Triad Engineering, Inc.

Expression of Interest



West Virginia Division of Natural Resources
Pipestem Resort SP Wastewater Improvements
CEOI 0310 DNR 1900000003

10541 Teays Valley Road | Scott Depot, WV 25560 304-755-0721 | www.triadeng.com





Purchasing Divison 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130

State of West Virginia Centralized Expression of Interest 02 — Architect/Engr

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2019-02-01	2019-02-22 13:30:00	CEOI 0310 DNR1900000003	1

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VENDOR					
endor Name, Address and Telephone Number:					

FOR INFORMATION CONTACT THE BUYER		
Guy Nisbet		
(304) 558-2596		
guy.l.nisbet@wv.gov		
January.		

All offers subject to all terms and conditions contained in this solicitation

Page: 1

FORM ID: WV-PRC-CEOI-001

DATE 2/20/19

ADDITIONAL INFORMATION:

Expression of Interest Request

The West Virginia Purchasing Division is soliciting Expression(s) of Interest for the Agency, The Division of Natural Resources from qualified firms to provide necessary engineering, and other related professional services to design and specify for construction as well as provide construction contract administration, for repairs and renovations to certain wastewater treatment and collection systems at Pipestern Resort State Park. The planned improvements may also include any other work necessary for, or related to, the aforementioned facilities, as well as any other necessary and conditions as attached hereto.

* Online submissions of Expressions of Interest are Prohibited

INVOICE TO	2HP 70
DIVISION OF NATURAL RESOURCES PARKS & RECREATION-PEM SECTION	SUPERINTENDENT DIVISION OF NATURAL RESOURCES PIPESTEM STATE PARK
324 4TH AVE	3405 PIPESTEM DR
SOUTH CHARLESTON WV25305	PIPESTEM W 25979-0150
US	us

	Line.	Comm Ln Desc	. Qty	Unit issue	
	1	Civil engineering			
1			-		

Comm Code	Manufacturer	Specification	Model #
81101500			

Extended Description:

Architectural/engineering services and contract administration for wastewater treatment and collection systems at Pipestern Resort State Park.

	Document Phase	Document Description	Page 3
DNR1900000003	Draft	A/E Services for Pipestem Resort SP	
		Wastewater Improvements	

ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions

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February 22, 2019

Mr. Guy Nisbet
Department of Administration
Purchasing Division
2019 Washington Street E
Charleston, West Virginia 25305

RE: West Virginia Division of Natural Resources
Engineering Services for Pipestem Resort State Park Wastewater
Improvements
CEOI 0310 DNR1900000003
Triad Proposal No. 04-18-0532

Dear Mr. Nisbet:

Triad Engineering, Inc. (Triad) is pleased to submit this Expression of Interest to provide engineering services for the repair or renovations to the wastewater treatment and collection systems at Pipestem Resort State Park, located in Summers County, West Virginia.

We are confident that the information in the enclosed documentation will illustrate that we are capable of providing all of the necessary services to satisfactorily address the Park's wastewater needs, and provides our team's level of understanding and expertise. Triad will work closely with DNR staff, system operators and park personnel, communicating on a regular basis throughout all phases of the project.

We trust this submittal provides the information you require. Should you have any questions or require additional information, please contact the undersigned.

Very truly yours,

TRIAD ENGINEERING, INC.

Larry "Lee" McCoy, PE

Civil Engineering Services Manager

David F. Meadows, PE, PS Chief Technical Officer

Southwestern Regional Manager



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COMPANY BACKGROUND

Triad Engineering, Inc. is a multi-disciplinary engineering firm based in the Mid-Atlantic region specializing in the areas of geotechnical engineering, civil and utility engineering, surveying, construction materials engineering and testing and inspection, environmental consulting services, drilling, and other earth science related disciplines. Since its founding in Morgantown, West Virginia in 1975, Triad has provided engineering consulting services on thousands of projects of varying size and complexity.

Triad currently maintains approximately 175 technically sound employees located in seven offices across five states. Our work force includes environmental scientists, geologists, hydrologists, civil, geotechnical and mining engineers, landscape architects, chemists, surveyors, trained Computer-Aided Design (CADD) draftsmen, field and laboratory technicians, drillers, and support personnel. We pride ourselves on a very low turnover rate, which adds to continuity and enhances the level of productivity and experience afforded by Triad.

With over 42 years of service in West Virginia and surrounding states, facilities and equipment available to support our staff have continued to evolve through the years to adapt to the changing needs of the market. We have developed a fleet of drill rigs and support vehicles to meet the needs of our field operations. Well-equipped material testing laboratories are maintained to provide support for our geotechnical engineering and construction monitoring projects.

Each office maintains networks to support CADD functions, hydrogeologic evaluations, water balance modeling, roadway design, storm water management and surface water drainage, design, stability analyses, risk assessment, survey data reduction, and mapping. These broad, in-house capabilities give Triad better control over project schedule, quality and cost, thereby minimizing problems that can occur during the various contract phases

Scott Depot

10541 Teays Valley Road Scott Depot, WV 25560 304-755-0721 Phone

Pittsburah

201 Penn Center Boulevard Suite 400 Pittsburgh, PA 15235 412-257-1325 Phone

Athens

1005 East State Street Suite 10 Athens, OH 45701 740-249-4304 Phone

Winchester

200 Aviation Drive Winchester, VA 22604 540-667-9300 Phone

Northern Virginia

46040 Center Oak Plaza Suite 180 Sterling, VA 20166 703-729-3456 Phone

Morgantown

1097 Chaplin Rd. Morgantown, WV 26501 304-296-2562 Phone

Hagerstown

1075-D Sherman Avenue Hagerstown, MD 21740 301-797-6400 Phone



PROJECT OVERVIEW AND BRIEF APPROACH TO MEETING PROJECT GOALS AND OBJECTIVES



Park Entrançe

The Pipestem Resort State Park operates and maintains five wastewater systems. Each of the systems have an extended aeration package treatment plant, all discharging to the Bluestone River.

The McKeever Lodge/Clubhouse wastewater system serves the 113-room lodge, restaurant, conference center, and clubhouse associated with the golf club. The collection system consists of terra cotta lines and brick manholes. The treatment plant has a capacity of 0.04 MGD.

The Recreation/Visitor Center wastewater system serves the Recreation Center, the Visitor Center, the park headquarters, and the park laundry facilities. The collection system consist of terra cotta line and brick manholes. The treatment plant has a capacity of 0.01 MGD.

The Cottages system serves 25 cabins. The collection system consists of terra cotta lines and brick manholes. The treatment plant has a capacity of 0.01 MGD.

The Mountain Creek Lodge system serves the 80-room lodge and restaurant. The collection system consists of terra cotta lines and brick manholes. The treatment plant has a capacity of less than 0.01 MGD.

The Campground wastewater system serves the 150-site campground and dump station. The collection system consists of terra cotta line and brick manholes. The treatment plant has a capacity of 0.008 MGD.

Built in the 1970s and 1980s, the aeration package plant equipment is antiquated and needs replaced and the plants rehabilitated. The collection systems, consisting of terra cotta clay pipe, likely allow significant inflow/infiltration. The dump station at the Campground wastewater plant presents challenges in meeting NPDES permit requirements. The chemicals used in RV holding tanks to control odor and dissolve solids shock biological sewage treatment units and reduce their efficiency.

Based on the request for qualifications and our site visit, we understand the Division of Natural Resources desires to make improvements to the to the various wastewater treatment and collection systems, specifically the Lodge, the Campground, and the Recreation/Visitor Center systems. Engineering services required may include:

- Feasibility studies/reviewing existing conditions, interview personnel
- Present options/make recommendations
- Preliminary engineering services
- Preparation of construction documents including plans and specifications, permit applications



- Bidding and contracting assistance including evaluation of bids
- Construction administration including construction observation services, as needed.

Triad's team has substantial experience with wastewater projects, both new and retrofit, as can be seen in the attached Past Project Experience and References.

Our team has provided assistance ranging from capital improvement projects, funding assistance, environmental analysis, on-going technical / management consulting services, planning and programming, design, and construction phase services for facilities and site infrastructures. We deliver assistance and guidance in resolving problems while providing high quality and innovative solutions through sustainable design.



Package Plant

The Triad Team will complete this project with proven experience and resources by forming a team to design, manage, and provide construction administration for the project. The following is a general project breakdown of information available, design a project that meets all owner and regulatory agencies requirements; oversee the construction of the project to ensure the project is built as designed and with minimal disruption of current system operations; and complete the project on time and within the budget.

PHASE I - INITIAL INVESTIGATION AND PRELIMINARY APPROVAL

Task 1 – Review Existing Conditions/Interview Personnel/Prepare Preliminary Engineering Report

We will perform a thorough review of all information available pertaining to the systems, including interviews with key personnel. Triad will supply the DNR with an assessment of the information and propose alternatives for the upgrades. This will be outlined in a Preliminary Engineering Report with supporting preliminary cost estimates.

Task 2 - Project Planning Meetings

We will schedule a meeting(s) with DNR officials and other stake holders to discuss the needs and possible solutions for the designated project. We will also schedule a meeting(s) with the various regulatory agencies to present the preliminary alternatives and receive their input.

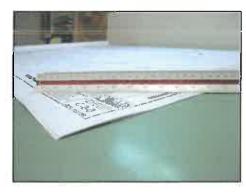


PHASE II - PRELIMINARY AND FINAL DESIGN

The following tasks will be accomplished as part of the preliminary and final design for these upgrades.

Task 1 - Selection of Alternatives

We will recommend specific alternatives for each project task. The decision will be based on cost, feasibility of construction, operation and maintenance concerns, and input from DNR officials and regulatory agencies.



Task 2 – System Mapping

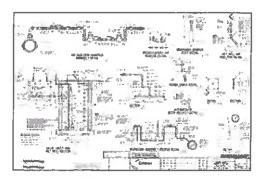
If system mapping is not already available, Triad surveyors will perform the necessary field and office work to provide accurate and up-to-date mapping of the project area. This survey will include planimetric features such as buildings, roads, utilities, drains, etc.

Task 3 – Preliminary Design

The Triad team will perform preliminary design of the proposed improvements, including geotechnical investigations, collection system layout, site design, structural design, selection of treatment equipment, and hydraulic analysis. The designs will be reviewed with DNR officials and permitting agencies for their comments.

Task 4 – Final Design

We will incorporate comments by DNR officials as well as regulatory and funding agencies into the final design for the project. We will then proceed with finalizing the preliminary design which may include:



- System Plans and Profiles
- Design of System Components
- Final Selection of Equipment
- Preparation of Details
- Preparation of Specifications
- Preparation of Contract Documents
- Preparation of a Final Cost Estimate
- Preparation of Design Report

The final design will be reviewed by with DNR officials and any necessary changes made.



Task 5 - Final Approval

The Triad team will be responsible for preparing permit applications, conducting meetings with various regulatory agencies, and making final revisions to the plans and specifications, if necessary.

PHASE III - BIDDING PHASE

Triad will assist DNR officials in preparing and placing the required advertisement(s) for construction of the proposed project. We will conduct a pre-bid meeting, address contractor questions, issue addendum, if any, conduct the bid opening, certify the bids, and make a recommendation of the lowest responsible bidder to DNR.

PHASE IV - CONSTRUCTION ADMINISTRATION AND OBSERVATION

Triad will provide construction administration and observation services for the duration of the proposed project. The Triad team will provide the following services during construction:

- Conduct a Pre-Construction Meeting
- Process Monthly Pay Requests
- Review Shop Drawings
- Attend Regularly Scheduled Meetings
- Conduct a Semi-Final and Final Inspection
- Preparation of As-Built Drawings
- Preparation of O&M Manuals

In addition, the Triad team will provide an engineering technician during construction to monitor the progress of the contractor. This can be provided on an as-needed or full time basis.



PROJECT COORDINATION AND COMMUNICATION

Triad will assign *Lee McCoy, PE* to serve as the Project Engineer. Mr. McCoy has 20 years of engineering experience with similar projects and has a proven track record of finishing project on time and on budget. Mr. McCoy will serve as a single point of contact for the project.

