The following documentation is an electronically-submitted 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.

Header 1

List View

General Information | Contact | Default Values | Discount | Document Information | Clarification Request

Procurement Folder: 1257392
Procurement Type: Central Purchase Order
Vendor ID: 000000204737
Legal Name: CTL ENGINEERING OF WV INC
Alias/DBA:
Total Bid: $0.00
Response Date: 08/29/2023
Response Time: 11:47
Responded By User ID: ctleng
First Name: Joe
Last Name: Stanley
Email: jstanley@ctleng.com
Phone: 304-292-1135

SO Doc Code: CEOI
SO Dept: 0313
SO Doc ID: DEP2400000006
Published Date: 8/9/23
Close Date: 8/29/23
Close Time: 13:30
Status: Closed
Solicitation Description: EOI - 2023 AML Contract N2
Total of Header Attachments: 1
Total of All Attachments: 1

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:	1257392
Solicitation Description:	EOI - 2023 AML Contract N2
Proc Type:	Central Purchase Order

Solicitation Closes	Solicitation Response	Version
2023-08-29 13:30	SR 0313 ESR08292300000001038	1

VENDOR

000000204737
CTL ENGINEERING OF WV INC

Solicitation Number: CEOI 0313 DEP2400000006

Total Bid: 0 **Response Date:** 2023-08-29 **Response Time:** 11:47:06

Comments:

FOR INFORMATION CONTACT THE BUYER
Joseph E Hager III
(304) 558-2306
joseph.e.hageriii@wv.gov

Vendor
Signature X **FEIN#** **DATE**

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

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	Bridgeport (Tomes) Landslide				0.00

Comm Code	Manufacturer	Specification	Model #
81100000			

Commodity Line Comments:

Extended Description:

Bridgeport (Tomes) Landslide

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
2	Burl Gould Highwall				0.00

Comm Code	Manufacturer	Specification	Model #
81100000			

Commodity Line Comments:

Extended Description:

Burl Gould Highwall

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
3	Burl Gould Landslides				0.00

Comm Code	Manufacturer	Specification	Model #
81100000			

Commodity Line Comments:

Extended Description:

Burl Gould Landslides

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
4	Fairmont (Windsor Dr) Subsidence & Highwall				0.00

Comm Code	Manufacturer	Specification	Model #
81100000			

Commodity Line Comments:

Extended Description:

Fairmont (Windsor Dr) Subsidence & Highwall

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
5	Falls Run (Abruzzino) DH & DS				0.00

Comm Code	Manufacturer	Specification	Model #
81100000			

Commodity Line Comments:

Extended Description:

Falls Run (Abruzzino) DH & DS

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
6	Glade Run Highwall				0.00

Comm Code	Manufacturer	Specification	Model #
81100000			

Commodity Line Comments:

Extended Description:

Glade Run Highwall

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
7	Glade Run Landslides				0.00

Comm Code	Manufacturer	Specification	Model #
81100000			

Commodity Line Comments:

Extended Description:

Glade Run Landslides

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: 1257392	**Reason for Modification:**
Doc Description: EOI - 2023 AML Contract N2	
Proc Type: Central Purchase Order	

Date Issued	Solicitation Closes	Solicitation No	Version
2023-08-09	2023-08-29 13:30	CEOI 0313 DEP2400000006	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 : CTL Engineering

Address : 1091 Chaplin Road

Street :

City : Morgantown

State : WV **Country :** US **Zip :** 26554

Principal Contact : Tim Darrah

Vendor Contact Phone: 304-292-1135 **Extension:**

FOR INFORMATION CONTACT THE BUYER
Joseph E Hager III
(304) 558-2306
joseph.e.hageriii@wv.gov

Vendor Signature X **FEIN#** 55-063-1834 **DATE** 8/29/23

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

west virginia

dep

EXPRESSION OF INTEREST

EOI – 2023 AML Contract N2

CEOI 0313 DEP2400000006

August 29, 2023

GTL ENGINEERING INC

EXPRESSION OF INTEREST

Engineering Services

EOI – 2023 AML Contract N2

Table of Contents

SECTION 1
INTRODUCTION

August 29, 2023

West Virginia Department of Environmental Protection
Office of Abandoned Mine Lands & Reclamation
601 57th Street SE
Charleston, WV 25304

Re: CEOI 0313 DEP2400000006
Expression of Interest
Design Engineering Services
EOI – 2023 AML Contract N2

Joseph E. Hager III;

CTL Engineering, Inc. (CTL) is very pleased to present this Letter of Interest to provide design engineering and related services for the West Virginia Abandoned Mine Lands and Reclamation Program. With over 95 years in the business, we feel our team can provide the professionals and facilities that the State of West Virginia is looking for.

CTL has evolved into a recognized leader in the Abandoned Mine Lands Engineering Design and Investigation field. We offer the services necessary to provide a quality product to support your program. Our capabilities include laboratory facilities, drilling rigs, surveying systems, design equipment, and a qualified staff. Our West Virginia staff leading our in-house disciplines have direct AML design experience. Our professional staff include: Civil & Mining Engineers, Geotechnical Engineers, CAD Designers, Surveyors, Geologists, Hydrologists and Biologists. We are experienced in completing more than 50 projects annually that require aerial mapping, support surveying with GPS, and final contouring for design.

Our in-house ability reaches beyond simply being an AML design firm. We also have extensive contract administration, and management experience with the procedures of the state of West Virginia. Our invoicing procedures and accounting software have been accepted, used, and audited by various state agencies. With offices in Charleston and Morgantown, CTL has the ability to cover projects in all areas of the State.

With these contracts having multiple projects and multiple services beyond design, CTL has created a team of local firms and professionals to provide consistent service throughout the project.

CTL's team will consist of the **Markosky Group (Markosky), Neff Longest Beam (NLB), and Greenman–Pederson (GPI).**

Markosky will provide NEPA for the project. Markosky brings valuable knowledge and local experience for the project. Markosky is currently providing NEPA services for the WVDOH and has a local office in Charleston, WV. Markosky will also be available to address potential environmental permitting or construction issues. CTL and Markosky continually team on projects throughout the region.

NLB will provide Realty and Right of Way Services. NLB is local to West Virginia with an office in Charleston and has continually provided realty and right of way services for the WVDOH. NLB will also assist with project oversight and design recommendations. NLB and CTL have a long history of teaming on successful projects.

GPI will be responsible for the survey and mapping on the projects and assist with the construction services. GPI has local offices in Morgantown and Scott Depot. GPI has a long history of providing these services to the State of West Virginia. GPI and CTL have partnered on many projects in WV and Ohio.

CTL, as the lead for the project, has a primary staff with over 125 years of experience with mine reclamation engineering on both a national and international level. Our qualifications and facilities are unsurpassed when it comes to Abandoned

Mine Reclamation Design. With offices in Charleston and Morgantown, we can effectively respond to any AML Design tasks throughout West Virginia. In addition, we have a dedicated design team available to complete AML design projects. Our staff members have extensive experience relative to reclamation design, highwall elimination, abandoned portal seals and drainage control structures. The Sullivan Refuse Project is similar in scope to more than 35 AML design projects that we have successfully completed. Attached to this EOI are numerous examples of similar projects which we have successfully designed and completed.

CTL has completed numerous landslide projects in several different states, for both private and public entities. CTL is currently working with county engineers and townships on several FEMA funded landslide projects in Ohio. Since 2018, CTL has completed over 60 landslide projects in the FEMA program. All of CTL's geotechnical engineers listed on this project have numerous years of experience with landslide evaluation, stabilization and repair.

Our team has the experience and knowledge to provide services to all levels of the public and private sector. The general engineering requirements in your request actually describe the areas of expertise and experience of the team. CTL has provided designs and specifications for Public Projects and Private throughout the region.

We sincerely appreciate the opportunity to submit these qualifications to you for consideration. Should you have any questions or need additional information, please contact our office at (304) 292-1135.

Respectfully submitted,
CTL Engineering of West Virginia, Inc.

Joseph Stanley
Business Development Manager

SECTION 2
FIRM AND SUBCONSULTANT INFORMATION

FIRM INFORMATION – CTL Engineering

CTL WV is a full-service consulting civil & geotechnical engineering, drilling, materials testing and construction observation service company. CTL WV was founded in 1983 to provide regional service to West Virginia, Maryland and Pennsylvania. CTL WV is part of CTL Engineering, Inc. (formerly known as Columbus Testing Laboratory), which was established in Columbus, Ohio in 1927 as an independent engineering testing laboratory serving the local community. Since 1927 our expertise has focused mainly on foundation engineering, construction testing and inspection services.

CTL WV has a state-wide staff of over 20 people; including licensed professional engineers, licensed land surveyors, environmental scientists, geologists and certified engineering technicians. Nationwide CTL Engineering sustains a staff of over 300 employees, providing additional professional expertise as well as staff and equipment resources for meeting project needs and goals.

Over our 40 years in West Virginia, CTL WV has provided numerous civil site designs, geotechnical designs, stormwater plans and surveys for commercial and residential developments and roadway projects. We have successfully prepared State and Federal 401 and 404 Permit submittals, Ms4 Phase II stormwater permits and conducted Environmental Site Assessments. CTL WV also has significant experience working on mining related projects including mine plans and permitting, mine refuse reclamation and subsidence evaluations. These projects were completed by conscientious interaction with Architects, Engineers, State and Federal Agencies and Owners.

CTL WV has certified engineering and laboratory technicians providing material testing and construction observation services. Our Morgantown lab is annually inspected by the West Virginia Division of Highways. CTL WV maintains a fleet of four drill rigs including truck and rubberized track mounted. Our crews have experience in steep terrain and barge drilling and deep boring exploration to depths greater than 300 feet. Additionally, CTL Engineering has a total of 13 drill rigs allowing CTL to place multiple rigs on one site, if project schedule demands.

FIRM INFORMATION – Sub consultants

While CTL WV can provide the anticipated services in-house, we have added the following highly qualified and experienced firms to our Team to augment our capabilities.

Strategic Team Partners	
Firm Name	**Role**
GPI	Construction Inspection / Survey
Markosky	Environmental / Design Support
Brierly	Geotechnical / Design Support
NLB	Realty / Design and Oversight

CTL will lead the Team and will provide the required services as seamlessly integrated Team.

The Markosky Engineering Group, Inc. (Markosky) is headquartered in Ligonier, PA. We have offices in Charleston, WV, Steubenville, OH, and York, PA. Our Charleston Office will take the lead on this proposal and potential projects.

Markosky is a Woman-Owned Disadvantaged Business Enterprise that employs over 80 professionals, including nine environmental scientists and planners with experience completing NEPA documentation (including Environmental Impact Statements, Environmental Assessments, and Categorical Exclusions) on behalf of a variety of lead federal agencies in numerous states, including West Virginia, Pennsylvania, Ohio, Indiana, North Dakota, Colorado, Wyoming, and North Carolina.

Markosky provides environmental consulting, construction management/inspection, and civil engineering services to public and private sector clients, including the following:

- NEPA compliance and permitting
- Regulatory agency coordination
- Environmental consulting, planning, and permitting
- Wetland /stream delineation and functional assessments
- Botanical surveys
- T&E Species coordination
- Waterway permitting
- Stream and wetland restoration and mitigation design
- Water sampling
- AMD treatment design
- Regulated material reviews
- Construction management and inspection
- Cultural resource investigations
- Geomorphological surveys
- Phased archaeological investigations
- Above ground historic structures evaluations
- Section 106 compliance
- Site restoration and grading design

WOMEN OWNED

At Markosky, we place great importance on collaboration within our team and with our clients. Collaboration at Markosky means more than just working together. We know that good ideas come from different perspectives: internal team members, diverse technical disciplines, outside experts, clients, and owners. Sifting these ideas and applying the best of them appropriately to the project is the work of collaboration. Our managers handle this task through cross-discipline reviews, team meetings, clear communication, and close client contact. Our effective collaboration process leads to meeting our clients' goals of quality projects delivered on time and within budget.

Neff, Longest and Beam (NLB) is a full-service, award-winning consulting firm with experience in all facets of infrastructure projects. Our purpose—and passion—is creating infrastructure solutions that make life easier for everyone. Founded in 1945, NLB has provided decades of expertise to clients across the United States and in Puerto Rico. We provide our clients with a comprehensive suite of services from concept through construction. Our collaborative, client-focused approach ensures that our clients receive thoughtful and effective solutions for their projects.

RECLAMATION CAPABILITIES & EXPERIENCE

NLB's team includes Travis Ferrell, who has over 26 years of professional experience in mining-related capacities, including 16 years in operations. While in operations, Travis served in various capacities, including project manager, engineering management, and operations management. Responsibilities included mine modeling, mine planning, project management, and environmental compliance for large-scale mining operations in West Virginia, which involved draglines, truck shovels, cast blast and dozer push, large-scale multi-seam surface mining, area mining, contour mining, highwall mining, auger mining, and all associated pre-mining and post-mining activities required for each mining method. Specific reclamation related project work included design and oversight of activities necessary to reclaim each of the aforementioned operations and encompassed large-scale surface mining areas; contour mining reclamation; highwall elimination; valley fill reclamation; removal of ponds, ditches, haul roads, and facilities; refuse impoundment reclamation; and large-scale tree planting projects.

PROPERTY DETERMINATION / RIGHT OF ENTRY

NLB's team, including Todd West PE/PS, Brandon Davis, and Travis Ferrell PE has property ownership and right of way experience with WVDOH projects. NLB has completed the Caney Branch Bridge project which involved right of way work. We are currently working on the Sleepy Hollow Road Widening which involves 60 parcels and 50 right of way takes. NLB also maintains a full service right of way department in its main office, which includes everything from property owner identification to appraisal and acquisition. NLB will draw on this experience as necessary for this project.

Greenman-Pedersen, Inc. (GPI), established in 1966, is a multi-disciplined engineering firm that provides professional design, planning, and construction management/inspection services to all levels of government and industry. In this short period of time, GPI has grown from a two-man consulting firm to a corporation earning a ranking among "Engineering News Record's" top 100 national engineering firms. With a staff of over 1500 professionals, offices throughout the United States, and access to specialized services, GPI is positioned to provide the required resources to complete each client's specific assignment.

GPI maintains two (2) offices in West Virginia;

Principal Office
58 Mission Way, Suite 201
Scott Depot, WV 25560

2000 Hampton Center, Suite C
Morgantown, WV 26505

In the State of West Virginia, GPI is delivering design services, construction management and inspection services, coatings inspection services, surveying services, and bridge inspection services. Our Construction Services staff have provided construction management, inspection, CPM scheduling and project finalization services to all 10 Districts of The West Virginia Division of Highways (WVDOH), utilizing P3, design-build, and design-bid-build project delivery methods. These projects range from multi-million-dollar projects with a full staff of Inspectors/Managers to smaller projects that require only one Inspector.

The GPI Team understands the importance of surveying data collection for construction and engineering design projects. With our in-state surveyors we have over 75 years of surveying experience, many of these working on WVDOT projects. We have structured our WV survey group as a true extension of the WVDOT. Our equipment and data collection process follows WVDOT standards for seamless data integration. We have extensive experience with construction surveying procedures and construction projects in general with some staff having surveying capabilities as well as WVTRET Certification. For this project, we have the capabilities to collect data with the latest technologies, by traditional methods, or a combination of both to ensure the best deliverable for the task.

TECHNICAL AREAS OF STRENGTH FOR THE TEAM

Engineering Categories	Technical Areas of Strength
Geotechnical Engineering Services	✓
Civil Site Design (Mining and Reclamation)	✓
Professional Surveying Services	✓
Environmental - NEPA	✓
Construction Inspection/Administration & Materials Testing	✓
Realty	✓

Geotechnical Capabilities - CTL

CTL's Routinely Performs Subsurface Explorations and Soil and Rock Testing

CTL annually performs over 350 geotechnical explorations, including soil and rock testing, for highway, bridge and geohazard projects throughout the states of West Virginia, Ohio, Indiana and Kentucky. CTL owns and operates its own fleet of 13 drill rigs, the largest of which can drill, core rock, and take samples up to 300 feet deep. Our rigs are capable of accessing difficult locations since many of them are track-mounted, ATV or 4-wheel drive truck-mounted rigs.

In addition, CTL utilizes in-house geophysical equipment and software to evaluate variations in subsurface conditions such as the identification of the bedrock surface. These capabilities include Refraction Microtremor (ReMi), Electrical Resistivity Imaging (ERI) along with Ground Penetrating Radar (GPR) equipment to locate voids or other anomalies. CTL also has Pile Driving Analyzer (PDA) equipment for performing dynamic testing of driven piles.


AASHTO ACCREDITED

CERTIFICATE OF ACCREDITATION

AASHTO

CTL Engineering, Inc.

in

Columbus, Ohio, USA

has demonstrated proficiency for the testing of construction materials and has conformed to the requirements established in AASHTO R 18 and the AASHTO Accreditation policies established by the AASHTO Committee on Materials and Pavements.

The scope of accreditation can be viewed on the Directory of AASHTO Accredited Laboratories (aashtoresource.org).

Tod Wright, AASHTO Executive Director

Mac Jamshidi, AASHTO COMP Chair

This certificate was generated on 10/19/2017 at 1:01 PM Eastern Time. Please confirm the current accreditation status of this laboratory at aashtoresource.org/aap/accreditation-directory

CTL houses AASHTO–Accredited geotechnical testing laboratories in several office locations, which are each managed by Professional Engineers specializing in geotechnical engineering. These laboratories provide a detailed analysis of the surface and subsurface composition and chemistry of soils and rock encountered during geotechnical explorations and are equipped to conduct Consolidation, Tri-axial Shear, Unconfined Compressive Strength, Direct Shear, Moisture Density Relationship (Proctor Tests), and CBR tests.

CTL is well-known for providing cost-effective, yet safe solutions to difficult subsurface conditions. We review a significant number of geotechnical reports prepared by others for the purpose of providing alternative recommendations that are more constructible, less conservative, yet maintain an appropriate factor of safety.

CTL has 20 geotechnical engineers with a majority of the engineers with Master's degrees and Professional Engineer Registration.

Civil Site Design – CTL and Markosky

CTL's Design Team has the capabilities to handle any size project.

The main goals of civil site design are functionality, quality and efficient use of space, and overall appearance. Our design team consist of qualified people who live and work in the area and take pride in seeing their designs benefit the community. We have performed civil site design services for a wide variety of projects throughout West Virginia, Pennsylvania and Ohio. These projects consist of **mining and AML related projects**, medical facilities, restaurants, and shopping centers. In addition, we have performed engineering for local school districts and universities. In our efforts to be a full-service company, we provide assistance through the funding process, design every element of a site, and manage the construction process, ensuring not only a quality product, but also the success of our clients. These are some civil site design services we can offer:

CTL WV provides the following Civil Design services:

Complete Site Development	Infrastructure Planning and Design
Conceptual Design / Presentations	**Reclamation Design**
Stormwater Management	Permitting (NPDES)
Erosion and Sediment Control	As-Built Surveys and Drawings

With the amount and complexity of the projects in this contract, CTL has added **Brierley and Markosky** as subcontractors to assist in the design phase. These two firms have vast experience in AML, and AML related projects, and will give our team a depth in staff to meet the goals and deliver a timely project.

Professional Surveying Services – CTL and GPI

CTL WV Maintains a Full-Service In-house Surveying and Mapping Team

CTL WV has the professional staff and the latest equipment to support two (2) full survey crews. Our equipment includes a Global Positioning System and Robotic Surveying Instruments which gives us an added dimension to our surveying and mapping capabilities.

We have performed surveying and mapping on many of our civil/site projects and have supplied construction stakeout and monitoring for many of our clients.

- Multi-disciplined offices within the region staffed with qualified and experienced personnel.
- Multiple crews equipped with the most up to date survey equipment: Trimble GPS, Trimble Robotic Instruments.
- Drone capabilities with multiple licensed pilots. We also have experience with the latest 3D modeling software.

With the number of projects in this contract, CTL has included GPI to provide additional depth for surveying as well as the ability to provide aerial mapping.

GPI - Surveying Services

The GPI Team understands the importance of surveying data collection for construction and engineering design projects. With our in-state surveyors we have over 75 years of surveying experience, many of these working on WVDOT projects. We have structured our WV survey group as a true extension of the WVDOT. Our equipment and data collection process follows WVDOT standards for seamless data integration. We have extensive experience with construction surveying procedures and construction projects in general with some staff having surveying capabilities as well as WVTRET Certification. For this project, we have the capabilities to collect data with the latest technologies, by traditional methods, or a combination of both to ensure the best deliverable for the task.

GPI - Unmanned Aerial Systems Services

GPI holds a Code of Federal Regulations (14 CFR) Section 333 Exemption from the Federal Aviation Administration (FAA). GPI's Section 333 Exemption No. 12229A allows GPI to operate drones commercially in the National Airspace System (NAS) under conditions and limitations outlined in the exemption. GPI also recognizes the FAA's recent announcement of new small Unmanned Aircraft System (sUAS) Rule (Part 107) which amends the existing regulations to adopt specific rules for the operation of small Unmanned Aircraft Systems in the NAS. GPI is one of the few firms that meets and exceeds Part 107 of Federal Aviation Administration (FAA) regulations for all drone operations, allowing our technical staff to provide: aerial photogrammetric mapping, topographic surveys, and inspection services. Using FAA statutes as our guidelines, we can fly any project over land or water in a timely manner and deploy on a moment's notice if needed compared to traditional aerial approaches.

GPI - Aerial photogrammetry/LiDAR Data Collection

GPI is a recognized industry leader in providing aerial photography and mapping services. Through our multiple offices we are able to provide Low Altitude Mapping Photography (LAMP) and an array of other specialized precision mapping services. GPI is known for its specialized experience and technical competence in all positioning services utilizing photogrammetry and surveying. GPI's execution of multiple DOT open-ended engineering, survey and photogrammetry contracts have included the following services: vertical and oblique aerial photography acquisition using a variety of aircraft including helicopters; aerial film processing, printing, and enlargements in black and white, color and color infrared; Airborne GPS; remote sensing such as LiDAR, SAR; and scanning of aerial film. Furthermore, ***GPI has in-house capabilities to perform all of these services***. We have multiple fixed wing aircraft equipped with Airborne GPS, high quality cameras and LiDAR. In addition, GPI has a large photo lab equipped with processors, enlargers, photo printers and high-resolution scanners.

Construction Administration & Inspection – CTL and GPI

CTL WV's Construction Administration Services Include On-site Daily Inspections

Federal, State, and Locally funded Construction Projects require a high level of administration and quality control to meet the project's demands. Counties and Municipalities, as well as private owners, developers, and contractors have selected CTL WV for Construction Administration, knowing that we have the experienced staff to be accurate, dependable, and perform these services in a timely manner. Our experienced engineers, inspectors, and technicians are your partners in construction. We help in completing these projects successfully and meeting the specific project requirements.

CTL WV's qualified construction inspectors will observe and inspect your construction project and complete the necessary daily documentation required by the Federal, State, and Local funding agencies participating in the project. CTL WV also provides in-house testing services such as concrete, asphalt, and sub-grade compaction, as well as daily on-site inspection services.

CTL WV provides the following CA services:	CTL WV's on-site inspector provides and/or participates in the following daily on-site Inspection services:
Conduct Pre-Construction Conference	
Project Team Coordination	Pre-Construction Conference
Field Reports & Construction Documents' Admin	Prepare Field Inspection & Quantities Reports
Field Engineering and Inspections	Prepare Construction Docs & provide to Construction Admin
Material Certification and Shop Drawing Reviews	Field Engineering in conjunction with Construction Administrator
Progress Meetings and Schedule Tracking	Observe & verify materials being used for the project
Payments and Reimbursements	Observe, identify and notify Construction Admin of deficiencies
Change Order Reviews	Provide Admin w/ monthly quantities for payment prep
Prevailing Wage Compliance	Material Testing, i.e., compaction, concrete, asphalt, etc.
EEO/DBE Contract Requirements	
Project Closeout Activities	

CTL also added **GPI** to the team for added depth for construction services

GPI - Construction Management and Inspection Services

Providing a full staff of Construction Services for our clients' infrastructure projects has been a vital part of GPI since our inception in 1966. Innovation, quality, and diversity are just some of the trademarks of our talented and dedicated Construction Services staff. On land, under water or high in the air, our highly trained staff is committed to providing the support necessary to complete our clients' projects on schedule and within budget.

All inspectors will be experienced, trained and prepared to satisfy The West Virginia Department of Environmental Protection as to the adequacy and correctness of the work they are inspecting. They do not take things for granted and have a keen sense of curiosity, while being proactive in their duties without losing sight of the integrity level which is expected to be maintained in this profession. The competent inspection of the work is primary to the construction project. Although the Plans and Specifications for a project are carefully prepared by professionals, if substandard materials and poor workmanship are incorporated into the project, the entire effort could be defeated.

Materials Testing and Laboratory Services

CTL WV is a Leader in Providing Testing Services to the Construction Industry

We maintain a staff of experienced personnel and accurate equipment to provide dependable results. We evaluate all types of construction materials. Additionally, CTL can prepare and test Portland Cement and bituminous concrete mixes for optimization studies to determine the proper mix design for specific jobs.

CTL offers petrographic examination of construction materials. These specialized microscopic evaluations allow us to closely evaluate concrete quality and determine the causes and extent of failures in concrete, in addition to potential future performance.

In addition to the standard ASTM tests of strength, absorption, dimensions unit weights etc., CTL provides several specialty tests on concrete block and brick, including the fire rating test, specified by the BOCA, and efflorescence testing required by many architectural firms

Environmental Services - Markosky

CTL Provides Environmental Services for Projects Varying in Complexities for Diversified Clients

CTL's environmental staff has a combined total of 144 years of experience in managing and conducting environmental projects of varying complexities. CTL performs over 500 environmental projects per year and follows the various ASTM standards, BUSTR and EPA regulations, and ODOT Guidelines for ESA Screening, Phase I and Phase II ESAs, UST Closures, Tier I & II Assessments, HazMat management and remediation. We also perform wetland delineation, permitting, and mitigation; asbestos, lead-based paint, and hazardous materials surveys, sampling, evaluation, as well as abatement project design & monitoring; waste management and disposal; GPR surveys; environmental monitoring/inspections during construction.

Markosky brings another level of depth to our team by adding or strengthening the following services

Markosky provides environmental consulting, construction management/inspection, and civil engineering services to public and private sector clients, including the following:

- NEPA compliance and permitting
- Regulatory agency coordination
- Environmental consulting, planning, and permitting
- Wetland /stream delineation and functional assessments
- Botanical surveys
- T&E Species coordination
- Waterway permitting
- Stream and wetland restoration and mitigation design
- Water sampling
- AMD treatment design
- Regulated material reviews
- Construction management and inspection
- Cultural resource investigations
- Geomorphological surveys
- Phased archaeological investigations
- Above ground historic structures evaluations
- Section 106 compliance
- Site restoration and grading design

Realty Services - NLB

NLB has a full service right of way department

PROPERTY DETERMINATION / RIGHT OF ENTRY

NLB's team, including Todd West PE/PS, Brandon Davis, and Travis Ferrell PE has property ownership and right of way experience with WVDOH projects. NLB has completed the Caney Branch Bridge project which involved right of way work. We are currently working on the Sleepy Hollow Road Widening which involves 60 parcels and 50 right of way takes. NLB also maintains a full service right of way department in its main office, which includes everything from property owner identification to appraisal and acquisition. NLB will draw on this experience as necessary for this project.

SECTION 3
PROJECT OVERVIEW

Project Overview

AML Project N2

The successful A/E Firm will be responsible for the following services (as may be applicable for each of the Projects as listed in Section One of the solicitation):

- National Environmental Policy Act (NEPA) consultations and documentation
- Public Participation
- Infrastructure Investment Jobs Act (IIJA) compliance
- Determine legal ownership of properties
- Obtain exploratory and construction rights of entry
- Provide legal documentation to substantiate legal ownership findings
- Provide current mapping, perform survey and other related services
- Perform Site and Geotechnical Investigations
- Design temporary and permanent access or accesses for construction and future maintenance
- Slope stabilization
- Design multiple portal seals and regrades
- Design reclamation of exposed coal refuse and mine spoil
- Design of drainage conveyances, including drainage channels, underdrains, and/or other controls to safely convey water off-site
- Design reclamation of landslide areas and subsidence features
- Construction quality assurance and quality control (QA/QC)
- Provide resident project representative/inspector
- Prepare daily construction activity logs summarizing activities
- Provide engineering support and services throughout construction
- Provide Engineers certification report

Locations: Projects are in Harrison and Marion Counties.

Project 1: Bridgeport (Tomes) Landslide is located east of the Town of Quiet Dell, in Harrison County, WV. Approximate coordinates are 39.218556°, -80.254722°. The project is for the remediation of a dangerous slide, clogged steam, and drainage design.

Project 2: Burl Gould Highwall is located east of the Town of Quiet Dell, in Harrison County, WV. Approximate coordinates are 39.208917°, -80.250667°. The project is for the remediation of a dangerous highwall, dangerous slides below the highwall, clogged stream, spoil piles, and drainage design.

Project 3: Burl Gould Landslides is located east of the Town of Quiet Dell, in Harrison County, WV. Approximate coordinates are 39.207528°, -80.252306°. The project is for the remediation of a dangerous highwall, dangerous slides, hazardous waterbody, spoil piles, and drainage design.

Project 4: Fairmont (Windsor Dr) Subsidence & Highwall is located in the City of Fairmont, in Marion County, WV. Approximate coordinates are 39.493739°, -80.127156°. The project is for the remediation of subsidence near homes and a dangerous highwall.

Project 5: Falls Run (Abruzzino) DH & DS is located east of the Town of Quiet Dell, in Harrison County, WV. Approximate coordinates are 39.212139°, -80.255861°. The project is for the remediation of a dangerous highwall, a dangerous slide, and drainage design.

Project 6: Glade Run Highwall is located west of the Town of Brownton, in Harrison County, WV. Approximate coordinates are 39.214333°, -80.205778°. The project is for the remediation of dangerous highwalls, hazardous waterbodies, and drainage design.

Project 7: Glade Run Landslides is located west of the Town of Brownton, in Harrison County, WV. Approximate coordinates are 39.217194°, -80.209056°. The project is for the remediation of dangerous slides and drainage design.

Project Management Plan

Our approach to the AML Contract Project N2 will be similar to our other AML projects. The Project Management Plan we have developed for these sites are as follows:

The project manager will be solely responsible for expedient and accurate completion of each phase of the individual projects performed under this contract. He will review the project sites and discuss the specific scope of work for the project with the project representative from the WVDEP. A cost proposal will be prepared, in accordance with contract unit rates, based upon an estimate of manpower, equipment, and laboratory needs.

Once project sites are identified, CTL will release NLB to start the realty process to gather information and establish ownership for the subject properties. NLB will then proceed to obtain exploratory right of ways for the reconnaissance portion of the project. As the design matures, NLB will begin the agreements for construction and maintenance right of ways.

CTL will engage (Markosky) to begin the NEPA scope of the project. Markosky will be directed by the CTL project manager. Proposed federal actions require compliance with the National Environmental Policy Act of 1969 (NEPA) (42 USC 4321, *et seq.*), and the Council on Environmental Quality Regulations for Implementing NEPA (40 C.F.R. Parts 1500-1508), among other more discipline-specific regulations including but not limited to Section 7 of the Endangered Species Act (ESA) of 1973, as amended, and Section 106 of the National Historic Preservation Act of 1966. Through the preparation of NEPA documents (including Environmental Impact Statements, Environmental Assessments, and Categorical Exclusions) on behalf of numerous federal agencies, Markosky's technical staff possess the knowledge and expertise to ensure compliance with these federal regulations.

As NEPA requires all federal agencies to review and analyze the environmental consequences associated with proposed actions, the US Department of Interior (DOI) Office of Surface Mining Reclamation and Enforcement (OSMRE) is also required to comply with NEPA whenever the bureau proposes to take an action, or authorizes any other entity to take an action, that could possibly affect environmental resources. For the projects proposed, Markosky will ensure that all DOI and OSMRE-specific NEPA protocols and procedures for AML reclamation are followed during preparation of the environmental review document(s) on behalf of the OSMRE. This will ensure that the significance of impacts for these AML reclamation projects is thoroughly evaluated in order to prepare the appropriate decision documents and allow the projects to move forward.

CTL will then mobilize a fully equipped survey crew from GPI to set survey control and map the project site. Permanent control monuments will be established to ensure that the construction contractor can tie into the necessary baselines. The project manager will supervise the surveying tasks and provide budgetary control for this portion of the work.

A geotechnical exploration and analysis will be performed to delineate the thickness of mine refuse to determine and design the optimum stable grading plan. This exploration will be performed with a focus on safety to insure the safety of the local inhabitants and dwellings as well as the safety of the drilling and geotechnical personnel. For Landslide projects CTL will perform a geotechnical exploration to determine the cause(s) of the slip. We will prepare a geotechnical report which will include proposed alternatives for the repair of the slip.

Should field conditions dictate that additional work or a major modification is required, the project manager will contact the WVDEP representative immediately to confirm the changed conditions.

