

The following documentation is an electronicallysubmitted vendor response to an advertised solicitation from the West Virginia Purchasing Bulletin within the Vendor Self-Service portal at wvOASIS.gov. As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at WVPurchasing.gov with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.

WOASI	S			Jump to: FORMS	Go Go	Home	& Personalize	Accessibility	🔁 App Help 🏾 🏷 Abou	ut [
/elcome, Lu Anne Cottrill			Procureme	ent Budgeting Accounts Re	eceivable	Accounts	Payable			
Solicitation Response(SR) Dept: 0603	ID: ESR081221000000	000935 Ver.: 1 Functio	on: New Phase: Final	Modified by batch , 08/12	2/2021					
Header 🕅 16										
									😑 List View	~
General Information Contact D	efault Values Discount	Document Information	Clarification Request							
Procurement Folder:	915025			SO Doo	c Code: C	EOI				
Procurement Type:	Central Purchase Order			so	O Dept: 0	603				
Vendor ID:	000000203587	2		SOI	Doc ID: A	DJ22000000	03			
Legal Name:	TRIAD ENGINEERING IN	NC		Publishe	d Date: 7	/28/21				
Alias/DBA:				Clos	e Date: 8	/12/21				
Total Bid:	\$0.00			Close	e Time: 1	3:30				
Response Date:	08/12/2021				Status: C	losed				
Response Time:	9:56			Solicitation Desc	ription:	South Gate R Stabilization [oad Slip Design-Camp	\bigcirc		
Responded By User ID:	triad2014	2		Total of Header Attach	ments: 1	6				
First Name:	Dane			Total of All Attach	ments: 1	6				
Last Name:	Ryan									
Email:	dryan@triadeng.com									
Phone:	3047550721									



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

State of West Virginia Solicitation Response

Proc Folder:	915025				
Solicitation Description:	South Gate Road Slip Stabilization Design-Camp Dawson				
Proc Type:	Central Purchase Order				
Solicitation Closes		Solicitation Response	Version		
2021-08-12 13:30		SR 0603 ESR0812210000000935	1		

VENDOR 000000203587 TRIAD ENGINEERING INC	0				
Solicitation Number:	CEOI 0603 ADJ2200000003				
Total Bid:	0	Response Date:	2021-08-12	Response Time:	09:56:39
Comments:					

FOR INFORMATION CONTACT THE BUYE David H Pauline 304-558-0067 david.h.pauline@wv.gov	R		
Vendor Signature X	FEIN#	DATE	
All offers subject to all terms and conditio	ns contained in this solicitation		

itation J

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract A	mount
1	South Gate Road Slip Stabiliza Camp Dawson	ition Design-			0.00	
Comm	Code Mar	nufacturer	Specifica	tion	Model #	
811015	508					

Commodity Line Comments:

Extended Description:

Provide professional architectural and engineering design services per the attached documentation.

TRIAD Listens, Designs & Delivers



August 5, 2021

WVARNG Joint Forces Headquarters, Construction and Facilities Management Office 1707 Coonskin Drive Charleston, WV 25311

RE: Expression of Interest Camp Dawson South Gate Road Slip Stabilization Design TRIAD Proposal No. 04-21-0391

Dear Mr. Underwood:

We are pleased to present our Expression of Interest for your consideration to provide services for geotechnical investigation and design for the stabilization of the South Gate Road located at Camp Dawson, near Kingwood, WV.

Triad has all capabilities to complete this project in house from our Scott Depot and Morgantown West Virginia offices without the need of subcontractors or subconsultants. Not using subcontractors typically results in a more efficient project and savings to the project budget. Should additional staffing be needed, Triad can rely on staff from our other six offices located throughout our Eastern regions.

We are confident that the attached documentation will illustrate how we will work with you to develop the best solutions for your engineering needs. This information will allow you to understand our team's level of experience and expertise. As you can see from the enclosed documents, Triad can and will provide all necessary engineering evaluation and design services.

If you have any questions or comments about our proposal, please do not hesitate to contact us at 304-755-0721.

Very truly yours,

TRIAD ENGINEERING, INC.

Dane H. Ryan Business Development Leader Larry "Lee" McCoy Jr., P.E. Regional Manager



TABLE OF CONTENTS

- I. Project Scope and Approach
- II. Company Background
- III. Qualifications and Expertise
- IV. Management and Staffing
- V. References
- VI. Project Team Resumes
- VII. Relevant Project Experience



SCOPE OF WORK

Based on the request for qualifications, we understand the proposed project consists of a geotechnical engineering team to provide soil investigations to provide evaluation of the existing slope and remedial design of the affected area.