Triad will provide status reports during the planning and design phases of projects at a frequency requested by our clients. The status report provides regular updates on the project. Triad also holds regular internal meetings and conference calls from the start of the project to close out of the project. Meetings and calls permit all project team members to efficiently discuss project activities.



During the construction phase of the project, Triad will conduct progress meetings where all aspects of the project are discussed with the contractor and our client.

The progress meeting agenda typically includes the following:

- Outstanding Issues
- Work In Progress
- Critical Delays (Lead Time On Project Components)
- Non-Critical Delays
- Submittals
- Requests for Information
- Complete Items and Agreement on Quantities
- Dispute Resolution
- Pay Requests
- Contractor Issues
- Open Discussion



QUALIFICATIONS

Triad has assembled a team of individuals with broad experience to bring knowledge and expertise to your project. The professional staff assigned to this project possesses the necessary and exceeding qualifications in their areas of proficiency.

Our principal in charge, **David F. Meadows**, **PE**, **PS**, brings over 40 years of leadership, design construction and project management experience to Triad Engineering as the Southwestern Regional Manager and Chief Technical Officer. Prior to coming to Triad in 2013, Mr. Meadows served a number of technical and leadership positions at the US Army Corps of Engineers, Huntington District. His expertise includes civil design, geotechnical engineering, construction management, surveying, environmental remediation and water resources engineering.

Larry "Lee" McCoy, PE, is the Civil Engineering and Utilities Department Manager for the Scott Depot office of Triad. Mr. McCoy has designed and managed projects in numerous disciplines including wastewater collection and treatment, potable water distribution and treatment, transportation engineering, site development, planning and surveying. Mr. McCoy has been responsible for numerous utility projects across the region that include water and wastewater systems, feasibility studies, utility design, storm water quality design, and storm water management. Mr. McCoy also has extensive experience in projects including streets/highways, bridges, retail/commercial site preparation, parking lots, buildings, retaining walls/foundations, as well as recreational facilities.

Mike Yandrich, PE, is currently a Senior Utilities Engineer for Triad. Mr. Yandrich has worked as both a government official and a design engineer in review, development, and state and local permitting of a wide variety of projects including water, wastewater, "green" roof, structural, and electrical/renewable energy. Mr. Yandrich's educational background includes environmental engineering, ecological engineering, civil engineering, wastewater collection and treatment, storm water conveyance, water distribution systems, storm water pollution control, stream restoration, and wetland design and restoration. Mr. Yandrich's duties have included hydrologic and hydraulic analysis and design, storm water management, drawing and specification preparation, construction inspection, shop drawing review, permitting, and report preparation and review.

Carrie Grimm is the Utilities Project Manager for Triad. Ms. Grimm has over 30 years of project management and funding experience. She is responsible for funding acquisition assistance to clients for water and wastewater projects, facilitating communication between Triad's clients and funding agencies, processing and tracking draw down of funds, supporting senior level engineers on impact of project costs to utility charges, preparation of status reports and facilitating and attending community meetings. Ms. Grimm also works with senior level engineers in preparation of asset management plans for clients.



Todd Griffith, PE, is the Geotechnical Engineering Services Manager at the Scott Depot office of Triad. Mr. Griffith possesses over 13 years of geotechnical engineering experience working with public agencies on projects involving site and subsurface investigations, design and construction of new or modified bridge foundations, cut slow analysis and design, fill slope analysis and design, the elevation and design of earth retainage structures (i.e., earthen dams, MSE walls, reinforced soil slopes), laboratory testing and stream bank erosion mitigation.

Lloyd Kirk, PS, is currently the Survey Manager for the Scott Depot office of Triad. In this capacity, he is responsible for the supervision of the survey crews, overseeing the field work through drafting to the finished product delivered to the client, meeting with clients, and performing field work on large and complex projects. Mr. Kirk is experienced in, construction layout, boundary and road work surveying, photogrammetric and topographic surveying. Mr. Kirk has been involved in survey projects in several states including West Virginia, Kentucky, Virginia, South Carolina and North Carolina.

Jobe Hope is the Field Services Manager for the Scott Depot office of Triad. In this capacity he oversees the field staff, by handling calls from technicians on technical matters, staffing and scheduling and serving as the branch RSO. Mr. Hope also handles and in house QA/QC, schedules training classes, keeps all records of inspections and calibrations. In addition, he also writes proposals for perspective jobs, assigns new jobs and lab work and writes all QC plans.

The roles of our most qualified personnel are illustrated on our organizational chart and discussed in the attached resumes provided in Attachment A.



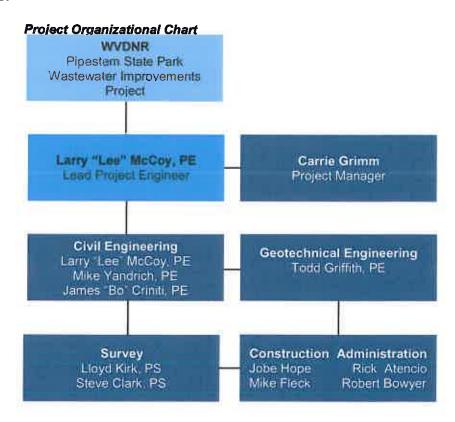
MANAGEMENT AND STAFFING

Engineers

All of the engineers who will provide services for this project are registered professional engineers and are in good standing.

Professional Liability Insurance

Triad Engineering, Inc. carries Errors and Omissions Professional Liability Insurance, Commercial Liability Insurance, and Automobile Liability Insurance, all at least \$1,000,000.



Experience and Expertise

All of the information under the *Past Project References* attachment clearly shows that Triad has extensive experience in similar projects. The materials provided also indicate that the Triad team assembled for this project has the expertise necessary to complete this project.

Capacity to Perform Project Scope

Triad provides a full range of in-house services including designing, surveying, drilling and testing, construction monitoring and environmental services. Our company maintains a staff of approximately 175 technically sound employees. Our footprint stretches across seven offices in five states where, should the need arise, we can call upon those resources at any time.



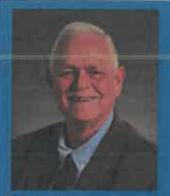
ATTACHMENT A Staff Résumés







CHIEF TECHNICAL OFFICER, SOUTHWESTERN REGIONAL MANAGER, SENIOR ENGINEER



EDUCATION

M., Civil Engineering
(Geotechnical), 1987, Virginia
Polytechnic Institute and State
University, Blacksburg, Virginia

M.S., Civil Engineering, 1981. West Virginia College of Graduate Studies, Charleston, WV

B.S. Civil Engineering, 1974. West Virginia Institute of Technology, Montgomery, WV Graduated Cum Laude.

PROFESSIONAL EXPERIENCE 43 Years

REGISTRATIONS & LICENSES Registered Professional Engineer: WV Registered Professional Surveyor-

Professional Affiliations
WV Society of Professional
Surveyors
National Society of Professional
Surveyors
American Society of Civil
Engineers
Fellow-Society of American
Military Engineers

SKILLIS

- Geotechnical Engineering
- Engineering Management
- Surveying
- Civil Engineering
- Environmental Assessments

HIGHLIGHTS OF EXPERIENCE

Mr. Meadows brings over 40 years of leadership, design, construction and project management experience to Triad Engineering. Mr. Meadows joined Triad in 2013 to provide management to the southwest region which includes the southern West Virginia area and the Athens, Ohio office. Mr. Meadows has recently been named Triad's Chief Technical Officer. In this capacity he helps with technical expertise, quality and risk management, operations management, leadership and business development.

Prior to coming to Triad he served in a number of technical and leadership positions at the US Army Corps of Engineers, Huntington District. His expertise includes civil design, geotechnical engineering, construction management, surveying, environmental remediation and water resources engineering.

RELEVANT EXPERIENCE

Triad Engineering, Scott Depot, WV

Mr. Meadows has played an important role in maintaining the technical quality and management of the region, while being very active in business development. Besides managing all phases of operations for the Scott Depot, WV and Athens, OH offices, Mr. Meadows is responsible for management and planning of all civil engineering design projects; environmental assessments; surveying and mapping; water/wastewater engineering design projects; construction monitoring and testing operations; geotechnical investigation projects; and soils and concrete laboratory work in the region.

US Army Corps of Engineers, Huntington, WV

Chief H&H and Technical Support Division, Great Lakes and Ohio River Dam Safety Production Center and Dam Safety Modification Mandatory Center of Expertise. Mr. Meadows was responsible for developing and directing the Division's efforts to manage the regional execution of complex, non-routine, regional and inter-regional dam safety modifications, engineering assessments and risk and reliability analyses throughout the infrastructure capital stock portfolio of the U.S. Army Corps of Engineers. He primarily accomplished this mission through twelve senior technical staff (Hydraulic, Cost and Construction Engineers) who oversaw all complex technical aspects of modification work. He directed their work and provided them with strategic leadership, mentoring, coaching, counseling, team building, partnering, direction and management.

Chief, Engineering and Construction Division. Mr. Meadows was responsible to the District Commander for the Engineering and Construction functions associated with creating synergy between water resource development and the environment as it pertained to the Civil Works Program; responded to local, national, and global disasters; and provided full spectrum engineering and construction support to a geographic area comprising 45,000-square-miles. The district infrastructure includes 35 major flood control dams, nine locks and dam, and 29 major local flood protection projects. He provided technical, management, and strategic advice on engineering and construction matters. He directed a diverse staff of 215 team members engaged in all of the district's engineering design, construction, dam safety, levee safety, water management, flood damage reduction, navigation, flood proofing, and environmental enhancement, restoration and rehabilitation projects.

Chief, Water Resources Engineering Branch, Engineering and Construction Division. Mr. Meadows was responsible for planning, supervising and coordinating all hydrologic and hydraulic engineering, water control management and water quality activities of the Huntington District. These multiple discipline activities involved supervisory and program responsibility for studies, designs and reports through all stages of engineering investigations and planning, including preliminary examinations, surveys, review of surveys, urban studies, design reports and final construction plans and specifications for a wide variety of projects which included multiple-purpose projects for flood control, hydroelectric power development, navigation, water quality, and/or recreation, in various combinations, local flood protection projects, and channel improvement.

In addition to the above positions, Mr. Meadows has served as the Chief, Environmental and Remediation Section, Construction Management and Field Support Branch, Chief, Civil Design Section, Design Branch, Chief Soils & HTRW Section, Geotechnical Branch. He has also served as a Geotechnical Engineer, a Program Manager and a Hydraulic Engineer. During his career at the Corps he has worked on numerous projects such as the Yatesville Dam design and construction; West Columbus Floodwall, Williamson Central Business District Floodwall, Matewan Floodwall, Grundy Floodwall, Island Creek Flood Damage Reduction Project, Lower Mud Flood Damage Reduction Project and the Marlinton Flood Damage Reduction Project; R. C. Byrd, Winfield and Marmet Locks and Dam Replacement; Willow Island and Medahl hydropower additions; and the Bluestone, Zoar Levee, Dover, Bolivar, Beach City and Mohawk Dam Safety Modifications; and the Tom Jenkins Mineral Extraction. Mr. Meadows was responsible for the and engineering and construction management of the Summit Equipment Remediation, American Car and Foundry Remediation, West Virginia Ordnance Works Remediation and Operations & Maintenance; and the Zoar Levee Emergency Repairs. Directly responsible for the development of Flood-proofing Guide Plans and Specifications that resulted in numerous savings and adopted across the USACE.





EDUCATION West Virginia Institute of Technology, WV BS, Civil Engineering

PROFESSIONAL EXPERIENCE 19 Years

REGISTRATIONS & LICENSES

 Professional Engineer, WV, KY & OH

PROFESSIONAL AFFILIATIONS

American Society of Civil Engineers Society of American Military Engineers Association of State Flood Plain Managers

SKILLS

- Civil Engineering
- Transportation Engineering
- Site Development
- Planning and Surveying

HIGHLIGHTS OF EXPERIENCE

Mr. McCoy is currently the Department Manager for our Civil/Transportation Design Section and a Project Manager for the St. Albans office of Triad. In this capacity, he is responsible for the oversight of our civil engineering staff as well as the technical and management aspects of civil design and transportation projects within the office. Mr. McCoy has designed and managed projects in numerous disciplines including civil, structural and transportation engineering, site development, planning and surveying. These projects have included streets/highways, bridges, retail/commercial site preparation, airports, parking lots, buildings, retaining walls/foundations, sanitary structures, as well as recreational facilities. Duties included field surveying, drawings and specification preparation, design, design drafting, construction inspection, quality control testing, shop drawing review, project management, contract administration and report preparation.