Following completion of the surveying, geotechnical exploration and any material sampling, the analytical design work will begin. The Project Manager and Engineer will review the project data, evaluate the feasible alternatives and prepare a preliminary set of construction documents. The documents will include at a minimum:

1. A site map indicating existing conditions;
2. A tax map overlay with the parcels identified that may be impacted by the proposed design;
3. Reclamation Plans for the project area.

4. Proposed site plans for the repair and stabilization of the landslide, including safely dewatering and excavation of portals, if needed.
5. Provide Sedimentation and Erosion Control Plan
6. Site Profiles
7. Cross Sections
8. Drainage systems and control structures, with details
9. NPDES Permit
10. MM109 Permit
11. Survey control points
12. Miscellaneous Site details

- CTL will also provide necessary data for the MM109 and NPDES permit including E&S Control Plans as required for the site construction and if deemed necessary, perform environmental assessments. CTL will make submittals for the NPDES permit.
- In addition to preparation of the above-described drawings, a complete set of specifications will be prepared and outlined to describe in detail the scope and methods of work to be accomplished. An estimate of construction costs and the design calculations will also be submitted to the WVDEP for review and future reference.
- Following the submission of the construction documents, a project design review meeting will be coordinated with the WVDEP, CTL, and appropriate individuals to review the proposed plans.
- Recommendations for plan revisions will be discussed and implemented, as necessary, into the final design documents. Upon completion, all final documents, drawings, plans and specifications will be forwarded to the WVDEP for bidding purposes.
- CTL will assist the WVDEP in the bidding process with any design or constructability questions.
- CTL will provide engineering technicians to provided QA/QC and materials testing throughout construction activities.
- CTL will provide daily reports and document the construction process and assist the WVDEP in the project closeout.

Project Goals

AML Contract Project N2

Project and Goals: As outlined in the EOI

The project goals and objectives include but are not limited to those listed below. Vendors should discuss any anticipated concepts and proposed methods of approach for achieving each of the listed goals and objectives:

- Aspects of all Work shall comply with Infrastructure Investment Jobs Act (IIJA), including compliance with the Davis-Bacon and Build America, Buy America (BABA), as applicable and all Federal, State, and Local laws.

- Aspects of the Planning Work encompasses all related consultations, investigations, report generation, applications, etc. required to perform the Work, which may include, but may not be limited to: National Environmental Policy Act (NEPA) consultations, West Virginia Division of Natural Resources (WVDNR) consultation, West Virginia Historic Preservation Office (SHPO) consultation, WV Regional Planning consultation, US Forest Service consultations, US Fish and Wildlife Service (USFWS) consultations, and any other consultation(s) or permit(s) needed to perform the Work. The above includes but is not limited to: bat studies, threatened and endangered species investigation / analysis / report generation, water quality sampling, and data collection / analysis.

- Aspects of the Realty Work encompass all necessary research and subsequent right of entry agreements being set into place for the sites to be sufficiently – legally – investigated, designed, and for a final design to be constructed. This may include but may not be limited to: performing courthouse research to determine legal property ownership and dutifully documenting the findings, obtaining Exploratory Rights of Entry (EROE) from affected landowners, obtaining Construction Rights of Entry (CROE) from landowners, keeping logs of all conversations with landowners, data collection, reporting, and possessing the capability of having boundary surveys performed on an as-needed basis. The successful A/E firm must obtain the rights of entry prior to performing any fieldwork on-site, and these rights of entry must include the successful A/E firm, the WVDEP-DLR-AML, and Office of Surface Mining Reclamation & Enforcement (OSMRE).

- Aspects of the Design Work may include, but may not be limited to: Civil, Geological, Hydrological, Survey (mapping), Process, Structural, Electrical, etc., as applicable. This encompasses all required engineering and survey (including current mapping and other related services) necessary to successfully design an engineered, permanent solution that fully addresses the issues / problems that each project presents. This also includes site and geotechnical investigations. Each design must fully remove / mitigate dangers to private individuals or the public that are currently present, not introduce new dangers, and be stamped by a Registered Professional Engineer in the State of West Virginia for design and Registered Professional Surveyor in the State of West Virginia for survey for deliverables. Design Work includes but is not limited to: National Pollutant Discharge Elimination System (NPDES) construction stormwater General Permit registration, West Virginia Department of Highways (WVDOH) MM-109 encroachment permits, Army Corps of Engineers (USACE) consultations, Department of Health Permits (for water lines, if applicable), and county permits as applicable, including floodplain permits. Design Work could include but is not limited to: developing construction plans and technical specifications for all aspects to reclaim mine portals, drainage controls and systems,slope stabilization, coal refuse and mine spoil reclamation, stream and / or channel restoration, subsidence repair, temporary and permanent access or accesses for construction and future maintenance, storm water and erosion and sediment control, regrading and revegetation, any required water treatment systems, and any remediation for all other conditions encountered on the project sites. Obtain/maintain/release all required permits.

- Aspects of the Construction Oversight Work may include but may not be limited to: Daily Inspection with documentation for the duration of the Construction and through the warranty period until final release, Engineering Oversight / Support, review, and approval of contractor-provided as-builts, and Final Engineer's Certification Report of the project.

CTL's abilities to complete the project scope and goals:

Reuben Haught will be the project manager for CTL. All communication through the owner for the duration of the project will be through Mr. Haught. Mr. Haught has the authority to engage any of CTL's staff or services for the completion of the project.

CTL has referenced several projects in (section 5) that were completed on time and on budget. CTL provides engineering services to a wide variety of projects with similar challenges as laid out in the EOI. We have a vast history providing engineering services to AML projects in WV and the surrounding states.

CTL will use the following project Management outline. CTL has accounting software that can provide work in progress reports weekly.

Plan Schedule Management

- **Define Scope**
- **Sequence scope tasks**
- **Estimate Resources and cost**
- **Estimate Durations and cost to complete tasks**
- **Develop Schedule**
- **Control Schedule**

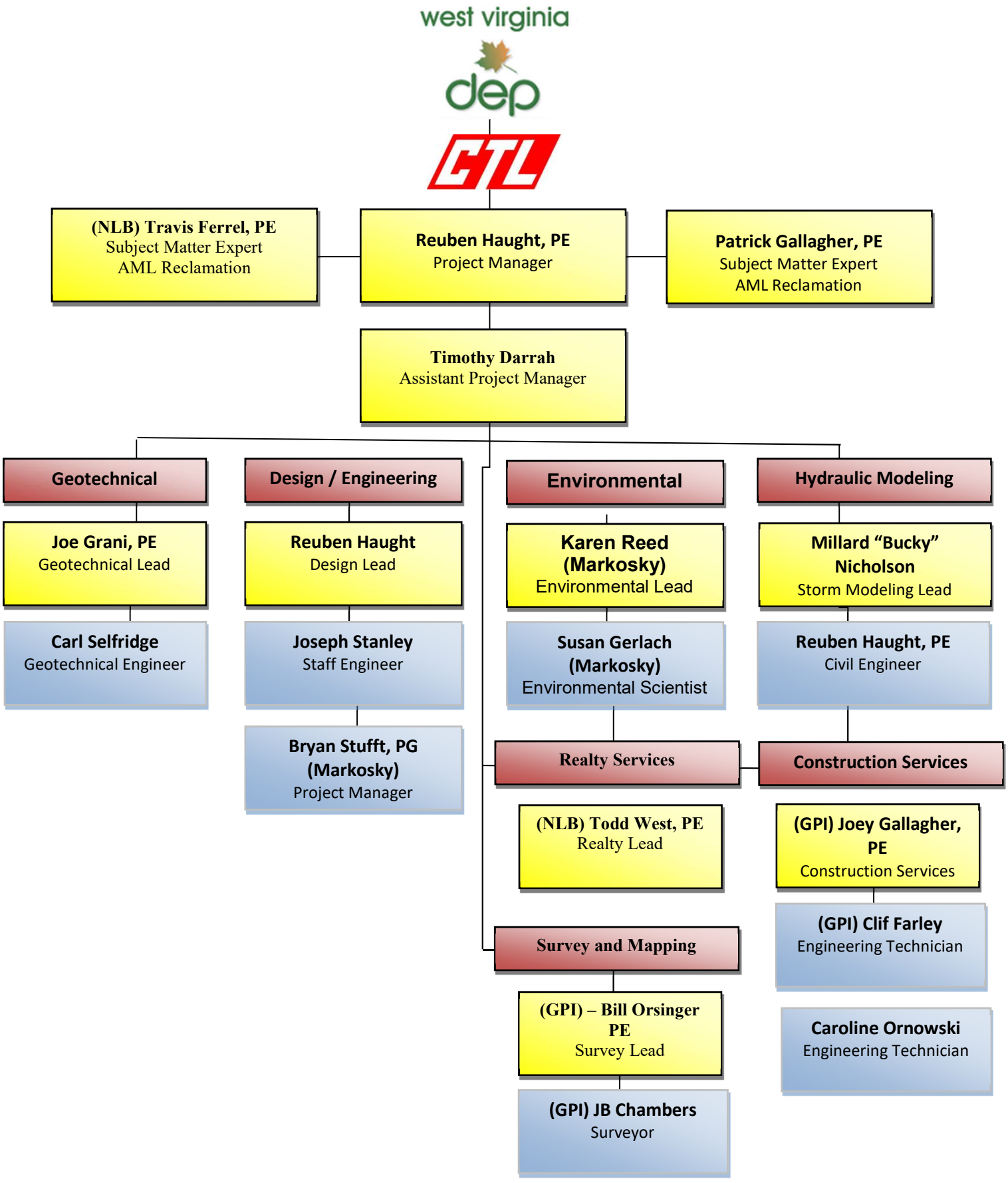
CTL provides services to several projects throughout the year that are constructed timely and efficient.

Construction Management Plan

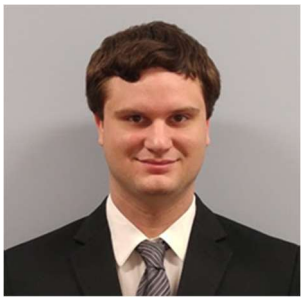
- **Project Organization**
- **Project Planning**
- **Project Monitoring**
- **Project Control**

CTL completes several projects a year which involve: landslide reclamation, civil site design, stormwater and drainage control, construction administration, construction inspection and testing, geotechnical engineering, surveying and environmental engineering.

SECTION 4
PROJECT PERSONNEL


west virginia
dep
(NLB) Travis Ferrel, PE
Subject Matter Expert
AML Reclamation
Reuben Haught, PE
Project Manager
Patrick Gallagher, PE
Subject Matter Expert
AML Reclamation
Timothy Darrah
Assistant Project Manager
Geotechnical
Joe Grani, PE
Geotechnical Lead
Carl Selfridge
Geotechnical Engineer
Design / Engineering
Reuben Haught
Design Lead
Joseph Stanley
Staff Engineer
Bryan Stufft, PG
(Markosky)
Project Manager
Environmental
Karen Reed
(Markosky)
Environmental Lead
Susan Gerlach
(Markosky)
Environmental Scientist
Realty Services
(NLB) Todd West, PE
Realty Lead
Survey and Mapping
(GPI) – Bill Orsinger
PE
Survey Lead
(GPI) JB Chambers
Surveyor
Hydraulic Modeling
Millard "Bucky"
Nicholson
Storm Modeling Lead
Reuben Haught, PE
Civil Engineer
Construction Services
(GPI) Joey Gallagher,
PE
Construction Services
(GPI) Clif Farley
Engineering Technician
Caroline Ornowski
Engineering Technician

CTL Team Key Personnel / Experience



Mr. Reuben Haught, P.E.
Staff Engineer

Mr. Haught is a Staff Engineer and CAD Designer. His Responsibilities include site design, site grading, stormwater design, permitting, retaining pond design, and impoundment stability inspections. He has previous experience with CTL Engineering in inspecting concrete and soil to ensure proper materials and installation tecniques on site. He is proficient in AutoCAD Civil 3D, Hydraflow Hydrographs, Microsoft Word, and Microsoft Excel.

Education
B.S. Civil Engineering Technology
Fairmont State College, Fairmont, West Virginia 2011
A.S. Civil Engineering Technology
Fairmont State College, Fairmont, West Virginia 2011

Professional Registration / Certification
Professional Engineer, West Virginia, 2019, No. 023617

CTL Project Experience

Water/Stormwater
WVU Track and Aquatic Center Site
Layout and grading, stormwater design, erosion and sediment permitting, and retaining pond design, Morgantown, WV
WVU Medicine Clinic
Site grading, stormwater design, erosion and sediment permitting, and retaining pond design, Fairmont, WV
Mon General Outpatient Facility
Site layout and grading, stormwater design, erosion and sediment permitting, and retaining pond design, Fairmont, WV
Fairmont Federal Credit Union
Site layout and grading, stormwater design, and retaining pond design, Fairmont, WV

Mining and Gas
CONSOL Energy Impoundment Inspections
Quarterly and Annual Inspections on impoundments, West Virginia and Pennsylvania.
Eclipse Fracking Well Pads
Site layout and grading for multiple well pads, Monroe County, Ohio

Other Site Design
FedEx Distribution Center
Site layout and grading, Morgantown, WV
Grapevine Development
Redesigned grading after required site modifications, Westover, WV

Construction Site Inspection
Gavin Power Plant
Piezometer and visual inspections to ensure stability of fill placement above drained impoundment, Cheshire, OH
University Place
Inspected compaction, concrete, gypcrete, and insulation. Morgantown, WV
Morgantown High School Football Stadium Press Box
Tested compaction and concrete, Morgantown, WV
Alderson-Broaddus College
Tested concrete for additions to football field area, Philippi, WV
Gateway Triple S Harley
Tested compaction for initial large scale earthwork and also for footings, Westover, WV
Harvest Ridge
Tested compaction for footings on Harvest Ridge lots and several other Dan Ryan Developments, Morgantown, WV
Tygart #1 Mine
Tested compaction of refuse, Grafton, WV
Fairmont Municipal Airport Airplane Parking Area
Tested compaction for construction of a parking area for small airplanes, Fairmont, WV
Concrete Cylinder Testing
Tested strength of concrete through compression of samples taken on site

Drafting
Yeager Airport Landslide Investigation
Prepared court documents in AutoCAD to illustrate investigation, Charleston, WV
Sewickley Guide Piles
Drafted profile and cross section, Sewickley, PA
University Town Centre Addition
Drafted up borehole plan, Granville, WV
Residential Beam Designs – Multiple Projects
Drafted designs for replacing several small beams with one large one
Strip Footing Designs – Multiple Projects
Drafted designs for strip footings.

Consulting Engineering • Testing • Inspection • Analytical Laboratory Services
Employee Owned • Established 1927
ASSOCIATE RESUME

CTL ENGINEERING INC

Tim Darrah

Manager
Civil Site and Surveying Departments

Mr. Darrah is presently responsible for department management for civil site design and surveying projects. Mr. Darrah also serves as project manager on various types of civil engineering projects including residential and commercial developments, and reclamation design projects. Office work includes site designs, reclaimation design, quantity calculations, and various other forms of engineering related duties. Mr. Darrah has been with CTL since 1990.

Education

B.S. Civil Engineering Technology
Fairmont State College, Fairmont, West Virginia 1988

CTL Project Experience

Mine Related

Morgantown Anderson Portals & Highwall-AML Reclamation Design. Morgantown, W.V.
Hopewell Church Refuse & AMD-AML Reclamation. Preston County, W.V.
Ottawa State Route 2 Mine Subsidence-Geotechnical Services & Grouting Plan, Ottawa County, Ohio
Fairmont (Jackson Addition) Subsidence Project-AML Reclamation, Subsidence Investigation & Geotechnical. Marion County, W.V.
Shinns Run Portals & AMD-AML Reclamation. Harrison County, W.V.
Ream Refuse Piles-AML Reclamation, Mine Refuse & Fire Abatement. McDowell County, W.V.
Cheat Neck (Lenhart) Landslide-Geotechnical Services & Hydrologic Evaluation. Monongalia County, W.V.
St. Clair Portals-AML Reclamation & Various Services. Monongalia County, W.V.
Morning Star Baptist Church Subsidence-Subsidence Investigation & Mitigation. Marion County, W.V.
Farmington United Methodist Church-Subsidence Investigation & Mitigation. Farmington, W.V.
Eccles and MacArthur Subsidence-Subsidence Investigation & Mitigation. Raleigh County, W.V.
Oakland PSD-Feasibility Study. Hancock County, W.V.
Peninsula Highwalls-AML Reclamation, Hydrologic & Geotechnical Services. Monongalia County, W.V.

Geotechnical Instrumentation & Monitoring

Design, Installation and Monitoring of surface and subsurface geotechnical monitoring instruments for multiple types of projects including: Ohio Mine Subsidence Insurance Underwriting Association, Federal and State Locks and Dams, Power Stations, Commercial and Residential Buildings, Dwellings, Civil Site Developments, Bridges, Conveyor Systems, Retaining Walls, Highways, WV BRIM (Subsidence Insurance), Underground and Aerial Utilities

Healthcare

WVUM Parking Garage Site Design. Morgantown, W.V.
Mon General Hospital Development-Site Design. Morgantown, W.V.
MedMark Environmental and Property-Phase I ESA, Asbestos
Investigation & Surveying Services. Marion County, W.V.
Mon View Parcel B-Surveying & Environmental Service. Morgantown W.V.
WVUH Stormwater Analysis-Stormwater Analysis. Morgantown, W.V.

Energy

FirstEnergy Harrison Power Station-CCB Landfill Phase V Step III. Harrison County, W.V.
Genpower: Longview Power Plant-Overland Conveyor Permitting. Monongalia County, W.V.
Conveyor Grading Redesign-Surveying Services. Monongalia County, W.V.
Longview Power Plant Coresco Permitting-Permitting Services. Monongalia County, W.V.
Fort Martin Power Station Chimney-Various Services. Monongalia County, W.V.

Education

Morgantown High School Stadium Survey-Surveying Services. Morgantown, W.V.
WVU Animal Facility Annex-Civil Site Design & Geotechnical Services. Morgantown, W.V.
WVU Child Care Center-Civil Site Design. Morgantown, W.V.
University High School Stadium Survey-Surveying Services. Morgantown, W.V.
The Friary-Various Services. Morgantown, W.V.

Building Development

University Park-Geotechnical, Surveying, Civil Site & Environmental Services. Morgantown, W.V.
Mapleshire Assisted Living-Surveying Services. Morgantown, W.V.
Pierpont Road Development-Surveying & Geotechnical Services. Morgantown, W.V.
Hornbeck Road Development-Various Services. Morgantown, W.V.
Chateau Royale ALTA Survey-ALTA Survey. Morgantown, W.V.

Municipal Infrastructure

Willowdale Drive WVDOH road design and utility relocations.
Maple Drive WVDOH road design and utility relocations.
Scotts Run Water Line, Wiles Hill Tank & MUB Access Road Survey-Surveying & Layout Services. Morgantown, W.V.
Linwood Street Stormwater-Stormwater System. Morgantown, W.V.

Mr. Patrick E. Gallagher P.E., CPGS

CTL Engineering of West Virginia, Inc.

Projects successfully completed under Mr. Gallagher's direction include: Civil Site Design, Foundation Design, Storm Water Management, Waste Water Design, Roadway Design, Parking Lot Design, Geotechnical Investigations & Design, Site Stability Analyses, Mine Subsidence Evaluations, Failure Investigations and Environmental Investigations and Expert Witness Testimony. Prior to joining CTL Engineering, Mr. Gallagher was the chief of the Abandoned Mine Reclamation Program for the State of Maryland, Department of Natural Resources, and Bureau of Mines. In addition, he was also responsible for overall engineering/geologic support to the Maryland Bureau of Mines Program. His career began in Pittsburgh as a project geotechnical engineer with Orbital Engineering.

Education

B.S., Civil Engineering, 1975, Virginia Polytechnic Institute and State University, Blacksburg, Virginia
Geology (Minor), 1975 Virginia Polytechnic Institute and State University, Blacksburg, Virginia

Professional Registration / Certification

- Registered Professional Engineer: Ohio - #48459 (1985); Maryland - #13256 (1982); West Virginia - #9297 (1982); Pennsylvania - #PE-044930-R (1993); Wyoming - #11033 (2010); North Carolina - #032503 (2005); Kentucky - #24988 (2005)
- Certified Professional Geological Scientist, #6575 (1992)
- Professional Surveyor: West Virginia (1983)
- Adjunct Professor – Civil Engineering
  Fairmont State College, 2001 – Present

CTL project Experience

Energy and Mining

Mr. Gallagher has served as principal-in-charge and chief engineer for numerous energy projects located throughout the tristate region. Mr. Gallagher is a recognized geotechnical expert in the region and has extensive experience with design for pads, access roads, slope failure evaluation and repair, rock cut slopes, and pipeline embankments.

He was responsible for the Deep Mine Permitting program in Maryland including Mining, reclamation and abandonment plans. His experience involves application of various geotechnical design and construction techniques for energy sites including geogrid reinforcement, soil cement stabilization, rock buttressing, and retaining wall systems. His energy experience includes:

I-79 Interchange Morgantown – Geotechnical Project Manager on this Design Build to the Town Centre
I-81 Martinsburg to Marlow Interchange-Design Build, Martinsburg, West Virginia

Transportation (continued)

Morgantown Municipal Airport, Morgantown, West Virginia
Black Water Bridge Abutments-Surveying & Design Services, Tucker County, West Virginia

Healthcare

Mon General Site Development-Site Design, Morgantown, West Virginia
Ambulatory Care Center-Geotechnical Services, Morgantown, West Virginia
Preston Memorial Hospital Construction Services, Preston County, West Virginia
WVUH Data Center-Geotechnical Services. Morgantown, West Virginia
Fresnius Medical Center-Geotechnical Services, Preston County, West Virginia

Power Generation

Harrison Step II Construction Monitoring, Harrison County, West Virginia
Harrison Power Station Phase V Step I, Harrison County, West Virginia
Harrison Power Station Cell A Repair, Harrison County, West Virginia
Overland Conveyor Permitting, Monongalia County, West Virginia
Harrison Power Station Landfill QA/QC Leachate Collection Layer Expansion, Harrison County, West Virginia

Building Development

University Place-Site, Civil & Geotechnical Services, Morgantown, West Virginia
Grand Central Apartments-Geotechnical Services, Morgantown, West Virginia
Gateway Development-Site & Civil Services, Morgantown, West Virginia
Federal Correctional Institute-Various Services, Hazelton, West Virginia
Parkview Heights Retaining Wall-Geotechnical Services, Bridgeport, West Virginia

Mine Related

Morgantown Anderson Highwalls - AML Reclamation Design, Morgantown, West Virginia
Thomas Northeast – AML Mine Grouting Reclamation Design, Thomas, West Virginia
Terra Haute Airport – AML Mine Grouting Reclamation Design, Indiada
Schramm, Gordon, East Franklin Landslide-AML Reclamation, Maryland.
Douglas Avenue Stormwater System-Geotechnical & Hydrologic Services. Allegheny County, Maryland
Fairmont (Jackson Addition) Subsidence-AML Reclamation & Geotechnical Services, Fairmont, West Virginia
Ottawa State Route 2 Mine Subsidence-Geotechnical Services & Grouting Plan, Ottawa County, Ohio

Joseph Grani, M.S., P.E

Branch Manager, Geotechnical Engineer

Mr. Joseph Grani, P.E. presently serves as a Geotechnical Engineer and Branch Manager of CTL's Morgantown, WV office. His work covers foundation analyses and recommendations for retaining walls, roadways, bridges, landslides, sewers, buildings, towers, and tanks. In addition, Mr. Grani is responsible for the supervision of all subsurface explorations. Mr. Grani formerly served as the Manager of Geotechnical Services in CTL's Columbus Office.

Other experience includes foundation design recommendations for bridges, soils subgrade evaluations for pavements, slope stability evaluations for highway embankments and earth dams, design of parking lot dewatering systems, and design recommendations for earth retention structures and noise barrier walls. He utilizes many geotechnical programs, including Driven, Slide, and Lpile.

EDUCATION

Master of Science
The Ohio State University, Columbus, Ohio 1994
Bachelor of Science, Civil Engineering
The Ohio State University, Columbus, Ohio 1991

PROFESSIONAL REGISTRATION / CERTIFICATION

Registered Professional Engineer, Ohio (E-60435)
Registered Professional Engineer, West Virginia (23685)
Member American Society of Highway Engineers

CTL PROJECT EXPERIENCE

TRANSPORTATION

Richland Ave. Pedestrian Tunnel & Ret. Walls, Athens, OH
West Run Rd. Relocation and Ret. Walls, Morgantown, WV
Various FEMA Slip Repairs, Jefferson County, Ohio
Various FEMA Slip Repairs, Scioto County, Ohio
Various FEMA Slip Repairs, Noble County, Ohio
Various FEMA Slip Repairs, Athens County, Ohio
BUT-129
COS-541-19.18
SR 315 SB Interchange Improvements
WAS-T394-0.86
BRO-221-6.80
HAM-74-17.71
ADA-125-10.80
LAW-217-7.8
US Route 33 & Three Creeks Metro Park, Columbus, Ohio
Walnut Hill Rd., Scioto County, Ohio
BEL-7-11.05
BRO-763-0.65
BRO-32-3.75
LAW-243-10.3-10.4
County Road 3 Landslide Exploration, Belmont County, Ohio
COL-517-6.65
LIC-161.2.30
HEN-110-0.66-Slip
2nd Ave Corridor Improvements, Columbus, Ohio
SCI-104-8.15
MOE-CR81-2.87
Richland Ave. Pedestrian Safety Improvement, Athens, Ohio
Middleport-Slip Repair, Meigs County, Ohio
COL-14-7.58
Olentangy Trail to Bethel Rd Connector, Columbus, Ohio
LAW-217-9.8
E Broad St. Widening, Columbus, Ohio
BEL-40-24.76
JEF-646-4.53
SEN-Miami Street
BEL-70-1445
MAD-70-8.62 Design Build
BRO-763-1.02-Bridge Replacement
LIC-62-14-72
LOG-CR21-1.00
MRW-TR82-0.94
HIG-50-6.87
LAW-775-15.45/15.70
WAS-CR 111
WAS-676-24.00
JEF-164-5.25
Parsons Ave-Franklin Ave to Broad Street Arterial Street Rehabilitation, Columbus, Ohio
BRO-221-5.54
LIC-310-1.72
DEL-3-5.41
PIK-CR4-3.98
LAW-93-15.39
CUY-175-12.35
MUS-313-2.47
CLA-CR362-2.95
BEL-147-22.93
BEL-800-16.93
SR 619 and Pickle Rd. Roundabout, Summit County, Ohio

Mr. Joseph Stanley

Client Manager
Project Manager
Business Development Manager

Mr. Joe Stanley currently serves as the Business Development Manager and a client manager for select clients in the Morgantown, West Virginia office of CTL Engineering, Inc. His responsibilities as a project manager include assisting in the planning and design of civil site design projects involving land planning and site development aspects. His projects vary from commercial and residential properties, mine and energy sites, and also includes state, county, and local roads.

Mr. Stanley has shown his dependability and increased his depth of experience by working with several of his clients for years during the long term development of commercial property developments. He has worked closely with the client, contractors, and developers of these long term projects. As with most of West Virginia, a large number of these developments were once on mine property if not once mined. He is familiar with the assets and potential difficulties of developing sites and long term planning in West Virginia.

Education
A.S. Drafting and Design
Fairmont State College, Fairmont West Virginia 2001

Technical Programs
AutoCad
Civil 3D

Professional Registration / Certification
Advanced GPS Training Course

CTL Project Experience

CTL Engineering of West Virginia, Inc., Morgantown, WV (May 2000 – Current)

As a project manager, Mr. Stanley is responsible for being a primary client contact and coordinator for our team with all interested parties. He maintains relationships with the contractors, developers, and regulatory agencies promoting open communication and prompt management of complications. His experience as a Surveyor, CAD Designer, Project Manager, and Staff Engineer enables him to advise and handle changes in a timely manner.

Infrastructure Development
CTL Engineering used the latest GPS technologies to develop accurate plans of the current conditions. The plans were then made for the various requirements of the projects. In some cases, the existing road conditions were just widened, and in other cases grading and access needs had to be changed to allow for current and future development.

Infrastructure Development (continued)
Dorsey Knob Park Road Improvements, Morgantown, West Virginia
Country Road 5/5 Relocation, Logan County, West Virginia
Morgantown Airport Alternative Access Road, Morgantown, West Virginia
Charles Point Roadway Cut Evaluation, Harrison County, West Virginia
Osage Bridge, Monongalia County, West Virginia

Mining
CTL Engineering is responsible for improving the safety, landscape, and water quality for abandoned mine lands. We develop plans to use the spoil and old stock piles available on site for slopes and regrading enabling seeding of the land as well as improving safety. CTL is also engaged to develop plans for sealing open mines while allowing for water drainage and ensuring bat habitats.

Fairmont Subsidence – Abandoned Mine Land Reclamation, Marion County, West Virginia
Morgantown Anderson Highwalls – Abandoned Mine Land Reclamation Design, Monongalia County, West Virginia
Shinns Run Portals – Abandoned Mine Land Reclamation & Portal Closure, Harrison County, West Virginia
Hopewell Church Refuse – Abandoned Mine Drainage, Preston County, West Virginia
Peninsula Highwalls – Abandoned Mine Land Reclamation, Monongalia County, West Virginia
Cheat Neck Landslide, Monongalia County, West Virginia

Energy
CTL Engineering developed plans for grading, clean water ditches, leachate collection, and also calculated volumes for ponds.
Harrison Power Station, Harrison County, West Virginia
Overland Conveyor Permitting, Monongalia County, West Virginia
Harrison Power Station Landfill, Harrison County, West Virginia
Longview Power Plant, Monongalia County, West Virginia
Pleasant Power Station, Pleasant County, West Virginia

Community and Municipal Development
CTL Engineering was involved in the planning for the current use and future development of these longer term projects. CTL created civil site plans, located utilities, worked on access roads, and also developed stormwater management plans.

Commercial Development, Monongalia County, West Virginia
University Park, Morgantown, West Virginia
Student living facilities in conjunction with West Virginia University.
Hornbeck Road Development, Morgantown, West Virginia
Residential planned community.
University Town Centre, Morgantown, West Virginia

Caroline Ornowski, EIT

Project Inspector
WVTRET Level Iv

Firm
CTL Engineering, Inc.

Education
Civil Engineering and Technology, 2016
Fairmont State University, Fairmont, West Virginia

Certifications
ACI – Concrete Technician
West Virginia DOH – Concrete Inspector
West Virginia DOH – Aggregate Sampling
West Virginia DOH – Soil and Agg Compaction
West Virginia DOH – Asphalt Field Technician
MSHA – Above Ground Training
OSHA – 10 Hour Construction
WVTRET Level III

Summary of Experience
Caroline is Level III construction inspector with 5 years of construction experience.in quality control testing and inspection of roadway, bridges and other infrastructure projects. She also has experience in construction administration and inspection of general items such as: structures, storm sewers, sanitary sewers and waterlines.

Caroline has been assigned as the lead inspector on the MGW Runway Extension Runway construction project in Morgantown This project features over **100,000 yards of rock excavation** and potential stakeholder encroachment. She has strong knowledge and experience with quality control testing, coordination of other technicians and serving as liaison between clients, owner and contractor. She also maintained as-built drawings, measured various material quantities and provided daily report of the construction activities.

Relevant Project Experience

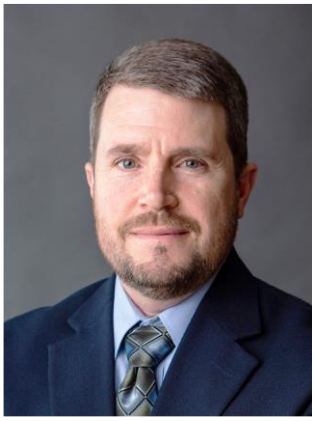
- **City of Morgantown / MGW Runway 18-36 Extension Construction Phase I FAA AIP No. 3-54-0015-045-2020 / Morgantown, West Virginia**
  Caroline is the lead inspector for the project. The airport expansion project is a multi-year project to be constructed in numerous phases. CTL was selected to provide the QA/QC for the duration of the project. Caroline coordinates the materials testing, daily reporting and is the lead liaison between the owner and the contractor.
- **Mountaineer Contracting / Route 250 Widening / Mannington, West Virginia**
  Caroline was the lead inspector. Caroline coordinated the field testing and sampling with the contractor. The project consisted of widening the existing road to add a turn lane. New curbing and drainage was added.
- **Mountaineer Contracting / Intersection of Goshen Road and Rt 73 / Morgantown, West Virginia**
  Caroline was the lead inspector responsible for materials testing and inspection. The project consisted of road stabilization due to heavy traffic. Construction of a reinforced concrete road and ditch and drainage improvement.
- **Mountaineer Contracting / Monongahela Boulevard / Morgantown, West Virginia**
  Caroline was the lead inspector responsible for materials testing and inspection. The project consisted widening the road from the Patteson Drive Intersection to the Boyers Avenue Intersection. The project also included the construction of a concrete curb on both sides and new pavement on the roadway.
- **Mylan Park Foundation / Mylan Park Aquatic Center and Track / Morgantown, West Virginia**
  WVU selected Mylan Park to be the home of the new Aquatic Center and Track Facility. Caroline was the lead inspector on the project. She monitored the cut and fill and the foundation construction. This also included coordinating the material testing for the project.