We understand services required will consist of:

- Soil analysis to determine existing subsurface soil conditions
- Slope stability evaluation and analysis
- Evaluations of all bore holes



- Recommendation of any and all remedial actions based on findings from subsurface exploration and slope evaluation
- Design of Remedial Measures
- Preparation of Construction Drawings and Specifications

Triad's team has substantial experience with subsurface investigations, drilling, and slope analysis projects. Triad's team brings years of experience among similar projects of this nature.

We deliver assistance and guidance in resolving problems while providing high quality and innovative solutions through sustainable design. We can provide a turn-key project or take a limited role depending on the client's needs. We have assembled a dedicated team whose number one goal is client satisfaction to meet the USARNG's needs for this project.





SUBSURFACE EXPLORATION

Triad has in house drilling capabilities that include truck-, track-, ATV- and skid-mounted drill rigs. This permits Triad to access variable terrain conditions. Prior to developing a subsurface exploration plan Triad personnel will meet with the client to obtain a thorough understanding of the client's needs. Triad will then develop a plan to obtain adequate information to meet these needs.

ANALYSIS AND DESIGN

At the completion of the subsurface exploration, Triad will conduct laboratory testing to determine engineering properties of the site soils and bedrock. The laboratory results will then be used to complete analyses for the design process. When there are concerns with slopes, the analysis includes slope stability analyses to evaluate options to improve stability. Options could include construction of retaining walls, regrading site soils and removal and replacement of problematic soils.





COMPANY BACKGROUND

Triad Engineering, Inc. is a multidisciplinary 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 is 100% employee-owned, with every employee taking part in Triad's ESOP from field support staff to senior managers.

"Triad is small enough to be responsive to the needs of our customers and large enough to remain at the forefront of scientific solutions" -Brad Reynolds, CEO

Triad currently maintains approximately 170 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 46 years of service in West Virginia and surrounding states, both the number and complexity of our



projects have grown. Our clients include federal, state and local governmental agencies, contractors, architects, engineers, attorneys, developers, commercial organizations, and mining and industrial corporations.

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.







KEY PERSONNEL

The Triad Team

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



Complete resumes for all project personnel are located in section VI.



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 through Architects and Engineers Insurance Company of Winchester, Virginia.



Experience and Expertise

All of the information under the *Relevant Project Experience* tab will clearly show that Triad has extensive experience in similar projects. After examining the materials provided, the Triad team assembled for this project will show the expertise necessary to complete this particular 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.



REFERENCES

Cindy Shamblin Whitman, Requardt & Associates, LLP 300 Summers Street, Suite 810 Charleston, West Virginia 25301

Larry Clegg CDM Smith 500 Lee Street, East Suite 410 Charleston, West Virginia 25301

Tim Kirk A. Morton Thomas and Associates, Inc. 417 Grand Park Drive, Suite 102 Parkersburg, West Virginia 26105

Mr. Kirk Donges Architect/Principal TSHD Architects 1010 Coles Blvd. Portsmouth, OH 45662 740.354.6621 kdonges@TSHDarchitects.com

Mr. Shaun A. Lopez AEP Transmission PM Marmet, WV 304.380.8552 salopez2@aep.com



Triad Engineering, Inc. Statement of Qualifications



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



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

www.triadeng.com

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 200 Aviation Drive Winchester, VA 22601 (540) 667-9300 201 Davis Drive, Suite KK Sterling, VA 20164 (703) 729-3456

OHIO

1010 Coles Blvd., Suite 200 Portsmouth, OH 25662 (740) 742-4304

PENNSYLVANIA

111 S. Center Avenue, Suite #6 New Stanton, PA 15672 (412) 257-1325

4999 Louise Drive, Suite 103 Mechanicsburg, PA 17055 (717) 590-7429



Appendix A







BENJAMIN G. CAMPBELL, PE SENIOR ENGINEER



EDUCATION Marshall University MS, Engineering

Fairmont State University BS, Civil Engineering Technology

Potomac State College AA, Civil Engineering

PROFESSIONAL EXPERIENCE 14 Years

REGISTRATIONS & LICENSES

Professional Engineer

- West Virginia
- Pennsylvania

SKILLS

- Project Management
- Soils Classification
- Construction Materials Engineering & Testing

PROFESSIONAL AFFILIATIONS

- ASHE
- ASCE
- NSPE

HIGHLIGHTS OF EXPERIENCE

Mr. Campbell has over 14 years of engineering experience. He is responsible to Triad's Geotechnical Engineering Services and Construction Field and Laboratory Services. Mr. Campbell performs geotechnical explorations, assessments, and evaluation of exploration results, foundation recommendations and reporting, laboratory testing, field inspections, and special inspections.