RELEVANT PROJECT EXPERIENCE

Child Development Center Sewer Line Extension, Hanging Rock, Ohio

As lead engineer on this project, Mr. McCoy is responsible for the initial study to determine the most feasible and cost effective method for upgrading the existing sanitary sewer collection system. Based on the results of the study, the option of extending the line to the City of Ironton, Ohio's Waste Water Treatment Plant was chosen. The project includes several thousand feet of 3 inch diameter force main line, booster stations, and road and creek crossings.

Sue Morris Sports Complex, Glenville, WV

McCoy served as project manager and lead civil engineer for this project to plan and design a sports field project that included a NCAA regulation baseball field for the use of Glenville State University, as well as Gilmore County High School. The project also included two regulation Little League baseball fields, a building that houses a concession, restroom, box seating, and a meeting room.

Pendleton County Commission, Franklin, WV

Project Manager and lead designer for a park project near Ruddle, WV. This park includes baseball fields, jousting field, parking facilities, exercise trails, and concession building. Mr. McCoy also managed the preparation of construction documents and aided in the bidding of the project. As Project Manager and Lead Engineer, provided technical supervision and oversight to the civil site design for the construction of this \$300,000 Recreational/ Sport Park. This project included grading, drainage, roadway design, parking lot design, as well as all aspects of designing a large multi-use sports complex. As Project Manager, was also responsible ensuring that the site was able to acquire United States Corps of Engineers Permitting due to sensitive flood plain issues.

Portsmouth High School Athletic Complex, Portsmouth, OH

Mr. McCoy served as project manager and lead civil engineer for this 35 acre development in downtown Portsmouth Ohio. The project involved the planning, and design and preparation of construction documents for a football stadium, baseball field, softball field, tennis courts, outdoor basketball courts, dedicated running track, open green space, parking areas and an extensive underground storm water detention system to meet the stringent standards of the City of Portsmouth.

Oak Hill High School Baseball and Softball Complex, Oak Hill, OH

Mr. McCoy served as project manager and lead civil engineer for this 10 acre development on the campus of Oak Hill High School in Oak Hill, Ohio. The project involved the planning, and design and preparation of construction documents for a baseball field, softball field, tennis open green space, parking areas and an extensive underground storm water detention system, synthetic turf baseball infield, and irrigation for both facilities.

Wheelersburg High School Football and Softball Complex, Wheelersburg, OH

Mr. McCoy served as project manager and lead civil engineer for a football field renovation project and the development of a softball field on the campus of Wheelersburg High School in Wheelersburg Ohio. The project involved the planning, and design and preparation of construction documents for a softball field and the renovation of the football field complex. The football field complex included a new locker room facility, restroom and concessions building, new home bleachers and a synthetic turf surface with an extensive underground storm water detention system. The design documents for the softball field included a press box, sunken dugouts, backstop and perimeter fencing.

Boone County Sports Complex, Julian, WV

Boone County Parks and Recreation (BCPR) wanted to expand the activities at their existing 130 acre park site near Julian West Virginia. The park is home of the Waterway, a swimming and water slide facility. BCPR enlisted the help of Triad Engineering to expand the facility and to provide other recreational opportunities for the community. The only available land for the expansion was in the Little Coal River flood plain. The development of this area required a flood study. Triad studied the flood prone area and determined that the development would not affect the flood plain or any downstream communities. Mr. McCoy served as project manager and lead civil engineer for this project.

WVDEP, Division of Abandoned Mine Land & Reclamation, Various Locations

As Project Manager and Lead Engineer, Mr. McCoy has been responsible for numerous AML&R designs throughout southern West Virginia. These designs have included grading, drainage, sealing of mine portals (wet & dry), and all aspects related to the closure and reclamation of pre-law mining sites.

Appalachian Power: Lakeview Substation, Cross Lanes, WV

As Project Manager and Lead Designer, Mr. McCoy prepared construction documents for the construction of a electric substation in Cross Lanes, WV. This project includes grading, drainage, and a reinforced embankment at a 1:1 slope.

Appalachian Power: North Proctorville Substation, Proctorville, OH

As Project Manager and Lead Designer, Mr. McCoy prepared construction documents for the construction of a electric substation in Cross Lanes, WV. This project includes grading, drainage and utilities. Also involved was a hydraulic and hydrologic study involving a nearby stream.

Bayer CropScience, Institute, WV

As Project Manager and Lead Civil Designer, Mr. McCoy prepared construction documents for the expansion for Bayer CropScience's Hazardous Waste Landfill in Institute, WV. The project included grading, drainage and the design of landfill liner and closure features including both earthen and synthetic liners and drainage features.

Federal Express Ground Distribution Center, Cross Lanes, WV

As Project Manager and Lead Designer, Mr. McCoy prepared construction documents for the development and construction of a 10 acre site to accommodate a distribution center and associated parking and access drives. This project included grading, drainage, detention, roadway expansion, parking lot design, utility design including water and sanitary sewer, water quality design as well as many other aspects.

Commerce Park, Huntington, WV

As Project Manager and Lead Engineer, Mr. McCoy, is responsible for the project design and construction administrative services for a large use development located in Huntington, WV. This development consists of affordable housing apartments, flex space warehousing and office space. This project includes grading, drainage, stormwater management, permitting, parking lot design, as well as many other aspects.

Amazon Call Center, Huntington, WV

As Project Manager and Lead Designer, Mr. McCoy prepared construction documents for the construction of a 70,000 square foot call center with 9 acres of parking in Huntington, WV. This facility houses over 800 customer service employees. This project includes grading, drainage, detention, roadway expansion, parking lot design, utility design including water and sanitary sewer, water quality design as well as many other aspects.

DirecTV Call Center, Huntington, WV

As Project Manager and Lead Designer, Mr. McCoy prepared construction documents for the construction of a call center just outside Huntington, WV. This facility houses DirecTV's customer service employees. This project includes grading, drainage, detention, roadway expansion, parking lot design, utility design including water and sanitary sewer, as well as many other aspects.

William Sharpe Hospital Expansion, Weston, WV

As Project Manager and Lead Civil Designer, Mr. McCoy prepared construction documents for site infrastructure for a 50 bed expansion to the existing William Sharpe Hospital Expansion. This project includes grading, drainage, detention, roadway expansion, parking lot design, utilities as well as many other aspects.

King's Daughters Medical Center, Various Locations in Kentucky and Ohio

As Project Manager and Lead Designer, Mr. McCoy prepared construction documents for the construction of numerous medical office buildings throughout Ohio and Kentucky. These projects include grading, drainage, detention, roadway expansion, parking lot design, utilities as well as many other aspects. Following is a list of more specific project locations:

- Ashland, KY
- Prestonburg, KY
- Ironton, OH
- Portsmouth, OH
- Minford, OH

Sheetz Store, Eisenhower Drive, Beckley, WV

As Project Manager and Lead Designer, Mr. McCoy prepared construction documents for the construction of a gas station/convenience store in Beckley, WV. This project includes grading, drainage, detention, roadway expansion, parking lot design, water quality design as well as many other aspects.

Devonshire Development, Scott Depot, WV

As Project Manager and Lead Engineer, Mr. McCoy, is responsible for the project design and construction administrative services for a large resort style mix use residential development located in Scott Depot, WV. This development consists of apartments, townhouses and condominiums, state-of-the-art 6500 sq. ft. clubhouse as well as swimming pools, Jacuzzis, sport courts, tot lots, and dog exercise areas. This project includes grading, drainage, permitting, parking lot design, as well as many other aspects. Mr. McCoy is also responsible for all sanitary sewer collection and water system distribution design for the development.

Washington Nile Local School District, West Portsmouth, OH

Mr. McCoy was project manager for the development of a middle school on an existing high school and elementary site. The new addition occupies the area now that was being used as an football practice field and open play area. The site needed to be raised 13 feet so that it would no longer be in the Ohio Rivers flood plain. Site features included the development of a new circulation and parking system, the placing of the building for appropriate sun orientation, pedestrian circulation around the site, utility design and an extensive storm water management system. The project is a LEED registered project that achieved a Silver Certification. Triad worked with a project team headed by the architect and owner, to develop a complete comprehensive set of construction documents.

Clay Local School District, Portsmouth, OH

Mr. McCoy was project manager for this project, which consisted of the development of an existing high school site into a K-12 school site with the addition of the middle and elementary schools. The new addition occupies the area now being used as student and faculty parking area. Site features included the development of a new circulation and parking system, the development of age appropriate play areas, outdoor learning areas, outdoor courtyard area, pedestrian circulation around the site, utility design and an storm water management system. This project is a LEED registered sustainable project.

Manchester Local School District, Manchester, OH

Mr. McCoy was project manager for the development of a 700 student elementary school attached to a recently built middle / high school. The new addition occupies the area that was being used as a parking area and open space. Site features included the development of a new circulation and parking system, pedestrian circulation around the site, grade appropriate play grounds, utility design and an extensive storm water management system. Triad worked with a project team headed by the architect and owner, to develop a complete comprehensive set of construction documents.





Professional Experience 19 Years

REGISTRATIONS & LICENSES

 Registered Professional Engineer, OH & WV

SKILLS

- Stormwater Conveyance
- Wastewater Treatment
- Water Distribution Systems
- Stormwater Pollution
 Control

HIGHLIGHTS OF EXPERIENCE

Mr. Yandrich is currently a Project Engineer for the Triad Engineering Utilities Group in the Athens, Ohio office. Mr. Yandrich has participated in review, development, and state and local permitting of a wide variety of projects including water, wastewater, "green" roof, structural, and electrical/renewable energy for various sites throughout Southeast Ohio, Kentucky, and West Virginia. Mr. Yandrich's educational background includes environmental engineering, ecological engineering, civil engineering, wastewater collection and treatment, storm water conveyance, water distribution systems, storm water pollution control, stream restoration, and wetland design and restoration. Mr. Yandrich has managed various construction projects including water, wastewater, structural, and electrical/renewable energy. His duties include project scheduling, coordination, budget management, client interaction, and project team coordination. In addition to the above mentioned activities, Mr. Yandrich also prepares proposals and estimates on larger, long term projects. Mr. Yandrich's duties have included hydrologic and hydraulic analysis and design, storm water management, drawing and specification preparation, construction inspection, shop drawing review, permitting, and report preparation and review. Mr. Yandrich completes engineering calculations, studies, plans, reports, and data analysis. Mr. Yandrich coordinates construction projects and conducts interim and final inspections of construction projects to determine compliance with applicable laws, regulations, and specifications.

RELEVANT PROJECT EXPERIENCE

Village of Holloway, OH Water System Improvements

This project involves the construction for replacing the entire water distribution system, all fire hydrants, and the bulk water station; rehabilitating the water treatment plant, providing telemetry for the water storage tank and an emergency generator.

Town of Mason, WV Water System Improvements - Phase II

This project involves the construction for replacing the remainder of the Town's old, undersized Asbestos Cement Pipe water distribution system, north of WV Highway 62. It also consists of rehabilitating the existing water storage tank, wells and pump houses, as well as providing telemetry for the water system.

Meigs County Commissioners – Rutland, OH Wastewater Rehabilitation

This project consists of the replacement of the existing low pressure system with individual septic tank effluent pumping (STEP) systems to increase the capacity and efficiency of the system, decrease operation & maintenance costs, and allow for system expansions. The project also includes the upgrade of the wastewater treatment plant by making necessary repairs, replacing old equipment, and making other miscellaneous improvements. Mr. Yandrich was responsible for writing the Village's preliminary engineering report to enable funding acquisition.