NLB
NEFF·LONGEST·BEAM

300 CAPITOL STREET, SUITE 507 | CHARLESTON, WV 25301
304.343.8036 | WWW.B-L-N.COM
A TRADITION OF EXCELLENCE SINCE 1945

Travis Ferrell, PE

Mining Engineer



Education

MBA, Business Administration, University of Charleston
BS, Civil Engineering, West Virginia University Institute of Technology
BS, Engineering Technology, West Virginia University Institute of Technology

Licenses

Professional Engineering, West Virginia #015803

Certifications

Certified Surface Mine Foreman, West Virginia #S-3997-05
Certified Surface Miner, West Virginia #L-5179

Travis has 26 years of engineering and operations management experience in the mining industry, which includes complex mine and reserve modeling; strategic planning; critical path project management; governmental and regulatory agency collaboration; and coordination of environmental planning, permitting, and compliance. Responsibilities as Chief Engineer included permitting, mine modeling, mine planning, project management, and environmental compliance of large-scale coal operations in West Virginia. Travis has extensive experience completing due diligence projects, property valuations, mining feasibility studies, reserve evaluations, reclamation liability assessments, environmental audits, and mine layout, which includes designing access corridors, haul roads, and drainage structures necessary to support operations.

Specialized Experience

- Coal Reserve Modeling
- Mine Design & Planning
- Mining Reserve Evaluations
- Reclamation Liability Assessment
- Access Corridor & Haul Road Design
- Drainage Structure Design
- Project Management
- Regulatory Compliance
- Environmental Coordination

Specific Project Experience

Mining Experience

Norwest Corporation & Stantec | Senior Project Manager & Consulting Project Engineer | 9 Years

Massey Energy | Chief Engineer | 8 Years
Progress Coal Mining Complex & Endurance Coal Surface Mine

Bluestone Energy | Chief Engineer | 1 Year
Chief Engineer | Corporate Office

Arch Coal Inc. Senior Engineer | 8 Years
Hobet Mining Complex & Samples Mining Complex

Professional Summary

Travis has over 26 years of professional experience in mining-related capacities, including project manager, engineering management, operation management, and mining consultant. Expertise includes project management, mine management systems, mine modeling, surface mine design, mine planning, environmental planning, and regulatory compliance.

While in the mining industry, Travis was directly responsible for the planning and overseeing 1.1 billion bank cubic yards of earth removal and the corresponding 70 million tons of coal recovery. In his last position at operations, he served as Engineering Manager for a 5.0 million tons per year surface mining complex, directing all production, environmental, permitting, and regulatory initiatives. This included preparation of mine planning efforts for dragline operations, truck shovel operations, cast blast and dozer push operations, large-scale multi-seam surface operations, area mining operations, contour/highwall mining operations, and all the associated pre-mining and post-mining activities related to those operations.

Operational-level responsibilities included managing multiple projects simultaneously, working closely with mine management to achieve desired results of plans, and coordinating projects with contractors, consultants, and regulatory agencies. Corporate-level responsibilities included preparing and delivering formal presentations to the corporate management team, providing long-range plans for budgeting purposes, short-range plans for operation management, identifying and determining asset retirement obligations and/or ongoing reclamation liabilities, and alternative strategic assessments for the long-term sustainability of operations.

As a mining consultant, participated in a variety of engineering projects both domestically and internationally, including scoping level mine studies, prefeasibility studies, due diligence projects, property valuations, mine planning and analysis of operations, evaluation of secondary mining alternatives for operations, financial modeling and capital expenditure forecasts of operations, coal recovery projections for mining properties, asset retirement obligations, reclamation liability assessments, impoundment volumetric calculations, provided mining expertise for financial institutions during bankruptcy proceedings, and performed insurance risk evaluations of operations.

Project Experience – Mining Consultant

Travis began working as a mining consultant in 2012, and his significant project experience includes:

Mining Resource and Reserve Evaluation/Mine Valuation (14 Projects)

Determining mining resources and reserves involves a geological component identifying minable resources and a mine planning component determining economically mineable reserves. Projects adhere to internationally established standards that provide baseline resource and reserve determinations guidance. In general terms, resources include mineral tonnages identified by following a prescribed exploration plan that meets required drilling/sampling criteria. Once resources are identified, reserves are determined by developing a comprehensive, economically viable mining plan that quantifies potentially recoverable mineral tonnages. Mine valuation involves applying additional economic analysis to the identified resources and reserves, which includes analyzing nearby operations, regional resource/reserve property sales, and comparable valuations prepared for nearby properties.

300 CAPITOL STREET, SUITE 507 | CHARLESTON, WV 25301
304.343.8036 | WWW.B-L-N.COM

Mine Design/Mine Plan Evaluations/Prefeasibility Study/Feasibility Study (24 Projects)

Mine design for surface operations includes matching pit design to mining equipment to optimize production and operating efficiencies. In the case of larger dragline operation evaluations/plans, alternatives are evaluated through a cross-sectional review and analyzing material placement as the unit progresses through the reserve. Secondary mining investigation involves determining the appropriate secondary mining method (auger or highwall mining) and the appropriate layout to meet highwall stability criteria. Once the layout is developed, a financial review of coal extraction and recovery is used to determine the viability of secondary mining operations as a standalone coal production method. Prefeasibility studies are the initial combination of reserve evaluations and mine plans used to produce financial results to evaluate the economics of a mining reserve. Feasibility studies take the next step in the financial evaluation of a potential mining reserve, where more detailed plans and financial analyses are prepared. Both prefeasibility and feasibility studies typically adhere to internationally established standards that serve as baseline guidance for economic review.

Asset Retirement Obligation/Point-In-Time Reclamation Liability Estimates (17 Projects)

ARO projects consist of developing the timing and cost associated with field-related reclamation activities and required permit holding costs. Field-related reclamation activities include the removal of infrastructure, access roads, maintenance/parking lots, drainage control structures, highwalls, disturbance areas, and reclamation of final projected mining pits. Permit holding costs include bond holding costs, permit renewals, water sampling and treatment, and any site-specific maintenance required to satisfy phase release requirements. Point-in-time reclamation liability estimates follow a similar methodology, except they are calculated for the existing point-in-time conditions. As such, they represent a live estimate of the total reclamation liabilities required to release an existing permit if mining immediately ceases. In most cases, point-in-time estimates present higher costs than ARO estimates because mining has not been completed and therefore has more disturbance than would be expected at the end of the mine plan.

Due Diligence Projects (11 Projects)

Due diligence projects evaluate mining companies/operations to determine their market value during potential acquisition proceedings. Projects involve verifying resources and reserves; evaluating the efficiency of operations; reviewing assets and ARO; and preparing financial forecasting of the business plan.

Mine Risk Assessment (7 Projects)

Mine risk assessments are mine site audits performed on behalf of insurance companies that identify the potential risks that could result in an insurance claim based on damages exceeding $500,000 and/or events exceeding 30 days of business interruption for the operation. Assessments included conducting site visits to meet with management teams; discussing environmental, permitting, operational, and logistical risks; reviewing mine plans and assessing execution in the field; and performing inspections of structures, facilities, operations, and primary pieces of production equipment. Assessments are then compiled into a report discussing the areas of investigation, identifying and classifying each potential risk by severity, and providing operations management with proposals to address all identified avoidable risks moving forward.

Refuse Impoundment Volumetric Calculations (4 Projects)
Volumetric calculations for refuse impoundments involve verifying the designed capacity of the impounding structure, determining the amount of material placed into the structure, and determining the remaining volume based on permitted and/or as-built survey information.

Project Experience – Mining Operations
Travis has over 16 years of operational experience in various capacities, including project manager, engineering management, and operations management.

Chief Engineer | Progress Coal Company | Alpha Natural Resources/Massey Energy | Twilight, WV
2006 – 2012
Engineering Manager responsible for all engineering functions and department personnel. Project involvement included short/long-range mine planning; coal quality analysis and sales forecasting; permitting; environmental/regulatory compliance; construction and ancillary projects; surveying; and financial management of capital projects. Additional key highlights included:

- Chief Engineer of 90 million bank cubic yards/5.0 million tons per year mining complex.
- Prepared analysis/justification for implementing a dragline project. The project included relocating and rehabilitating the dragline and organizing and coordinating operator and management training before startup. Upon startup, served as dragline superintendent and assisted in integrating the operation into the mining complex. This was Massey Energy's only operating dragline.
- Participated in due diligence activities during Alpha Natural Resource's acquisition of Massey Energy.
- Assisted in preparing feasibility studies to justify permitting significant expansion into adjacent reserve areas.
- Coordinated the relocation of a 138 kV power transmission line that crossed the active mining area of the property.

Previous Positions
Travis began his professional career at Catenary Coal Company (a division of Arch Coal) as a mining engineer with responsibilities of mine planning and production reporting, which included developing and coordinating mine plans using various CAD software packages and customized spreadsheets. As responsibilities increased, he assumed monthly engineering reporting duties and expanded into other areas, including royalty calculations, reclamation liability estimations, project management, and environmental/regulatory compliance. Through the years, Travis developed a close working relationship with mine management and controllers, eventually expanding his role to Engineering Manager. Collectively, these operational experiences served as the foundation for a successful transition into a mining consult role. Served in the following roles at other operations/companies:

- Massey Energy | Chief Engineer | Endurance Mining Company | Uneeda, WV | 2004 – 2006
- Bluestone Industries, Inc. | Chief Engineer | Beckley, WV | 2003 – 2004
- Hobet Mining, Inc. | Senior Engineer | Arch Coal, Inc. | Madison, WV | 2002 – 2003
- Catenary Coal Company | Mine Engineer | Arch Coal, Inc. | Cabin Creek, WV | 1996 – 2002
- Arch of West Virginia | Engineer Intern | Arch Coal, Inc., | Yolyn, WV | 1990 – 1995

MARKOSKY

Amanda Brown, PE
Environmental Engineer

Professional Experience:

Amanda has 13 years of experience specializing in environmental engineering and compliance support. She has experience in erosion and sedimentation control, stormwater management, drainage design, air permitting, mine permitting, water treatment design and field inspection. Amanda's experience includes being an Environmental Engineering Trainee with the PA Department of Environmental Protection Clean Water Department where she reviewed industrial wastewater NPDES permit applications. She was an Engineering Technician with CME Engineering, LP where she designed surface site plans and E&S controls for underground and surface coal mining operations and prepared the associated permit applications. Amanda performed cost analysis and treatment design for mining runoff treatment using AMDTreat software. She also has experience with design and design management on large scale transportation projects including structures and new expressways.

Select Project Experience:

SR 6219, Section 020 Meyersdale to Somerset FD & Construction Consultation Services, Somerset County, PA – PennDOT District 9-0
Project Engineer – Environmental Permitting Compliance
Amanda was responsible for assisting the District with ensuring compliance with the "Temporary Discharge Authorization" (TDA) issued for the project. The initial TDA required water quality (AMD) monitoring for 24 specific stormwater runoff outfall locations. The TDA was revised during construction to add two more AMD discharge locations. She prepared the Special Provisions for coal, carbonaceous material and potentially acid forming material disposal, encapsulation, cleanout of basins, water quality sampling and a stormwater treatment item for the separate earthmoving, structural and paving contracts awarded for the project. We analyzed the water quality data obtained from the sampling and assisted the District with ensuring compliance with the TDA. This included obtaining pre-existing mining data, coordination with the PADEP, and designing passive water treatment systems to comply with the TDA. Cost estimates were prepared for each design. It also included preparing loading calculations and analysis of impacts to the adjacent streams.

Mon-Fayette Design Management, PA 51 to I-376 Monroeville, Allegheny County, PA – Pennsylvania Turnpike Commission (SAP 4400000984)
Project Engineer – Design Management of E&S and PCSM Plans, and NPDES Permitting
Amanda is a key member of the Design Management team for this proposed 14-mile, $2 billion limited access toll highway. The environmental tasks involve coordinating with the PTC, 7 different design consultants, and the environmental reevaluation consultant to ensure the FEIS and reevaluation commitments were incorporated into the project designs. Amanda is also responsible for coordinating and preparation of the NPDES permitting, Stormwater, E&S, and stream mitigation plan design for the project. The environmental tasks also include coordination with the USACE, PF&BC, PADEP, Allegheny County Conservation District, PA Turnpike Commission, and the design teams to prepare the required PADEP mining, NPDES, and Chapter 105 Joint Permit applications required for the project. She managed and coordinated the mining task including AMD BMP design, water quality monitoring, contract specifications, and coordination with PA DEP Bureau of Abandoned Mines and Reclamation. She also prepared the water quality sampling plan needed for monitoring the pre-existing discharges and stream water quality to ensure there were no AMD impacts during and post construction. Amanda provided direction and oversight for the stream mitigation design to ensure natural stream mitigation features were included.

EDUCATION

B.S. Civil Engineering / Environmental Engineering Minor

Penn State University, 2009

REGISTRATIONS

Professional Engineer, PA (PE-086424)

Bethel Ridge Water Sampling, Washington County, PA – Energy Client
Environmental Engineer – Analysis of pre-construction sampling
Amanda was responsible for the management of the AMD water sampling tasks for this project. We completed 6 pre-construction water sampling events on an existing mine water seep located outside the proposed pipeline right-of-way for the Bethel Ridge to Muskovich pipeline project. The existing seep is documented on the Office of Surface Mining Reclamation and Enforcement Abandoned Mine Lands Inventory (OSMRE AML) as an AMD Discharge Area located within the abandoned "North Fork West" mine area. Loading rates for Alkalinity, Acidity, Sulfate as SO4, Aluminum, Iron, and Manganese were calculated per the flow measured at the time of water quality sampling and results were summarized in a water sampling report to the client. Post construction water sampling was completed for an additional 12 samples. The results were analyzed and compared to the preconstruction results to determine any statistically significant change in the flow or quality of the seep.

SR 0422, Section 19B Margaret Road Intersection PE, Armstrong County, PA – PennDOT District 10-0
Designer – Phase I Environmental Site Assessment
The project included a one-mile offline shift of a portion of existing highway corridor to improve safety conditions at a hazardous substandard intersection located at the bottom of a valley. The project also included the construction of a new, off-line bridge to span a valley, stream, and local roadway, several stream relocations, and wetland mitigation design. An individual US Army Corps of Engineers 404 permit was required for this project. Amanda was responsible for preparing the stream and wetland mitigation design for this project. This work involved the installation of monitoring wells to determine groundwater elevations, stream assessments, natural stream channel features, and grading and planting plans. During geotechnical investigations, acid bearing rock (ABR) was determined to be present in an area of earth disturbance. Amanda worked with the design team to ensure safeguards were included with the design to encapsulate the exposed ABR and prescribe water quality sampling protocols to identify if this activity is having a negative impact on the project area streams. Due to the magnitude of impacts to aquatic resources (~ 1 ac) and presence of acid bearing rock, significant agency coordination was conducted to ensure the project could be approved in a relatively short time frame with little back and forth effort during the permit review process.

I-80 Canoe Creek Bridges EB & WB, Clarion County, PA – PennDOT District 10-0
Environmental Engineer – PCSM, E&S & Stream Mitigation Design
This project is the preliminary and final design of new dual structures carrying both directions of Interstate 80 over Canoe Creek and associated alignment improvements to the I-80 corridor in the area. Amanda was responsible for preparing and obtaining approval of the NPDES permit, including E&S plans and PCSM plans for the project, preparation of the H&H report and stream mitigation design. Amanda worked with the design team to ensure safeguards were included with the design to encapsulate the exposed ABR and prescribe water quality sampling protocols to identify if this activity is having a negative impact on the project area streams. Due to the size of the project and the amount of acid bearing rock, significant agency coordination with the PADEP was conducted to ensure the project could be approved in a relatively short time frame with little back and forth effort during the permit review process.

TRAINING

Westmoreland Conservation District Engineer's Workshop 2023

PennDOT Waste Site Evaluation Refresher Training 2017

Westmoreland Conservation District Stream Restoration as a Pollutant Reduction Strategy

40 Hour HAZWOPER Training

OSHA Construction Safety & Health

PennDOT Erosion and Sediment Pollution Control Design

Indiana County Conservation District Stormwater Management Workshop

WTI Planning, Hydrology, Vegetation and Soils for Constructed Wetlands

803 Quarrier Street
Suite 610
Charleston, WV 25301

724.238.4138
www.markosky.com

Benjamin Stufft, PG
Senior Environmental Project Manager

Professional Experience:

Benjamin has over 14 years of engineering and environmental science experience with extensive practice in project management and technical design. While directing projects, he has overseen the permitting and design of surface/underground mines, coal refuse/ash disposal facilities, bridge/culvert replacements, roadway improvements, oil and gas transmission lines, as well as the permitting and design for community and noncommunity water projects. He has provided environmental and hydrogeologic services, including wetland delineation field investigations, hydrogeologic evaluations, well siting, aquifer testing, and waterway permit applications for the Pennsylvania Department of Environmental Protection (PADEP) and U.S. Army Corps of Engineers (USACE). He also has experience with the National Environmental Policy Act requirements and documents, categorical exclusion evaluations (CEE), agency and public meeting involvement, Section 4(f)/6(f) evaluations, and technical report writing.

Select Project Experience:

AML Reclamation: Coffelt and D-2315 Wheeling Valley, Harrison County, OH – ODNR
Senior Environmental Project Manager – Aquatic Resources Investigation, Water Quality Sampling, Terrestrial Habitat Survey, T&E Coordination, and Mist Net Survey
We are completing environmental survey consulting services and reporting for the ODNR Division of Mineral Resources Management's AML Reclamation Contract No. L-22A-03 located in Harrison County, OH. This project is comprised of two project areas (Coffelt Reclamation & D-2135 Wheeling Valley) totaling approximately 600-acres. We are completing field investigations/delineations for stream, wetland, and open-water resources, including the completion of Ohio Rapid Assessment Method, Headwater Habitat Evaluation Index, and Qualitative Habitat Evaluation Index forms. We are also completing qualitative terrestrial habitat field surveys at each project site to identify and map dominant vegetative communities present within each study area in accordance with the Anderson Method, in addition to documenting all encountered wildlife. Additionally, presence/absence determinations of site-specific State and Federally listed T&E species based on the identified vegetative communities and habitats present are being made by our scientists. Benjamin is responsible for project management, coordination, and oversight. This includes coordination and oversight for two sub-consultants completing water quality sampling, agency T&E coordination, and summer bats mist netting surveys.

George L Reade Well Sites Major Modification, Cambria County, PA – Energy Client
Senior Environmental Project Manager – Geohazard Evaluation, Aquatic Resources Investigation, and Permitting
This project involved the completion of environmental services, engineering design, and permitting under the Erosion and Sediment Control General Permit (ESCGP-3) for the replacement of natural gas well casings which are part of the George L Reade 6 Well Sites located in Cambria County, PA. Markosky scientists were responsible for completing the aquatic resources survey identifying multiple wetlands and streams within the project study areas and provided delineations for each resource. Benjamin was responsible for the completion of a geohazard review for two natural gas well sites which involved desktop research of publicly available sources published by State and Federal agencies in conjunction with on-site field reconnaissance to visually identify potential geologic hazards within the project area for each well pad and access road. We were responsible for the design and preparation of the ESCGP-3 Major Modification addressing the construction and restoration activities associated with the remediation and well casing operations for each natural gas well.

EDUCATION

B.S. Geology

University of Pennsylvania, 2009

REGISTRATIONS

Professional Geologist, PA

PG (005270)

North Fork Mine, Somerset County, PA – AK Coal Resources, Inc.
Senior Project Geologist – Environmental, Geology, and Hydrology Modules
This project involved the hydrologic assessment of an underground mine plan area for coal extraction on three separate seams via in-seam slopes, including potential impacts from underground coal extraction and post-mine pool evaluation. Benjamin prepared a reserve evaluation based on extraction rate, coal thickness, and coal quality, as well as the 4,885.4-acre Pennsylvania State Mining Permit Application (CMAP) and associated NPDES permit application for sedimentation and treatment facilities.

Private Domestic Water Complaint Investigations – Cambria, Somerset, Westmoreland, and Fayette Counties, PA – Various Energy Clients (Mining)
Senior Project Geologist – Geologic and Hydrologic Assessment
These investigations involved the preparation and submission of PADEP Mine Operator Reporting Forms, water supply impact assessments, and water supply impact rebuttals on behalf of client. Benjamin conducted desktop review of mine plan areas, real-time operational data for various underground and surface mine operations, water supply construction details and hydrogeologic characteristics based on aquifer testing performance and water quality sampling. He coordinated replacement water supply installation including well siting, drilling oversight, aquifer testing, and water quality sampling and water supply rehabilitation efforts.

New Source Community Groundwater Well, Clearfield County, PA – Brady Township-Troutville Borough Water Association
Senior Project Geologist – Hydrogeologic Evaluation and Well Performance Testing
For this project, Benjamin conducted a site-specific hydrogeologic evaluation and developed drilling recommendations to site a new source community groundwater well to serve approximately 900 residents. He served as the liaison between the Water Association, drilling contractor, and PADEP Safe Drinking Water Program, and coordinated drilling contractor bids, drilling schedule, and aquifer testing setup, which ultimately included the preparation of cost estimates and schedules throughout the project's duration. This project involved the development of Pre-Drill Plan and Aquifer Testing Protocol for approval by PADEP Safe Drinking Water Program and required drilling inspection and well reconstruction oversight by Benjamin to ensure compliance with Part II Community Design Standards. He also performed required aquifer tests per approved Aquifer Testing Protocol including 8-hour stepped rate aquifer test, background test, and 72-hour constant rate test, and conducted New Source Groundwater sampling for laboratory analysis.

Ash Disposal Site, Homer City Generation Station, Indiana County, PA – Homer City Generation, L.P.
Project Geologist – Drilling Schedule Development, Inspection, and Testing
Benjamin led the development of a groundwater characterization plan for a proposed ash site disposal expansion. He was the lead geologist for the drilling, installation, and construction of nineteen (19) piezometer nests including lithologic descriptions, encountered water-bearing zone depths/yields, and raw water quality testing. He performed quarterly groundwater monitoring, prepared quarterly 14R Forms and Annual Evaluation Reports, as well as the aquifer testing including slug tests and drawdown tests for groundwater modeling and water level contour mapping.

TRAINING

OSHA Confined Spaces

OSHA 40-Hour HAZWOPER Training

MSHA 24-Hour Hazard Training

MSHA Impoundment Inspection Training

MEMBERSHIPS

National Groundwater Association Professional Membership – 2020

Employer Representative Safety Committee Chairman – 2018 through 2020

803 Quarrier Street
Suite 610
Charleston, WV 25301

724.238.4138
www.markosky.com

Karen Reed
West Virginia Project Manager

Professional Experience:

Karen is a project manager with 18 years of experience in preparing NEPA documents and obtaining the required clearances for environmental resources. She is also an archaeologist with significant experience with Section 106 of the National Historic Preservation Act. She has uniquely served as both an archaeological consultant on smaller bridge replacement and larger linear transportation projects but was also the acting Archaeology Unit Leader while working for the West Virginia DOH. In her position at the DOH, she became directly familiar with the policies and guidelines of the DOH, and managed and conducted various Section 106 tasks within a broad range of transportation project types. This also exposed her to understanding the interdisciplinary cooperation of NEPA and natural resource efforts within the DOH to be able to effectively move projects forward while considering parallel design services. These experiences also included the preparation of Environmental Assessments (EA) and Categorical Exclusions (CE).

Select Project Experience:

Greenbag Road Improvement Project, Monongalia County, WV – WVDOH
Project Manager and NEPA Author
Karen is the project manager responsible for the coordination of all aspects of the EA and public involvement. She was the lead author on the EA and the Finding of No Significant Impact. Markosky completed the NEPA documentation and supporting resource studies for aquatic resources, cultural resources, and noise analysis for the Greenbag Road Improvement Project. The project includes improvements to the level of service for the Greenbag Road (CR 857) corridor in Morgantown WV including improvements to two major intersections. Markosky prepared the EA for the project, including all public involvement.

Ralston Branch Bridge No. 2 Bridge Replacement (WVDOH), Wyoming County, WV
Permitting Task Manager
Karen is the task manager for permitting for the project and serves as the liaison for any environmental issues. This project consists of replacement of a single span bridge over Toney Fork in Wyoming County near the town of Kopperston, WV. As the prime consultant, Markosky is completing the design of the proposed structure, roadway approaches, utility coordination, traffic control, H&H, permitting, and overall project management along with the final PS&E package preparation.

U.S. 30 Corridor Improvements (PennDOT), Westmoreland County, PA
NEPA Author
Karen is an environmental lead for this comprehensive transportation evaluation of the Route 30 corridor between Irwin in Westmoreland County and the Allegheny County line. The project involved analysis of the supporting roadway network to develop and design strategies to improve the safety and mobility within the corridor. Karen is an author for the preparation of the Environmental Assessment document.

EDUCATION

B.A. Anthropology

Fort Lewis College, 2000

MEMBERSHIPS

Women's Transportation Seminar

Women's Energy Network

Brownsville Engineer Consulting, Fayette County, PA
NEPA Author
Karen drafted the Level 2 CE NEPA evaluation for this rehabilitation project. This project involves the rehabilitation of the nation's first cast iron, metal arch bridge, which carries SR 4003 over Dunlap Creek. The structure, which is listed on the NRHP, was built in 1839 in Brownsville, Pennsylvania. Markosky was responsible for assistance with public involvement, development of an environmental constraints map, preparation of the Categorical Exclusion, aquatic resource investigations, preparation of an alternatives tracking table to calculate environmental impacts associated with different project alternatives, and attendance at a permit pre-application meeting.

Quick Curve Relocation, Randolph County – WVDOH
NEPA Project Manager/Author
Karen developed the Categorical Exclusion documentation to complete the NEPA requirements and provided review of the consultant prepared Phase I archaeological survey report for submission to State Historic Preservation Office. She initiated and completed all agency coordination for the project. The project involved the realignment of a section of roadway to improve the sight distance for increased vehicular safety.

Seminole Road, Summers County – WVDOH
NEPA Project Manager/Author
Karen developed the Categorical Exclusion documentation to complete the NEPA requirements and provided review of the consultant prepared Phase I archaeological survey report for submission to State Historic Preservation Office. She initiated and completed all agency coordination for the project. This roadway project included the relocation of an intersection to improve safety conditions and sight distances.

Allegheny Circle, Allegheny County, PA – City of Pittsburgh
NEPA Author
Karen drafted the BRPA NEPA clearance document for this roadway improvement project. Markosky was responsible for the environmental and cultural resources tasks associated with the project. Tasks which Markosky was responsible for included the preparation of the BRPA NEPA document, Section 4(f) evaluations, threatened and endangered species coordination, Historic District Eligibility Evaluations, and Determination of Effects analysis for the project.

Washington Boulevard Bike and Pedestrian Trail, Allegheny County, PA – City of Pittsburgh
Environmental Scoping Author
Karen wrote the environmental scoping document as a pre-cursor to the BRPA NEPA document for this trail project. Markosky was responsible for the environmental resources tasks associated with this project to improve bicycle and pedestrian accessibility in the project area. Tasks which Markosky was responsible for included preparation of the BRPA NEPA document, wetland and stream investigations, Section 4(f) evaluations, and threatened and endangered species coordination for the project.

TRAINING

NEPA and the Transportation Decision Making Process

Advanced Metal Detecting for Archaeologists

Public Involvement in Transportation Decision Making

Section 106: Resolving Adverse Effects and Writing Agreement Documents

Applying Section 4(f)

Tribal Consultation

Archaeological Photography

803 Quarrier Street
Suite 610
Charleston, WV 25301

724.238.4138
www.markosky.com

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
David G. Hibbard, P.G.	Project Manager/Project Geologist	10	7

15. FIRM NAME AND LOCATION *(City and State)*

Brierley Associates, Denver, CO

16. EDUCATION *(Degree and Specialization)*

MS, Geographic Information Sciences, University of Denver*

BS, Applied Geoscience, Metro State University of Denver (2014)

17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*

Professional Geologist (WY, #4136)

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

Dave Hibbard has been a leader in Brierley's services for WY AML since 2016. As a Project Geologist, Mr. Hibbard specializes and leads a team in geologic hazards assessment; mine risk evaluation, mitigation design, remote and geospatial analysis, hydrogeologic assessment, rock mechanics, slope/highwall stability, and geographic information sciences. His technical expertise includes; geomechanical characterization in relation to compromised rock structure, subsurface geotechnical sampling, historic hard/soft rock mines, civil inspection, civil materials, erosion control and design, and construction management of multi-million-dollar projects. With 10 years of extensive field and analytical experience. Mr. Hibbard has worked on an assortment of civil and geologic projects relating to; historic underground mine mitigation, trenchless tunneling, earthwork and soil engineering, dams, flexible concrete, asphalt, road improvement design, bridge and abutment material inspection, material quality control and assurance, foundation soils assessment, oil and gas exploration, geologic site investigation, geotechnical drilling, and lab testing/analysis. **Dave led the project at Hanna Elementary School which recently earned a regional award by OSMRE (Office of Surface Mining Reclamation and Enforcement).**

Publications: Hibbard, D., Gamal, M. (November, 2019): *Mitigation in artesian conditions; Abandoned coal mine unique challages;* Mining Engineering Magazine

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*: **Abandoned Mine Lands; Historic Mine Assessment and Mitigation, WY Abandoned Mine Land Division, Wyoming Department of Environmental Quality (Addendums 1-7)**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: **Ongoing**; CONSTRUCTION (*If applicable*): **Ongoing**

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

Role: Project Manager, Geologist, Construction Manager; Technical direction of a multi-disciplinary teams investigating and evaluating subsidence risk over extensive historic underground room and pillar coal mines within in Carbon and Converse County. This work included comprehensive geotechnical investigation, GIS analysis, deformation studies, subsidence mitigation and design, hydraulic/hydrogeologic assessment, drainage, historic mine mapping, remote sensing and geospatial analysis (INSAR, drone photogrammetry, and LIDAR), ground surveying, geophysical analysis, geotechnical sampling, public outreach, technical specification production, and construction management.

b.

(1) TITLE AND LOCATION *(City and State)*: **Goldfield Mine, Goldfield, NV (Phase 1 & 2)**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: **2022**; CONSTRUCTION (*If applicable*): **2023**

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

Role: Project Manager, Engineering Geologist: Technical direction and oversite of a multi-disciplinary team tasked to investigate and evaluate subsidence and highwall hazard risk over an extensive historic underground stope mine with significate signs of subsidence. This work included comprehensive geotechnical investigation, geophysical and geospatial analysis, remote sensing, mine map modeling, structural support delineation, and proposed plans for mitigation solutions in an active highly altered hardrock mine with over 25 mine intervals to depth of 1,000'bgs.

c.

(1) TITLE AND LOCATION *(City and State)*: **Farthing Rock Quarry, (Phase 1, 2, and 3)**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: **2021**; CONSTRUCTION (*If applicable*): **2023**

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

Role: Project Manager, Engineering Geologist: Provided management and guidance for geologic site characterization on hardrock mine development and open pit design. Project consists of extensive geologic mapping, drilling sample collection, geophysical assessment, remote sensing, spatial analysis, laboratory testing, mine permitting, modeling, and open pit highwall design.

d.

(1) TITLE AND LOCATION *(City and State)*: **Globeville Tunnel; City of Denver, Denver, CO**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: **2017**; CONSTRUCTION (*If applicable*): **2017**

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

Role: Field Engineering Geologist, Construction Manager, Quality Assurance: Provided extensive QA/QC inspection oversite on multi-million-dollar project for a 96-Inch diameter stormwater tunnel expanding beneath I-70 and RTD rail lines. Work included; permeation grouting, instrumentation monitoring, QA/QC oversite, material oversite, and construction management. Mr. Hibbard served as the onsite engineer/geologist, providing support to the principle designer and contractor project management.

e.

(1) TITLE AND LOCATION *(City and State)*
Geological Survey; City of Manitou Springs, CO

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
2017	**2017**

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Role: Field Geologist, Construction Manager: Conducted geological site survey to provide a constructability and rippability assessment for historic water main replacement. Work included; geotechnical sampling, In-situ test pit analysis, literature review, and construction management. Mr. Hibbard served as the resident field geologist assisting the City of Manitou and Public Works.

f.

(1) TITLE AND LOCATION *(City and State)*
Banner Lakes Dam; Hudson, CO

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
2017	**2017**

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Role: Field Geologist, Construction Manager: Working with the Colorado Parks and Wildlife, Mr. Hibbard provided services to assess and explore several compromised earth embankment dams associated with wide scale 'pipping'. Project involved geologic exploration working with the Colorado Department of Wildlife and geotechnical assessment of dam cores and slope structure. Subsurface geotechnical sampling, water sampling analysis, and lab testing was performed, in addition to a very thorough literature review.

g.

(1) TITLE AND LOCATION *(City and State)*
Daniel Sands Quarry and Dam; Colorado Springs, CO

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
2017	**2017**

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Role: Field Geotechnical Engineer/Geologist, Construction Manager: Performed construction oversite, material and soil inspection, hydrogeologic assessments, and soil lab analysis for the Auraria Campus Expansion project. Detailed soil and subgrade sampling were required due to environmental contamination and on-site conditions. Inspection work included; reinforced steel, storm sewer, retaining walls, and storm water inspection.

h.