RELEVANT PROJECT EXPERIENCE / GEOTECHNICAL

ON CONSOL Midstream Green Hills Slide, Morris Township, PA

As project engineer, Mr. Campbell provided geotechnical exploration for landslide repairs of an approximate 300 cubic yard slip along trunk line right of way. Mr. Campbell's responsibilities included supervision of the field exploration program, drilling inspection, logging of boring locations, and initial slide repair recommendations.

Rice Swohalla Well Site, Union Township, OH

As project engineer, Mr. Campbell provided geotechnical exploration and initial earthwork recommendations for the well pad site. Project challenges included fill slop stability, heavy vehicular traffic loads, and moisture susceptibility of site soils

Rice Dahn-Than Well Pad, Wayne Township, PA

As project engineer, Mr. Campbell provided geotechnical exploration and initial earthwork recommendations for this well pad site. Project challenges included colluvial soils in relation to slope stability, site location in close proximity to landslide susceptible materials, vehicular traffic loads, and moisture susceptibility of site soils.

Rice Irish Pug Well Pad, Wayne Township, PA

As project engineer, Mr. Campbell provided geotechnical exploration and initial earthwork recommendations for this well pad site. Project challenges included fill slop stability, heavy vehicular traffic loads, and moisture susceptibility of site soils.

Rice Battle Phrog, Whitely Township, PA

As project engineer, Mr. Campbell provided a geotechnical exploration and initial earthwork recommendations for this well pad site. Project challenges included fill slope stability, site location in close proximity to landslide susceptible materials, vehicular traffic loads, and moisture susceptibility of site soils.

Eclipse Resources Posey RUMA, Quaker City, OH

As project engineer, Mr. Campbell provided an evaluation and geotechnical exploration of local roads scheduled for a road use maintenance agreement. Included in the project was an assessment of current conditions, improvement needs, and FDR design recommendations.



TYLER HAMPTON, EI STAFF ENGINEER



EDUCATION Marshall University, WV BS, Civil Engineering Graduated Cum Laude

PROFESSIONAL EXPERIENCE 4 Years

CERTIFICATIONS

- Hazmat Certified
- Nuclear Gauge Safety
 Certified
- OSHA 10 Hour
 Construction
- CPR/AED and First Aid

SKILLS

- Construction Materials Testing and Inspection
- Environmental
- Geotechnical

HIGHLIGHTS OF EXPERIENCE

Mr. Hampton is currently a Staff Engineer for the Geotechnical Engineering Section at the Scott Depot branch of TRIAD. In this capacity, he has been involved in laboratory testing, drill rig inspection, assisting the Geotechnical Project Manager in design and calculations, and writing reports. Mr. Hampton also has experience in building and installing sediment traps, performing laboratory analysis, surveying, and right-of-way plans. These projects have included stream studies, road construction, and flood damage. Mr. Hampton graduated Cum Laude from Marshall University with his Bachelors of Science in Engineering, Civil Emphasis and was the recipient of many awards including the Dean's List, Promise Scholar, National Society of Collegiate Scholars, and NASA West Virginia Space Grant, Undergraduate Fellowship.

RELEVANT PROJECT EXPERIENCE

Subsurface and Foundation Explorations (WV, VA, MD, KY, and OH)

Mr. Hampton assists with subsurface and foundation explorations for various private business and industrial firms. The projects consist of assisting the performing of subsurface explorations and analysis and recommending appropriate foundation types based on the results of the subsurface explorations. The projects also involved estimating potential settlement, delineating potential subsurface problems, and providing related recommendations regarding the geotechnical aspects of the projects. Mr. Hampton assisted in preparing the geotechnical report provided to the client for each project.

WV Division of Highways, District 2 Headquarters, Maintenance Design

Mr. Hampton visually surveyed roads in need of repair and documented road surface quality. He calculated total cost and quantity of material required to repair roads for paving contracts. Mr. Hampton also prepared and submitted right-of-way plans using Microstation and assisted in surveying flood damage and assembled contracts submitted to FEMA & FHWA.