Village of Racine, OH Water System Improvements - Phase II

This project consists of the construction for replacing the remainder of the old, undersized lines; replacing touch-read meters with radio-read meters; replacing all the fire hydrants to provide adequate fire protection; cleaning & inspecting the water storage tank; replacing the bulk water station; and making various improvements to the water treatment plant, including upgrading the SCADA system. The project also consists of the cleaning and redevelopment of the existing wells, rehabilitating the wells by adding heat trace system with insulation,

and abandoning one of the wells & replacing it with a new one. An interconnection will also be provided with the Tupper Plains – Chester Water District.

Town of Belle, WV Wastewater Treatment Plant Replacement

This project consists of the replacement of the wastewater treatment plant with a steel-tank package treatment plant; a new headworks structure with an automatic bar screen and grit unit; conversion of the existing concrete aeration tanks to equalization basins and emergency storage; purchase & installation of an emergency generator; construction of a new garage/blower building; and rehabilitation of the main pump station at the wastewater treatment plant. Mr. Yandrich was responsible for revising the Town's preliminary engineering report, as well as the plans and specifications to enable funding acquisition.

Village of Woodsfield, OH Water System Improvements

This project includes the design and specification for retrofitting an existing lime-settling basin with automatic scrapers for labor reduction, the design of a booster station to enable sales of potable water to a neighboring water system through an existing water main, and the replacement and extension of an existing 2" water line with a 6" line to provide improved service and fire protection to residents. Mr. Yandrich was also responsible for writing the Village's preliminary engineering report to enable funding acquisition.

Village of Jewett, OH Water System improvements

This project consisted of the design and specification of equipment for the ultimate replacement of the Village's aging water treatment plant, entire distribution system, and water storage tanks. The project also entails the construction of a new source water well. Mr. Yandrich was also responsible for writing the Village's preliminary engineering report.

Village of Amesville, OH Water System Improvements

This project involves the construction of a new water treatment facility and a new water storage tank in order to replace the existing 55-year old facility. Mr. Yandrich is responsible for writing the preliminary engineering report, as well as for the design and specification of equipment to effectively treat the existing source of ground water. A new tank will replace the aging water storage tank. Mr. Yandrich is also responsible for the design of a new access road, structure to house the new treatment system, small wastewater treatment facility, a new source water well, and overall treatment system security.

City of Toronto, OH Water System Improvements

This project consisted of extensive replacement of aging cast-iron waterline in multiple areas of the City, as well as the construction of a new loop to improve water pressure and to serve an existing industrial facility. Mr. Yandrich was responsible for construction management and post-construction activities, including contractor payment, day-to-day reviews of construction progress, monthly progress meetings, and construction drawing updates and modifications.

Town of Mason, WV Wastewater Treatment Plant Upgrades

This project consisted of the design and specification of an extended aeration plant rebuild, including headworks, primary aeration, and clarifiers. The project also consisted of the design of a new lift station and force main, and collection system improvements for inflow and infiltration reduction. Mr. Yandrich was also responsible for the specification of a new maintenance garage at the facility.

For each of the following projects, Mr. Yandrich was responsible for permit application review, detailed plan and specifications review, hydraulic and capacity calculations, design review and recommendation, and permit recommendation and issuance. Mr. Yandrich also performed site evaluations and inspections to ensure compliance with all applicable rules and regulations.

Mason County E Corp, Meigs County, Ohio

Temporary holding tank and wetland-based wastewater treatment system.

DLD One, LLC, Jefferson County, Ohio

Sanitary sewer extension for a new Wall Mart Center.

Various on-site systems including: Holiness Church Center, Clearview Primitives, Liberty Life Church, Gheen Equipment Rental, Guernsey County Sportsman for Conservation Club, North Star Metals, Porter Freewill Baptist Church, Stark Truss Company, Guernsey County Deputies F.O.P., Latham Limestone, Ludlow Township/Little

Muskingum Development Corp., Apex Environmental LLC, Larry Mitchel Trucking Garage, McQuinn LTD, Valley Hospice, DESCO Federal Credit Union, Multiple Counties, Southeast Ohio

These on-site systems included low pressure, mound, traditional leach, and holding tanks.

Norfolk Southern Railway Company, Scioto County, Ohio

This project consisted of modifying one primary settling pond into two parallel ponds with concrete bottom for easy cleaning. Mr. Yandrich reviewed all environmental permitting applications, detailed plans, and performed hydraulics calculations in order to determine project effectiveness.

Apex Sanitary Landfill, Jefferson County, Ohio

The project utilized a proprietary "SCAT" system and low pressure distribution to serve a new office building at a landfill.

Village of Wintersville, Jefferson County, Ohio

Sanitary sewer replacement at the Beechwood Area/Rt43 Floyd Easement area.

Barbers Hollow WWTP, Jefferson County, Ohio

The project consisted of new Influent screens for the Barber's Hollow WWTP.

Jefferson County Joint Vocational School, Jefferson County, Ohio

Sanitary sewer extension to the Jefferson County "M".

Wheelersburg Local School District, Scioto County, Ohio

Sanitary sewer extension for a new K-12 School

M & J Industries, LLC, Scioto County, Ohio

A new grinder pump station with a discharge to the Southern Ohio Correctional POTW

City of Portsmouth Lawson Run WWTP, Scioto County, Ohio

Conversion of the plant's old anaerobic sludge digestion system to ATTAD process.

GENPRO, LLC (Mission Pointe Sub), Jefferson County, Ohio

Sanitary sewer extension for new condominiums to the existing city of Steubenville wastewater collection system.





Education West Virginia University. WV BA. Chemistry

West Virginia Institute of Technology, WV BS, Civil Engineering

PROFESSIONAL EXPERIENCE 7 Years

REGISTRATIONS & LICENSES

Professional Engineer,
 WV

SKILLS

- Civil Engineering
- Hydrologic and Hydraulic Analysis and Design
- Erosion and Sediment Control Plans
- Stormwater Management

HIGHLIGHTS OF EXPERIENCE

Mr. Criniti is currently a Project Engineer and is responsible for civil and surveying projects. He has participated in the design and management of numerous projects. These projects have included retail/commercial site preparation, airports, parking lots, buildings, retaining walls, foundations, sanitary structures, as well as boundary and topographic and photogrammetric surveys. Duties have included hydrologic and hydraulic analysis and design, erosion and sediment control plans, storm water management, field surveying, preparation of construction and as-built drawings, project specifications and preparation of various permit applications. Mr. Criniti also performs construction management, construction inspection, quality control testing, shop drawing review, project management, contract administration, and report preparation. He performs engineering calculations, studies, plans, reports and data analysis. Mr. Criniti assists in the coordinating of construction projects including conducting pre-bid, pre-construction and progress meetings, schedule review and pay request review and approval. He also assists in conducting interim and final inspections of construction projects to determine compliance with applicable laws, regulations, and specifications.

RELEVANT PROJECT EXPERIENCE

Washington Nile, Clay Local School District and Portsmouth Athletic Complex, Various Locations in Ohio

As a Staff Engineer, Mr. Criniti has been involved in and is responsible for the drainage design and permitting for these projects. In this capacity he has to coordinate with the project architect, local municipalities, the ODOT and the project developer. Work on these projects included, utility routing, storm drainage design, storm water management design and preparation of ODOT encroachment permit applications, health department permit application and NPDES permit application for handling surface water during construction. Mr. Criniti is also responsible for performing construction admin on this project consisting of site inspections, pay application review and approval and construction schedule monitoring.

Tolsia Athletic Fields, Fort Gay, West Virginia

As a Staff Engineer, Mr. Criniti has been involved in and is responsible for the drainage design and permitting for this project. In this capacity he has to coordinate with the project architect, local municipalities, the WVDOH and the project developer. Work on this project included, utility routing, storm drainage design, storm water management design and preparation of WVDOH encroachment permit applications, health department permit application and NPDES permit application for handling surface water during construction. Mr. Criniti was responsible for performing construction admin on this project consisting of site inspections, pay application review and approval and construction schedule monitoring.

Oak Hill High School Baseball and Softball Complex, Oak Hill, Ohlo

As a Staff Engineer, Mr. Criniti has been involved in and is responsible for the drainage design and permitting for this project. In this capacity he has to coordinate with the project architect, local municipalities, state regulatory agencies and the project developer. The project involved the planning, and design and preparation of construction documents for a baseball field, softball field, tennis open green space, parking areas and an extensive underground storm water detention system, synthetic turf baseball infield, and irrigation for both facilities.

City National Bank - Construction Administration Services, WV

This project consists of a state wide contract to provide construction administration services for City National Bank on bank loans for commercial construction projects. On this project Mr. Criniti is responsible for performing periodic job site inspections of work progress, reviewing contractor pay requests, monitoring project schedules as they pertain to percent completion and pay requests, and conducting periodic progress meetings.

King's Daughters Medical Center - Various Locations in Kentucky and Ohio

As a Staff Engineer, Mr. Criniti has been involved in and is responsible for the drainage design for this project. Mr. Criniti assisted the projected manager in the preparation of construction documents for the construction of numerous medical office buildings throughout Ohio and Kentucky. These projects include grading, drainage, detention, roadway expansion, parking lot design, utilities as well as many other aspects.

BB&T Facility, Beckley, WV

As a Staff Engineer, Mr. Criniti has been involved in and is responsible for the drainage design and permitting for this branch bank facility. In this capacity he has to coordinate with the project architect, local municipalities, the WVDOH and the project developer. Work on this project included, utility routing, storm drainage design, storm water management design and preparation of WVDOH encroachment permit applications, health department permit application and NPDES permit application for handling surface water during construction. Mr. Criniti is also responsible for performing construction admin on this project consisting of site inspections, pay application review and approval and construction schedule monitoring.

FedEx Ground Expansion, Nitro, WV

This project consisted of providing site design and construction documents for the expansion of the FedEx Ground Building in Nitro, West Virginia. As a Staff Engineer, Mr. Criniti worked with a project team to provide construction documents including existing conditions, demolition plan, proposed site plan, layout plan, grading and drainage plan, erosion and sediment control plan and associated details.

Devonshire Housing Development, Scott Depot, WV

As a Staff Engineer, Mr. Criniti has been involved in and is responsible for site development design and permitting for various portions of this large residential development. In this capacity he has to coordinate with the project architect, local municipalities, the WVDOH and the project developer. Work on these projects includes building pad positioning and elevation, access road layout including grading design, parking lot layout, utility routing, storm drainage feature layout and design. Permitting work on these projects includes WVDOH encroachment permitting, health department permitting and NPDES permitting for handling surface water during construction. Mr. Criniti is also responsible for attending and conducting project meetings with the project contractor, the developer and associated agency.





West Virginia University WV BA, Business Administration

West Virginia State University WV

Associate Degree. Mathematics

PROFESSIONAL EXPERIENCE 28 Years

SKILLS

- Funding Assistance
- Facilitates between Client and Funding Agency
- Business Development & Marketing

HIGHLIGHTS OF EXPERIENCE

Ms. Grimm is the Utilities Project Manager in the Scott Depot, WV office. Ms. Grimm has over 28 years of project management and funding experience. She is responsible for funding acquisition assistance to clients for water and wastewater projects, facilitating communication between Triad's clients and funding agencies, processing and tracking draw down of funds, supporting senior level engineers on impact of project costs to utility charges, preparation of status reports and facilitating and attending community meetings. Ms. Grimm also works with senior level engineers in preparation of asset management plans and utility rate analyses for clients.

RELEVANT PROJECT EXPERIENCE

At Triad, Ms. Grimm is responsible for assisting clients in securing funding packages for water and wastewater projects; facilitating communication between clients and funding and regulatory agencies; processing and tracking payment requests; preparing status reports; facilitating and attending community meetings; and assisting clients and lawyers in preparation of easements and user agreements.

Ms. Grimm assists engineering staff by reviewing contractor's pay request and making recommendation for approval; coordinating and distributing bid documents, addenda, and plan-holders lists; and by providing non-technical quality control. She also assists technical staff in preparing various documents, including but not limited to: permit applications; contract documents; project schedules; project budgets; bid tabulations; meeting agendas; change orders; asset management plans; operation and maintenance manuals; and manhole inspection, smoke testing, and infiltration and inflow reports.