(1) TITLE AND LOCATION *(City and State)*
E-470 Highway Expansion; Parker, CO

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
2016	**2016**

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☐ Check if project performed with current firm

Role: Field Geotechnical Engineer/Geologist: As part of the E-470 Widening project from Jordan Rd to Quincy Exits, QA and QC were routinely performed for material inspection and construction oversite. Inspection work included, heavy earthwork soil inspection with sensitive soils, road embankment slope surveying, re-enforced steel, cement treated soil, bridge abutment and caisson inspection, soil nail retaining walls, flexible pavement, and bridge approach inspection. Heavy CDOT specification guidelines were followed as part of E-470 quality requirements.

i.

(1) TITLE AND LOCATION *(City and State)*
Highline Canal; Denver, CO

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
2015	**2016**

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☐ Check if project performed with current firm

Role: Field Geotechnical Engineer/Geologist, Construction Manager: As part of the East Gate Industrial Park development project, planned road development included cement treated soil for subgrade replacement. Project required routine soil and asphalt inspection, re-enforced steel inspection, geological site inspections, and storm water inspection.

k.

(1) TITLE AND LOCATION *(City and State)*
Seidel Geologic; Denver, CO

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
2013	**2015**

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☐ Check if project performed with current firm

Role: Field Geologist: Serving as a field geologist, Mr. Hibbard provided interpretive stratigraphic analysis through qualitative lab techniques on exploratory helium and hydrocarbon wells. This included deep drilling in remote locations, material analysis utilizing microscopy, geophysical analysis of SP, Gamma, and resistivity. Drill logs were created to classify, porosity, permeability, and historic deposition leading oil, gas, and helium production.

l.

(1) TITLE AND LOCATION *(City and State)*
United States Geological Survey, Lakewood CO

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
2014	**2014**

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☐ Check if project performed with current firm

Role: Physical Science and Remote Sensing Analysis (Internship): Serving as a physical scientist, Mr. Hibbard was tasked with carbon cycle analysis of national fire scaring used to assess regional carbon emissions. Project included ArcGIS analysis utilizing LANDSAT 8 imagery, multispectral analysis, fire inventories, and statistical analysis of recent forest fires.

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person)

12. NAME	13. ROLE IN THIS CONTRACT	7 YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Joshua Zimmermann, P.E., G.I.T	Engineer of Record	8.5	8.0

15. FIRM NAME AND LOCATION *(City and State)*

Brierley Associates, Cottage Grove, MN

16. EDUCATION *(Degree and Specialization)*

BS, Geological Engineering, University of Wisconsin- Madison (2015)

BS, Geology and Geophysics, University of Wisconsin- Madison (2015)

17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*

Professional Engineer WV (#25975), CO, IA, IL, MN, ND, NM, NV, VA, WY

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

Mr. Zimmermann's experience as a construction material technician served as the launching point into his experience with geotechnical investigations/design, soil & rock mechanics, geophysical observations, special inspections, field investigations, tunnel rehabilitation/repair, grouting, ground improvement and construction monitoring/management. His effective communication skills are essential to creating strong client relationships and ensure project completion. He has also lead efforts in public outreach on behalf of Wyoming AML to ensure clear and constant communication with owners in regard to mitigation efforts on their property, including managing and obtaining consent for mitigation on public and private property.

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*: **Abandoned Mine Lands; 17.6B Historic Mine Assessment and Mitigation, WY**

(4) YEAR COMPLETED — PROFESSIONAL SERVICES: **2016-2020** | CONSTRUCTION *(If applicable)*: **2016-2020**

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Role: Project Engineer and Construction Manager; Project Engineer as part of a multi-disciplinary team investigating and evaluating subsidence risk over extensive historic underground subbituminous and bituminous room and pillar coal mines across Wyoming. This work included comprehensive geotechnical and geologic investigation, GIS analytics and reporting, field deformation and geomorphic studies, subsidence mitigation and design, hydraulic/hydrogeologic assessment and analysis, water conveyance, sub-surface mine mapping utilizing remote sensing techniques (INSAR, LIDAR, photogrammetry, multispectral imagery), geospatial analysis, ground surveying, geophysical analysis, geotechnical sampling/testing, public outreach, technical specification production, and construction management.

b.

(1) TITLE AND LOCATION *(City and State)*: **Abandoned Mine Lands; 17.6C Historic Mine Assessment and Mitigation, WY**

(1) YEAR COMPLETED — PROFESSIONAL SERVICES: **Ongoing** | CONSTRUCTION *(If applicable)*: **Ongoing**

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Role: Project Engineer and Construction Manager; A continuation of work performed under the 17.6B for Wyoming's AML division in a renewed contract. This project includes performing geotechnical investigation, design, hydrogeologic analysis, subsidence mitigation as construction manager for one of the largest subsidence mitigation projects in Wyoming AML history for a site impacted by artificially induced artesian conditions from an abandoned, subbituminous coal mine in Glenrock, WY. This was the first project of its kind constructed in North America. Joshua was also the Construction Manager for mine subsidence mitigation work at the Dana No. 1 Mine outside of Hanna, WY, where careful monitoring was required to mitigate abandoned coal mine workings under a Union Pacific at depths less than 30-ft from the ground

c.

(1) TITLE AND LOCATION *(City and State)*: **Preliminary Subsidence Hazard Report, Goldfield, NV**

(1) YEAR COMPLETED — PROFESSIONAL SERVICES: **2023** | CONSTRUCTION *(If applicable)*: **N/A**

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Role: Project Engineer and Field Geologist; Performed investigative and analytical work to determine the subsidence risk to surface infrastructure and construction activities overlying an abandoned gold mine in Goldfield, Nevada. The client, who is trying to reactivate the site into an open pit mine, was concerned about the development of recently formed sinkholes resulting from historic underground stope mining. Joshua served as a project engineer, evaluating historic mine records and geotechnical data to develop a preliminary subsidence risk profile to relating to potential surface activities that were being performed across the 100+ acre site. This included geotechnical and geo-structural analysis, risk categorization, and site hazard analysis for sinkhole and subsidence development. He also served as a field geologist, logging nearly 1,000 feet of rock core as part of a 24-hour geotechnical coring operation drilling to obtain updated geotechnical data to obtain higher quality geologic data, establish the current status of the mine workings and overlying bedrock against rubbleization, and ensure the accuracy of an underground model of the mine workings. He also designed the geotechnical laboratory program, helping to designate over 100 samples for testing in labs across the county to create a more accurate sinkhole risk profile.

d.

(1) TITLE AND LOCATION *(City and State)*: **Sewer Modernization and Replacement Tunnel; Moraine, Ohio**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: **2020** | CONSTRUCTION *(If applicable)*: **N/A**

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Role: Field Geologist: Oversaw and conducted geological site survey to provide a Geotechnical Data Report (GDR) and Geotechnical Baseline Report (GBR) to be included in contract specifications for a new 7,200 linear foot, 72-inch diameter soft ground sewer tunnel with associated shafts. Tunnel alignment would cross a major river, an active airfield, and an interstate highway in potentially environmentally contaminated soil. Work included; geotechnical soil characterization and logging, developing, and implementing a geotechnical sampling and lab analysis program,

e.	(1) TITLE AND LOCATION *(City and State)*	(4) YEAR COMPLETED	
	Greenmeadow Interceptor; Waukesha, Wisconsin	PROFESSIONAL SERVICES **2020**	CONSTRUCTION (*If applicable*) **2020**

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Role: Field Geologist, Construction Manager: Oversaw and conducted geological site survey to provide a GDR and GBR to be included in contract specifications for a new sewer pipeline in Waukesha, Wisconsin. 3,000 linear feet of this pipeline was to be constructed via a 60-inch diameter tunnel in hard dolomite and 600 linear feet in a dual 18-inch siphon in environmentally contaminated soil by the Fox River. Work included; overseeing the entire geotechnical investigations program, performing geotechnical soil/rock characterization and logging, developing, and implementing a geotechnical sampling and lab analysis program, In-situ geologic hydrogeologic field testing, geotechnical calculations for rock stability, technical writing for contract specifications, and providing construction management services.

Clifton E Farley III

Construction Supervisor

PROPOSED PROJECT ASSIGNMENT:
Construction Supervisor

EDUCATION:
High School Diploma/ Hurricane High School/ 1990
WVDOH Level V 1545/Fairmont State College/2008

YEARS WITH FIRM: *1*
TOTAL YEARS EXPERIENCE: *31*

CERTIFICATIONS:
WVDOH Level V Transportation Engineering Technologist (TRETCNO)

COURSE WORK:
Construction Inspection (Tech 2299-05)
Soil Erosion and Counter Measures
Advanced Presenting P3

PROFESSIONAL AFFILIATIONS:

Professional Profile

Mr. Farley has over 30 years experience in highway and bridge related construction inspection management including the last 6 years as the Project Supervisor for the West Virginia Division of Highways on the P3 Design Build WV 869 to Mason CR 40 project. At the time of award, it was the largest single construction project in WV History. Mr. Farley is experienced with the computer software programs Project Wise, AWP/Site Manager, and LIMS utilized on WVDOH projects.

Project Experience

West Virginia Division of Highways, Carter Bridge to Brooks Street Bridge Painting. (2022-Current). TRET Level V Project Supervisor. Mr. Farley is the Project Supervisor for the $27 million Carter Br./Brooks St. project in Charleston, WV. The project includes bridge painting and repair of fifteen (15) bridges on the I-77/I-64 corridor in Charleston, WV. The project footprint includes the bridges associated with the I-77/I-64 interchange (Bigley Ave. bridges/ramps) on the north side of downtown Charleston. It stretches east across the Elk River and Kanawha Valley Railroad to the I-77/I-64 ramps for Leon Sullivan Way and Brooks Street. Additional responsibilities also include supervision of field inspectors, plan and specification compliance, quantity tracking, daily reports, change orders, and contractor estimate payments through use of the AWP and ProjectWise programs.

West Virginia Division of Highways, P3 Design Build US Route 35 (2015-2021). Project Supervisor. Mr. Farley was the WVDOH Supervisor for the 15-mile-long, 4-lane new alignment of US35 in Mason and Putnam counties. The $257 million project was separated into two contracts, one for the grade and drain and the other for the paving and Buffalo Interchange. Combined, the projects included 10 bridges, 17.3 million cubic yards of embankment and excavation, 17.2 miles of drainage pipe, and 460,000 tons of asphalt paving. Clif coordinated the construction inspection staff and materials testing of two consultant-led teams. Additional responsibilities also include overseeing the prime contractor and their 28 subcontractors, representing the State of West Virginia as the liaison to the Toyota Motor Manufacturing Facility and residents, plan and specification compliance, quantity tracking, daily reports, change orders, and contractor estimate payments through the use of the Site Manager and ProjectWise programs.

West Virginia Division of Highways, US 35 from CR 40 to WV 869 Repaving (2011-2014). Project Supervisor. Mr. Farley was the WVDOH Supervisor for the 15-mile-long, 2-lane reconstruction and repaving. The $10 million project upgraded existing drainage, shoulder-width extensions, and asphalt paving and installed new signage. Mr. Farley assigned work items to various subordinate inspectors, reviewed inspectors daily reports, wrote change orders, and contractor estimate payments. He oversaw the prime contractor and all the subcontractors for the work being performed.

West Virginia Division of Highways, US 35 Jim Hill Rd to CR 40. (2007-2010). Project Supervisor. Mr. Farley was the WVDOH Supervisor for the 3.5-mile-long, 4-lane new alignment of US 35 in Mason County. The $40 million project consisted of major earthwork, drainage, stream mitigation, construction of 4 bridges, concrete paving, signage, and guardrail items. Mr. Farley assigned work items to various subordinate inspectors, reviewed inspectors daily reports, wrote change orders, and contractor estimate payments. He oversaw the prime contractor and all the subcontractors for the work being performed.

West Virginia Division of Highways, US 35 Wetland Mitigation CR 78. (2006-2007). Project Supervisor. Mr. Farley was the WVDOH Supervisor for the $2 million project. The project was broken into 2 separate locations. Each location consisted of unclassified excavation to create a series of sub-channels and ponds. Special wetland seed mixes were used, trees and shrubs were planted, and a series of rock and log vanes were installed along the creek to stop future bank erosion. Mr. Farley was the only personnel on the project and provided construction inspection, daily reports, change orders, and contractor estimate payments. He oversaw the prime contractor and all the subcontractors for work being performed.

West Virginia Division of Highways, US 35 Crooked Creek to WV 34. (2005-2006). Project Supervisor. Mr. Farley was the WVDOH Assistant Supervisor for the 2 mile long, 4 lane new alignment of US 35, which he later completed the project as the supervisor. The project consisted of earthwork, drainage, stream mitigation, asphalt paving, guardrail, and signage. Mr. Farley assigned items of work to various subordinate inspectors, reviewed inspectors daily reports, wrote change orders, and contractor estimate payments. He oversaw the prime contractor and all the subcontractors for work being performed.

GPI

John (Joey) Gallagher, P.E.

Director of Construction Services for West Virginia

PROPOSED PROJECT ASSIGNMENT: Project Manager/ Project Scheduler

EDUCATION:
BS/2005/Civil Engineering, The Ohio State University

REGISTRATION:
2015/Professional Engineer/No. 80145/OH
2017/Professional Engineer/ No. 6201065398/MI
2018/Professional Engineer/ No. 23284/WV

YEARS WITH FIRM: *7*
TOTAL YEARS EXPERIENCE: *19*

CERTIFICATIONS:
ODOT Prequalified Construction Engineer Level 1 & 2
ODOT Prequalified Coatings Inspector
Certified Erosion Sediment and Storm Water Inspector
ACI Concrete Field Testing Technician, Grade I
NACE Level I Certified Coatings Inspector #64636

COURSE WORK:
Certified Work Zone Traffic Control Supervisor
OSHA 30 Hour Certified
ODOT Work Type 26, Structural Steel Painting
ODOT Work Type 57, Concrete Sealer Training
ODOT Site Manager Training

Professional Profile

Mr. Gallagher has more than 19 years of experience in the transportation engineering and construction industries, including contract management and administration. He is currently responsible for the management of Greenman-Pedersen, Inc's. (GPI) West Virginia Operations field project inspection staff and its project safety initiatives. Projects include construction management/administration via prime contractor and QA/QC assignments. Project delivery systems include design/bid/build and design/build. Previous experience includes project ranging from the management and supervision of multi-million-dollar heavy civil projects to locally administered LPA projects. Skills include managing construction activities, erosion and sediment control, document control, quality control, scheduling, traffic control, and safety control measures. He is experienced in the use of Primavera (P6/P3/Suretrak) and Microsoft Project CPM scheduling software. Utilizing these tools, Mr. Gallagher has analyzed resource and cost loaded design schedules for full-service projects and developed preliminary construction schedules to determine the construction duration and constraints to be specified in the project special provisions.

Project Experience

West Virginia Division of Highways, Carter Bridge to Brooks Street Bridge Painting. (2022-Current). Project Manager. Mr. Gallagher is responsible for field staff coordination between GPI, its subcontractors, and District staff. The Carter Br./Brooks St. project is a $27M bridge painting and repair project of fifteen (15) bridges on the I-77/I-64 corridor in Charleston, WV. The project footprint includes the bridges associated with the I-77/I-64 interchange (Bigley Ave. bridges/ramps) on the north side of downtown Charleston and stretches east across the Elk River and Kanawha Valley Railroad to the I-77/I-64 ramps for Leon Sullivan Way and Brooks Street.

West Virginia Department of Transportation, I-79 Exit 99 Interchange Reconstruction, Weston, WV; (2020-Current). Project Manager and CPM Schedule Reviewer for the full-time QC construction administration/inspection staff of this $27 million, project-specific assignment. The Project involves the reconfiguration of the existing I-79 southbound off-ramp to US33/US48/US119. The new off-ramp configuration will eliminate the existing "zipper" merge for traffic exiting I-79 southbound and traffic entering I-79 southbound. The Project includes the excavation of nearly 844,000 cubic yards of dirt and rock to accommodate the new I-79 southbound off-ramp and future flyover ramp for US33 eastbound traffic. The project also rehabilitates the existing I-79 southbound and northbound bridges, along with the rehabilitation of the I-79 northbound off-ramp bridge. Additional work includes subgrade, aggregate base, drainage, asphalt paving, pavement markings, and traffic signals. The GPI Team provides full on-site construction inspection/testing documentation, Site Manager/ProjectWise entries including change orders and contractor estimates.

West Virginia Department of Transportation, QAM Services US35 Upgrade – WV869 to Mason CR 40 Design-Build: CPM Schedule Reviewer for the $194 million US 35 P3 Project. This project is a 14.6-mile grade and drain project on a new alignment of the future highway to complete the 4-lane section of US 35 from the Ohio River to I-64 in West Virginia. Mr. Gallagher is responsible for the review and analysis of construction contractor project schedule baselines, revisions, monthly updates, and cost histogram/s-curve progress payments in accordance with specifications.

West Virginia Department of Transportation, QAM Services Wellsburg Bridge, WV Route 2 to OH Route 7: Mr. Gallagher is providing CPM Schedule Review analysis for the $148 million Wellsburg Bridge over the Ohio River Design-Build project. This project includes the construction of a new Ohio River crossing, associated tie-ins to WV Route 2 and OH Route 7 and retaining wall construction. Mr. Gallagher is the CPM Schedule Manager for the review and analysis of construction contractor project schedule baselines, revisions, and monthly updates.

West Virginia Department of Transportation, Statewide Construction Inspection Services and Quality Assurance Management Task Orders (2018-Current). Mr. Gallagher is the Project Manager for our Statewide Construction Inspection Services and Quality

Assurance Management Task Order contracts for the WVDOH. Responsibilities include managing and coordinating staff inspectors for assigned projects throughout the State. This includes meeting with the District Engineers, as well as Area Engineers to ensure the inspection staff meets the needs of the District and is qualified for each specific project. He provides QA/QO for project specifications, reports, inspector time sheets, and all other project documentation and routinely visits each project to ensure issues are resolved at the field level wherever possible.

West Virginia Department of Transportation, Districts 5 and 10 Task Orders (2020-Current). Mr. Gallagher is the Project Manager for the District Specific Construction Inspection Services Task Order contracts in Districts 5 and 10. Responsibilities include managing and coordinating staff inspectors for assigned projects within each District. This includes meeting with the District Engineers, as well as Area Engineers to ensure the inspection staff meets the needs of the District and is qualified for each specific project. He provides QA/QO for project specifications, reports, inspector time sheets, and all other project documentation and routinely visits each project to ensure issues are resolved at the field level wherever possible.

Ohio Department of Transportation, District 6; UNI-33-24.87 PID No. 92953; (2022-Current). Project Manager and CPM Schedule Reviewer for the $38M Interchange reconfiguration of US33/SR161 in Dublin. Major work items include reconstruction of the US 33 bridge over SR 161, roadway demolition and widening, ramp reconfiguration, roundabout modifications, a box culvert extension, drainage, full asphalt and concrete paving, MOT, traffic signals, retaining walls, landscaping, signage, and pavement markings. The multi-season project contains multiple construction maintenance of traffic phases. Mr. Gallagher is responsible for review and analysis of construction contractor project schedule baselines, revisions, and monthly updates.

Ohio Department of Transportation, District 3; WAY-83-10.81 PID No. 91095; (2022-Current). CPM Schedule Reviewer for the multi-phase, design-build, full depth reconstruction of SR 83/US 30/SR 3/SR 585 roadway and interchange ramps in Wooster. Major work items include roadway demolition, drainage, cement stabilization, full depth asphalt paving, concrete median, MOT, signage, and pavement markings. The multi-season project contains complex construction maintenance of traffic phasing with multiple contractual roadway/ramp closures that must be met to complete by the October 15, 2023, completion date. Mr. Gallagher is responsible for review and analysis of construction contractor project schedule baselines, revisions, and monthly updates per ODOT Proposal Notes 129, 131, and 132.

Ohio Department of Transportation, District 3; MED-18-12.99 (Part 1 & Part 2) PID No. 92953; (2021-Current). CPM Schedule Reviewer for the 8-phase reconstruction and widening of approximately 2.13 miles of roadway on State Route 18 in Medina. Major work items include roadway demolition, drainage, full depth asphalt paving, concrete curb, MOT, signals, retaining walls, culverts, a pedestrian bridge, signage, and pavement markings. The multi-season project contains complex construction maintenance of traffic phasing with multiple contractual milestones that must be met to complete by the June 30, 2024 completion date. Mr. Gallagher is responsible for review and analysis of construction contractor project schedule baselines, revisions, and monthly updates.

West Virginia Department of Transportation, Districts 5, 7, and 8 Task Orders (2018-2020). Mr. Gallagher is the Project Manager for the two-year District-wide Task Orders in Districts 5, 7, and 8 for Resurfacing, Small Structures, and Slide Repairs. Responsibilities included managing and coordinating staff inspectors for District-wide projects. This includes meeting with the District Engineers, as well as Area Engineers to ensure the inspection staff meets the needs of the District and is qualified for each specific project. He provides QA/QO for project specifications, reports, inspector time sheets, and all other project documentation and routinely visits each project to ensure issues are resolved at the field level wherever possible.

West Virginia Department of Transportation, 2018 Statewide Construction Services – Design Build Expenditures: Mr. Gallagher provided CPM Scheduling services and data analysis for the Statewide Design-Build Expenditure task. The assignment required meeting with each District to determine ongoing and future design-build projects within each District. Utilizing the complete list of projects, a database was created to track past and future expenditures for each project. This allowed the WVDOH to accurately track and budget design-build expenditures to meet strict State requirements on yearly expenditures for design-build projects.

Ohio Department of Transportation District 12 Opportunity Corridor 2 and 3; (2017-Current). Mr. Gallagher is managing the project EEO and DBE compliance requirements for the Opportunity Corridor Project No. 2 and No. 3. This work involves regular monitoring of personnel on the project and documenting their hours and wage payments on site. He conducts on-site interviews and works closely with ODOT's Office of Inclusion and Diversity to ensure compliance with the unique compliance quotas of these projects. He is proficient in the use of ODOT's AASHTOWare CRL module.

Delaware Department of Transportation, Brandywine Bridge Constructability Review: As part of the constructability review for the rehabilitation of the I-95 Bridge over the Brandywine River, Mr. Gallagher provided CPM scheduling services to assist DelDOT in the development of a schedule for the proposed scope of work and maintenance of traffic requirements in the development stage of the project. The schedule is being used to assess the cost and timeframe for the construction of the bridge as part of a larger project on I-95. He provided feedback on the proposed sequence of work, work restrictions, potential construction issues, crew requirements, schedule requirements, and feasibility of the construction timeframe currently being considered for the project.

City of Willowick – LPA PID 82698 – LAK-SR283-00.00 Lakeshore Blvd. (2017-2018). Mr. Gallagher is the Project Manager for the locally administered project for the City of Willowick. This four-phase, 1.5-mile project, resurfaces Lakeshore Blvd. from the Willowick west corporation limit to Vine Street. This project includes pavement planning, full and partial depth concrete repairs, ADA curb ramps, intermediate and surface asphalt paving, pavement markings, and maintenance of traffic. Mr. Gallagher oversees the field staff, led by a Construction Engineer 2, and Project Inspector, assisting the Construction Engineer with LPA guidelines, RFI's, disputes, scheduling, residents' complaints, estimates, and communication with the City of Willowick.

Ohio Department of Transportation, District 3, Ashland, OH; (2016-2017). Mr. Gallagher performed ODOT LPA Construction Monitor duties. He was responsible for early stage to plan completion constructability reviews, oversight of overall LPA performance in accordance with LPA/ODOT specifications, material management compliance, change order review, and claim resolution on a multitude of projects ranging from pavement resurfacing to complete roadway/structure replacement.

Ohio Department of Transportation District 11 District Task Order; (2016-2017). Mr. Gallagher was the Project Manager for the two-year District-wide Task Order in District 11. Responsibilities included managing and coordinating staff inspectors for District-wide projects. This included meeting with the Area Engineers, as well as Project Engineers to ensure the inspection staff met the needs of the District and were tailored to the specific project qualifications. He provided QA/QO for project specifications, reports, inspector time sheets, and all other project documentation and routinely visits each project to ensure issues are resolved at the field level wherever possible.

Indiana Department of Transportation, SR237 Ohio River Bridge Rehabilitation; (2016-2017). Project Manager. This $16 million project consists of the replacement of deficient structural steel elements, concrete repairs to the existing piers and bridge deck, rerouting the existing drain system outfalls, and the removal and replacement of the existing paint system. Mr. Gallagher is responsible for managing GPI's staff and performing Construction Management and Inspection for INDOT. GPI's responsibilities include field inspections, field testing, office engineering, and Site Manager documentation/recordkeeping.

J.B. Chambers

Survey Project Manager

PROPOSED PROJECT ASSIGNMENT: Survey Services

EDUCATION:
Garrett Community College, McHenry, MD

YEARS WITH FIRM: *2*
TOTAL YEARS EXPERIENCE: *40*

Professional Profile

Mr. Chambers is a Senior Surveyor at GPI with 40 years of experience in the surveying industry. Managing multiple projects and personnel, he has performed a wide variety of duties consisting of construction monitoring, construction layout, topographic surveys, highway engineering, power plants, chemical plants, petrochemical plants, commercial development, private development, public schools, colleges, universities, ALTA surveys, local airports, regional airports, national airports, and infrastructure surveys and designs.

Project Experience

Corridor H – Parsons to Davis; Current. Survey Project Manager. Working as a Survey Project Manager for GPI, Mr. Chambers is responsible for leading field crews and collecting data for approximately 9.72 miles of new 4-lane, divided highway, approximately 3.67 miles of connector and side roads, 1.31 miles of interchange ramps, six (6) structures and two (2) box culverts, utilities, boundary, borings, as-builts, topo, GPS control, stream locations, design tie-ins, and data collection from Parsons, WV to Davis and Thomas, WV for mapping and design. This project includes establishing horizontal and vertical control, scanning, coordinating in-house aerial imagery, aerial LiDAR, terrestrial LiDAR, as well as conventional surveying methods to assist with design.

In this capacity he managed field operations as well as collected data. To collect the data, he utilized robotic total stations, GNSS RTK systems, and terrestrial scanning techniques. Client: West Virginia Department of Transportation, Division of Highways

US 35 Settlement Areas and Mapping; Current. Survey Project Manager. Working as a Survey Project Manager for GPI, Mr. Chambers is responsible for leading field crews and collecting data for 30 miles of roadway, bridges, utilities and data collection from Teays Valley, WV to Henderson, WV for mapping, repairs and as-builts locations. This project includes establishing horizontal and vertical control, scanning, coordinating in-house aerial imagery, aerial LiDAR, terrestrial LiDAR, as well as conventional surveying methods to assist with design.

In this capacity he managed field operations as well as collected data. To collect the data, he utilized robotic total stations, GNSS RTK systems, and terrestrial scanning techniques.

I-77 Belle Ramp over Piedmont & Railroad; Current. Survey Project Manager. Working as a Survey Project Manager for GPI, Mr. Chambers is responsible for leading field crews and collecting data for the bridge ramp and railroad in Belle, WV for mapping, repairs and as-builts locations. This project includes establishing horizontal and vertical control, scanning, as well as conventional surveying methods to assist with design.

I-79 Bridges Bundle Project; 2021. Senior Surveyor. Working as a senior surveyor for GPI, Mr. Chambers is responsible for leading field crews and collecting data for 13 bridge structures and over 9 miles of roadway data collection from Lost Creek, WV to the I-68/I-79 interchange for the rehabilitations of existing bridge structures. This project includes establishing horizontal and vertical control, scanning, coordinating in-house aerial imagery, aerial LiDAR, terrestrial LiDAR, as well as conventional surveying methods to assist with design.

In this capacity he managed field operations as well as collected data. To collect the data, he utilized robotic total stations, GNSS RTK systems, and terrestrial scanning techniques.

West Virginia Department of Highways; Surveying Supervisor. Throughout his career, Mr. Chambers has worked for the West Virginia Department of Highways, business consultants and contractors on numerous transportation projects in West Virginia. Mr. Chambers has served as the Surveying Supervisor, responsible for multiple personnel, submitting right of entry and right of way agreements, construction surveying, construction monitoring, engineering design, topographic mapping, geotechnical engineering, survey calculations, as-builts, and construction layout efforts on roads and bridges.

Mon-Fayette Expressway, Morgan's Run Bridge; 2007. Project Surveyor. Mr. Chambers served as the Project Surveyor, responsible for all survey calculations, as-builts, and construction layout efforts for the construction of a $19.9 million four-lane bridge carrying route 43 over Morgan's Run.

Jefferson Street Bridge, "Million-Dollar Bridge"; 1998. Project Surveyor. Mr. Chambers served as the Project Surveyor, responsible for all survey calculations, as-builts, redesigned alinement and construction layout efforts for the construction of a $23.5 million four lane bridge on Marion County 19/73 east of US 19 and crossing over the Monongahela River.

Ohio Department of Transportation; 1993-2000 / 2010-2020 Surveying Supervisor. Throughout his career, Mr. Chambers has worked for the Ohio Department of Transportation, business consultants and contractors on numerous transportation projects in Ohio. Mr. Chambers has served as the Surveying Supervisor, responsible for multiple personnel, construction monitoring, right of ways, construction surveying, grouting projects, geotechnical engineering, topographic mapping, survey calculations, as-builts, and construction layout efforts on roads, interstates and turnpikes.

Delaware Department of Transportation; Current. Senior Surveying Supervisor. Mr. Chambers has worked for the Delaware Department of Transportation, on numerous transportation projects in Delaware. Mr. Chambers has served as the Senior Surveying Supervisor, responsible for as-builts, right of ways, boundary, topographic mapping, survey calculations, and drainage efforts on or around roadways.

West Virginia University; Surveying Supervisor. Mr. Chambers served as the Surveying Supervisor, responsible for multiple personnel, topographic mapping, survey calculations, as-builts, ALTA Surveys, geotechnical engineering and construction layout efforts for numerous University facility upgrades as well as new construction. Some relative examples include Milan-Puskar Stadium, WVU Coliseum, Hawley Field, West Virginia Public Theatre, The Mountainlair, and numerous Evansdale and Downtown campus facilities.

West Virginia University Hospitals; Surveying Supervisor. Throughout his career, Mr. Chambers has worked for the West Virginia United Health System on numerous construction surveying, engineering design, expansion, geotechnical engineering and renovation projects. In this capacity he served as the Surveying Supervisor, responsible for multiple personnel, topographic mapping, survey calculations, as-builts, ALTA Surveys, and construction layout efforts.

Monongalia General Hospitals; Surveying Supervisor. Mr. Chambers has performed numerous construction surveying and engineering design survey projects for Monongalia General Hospital. As Surveying Supervisor, he led efforts for multiple hospital expansions, renovations, and construction projects. These responsibilities included client and personnel management, geotechnical engineering, topographic mapping, survey calculations, as-builts, ALTA Surveys, and construction layout efforts.

Garrett County Memorial Hospital, Oakland, MD; Surveying Supervisor. Mr. Chambers has performed numerous construction surveying and engineering design survey projects for Garrett County Memorial Hospital. As Surveying Supervisor, he led efforts for multiple hospital expansions, renovations, and construction projects. These responsibilities included client and personnel management, geotechnical engineering, topographic mapping, survey calculations, as-builts, ALTA Surveys, and construction layout efforts.

Preston Memorial Hospital, Kingwood, WV; Surveying Supervisor. Mr. Chambers has performed numerous construction surveying and engineering design survey projects for Preston Memorial Hospital. As Surveying Supervisor, he led efforts for the construction of the new hospital in Kingwood, West Virginia. These responsibilities included client and personnel management, construction monitoring, survey calculations, as-builts, and construction layout efforts.

Harrison Power Station, Shinnston, WV; Project Surveyor. Throughout his career, Mr. Chambers has worked for Allegheny / First Energy on numerous construction surveying, engineering design, expansion, and renovation projects. In this capacity he served as the Project Surveyor, responsible for multiple personnel, aerial flight control, construction monitoring, control, boundary, piling layout, fly ash deposal area monitoring and layout, topographic mapping, survey calculations, as-builts, and construction layout efforts.

Longview Power Plant, Morgantown, WV; 2006 Project Surveyor. Mr. Chambers has worked for Longview Power on numerous construction surveying and engineering design projects. In this capacity he served as the Project Surveyor, responsible for multiple personnel, aerial flight control, boundary, control, ALTA Surveys, topographic mapping, survey calculations, Pennsylvania One Call System locates, as-builts, and construction layout efforts of a new power plant.

Mount Storm Power Station, Mount Storm; Project Surveyor. Throughout his career, Mr. Chambers has worked for Virginia Power / Dominion Energy on numerous construction surveying, engineering design, expansion, and renovation projects. In this capacity he served as the Project Surveyor, responsible for multiple personnel, aerial flight control, construction monitoring, control, boundary, piling layout, fly ash disposal area monitoring and layout, lake soundings, topographic mapping, survey calculations, as-builts, and construction layout efforts.