JOHN HAYNES, PE DRILLING SERVICES MANAGER



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

PROFESSIONAL EXPERIENCE 30 Years

CERTIFICATIONS

Certified Monitoring Well
 Installer (WV
)

REGISTRATIONS & LICENSES

 Registered Professional Engineer (WV, MD)

SKILLS

- Managing Multiple Drill Crews
- Organizing drills, crews, and supplies for drilling projects
- Design of Subsurface
 Explorations
- Approval of Design Drawings
- Proposals
- Driling Inspection
- Geotechnical Analysis & Reporting
- Geotechnical Engineering and Driling Cost Estimating and Bid Preparation

HIGHLIGHTS OF EXPERIENCE

Mr. Haynes serves as the Senior Drilling Manager for Triad's drilling operations when he manages all drilling and sampling activities conducted by the firm's regional offices. Mr. Haynes previously served as a Project Geotechnical Engineer. Mr. Haynes' duties include design and implementation of the subsurface investigations, assignment of laboratory testing, approval of design drawings, development of technical specifications, and preparation of drilling and geotechnical engineering cost proposals and reports.

RELEVANT PROJECT EXPERIENCE

Statewide Geotechnical Drilling IDIQ, Various Locations, WV

This project consists of an as-needed, on-call 1 to 2 year contract for providing geotechnical drilling to the West Virginia Division of Highways. Triad has maintained this contract since 1998 and Mr. Haynes has managed the contract since 2012. Recent projects have included water borings (off shore drilling) for the I-64 Nitro, St. Albans, Bridge and borings for several bridge replacements in various locations in Berkeley and Hampshire Counties, WV.

Corridor H Drilling-Kerens to Parsons, Section 2, Tucker County, WV

The project consists of the geotechnical drilling for a 3.69 mile section of a 4 lane Expressway which extends from Interstate 79 near Weston, WV east to the Virginia state line near Wardensville, WV. Mr. Haynes was the project manager for this project which consisted of 166 Borings for a total drilling footage of 10,616 feet. This project was extremely difficult due to the extremely steep terrain and strict environmental requirements.

Corridor H Drilling-Kerens to Parsons, Section 1B, Randolph, Tucker County, WV

The project consists of the geotechnical drilling for a 5.62 mile section of a 4 lane Expressway which extends from Interstate 79 near Weston, WV east to the Virginia state line near Wardensville, WV. Mr. Haynes was the project manager for this project which consisted of 272 Borings for a total drilling footage of 15,757 feet. This project was extremely difficult due to the extremely steep terrain and strict environmental requirements.

Morris Impoundment, Dodridge County, WV

The project consists of the construction of an impoundment for the construction of a secondary containment system for a centralized water storage tank in Dodridge County, WV to be used in development of natural gas wells. Mr. Haynes provided drilling supervision and oversight during the subsurface investigation portion of the project. The subsurface investigation consisted of drilling 7 test borings to depths ranging from 16.5 to 45 ft. beneath the existing ground surface. Standard Penetration Testing was performed at each location and rock coring was performed at select borings.

Appalachian Corridor "H", Tucker and Grant County, WV

As a Staff Geotechnical Engineer, Mr. Haynes worked closely with the field inspectors during the subsurface investigation phase by helping make decisions concerning boring locations, depths, and subsurface descriptions. He entered boring logs, assigned laboratory testing, and prepared geological stick bar borings to be placed on the project cross sections. Mr. Haynes also designed cut and fill slopes, preformed slope stability analysis on critical embankment fills, estimated shrink/swell factors for excavated materials, and tabulated probable sources of select embankment for these sections of the Corridor. He compiled all information into a final geotechnical roadway report, including the three bridges

www.triadeng.com

in this section. Bridge reports provided foundation recommendations and bearing capacity computations for each of the bridge abutments and piers.

Western Juvenile Detention Center, Barboursville, WV

As a Project Engineer, Mr. Haynes developed and implemented the subsurface investigation for this detention facility. His responsibilities included coordination with our in-house survey department, determination of access for drill rig and equipment, and supervision of all field work.

Ohio University Southern Center for Development, Athens, OH

Mr. Haynes worked with drill teams from Triad during the subsurface investigation phase of this project, and then prepared computer-generated borings logs and assigned laboratory testing. From this, he prepared a geotechnical report including foundation recommendations, allowable bearing capacities, and estimated settlements.

St. Mary's Hospital, Huntington, WV

Mr. Haynes escorted Triad's drillers to this project site and staked the test borings utilizing measurements from existing site features. Following the subsurface investigation, Mr. Haynes then prepared a geotechnical report including foundation recommendations, allowable bearing capacities, and estimated settlements.