Village of Amesvile, OH – Water System Improvements

Arbuckle Public Service District, Minden, WV – Wastewater Collection System I/I Rehabilitation and Extension

Arbuckle Public Service District, Minden, WV – Emergency WWTP Oxidation Ditch Rehabilitation

Town of Belle, WV – Wastewater Treatment Plant Replacement

Village of Cadiz, OH - Wastewater System Inflow/Infiltration Study

Town of Camden-on-Gauley, WV – Water System Improvements

Denver Water Association, Tunnelton, WV – Water System Improvements

Green Valley Glenwood PSD, Bluefield, WV - Water System Improvements

Town of Hartford, WV – Water System Improvements

Village of Holloway, OH – Water System Improvements

Village of Jewett, OH – Water System improvements

Town of Mason, WV - Water System Improvements - Phase II

Town of Mason, WV – Wastewater Treatment Plant Upgrades

Meigs County Commissioners, Pomeroy, OH - Rutland Wastewater System Improvements

Town of New Haven, WV – Water System Improvements

Town of Pratt, WV – Wastewater System Improvements

Sissonville PSD, Sissonville, WV - Wastewater System Improvements

Syracuse Racine Regional Sewer District, Racine, OH – Wastewater System Improvements

Village of Racine, OH - Water System Improvements - Phase II

Salt Rock Public Service District, Barboursville, WV – Water System Extension

Village of Woodsfield, OH - Water System Improvements

West Virginia Department of Environmental Protection - Charleston, WV

Ms. Grimm worked for 26 years as a project manager and Community Development Specialist II with the WV Department of Environmental Protection (WVDEP) Clean Water State Revolving Fund Program. In this capacity, she reviewed grant/loan applications for compliance, cost and accuracy in such areas as financial documentation, public notification, civil rights, engineering contract review, professional contract review, federal and state compliance, etc. She also provided recommendations for grant/loan applications with highest need priority. Other responsibilities in this position consisted of the review of supporting invoices and recommendations for monthly payment reimbursement requests, allowable project extension approvals and final payment and closure of loan reimbursements. She monitored monthly contracts for the local administration of state and federal grants/loans to assure funds were properly spent and appropriate records maintained. She was also responsible for preparing monthly project progress reports. She investigated infrastructure development needs through meetings with state, regional and local governmental officials, community leaders, and private sector parties. She provided local officials and contractor's guidelines in establishing files, financial records systems, record keeping and retention, purchasing procedures, audit requirements and reporting requirements, both federal and state related. She also participated in local workshops and meetings to advise local officials and other interested parties of programs and educated officials in grant/loan application procedures and grant/loan administration.



West Virginia University B.S. Civil Engineering, 2004

VIRGINIA TECH

M.S. Civil Engineering. Geotechnical Specialization. 2005

PROFESSIONAL EXPERIENCE 13 years

CERTIFICATIONS

 OSHA 30 Hour
 Occupational Safety and Health Training

REGISTRATIONS & LICENSES

- Professional Engineer, West Virginia
- Professional Engineer Pennsylvania
- Professional Engineer
 Kentucky
- Professional Engineer, Maryland
- Professional Engineer
 Ohio

SKILLS

- Deep and Shallow Foundation Engineering Studies and Design Recommendations
- Siope Stability Investigations
- Design of Wick Drains for Soil and Site Improvement
- Reinforced Soil Slope Design
- Geotechnical Aspects of Highway Design

HIGHLIGHTS OF EXPERIENCE

Mr. Griffith is the Geotechnical Engineering Services Manager for the Scott Depot branch of Triad Engineering, Inc. Mr. Griffith possesses over 13 years of geotechnical engineering experience working with public agencies such as WVDOH and USACE, working on projects involving site and subsurface investigations, design and construction of new or modified bridge foundations, cut slope analysis and design, fill slope analysis and design, the elevation and design of earth retainage structures (i.e., earthen dams, MSE walls, reinforced soil slopes), laboratory testing, and stream bank erosion mitigation.

RELEVANT PROJECT EXPERIENCE

The following is a breif list of notable projects Mr. Griffith has worked on:

- Parkersburg Riverfront Park, Parkersburg, WV
- Camp Washington Carver Stage and Support Building, Fayetteville, WV
- American Electric Power Pax Branch Substation, Pax, WV
- Natural Gas Power Plant, Follansbee, Brooke County, WV
- New Creek Wind Farm, New Creek Mountain, Grant County, WV
- Perkins Compressor Station, Doddridge County, WV
- US Route 35 Public Private Partnership, Putnam and Mason Counties, WV
- Coalfields Expressway Public Private Partnership, Wyoming County, WV
- Tri-State Airport Access Road Retaining Wall / MALSR Road Slope Repair Projects, Huntington, WV
 - Kanawha Falls Bridge Rehabilitation, Fayette County, WV
 - Bridge Street Bridge Replacement, Taylor County, WV
- Weilsburg Bridge Public-Private Partnership Project, Weilsburg, WV and Brilliant, OH





22 Years

REGISTRATIONS & LICENSES

- Licensed Professional Surveyor – WV
 NC
- FEMA Certified Flood Plain Surveyor – NC

SKILLS

- Construction Layout
- Boundary Subdivision
- · Right of Way Plans
- Photogrammetric Control
- Mine Surveying
- Topographic Location

PROFESSIONAL AFFILIATIONS

- WV Society of Professional Surveyors.
- NC Society of Professional Surveyors
- National Society of Professional Surveyors

HIGHLIGHTS OF EXPERIENCE

Mr. Kirk is currently the Survey Manager for the Scott Depot office of TRIAD. In this capacity, he is responsible for the supervision of the survey crews, overseeing the field work through drafting to the finished product delivered to the client, meeting with clients, and performing field work on large and complex projects. Mr. Kirk is experienced in, construction layout, boundary and road work surveying, photogrammetric and topographic surveying. He has supervised and/or performed survey work on various types of work including surface mine surveying for coal mine facilities, site surveys and construction layout for landfill facilities, site surveys and right of way plans for WVDOH and NCDOT highway projects, and site surveys and construction layout for site development projects. Mr. Kirk has been involved in survey projects in several states including West Virginia, Kentucky, Virginia, South Carolina and North Carolina.

In his capacity, he is responsible for schedules, project budgets, and the overall coordination of all survey projects. He works with all levels of engineering staff, the overall project team, and the project owner to produce a quality work product which satisfies all project requirements.

RELEVANT PROJECT EXPERIENCE

5th Street Bridge Rehabilitation, Cabell County, WV

Mr. Kirk was the project manager and lead surveyor for this project. The project consisted of an existing conditions survey of the entire bridge including substructure and approaches.

Dingess Street Bridge, Logan WV

This project consisted of the replacement of the Dingess Street Bridge in Logan, WV. Mr. Kirk was the project manager and lead surveyor for this project which entailed generating an existing conditions survey of the existing bridge, approaches and affected roadway areas.

Kenney Hamrick Sr. Memorial Bridge, Webster County, WV

This project consisted of the replacement of the existing bridge. Mr. Kirk was the project manager and lead surveyor for this project which entailed generating an existing conditions and topographic survey of the existing bridge, approaches and affected roadway areas, stream cross sections and R.O.W. surveys.

Rt. 10 Roadway, Man, WV

Mr. Kirk was the project manager and lead surveyor on this project which consisted of construction layout surveying during construction.

Ona Mall I-64 Bridge, Cabell County, WV

This project will eventually consist of the widening of I-64 in the area of the Ona Mall, which will affect the I-64 Bridge in this area. Mr. Kirk was the project manager on this project. Survey work on this project consisted of an existing conditions and topographic survey of the bridge and surrounding area.

City of Raleigh, Raleigh, NC

Buffalo Road Sanitary Sewer Collector Easement Acquisition Survey
As Surveyor-of-Record, provided direct supervision of various field crews and conducted
field surveys for right-of-way acquisition, topographic location, and wetlands delineation

surveys for an approximately 6000 LF sanitary sewer line. Project consisted of field work necessary to compile and prepare recordable plats of survey for easement acquisition by the City of Raleigh. Topographic mapping for design purposes, and the preparation of Wetlands Delineation Maps to secure 404(c) permits through the US Army Corps of Engineers (Wilmington District).

North Carolina Department of Transportation, Warren County, NC

State Route 1608 - Will Cheek Road

State Route 1620 - Sherriff Davis Road

As Surveyor-of-Record / Data Analyst contracted to NCDOT, provided direct supervision of various field crews and conducted field surveys for right-of-way acquisition and topographic location surveys for roadway improvements. Project consisted of field surveys conducted per Federal Highway Administration High Risk Rural Roads specifications for approximately 3.5 miles of local rural roads in Warren County NC including deliverable plan sets prepared per NCDOT/NC MAPS specifications. Final field work consisted of setting Right-of-Way monumentation and staking of best-fit centerline of road alignment.

North Carolina Army National Guard, Morrisville, NC

Professional Services 2005 / Construction Completed

Surveyor of Record / Field Supervisor providing construction staking and layout of Crash, Fire and Rescue (CFR) Facilities Building supporting the 1st of 130th Aviation Battalion (AH-64 Apache Helicopter unit) based at Raleigh Durham International Airport. Operations were conducted in close coordination with Federal Aviation Administration and NC National Guard personnel to provide layout services for the construction of an approximately \$1.3 million facility.

Triangle Transit Authority (TTA), Raleigh, Durham, Chapel Hill Triangle Area of NC

Regional Transit Plan - Phase | Regional Rail - Durham to North Raleigh

As Surveyor-of-Record / Data Analyst, provided direct supervision of various field crews and CAD technicians for Subsurface Utilities Engineering location surveys and gravity utilities mapping for a 40 mile railway corridor in support of design efforts for a regional rail service route. Field work and deliverables preparation were conducted in accordance with Federal Railway Administration, CSX Railroad, NC Railroad, and North Carolina Department of Transportation Rail Division specifications and guidelines. Being a controversial project, construction is still pending with a capital cost estimate of \$754 million.

Raleigh-Durham Airport Authority (RDUAA), Morrisville, NC

Professional Services 2000-2003 / Construction completed & ongoing

Surveyor-of-record for long-term on-call contract to provide professional services to the Raleigh Durham Airport Authority providing, boundary surveys, topographic location, as-built surveys, subsurface utilities location, construction verification and construction layout for various on-site improvement and expansion projects. Provided coordinative support/project management for various design and engineering firms for the development of the RDU Airport Authority's Master Plan for future development and improvement of RDU International Airport. As one of the few non-employees to ever be granted limited movement privileges at RDU, coordinated airside survey operations (night-time and day-time conditions) with Ground Traffic Controller and FAA personnel on-site.

Santee-Cooper Regional Water System, SC

Field coordination of Right-of-way Acquisition and Topo-Location Surveys for 26 mile regional water distribution line from Lake Moultrie to North Charleston SC. Project included topo for 24MGD Surface Water Treatment Plant (SWTP), 1 Million gallon elevated tank, and Wetlands location.

Grand Strand Sewer and Water Authority, Bull Creek SWTP

Topographic location surveys for design purposes and construction staking/layout for 31MGD surface water treatment plant and associated facilities.

Triangle Transit Authority (TTA) Regional Rail Project, NC

SUE and gravity utilities location for 40-mile railway project from Raleigh to Durham, NC

Boundary Retracement for Durham Parks and Recreation Department, Durham, NC

Duke Park in Durham, NC

Sanitary Sewer As-Built Survey for City of Durham Engineering Department, Durham, NC

Goose Greek Interceptor (approx. 6000LF sanitary sewer) in Durham, NC

As-Built Location Surveys for NC Department of Corrections, NC

Women's Prison in Raleigh, NC Youth Offenders Camp (Hi-Rise) in Morganton, NC Anson County Prison Camp, Peachland, NC Davidson County Prison Honor Camp, Davis, NC

City Development Block Grant (CDBG) Projects (Federal Funding)

Town of Ansonville, NC Town of Siler City, NC City of Whiteville, NC Town of Tabor City, NC

Provided topographic location surveys, design-support surveys and Right-of-Way Acquisition Surveys for sanitary sewer and waste-water treatment plant installation, expansion, and improvements.