William Orsinger, LS

Director of Survey and Mapping

PROPOSED PROJECT ASSIGNMENT:

EDUCATION:
Minor/2006/Engineering

REGISTRATION:
2007/Professional Land Surveyor/MD
2010Professional Surveyor/WV
2011/Professional Land Surveyor/VA
2011/Professional Land Surveyor/PA
2012/Professional Land Surveyor/DE
2020/FAA Remote Pilot/Federal

OSHA 10 Hour Construction Safety Course
OSHA Fall Protection Training
OSHA Confined Space Entry

YEARS WITH FIRM: *9*
TOTAL YEARS EXPERIENCE: *36*

PROFESSIONAL AFFILIATIONS:
Maryland Society of Surveyors (Past President)
West Virginia Society of Professional Surveyors (Current President)
Virginia Association of Surveyors
Delaware Association of Surveyors
District of Columbia Association of Land Surveyors
Pennsylvania Society of Land Surveyors
Maryland State Geographic Information Committee
West Virginia Association of Geospatial Professionals
Surveyors Historical Society

Professional Profile

Mr. Orsinger has over 35 years of Land Surveying experience including project management of multiple transportation projects. Mr. Orsinger serves as the Director of Survey & Mapping for Greenman-Pedersen, Inc. In this role, Mr. Orsinger works closely with clients, GPI survey field staff, GPI survey office staff, GPI support staff and sub-consultants to coordinate the integration of the field and office survey efforts, conducting quality control reviews and maintaining schedules of final deliverables. Mr. Orsinger has both field and office experience in a multitude of surveying and mapping techniques including real time and static GNSS, terrestrial lidar, mobile lidar, aerial lidar, classical survey techniques used to prepare topography, as-built survey, boundary & right-of-way determinations and construction layout. Mr. Orsinger is the former President of the MD Society of Surveyors, the current President of the WV Society of Surveyors and recipient of the 2014 MD Surveyor of the Year Award.

Project Experience

Multiple Tasks for the Town of Thurmont, Thurmont, MD; Current. Project Surveyor. Mr. Orsinger is responsible for managing multiple tasks for the Town of Thurmont, assisting with land record deed research, investigating unrecorded historical documents, progress meetings with Mayor and Town Manager, QA/QC of easement descriptions and easement plats. Review of boundary and topographic surveys. Client: Town of Thurmont

Woodstock Road Emergency Response, Howard County DPW, Howard County, MD. 2020. **Project Surveyor:** In response to the slope, retaining wall and road damage along Woodstock Road after the severe July 2016 rain event, GPI quickly responded and provided existing condition surveys and preliminary engineering design. Innovative survey techniques were used to rapidly, completely and accurately survey the failing retaining wall, roadbed and slope in detail. GPI used and integrated a full range of survey techniques including classical, GNSS, mobile lidar and terrestrial lidar data collection. This expedited the delivery of a detail design-ready survey of the existing conditions.

Survey of Six Stormwater Outfalls throughout Prince George's County, MD. 2020. PLS Surveyor is responsible for overall project management of mapping projects under this open-end contract. Directed QC/QA review of the collection and integration of aerial mapping, mobile & terrestrial LiDAR mapping, and classical surveying mapping. The task included surveying/mapping services, including setting GPS and conventional survey control for 16 stormwater outfall sites in Prince George's County. Surveys included field run topography, topographic design files, deed research, property mosaics, metes and bounds surveys, and baseline of ROW establishment. Also, prepared ROW and easement-taking plats.

Low Altitude Helicopter Photogrammetry & High Accuracy Ground Control, Statewide, NJ; 2015. Director of Survey and Mapping. Directed the setting and measuring of accurate and precise aerial photo control targets for low-altitude helicopter photogrammetry on selected NJ highways. Client: New Jersey Department of Transportation.

Conowingo Hydroelectric Dam, Harford County, MD; 2017 – 2018. Director of Survey and Mapping. Directed the collection of accurate measurements of existing conditions for 120-foot-deep water intake shafts before removing and installing new rails for a rack system that protects the hydroelectric turbines from incoming debris. A combination of terrestrial LiDAR and classical survey techniques were used to measure and check existing as-built conditions of the intake shafts. Client: Crofton Diving Corporation.

Stream Restoration Stakeout and As Built, Western Branch Mitigation Site, Upper Marlboro, MD; 2019 – Current. Director of Survey and Mapping. GPI is providing as-built plans and layout services for stream restoration construction. This project requires integrating terrestrial LiDAR collection and aerial UAS photogrammetry. Client: Environmental Quality Resources, Inc.

North East Library, North East, MD; 2018 – Current. Project Land Surveyor. Project Land Surveyor for existing conditions survey of the Cecil County Public Library site for the design of a new $21M, 45,000 square foot library. The new library is currently being constructed in the North East Station shopping center and will replace the existing 2,000 square foot North East Branch and serve as the new library headquarters. Client: Cecil County Public Library

Stream Restoration As-Built - I-270 at Watkins Mill Road Interchange, Montgomery County, MD; 2018 – Current. Director of Survey and Mapping. This project consists of preparing detailed as-built of the restored stream by combining topographic, aerial mapping data collected with an unmanned UAS aerial system, terrestrial LiDAR data, and conventional total station survey data. Prepare as-built redline drawing for review and approval by State Highway Administration. Client: Maryland State Highway Administration

Izaak Walton League, Jefferson County, WV; 2018 – 2020. Project Manager. This project consisted of preparing detailed topographic and bathymetric surveys combining aerial mapping data collected with an unmanned UAS aerial system and bathymetric data collected with an unmanned USV boat equipped with a sonar sensor geo positioned with a total robotic station. The site included two adjoining ponds, and jurisdictional authority needed to be determined. Client: Izaak Walton League of America - Jefferson County WV Chapter

Waffle House, Frederick, MD; 2018 – 2019. Project Land Surveyor. Project Land Surveyor for existing conditions survey of a Waffle House restaurant for the design and construction of a building rehab and site renovations. Responsible for directing the establishment of survey control and detailed fieldwork as necessary to develop accurate base mapping. The design engineer was CBM Consulting, LLC. Client: Waffle House

UPS Warehouse, Waldorf, MD; 2018 – 2019. Project Land Surveyor. Project Land Surveyor for existing conditions survey of a UPS warehouse for the design and construction of a building rehab, expansion, and site renovations. Responsible for directing the establishment of survey control, integration of multiple data collection techniques including drone-based photogrammetry, terrestrial lidar, and detailed supplemental fieldwork as necessary to develop accurate base mapping. Including deed research and boundary determination. The design engineer was Prime Engineering, Inc. Client: United Parcel Service

MDOT SHA BCS 2011-08D – Photogrammetric Surveys, Statewide, Statewide, MD; 2014 – 2019. Project Manager. Mr. Orsinger was the responsible charge for survey fieldwork on task assignments providing Fixed Wing Mapping and Low Altitude Helicopter Mapping projects. Supervise field and office staff in performing surveying computations, book work, and CADD drafting to conform to the SHA CADD standards. Client: Maryland State Highway Administration

Jones Falls Phases 2, 3, 4, 5 Trails, Baltimore City, MD; 2011 – 2019. Project Surveyor Project surveyor responsible for directing the establishment of survey control, photogrammetric ground control, and detailed supplemental fieldwork as necessary to develop accurate base mapping. Including deed research, boundary determination, and preparation of easement descriptions. Client: City of Baltimore Recreation and Parks

MDOT BCS SHA 2012-03C Task 3 – Task 12 –TMDL Outfalls, Prince Georges County, MD; 2018. Surveyor and Project Manager. Surveyor and Project Manager for preparation of final Right-of-Way Plats based on the results of the previously prepared metes and bounds survey showing existing property lines and new easements and required expansion of existing Right-of-Way. Plats were prepared per SHA MicroStation standards. A Surveyor's report was provided, which included details on how the base-line of Right-of-Way and lines of division were determined. Client: Maryland State Highway Administration

Conowingo Hydroelectric Dam, Harford County, MD; 2017 – 2018. Director of Survey and Mapping. Directed the collection of accurate measurements of existing conditions for 120-foot-deep water intake shafts before the removal and installation of new rails for a rack system that protects the hydroelectric turbines from incoming debris. A combination of terrestrial LiDAR and classical survey techniques were used to measure and check existing as-built conditions of the intake shafts. Client: Crofton Diving Corporation

MDOT SHA BSC 2009-04B Task 34 – UAV Quality Assurance Review for MD 404 Project, Wye Oak, MD; 2017. Surveyor and Project Manager. As a Surveyor and Project Manager on this project, Mr. Orsinger provided UAV (Unmanned Aerial Vehicles) technology on MD 404 for construction oversight, environmental compliance, and enhanced documentation of site conditions. He utilized UAV aerial techniques to document the location and functionality of installed E&S controls through flyover and up-close observation; used data for determining actual disturbed grading units on the project; and performed post-storm UAV inspections. Client: Maryland State Highway Administration

MDOT SHA BCS 2011-09I Task 56-1 Copps Branch TMDL, Westminster, MD; 2017. Surveyor and Project Manager. As a Surveyor and Project Manager on this project, Mr. Orsinger provided accurate survey control utilizing existing SHA traverse points, detailed

topographic survey, and stream cross-sections for TMDL Stream Restoration Study. Included was a metes-and-bounds survey for establishing the current Right-of-Way, including the westerly Right-of-Way of MD 31 and intersection with MD 140 and the determination of the property lines for the adjacent properties. Client: Maryland State Highway Administration

Empire State Trail Project Region 3, Syracuse, NY; 2017. Survey Project Manager. Survey Project Manager for this $45.4M proposed development of a 35-mile trail thru Rensselaer and Columbia Counties, NY. Directed the successful collection of Mobile LIDAR data of road surfaces along the proposed Pedestrian and Bicyclist Pathway route at Survey grade accuracy, which required precision GPS and digital leveling field surveys for setting accurate targets to derive required results. Client: New York Department of Transportation

MDOT SHA BCS 2007-25 – Wetland Mitigation and Stream Restoration Design Services, Statewide, Statewide, MD; 2017. Project Manager. Mr. Orsinger was the responsible charge for field surveying services. This project entailed electronic data collection for existing streams, stream cross-sections, wetland delineations, and other topographic mapping requirements in support of environmental projects that involve wetland mitigation and stream restoration throughout Maryland. Client: Maryland State Highway Administration

Herring Run Trail, Baltimore, MD; 2016. Project Surveyor. Responsible for directing the establishment of survey control, photogrammetric ground control, and detailed supplemental fieldwork as necessary to develop an accurate base mapping of this stream valley trail. Included deed research, boundary determination, and preparation of easement descriptions. Client: Baltimore City Recreation and Parks

TMDL Outfall Restoration Surveys – Task 12, Prince Georges County, MD; 2016. Principal in Charge. Principal in Charge of Survey and Mapping Department. Directed boundary and topographic surveys for TMDL restoration design. Including property record and right-of-way deed research. Directed the preparation of right-of-way plats showing existing and proposed new right of ways and easements. Client: MDOT State Highway Administration

Woodstock Road Emergency Response, Howard County, MD; 2016. Project Surveyor and Surveyor. In response to the slope, retaining wall, and road damage along Woodstock Road after the severe July 2016 rain event, GPI rapidly responded and provided existing condition surveys and preliminary engineering design. Innovative survey techniques were used to promptly, ultimately, and accurately survey the failing retaining wall, roadbed, and slope in detail. GPI used and integrated a full range of survey techniques, including classical, GNSS, mobile lidar, and terrestrial lidar data collection. All expedited the delivery of a detail design ready survey of the existing conditions. Client: Howard County Department of Public Works

Alpha Ridge Park Expansion, Howard County, MD; 2015. Project Surveyor. Mr. Orsinger was responsible for directing the establishment of survey control, topographic survey of existing features, and boring plan stake-out necessary to develop seamless development of this park expansion. Client: Howard County Department of Public Works

Asset Inventory, Statewide, MA; 2015. Director of Survey and Mapping. Mr. Orsinger was the Director of Survey and Mapping Department, which included the Surveying, Photogrammetry, LIDAR, and UAS sections. He has directed development and implementation by the LIDAR section of the necessary processes and procedures for the efficient collection and processing of Massachusetts Department of Transportation's highway inventory using both Mobile LIDAR collection and high-quality geotagged photography. Client: Massachusetts Department of Transportation

MDOT SHA BCS 2012-03C Task 3 – TMDL Outfalls, Cecil County, MD; 2015. Project Manager and Surveyor. Mr. Orsinger was a Project Manager and Surveyor for this stream restoration study task, which was started by a different consultant. Assigned work under this contract included performance, schedule, and accuracy failed and was severely behind. Assumed the task from the other consultant and completed the job correctly and accurately, providing survey control, detailed topographic survey, and stream cross-sections for TMDL Stream Restoration Study putting the project back on the SHA's schedule for completion. Client: MDOT State Highway Administration

Road Surface Survey, Statewide, NC; 2015. Director of Survey and Mapping. Director of Surveying and Mapping responsible for the Survey and LIDAR sections in the successful collection of Mobile LIDAR data of road surfaces. Collected LIDAR point cloud data of road surfaces at Survey grade accuracy, which required precision GPS and digital leveling field surveys for setting accurate targets to derive required results. Client: North Carolina Department of Transportation

MDOT SHA BSC 2011-08E Task 8-1 – MD32 from Linden Church Road to I70, Howard County, MD; 2015. Project Manager and Surveyor. As the Project Manager and Surveyor, Bill provided 1"=10' scale accuracy mapping for the pavement of MD32 from Linden Church Road to I-70 using Mobile Lidar techniques. Produced 1"=30' scale accuracy mapping (1-foot contours) using fixed-wing photogrammetric methods; and provided supplemental field locations to obtain existing pipe inverts, drainage structure elevations, and utility pole and marker numbers. He assisted with the integration, and QA/QC of the multiple methodologies use. Client: Maryland State Highway Administration

SWM Facility Retrofit Projects (TMDLs), Montgomery County, MD; 2014 – 2015. Director of Survey and Mapping. Mr. Orsinger directed boundary and topographic surveys to develop construction and right-of-way plans for the assessment and design of retrofitting and designing upgrades to Stormwater Management facilities countywide. Client: Montgomery County Department of Environmental Protection

Sign Inventory Project, Statewide, MA; 2013 – 2015. Principal in Charge. Mr. Orsinger was the Principal in Charge of the Geomatics Department, which included the Survey, Photogrammetry, and LIDAR sections. He directed development and implementation by the LIDAR section for necessary processes and procedures for the efficient collection and processing of the Massachusetts Department of Transportation's highway inventory using both Mobile LIDAR collection and high quality geotagged photography. Client: Massachusetts Department of Transportation, Highway Division

Low Altitude Helicopter Photogrammetry & High Accuracy Ground Control, Statewide, NJ; 2013 – 2015. Director of Survey and Mapping. As the Director of Survey and Mapping, Mr. Orsinger directed the setting and measuring of accurate and precise aerial photo control targets for low altitude helicopter photogrammetry on selected NJ highways. Client: New Jersey Department of Transportation

Indian River Inlet Bridge Construction, Rehoboth, DE; 2011 – 2015. Director of Survey and Mapping. Assigned work performed under this contract included construction survey support for all IRIB contracts, including the Roadway, Bridge, Demolition, and Park construction. Survey efforts included extensive monitoring of the existing bridge for potential movement of the piers located in the inlet, embankment settlement monitoring, and 3D laser scanning to provide graphical representations and color renderings of MSE wall movements and deformations. Also performed daily geometry checks of the cable stay bridge spans during construction. Client: Delaware Department of Transportation

MDOT MD Port Administration Contract No. 509909 – Miscellaneous Engineering Services-Survey, Statewide, MD; 2009 – 2014. Project Manager. Mr. Orsinger was the responsible charge for survey fieldwork for surveying and aerial photogrammetric mapping services. Specific task assignments included sea wall monitoring, field run topographic mapping, construction stakeout for piers, GPS height modernization survey, utility designation, aerial photogrammetric mapping, LIDAR acquisition, and digital Ortho imagery for Masonville, Dundalk, and Locust Point Terminals. Client: Maryland Port Administration

Aerial LiDAR, Wicomico and Somerset Counties, MD; 2012. Survey Project Manager. Responsible for survey services necessary for ground control, quality control, and establishment of a calibration site for accurate LiDAR data acquisition. Coordinate closely with aerial flight crews to provide data essential for the processing of airborne GPS. Client: Chesapeake Bay Tidal Mapping

Brunswick to Jefferson Natural Gas Transmission Pipeline, Frederick County, MD; 2009 – 2011. Project Manager. Project Manager for route survey of proposed alignment, including initial route and alternate route determinations. Contact with landowners, control survey, property line determination, and photogrammetric mapping. Client: Washington Gas

Catoctin Creek Park, Frederick County, MD; 2009 – 2011. Survey Project Manager. Assigned work performed under this contract included preparation of an ALTA/ACSM Land Title Survey on a 130-acre site for a proposed regional park. Mr. Orsinger discovered and identified a cloud of title issues dating from the 1800s. He worked with all parties involved, including Title Abstractors, Attorneys, Client, and Adjoining Landowners, to explain, clarify, and resolve; prepared easement exhibits, sketches, metes and bounds descriptions used in the affirmative and quitclaim deeds to clear title. Client: Frederick County Parks and Recreation

MDOT SHA BCS 2007-12 – Supplemental Engineering Support for SHA, District 1, Dorchester, Wicomico, Worcester and Somerset Counties, MD; 2007 – 2008. Professional Licensed Surveyor. Mr. Orsinger was the Responsible charge for field surveying services to provide wetland locations, data collection, and prepare design maps. Perform computations and adjustments for static GPS positioning along with terrestrial surveying control. Responsible for quality assurance and quality control for survey collected data, coordination of field crews and office staff, and coordinate permitting along highways for traffic control. Client: Maryland State Highway Administration

Awards

2014 MD Surveyor of the Year
2013 & 2014 WV Chapter of the Year

SECTION 5
PAST PERFORMANCE

AML & Relevant Project Experience

HIGHWALLS

- Anderson Highwalls, WVDEP
- Peninsula Highwalls, WVDEP
- St. Clair Portals, WVDEP
- Collins Mining, ODNR
- Miller Mining, ODNR

OPEN PITS

- Shinn's Run Portals, WVDEP
- Jones Trucking, ODNR
- General Clay #1 & #2, ODNR

OPEN MINE SHAFTS

- Kennel Mine Closure, MDE, AMLD
- Frostburg North Closure, MDE, AMLD
- Zilman Closure, MDE, AMLD

REFUSE PILES

- Hopewell Church Refuse & AMD, WVDEP
- Ream Refuse Pile, WVDEP
- Williams Refuse Pile, Private
- Harrison Power Plant, Allegheny Power

MINE SUBSIDENCE

- Fairmont Subsidence, WV DEP
- Lower Consol Road MDE, AMLD
- Terra Haute Airport, IN AML
- Farmington UMC, WV DEP Emergency
- Morningside Baptist, WV DEP Emergency
- Eccles Subsidence, WV DEP
- McArthur Subsidence, WV DEP
- Mark Kempner, NJ Private
- WV BRIM
- OMSIUA

MINE DRAINAGE/STREAM RESTORATION

- St. Clair Portals, WV DEP
- Aarons Run, MDE, AMLD
- Deckers Creek, WVDEP

LANDSLIDES

- Douglas Avenue Landslide, MDE, AMLD
- Schramm Landslide, MDE, AMLD
- Gordon Landslide, MDE, AMLD
- East Franklin Landslide, MDE, AMLD
- Cheat Neck Landslide, WV DEP
- McCourt Landslide, ODNR
- Caldonia Hill Slope Stability, MDE, AMLD

WATER SUPPLY REPLACEMENT

- Douglas Avenue Stormwater System Repair, MDE, AMLD
- Bald Knob & Potomac Hollow Water Investigations, MDE, AMLD
- Pee Wee Hill Supply Design, MDE, AMLD
- Pee Wee Will Water Feasibility Study, MDE, AMLD
- Fairview Water Feasibility, WV DEP
- Tioga Water Feasibility, WV DEP

Landslide Projects with FEMA Funding

Year	Client Name	Project Name
2023	Noble Co. Engineer	NOB-CR18
2023	Knox Twp., Jefferson Co., OH	JEF-TR242 – 2 Different Landslides
2022	Knox Twp., Jefferson Co., OH	JEF-TR244
2022	Mt. Pleasant Twp., Jefferson Co., OH	JEF-TR1114
2022	Knox Twp., Jefferson Co., OH	JEF-TR246
2021	Springfield Twp., Jefferson Co., OH	JEF-TR276
2020	Athens Co. Engineer	ATH-CR2-3.27
2020	Athens Co. Engineer	ATH-CR38-0.73
2020	Athens Co. Engineer	ATH-CR76-0.12
2020	Village of Irondale, OH	Saline Street
2020	Warren Twp. Trustees, Jefferson Co. , OH	JEF-TR111 – 3 Different Landslides
2020	Warren Twp. Trustees, Jefferson Co. , OH	JEF-TR117 – 2 Different Landslides
2020	Noble Co. Engineer	Landslides on 17 Different County Roads
2020	Scioto Co. Engineer	Landslides on 10 Different County Roads
2020	Island Creek Twp., Jefferson Co., OH	JEF-TR350
2020	Island Creek Twp., Jefferson Co., OH	JEF-TR381
2020	Knox Twp., Jefferson Co., OH	JEF-TR246
2020	Village of Rayland, OH	Narrows Road
2020	Springfield Twp., Jefferson Co., OH	JEF-TR265
2020	Island Creek Twp., Jefferson Co., OH	JEF-TR382
2020	Island Creek Twp., Jefferson Co., OH	JEF-TR383
2020	Wayne Twp., Jefferson Co., OH	JEF-TR205
2019	Washington Co. Engineer	WAS-TR394-0.86
2019	Athens Co. Engineer	ATH-CR10-7.25
2019	Pike Co. Engineer	PIK-CR56-05.26
2019	Ross Co. Engineer	ROS-CR602
2019	Wayne Twp. Trustees, Jefferson Co., OH	JEF-TR166
2019	Steubenville Twp. Trustees, Jefferson Co., OH	JEF-TR170
2019	Wayne Twp. Trustees, Jefferson Co., OH	JEF-TR213
2019	Scioto Twp. Trustees, Ross Co., OH	SCI-TR144A
2019	Island Creek Twp. Trustees, Jefferson Co. OH	JEF-TR384
2018	Warren Twp. Trustees, Jefferson Co. , OH	JEF-TR109A
2018	Warren Twp. Trustees, Jefferson Co., OH	JEF-TR113

AML / Mine Related-Past Performance Matrix

Name	Location	Landslide	Subsidence	Highwalls	Refuse Piles	AMD	Mine Openings	Stream Design / Restorations	Construction Docs / Bidding
Anderson Highwall	Monongalia County, WV			X			X		X
Tars Hill Landslide	Jefferson County Ohio	X							X
Oakhill Landslide	Allegheny County Maryland	X							X
Riddles Run Landslide	Jefferson County, Ohio	X							X
Aarons Run Road Failure & Landslide	Garrett County, Maryland	X							X
Peninsula Highwall	Monongalia County, WV			X			X		X
St. Clair Portals	Monongalia County, WV			X	X	X	X	X	X
Aaron's Run	Garrett County, MD					X		X	X
George's Creek	Garrett County, MD							X	X
Shinn's Run Portals	Harrison County, WV					X	X		X
Williams Refuse Pile	Harrison County, WV				X	X			X
Maryland Deep Mine Closures	Allegheny & Garrett County, MD						X		X
Hopewell Church & AMD, WVDEP	Preston County, WV			X	X	X	X		X
Fairmont Subsidence	Fairmont, WV		X						X
Blackwater River AMD	Tucker County, WV					X			X
Taylor Creek Impoundment	Clay County, WV				X			X	X
Thomas Subsidence	Thomas, WV		X						X
Red Hollow Refuse Pile	Mc Comas, WV				X				X
Alderson Branch Refuse Pile	Raleigh County, WV				X				X
General Clay	Medina County, Ohio			X					X
Zerger Quarry	Noble County, Ohio			X					X

Past Project Experience

Project: Anderson Highwall
Client: WVDEP AML
Contact: AML Division (Bridgeport Office)
Phone: (304) 926-0499
Location: Monongalia County, West Virginia
Project Description: The site consisted of dangerous highwalls, seven or more open or partially open portals and a dangerous scrap yard with potentially dangerous materials. CTL provided surveying, geotechnical investigation, civil design and construction bidding documents.

Project: Tars Hill Landslide
Client: ODNR – Division of Mineral Resource Management
Contact: AML Division
Phone: (614) 265-7079
Location: Jefferson County, Ohio
Project Description: CTL Engineering, Inc. provided engineering design services and construction documents necessary to repair and stabilize a landslide that has damaged a road and made it impassable. In addition, the hillside above the damaged road has become unstable and has several large slip areas. Abandoned deep mines, on both sides of the hollow, produce a significant number of ground water sources, which has added to the instability of the area.
Site design will begin on the collection and diversion of ground water, slope stability and road replacement once the final site investigation has been completed.

Project: Oakhill Landslide
Client: Maryland Department of Environment – Bureau of Mining
Contact: MBOM
Phone: (301) 689-8020
Location: Allegheny County, Maryland
Project Description: CTL Engineering, Inc. provided engineering design services and construction documents necessary to reclaim and stabilize a landslide encroaching on Georges Creek and reducing the flow area of the stream. The site had been backfilled with mine spoil and mine drainage was saturating the slope and creating the instability. Subsurface investigations were performed to determine soil characteristics, strata depths and water levels, using piezometers. Slope stability analyses were performed to determine the corrective actions required to stabilize the area. Surface and subsurface drainage structures, a toe key, and stream bank protection were designed to correct the instability problems and provide long term protection to the area.

Project: Riddles Run Landslide
Client: ODNR – Division of Mineral Resource Management
Contact: AML Division
Phone: (614) 265-7079
Location: Jefferson County, Ohio
Project Description: CTL Engineering, Inc. provided engineering design services and construction documents necessary to repair and stabilize a landslide that has damaged a road. Mine drainage of abandoned deep mine entries have saturated the soil causing it to slide down the slope toward the road. In addition, trees whose roots have been loosened by the movement of soils are in danger of sliding onto the roadway.

This 0.15-acre site was cleared and grubbed to install a sub-surface drain that will carry mine drainage away from the slip area. This drain was constructed above and perpendicular to the slip. An additional surface drain was constructed and lined with rock to direct the flow from the subsurface drain to natural drainage.

Project: Oakhill Landslide
Client: Maryland Department of Environment – Bureau of Mining
Contact: MBOM
Phone: (301) 689-8020
Location: Garrett County, Maryland
Project Description: CTL Engineering of West Virginia Inc. provided site investigation, geotechnical drilling and engineering services and remediation design for this road failure which was caused by subsidence from abandoned deep mines. The mines were within 50 feet of the road surface and had active water discharge on the outslope of the roadway. The design required the excavation of all material to the deep mine, create and engineered embankment to the road level and move the roadway further into the uphill side of the existing roadway.

This design was selected as the most cost effective way to remediate the failure and utilize nearby material for the fill.

Project: Peninsula Highwall
Client: WVDEP AML
Contact: AML Division (Bridgeport Office)
Phone: (304) 926-0499
Location: Monongalia County, West Virginia
Project Description: This site contained 1,800 LF of vertical to sloughed highwalls 15 to 25 feet high, 7 partially of totally collapsed mine portals, 1 open mine portal, subsidence depressions behind the portals and water present at or flowing from the portals. CTL Engineering of West Virginia, Inc. was retained to provide the design for the access road into the site, wet seal 2 portals, regrade face of 2 portals, riprap channel and additional channel to carry water off site, backfill of highwalls and subsidence areas, restoration of golf path asphalt, and conditioning and revegetation of all disturbed areas.

Project: St. Clair Portals
Client: WVDEP AML
Contact: AML Division (Bridgeport Office)
Phone: (304) 926-0499
Location: Monongalia County, West Virginia
Project Description: The site consisted of coal refuse, acid mine drainage with impounded water, collapsed mine portals and highwalls. 17 portals were found along the highwall bench. Three impoundments of approximately 70,000 sq.ft. had water flowing at 300 gpm with a pH value of 3.1 and iron >10 mgl. A 35' to 45' high refuse pile was in the middle of the site as well as scattered refuse throughout the site.

CTL Engineering of West Virginia, Inc. was retained to provide the design for excavation and wet seal of at least 17 mine portals, dewater three impoundments, 2000 LF of stream reconstruction, regrade and cover of coal refuse and spoil areas on mine bench, drainage control channels to carry water off site. CTL was also responsible for the backfill of highwalls using spoil material to original contour and conditioning and revegetation of all disturbed areas.

Project: Aaron's Run AMD Project
Client: Maryland Department of Environment – AML Division
Contact: Mike Garner
Phone: (301) 689-1440
Location: Garrett County, Maryland
Project Description: CTL Engineering of West Virginia, Inc. was retained to provide the design for multiple AMD treatment systems, 2 SAP cells, slurry doser, settling ponds, and natural wetlands. CTL also provided full site grading plans & drainage controls, access road & highway rated bridge, all state & federal permitting, and construction specifications and drawings.

Project: Upper Georges Creek Stream Sealing Project
Client: Maryland Department of Environment – AML Division
Contact: Tim Miller
Phone: (301) 689-1440
Location: Garrett County, Maryland
Project Description: CTL Engineering of West Virginia Inc. was retained to perform geologic and hydrologic assessments of the Upper Georges Creek Watershed to determine the extent and amount of stream flow lost to underground mines. CTL was responsible for conducting cooperative meetings with several stakeholders, reviewing existing reports and data on file at the AMLD office and based on available data along with possibly field measurements or drilling, develop plans to monitor streams to locate stream water loss zones. CTL then performed stream flow measurements within the study area to locate the areas of most significant water loss. Also, assessments to each tributary was completed as a part of the study. Upon completion of the study, CTL provided remediation options for sealing the streams.

.

Project: Shinns Run
Client: WVDEP AML
Contact: AML Division (Bridgeport Office)
Phone: (304) 926-0499
Location: Harrison County, West Virginia
Project Description: CTL Engineering provided surveying, reclamation design and subsurface investigations for this Abandoned Mine Lands and Reclamation project. The surveying was completed in order to establish the areas that will be reclaimed and to locate utilities that were not apparent on the mapping provided for the job. CTL provided drilling services near the mine entries to determine the mine pool as well as near a bridge on site to determine the foundation depth and bearing capacity. CTL also developed sedimentation and erosion control plans for all disturbed sites.

Project: Williams Refuse Pile
Client: Targe Energy
Contact: Van Plocus
Phone: (412) 784-0750
Location: Harrison County, West Virginia
Project Description: CTL Engineering of West Virginia, Inc. was selected to perform engineering related services including environmental services, site design, and permitting for Targe Energy Reclamation, LLC during this *turnkey project.* This project was treated very similar to a complete surface mine application. The scope of services provided by CTL included a refuse removal plan, field reconnaissance, ash backfill design, permits preparation, and environmental sampling.

Project: Maryland Deep Mine Closures
Client: Maryland Department of Environment – AML Division
Contact: Tim Miller
Phone: (301) 689-1440
Location: Allegheny and Garrett County, Maryland
Project Description: CTL Engineering of West Virginia, Inc. was retained to provide the develop detailed engineering design plans and construction plans including; cost estimates, bid documents, project drawings, maps, plans & specifications for the reclamation construction of multiple mine mouth closures. Design and Plans included dry and wet mine seals, bat gates, regrading, drainage structures and site reclamation.

Project: Fairmont Subsidence
Client: WVDEP AML
Contact: AML Division (Bridgeport Office)
Phone: (304) 926-0499
Location: Harrison County, West Virginia
Project Description: CTL Engineering provided surveying, reclamation design and subsurface investigations for this Abandoned Mine Lands and Reclamation project. The surveying was completed in order to establish the areas that will be reclaimed and to locate utilities that were not apparent on the mapping provided for the job. CTL provided drilling services near the mine entries to determine the mine pool as well as near a bridge on site to determine the foundation depth and bearing capacity. CTL also developed sedimentation and erosion control plans for all disturbed sites.

Project: Blackwater River
Client: WVDEP AML
Contact: AML Division (Bridgeport Office)
Phone: (304) 926-0499
Location: Tucker County, West Virginia
Project Description: CTL Engineering of West Virginia, Inc. provided Engineering Design Services and construction documents to rehabilitate an existing concrete dam and install a rotating drum and limestone slurry treatment facility on the Blackwater River. This project was a cooperative project with West Virginia Department of Environmental Protection and West Virginia Division of Natural Resources. This project has been recognized by **"Trout Unlimited"** and was mentioned in the February 1993 issue of **"Outdoor Life"**. The Blackwater River/Beaver Creek Treatment Project has successfully transformed a formally dead section of the Blackwater River into a high quality trout fishery and was recognized by the ***US Dept of Interior, Office of Surface Mining, as the 1999 Appalachian Region Award Winner.***

Project: Taylor Creek Impoundment
Client: WVDEP AML
Contact: AML Division (Bridgeport Office)
Phone: (304) 926-0499
Location: Clay County, West Virginia
Project Description: CTL Engineering of West Virginia, Inc. provided Engineering Design Services and construction documents necessary for the reclamation and extinguishment of a 120-acre burning refuse pile. This project also included the subsurface investigation of burning material to depths of approximately 110 feet, and the design and reconstruction of approximately 3,400 feet of Taylor Creek. Several areas of slope instability required stabilization. Additionally, an existing 24-acre coal related impoundment had to be evaluated, dewatered and the area stabilized.