Cenalli Impoundment, Barbour County, WV

The project consists of the construction of an impoundment with an approximate total volume of 10.2 million gallons, located in Barbour County, WV. We understand that the impoundment will be used as a centralized pit for the storage of water used in development of natural gas wells. Mr. Haynes provided drilling supervision and oversight during the subsurface investigation portion of the project. The subsurface investigation consisted of drilling 4 test borings to depths ranging from 30 to 40 ft. beneath the existing ground surface. Standard Penetration Testing and rock coring was performed at each location.

West Virginia Route 9, Jefferson and Berkeley County, WV

As a Staff Geotechnical Engineer on the first section of this project, Mr. Haynes worked as the Lead Inspector in the field during the subsurface investigation by logging soil and rock from bore holes, keeping track of drill rigs, and aiding other inspectors. He designed cut and fill slopes, performed slope stability analysis on critical embankment fills, performed settlement calculations for embankment fills, estimated shrink/swell factors for excavated materials, and tabulated probable sources of select embankment.

Coalfields Expressway, Sophia, WV

As a Project Geotechnical Engineer on this project, Mr. Haynes initially developed a boring layout based on the project cross-sections provided by the client. He also worked with field inspectors during the subsurface investigation to design cut and fill slopes, perform settlement calculations for embankment fills, estimate shrink/swell factors for excavated materials, and tabulate probable sources of select embankment. After the original subsurface investigation and geotechnical report was completed, WVDOT decided to extend the project 800 ft. in an attempt to balance borrow and waste. Mr. Haynes then developed a recall boring list in order to continue the project.

Pleasants County PSD Water Storage Tanks, Pleasants County, WV

Mr. Haynes escorted Triad drillers to this project site and worked with the drill crew during the subsurface investigation. Following the subsurface investigation, Mr. Haynes developed computerized boring logs, assigned laboratory testing, and prepared a geotechnical report including foundation recommendations, allowable bearing capacities, and estimated settlements.

Fairdale Elementary School, Fairdale, WV

Mr. Haynes escorted Triad's drillers to this project site and staked the test borings utilizing measurements from existing site features. Following the subsurface investigation, Mr. Haynes developed computerized boring logs, assigned laboratory testing, and prepared a geotechnical report including foundation recommendations, allowable bearing capacities, and estimated settlements.

Proposed Hampton Inn, Gallipolis, OH

Mr. Haynes escorted Triad's drillers to this project site and staked the test borings utilizing measurements from existing site features. Following the subsurface investigation, Mr. Haynes developed computerized boring logs, assigned laboratory testing, and prepared a geotechnical report including foundation recommendations, allowable bearing capacities, and estimated settlements.

www.triadeng.com



BRETT MORRIS LABORATORY MANAGER/STAFF GEOLOGIST II



EDUCATION Marshall University, WV BS, Geology

PROFESSIONAL EXPERIENCE 7 Years

Registration & Licenses

- WVDOH Aggregate Technician
- ACI Concrete Lab
 Testing Technician
 Level I
- ACI Aggregate Testing Technician Level I
- ACI Concrete Strength
 Testing Technician

HIGHLIGHTS OF EXPERIENCE

Mr. Morris works with our Geotechnical Department and in the Laboratory in our Scott Depot, WV office as a staff geologist and laboratory manager. In this capacity, Mr. Morris's responsibilities include inspecting ongoing drilling projects. His drilling inspection responsibilities include coordination with the client, and logging soil and rock samples. He communicates and coordinates with the project engineers and the drillers to verify the work is being completed correctly. In the Lab, Mr. Morris performs multiple tests including, standard and modified Proctors, sieve analyses, Atterberg limits, tri-axial compression, permeability and unconfined compressive strength tests.

RELEVANT PROJECT EXPERIENCE

East Beckley Bypass, Beckley, West Virginia

As a staff geologist, Mr. Morris was responsible for field coordination activities during geotechnical drilling for this WVDOH highway expansion and upgrade project in Raleigh County, WV. His duties also included logging and field classification of soil and rock samples. Mr. Morris also assisted in the preparation of engineering boring logs and report preparation.

Dow Evergreen Project, Institute, West Virginia

As a staff geologist, Mr. Morris was responsible for field coordination activities during geotechnical drilling for this chemical facility project in Institute, WV. His duties also included logging and field classification of soil and rock samples. Mr. Morris also assisted in the preparation of engineering boring logs and report preparation.