Department of Defense Projects, NC:

Camp Lejeune - Jacksonville, NC

Topographic Location Surveys for elevated water tank demolition and replacement, topographic location surveys for closure of Grenade Range, and topographic location surveys for various sanitary sewer projects.

Cherry Point MCAS - Havelock, NC

As-Built / Topographic Location Surveys for expansion and improvement of the Naval Air Rework Facility and First Order Vertical Control Surveys for runway-resurfacing project.

Fort Bragg - Fayetteville, NC

Various Wetlands Location Surveys, Red-Cockaded Wood Pecker Studies (Specimen Tree Location), Photogrammetric control (setting of aerial photo targets) for Training Area K Erosion Study, Topographic Location of St. Mere Eglise Drop Zone, Topographic Location and Lake Level Study for repair and improvements of Upper and Lower McKellar's Ponds, McFayden Pond, and Mott Lake, and Tank Creek Boundary Retracement Survey – between Pope Air Force Base and Fort Bragg.





30 Years

REGISTRATIONS & LICENSES

- Licensed Professional Surveyor-WV
 PA (#)
- Certified 40 Hr. HAZWOPER

SKILLS

- Underground Surveying
- Construction Layout
- Boundary and Road Work Surveying
- Surface Mine Surveying

PROFESSIONAL AFFILIATIONS

- WV Society of Professional Surveyors
- National Society of Professional Surveyors

HIGHLIGHTS OF EXPERIENCE

Mr. Clark is currently the Survey Supervisor for the Scott Depot office of Triad. In this capacity, he is responsible for the supervision of the survey crews, overseeing the field work through drafting to the finished product delivered to the client, meeting with clients, and performing field work on large and complex projects. Mr. Clark is experienced in underground surveying, construction layout, boundary and road work surveying, photogrammetric and topographic surveying. He has supervised and/or performed survey work on various types of work including both underground and surface mine surveying for coal mine facilities, site surveys and construction layout for landfill facilities, site surveys and right of way plans for WVDOH highway projects, and site surveys and construction layout for site development projects. Mr. Clark has been involved in survey projects in several states including West Virginia, Florida, Virginia, and Ohio. In his supervisory capacity, he is responsible for schedules, project budgets, and the overall coordination of all survey projects. He works with all levels of engineering staff, the overall project team, and the project owner to produce a quality work product which satisfies all project requirements.

RELEVANT PROJECT EXPERIENCE

WVDOT Highway Projects, Various Highway Engineering Consultants

Mr. Clark's expertise includes several WVDOH projects for various highway consulting engineering firms. He is responsible for the generation of site surveys and property boundary surveys to be used in highway planning and design. These surveys include locating all physical and topographic features, utility locations, storm drainage features, and property boundary lines. He has also supervised and performed construction layout on highway projects including bridge and structure layout. Some notable highway design projects include: Corridor D - Parkersburg, WV, I-64 Widening - Kanawha County, WV, Veterans Bridge - Clarksburg, WV, and Route 10 Upgrade - Logan County, WV, King Coal Highway - Mercer County, West Virginia. Notable construction layout projects include: Holden Bridge - Logan County, WV and Chelyan Bridge - Kanawha County, WV.

Retail Development, Construction Surveying

Mr. Clarks experience as a construction layout surveyor includes multiple site design and construction layout projects. Notable projects include the construction layout of the Nitro Market Place retail Center in Nitro, WV, Southridge Retail Center, Charleston, WV, Devonshire Luxury Housing Site, Putman County WV, Ripley Hudson Housing Development, Jackson County, WV; Donnel Kinnard Memorial Cemetery, Dunbar WV; numerous retail restaurants', including Arby's, Burger King, Wendy's, O'Charley's. Retail stores include Walgreen's, Rite Aid, Wal-Mart, Lowes. Work on these projects included establishing horizontal and vertical control, staking out the buildings as per the instruction of the Project Superintendent, laying out drainage, sewage, paving and curbing with grades.

Abandoned Mine Lands, Statewide Contract, WV

In his role as Chief Surveyor, Mr. Clark is responsible for generating site survey data including all physical and topographic features for various Abandoned Mine Land (AML) projects throughout West Virginia. Various types of AML projects include landslide correction include retaining wall design and site grading and drainage improvements, acid mine drainage collection and neutralization, water line upgrade and extensions, and various projects requiring site regrading and drainage upgrade. Work on these projects also included establishing horizontal and vertical control surveys for aerial photogrammetry

mapping, baseline layout, referencing control points, generating check cross sections and site surveys including all physical and topographic features of each unique site.

Chemical Plant Facilities, Various Facilities throughout West Virginia

Mr. Clark's experience in the chemical plant environment includes construction layout surveying, topographic mapping surveys, quantity surveys, and boundary surveying. Notable chemical companies include Dow Chemical Company, South Charleston, WV, Bayer Crop Science, institute, West Virginia.

Coal Mine Facilities, Various Facilities throughout West Virginia

Mr. Clark's experience on coai mine facilities consists of underground and surface mine surveying. Underground surveying consists of surveying mine projections for the production of coal, and keeping mine entry horizontal and vertical datum current. Surface mine surveying consists of surveying the coal pits for quantity and mapping purposes, mapping of the overburden monthly for coal production ratios, and assorted construction layout, topographic and GPS surveys. Mr. Clark's experience also entails the preparation of yearly state and federal mine maps for underground and surface mines, slurry impoundment dams, monthly quantity surveys of the clean coal stockpiles, and assisting in the mine permitting process. Notable mining companies include Mingo Logan Coal Company- Logan County, and Ashford Coal Company- Boone County.

Cadastral/Boundary Retracement Surveys, Various Locations

Mr. Clark was responsible for surveys for Beazer Site Boundary, Weirton, WV; Grundy Boundary Tracts- USACE Huntington District; Martin County KY Boundary Tracts- USACE Huntington District; Paint Creek Boundary- USACE Huntington District

Dam Monitoring and Instrumentation Surveys, Various Locations

Mr. Clark has experience with the precise surveys required for periodical checks for movement at a large number of the flood control projects and inland navigation structures inside the Huntington District of the USACE. These surveys have required precise measurements to be made by GPS, Robotic Total Stations and Digital Levels. This data for the following projects has been processed utilizing the least squares adjustment method and compared to previous observations to check for movement:

- ➤ 2008 Capt. Anthony Meldahl Locks and Dam-USACE Huntington
- 2008 Willow Island Locks and Dam-USACE Huntington District
- 2007 Dover Dam-USACE Huntington District
- 2009 Charles Mill Dam-USACE Huntington District
- 2009 North Branch of Kokosing Dam-USACE Huntington District
- 2009 Pleasant Hill Dam-USACE Huntington District
- > 2009 Mohicanville Dam-USACE Huntington District
- 2009 Pavonia Levee-USACE Huntington District
- ➤ 2009 Charles Mill Lake Dikes 1 and 2-USACE Huntington District
- ➤ 2009 Mohicanville Dikes 1 and 2-USACE Huntington District
- > 2009 Nashport Dike of Dillon Lake-USACE Huntington District
- > 2009 Pleasant Valley Dike of Dillon Lake-USACE Huntington District
- 2009 Silica Sands Levee of Beech City Lake-USACE Huntington District-
- 2009 Deer Creek Dam-USACE Huntington District
- > 2009 London Locks and Dam- USACE Huntington District
- > 2009 Winfield Locks and Dam- USACE Huntington District
- > 2009 Racine Locks and Dam- USACE Huntington District
- > 2009 Pleasant Hill Dam-Auxillary Fuse Plug Dike- USACE Huntington District
- ➤ 2010 Bluestone Cross Sections- USACE Huntington District





Professional Experience 27 Years

REGISTRATIONS & LICENSES

- WVDOH Certifies Tech
 Training Classes
 Compaction, Aggregate
 Portland Gement and
 Bituminous Concrete
- Troxler 8 Hour Nuke Safety and Operation
- Troxler Radiation Safety Officer Training
- 40 OSHA Training
- MSHA Impoundment Inspector Training ACI Training and Classes
- USACGE Contractor QC Training
- WVDOT/DOH
 Compaction Inspector
- WVDOT/DOH Portland Cement Inspector
- WVDOT/DOH
 Aggregate Inspector
- WVDOT/DOH
 Bituminous Inspector
- ACI Grade I Field Tech
- ACI Grade I Lab Tech

HIGHLIGHTS OF EXPERIENCE

Mr. Hope is currently the Field Services Manager for the Scott Depot office of Triad. In this capacity he oversees the field staff, by handling calls from technicians on technical matters, staffing and scheduling and serving as the branch RSO. Mr. Hope also handles and in house QA/QC, schedules training classes, keeps all records of inspections and calibrations. In addition, he also writes proposals for perspective jobs, assigns new jobs and lab work and writes all QC plans.

RELEVANT PROJECT EXPERIENCE

Marshall University Football Stadium, Huntington, WV

Duties included the Testing and Sampling of site concrete. Testing of utility line backfill for compaction. The testing of structural steel and light foundation connections for proper bolt torque.

Sixth Street Bridge, Huntington, WV

Duties included Testing and Sampling of all West Virginia Department of Highways (WVDOH) classes of concrete. The monitoring thickness and testing of both fills and backfills for compaction. The sampling and testing of the river water for clarity during construction. Maintaining Quality Control Charts.

Georgia Pacific Plant, Mount Hope, West Virginia

Duties included Testing and Sampling of all concrete. Testing and monitoring lift thickness of tills. Collection of new proctor samples when material changes occurred. Utilization of an onsite lab to cure and break the test cylinders at proper intervals. Reporting of all information.

King's Daughter Medical Center Addition, Ashland, Kentucky

Duties included the Testing and Inspection of auger cast pile foundation instillation. Testing and Sampling of site concrete.

American Electric Power's North Charleston Service Center, Charleston, WV

Duties included the Testing and Sampling of site concrete, Testing and Monitoring of fill and backfill placement. The shipping of test samples to AEP lab and the receiving and recording of the test data. Inspection of plumbing crews including instillation of work. Backfill of utility trenches. Inspection of testing the lines. Inspection of concrete finishers work. Filling out of AEP's daily log sheets.

RCB Locks and Dam, Apple Grove, West Virginia

Duties included site concrete Testing and Sampling. The testing of fill placement by sandcone method. Collection and determination of usability of site fill materials. Utilized onsite lab for gradation/sieve analysis.

Endocrine Disruptor Study, Potomac, Ohio, Monongahela and Kanawha Rivers

Duties included the Sampling and Collection of raw river water to be tested by EPA and WV DEP for Endocrine Disruptors. The labeling and shipping of the samples to the testing labs. Photographic locations for the report and document river levels and clarity.

REGISTRATIONS & LICENSES (CONT.)

- 40 OSHA HAZWAPER Certification
- MSHA —Certified Impoundment inspector
- MSHA –Above Ground Hazard Trained
- US Army COE –
 Construction QC

 Manager for Contractors
- PCI Level I and IIF-Number
 Measurement/Floor flatness
- Pervious Concrete Technician
- Licensed Asbestos Inspector WV

Commerce Park and West Pea Ridge Bridges, Huntington, West Virginia

Duties included the sampling and testing of all classes of WVDOH concrete. Testing and monitoring of lift thicknesses of fills and backfills. The collection of aggregate samples.

Route 10 Overpass Overlay, Chapmanville, West Virginia

Duties included the sampling and testing of the latex modified concrete for the overlay. Including the making of chloride perm samples.