Project: Jackson Mountain Mine Fire
Client: Maryland Bureau of Mines
Contact: Mike Garner
Phone: (301) 689-6764
Location: Allegheny County Maryland
Project Description: CTL Engineering, Inc. provided engineering design services and construction documents necessary to determine the location and characteristics of a mine fire and design of an excavated cutoff barrier to prevent the fire, along the crop line, from encroaching on the roadway. Additional design was included to reclaim a slip that had occurred along the road, once the cutoff barrier had been constructed.

Project: Morgantown Airport Runway Extension
Client: City of Morgantown
Contact: Michael Baker
Phone: (304) 284-7405
Location: Monongalia, West Virginia
Project Description: The Runway Extension Project is a five-year initiative taking place at the Morgantown Municipal Airport – the busiest airport in West Virginia. The scope of work for this project is to extend the existing runway by 1,001 feet, creating a safer takeoff and landing space for outgoing and incoming flights. Over 100,000 CY of rock excavation was part of the scope of the PH-1 project.

SECTION 6
CCQQ
RPEM

AML and RELATED PROJECT EXPERIENCE MATRIX (2008 - 2022)

PROJECT	Exp. Basis C=Corp. P=Personal *	Additional Info Provided in Section (s) **	PROJECT EXPERIENCE REQUIREMENTS															PRIMARY STAFF PARTICIPATION/CAPACITY *** M=Management P=Professional				
			Abandoned Surface Mine Reclamation	Abandoned Deep Mine Reclamation	Portal/Shaft Closure	Hydrologic/Hydraulic Design/Eval.	Remining Evaluation	Mine Refuse/ Fire Abatement	Subsidence Investigation Mitigation	Hazardous Waste Disposal	Project Specifications	Water Quality Evaluation/Mitigation/ Replacement	Construction Inspection/Management	Water Treatment	Equipment/ Structure Removal	Stream Restoration	Geotechnical/Stability	PATRICK GALLAGHER, PE	TIM DARRAH	JOSEPH STANLEY	CARL SELFRIDGE	Millard Nicholson
MORGANTOWN ANDERSON HIGHWALLS (WV AML '12)	C			X	X	X					X							MP	MP	P		P
SCHRAMM - GORDON -EAST FRANKLIN LANDSLIDES (MD AML '12)	C		X	X							X						X	MP	MP	P	P	
DOUGLAS AVENUE STORMWATER SYSTEM (MD AML '12)	C					X						X						MP				
FAIRMONT SUBSIDENCE (WV AML '12)	C	Profile		X					X		X						X	MP	MP	P	P	P
DOUGLAS AVENUE LANDSLIDE (MD AML '12)	C			X		X			X		X						X	MP	MP	P	P	P
LOWER CONSOL ROAD SUBSIDENCE (MD AML '11)	C		X	X					X		X						X	MP	MP	P	P	P
BALD KNOB WATER SUPPLY STUDY (MD AML '12)	C					X						X						MP	MP			
SHINNS RUN PORTALS (WV AML '11)	C	Profile		X	X												X	MP	MP	P	P	P
REAM REFUSE PILE (WV AML '10)	C	Profile	X					X										MP	MP	P		
PEE WEE HILL WATER SUPPLY (MD AML '10)	C											X						MP	MP			
TERRA HAUTE AIRPORT (IN AML '10)	C			X	X				X		X						X	MP	MP		P	
KENNEL MINE CLOSURE (MD AML '10)	C		X	X	X						X							MP	MP	P		
FROSTBURG NORTH CLOSURE (MD AML '10)	C		X	X	X						X							MP	MP	P		
PEE WEE HILL WATER FEASIBILITY (MD AML '10)	C											X						MP	MP		P	
WILLIAMS REFUSE PILE #2 (Private AML '09)	C		X			X	X			X	X	X	X	X			X					
PENINSULA HIGHWALLS (WV AML '09)	C	Profile	X	X		X			X		X						X	MP	MP	P	P	P
ST. CLAIR PORTALS (WV AML '09)	C	Profile	X	X	X	X					X					X	X	MP	MP	P	P	P
CHEAT NECK LANDSLIDE (WV AML '09)	C	Profile			X	X					X						X	MP	MP	P	P	
FARMINGTON UMC (WV DEP EMER. '09)	C								X		X							MP	MP		P	
MORNINGSIDE BAPTIST (WV DEP EMER. '09)	C								X		X							MP	MP		P	
COLLINS MINING (ODNR FOR. '09)	C		X								X							MP	MP	P		
FAIRVIEW WATER FEASIBILITY(WV AML '09)	C											X						MP	MP			
AARON'S RUN (MD AML '09)	C	Profile	X			X					X	X		X		X		MP	MP	P		
ECCLES SUBSIDENCE (WV AML '08)	C								X		X						X	MP	MP		P	
McARTHUR SUBSIDENCE (WV AML '08)	C								X								X	MP	MP		P	
TIOGA WATER FEASIBILITY (WV AML '08)	C											X						MP	MP			
McCOURT LANDSLIDE(ODNR FOR. '08)	C		X			X					X						X	MP	MP	P	P	
JONES TRUCKING (ODNR FOR. '08)	C		X								X							MP	MP	P		
MILLER MINING (ODNR FOR. '08)	C					X					X	X						MP	MP	P		
ZILMAN CLOSURE (MD AML '08)	C			X	X						X							MP	MP	P		
CALDONIA HILL SLOPE STABILITY (MD AML '08)	C		X														X	MP	MP			
WEST VIRGINIA BRIM (2005 - 2012) 42 Projects	C								X								X	MP	MP		P	
OMSIUA (2005 - 2010) 47 Projects	C								X								X	MP	MP		P	
(2005 - 2008) 20 Additional AML Projects for WV, MD, OH, PA	C		X	X	X				X		X	X	X				X	MP	MP		P	

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
AML CONSULTANT CONFIDENTIAL QUALIFICATION QUESTIONNAIRE "Attachment B"

PROJECT NAME	DATE (DAY, MONTH, YEAR)	FEIN
2023 AML Contract Project S2	04/08/2022	**55-063-1834**

1. FIRM NAME	2. HOME OFFICE BUSINESS ADDRESS	3. FORMER FIRM NAME
CTL Engineering, Inc.	**2860 Fisher Road Columbus, OH 43204**	**Columbus Testing Laboratories**

4. HOME OFFICE TELEPHONE	5. ESTABLISHED (YEAR)	6. TYPE OWNERSHIP	6a. WV REGISTERED DBE (Disadvantaged Business Enterprise)
(614)276-8123	**CTL-1927 CTL-WV 1983**	Individual **Corporation** Partnership Joint-Venture	YES **NO**

6. PRIMARY AML DESIGN OFFICE: ADDRESS/ TELEPHONE/ PERSON IN CHARGE/ NO. AML DESIGN PERSONNEL EACH OFFICE
1091 Chaplin Road, Morgantown, WV 26501/ 304-292-1135/ CK Satyapriya, President / Morgantown – 16

7. NAMES OF PRINCIPAL OFFICERS OR MEMBERS OF FIRM	8a. NAME, TITLE, & TELEPHONE NUMBER - OTHER PRINCIPALS
C. K. Satyapriya – CEO Ali Jamshidi – CFO Bipender Jindal – Secretary Hassan Zahran – Principal Ali Karaki – Principal Marc Montgomery – Principal Kevin Reichert – Principal	**Joe Grani – President – Geotechnical and Branch Manager of CTL Engineering of WV Timothy Darrah – Design Manager – CTL Eng. of WV Office Telephone: 304-292-1135**

9. PERSONNEL BY DISCIPLINE

52	ADMINISTRATIVE	-	ECOLOGISTS	-	LANDSCAPE ARCHITECTS	-	STRUCTURAL ENGINEERS
2	ARCHITECTS	-	ECONOMISTS	-	MECHANICAL ENGINEERS	4	SURVEYORS/RODMEN
-	BIOLOGIST	-	ELECTRICAL ENGINEERS	1	MINING ENGINEERS	-	TRAFFIC ENGINEERS
6	CADD DESIGNERS	6	ENVIRONMENTALISTS	-	PHOTOGRAMMETRISTS	**X**	OTHER,
1	CHEMICAL ENGINEERS	-	ESTIMATORS	-	PLANNERS: URBAN/REGIONAL	31	Project Managers
15	CIVIL ENGINEERS	3	GEOLOGISTS	-	SANITARY ENGINEERS	102	Technicians/Drillers
15	CONSTRUCTION INSPECTORS	-	HISTORIANS	19	SOILS ENGINEERS		
-	DESIGNERS	-	HYDROLOGISTS	-	SPECIFICATION WRITERS		
1	DRAFTSMEN						

258 TOTAL PERSONNEL

TOTAL NUMBER OF WV REGISTERED PROFESSIONAL ENGINEERS IN PRIMARY OFFICE: 3

***RPEs other than Civil and Mining must provide supporting documentation that qualifies them to supervise and perform this type of work.**

10. HAS THIS JOINT-VENTURE WORKED TOGETHER BEFORE? ☐ YES ☐ NO

11. OUTSIDE KEY CONSULTANTS/SUB-CONSULTANTS ANTICIPATED TO BE USED. Attach "AML Consultant Confidential Qualification Questionnaire" for each if copy is not on file with AML.

NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
The Markosky Engineering Group, Inc. 803 Quarrier Street Suite 610 Charleston, WV 25301	Environmental NEPA	__X___ Yes _____ No
NAME AND ADDRESS: Brierley Associates 100 E. Campus View Blvd. Suite #250 Columbus, OH 43235	SPECIALTY: Reclamation Design (AML)	WORKED WITH BEFORE _____ Yes ____X_ No
NAME AND ADDRESS: Neff Longest Beam 300 Capitol Street Suite #507 Charleston, WV 25301	SPECIALTY: Realty Reclamation Design	WORKED WITH BEFORE __X___ Yes _____ No
NAME AND ADDRESS: Greeman Pederson (GPI) 2000 Hampton Center Suite C Morgantown, WV 26505	SPECIALTY: Construction Inspection Surveying and Mapping	WORKED WITH BEFORE ___X__ Yes _____ No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No

NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No

12. A. Are your firm's personnel experienced in Abandoned Mine Lands Remediation/Mine Reclamation Engineering?

YES Description and Number of Projects: CTL Engineering has completed more than 800 AML related projects nationally and internationally. See attached "AML Past Project Experience" for some specific examples. CTL completes un excess of 100 testing projects each year.

NO

B. Is your firm experienced in Soil Analysis?

YES Description and Number of Projects: Our in-house laboratories perform all ASTM mechanical, organic and in-organic analyses for soils. Our labs are certified by WVDOH, OEPA and US Corps of Engineers.

NO

C. Is your firm experienced in hydrology and hydraulics?

YES Description and Number of Projects: Each of our site design and AML projects require hydrology & hydraulic evaluations. We estimate that annually, we complete more than 100 projects requiring hydrology design.

NO

D. Does your firm produce its own Aerial Photography and Develop Contour Mapping?

YES Description and Number of Projects:

NO However, we annually complete more than 25 projects requiring aerial photography & mapping. While we sub-contract the aerial photography, in-house we provide GPS, surveying and develop the contouring as needed. CTL deploys a drone to support contour mapping typicall for sites less than 10 acres.

E. Is your firm experienced in domestic waterline design? (Include any experience your firm has in evaluation of aquifer degradation as a result of mining.)

YES Description and Number of Projects: We have completed numerous waterline design projects and our in-house staff has more than 50 years of combined experience with aquifer degradation.

NO

F. Is your firm experienced in Acid Mine Drainage Evaluation and Abatement Design?

YES Description and Number of Projects: CTL has developed more than 20 active and passive treatment systems for AMD. More than 50 of our AML Design projects required some form of AMD evaluation and design.

NO

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

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
Gallagher, Patrick E., PE **President, Project Manager**	YEARS OF AML DESIGN EXPERIENCE: **40**	YEARS OF AML RELATED DESIGN EXPERIENCE: **40**	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: **32**

Brief Explanation of Responsibilities
President of CTL Engineering of WV, Inc.; responsible for the overall administration of the Morgantown, WV office along with the management of the individual engineering projects. His administration and management responsibilities include marketing, proposal preparation, client contact, supervision of design personnel, scheduling, budget control, and report preparation. Projects successfully completed by Mr. Gallagher include: Geotechnical Investigations, Foundation Design Investigations, Dam Stability Analyses, Mine Subsidence Evaluations, Mineral Reserve Studies, Landslide Investigations, Mine Reclamation Designs, Failure Investigations, and Mining Permits.

EDUCATION (Degree, Year, Specialization)
B.S., 1975, Civil Engineering
B.S., 1975, Equivalent, Geology

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	REGISTRATION (Type, Year, State)
American Society of Civil Engineers Society of Mining Engineers of A.I.M.E. Triangle Fraternity of Engineers, Architects and Scientists International Society of Soil Mechanics and Foundation Engineers American Institute of Professional Geologists	Registered Professional Engineer; 1983-West Virginia, 1984-Ohio, 1983-Maryland, 1993-Pennsylvania, 2006-Wyoming, 2006-North Carolina Certified Professional Geological Scientist - 1984 Professional Surveyor, 1995-West Virginia

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

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
Selfridge, Carl G. **Department Head, Geotechnical Services**	YEARS OF AML DESIGN EXPERIENCE: **11**	YEARS OF AML RELATED DESIGN EXPERIENCE: 11	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:

Brief Explanation of Responsibilities
Deartment Head Geotechnical Engineering. Responsible for subsurface investigations, geotechnical reporting, foundation analysis & recommendations, program development for investigative and laboratory analysis.

EDUCATION (Degree, Year, Specialization)
Graduate Studies, 1996-1999, Civil Engineering (Geotechnical)
B.S., 1996, Civil Engineering, Geotechnical and Structural
A.S., 1994, Engineering Science
A.A.S., 1991, Mechanical Technology – Design & Drafting

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	REGISTRATION (Type, Year, State)
Fellow of the American Society of Civil Engineers, The GEO-Institute, Timber Framers Guild, Construction Institute (ASCE)	Engineering Intern (EI), 1996, New York Level II Drilling Inspector, 1999, PennDOT

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

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
Darrah, Timothy A. **Civil Site Dept. Mgr., Project Manager**	YEARS OF AML DESIGN EXPERIENCE: **26**	YEARS OF AML RELATED DESIGN EXPERIENCE: 26	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE 26

Brief Explanation of Responsibilities

Mr. Darrah is presently responsible for Management and Design for various types of civil engineering projects including reclamation design, commercial and residential development projects. He is also responsible for scheduling, invoicing and client contacts for all surveying projects including topographic, property and construction layout. Mr. Darrah's duties include drafting, writing of property descriptions, hydrology calculations, quantity calculations and various other forms of surveying and civil engineering related duties. He is also proficient in computer software including AutoCAD, Civilsoft, HEC-1, HEC-RAS and various other engineering software.

EDUCATION (Degree, Year, Specialization)

B.S., 1988, Civil Engineering Technology

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	REGISTRATION (Type, Year, State)

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

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
Stanley, Joseph **Project Manager**	YEARS OF AML DESIGN EXPERIENCE: **12**	YEARS OF AML RELATED DESIGN EXPERIENCE: 12	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 9

Brief Explanation of Responsibilities

Mr. Stanley is responsible for Reclamation Design, Drafting Hydrology, Quantity Calculations, Stability Analysis, Residential Development, Valley Fill Footprinting, Surveying, Subsidence Surveys, Pre-Blast Surveys, Acid Base Accounts, Groundwater Inventory. PC Software includes Hydrologic TR-20, TR-55, Excel, Harstad Methods, Word, AutoCADD Land, Quarttro, Access.

EDUCATION (Degree, Year, Specialization)

A.S., 2001 Civil -Engineering Technology Drafting & Design

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	REGISTRATION (Type, Year, State)

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

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
Grani, Joe **Branch Manager (WV)** **Geotechnical Manager**	YEARS OF AML DESIGN EXPERIENCE: **0**	YEARS OF AML RELATED DESIGN EXPERIENCE: 28	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 0

Brief Explanation of Responsibilities

Mr. Grani is the Branch Manager of the WV office and also responsible for field review and exploration for the Geotechnical Engineering Department for CTL Engineering of West Virginia. Joe is involved in the management of field drilling, classification of soil and rock, field safety procedures, assignment of project specific lab testing, and performing geotechnical evaluations. Engineering evaluations include subsidence evaluation, foundation recommendations, settlement analysis, slope stability analysis, earth pressure coefficients and report preparation.

EDUCATION (Degree, Year, Specialization)

B.S., 1991, The Ohio State University, Civil Engineering
M.S., 1994, The Ohio State University, Civil Engineering

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	REGISTRATION (Type, Year, State)
ASHE ACEC	Civil Engineering Professional Engineer, #E-60435 Ohio

14. PROVIDE A LIST OF SOFTWARE AND EQUIPMENT AVAILABLE IN THE PRIMARY OFFICE WHICH WILL BE USED TO COMPLETE AML DESIGN SERVICES.

OFFICE EQUIPMENT

3 HP Color Plotters
HP Color Scanner
Duplicating equipment, copiers, blueprinting, laser printers, etc.
Facsimile Machine

DESIGN SOFTWARE

Windows XP & 2000 based operating systems
Microsoft Office 2000 & 2002 is used for word processing, spreadsheet creation, data processing, and presentation creation. Alternative software including Corel Suite is available, if necessary Project designs and specifications are produced in our Computer Aided Drafting and Design (CADD) section using all versions of AutoCAD including Release current civil 3d version.

Hydrogeologic Studies
MODFLO
MODPATH
SURFER
CAPZONE
GWPATH
SKUGIS
PHREEQCI
WATEQ4F
Groundwater for Windows

Civil Engineering Software
Civil 3D
Profiling
Civilsoft
TR-20 & TR-55
SEDCAD
HEC 1 & 2
HEC-RAS
Arc GIS
ArcPAD
Carson Software

Geotechnical
GINT
STABL6
SHAFT
WSPRO
Various Bridge, Pavement, Pile and Foundation Software

SURVEY EQUIPMENT

- 8 – Trimble GPS Systems - 6-R8 Receivers & 2- R10 Receiver
- 6 Total Stations (2- Robotics)
- DJI Inspire II Drone
- NAK Micrometer Level System & Direct Levels
- 4X4 Vehicles, including ATV for off-road use
- 2-Way Radios

SUBSURFACE INVESTIGATION EQUIPMENT

SUBSURFACE INVESTIGATION EQUIPMENT

CTL Engineering Inc. owns and operates a fleet of geotechnical drill rigs and support vehicles. Our drill rigs are suitable to be used in a verity of terrains and under a verity of conditions including steep terrain, limited access, over water barge drilling. CTL can mobilize special equipment or a fleet of drilling rigs to a particular project requiring multiple units.

CTL's drill rigs are rotary drilling rigs equipped to conduct standard penetration testing (SPT) with calibrated hammers for split-spoon sampling and undisturbed Shelby tube samplers. Borings may be advanced through soil overburden and rock using various sizes of hollow stem augers (typically 3.25 inch), solid stem augers, spin casing with casing advancer, air and mud rotary, down-hole hammer, etc. Our rigs are also equipped to perform rock core sampling with Moyno pumps, wire-line or conventional rock coring equipment (typically NWL (NQ) – 2 inch double tube core barrels) for proper and efficient execution of a subsurface exploration program.

CTL current owns and operates eleven (11) geotechnical drill rigs listed as follow, with some having the capacity of drilling to depths greater than 500 feet and select rigs having angle drilling capability:

- 1996 CME 45C Skid, trailer, and/or Truck Mounted Drill Rig System
- 1988 CME 55 Truck Mounted Rig
- 2001 CME 55 Truck Mounted Rig
- 2001 CME 45C Rubber Track Mounted Rig
- 1987 CME 75 Truck Mounted Rig
- 2012 CME 550X Rubber Tired ATV Mounted Rig
- 2016 CME 550X Rubber Tired ATV Mounted Rig
- 2017 Mobile B-57 Truck Mounted Rig
- 2002 CME 55 Rubber Track Mounted Rig
- 2004 CME 45C Rubber Track Mounted Rig
- 2017 Mobile B-57 Rubber Track Mounted Rig

Some of CTL’s more specialized drilling, sampling, and testing exploration equipment include:

- Mobile “Minuteman” small portable drilling rig, for limited and tight access drilling, used with tripod and powered cat and hammer system.
- Portable electric core drills with stands and truck mount system
- GeoVision Color Borehole video camera system with 300 foot range
- Inclinometer testing equipment
- Packer test equipment with vibrating wire piezometers for determining transmissivity and storage coefficient of low permeability rock strata

- Borehole field shear vanes systems
- GUS Sampler (Gregory Undisturbed Sampler)
- Denison Core Barrel Sampler
- CME stabilized continuous sample tube system
- CME bearing head continuous sample tube system
- Acker pitcher sampler
- GEOTECH bladder pump with Geocontrol 2 Logic Unit
- NUMA “Super Jaw” down hole hammer
- CBR equipment
- Hand Augers
- Pump testing equipment
- Decontamination Equipment - Steam cleaners, drums, generators, etc
- Soil-gas survey equipment
- Ground Penetrating Radar
- Field and Lab electrical resistivity testing
- Geophysical refraction microtremor (REMI) surveying
- Geophysical 2D and 3D electrical resistivity and induced polarization surveying imaging
- Down hole temperature gauges, PID, FID, CGI and various field monitoring equipment

Drill crews have a wide verity of experiences drilling in different conditions, both surface and subsurface, installing monitoring wells, piezometers, inclinometers, along with other field sampling and testing equipment.

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

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
Geotechnical Engineering	ODOT District 9 ODOT District 6	Geotechnical Engineering and Drilling	NA	90%
WV Statewide Drilling Contract	WVDOT Charleston, WV	Geotechnical Engineering and Drilling	NA	2019-2022
Scioto County Engineer Landslides	Scioto County Ohio Engineer	Geotechnical Engineering and Drilling	NA	2022
FRA-270-51.50/FRA-23-4.19 P1&P2 Highway Franklin County, Ohio	Ohio Department of Transportation 400 East Williams Street Columbus, Ohio 43015	Construction Inspection	$19,674,000	5%
ODOT District 03 Construction Inspection Highway Northeast Ohio	Ohio Department of Transportation 906 North Clark Street Ashland, Ohio 44805	Construction Inspection	N/A	25%
Monongahela Soils Conservation, Impoundments	Monongahela Soils Conservation Morgantown, WV	Civil Site Design, Geotechnical Engineering	NA	50%
TOTAL NUMBER OF PROJECTS: 57				

16. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS SERVING AS A SUB-CONSULTANT TO OTHERS

PROJECT NAME, TYPE AND LOCATION	NATURE OF FIRMS RESPONSIBILITY	NAME AND ADDRESS OF OWNER	ESTIMATED COMPLETION DATE	ESTIMATED CONSTRUCTION COST	
				ENTIRE PROJECT	YOUR FIRMS RESPONSIBILITY
Morgantown Airport Expansion	Construction Management and Inspection	Michael Baker	2025	$40,000,000	$500,000
OTIC 99-23-06 Bridge Repairs (Phase A) MP13.2	Construction Inspection	Ohio Turnpike via AECOM	2023	Unknown	$45,621.00
VAR-District 8 Construction Inspection No. 2023-2, PID 117608	Construction Inspection	ODOT via American Structurepoint	2025	$2,500,000	$50,000.00
ODOT D03 Construction Inspection 2023-2 Agreement 38617	Construction Inspection	ODOT via MSG Construction Services	2025	$1,000,000	$140,000.00
MUS-70-10.49 Construction Inspection	Construction Inspection	ODOT via True Inspection	2023	$72,200,000	$600,000.00

17. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM WAS THE DESIGNATED ENGINEER OF RECORD				
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
WVU Aquatic Center Morgantown, WV	West Virginia University	$45,000,000	2018	YES
Guernsey Power Plant Mine Grout Project Cambridge, Ohio	Gemma Power Systems Glastonbury, CT	$1,000,000,000	2018- 2020	YES
WVUH Drug Rehab Center	WVU Hospitals 1 Medical Center Drive Morgantown, WV 26506	$30,000,000	2018	YES
Southern WV Drilling	Department of Environmental Protection Office of the AML	$650,000	2017- 2018	YES
FRA-71/9.62/9.71 Franklin County, Ohio	Ohio Department of Transportation 400 East Williams Street Columbus, Ohio 43015	$3,500,000	2017- 2019	YES
ODOT D 12 Construction Inspection/Construction Administration	Ohio Department of Transportation 5500 Transportation Blvd Cleveland, Ohio 44125	$2,400,000	2022- 2023	YES

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

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST OF YOUR FIRM'S PORTION	YEAR	CONSTRUCTED (YES OR NO)	FIRM ASSOCIATED WITH
Fremont City Schools 4 elementary schools	Fremont City Schools Fremont Ohio	$52,000,000	2020	yes	SSOE Group, 1001 Madison Ave. Toledo, Ohio
Cacapon Resort Civil Site Design and Surveying Civil Site Design and Surveying	WVDNR State Parks	25,000,000	2019	yes	Paradigm Architecture 2223 Cheat Rd. Morgantown, WV
Sunnyside TIF Project Geotechnical Engineering and Surveying	City of Morgantown	$6,000,000	2019	yes	Herbert, Rowland and Grubic, Inc 829 Fairmont Road Morgantown, WV
Arizona Infrastructure Project Civil Site Design	Army Corps of Engineers	NA	2020	yes	Rizzo International
West Run Widening Morgantown, WV Surveying and Geotechnical	Surveying and Geotechnical	$28,000,0000	2020	no	Herbert, Rowland and Grubic, Inc 829 Fairmont Road Morgantown, WV
ODOT D07 Construction Inspection	Ohio Department of Transportation	$100,000	2020-2022	YES	American Structurepoint
City of Columbus Roadway Material and Inspection 2021-2022	City of Columbus	$100,000	2022-2023	YES	DLZ Ohio

19. Use this space to provide any additional information or description of resources supporting your firm's qualifications to perform work for the West Virginia Abandoned Mine Lands Program.
For the past 30 years, CTL has successfully designed more than 200 AML projects. We have worked nationally and internationally on a variety of AML problem sites. We have developed unique solutions that have been applied to site development, AMD Treatment, Mine Subsidence Abatement, Mine Fires and Highwall Elimination. Routinely, CTL is involved with highwall and refuse pile stabilization, extinguishment and landslides.

20. The foregoing is a statement of facts.

Signature: _____ Title: Business Development

Printed Name: Joseph Stanley

Date: 8/23/2023

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
AML CONSULTANT QUALIFICATION QUESTIONNAIRE Attachment "A"

PROJECT NAME	DATE (DAY, MONTH, YEAR)	FEIN

1. FIRM NAME	2. HOME OFFICE BUSINESS ADDRESS	3. FORMER FIRM NAME
The Markosky Engineering Group, Inc.	3689 Route 711 Ligonier PA 15658	N/A

4. HOME OFFICE TELEPHONE	5. ESTABLISHED (YEAR)	6. TYPE OWNERSHIP	6a. WV REGISTERED DBE (Disadvantaged Business Enterprise)
724.238.4138	1999	Individual [Corporation] Partnership Joint-Venture	[YES] NO

7. PRIMARY AML DESIGN OFFICE: ADDRESS/ TELEPHONE/ PERSON IN CHARGE/ NO. AML DESIGN PERSONNEL EACH OFFICE

3689 Route 711
Ligonier PA 15658 724.238.4138 Benjamin Stufft, PG 8 AML Design Personnel

8. NAMES OF PRINCIPAL OFFICERS OR MEMBERS OF FIRM	8a. NAME, TITLE, & TELEPHONE NUMBER - OTHER PRINCIPALS
Joyce Markosky, PE (President) Mark Markosky, PE (Senior Vice-President)	Matthew Walerysiak, PE (Vice-President) Michael Houser (Vice-President) David Cutlip (Vice-President)

9. PERSONNEL BY DISCIPLINE

17 ADMINISTRATIVE	— ECOLOGISTS	— LANDSCAPE ARCHITECTS	— STRUCTURAL ENGINEERS
— ARCHITECTS	— ECONOMISTS	— MECHANICAL ENGINEERS	— **SURVEYORS**
2 **BIOLOGIST**	— ELECTRICAL ENGINEERS	— **MINING ENGINEERS**	4 TRAFFIC ENGINEERS
2 **CADD OPERATORS**	17 ENVIRONMENTALISTS	— PHOTOGRAMMETRISTS	15 OTHER
— CHEMICAL ENGINEERS	— ESTIMATORS	1 PLANNERS: URBAN/REGIONAL	
17 **CIVIL ENGINEERS**	1 **GEOLOGISTS**	— SANITARY ENGINEERS	
19 CONSTRUCTION INSPECTORS	2 HISTORIANS	— SOILS ENGINEERS	
12 DESIGNERS	— HYDROLOGISTS	— SPECIFICATION WRITERS	110 TOTAL PERSONNELL
— DRAFTSMEN			

TOTAL NUMBER OF WV REGISTERED PROFESSIONAL ENGINEERS IN PRIMARY OFFICE: 13

***RPEs other than Civil and Mining must provide supporting documentation that qualifies them to supervise and perform this type of work.**

10. HAS THIS JOINT-VENTURE WORKED TOGETHER BEFORE? ☐ YES ☐ NO

11. OUTSIDE KEY CONSULTANTS/SUB-CONSULTANTS ANTICIPATED TO BE USED. Attach "AML Consultant Qualification Questionnaire".		
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No

12. A. Is your firm's personnel experienced in Abandoned Mine Lands Remediation/Mine Reclamation Engineering?

YES Description and Number of Projects: Passive treatment system design/construction oversight, wetland and stream mitigation design/permitting, hydrogeologic evaluations, aquifer testing for hydraulic properties/geochemical analysis, overburden test hole drilling, acid-base accounting, and special handling plan development for over 25 projects.

NO

B. Is your firm experienced in Soil Analysis?

YES Description and Number of Projects: _____

NO

C. Is your firm experienced in hydrology and hydraulics?

YES Description and Number of Projects: Over 100 hydrology and hydraulics reports for infrastructure projects including: bridge/culvert replacements fill slope encroachments, oil/gas facilities, stream and wetland mitigation projects, stormwater and AMD treatment basin routing and analysis, passive AMD treatment design.

NO

D. Does your firm produce its own Aerial Photography and Develop Contour Mapping?

YES Description and Number of Projects: _____

NO

E. Is your firm experienced in domestic waterline design? (Include any experience your firm has in evaluation of aquifer degradation as a result of mining.)

YES Description and Number of Projects: Development of drilling schedules for the installation of piezometer nests/monitoring well networks to characterize hydraulic and geochemical properties, calculation of mine pool volumes/recharge rates, interpretation of historic mine and published geologic mapping, water supply impact evaluations, aquifer testing, and waterline layout.

NO

F. Is your firm experienced in Acid Mine Drainage Evaluation and Abatement Design?

YES Description and Number of Projects: Design of passive treatment systems including aerobic wetlands, vertical flow ponds, anoxic limestone drains, and manganese oxidation beds, including site layout, pollutant loading, and cost analysis of these systems. Utilization of AMDtreat to analyze system costs, including system operation, maintenance, and life cycles.

NO

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

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Brown, Amanda, PE - Environmental Engineer	0	3	0

Brief Explanation of Responsibilities

Performed water quality analysis and proposed treatments for mining impacted drainage and acid producing rock drainage. Planned layout and grading of surface operations and reclamation for underground and surface coal mining operations. Designed passive treatment systems and analyzed associated costs. Designed E&S and PCSM BMPs for energy and transportation clients. Completed permit applications.

EDUCATION (Degree, Year, Specialization)

[illegible]

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	REGISTRATION (Type, Year, State)
[illegible]	[illegible]

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

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Stufft, Benjamin, PG - Geologist	6	13	0

Brief Explanation of Responsibilities

Manage the permitting and design of surface/underground mines (coal & non-coal), bridge/culvert replacements, roadway improvements, oil and gas transmission lines, as well as the permitting and design for community and non-community water supply projects. Provide environmental services, including wetland delineation field investigations, report preparation, waterway permit applications, surface coal mine permit applications, and coal mining activity permit applications for the Pennsylvania Department of Environmental Protection (PA DEP) and U.S. Army Corps of Engineers (USACE). Preparation of National Environmental Policy Act (NEPA) documents, categorical exclusion evaluations (CEE), Section 4(f)/6(f) evaluations, and technical report writing.