Dingess Street Bridge, Logan, West Virginia

As a staff geologist, Mr. Morris was responsible for field coordination activities during geotechnical drilling for this WVDOH bridge replacement and upgrade project in Logan, WV. His duties also included logging and field classification of soil and rock samples. Mr. Morris also assisted in the preparation of engineering boring logs and report preparation.

Special Metals Equipment and Building Expansion, Burnaugh, KY

As a staff geologist, Mr. Morris was responsible for field coordination activities during geotechnical drilling for this steel manufacturing facility project in Burnaugh, KY. His duties also included logging and field classification of soil and rock samples. Mr. Morris also assisted in the preparation of engineering boring logs and report preparation.

Bayer Crop Science West Sump SEP Project, Institute, WV

As a staff geologist, Mr. Morris was responsible for field coordination activities during geotechnical drilling for the construction of a large concrete sump for the Bayer Crop Science facility Institute, WV. His duties also included logging and field classification of soil and rock samples. Mr. Morris also assisted in the preparation of engineering boring logs and report preparation.



RAYMOND A. STROTHER II, PE SENIOR GEOTECHNICAL ENGINEER



EDUCATION West Virginia University, BS, Civil Engineering, 2006

Potomac State College, AS, Civil Engineering

PROFESSIONAL EXPERIENCE 14 Years

REGISTRATIONS & LICENSES

- P<u>E, Virginia,</u> #
- PE , West Virginia,
 #1
- PE, Maryland,
- NCEES Record
- Troxler Nuclear Moisture
 Density Gauge Operator
- MSHA

SKILLS

- Drilling Inspection
- Geophysical Surveys
- Soils Classification
- Geotechnical Analysis & Reporting

HIGHLIGHTS OF EXPERIENCE

Mr. Strother is a Senior Geotechnical Engineer and Geotechnical Practice Leader for the Shenandoah Valley Region. He is responsible for monitoring geotechnical investigations, geophysical testing, site construction testing and monitoring, shallow and deep foundation inspections, dam/impoundment inspections, siphon design, karst mitigation and pre-blast surveys. Project experience includes coordination of drilling crew operations, performance of detailed geotechnical investigations ranging from small commercial/residential projects to multi-million square feet industrial projects and VDOT/WVDOH projects and management of QA/QC monitoring and materials testing operations.

RELEVANT PROJECT EXPERIENCE

Shepherd University, New Student Housing Project, Shepherd, WV

Project Manager in charge of detailed geotechnical investigation for a new student housing building. Building was designed in an "L" shape with one wing measuring 195 feet and the other wing 175 feet and 5 stories tall.

Christiandom College, St. Claire's Women Dormitory, Warren County, VA

Project Manager responsible for detailed geotechnical invesitgation for a new student resident hall. Planned building was 2 stories with a gross footprint of 19,800 square feet. Geotechnical services included field exploration, laboratory testing and detailed geotechnical report of findings and recommendations for construction.

Snowden Bridge Residential Subdivision, Frederick County, VA

Project Engineer and then Project Manager for geotechnical services in support of new residential development. For the past 8+ years, Triad has performed detailed geotechnical investigations for multiple phases of development.

Lowes at Riverton Commons, Warren County, VA

As staff engineer was tasked with overseeing proof-drilling and pressure grouting operations for a Lowes building situated in karst terrain. Duties included monitoring of quantities and grouting pressures and documentation of rock conditions during proof-drilling.

Valley Health Systems, Various projects, Winchester, VA

Coordinated with utility companies and Valley Health Systems personnel due to multiple public and private utilities present with the property prior to drilling operations. Performed caisson inspections, logging soil, sewer video inspection, rock and groundwater conditions and supervision of the drill crew.



CABELL HUNTINGTON HOSPITAL LANDSLIDE REPAIR

HUNTINGTON, WEST VIRGINIA

OVERVIEW

This landslide occurred on a hillside adjacent to the Cabell-Huntington Hospital parking lot resulting in slide material encroaching on a street and parking area and damaging yards of a few residences at the crest of the hill. Left unabated



the slide could have endangered the houses and further encroached on the street and parking area. A drilled H pile retaining wall was chosen to stabilize the hillside, allow repair of the yards and cleanup of the parking lot and street.

Services provided by Triad consisted of field surveying to generate existing site conditions and topographic mapping, a geotechnical investigation to determine subsurface conditions to facilitate wall design, research and interaction with the client and adjacent property owners to select the most appropriate and economic wall for the application, design of the wall, and preparation of construction drawings and project specifications. During construction of the wall, Triad performed quality control testing and monitoring. Quality control testing consisted of concrete and compaction testing of wall foundation and backfill materials.