PROFESSIONAL EXPERIENCE 9 Years

REGISTRATIONS & LICENSES

- MSHA 24 Hour Training
- OSHA 30 Construction Management
- OSHA HAZWOPER 40 Hour Training
- Licensed Asbestos
 Inspector
- West Virginia Certified Concrete Technician

SKILLS

- Earthwork Construction Expertise
- Utility Construction Knowledge
- Concrete and Foundation Construction Expertise
- Earthwork Compaction Testing
- Concrete Materials
 Testing
- Asbestos Inspection

HIGHLIGHTS OF EXPERIENCE

Mr. Atencio is currently an engineering technician with Triad's Scott Depot, West Virginia office. In this capacity he assists the Geotechnical Engineering Department in performing onsite construction materials testing and construction monitoring. Tests performed by Mr. Atencio include compaction testing and construction monitoring during earthwork fill placement and concrete testing and concrete construction monitoring during concrete placement. Mr. Atencio also performs inspections and surveys to assist in the determination of the presence of asbestos containing materials

RELEVANT PROJECT EXPERIENCE

Devonshire Pond No. 2 Reconstruction, Scott Depot, WV

This project consisted of the redesign and reconstruction of the dam for Retention Pond No. 2. The original dam was designed by others and was breached due to the collapse of the principal spillway decant pipe. TRIAD redesigned the principal spillway, decant pipe and the new embankment. The dam was constructed in the late summer and fall of 2016. Mr. Atencio performed all construction monitoring and concrete and compaction testing during construction.

Holden Elementary School, Holden, WV

Mr. Atencio served as an engineering technician on this project to construct an elementary school. His responsibilities consisted of full time monitoring, compaction testing and concrete testing during site, utility, and foundation construction. He monitored all fill placement, utility pipe placement and trench backfill, and foundation construction for compliance with the project plans and specifications.

Devonshire Residential Housing Development, Scott Depot, WV

Mr. Atencio served as an engineering technician on this luxury residential complex consisting of townhomes, apartments, and single family dwellings. His responsibilities consisted of full time monitoring, compaction testing and concrete testing during site, utility, and foundation construction. He monitored all fill placement, utility pipe placement and trench backfill, and foundation construction for compliance with the project plans and specifications. Mr. Atencio also monitored all access road and parking area construction.

Community Wide Brownfields Assistance Grant Program, Huntington, WV As an Engineering Technician, Mr. Atencio assisted the project manager with the collection, documentation, and photographic documentation of samples collected during the asbestos inspection phase of the project.

County Wide Brownfields Assistance Grant Program, Fayette County, WV
As an Engineering Technician, Mr. Atencio assisted the project manager with the collection, documentation, and photographic documentation of samples collected during the asbestos inspection phase of the project.

Base Construction, Nitro, WV

Prior to his employment at Triad Engineering, Inc., Mr. Atencio worked as an equipment operator for an environmental and site work contractor. Mr. Atencio performed earthwork excavation and site grading for various site work and utility construction projects.





Education Dupont High School

PROFESSIONAL EXPERIENCE 19 Years

REGISTRATIONS & LICENSES West Virginia Department of Highways Compaction Inspector West Virginia Department of Highways Aggregate Sampler West Virginia Department of Highways Portland Concrete Inspector ACI Level 1 Concrete Technician: Smoke Certification OSHA 40 Hour Hazardous Waste Operations MSHA Certificate of Training Pervious Concrete Technician Trenching and Excavation Competent Person Troxier 8 Hour Nuke Safety and Operation Troxler Radiation Safety

Officer Training

40 OSHA Training

MSHA Impoundment Inspector Training ACI

HIGHLIGHTS OF EXPERIENCE

Mr. Fleck is currently a Senior Engineering Technician at the Southwestern Region of Triad. Mr. Fleck duties in this role have included quality control testing and inspection of soil, concrete, structural steel and asphalt. Mr. Fleck has supervised as many as 2 engineering technicians on projects. He has provided project inspection and Quality Assurance/ Quality Control services on numerous building, site and highway and bridge projects throughout West Virginia. In addition, Mr. Fleck also trains newer technicians, and handles all job specific reporting.

RELEVANT PROJECT EXPERIENCE

Mr. Fleck has performed Quality Control Testing and Inspection on Numerous Highway/Bridges projects, Industrial and Commercial projects. He has provided these services throughout our service area of operations as can be seen on the following representative project list.

Highway / Bridge Projects

Coalfields Expressway QAM – Mullens, WV
Route 10 Upgrades - Logan to Man, West Virginia
Johnson Creek Bridge - Alta, West Virginia
Shadle Bridge - Point Pleasant, West Virginia
Jefferson Ave. Bridge - Huntington, West Virginia
I-64 Upgrade - Cross Lanes, West Virginia
Darnell Road Overpass - Huntington, West Virginia
King Coal Highway – Mingo County, West Virginia

Dam and Impoundment Projects

Elkwater Fork Dam – Elkins, WV Wallback Dam – Wallback, WV

Water and Wastewater Projects

i and I Study - Cadiz, Ohio Phase II Water Distribution System - Mason, WV East Beckley WWTP - Beckley, West Virginia Bradley WWTP - Bradley, West Virginia

Building Construction & Site Development

Fountain Place - Logan, West Virginia
Lowe's - Lexington, Kentucky
Cabell Huntington Hospital Additions - Huntington, West Virginia
Pullman Square - Huntington, West Virginia
Huntington Post Office - Huntington, West Virginia
Lakin Correctional Facility - Lakin, West Virginia
Marshall University Foundation Center - Huntington, West Virginia
King's Daughters Medical Center - Ironton, Ohio
Milton Middle School - Milton, West Virginia
Devonshire - Scott Depot, West Virginia



Professional Experience 9 Years

REGISTRATIONS & LICENSES

CDL Class B

SKILLS

- Earthwork Construction Expense
- Utility Construction Knowledge
- Concrete and Foundation Construction Expertise
- Earthwork Compaction Testing
- Concrete Materials Testing

HIGHLIGHTS OF EXPERIENCE

Mr. Bowyer is currently an engineering technician with Triad's Scott Depot, West Virginia office. In this capacity he assists the Geotechnical Engineering and Utilities departments in performing onsite construction materials testing and construction monitoring. Tests performed by Mr. Bowyer include compaction testing and construction monitoring during earthwork fill placement and concrete testing and concrete construction monitoring during concrete placement. Mr. Bowyer also provides Residence Project Representative services on water and waste water projects.

RELEVANT PROJECT EXPERIENCE

Waste Water System Upgrade Phase II, Mason, WV

Mr. Boywer served as the backup RPR for this waste water system improvement project in Mason, WV. Mr. Bowyer was responsible for documenting the contractor's progress, personnel, equipment and daily installed quantities.

Water Distribution System Improvements, Village of Holloway, Ohio

This project consisted of the upgrade and line extensions for the water distribution system for the Village of Holloway. Mr. Bowyer served as the Residence Project Representative (RPR) for this project. Mr. Bowyer was responsible for documenting the contractor's progress, personnel, equipment and daily installed quantities.

Water Distribution System Improvements Phase II, Village of Racine, Ohio

This project consisted of the upgrade and line extensions for the water distribution system for the Village of Racine, Ohio. Mr. Bowyer served as the Residence Project Representative (RPR) for this project. Mr. Bowyer was responsible for documenting the contractor's progress, personnel, equipment and daily installed quantities.

Waste Water Treatment Plant Upgrade, Belle, WV

This project consisted of the upgrade to the waste water treatment plant in Belle, WV. Mr. Boywer served as the backup RPR for this waste water system improvement project. Mr. Bowyer was responsible for documenting the contractor's progress, personnel, equipment and daily installed quantities.

Cobb Compressor Station, Clendenin, WV

This project consists of the construction of a large natural gas compression station near Clendenin, WV. Mr. Bowyer was responsible for performing concrete testing during foundation construction. The concrete testing consisted of temperature determinations, slump testing and air content determinations. Test Cylinders were also fabricated for curing and compressive strength testing in our laboratory.

Water System Improvements, Village of Amesville, OH

This project involvs the construction of a new water treatment facility and a new water storage tank in order to replace the 55-year old facility.

ATTACHMENT B

Past Project Experience and References





STORM AND SANITARY PROJECT

TOWN OF ALDERSON, WEST VIRGINIA

CLIENT:

Town of Alderson, West Virginia

PROJECT TYPE: Utilities

TRIAD PROJECT No.: 04-16-0403 Study 04-17-0144 Design 04-17-0307 Construction

PROJECT COMPLETED: Spring 2018

PROJECT MANAGER: Lee McCoy, PE

PROJECT OBJECTIVE:
To evaluate June 2016
flood damage to storm
and sanitary sewer
systems, and to
rehabilitate/ replacement
systems as needed.

TRIAD SERVICES:

- CCTV Pipe Inspections
- Onsite Engineering Evaluations
- Field Surveying
- Flow Analysis
- Storm System Design
- Sanitary System Design
- Bidding Document Preparation
- Construction Observation

OVERVIEW

On June 23, 2016, torrential rain fell in much of West Virginia, resulting in accumulations of up to 10 inches in a 12-hour period. The National Weather Service meterologists qualified the rainfall as a 1,000-year event for parts of Fayette, Greenbrier, Nicholas, and Summers counties.



The Town of Alderson, West Virginia contracted with Triad Engineering, Inc. (Triad) to perform an evaluation of existing infrastructure including sanitary sewer collection system and storm water collection system. The



replacement of others.

purpose of this evaluation was to investigate defects in the infrastructure and to ascertain as to whether these defects could be attributed to the flooding event of June 2016. Triad conducted an extensive investigation including system mapping, Closed Circuit Television (CCTV) of both storm and sanitary collection lines, smoke testing, manhole inspections, and evaluation of problem areas. Upon review of the inspection and subsequent report, Triad designed repairs of portions of the system and total

Triad worked with the Town and FEMA through the construction process.

Funding for a second phase of the project was applied for and obtained from FEMA. Triad designed the repairs/replacements as needed, assisting the town in bidding and performed construction inspection. Portions of the systems were discovered to be combined and were separated as a part of this project.





WASTEWATER TREATMENT PLANT UPGRADE

BELLE, WEST VIRGINIA

CLIENT:

Town of Belle, West Virginia

PROJECT TYPE: Utilities

PROJECT NUMBER: 04-09-0472

PROJECT COMPLETION: Ongoing

PROJECT MANAGER: Mike Yandrich, PE

PROJECT OBJECTIVE:
To replace outdated
wastewater treatment
plant with package
plant and provide
additional wet weather
storage capacity.

TRIAD SERVICES:

- Engineering Design
- Geotechnical Investigation
- Soil Borings
- Laboratory Testing
- Surveying
- Mapping
- Permitting
- Funding Assistance
- Construction
 Administration
- Construction
 Observation
- Update Asset Management Plan

OVERVIEW

The project consisted of the installation of a new package plant and a package headworks system, conversion of an existing concrete aeration tank to an equalization basin, construction of a new garage and blower



building, and improvements and equipment replacement at the main pump station. The purpose of this project was to replace the greater than 50-year old wastewater treatment plant to allow the Town to better meet their NPDES permit requirements, to allow for more storage capacity during wet weather, and to replace dilapidated equipment.

At the wastewater treatment plant, the project entailed the installation of a 69' diameter steel packaged treatment plant - two (2) aeration tanks, one (1) aerobic sludge digester, one (1) center fed clarifier and one (1) chlorine contact tank as well as one (1) 28' diameter secondary clarifier; all associated equipment – including, but not limited to, all piping, valves, pumps, blowers and necessary appurtenances for a fully functional packaged wastewater treatment plant and secondary clarifier; installation of a package headworks system including an automatic self-cleaning bar screen and grit removal; earthwork and foundations; conversion of the existing aeration tank into an equalization tank; abandoning the existing clarifiers; construction of a garage and blower building; all yard piping; and stairs and walkways.

The upgrades to the main pump station included equipment replacement, and electrical and SCADA upgrades.

Services provided by Triad Engineering included surveying and mapping to generate an existing conditions site map of the existing and proposed wastewater treatment plant site; geotechnical investigation of the proposed wastewater treatment plant site, including soils borings and laboratory testing; generation of design drawings and construction bid packages; assistance obtaining project funding; and obtaining permits from the West Virginia Department of Environmental Protection (WVDEP). Triad also provided construction administration and construction observation services during the construction process.



WASTEWATER COLLECTION SYSTEM IMPROVEMENTS

TOWN OF BELLE, WEST VIRGINIA

CLIENT:

Town of Belle Belle, WV

PROJECT TYPE: Utilities

PROJECT COST: Total Project Cost: \$1,945,100

TRIAD PROJECT No.: 04-07-0236

PROJECT COMPLETION: 2009

PROJECT MANAGER: Carrie Grimm

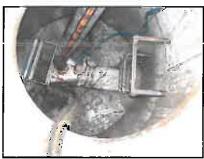
PROJECT OBJECTIVE: Eliminate major sources of inflow/infiltration in collection system.

