided technical expert testimony in courts on drainage control, sediment control, wastewater discharges and environmental impacts. He has thorough knowledge of federal and state grant/loan programs and has been very successful obtaining favorable grant/loan packages for all the projects.

Forty Three years of professional experience in environmental, water supply, wastewater, solid wastes management, industrial wastewater, pre-treatment, civil and mining engineering fields. He has provided planning, design, construction management and technical expert testimony for environmental and general civil engineering projects. He has prepared Phase I environmental site assessments and carried out subsequent Phase II and Phase III remediation work. He has also prepared portions of environmental impact statements for highway projects. Having worked for state government, as well as private firms, he thoroughly understands both sides, which results in extremely satisfactory completion of a project. He has extensive knowledge of the state and federal water supply, and wastewater laws and regulations.

**City of Huntington, Cabell County, WV** - Sub-Consultant for Hal Greer Blvd. Sewer Extension Project. Field surveying, mapping, ROW, Permitting and construction stakeout.

**City of Huntington, Cabell County, WV** - Sub-Consultant for Orchard Avenue Sewer Extension Project. Permitting and construction inspection.

**City of St. Marys, Pleasants County, WV** - Planning, design, and construction management of water & sewer line replacements in several city blocks, one (1) water storage tank, street paving and related work. Total project cost \$ 7,740,000. Approximately \$450,000 leftover in budget - to be used to purchase equipment. Expected project completion of March 2013.

**Nitro Regional Wastewater Utility, Kanawha County, WV** - Planning, design, and construction management of an upgrade of the wastewater treatment plant's elevated headworks with two (2) new mechanical fine screens and Pista grit removal system, installation of two (2) new parshall flumes and flowmeters, construction of a new 80'x44' garage / maintenance building and replacement of Pump Station No. 7. Total project cost \$ 3,035,000. Approximately \$180,000 leftover in budget - used to purchase new billing software / hardware, two (2) flow meters, and a video inspection system. Project completed in January 2012.

**Kanawha PSD, Kanawha County, WV** - Planning, design, and construction management of 6 miles of gravity sewer & force mains, two (2) pump stations and three (3) grinder pump stations for Winifrede Hollow. Total project cost \$ 5,370,000. Approximately \$450,000 leftover in budget - used to purchase sewer vacuum truck, skid steer, trailer, replacement of diffusers in Aeration Basin No. 1 & 2, renovation of old belt press building and conversion to laboratory. Project completed in June 2011.

**Project Assignment**  
President

**Name of the Firm**  
S & S Engineers, Inc.

**Years of Experience**  
With the Firm - 33  
Total Years of Experience - 43

**Educations**  
M.S.C.E. (Environmental Engineering) 1970  
Partial course work for Ph.D.

**Registrations**  
Registered Professional Engineer, West Virginia  
Registered Professional Engineer, Ohio  
Registered Professional Engineer, Kentucky  
Registered Professional Engineer, Virginia  
Diplomate, American Academy of Environmental Engineers  
Qualified Environmental Professional, IPEP

**City of St. Marys, Pleasants County, WV** - Planning, design, and construction management of water & sewer line replacements in 12 city blocks, two (2) water storage tanks, street paving and related work. Total project cost \$ 5,350,000. Leftover funds used to replace all water meters with RFID meters. Project completed in October 2010.

**Town of Winfield, Putnam County, WV** - Planning, design, and construction management of the replacement of three (3) pump stations and force mains, upgrade of one pump station, gravity sewer replacement, and lagoons cleaning with land application of sludge on farmlands. Total project cost \$ 2,300,000. Approximately \$130,000 leftover in budget - used to purchase two (2) new lagoon aerators, four (4) spare pumps and two (2) emergency generators. Project completed in October 2010.

**Town of Sophia, Raleigh County, WV** - Planning, design, and construction management of 6.5 miles of sewer & force mains, one pump station and one grinder pump station. Total project cost of \$ 2,400,000. Approximately \$200,000 leftover in budget - used to install approximately one (1) mile of sewer & force mains and one pump station. Project completed in September 2008.

**Putnam Public Service District, Putnam County, WV** - Planning, design, and construction management of Kanawha Valley Sewer Project including 15 miles of sewer & force mains, 6 pump stations, 13 grinder pump stations, 6 emergency generators, master flowmeter, etc. Total project cost of \$7.2 million. Approximately \$700,000 leftover in budget - used to purchase TV/Camera inspection system, an excavator, and for the replacement of an existing pump station & one (1) mile of force main. Project completed in August 2007.

**Chelyan PSD, Kanawha County, WV** - Cabin Creek Sewer Extensions - 20 miles of sewer extensions and treatment plant upgrading. (Total Estimated Project cost - \$13 million). Phase I of this project was completed in August 2000 (\$5.8 million). Phase II involves sewer extensions and treatment plant upgrading from 0.815 mgd to 1.63 mgd. Project completed in November 2003. Approximately \$400,000 leftover in budget - used to install and construct a 1.5 meter belt filter press and building.

**Chelyan PSD, Kanawha County, WV** - 14 Miles of Sewer Extensions and Treatment Plant Upgrading: Project involved sewer extensions to Witcher Creek, Diamond, Quincy Center, Carroll Branch, and wastewater treatment plant expansion including 2 clarifiers, 0.7 meter belt filter press, and UV disinfection system. Total project cost of \$2.7 million. Project completed in May 1996.