CLIENT:

Cabell Huntington Hospital *Leslie Ray* (304) 526-4840

PROJECT TYPE: Geotechnical

- Surveying and Mapping
- Geotechnical
 Investigation
- Design
- Quality Control Testing and Monitoring



OVERVIEW

CLIENT:

City of Charleston *Mrs. Cathy Rushworth* (304) 348-1084

PROJECT TYPE: Geotechnical

TRIAD SERVICES:

- Surveying and Mapping
- Geotechnical
 Investigation
- Design
- Construction
 Administration
- Quality Control
 Testing

Triad Engineering, Inc. (Triad) designed a segmental block retaining wall to replace an existing retaining wall located along a portion of Lower Edgewood Drive. The existing retaining wall was constructed of stacked cut sandstone blocks and was approximately 240 feet long. Since the wall was constructed, the street had displayed continual signs of settlement and the wall had apparently moved laterally as evidenced by a substantial bulge near the center of the wall.

A segmental block wall was selected for this project since the overall aesthetic appearance of the wall was a major concern of the adjoining property owners. In addition to supporting Edgewood Drive, the new wall had to be aesthetically pleasing to the nearby residences as well as maintaining some of the historic significance of the existing sandstone wall. Safety was also a concern since the retaining wall resulted in a vertical drop of approximately 20 feet. A short wall, consisting of cut sandstone blocks from the existing wall, was constructed on top of the segmental block wall to provide fall protection and to create a vehicle barrier.

Services provided by Triad consisted of field surveying to tie as-built existing site conditions with available aerial mapping of the area, a geotechnical investigation to determine subsurface conditions to facilitate wall design, research and interaction with the client and adjacent property owners to select the most appropriate and economic wall for the application, design of the wall, and preparation of construction drawings and project specifications. During construction of the wall, TRIAD performed construction administration duties and quality control testing. Construction administration duties included conducting construction meetings, approval of change order requests, and periodic engineering inspection. Quality control testing consisted of compaction testing of wall foundation and backfill materials.



EMBANKMENT FAILURE, LORENE STREET

CITY OF LOGAN, WEST VIRGINIA

OVERVIEW

During the incident period of March 15 to March 31, 2012, heavy rains associated with severe storms passed over the City of Logan causing high velocity runoff waters and flooding of the city. This high velocity water



caused road embankment failure located on Lorene Street. The road embankment failure was reported to be 48 feet long, 10 feet wide and 5 feet in depth. Once further site investigations were made by the engineer, the actual failure measured 52ft x 10ft x 15 ft.

Triad Engineering performed a topographic survey to document existing conditions at the site and to provide a basis for remedial



design. Triad performed a geotechnical investigation to determine subsurface conditions at the site. Triad utilized the additional data gathered during the geotechnical and topographical investigations to better determined the most feasible repair for the embankment failure. Triad designed a steel piling and concrete lagging retaining wall as well as road repair. The engineer's estimate was \$194,390.00.

CLIENT: City of Logan

PROJECT TYPE: Geotechnical

- Surveying
- Geotechnical
 Investigation
- Design



OVERVIEW

The project consisted of a geotechnical investigation for abatement that occurred along North Edgemont Road, in Huntington, West Virginia. The slide initially impacted the edge of North Edgemont Road, and resulted in eventual closure of the road. There were multiple attempts at repairing the slide consisting of gabion baskets and crushed stone fill. However, these methods failed to stabilize the slide activity.

Triad performed a geotechnical investigation in order to provide information for the design of remedial measures for the landslide. The geotechnical investigation indicated that the landslide was most likely caused by the improper placement of existing fill along the outside of the road and the distance to bedrock was relatively shallow. The remedial design generated by Triad consisted of removal of all existing fill down to the bedrock and re-grading of the site using rock rip rap. The use of this material allowed a relatively steep slope thus keeping the remedial work within the city right of way. Additional services provided by Triad included surveying and mapping to provide a base existing conditions and topographic map for the site.

CLIENT:

City of Huntington Dept. of Public Works (304) 696-5903

PROJECT TYPE: Geotechnical

- Surveying and Mapping
- Geotechnical
 Investigation
- Design

SHEETZ STORE BECKLEY, WEST VIRGINIA



OVERVIEW

The project consists of the design and development of a Sheetz Convenient Store/Fueling Station. The development consisted of a 6,900 square foot convenient store building, a canopied fueling station, parking lot, drive aisles, and all other appurtenances. In order to meet storm water treatment and management requirements for the City of Beckley, a rain garden was designed and installed in the green space adjacent to the store building.