TRIAD SERVICES:

- CCTV Pipe Inspections
- Survey and Mapping
- Assistance Obtaining Project Funding
- Permitting
- Construction Administration
- Construction
 Observation

OVERVIEW

The project consisted of the investigation and remedial measures for a severe Inflow and Infiltration problem with the Town of Belle's wastewater collection and treatment system. Triad conducted an extensive investigation including system mapping, Closed Circuit Television (CCTV) of over 15 miles of collection line,



smoke testing, manhole inspections, and evaluation of problem areas. Upon review of the inspection and subsequent report performed and provided by Triad, it was decided that it was more economical to slip line the existing pipe and to rehabilitate the existing manholes.



The project included relining over 13,000 LF of existing sewer line, replacement and/or rehabilitation of approximately 80 manholes, and rehabilitation of the 13th Street pump station.

Services provided by Triad Engineering included surveying and mapping to generate an existing conditions site map of the pipe

routes and manhole and inlet locations, assistance obtaining project funding, obtaining permits from the West Virginia Department of Environmental Protection (WVDEP), generation of design drawings and construction bid packages. Triad also provided construction administration and construction observation services during the construction process.





WASTEWATER TREATMENT PLANT AND COLLECTION System Improvements

Town of Mason, West Virginia

CLIENT:

Town of Mason, West Virginia

PROJECT TYPE: Utilities

PROJECT NUMBER: 04-13-0133

PROJECT COMPLETION: Ongoing

PROJECT MANAGER: Mike Yandrich, PE

PROJECT OBJECTIVE: Rehabilitation of aged wastewater treatment plant and reduction of inflow/infiltration in collection system.

TRIAD SERVICES:

- Survey and Mapping
- Manhole Inspections
- Smoke Testing
- Funding Assistance
- Permitting
- Design Drawings
- Construction
 Administration
- Construction
 Observation

OVERVIEW

The project consisted of the rehabilitation of the existing external clarifier and Park pump station and rehabilitation of approximately 75 manholes. The purpose of this project was to improve a significant inflow and infiltration problem, to replace dilapidated equipment at both the



wastewater treatment plant and a pump station.

At the wastewater treatment plant, the project entailed the replacement of the secondary clarifier equipment – drive unit, control panel, stiling well, sludge scraper, and torque tube; and the replacement of the screening carts. An emergency generator and automatic transfer switch were purchased and installed at the Park pump station, above the 100-year floodplain. Miscellaneous equipment was purchased for the Town: utility truck, sewer jetter to clean the sewer lines, and a sewer inspection camera



to conduct their own sewer system evaluations.

The improvements that were made to the manholes to reduce the inflow and infiltration consisted of replacing broken manhole lids and/or rings, raising manhole lids that are depressed below ground with grade rings, excavating buried manhole lids and raising them to existing

grade with grade rings, replacing manholes that were in extremely poor condition, coating the interior of manholes with non-shrink grout or hydraulic cement, replacing manhole steps that were in poor condition or missing, and removing debris that was built-up in the manhole inverts and on the walls.

Services provided by Triad Engineering included surveying and mapping to generate an existing conditions site map of the sanitary sewer pipe routes and manhole locations, manhole inspections and smoke testing of the collection system, assessments of existing pump stations and the treatment facility, assistance obtaining project funding, obtaining permits, and the generation of design drawings and construction bid packages. Triad also provided construction administration and construction observation services during the construction process.



WASTEWATER TREATMENT FACILITIES, COLLECTION SYSTEM AND PUMP STATION IMPROVEMENTS

Town of Pratt, West Virginia

CLIENT:

Town of Pratt Pratt, WV

PROJECT TYPE: Utilities

PROJECT COST: Total Project Cost: \$1,541,728

TRIAD PROJECT No.: 04-10-0203

Project Completion: 2015

PROJECT MANAGER: Carrie Grimm

PROJECT OBJECTIVE: Rehabilitation of aged wastewater treatment plant and collection systems.

TRIAD SERVICES:

- Survey and Mapping
- Manhole Inspections
- Smoke Testing
- Assistance
 Obtaining Project
 Funding
- Permitting
- Construction
 Administration
- Construction Observation

OVERVIEW

The project consisted of investigation and remedial measures to upgrade the wastewater collection system and pump stations, and to provide needed repairs and equipment at the treatment facility for the Town of Pratt, West Virginia. The purpose of this project was to improve a significant inflow and infiltration problem, increase the collection system capacity, and address a West Virginia Department of Environmental Protection (WVDEP) Consent Order.

The project entailed the replacement of 790 feet of existing 8-inch and 90 feet of existing 6-inch gravity sewers including



one (1) railroad crossing, replacing 16 existing manholes, sealing 21 existing manholes with epoxy, and providing 45 various other repairs to existing manholes. Also included was the complete refurbishing of two (2) existing pump stations and the elimination of a third existing pump station which met the WVDEP Consent Order, requiring the elimination of a sewer overflow. This was achieved by designing 560 feet of new 10-inch gravity



sewer to connect two different gravity collection zones. The new line required 10 manholes and a highway crossing to accomplish the pump station abandonment.

Additionally, the project provided new chlorination and sulfonation systems, a perimeter security alarm system, a spare blower with motor, a new sludge pump, additional flow metering and

miscellaneous laboratory equipment at the wastewater treatment facility, replacement of the chlorine line and chlorine tank valve.

Services provided by Triad Engineering included surveying and mapping to generate an existing conditions site map of storm and sanitary sewer pipe routes and manhole and inlet locations, manhole inspections and smoke testing of the collection system, assessments of existing pump stations and the treatment facility, assistance obtaining project funding, obtaining permits, the preparation of application forms and drawings for an occupancy agreement with CSX Railroad, and the generation of design drawings and construction bid packages. Triad also provided construction administration and construction observation services during the construction process.

ATTACHMENT C Signed Forms



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

(Name, Title)
David F. Meadows, PE, PS, Cheif Technical Officer
(Printed Name and Title)
10541 Teays Valley Road, Scott Depot WV 25560
(Address)
<u>304-755-0721 / 304-755-1880</u>
(Phone Number) / (Fax Number)
dmeadows@triadeng.com
(email address)

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

Triad Engineering, Inc.	
(Company)	
(Authorized Signature) (Representative Name, Title)	
David F. Meadows, PE, PS, Chief Technical Officer	
(Printed Name and Title of Authorized Representative)	
2/20/2013	
(Date)	
304-755-0721 / 304-755-1880	
(Phone Number) (Fax Number)	

ADDENDUM ACKNOWLEDGEMENT FORM SOLICITATION NO.:

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)
Addendum No. 1 Addendum No. 2 Addendum No. 3 Addendum No. 4 Addendum No. 5	Addendum No. 6 Addendum No. 7 Addendum No. 8 Addendum No. 9 Addendum No. 10
I turther understand that any verbal reprediscussion held between Vendor's repres	eceipt of addenda may be cause for rejection of this bid esentation made or assumed to be made during any oral sentatives and any state personnel is not binding. Only ded to the specifications by an official addendum is
Triad Engineering, Inc. Company Authorized Signature	
2/20/2019 Date	

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

West Virginia Ethics Commission



Disclosure of Interested Parties to Contracts

Pursuant to W. Va. Code § 6D-1-2, a state agency may not enter into a contract, or a series of related contracts, that has/have an actual or estimated value of \$1 million or more until the business entity submits to the contracting state agency a Disclosure of Interested Parties to the applicable contract. In addition, the business entity awarded a contract is obligated to submit a supplemental Disclosure of Interested Parties reflecting any new or differing interested parties to the contract within 30 days following the completion or termination of the applicable contract.

For purposes of complying with these requirements, the following definitions apply:

"Business entity" means any entity recognized by law through which business is conducted, including a sole proprietorship, partnership or corporation, but does not include publicly traded companies listed on a national or international stock exchange.

"Interested party" or "Interested parties" means:

- (1) A business entity performing work or service pursuant to, or in furtherance of, the applicable contract, including specifically sub-contractors;
- (2) the person(s) who have an ownership interest equal to or greater than 25% in the business entity performing work or service pursuant to, or in furtherance of, the applicable contract. (This subdivision does not apply to a publicly traded company); and
- (3) the person or business entity, if any, that served as a compensated broker or intermediary to actively facilitate the applicable contract or negotiated the terms of the applicable contract with the state agency. (This subdivision does not apply to persons or business entities performing legal services related to the negotiation or drafting of the applicable contract.)

"State agency" means a board, commission, office, department or other agency in the executive, judicial or legislative branch of state government, including publicly funded institutions of higher education: Provided, that for purposes of W. Va. Code § 6D-1-2, the West Virginia Investment Management Board shall not be deemed a state agency nor subject to the requirements of that provision.

The contracting business entity must complete this form and submit it to the contracting state agency prior to contract award and to complete another form within 30 days of contract completion or termination.

This form was created by the State of West Virginia Ethics Commission, 210 Brooks Street, Suite 300, Charleston, WV 25301-1804. Telephone: (304)558-0664; fax: (304)558-2169; e-mail: ethics@wv.gov; website: www.ethics.wv.gov.

West Virginia Ethlcs Commission Disclosure of Interested Parties to Contracts

(Required by W. Va. Code § 6D-1-2)

Name of Contracting Business Entity: <u>Triad Engineering, Inc.</u> Address:	10541 Teays Valley Road
	Scott Depot, WV 25560
Name of Authorized Agent: Address:	
Contract Number: Contract Descrip	
Governmental agency awarding contract:	
☐ Check here if this is a Supplemental Disclosure	
List the Names of Interested Parties to the contract which are known or reasonal entity for each category below (attach additional pages if necessary):	ably anticipated by the contracting busines
 Subcontractors or other entitles performing work or service under the □ Check here if none, otherwise list entity/individual names below. 	e Contract
2. Any person or entity who owns 25% or more of contracting entity (not ☐ Check here if none, otherwise list entity/individual names below.	t applicable to publicly traded entities
3. Any person or entity that facilitated, or negotiated the terms of, the services related to the negotiation or drafting of the applicable contract. Check here if none, otherwise list entity/individual names below. Signature: Date Signed	ct)
Notary Verification	
State of WEST MESWIA. County of PUTNA	
I, <u>Davis F McAssus</u> , the auti- entity listed above, being duly sworn, acknowledge that the Disclosure herein is penalty of perjury.	horized agent of the contracting business s being made under oath and under the
Taken, swom to and subscribed before me this day of _Feb.	rugry , 2019.
Notary Public To be completed by State Agency: Date Received by State Agency: Date submitted to Ethics Commission:	

Scott Depot, WV 25580

My Commission Expires March 10, 2019

STATE OF WEST VIRGINIA Purchasing Division

PURCHASING AFFIDAVIT

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

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

EXCEPTION: The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' companisation 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. Vs. 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

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

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

Official Seal
Hotary Public, State of West Wighter
Pamela E. Doslar
105 Valley Bend
Scott Depot, WV 25560
My Commission Expires March 10, 2019

Purchasing Affidavit (Revised 01/19/2018)

OUR SERVICES

Civil Engineering

Geotechnical Engineering

Environmental Services

Survey and Mapping

Landscape Architecture

Construction Monitoring

Drilling and Sampling

Laboratory Testing

Oil and Gas Industry Services

Mine Permitting



WEST VIRGINIA

1097 Chaplin Road Morgantown, WV 26501 (304) 296-2562

10541 Teays Valley Road Scott Depot, WV 25560 (304) 755-0721

MARYLAND

1075-D Sherman Avenue Hagerstown, MD 21740 (301) 797-6400

VIRGINIA

200 Aviation Drive Winchester, VA 22601 (540) 667-9300

46040 Center Oak Plaza, Suite 180 Sterling, VA 20166 (703) 729-3456

PENNSYLVANIA

201 Penn Ctr. Blvd., Suite 400 Pittsburgh, PA 15235 (412) 257-1325



OHIO