**JESSIE O. PARKER, JR., P.E.**  
**VICE PRESIDENT**

Ten years of civil engineering projects including water, wastewater, storm sewers, drainage calculations, grading plans, inspections, payment request approvals, quantity & cost estimates, having worked with Contractors, City & PSD personnel, private sector, regulatory and funding agencies, he is able to move the project in a professional, cost-effective and timely manner.

**City of St. Marys, Pleasants County, WV** - Planning, design, and construction management of water & sewer line replacements in several city blocks, one (1) water storage tank, street paving and related work. Total project cost \$ 7,740,000. Approximately \$450,000 leftover in budget - to be used to purchase equipment. Expected project completion of March 2013.

**Nitro Regional Wastewater Utility, Kanawha County, WV** - Planning, design, and construction management of an upgrade of the wastewater treatment plant's elevated headworks with two (2) new mechanical fine screens and Pista grit removal system, installation of two (2) new parshall flumes and flowmeters, construction of a new 80'x44' garage / maintenance building and replacement of Pump Station No. 7. Total project cost \$ 3,035,000. Approximately \$180,000 leftover in budget - used to purchase new billing software / hardware, two (2) flow meters, and a video inspection system. Project completed in January 2012.

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**City of St. Marys, Pleasants County, WV** - Planning, design, and construction management of water & sewer line replacements in 12 city blocks, two (2) water storage tanks, street paving and related work. Total project cost \$ 5,350,000. Leftover funds used to replace all water meters with RFID meters. Project completed in October 2010.

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**Project Assignment**

Vice President

**Name of the Firm**

S & S Engineers, Inc.

**Years of Experience**

With the Firm - 10

Total Years of Experience - 10

**Educations**

**WVU Institute of Technology, Montgomery, WV** - B. S. Civil Engineering - December 2002

**Marshall University, South Charleston, WV** - M.S. Engineering - May 2006

**Registrations**

Registered Professional Engineer, West Virginia

**RANDY BROOKS CRACE, P.S.**  
**VICE PRESIDENT**

Thirty Eight years of surveying and technical experience. Areas of concentration in boundary surveys, mapping, topography, subdivisions, annexations, right of ways, subdivision development, construction stakeout, solid waste disposal permits, aerial mapping controls, GPS-RTK survey control networks, oil and gas well locations, land development projects, wastewater collection systems, surface and underground mining permits, construction stakeout, hydrology, erosion and sediment control plans, stormwater retention systems, site grading plans, parking lot layout, WVDOH driveway permits, AutoCadd / Softdesk / Eagle Point / software programs, Geographic Information Systems, Phase I - ASTM environmental site assessment and expert witness testimony in surveying field.

**Marshall University, Huntington, WV** - Boundary and topography surveys with design-build team for 5<sup>th</sup> Avenue Parking Garage.

**Huntington Urban Renewal Authority, Huntington, WV** - Property survey and maps of 20 parcels along Artison Avenue.

**Pyramid Properties, LLC, Huntington, WV** - Property surveys and maps with utilities of over 35 parcels in and around Huntington.

**Candlewood Suites, Logan, WV** - Property survey, Phase I-ESA, site planning, grading, drainage & permits for 72 room motel in Logan, WV.

**McDonald's Restaurants in Huntington Area**- ALTA/ACSM surveys, topographic mapping, civil drawings with grading plans, utility connection plans, stormwater control/retention, sediment control plans, and Phase I ESA on commercial sites for over 160 restaurants throughout West Virginia, Ohio and Kentucky.

**Harbinger Development** - ALTA/ACSM surveys, topographic mapping, civil drawings, grading plans, utility plans, stormwater control/retention, sediment control plans, WV/NPDES Stormwater permits, DOT driveway permits, for various apartment complex developments throughout West Virginia.

**Wendy's Restaurants** - ACTA/ACSM Surveys, topographic mapping, civil drawings with grading plans, utility connection plans, stormwater control/retention, sediment control plans, DOT driveway permits and Phase I Environmental Site Assessments for commercial development throughout West Virginia, Ohio and Kentucky.

**Former Owens Illinois Plant, Four Pole Creek** - Groundwater monitoring wells, surveys for GPS/GIS and elevation data.

**Shaw Environmental, Quaker State Terminal** - GPS/GIS and environmental data on ground water monitoring wells.

**West Virginia State Police** - Land surveying and topographic mapping for new building projects statewide.

**Kanawha County Schools** - Land surveying services including topographic mapping, flood elevation certificates, construction stakeout and expert witness on boundary rights.

**Kanawha County Parks and Recreation Commission** - Land surveying and topographic mapping, site grading plans, stormwater management plans and utility plans for new amphitheater and soccer complex.

**Project Assignment**  
Vice President

**Name of the Firm**  
S & S Engineers, Inc.

**Years of Experience**  
With the Firm - 30  
Total Years of Experience - 38

**Educations**  
**MUCGS, Institute, WV**  
Attended graduate classes toward M.S., Major in Environmental Studies

**West Virginia State College, Institute, WV - BA**  
Major Industrial Technology

**Registrations**  
Professional Surveyor, West Virginia, 1982 Professional Surveyor, Ohio, 1990 Registered Surveyor, Kentucky, 1982