Services provided by Triad included civil site design including grading and drainage, geotechnical investigation, surveying and quality control testing and inspection. Triad worked with a project team headed by the owner, to develop a complete comprehensive set of construction documents.

CLIENT: Sheetz, Inc.

PROJECT TYPE: Civil and Geotechnical

- Civil Site Design
- Geotechnical
 Investigation
- Surveying
- Quality Control
- Construction
 Documents



OVERVIEW

This project consisted of a landslide immediately adjacent to a 30 inch diameter, high pressure Columbia Gas Transmission pipeline. The landslide scarp occurred directly over the pipe in one area and affected the



adjacent property owner's apple orchard and access road. In order to retain and stabilize the area and to protect the gas line, Triad designed a drilled pile and concrete lagging retaining wall. Due to the location of the gas line, the retaining wall was located along the upper side of the access road on the adjacent property. In addition to the retaining wall, this project also included replacing the damaged apple trees and repairs and upgrade to adjacent drainage features.

Services provided by Triad consisted of field surveying to generate existing site conditions and topographic mapping, a geotechnical investigation to determine subsurface conditions to facilitate wall design, research and interaction with the client and adjacent property owners to select the most appropriate and economic wall for the application, design of the wall, and preparation of construction drawings and project specifications. During construction of the wall, Triad performed construction administration duties and quality control testing. Construction administration duties included conducting construction meetings, approval of change order requests, and periodic engineering inspection. Quality control testing consisted of concrete and compaction testing of wall foundation and backfill materials.

CLIENT:

Columbia Gas Transmission Jim Poling (304) 722-8521

PROJECT TYPE: Geotechnical

- Surveying and Mapping
- Geotechnical
 Investigation
- Design
- Construction
 Administration
- Quality Control

Project Scope and Approach





Company Background





Qualifications and Expertise





Management and Staffing





References





Project Team Resumes





Relevant Project Experience







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

State of West Virginia Centralized Expression of Interest Architect/Engr

Proc Folder:	915025		Reason for Modification:
Doc Description:	South Gate Road Slip Stabi		
Proc Type:	Central Purchase Order		
Date Issued	Solicitation Closes	Solicitation No	Version
2021-07-28	2021-08-12 13:30	CEOI 0603 ADJ2200000003	1

BID RECEIVING LOCATION
BID CLERK
DEPARTMENT OF ADMINISTRATION
PURCHASING DIVISION
2019 WASHINGTON ST E
CHARLESTON WV 25305
US

VENDOR		
Vendor Customer Code:		
Vendor Name : Triad Engineering, Inc.		
Address :		
Street: 10541 Teays Valley Road		
City: Scott Depot		
State : West Virginia	Country : USA	Zip : 25560
Principal Contact : Larry "Lee" McCoy Jr., P.E.		
Vendor Contact Phone: 304-755-0721	Extension:	

FOR INFORMATIC David H Pauline 304-558-0067 david.h.pauline@w	ON CONTACT THE BUYER				
Vendor Signature X	X	FEIN#	550592364	DATE	8/06/2021

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

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 limited 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' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

DEFINITIONS:

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

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

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (W. Va. Code §61-5-3) that: (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.

WITNESS THE FOLLOWING SIGNATURE:

Vendor's Name: Triad Engineering, Inc.	
Authorized Signature:	Date: <u>8/6/2021</u>
County of Putnam, to-wit:	20
My Commission expires, 20, 20,	, 20
AFFIX SEAL HERE NOTARY	PUBLIC

Purchasing Affidavit (Revised 01/19/2018)

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) Tyler Hampton, El (Printed Name and Title) 10541 Teays Valley Road, Scott Depot, WV 25560 (Address) 304-755-0721 / 304-755/1880 (Phone Number) / (Fax Number) thampton@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.

By signing below, I further certify that I understand this Contract is subject to the provisions of West Virginia Code § 5A-3-62, which automatically voids certain contract clauses that violate State law.

Triad Engineering, Inc. (Company) (Authorized Signature) (Representative Name, Title) Larry "Lee" McCoy Jr., P.E. Regional Manager / Vice President (Printed Name and Title of Authorized Representative) 8/6/2021 (Date) 304-755-0721 / 304-755-1880 (Phone Number) (Fax Number) Revised 07/01/2021