EDUCATION (Degree, Year, Specialization)

Bachelor of Science, 2009, Geoscience

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS		REGISTRATION (Type, Year, State)
National Groundwater Association, 2020	Pennsylvania Coal Alliance, 2017	Professional Geologist, 2016, Pennsylvania
Northern Alleghenies Geological Society, 2019	Pennsylvania Mining Professionals, 2016	

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

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Vogelsang, Bryan, PE - Environmental Engineer	2	19	0

Brief Explanation of Responsibilities

design work for roadway, pipeline, and site development projects, developing roadway construction plans, signing and pavement marking plans, traffic control plans, hydrologic and hydraulic reports, erosion and sediment pollution control plans, stormwater management plans, wetland and stream mitigation plans, utility coordination and drainage designs, preparing acid mine drainage (AMD) treatment BMP's

EDUCATION (Degree, Year, Specialization)

Bachelor of Science, 2003, Civil Engineering

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	REGISTRATION (Type, Year, State)
PA Environmental Professionals; ASHE Mid-Allegheny; WTS; Society of Women's Environmental Professionals;	Pr□□□□□□□□□□E□□□□□r□200□P□□□□□□□□□ Pr□□□□□□□□□□E□□□□□r□20□3□□ □□□□r□□□□ Pr□□□□□□□□□□E□□□□□r□20□3□□ □□□

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

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Fisher, Bradley - Environmental Scientist	10	21	0

Brief Explanation of Responsibilities

Manage the permitting and design of stream and wetland mitigation sites, bridge/culvert replacements, and roadway improvements. Provide environmental services including wetland delineation field investigations, environmental sampling and remediation, report preparation, waterway permit applications, surface coal mine permit applications, and wetland mitigation monitoring.

Preparation of coal mining activity permit applications for the Pennsylvania Department of Environmental Protection (PA DEP) and U.S. Army Corps of Engineers (USACE). Preparation of National Environmental Policy Act (NEPA) documents, categorical exclusion evaluations (CEE), Section 4(f)/6(f) evaluations, and technical report writing.

EDUCATION (Degree, Year, Specialization)

Bachelor of Science, 2001, Environmental Resource Management (Water Resources)

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	REGISTRATION (Type, Year, State)

14. PROVIDE A LIST OF SOFTWARE AND EQUIPMENT AVAILABLE IN THE PRIMARY OFFICE WHICH WILL BE USED TO COMPLETE AML DESIGN SERVICES

Cedar CT8X2 Tablet/Trimble DA2 GNSS Receiver, Trimble GeoXH 6000, AutoCAD, AMDTreat, HecRAS, HydroCAD, Solonist water level meter (300 ft),

Horiba U-52 multi-meter, Hach DR900 multi parameter portable colorimeter, Hach FH950 portable velocity meter

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

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
Coffelt Reclamation and D-2315 Wheeling Valley	Ohio Department of Natural Resources 2207 Reiser Ave. S.E. New Philadelphia, OH 44663	Environmental survey consulting services	$5,000,000	30% (Markosky tasks)
Ralston Branch Bridge No 2 Bridge replacement Kopperston, WV	West Virginia Division of Highways 1900 Kanawha Blvd E Building 5 Charleston WV 25301	Engineering design and environmental permitting	$800,000	98% (Markosky tasks)
Eastwood Lane Bridge Bridge replacement Van, WV	West Virginia Division of Highways 1900 Kanawha Blvd E Building 5 Charleston WV 25301	Engineering design and environmental permitting	$2,000,000	90% (Markosky tasks)
Academy Drive Bridge Bridge replacement	West Virginia Division of Highways 1900 Kanawha Blvd E Building 5 Charleston WV 25301	Engineering design and environmental permitting	$855,000	5% (Markosky tasks)

TOTAL NUMBER OF PROJECTS:	TOTAL ESTIMATED CONSTRUCTION COSTS: $

16. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS SERVING AS A SUB-CONSULTANT TO OTHERS

PROJECT NAME, TYPE AND LOCATION	NATURE OF FIRMS RESPONSIBILITY	NAME AND ADDRESS OF OWNER	ESTIMATED COMPLETION DATE	ESTIMATED CONSTRUCTION COST	
				ENTIRE PROJECT	YOUR FIRMS RESPONSIBILITY
Mon-Fayette Expressway PA51 to I376 4-lane expressway Allegheny County, PA	Environmental management and permitting	Pennsylvania Turnpike Commission	In progress	$2B	$5.2M
I-80 Canoe Creek Bridges Bridge replacement Clarion County, PA	Environmental resource studies and permitting	PennDOT District 10-0	2025	$120M	$229K
I-80 North Fork Bridge Bridge replacement Jefferson County, PA	Stream and wetland mitigation design, environmental clearance activities	PennDOT District 10-0	2026	$120M	$295K
Greenbag Road Improvement Project Morgantown, WV	NEPA documentation, highway lighting, permitting	West Virginia Division of Highways	2024	Unknown	$418K
Margaret Road Intersection Intersection re-alignment Plumcreek Township, PA	NEPA documentation, permitting	PennDOT District 10-0	2024	$26M	$342K

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

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
SR 6219 Section 020 Meyersdale to Somerset 4-lane highway on new alignment Cambria County, PA	PennDOT District 9-0	$110M	2018	yes
EQM Gathering OPC Hammerhead Expansion Gathering system pipeline Wetzel County, WV	Equitrans	Unknown	2018	yes
Coder Bridge Bridge replacement Jefferson County, PA	PennDOT District 10-0	$3M	2023	yes
Bethel Ridge to Muskovitch Pipeline Project Gathering line Washington County, PA	Private oil/gas client	Unknown	2018	yes

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

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST OF YOUR FIRM'S PORTION	YEAR	CONSTRUCTED (YES OR NO)	FIRM ASSOCIATED WITH
Moraine State Park Access New access road Butler County, PA	PennDOT District 10-0	$118K (Markosky portion)	2019	yes	HDR
Balls Bend Intersection re-alignment Butler County, PA	PennDOT District 10-0	$223K (Markosky portion)	2023	yes	Erdman Anthony
Three-degree Road Intersection Intersection re-alignment Butler County, PA	PennDOT District 10-0	$542K (Markosky portion)		no	Erdman Anthony
SR119-A03 Roadway reconstruction Westmoreland County, PA	PennDOT District 12-0	$572K (Markosky portion)	2018	yes	SAI Consulting Engineers

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

20. The foregoing is a statement of facts.

Signature: David A Cutlip Title: Vice President - Environmental Services Date: 8/21/2023

Printed Name: David A. Cutlip

AML and RELATED PROJECT EXPERIENCE MATRIX

PROJECT	Exp. Basis C=Corp. P=Personnel *	Additional Info Provided in Section (s) **	PROJECT EXPERIENCE REQUIREMENTS															PRIMARY STAFF PARTICIPATION/CAPACITY *** M=Management P=Professional					
																		Amanda Brown, PE	Benjamin Stufft, PG	Brad Fisher	Bryan Vogelsang, PE		
Coffelt Reclamation	C		X									X							P	P			
D-2315 Wheeling Valley	C		X									X							P	P			
SR 6219	C										X	X		X				P			P		
Margaret Road	C										X						X	P		P	P		
Mon-Fayette Expressway	C					X					X		X				X	P	P	P	P		

*** List whether project experience is corporate or personnel based or both.**

**** Use this area to provide specific sections or pages if needed for reference.**

***** List Primary Design personnel and their functional capacity for the projects listed.**

Attachment "B"

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
AML CONSULTANT QUALIFICATION QUESTIONNAIRE Attachment "B"

PROJECT NAME	DATE (DAY, MONTH, YEAR) August 21, 2023	FEIN 11-2537074
1. FIRM NAME Greenman-Pedersen, Inc.	2. HOME OFFICE BUSINESS ADDRESS 11000 Broken Land Parkway, Suite 500 Columbia, MD 20144	3. FORMER FIRM NAME

4. HOME OFFICE TELEPHONE	5. ESTABLISHED (YEAR)	6. TYPE OWNERSHIP Individual Corporation Partnership Joint-Venture	6a. WV REGISTERED DBE (Disadvantaged Business Enterprise) YES NO

7. PRIMARY AML DESIGN OFFICE: ADDRESS/ TELEPHONE/ PERSON IN CHARGE/ NO. AML DESIGN PERSONNEL EACH OFFICE
2000 Hampton Center, Suite C, Morgantown, WV 26505
58 Mission Way, Suite 201, Scott Depot, WV 25560

8. NAMES OF PRINCIPAL OFFICERS OR MEMBERS OF FIRM	8a. NAME, TITLE, & TELEPHONE NUMBER - OTHER PRINCIPALS
Douglass Robb, Executive Vice President, Branch Manager Steven Greenman, Chairman of the Board Christer Ericsson, President / Chief Executive Officer Michael Buoncore, Executive Vice President / Chief Financial Officer Denise Carter, Executive Vice President / Chief Strategic Officer	David W. Peake, Sr. Vice President, (443) 753-5469 James (JD) Simpson, Vice President, (304) 881-5225 John (Joey) Gallagher, Assistant Vice President (614) 395-4896

9. PERSONNEL BY DISCIPLINE

118	ADMINISTRATIVE	—	ECOLOGISTS	13	LANDSCAPE ARCHITECTS	141	STRUCTURAL ENGINEERS
1	ARCHITECTS	—	ECONOMISTS	50	MECHANICAL ENGINEERS	**122**	**SURVEYORS**
—	**BIOLOGIST**	46	ELECTRICAL ENGINEERS	—	**MINING ENGINEERS**	112	TRAFFIC ENGINEERS
61	**CADD OPERATORS**	27	ENVIRONMENTALISTS	27	PHOTOGRAMMETRISTS	12	GIS SPECIALISTS
—	CHEMICAL ENGINEERS	2	ESTIMATORS	9	PLANNERS: URBAN/REGIONAL	55	COATINGS ENG/INSPECTORS
204	**CIVIL ENGINEERS**	—	**GEOLOGISTS**	1	SANITARY ENGINEERS	38	DIVERS
388	CONSTRUCTION INSPECTORS	—	HISTORIANS	—	SOILS ENGINEERS	8	FIRE PROTECTION ENGINEER
—	DESIGNERS	1	HYDROLOGISTS	—	SPECIFICATION WRITERS	221	OTHER
—	DRAFTSMEN						

1669 TOTAL PERSONNEL

TOTAL NUMBER OF WV REGISTERED PROFESSIONAL ENGINEERS IN PRIMARY OFFICE: _____
***RPEs other than Civil and Mining must provide supporting documentation that qualifies them to supervise and perform this type of work.**

10. HAS THIS JOINT-VENTURE WORKED TOGETHER BEFORE? ☐ YES ☐ NO

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

NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No

12. A. Is your firm experienced in Abandoned Mine Lands Remediation/Mine Reclamation Engineering?

YES Description and Number of Projects:_____

_____

NO

B. Is your firm experienced in Soil Analysis?

YES Description and Number of Projects:_____

_____

NO

C. Is your firm experienced in hydrology and hydraulics?

YES Description and Number of Projects:_____

_____

NO

D. Does your firm produce its own Aerial Photography and Develop Contour Mapping?

YES Description and Number of Projects:_____

_____

NO

E. Is your firm experienced in domestic waterline design? (Include any experience your firm has in evaluation of aquifer degradation as a result of mining.)

YES Description and Number of Projects:_____

_____

NO

F. Is your firm experienced in Acid Mine Drainage Evaluation and Abatement Design?

YES Description and Number of Projects:_____

_____

NO

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

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:

Brief Explanation of Responsibilities

_____

_____

_____

EDUCATION (Degree, Year, Specialization)

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	REGISTRATION (Type, Year, State)

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

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:

Brief Explanation of Responsibilities

_____

_____

_____

EDUCATION (Degree, Year, Specialization)

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	REGISTRATION (Type, Year, State)

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

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Brief Explanation of Responsibilities _____ _____ _____			
EDUCATION (Degree, Year, Specialization)			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS		REGISTRATION (Type, Year, State)	

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

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Brief Explanation of Responsibilities _____ _____ _____			
EDUCATION (Degree, Year, Specialization)			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS		REGISTRATION (Type, Year, State)	

14. PROVIDE A LIST OF SOFTWARE AND EQUIPMENT AVAILABLE IN THE PRIMARY OFFICE WHICH WILL BE USED TO COMPLETE AML DESIGN SERVICES

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

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
1. 90 Grandview Ave North East MD Project Type: Survey	Tom Nickerson	Topographic & Boundary Survey:	$1,000.00	90%
2. 2020 ODOT D11 CI OE #34452 Project Type: Inspection	Ohio Department of Transportation Philadelphia, OH	GPI, as the prime consultant will perform construction administration and inspection services.	$750,000.00	90%
3. 2020 WVDOH District 5 Construction Inspection Services Project Type: Inspection	West Virginia Department of Transportation Burlington, WV	GPI, as the prime consultant will perform construction inspection services.	$2,500,000	90%
4. Fort Detrick Area B Landfill-Plexus Project Type: Survey	Plexus Scientific Corporation Alexandria, VA	Yearly topo of landfill to determine earth quantity.	$19,500.00	60%
5. 2020 ODOT D03; MED-SR18-12.99; #35362 Project Type: Inspection	Ohio Department of Transportation Ashland, OH	GPI, as the prime consultant will perform construction administration and inspection services.	$1,600,000	85%
6. 2021 WVDOH Statewide CI Services Project Type: Inspection	West Virginia Department of Transportation Charleston, WV	GPI, as the prime consultant will perform construction inspection services.	$5,000,000.00	75%
7. OTIC 58-21-02 & 58-22-01 Mainline Toll Plaza MP 211/239 Project Type: Inspection	Ohio Turnpike & Infrastructure Commission Berea, OH	GPI has been awarded a Contract for CA/CI services foe toll collection system improvements.	$1,065,000.00	85%
8. 2021 ODOT D6 UNI-033-24.87 #36761 Project Type: Inspection	Ohio Department of Transportation Akron, OH	GPI, as the prime consultant will perform construction administration and inspection services.	$1,000,000.00	85%

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

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
9. Lorain Co, Broadway Ave.; CA/CI; Agmt 37293 PID 111587 Project Type: Inspection	Lorain County, Ohio Elyria, OH	GPI, as the prime consultant will perform construction administration and inspection services.	$340,000	85%
10. Kings Valley Rd – Wormald Project Type: Survey	Wormald Commercial LLC Frederick, MD	Soil Boring Stake out	$3,150	90%
11. Corridor H - Parsons to Davis Project Type: Highway	West Virginia Department of Transportation Charleston, WV	Oversight and plan preparation for a section of APD Corridor H	$40,961,229	50%
12. 417 Main St Laurel - Easement Project Type: Survey	SOLH, LLC Bethesda, MD	Prepare Easement	$6,100	90%
13. Layton Ct Lot 3 Project Type: Survey	Ali Tomasini Frederick, MD	"New Single Family House Construction Stake out	$1,375.00	90%
14. Fallswood HOA Retaining Wall Project Type: Survey	Fallswood Court HOA Falls Church, VA	Retaining Wall Monitoring	$11,550.00	30%
15. Carter Bridge/Brooks Street Construction and Coatings Inspection Project Type: Inspection	West Virginia Department of Transportation Charleston, WV	GPI, as the prime consultant will perform construction/coatings inspection services.	$5,677,389	75%
16. Navarre/Coy Intersection Improvement Project Type: Inspection	City of Oregon, Ohio Oregon, OH	GPI has been selected to perform CA/CI Services on the Navarre/Coy project.	$192,608.00	85%
17. Beech Tree ALTA Project Type: Survey	Ryko Development Inc. Houston, TX	ALTA/NSPS Land Title Survey	$20,900.00	90%

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

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
18. Shorebird St – Monocacy Project Type: Survey	Monocacy Center Land, LLC Frederick, MD	Construction Layout of Shorebird Street	$19,135	90%
19. 18301 Clagett Landing Road Project Type: Survey	Fidelity National Law Group McLean, VA	Property Line Determination	$8,750.00	90%
20. Portage County Engineer – 2022 Subdivisions Project Type: Inspection	Portage County, Ohio Ravenna, OH	The Portage County Engineer has contracted GPI to perform CA/CI services for various subdivions throughout the County.	$91,965	90%
21. Franklin County Engineer – Amlin Area Infrastructure Project Type: Inspection	Franklin County, OH Coumbus, OH	GPI, as the prime consultant will perform construction administration and inspection services.	$312,158	80%
22. 2022 City of Solon; Citywide CA/CI Services Project Type: Inspection	City of Solon Solon, OH	City of Solon has contracted GPI to perform CA/CI services	$750,000.00	80%
23. Foxhall Solar Joule - PAI #06-0230 /20450 Middletown Road Project Type: Survey	Joule, LLC New Orleans, LA	Construction stake out of a Solar Farm	$28,500	50%
24. Village Center Parcel A Bk H ALTA Project Type: Survey	Village Center III, LLC Frederick, MD	ALTA/NSPS Land Title Survey	$4,610	90%
25. USACE Huntington Great Lakes & Ohio River Project Type: Survey	United States Army Corp of Engineers	Indefinite Delivery Contract (IDC) for Geospatial Services for the US Army Corps of Engineers (USACE), Great Lakes and Ohio River Division	$12,000,000	90%

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

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
26. 2022 SHA Survey and SUE BCS 2020-02D Project Type: Survey	Maryland State Highway Administration Baltimore, MD	Comprehensive Geomatics Engineering Services contract to include: Land Surveying, Geodetic Engineering, Aerial Photogrammetry, Scanning, LIDAR and other Remote Sensing technologies, Computer Aided Drafting & Design (CADD), Mapping, Plat Preparation, Deed Description Preparation, Survey Document preservation, and database development, Geographic Information System (GIS) services, Utility Designation and Location, and other specialized field investigations, land records research, field personnel support, and office support services.	$6,500,000	20%
27. WVDOH, 2022 Statewide Construction Inspection Services Project Type: Inspection	West Virginia Department of Transportation Charleston, WV	GPI was awarded this contract for statewide construction inspection services on a task order basis.	$5,000,000.00	50%
28. DNR Whites Ferry Project Type: Survey	Maryland Dept. of Natural Resources Annapolis, MD	Boundary Survey	$12,500.00	90%
29. Cherrywood Caroline County MD Project Type: Survey	Landpoint, LLC Fort Worth, TX	Topographic Survey	$14,200	80%
30. Sparrows Point Wind SJM Project Type: Survey	S.J. Martenet & Co. Baltimore, MD	Topographic Survey	$0.00	80%
31. Holy Communion Fallston MD EQR 3893 Project Type: Survey	Environmental Quality Resources, Inc. Millersville, MD	Sediment Control/Limits of Disturbance	$8,625.00	80%
32. Stark County Engineer Farber St Bridge Replacement Project Type: Inspection	Stark County Ohio Canton, OH	Construction Inspection and Construction Administration, and associated field testing for the Elyria Avenue (CR95) resurfacing project in Elyria Township in Lorain County	$350,000.00	20%

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

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
33. SUM-008-01.75 Cons Insp of SR-8-1.75 Major Bridge Structure Project Type: Inspection	Ohio Department of Transportation Akron, OH	Replacement of the SR-8-1.75 Major Bridge Structure with 2 new major bridge structures over the Cuyahoga river valley located between Glenwood and Perkins Avenues, in the City of Akron	$6,000,000.00	20%
34. Bamby Property Line Stakes, 2715 Pumpkin Street Project Type: Survey	Mr. Scott Bamby Clinton, MD	GPI will recover and verify the location of the property corners	$1,450.00	40%
35. OH, Columbia West River Rd, Lorain Co Engineer Project Type: Inspection	Lorain County, Ohio Elyria, OH	Construction Inspection and Construction Administration, and associated field testing	$27,639.00	50%
36. Cleveland Metroparks 2023 Construction Inspection Project Type: Inspection	Cleveland Metroparks Clevelant, OH	Construction Management and Inspections Services	$26,500	25%
37. Village Center 1, 2, and 3 Wormans Mill As-Built Project Type: Survey	Village Center III, LLC Frederick, MD	As Built Red Line for City of Frederick	$19,800.00	15%
38. Beacon House Square Condo 3549 Old Frederick Rd Plat Project Type: Survey	Beacon Communities LLC Boston, MD	Prepare Condominium Plat	$14,250.00	10%

TOTAL NUMBER OF PROJECTS: 38

TOTAL ESTIMATED CONSTRUCTION COSTS: $90,339,883.00

NOTE: THIS LIST IS A REPRESENTATION OF PROJECTS FROM OUR COLUMBIA, MD OFFICE, NOT FIRMWIDE

16. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS SERVING AS A SUB-CONSULTANT TO OTHERS

PROJECT NAME, TYPE AND LOCATION	NATURE OF FIRMS RESPONSIBILITY	NAME AND ADDRESS OF OWNER	ESTIMATED COMPLETION DATE	ESTIMATED CONSTRUCTION COST	
				ENTIRE PROJECT	YOUR FIRMS RESPONSIBILITY
1. 2018 MTA On-Call Structural Engineering, Baltimore MD Project Type: 02: Bridge/Structural Eng.	Engineering and technical services for the design of structural projects, including alterations, improvements and rehabilitation of aerial structures, bridges, buildings and other miscellaneous work at MTA rail, bus and other facilities.	Maryland Transit Administration Baltimore, MD	2023	$600,000	$600,000
2. 2020 ODOT D05; MUS-70-10.49; #34904 Zanesville, OH Project Type: Inspection	GPI, as the sub-consultant, was awarded a contract to provide construction inspection services for ODOT District 5	Ohio Department of Transportation	2026	$330,000.00	$330,000.00
3. 2020 ODOT D5 CI OE #35370 Varies Project Type: Inspection	GPI, as the sub-consultant, was awarded a contract to provide construction inspection services for ODOT District 5	Ohio Department of Transportation	2023	$95,000.00	$95,000.00
4. 2022 ODOT D03 WAY-083 # 36282 Wooster, OH Project Type: Inspection	GPI, as the sub-consultant, was awarded a contract to provide construction inspection services for ODOT District 3.	Ohio Department of Transportation	2023	$50,000.00	$50,000.00
5. 2021 ODOT District 9 OE 36775 (Terracon) Varies Project Type: Inspection	GPI, as a sub to Terracon, is providing construction administration and inspection services for Ohio Department of Transportation	Ohio Department of Transportation	2024	$220,000.00	$220,000.00
6. BCS 2021-21 Bridge Condition Insp. Complex and Movable Bridges, Statewide Varies Project Type: Inspection	Condition inspection for routine, complex and/or movable bridge types, including inspection and engineering evaluate complex and/or movable bridge types, including inspection and engineering evaluation of structural, mechanical and electrical systems for movable bridges, statewide.	Maryland State Highway Administration	2028	$200,000.00	$200,000.00
7. Meditation Center 3325 Franconia Rd Alexandria, VA Project Type: Survey	Topographic Survey	Ashenafi Worku	2023	$12,750.00	$12,750.00
8. US35 Settlement Study Scott Depot, WV Project Type: Survey	Survey, Mapping and Aerial Photogrammetry of approximately 20 miles of existing US 35 along with developing plans showing as designed vs. current conditions.	West Virginia Department of Transportation	2023	$299,457.00	$299,457.00
9. CE&I Services for I-26 Reconstruction and Bridge Rehabilitations - Sub to CES Scott Depot, WV Project Type: Survey	Consulting Engineering and Inspection (CE&I) Services to provide SCDOT with oversight of all project management, contract management and construction activities to verify Contractor compliance with contract provisions, plans and specifications.	South Carolina Dept of Transportation	2026	$691,626.97	$691,626.97

16. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS SERVING AS A SUB-CONSULTANT TO OTHERS

PROJECT NAME, TYPE AND LOCATION	NATURE OF FIRMS RESPONSIBILITY	NAME AND ADDRESS OF OWNER	ESTIMATED COMPLETION DATE	ESTIMATED CONSTRUCTION COST	
				ENTIRE PROJECT	YOUR FIRMS RESPONSIBILITY
10. Northeast Park SWM Retrofit and Stream Restoration, Rockville, MD Project Type: Survey	GPI to Provide stakeout of the limits of disturbance at a 50 foot interval and major breaks. All stakes will be marked LOD for limits of disturbance. The limits will be based on the approved construction plans	Environmental Quality Resources, Inc.	2023	$23,600.00	$23,600.00
11. Yank Marine USCG Inspection Ocean View, NJ Project Type: Inspection	Provide NACE inspection for US Coast Guard MLB underwater hull renewal.	Yank Marine Services LLC	2023	$50,000.00	$50,000.00
12. 2022 ODOT D3 CI #36746 Scott Depot, WV Varies Project Type: Inspection	GPI, as the sub-consultant to TIS will perform perform construction/coatings inspection services at various locations throughout District 3. Projects will be assigned via task order process.	Ohio Department of Transportation	2023	$100,000.00	$100,000.00
13. ODOT#38158, 2023 District 12 Compaction Scott Depot, WV Varies Project Type: Inspection	District 12 construction inspection services for Calendar Years 2023-2024 soil and compaction testing and provide assistance for the District Test Lab.	Ohio Department of Transportation	2024	$200,000.00	$200,000.00
14. SCDOT, I-95 over Lake Marion Bridge Replacements, Clarendon and Orangeburg Counties Lake Marion, SC Project Type: Survey	GPI Columbia (West Virginia Field Surveys) will provide a party chief equipped with a survey vehicle, robotic total station, GNSS receivers and all relative accessories.	GPI Geospatial, Inc.	2023	$5,362.00	$5,362.00
15. NSRC Boundary/Corridor Survey Jackson Phase 1 AL Project Type: Survey	GPI Columbia (West Virginia Field Surveys) will provide a party chief equipped with a survey vehicle, robotic total station, GNSS receivers and all relative accessories.	GPI Geospatial, Inc.	2023	$14,672.80	$14,672.80
16. ODOT VAR-D12-CY Construction Inspection - sub to QCS Varies Project Type: Inspection	District 12 contract for construction inspection services for Calendar Years 2023-2024.	Ohio Department of Transportation	2025	$400,000.00	$400,000.00
17. ODOT VAR-D12-CY construction inspection services - sub to Hill Varies Project Type: Inspection	District 12 contract for construction inspection services for Calendar Years 2023-2024.	Ohio Department of Transportation	2025	$280,000.00	$280,000.00

16. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS SERVING AS A SUB-CONSULTANT TO OTHERS

PROJECT NAME, TYPE AND LOCATION	NATURE OF FIRMS RESPONSIBILITY	NAME AND ADDRESS OF OWNER	ESTIMATED COMPLETION DATE	ESTIMATED CONSTRUCTION COST	
				ENTIRE PROJECT	YOUR FIRMS RESPONSIBILITY
18. ODOT VAR-D12-CY Construction Inspection services sub to MBI Varies Project Type: Inspection	District 12 contract for construction inspection services for Calendar Years 2023-2024.	Ohio Department of Transportation	2025	$275,000.00	$275,000.00
19. SHA, BCS 2016-01C Task 23 Superelevation Review on I-68 E sub to iDesign Flintstone, MD Project Type: Survey	Aerial Acquisition – Aerial LiDAR UAS based LiDAR acquisition and extraction of 1.4 miles of I-68 east of MV Smith Road in Flintstone MD	Maryland State Highway Administration	2024	$20,000.00	$20,000.00
20. OTIC, Project 43-22-06 Bridge Repair and Rehab Ohio Turnpike over Cuyahoga River MP 176.9 Peninsula, OH Project Type: Inspection	Bridge Repair and Rehabilitation, Ohio Turnpike over Cuyahoga River M.P. 176.9, located at about Milepost 176.9 in Summit County, Ohio	Ohio Turnpike & Infrastructure Commission	2023	$200,000.00	$200,000.00
21. OH, Mahoning Count Eng Bridge Rehab and Painting Youngstown, OH Project Type: Inspection	The services include Construction Inspection and Construction Administration services and material testing services for: The construction project consists of the rehabilitation of four (4) large span steel beam structures located in Mahoning County.	Mahoning County, Ohio	2023	$100,000.00	$100,000.00
22. Cabin Branch Stream and Wetland Mitigation, Sub to EQR Clarksburg, MD Project Type: Survey	Provide stakeout of the limits of disturbance at 50 feet intervals and major breaks. All stakes will be marked LOD for limits of disturbance. The limits will be based on the approved construction plans.	Environmental Quality Resources, Inc.	2024	$14,200.00	$14,200.00
23. DSP Troop 5 Pre-engineered Metal Bldg Bridgeville, DE Project Type: Survey	Topographic Survey: Plan will be prepared for use in future design tasks.	Site Studios, Inc.	2023	$4,500.00	$4,500.00
24. Sandstone WV CSX GEO Sandstone, WV Project Type: Survey	GPI Columbia will provide a boundary/corridor survey of a section of track from milepost CA 365.18 to CA 365.55 along the New River Subdivision, Southern East Division in Sandstone, WV.	GPI Geospatial, Inc.	2024	$11,500.00	$11,500.00

NOTE: THIS LIST IS A REPRESENTATION OF PROJECTS FROM OUR COLUMBIA, MD OFFICE, NOT FIRMWIDE

17. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM WAS THE DESIGNATED ENGINEER OF RECORD				
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
1. 2021 WVDOH Statewide CI Services, Varies WV. GPI, as the prime consultant performed construction inspection services. Project Type: 19: Construction Inspection	West Virginia Department of Transportation Charleston, WV	$2,500,000	2022	N/A
2. 2021 WVDOH Statewide Coatings Services, Varies WV. GPI has been selected to provide statewide coatings inspection services, project management, and/or technical expertise for WVDOH bridge painting program. Project Type: 19: Construction Inspection	West Virginia Department of Transportation Charleston, WV	$2,500,000	2022	N/A
3. 2021 WVDOH Statewide QAM Services, Statewide, WV. GPI, as the prime consultant will perform Quality Assurance Management (QAM) Services. Project Type: 19: Construction Inspection	West Virginia Department of Transportation Charleston, WV	$2,500,000	2022	N/A
4. Indian Creek Bridge Replacement, Mandeville, WV. Single span bridge replacement under a design bid build contract. Project Type: 02: Bridge/Structural Eng.	West Virginia Department of Transportation Charleston, WV	$529,854	2021	N/A
5. Indian Creek Post Design Services, Mandeville, WV. Shop drawing review for a single span galvanized and welded steel plate bridge. Project Type: 02: Bridge/Structural Eng.	West Virginia Department of Transportation Charleston, WV	$42,262	2021	N/A
6. North Whites Addition Bridge, Logan, WV. Single span bridge replacement under a design bid build contract. Project Type: 02: Bridge/Structural Eng.	West Virginia Department of Transportation Charleston, WV	$434,003	2021	N/A
7. North Whites Addition Post Design Service, Logan, WV. Shop drawing review for a single span prestressed concrete bridge. Project Type: 02: Bridge/Structural Eng.	West Virginia Department of Transportation Charleston, WV	$24,052	2021	N/A
8. Northview Overpass Bridge, Clarksburg, WV. Single span bridge replacement under a design-bid-build contract. Project Type: 02: Bridge/Structural Eng.	West Virginia Department of Transportation Charleston, WV	$1,163,643	2021	N/A
9. WVDOH 2017 ID/IQ Contract, Varies, WV. ID/IQ project for work in WVDOH District 6.. Project Type: 02: Bridge/Structural Eng.	West Virginia Department of Transportation Moundsville, WV	$750,000	2021	N/A

17. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM WAS THE DESIGNATED ENGINEER OF RECORD				
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
10. 2019 WVDOH Statewide QAM Services, Statewide, WV. GPI, as the prime consultant will perform Quality Assurance Management (QAM) Services. Project Type: 19: Construction Inspection	West Virginia Department of Transportation Charleston, WV	$2,500,000	2021	N/A
11. 2019 WVDOH Statewide CI Services, Varies (see each task) WV. GPI, as the prime consultant will perform construction inspection services. Project Type: 19: Construction Inspection	West Virginia Department of Transportation Charleston, WV	$2,500,000	2020	N/A
12. 2019 WVDOH Statewide QAM Services, Varies (see each assignment) WV. GPI, as the prime consultant will perform construction inspection services. Project Type: 19: Construction Inspection	West Virginia Department of Transportation Charleston, WV	$2,500,000	2020	N/A
13. Broad Hollow Bridge Rehabilitation, Wayne WV. Superstructure replacement on twin three span structures carrying I-64 over County Route 2 in Ceredo, WV. Project Type: 02: Bridge/Structural Eng.	West Virginia Department of Transportation Charleston, WV	$563,643	2020	N/A
14. Broad Hollow Post Design Services, Wayne WV. Superstructure replacement on twin three span structures carrying I-64 over County Route 2 in Ceredo, WV. Project Type: 02: Bridge/Structural Eng.	West Virginia Department of Transportation Charleston, WV	$35,314	2020	N/A
15. Contract Award Manual, Charleston WV. Contract Award Manual Review, Research, Coordination, and Update Services for the West Virginia Department of Transportation, Division of Highways. Project Type: 06: Highways	West Virginia Department of Transportation Charleston, WV	$239,000	2020	N/A
16. Cook Bridge, Wetzel WV. Single span bridge replacement under a design-bid-build contract. Project Type: 02: Bridge/Structural Eng.	West Virginia Department of Transportation Moundsville, WV	$250,000	2020	N/A
17. District 6 Slide Repairs and Duties as Assigned, Wheeling WV. GPI, as the prime consultant will perform construction inspection services. Project Type: 19: Construction Inspection	West Virginia Department of Transportation Moundsville, WV	$120,403	2020	N/A
18. Duerns Run Bridge Survey, Wetzel WV. Survey for a single span bridge replacement under a design-bid-build contract. Project Type: 02: Bridge/Structural Eng.	West Virginia Department of Transportation Moundsville, WV	$25,000	2020	N/A

17. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM WAS THE DESIGNATED ENGINEER OF RECORD				
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
19. Indian Creek Bridge Replacement, Mandeville WV. Single span bridge replacement under a design bid build contract. Project Type: 02: Bridge/Structural Eng.	West Virginia Department of Transportation Charleston, WV	$529,854	2020	N/A
20. Joseph Homer Lloyd Bridge WVDOH D-1, Nitro WV. GPI is providing full time coatings inspection services for this bridge painting project in Nitro, WV for WVDOH Project Type: 35: Corrosion Cont./Coatings	West Virginia Department of Transportation Charleston, WV	$78,617	2020	N/A
21. Main Street Bridge Oak Hill, WV WVDOH D-9, Oak Hill WV. GPI is providing full time coatings inspection services for this bridge painting project in Oak Hill, WV for WVDOH District-9 Project Type: 35: Corrosion Cont./Coatings	West Virginia Department of Transportation Lewisburg, WVCharleston, WV	$158,679	2020	N/A
22. North Whites Addition +1 Bridge Replacement, Charleston WV. Single span bridge replacement under a design bid build contract.for the West Virginia Department of Transportation, Division of Highways. Project Type: 06: Highways	West Virginia Department of Transportation Charleston, WV	$434,003	2020	N/A
23. Northview Overpass Bridge, Clarksburg WV. Single span bridge replacement under a design-bid-build contract. Project Type: 06: Highways	West Virginia Department of Transportation Charleston, WV	$1,108,734	2020	N/A
24. Patrick Street Bridge Inspection, Charleston WV. Project Type: 02: Bridge/Structural Eng.	West Virginia Department of Transportation Charleston, WV	$0	2020	N/A
25. Scheidler Run Bridge, Wetzel WV. Single span bridge replacement under a design-bid-build contract. Project Type: 02: Bridge/Structural Eng.	West Virginia Department of Transportation Moundsville, WV	$250,000	2020	N/A
26. Wade Bridge, Wetzel WV. Single span bridge replacement under a conventional design bid build contract. Project Type: 02: Bridge/Structural Eng.	West Virginia Department of Transportation Moundsville, WV	$250,000	2020	N/A
27. West Virginia US 35 Design-Build QAM, Henderson WV. Quality Assurance Management (QAM) services and related duties as required for the upgrade of US 35 from WV 869 to Mason CR 40 in Putnam and Mason Counties, West Virginia. Project Type: 19: Construction Inspection	West Virginia Department of Transportation Charleston, WV	$10,604,700	2020	N/A

17. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM WAS THE DESIGNATED ENGINEER OF RECORD				
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
28. WV D2 CI Sgt Jackie L Waymire, Huntington WV. GPI is providing full time coatings inspection services for the bridge painting projects in WV for WVDOH Project Type: 35: Corrosion Cont./Coatings	West Virginia Department of Transportation Charleston, WV	$243,203	2020	N/A
29. WV D2 CI Sgt Jackie L Waymire, Huntington WV. GPI, as the prime consultant will perform construction inspection services. Project Type: 19: Construction Inspection	West Virginia Department of Transportation Huntington, WV	$35,850	2020	N/A
30. WV D7 Crawford Arch Bridge, Crawford WV. GPI, as the prime consultant will perform construction inspection services. Project Type: 19: Construction Inspection	West Virginia Department of Transportation Weston, WV	$194,154	2020	N/A
31. WVDOH 2017 ID/IQ Contract, Varies (see each assignment) WV. ID/IQ project for work in WVDOH District 6. Project Type: 02: Bridge/Structural Eng.	West Virginia Department of Transportation Moundsville, WV	$750,000	2020	N/A
32. WVDOH AASHTOWare Implementation Services, Charleston WV. GPI, as the prime consultant will perform construction inspection services. Project Type: 19: Construction Inspection	West Virginia Department of Transportation Charleston, WV	$141,869	2020	N/A
33. WVDOH College Street/ Mineral Road, Glenville WV. GPI, as the prime consultant will perform construction inspection services. Project Type: 19: Construction Inspection	West Virginia Department of Transportation Weston, WV	$14,618	2020	N/A
34. WVDOH Construction Manual Review Services, Charleston WV. GPI, as the prime consultant will perform construction inspection services. Project Type: 19: Construction Inspection	West Virginia Department of Transportation Charleston, WV	$82,091	2020	N/A
35. WVDOH D8 Springstone Run Bridge, Elkins WV. GPI, as the prime consultant will perform construction inspection services. Project Type: 19: Construction Inspection	West Virginia Department of Transportation Charleston, WV	$46,242	2020	N/A
36. WVDOH District 2 Contract Finalization Services, Huntington WV. GPI, as the prime consultant will perform construction inspection services. Project Type: 19: Construction Inspection	West Virginia Department of Transportation Huntington, WV	$90,666	2020	N/A

17. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM WAS THE DESIGNATED ENGINEER OF RECORD				
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
37. WVDOH District 4 Finalization Services, Clarksburg WV. GPI, as the prime consultant will perform construction inspection services. Project Type: 19: Construction Inspection	West Virginia Department of Transportation Clarksburg, WV	$235,590	2020	N/A
38. Nutter Farm Bridges EB & WB, Petroleum WV. GPI is providing full time coatings inspection services for bridge painting projects in WV for the WVDOH. Project Type: 35: Corrosion Cont./Coatings	West Virginia Department of Transportation Charleston, WV	$29,365	2019	N/A
39. Statewide Finalization Services – Materials, Charleston WV. GPI, as the prime consultant will perform construction inspection services. Project Type: 19: Construction Inspection	West Virginia Department of Transportation Charleston, WV	$283,007	2019	N/A
40. Statewide Finalization Services for Contract Administration, Weston WV. GPI, as the prime consultant will perform construction inspection services. Project Type: 19: Construction Inspection	West Virginia Department of Transportation Charleston, WV	$464,987	2019	N/A
41. WVDOH – D5 Small Structures, Varies (see each assignment) WV. GPI, as the prime consultant will perform construction inspection services. Project Type: 19: Construction Inspection	West Virginia Department of Transportation Charleston, WV	$750,000	2019	N/A
42. WVDOH – District 5 Resurfacing. GPI, as the prime consultant will perform construction inspection services. Project Type: 19: Construction Inspection	West Virginia Department of Transportation Charleston, WV	$750,000	2019	N/A
43. WVDOH – District 5 Slides. GPI, as the prime consultant will perform construction inspection services. Project Type: 19: Construction Inspection	West Virginia Department of Transportation Charleston, WV	$750,000	2019	N/A
44. WVDOH – District 7 Misc Small Structures, Weston WV. GPI, as the prime consultant will perform construction inspection services. Project Type: 19: Construction Inspection	West Virginia Department of Transportation Weston, WV	$208,651	2019	N/A
45. WVDOH – District 7 Resurfacing. GPI, as the prime consultant will perform construction inspection services. Project Type: 19: Construction Inspection	West Virginia Department of Transportation Charleston, WV	$750,000	2019	N/A

17. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM WAS THE DESIGNATED ENGINEER OF RECORD				
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
46. WVDOH – District 7 Slides. GPI, as the prime consultant will perform construction inspection services. Project Type: 19: Construction Inspection	West Virginia Department of Transportation Charleston, WV	$750,000	2019	N/A
47. WVDOH – District 7 Small Structures. GPI, as the prime consultant will perform construction inspection services. Project Type: 19: Construction Inspection	West Virginia Department of Transportation Charleston, WV	$750,000	2019	N/A
48. WVDOH – District 8 Materials. GPI, as the prime consultant will perform construction inspection services. Project Type: 19: Construction Inspection	West Virginia Department of Transportation Charleston, WV	$750,000	2019	N/A
49. WVDOH – District 8 Resurfacing. GPI, as the prime consultant will perform construction inspection services. Project Type: 19: Construction Inspection	West Virginia Department of Transportation Charleston, WV	$750,000	2019	N/A
50. WVDOH – District 8 Slides. GPI, as the prime consultant will perform construction inspection services. Project Type: 19: Construction Inspection	West Virginia Department of Transportation Charleston, WV	$750,000	2019	N/A
51. WVDOH – District 8 Small Structures. GPI, as the prime consultant will perform construction inspection services. Project Type: 19: Construction Inspection	West Virginia Department of Transportation Charleston, WV	$750,000	2019	N/A
52. WVDOH D7 I-79 Exit 99 SB Off Ramp, Weston WV. GPI, as the prime consultant will perform construction inspection services. Project Type: 19: Construction Inspection	West Virginia Department of Transportation Weston, WV	$253,405	2019	N/A
53. WVDOH D-8 Pendleton Co. Cherry Grove Bridge, Cherry Grove WV. GPI is providing full time coatings inspection services for bridge painting projects in WV for the WVDOH Project Type: 35: Corrosion Cont./Coatings	West Virginia Department of Transportation Charleston, WV	$15,100	2019	N/A
54. WVDOH D-9 Greenbrier White Sulphur Springs Bridges US-60, White Sulphur Springs WV. GPI is providing full time coatings inspection services for bridge painting projects in WV for the WVDOH Project Type: 35: Corrosion Cont./Coatings	West Virginia Department of Transportation Charleston, WV	$46,608	2019	N/A

17. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM WAS THE DESIGNATED ENGINEER OF RECORD				
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
55. WVDOH District 4 Materials Finalization, Fairmont WV. GPI, as the prime consultant will perform construction inspection services. Project Type: 19: Construction Inspection	West Virginia Department of Transportation Clarksburg, WV	$193,265	2019	N/A
56. WVDOH District 4 Resurfacing and Assigned Projects, Clarksburg WV. GPI, as the prime consultant will perform construction inspection services. Project Type: 19: Construction Inspection	West Virginia Department of Transportation Charleston, WV	$130,321	2019	N/A
57. 2015 WVDOH QAM for PPP B&G Facilities, Charleston WV. Quality Assurance Management (QAM) serviced and related duties as required for the design and construction of nine (9) headquarter facilities for county and substation organizations located throughout West Virginia. Project Type: 19: Construction Inspection	West Virginia Department of Transportation Charleston, WV	$7,075,300	2018	N/A
58. 2017 COAT WVDOH – Statewide Coatings Inspection Services, Charleston WV. GPI was awarded a statewide coatings inspection contract for the West Virginia Department of Highways. Project Type: 35: Corrosion Cont./Coatings	West Virginia Department of Transportation Charleston, WV	$1,500,000	2018	N/A
59. WVDOH Statewide Construction Inspection Services, Charelston WV. Greenman-Pedersen Inc. was awarded this two year contract to provide construction inspection services statewide for the West Virginia Department of Highways. Project Type: 19: Construction Inspection	West Virginia Department of Transportation Charleston, WV	$1,500,000	2018	N/A
60. 2015 WVDOH – Statewide Coatings Inspection, Charleston WV. GPI was awarded a statewide contract to provide coatings inspection services for the West Virginia Department of Highways. Project Type: 35: Corrosion Cont./Coatings	West Virginia DOT, DOH Consulting Services Section Charleston, WV	$1,500,000	2016	N/A
61. 2015 WVDOH Statewide QAM, Charleston WV. Quality Assurance Management (QAM) services and related duties as required on various Design-Build projects throughout the State. Project Type: 19: Construction Inspection	West Virginia Department of Transportation Charleston, WV	$125,000	2016	N/A
62. 2013 WVDOH Statewide Coatings Insp. GPI was awarded a statewide contract for the West Virginia Department of Highways to provide full time coatings inspection. Project Type: 35: Corrosion Cont./Coatings	West Virginia DOT, DOH Consulting Services Section Charleston, WV	$1,500,000	2014	N/A

17. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM WAS THE DESIGNATED ENGINEER OF RECORD				
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
63. 2013 WVDOH Statewide Mapping. Aerotriangulation, photogrammetric mapping and 3D Laser Scanning statewide. Project Type: 36: Aerial Photogrammetry	West Virginia Department of Transportation Charleston, WV	$1,500,000	2014	N/A
64. 2011 WVDOH Statewide Coatings Insp. WV. GPI was awarded a statewide contract for the West Virginia Department of Highways to provide full time coatings inspection. Project Type: 35: Corrosion Cont./Coatings	West Virginia DOT, DOH Consulting Services Section Charleston, WV	$750,000	2012	N/A
65. 1614 St James Rd Shed TCP, Accokeek, MD. Plot plan for shed permit Project Type 17: Survey/GPS/GBLS	Herbert Mitchel Accokeek, MD	$1,250	2021	N/A
66. 18th St ALTA University of Utah DC. ALTA/NSPS Land Title Survey Project Type: 17: Survey/GPS/GBLS	University of Utah Salt Lake City, UT	$4,800	2021	N/A
67. 2020 Bridge Rehabilitation; CA/CI; #43-19-05, North Royalton, OH. GPI, as the prime consultant will perform construction administration and inspection services. Project Type: 19: Construction Inspection	Ohio Turnpike & Infrastructure Commission Berea, OH	$251,885	2021	N/A
68. 2360 Pulaski North East MD InSite, North East, MD. Surveying Services Project Type: 17: Survey/GPS/GBLS	InSite Development Services, LLC Oak Brook, IL	$7,000	2021	N/A
69. Beechtree Presidential Golf Club, Upper Marlboro, MD. Exhibit for the proposed marketing and sale of the Beechtree golf course. Project Type: 17: Survey/GPS/GBLS	Ryko Development Inc. Houston, TX	$35,000	2021	N/A
70. Centreville MD Morris TRC, Centreville, MD., DEscription and sketch for 7.75 acre FRO Easement Project Type: 17: Survey/GPS/GBLS	TRC Companies Inc. West Chester, PA	$4,500	2021	N/A
71. Charlestown Crossing, North East, MD. Project Type: 11: Site Planning/Land Dev.	Klein Enterprises Baltimore, MD	$6,500	2021	N/A

17. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM WAS THE DESIGNATED ENGINEER OF RECORD				
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
72. Ridges HOA, Brandywine, MD. Recover property corners Project Type: 17: Survey/GPS/GBLS	The Ridges Homeowners Association, Inc. Brandywine, MD	$550	2021	N/A
73. St Gregory PLSO, Accokeek, MD. Recover Property Monumentation Project Type: 17: Survey/GPS/GBLS	Roy Heron Accokeek, MD	$950	2021	N/A
74. 114 Deerwood PLSO, Myersville MD. Property Line Stakes Project Type: 17: Survey/GPS/GBLS	Brian Grossnickle Myersville, MD	$500	2020	N/A
75. 2014 Mont Co. Eng for Transportation Facilities, Various (check each task) MD. GPI will prepare construction documents for the design of projects under this open end contract. Projects may include: Transportation Facility Planning, Roadway Projects, Bridge Projects, Intersection and other Traffic Improvements, Bikeway and pedestrian facilities, Storm drain projects, Property Acquisition, parking Facilities, transit Facilities and the environmental permitting that is associated with these types of projects. Project Type: 13: Traffic/Transportation	Montgomery Co., MD Gaithersburg, MD	$2,072,000	2020	N/A
76. 2015 Howard Co. Gen Civil Eng and Survey Serv, Annapolis Junction MD. On Call Contract for Civil Engineering and Surveying Projects including structure design of bridges Project Type: 02: Bridge/Structural Eng.	Howard Co., MD Columbia, MD	$5,525,631	2020	N/A
77. 2015 MSHA Environ Design & Permitting 2012-03C, Annapolis Junction MD. GPI was retained to provide environmental design and permitting services statewide for the Maryland State Highway Administration. Project Type: 05: Environmental Sciences	Maryland State Highway Administration Baltimore, MD	$4,530,000	2020	N/A
78. 2017 DelDOT Statewide Agreement #1821, Dover DE. Statewide Construction Inspection and Related Services for DelDOT Project Type: 19: Construction Inspection	Delaware Dept. of Transportation Dover, DE	$1,400,000	2020	N/A
79. 2018 Lorain Co.; Cooper Foster Park Rd; PID 100171, Amherst OH. GPI has been selected to perform CA/CI Services on the Cooper Foster Park Rd reconstruction project. Project Type: 19: Construction Inspection	Lorain County, Ohio Elyria, OH	$369,619	2020	N/A

17. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM WAS THE DESIGNATED ENGINEER OF RECORD				
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
80. 2018 ODOT D04/11 CI OE #32670, Varies (see each assignment) OH. GPI, as the prime consultant will perform construction administration and inspection services. Project Type: 19: Construction Inspection	Ohio Department of Transportation Akron, OH	$1,800,000	2020	N/A
81. 2019 City of Solon; Citywide CA/CI Services, Solon OH. City of Solon has contracted GPI to perform CA/CI services Project Type: 19: Construction Inspection	City of Solon Solon, OH	$1,450,000	2020	N/A
82. 2019 Lorain County; E31st St. UW Inspection, Lorain OH. GPI was awarded a contract by the Lorain County Engineer's Office for the underwater inspection of the E31st St. bridge located in Lorain, OH. Project Type: 19: Construction Inspection	Lorain County, Ohio Elyria, OH	$9,325	2020	N/A
83. 2019 ODOT D03 CI OE #33165, Varies (see each project) OH. GPI, as the prime consultant, was awarded a contract to provide construction inspection services for ODOT District 3. Project Type: 19: Construction Inspection	Ohio Department of Transportation Ashland, OH	$1,000,000	2020	N/A
84. 2019 ODOT D12 CA/CI OE #32695, Varies (see each assignment) OH. GPI, as the prime consultant will perform construction administration and inspection services. Project Type: 19: Construction Inspection	Ohio Department of Transportation Garfield Heights, OH	$2,000,000	2020	N/A
85. 2019 Stark County Weimer Dr Bridge; PID 103225, Osnaburg Township OH. GPI has been selected to perform CA/CI Services on the Weimer Dr. bridge replacement. Project Type: 19: Construction Inspection	Stark County Ohio Canton, OH	$74,725	2020	N/A
86. 2019 Veterans Trail Phase 3 CA/CI, Hudson OH. GPI, as the prime consultant will perform construction administration and inspection services. Project Type: 19: Construction Inspection	City of Hudson Hudson, OH	$13,772	2020	N/A
87. 2019 Warrensville Center Rd. PID 105935, Shaker Heights OH. GPI is providing construction administration and inspection services for The City of Shaker Heights Project Type: 19: Construction Inspection	City of Shaker Heights Shaker Heights, OH	$242,538	2020	N/A
88. 2020 Fitchville River Road; PID 102915, Wakeman OH. GPI has been selected to perform CA/CI Services. Project Type: 19: Construction Inspection	Huron County, Ohio Norwalk, OH	$128,749	2020	N/A

17. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM WAS THE DESIGNATED ENGINEER OF RECORD				
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
89. 2020 Oregon LUC-Seaman/Yarrow; PID 107148, Oregon OH. GPI has been selected to perform CA/CI Services on two bridge replacements. Project Type: 19: Construction Inspection	City of Oregon, Ohio Oregon, OH	$120,573	2020	N/A
90. BJs Wholesale Bowie MD, Bowie MD. ALTA / NSPS Land Title Survey Old job N:\2000\00161\survey\ Project Type: 17: Survey/GPS/GBLS	HG Bowie Realty, LLC Pittsburgh, PA	$5,850	2020	N/A
91. Boynton law - Fletch's v. Albi, Ocean View NJ. Write opinion report on protective coatings dispute. Project Type: 03: Coastal & Marine	Boynton, Waldron, Doleac, Woodman and Scott, P.A. Portsmouth, NH	$5,500	2020	N/A
92. Centreville MD Morris, Centerville MD. Topo Proposed Entrance Project Type: 17: Survey/GPS/GBLS	TRC Companies Inc. Windsor, CT	$2,750	2020	N/A
93. Condition Assessment of Pedestrian Bridg, Town of University Park MD. Condition Assessment of Pedestrian Bridge Project Type: 02: Bridge/Structural Eng.	Town of University Park University Park, MD	$3,500	2020	N/A
94. De Elec Co-op Greenwood, Greenwood DE. Surveying services to the Delaware Electric Cooperative (DEC). Project Type: 17: Survey/GPS/GBLS	Delaware Electric Cooperative Greenwood, DE	$2,200	2020	N/A
95. DNR Bast South Mtn 32-19, Boonesboro MD. Boundary Survey Project Type: 17: Survey/GPS/GBLS	Maryland Dept. of Natural Resources Annapolis, MD	$10,440	2020	N/A
96. DNR Payne, Rohrersville MD. Boundary Survey Project Type: 17: Survey/GPS/GBLS	Maryland Dept. of Natural Resources Annapolis, MD	$10,493	2020	N/A
97. DNR Weichert South Mtn 29-19, Smithsburg MD. Boundary Survey Project Type: 17: Survey/GPS/GBLS	Maryland Dept. of Natural Resources Annapolis, MD	$9,780	2020	N/A

17. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM WAS THE DESIGNATED ENGINEER OF RECORD				
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
98. F4 Circuit Tie Project-Phase III – Thurmont, Thurmont MD. Topographic and ROW Survey for construction of underground electric grid redundancy. Project Type: 07: Municipal/Public Works	Town of Thurmont Thurmont, MD	$10,920	2020	N/A
99. George Is Landing ALTA Stockton, Stockton MD. ALTA/NSPS Land Title Surveys Project Type: 17: Survey/GPS/GBLS	TRC Companies Inc. Windsor, CT	$16,800	2020	N/A
100. Good HSO – Phoenix, Great Falls VA. House Construction Stake out for single family house Project Type: 17: Survey/GPS/GBLS	Phoenix Builders, Inc. Herndon, VA	$5,850	2020	N/A
101. Heartland Fabrication 156070 Shop Drawing Review VA. Shop drawing review for a steel fabricator on a VDOT bridge project. Project Type: 02: Bridge/Structural Eng.	Heartland Fabrication, LLC Brownsville, PA	$3,000	2020	N/A
102. Hokuf Mitigation Banking, North East MD. Project Type: 11: Site Planning/Land Dev.	Doug Hokuf North East, MD	$3,800	2020	N/A
103. KYTC Agreement # 2018-10-7, Frankfort KY. GPI has been awarded a statewide contract by the Kentucky Transportation Cabinet to provide coatings inspection services along with other related coating services as needed throughout the state. Project Type: 35: Corrosion Cont./Coatings	Kentucky Transportation Cabinet Frankfort, KY	$5,000,000	2020	N/A
104. MD Gibbons Snow Hill, Snow Hill MD. ALTA/NSPS Boundary Survey Gibbons 5844 Worcester Hwy Snow Hill MD 21863 Project Type: 18: Energy Conservation	Forefront Power San Francisco, CA	$11,500	2020	N/A
105. MD Kleinwachter Preston, Preston MD. ALTA/NSPS Boundary Survey Kleinwachter Payne Road Preston, MD 21655 Project Type: 18: Energy Conservation	Forefront Power San Francisco, CA	$10,500	2020	N/A
106. MD White Baltimore, Baltimore MD. ALTA/NSPS Boundary Survey White 9155 Old Court Road Baltimore, MD 21244 Project Type: 18: Energy Conservation	Forefront Power San Francisco, CA	$10,395	2020	N/A

17. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM WAS THE DESIGNATED ENGINEER OF RECORD				
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
107. Muddy Creek EQR at River Valley Ranch, Manchester MD. Stream Restoration Layout CO#1 - Update GPS Model with Revised Grading Project Type: 05: Environmental Sciences	Environmental Quality Resources, Inc. Millersville, MD	$45,250	2020	N/A
108. North East Harbour, North East MD. Project Type: 11: Site Planning/Land Dev.	North East Harbour, LLC Edgewater, MD	$8,500	2020	N/A
109. Purple Line Paint Branch Stream Mitigation, College Park MD. Provide stream restoration construction for Paint Branch Stream Project Type: 17: Survey/GPS/GBLS	Environmental Quality Resources, Inc. Millersville, MD	$18,040	2020	N/A
110. Rising Sun Library, Rising Sun MD. Project Type: 11: Site Planning/Land Dev.	Cecil County Public Library Elkton, MD	$2,732	2020	N/A
111. Rowlesburg Site Elevation, Rowlesburg WV. Site survey to determine FEMA flood plain elevation. Project Type: 17: Survey/GPS/GBLS	Natural Capital Investment Fund Shepherdstown, WV	$1,000	2020	N/A
112. Shoemaker Property Site Plan, Riverdale MD. Provide Site plan for building permit review. Project Type: 11: Site Planning/Land Dev.	Edmonston Associates, LLC Riverdale, MD	$3,200	2020	N/A
113. Steed Property Chevy Chase WC, Chevy Chase MD. Wall Check Project Type: 17: Survey/GPS/GBLS	Acadia, LLC Chevy Chase, MD	$725	2020	N/A
114. Waffle House – Frederick MD, Frederick MD. As Built Project Type: 17: Survey/GPS/GBLS	CBM Consulting, LLC Frederick, MD	$1,460	2020	N/A
115. 16th Street North Arlington, Arlington VA. Boundary and Topographic Survey Project Type: 17: Survey/GPS/GBLS	Donald Lococo Architects, LLC Washington, DC	$2,200	2019	N/A

17. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM WAS THE DESIGNATED ENGINEER OF RECORD				
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
116. 2011 Balt. City Rec & Parks OE #1167. Project Type: 08: Parks/Sports/Rec. Fac.	City of Baltimore Baltimore, MD	$2,500,000	2019	N/A
117. 2014 Mont Co. CMCI & Testing BOA 1011781, varies (see each task) MD. Construction Management and Inspection services, including environmental and professional arborist services. Project Type: 19: Construction Inspection	Montgomery Co., MD Gaithersburg, MD	$1,200,000	2019	N/A
118. 2014 MSHA District 7 Survey and Eng, Annapolis Junction MD. Project Type: 06: Highways	Maryland State Highway Administration Frederick, MD	$2,000,000	2019	N/A
119. 2017 ODOT D12 CI OE #30692, Varies (see each task) OH. GPI, as the prime consultant will perform construction administration and inspection services. Project Type: 19: Construction Inspection	Ohio Department of Transportation Garfield Heights, OH	$1,500,000	2019	N/A
120. 2018 ODOT D11 CI OE #31710, Varies (see each task) OH. GPI, as the prime consultant will perform construction administration and inspection services. Project Type: 19: Construction Inspection	Ohio Department of Transportation New Philadelphia, OH	$750,000	2019	N/A
121. 2019 OTC Coatings #40-19-02, Windham OH. GPI has be awarded a contract to provide coatings administration and inspection services for Ohio Turnpike & Infrastructure Commission Project Type: 35: Corrosion Cont./Coatings	Ohio Turnpike & Infrastructure Commission Berea, OH	$127,750	2019	N/A
122. 2019 OTIC Shop Inspection # 43-18-02, Maumee OH. OTIC has contracted GPI to perform shop inspection of structural steel Project Type: 19: Construction Inspection	Ohio Turnpike & Infrastructure Commission Berea, OH	$104,391	2019	N/A
123. 417 Main St Laurel ALTA, Laurel MD. Boundary Survey Project Type: 17: Survey/GPS/GBLS	SOLH, LLC Bethesda, MD	$2,275	2019	N/A
124. 505 Black Branch Way PLSO, Bowie MD. Recover, check and mark property corners Project Type: 17: Survey/GPS/GBLS	Ken Burton Bowie, MD	$650	2019	N/A

17. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM WAS THE DESIGNATED ENGINEER OF RECORD				
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
125. 6908 Simmons Ln PLSO, Clinton MD. Recover property corners Project Type: 17: Survey/GPS/GBLS	Edith McCrary Clinton, MD Client: Edith McCrary Clinton, MD	$550	2019	N/A
126. Belvedere EST Inspection/SA, Arnold MD. Project Type: 02: Bridge/Structural Eng.	Anne Arundel County, MD Annapolis, MD	$21,159	2019	N/A
127. Cherrywood Lane at Courthouse Review, Greenbelt MD. GPI reviewed a traffic analysis report, prepared by another entity, for the City of Greenbelt. Project Type: 13: Traffic/Transportation	Greenbelt, City of, MD Greenbelt, MD	$6,500	2019	N/A
128. Dulles Silver Line Straddle Bent Coating, Columbia MD. Forensic analysis of plural component urethane coating applied to post tension strand pours. Dulles Silver line extension project near Dulles Airport. Project Type: 35: Corrosion Cont./Coatings	Structural Technologies Manassas, VA	$9,010	2019	N/A
129. Elk Neck Elementary Outfall, Elkton MD. Design a stilling basin/plunge pool downstream of 24" outfall. Project Type: 12: Stormwater Mgmt/Drainage	Cecil County Public Schools North East, MD	$3,500	2019	N/A
130. EVC QC training, Chicago IL. QC technician training for SSPC certification Project Type: 19: Construction Inspection	Era-Valdivia Contractors, Inc. Chicago, IL	$5,636	2019	N/A
131. Gauley Tpke - Heaters WV, Heaters WV. Boundary Survey Project Type: 17: Survey/GPS/GBLS	Arcadis US, Inc. Raleigh, NC	$11,200	2019	N/A
132. HNB Design Build Proposal, Columbia MD. Assist Parsons with the preparation of the proposal for the Harry Nice Bridge Replacement Project. Project Type: 05: Environmental Sciences	Parsons Corporation Baltimore, MD	$18,589	2019	N/A
133. INDOT 2-day Coatings Training, Indinapolis IN. GPI is providing bridge painting training for INDOT supervisory staff. This is a custom 2-day course based on INDOT specifications. Project Type: 72: Training	Indiana Dept. of Transportation Indianapolis, IN	$16,163	2019	N/A

17. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM WAS THE DESIGNATED ENGINEER OF RECORD				
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
134. Klinge Building Coating Failure, Columbia MD. Forensic analysis of internal roof coating after mold damage. Project Type: 35: Corrosion Cont./Coatings	Blakinger Thomas Law Firm Lancaster, PA	$4,200	2019	N/A
135. MGAC 2000 FL Ave. NW Coatings Failure, Columbia MD. Investigation of peeling paint on galvanized structural steel at penthouse of DC office building. Project Type: 35: Corrosion Cont./Coatings	MGAC Inc. Washington, DC	$12,633	2019	N/A
136. Point Reyes Coating Consulting, Ocean View NJ. GPI provided consulting reviews for metallizied coating of the Point Reyes Lighthouse rehabilitation. Project Type: 35: Corrosion Cont./Coatings	Abide International Inc. Sonoma, CA	$6,875	2019	N/A
137. St James, Lot 4C TCP, Accokeek MD. Forest conservation plan modification for a homeowner. Project Type: 05: Environmental Sciences	Troy Arnold Accokeek, MD	$2,860	2019	N/A
138. Stonhard tank lining failure investigation, Hillsboro OR. GPI is investigating a lining failure at a computer manufacturing facility. Project Type: 35: Corrosion Cont./Coatings	Cohen Seglias Pallas Greenhall & Furman, P.C. Philadelphia, PA	$24,740	2019	N/A
139. Titan AT-A equipment rental, Ocean View NJ. PosiTest AT-A rental Project Type: 35: Corrosion Cont./Coatings	Titan Industrial Baltimore, MD	$600	2019	N/A
140. Tonkon Greenbrier Rail Cars, Oceanview NJ. Technical coatings expert for litigation of rail car coatings failure. Project Type: 54: Railroad and Rapid Transit	Tonkon Torp, LLP Portland, OR	$6,765	2019	N/A
141. UPS Waldorf Pika Dr, Waldorf MD. ALTA / NSPS Boundary Survey Project Type: 17: Survey/GPS/GBLS	United Parcel Service Laurel, MD	$6,000	2019	N/A
142. Wexler Residence, Rockville MD. Project Type: 11: Site Planning/Land Dev.	Donald Lococo Architects, LLC Washington, DC	$4,000	2019	N/A

17. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM WAS THE DESIGNATED ENGINEER OF RECORD				
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
143. Windy Run Erection Plan, Charleston WV. This project includes the development of a beam erection sequence plan set for a single span bridge Project Type: 02: Bridge/Structural Eng.	Rock Forge Bridge Company Amma, WV	$5,000	2019	N/A
144. WSSC WNWLI Task 20A, Potomac MD. Access Path Stakeout Project Type: 17: Survey/GPS/GBLS	Environmental Quality Resources, Inc. Millersville, MD	$2,805	2019	N/A
145. 2013 FHWA BPA DTFH61-13-A-00005. GPI will provide Non-personal, Professional Support Services to Provide Program Support for the FHWA Office of Asset Management, Pavement and Construction (HIAP) Project Type: 19: Construction Inspection	Federal Highway Administration Washington, DC	$4,600,000	2018	N/A
146. 2014 MDTA CEI - AE 2815 CMCI Services, Baltimore MD. Construction management and inspection (CM/I) for an undetermined number of projects primarily located at the various facilities maintained by the MDTA on an as needed basis. Project Type: 19: Construction Inspection	Maryland Transportation Authority Baltimore, MD	$3,205,000	2018	N/A
147. 2015 KYTC Statewide Bridge Maint Paint Insp, Various (check each task) KY. GPI has been contracted by the Kentucky Transportation Cabinet to provide full time project management and coatings inspection services throughout the State. This may also include other coatings related services as well. Project Type: 35: Corrosion Cont./Coatings	Kentucky Transportation Cabinet Frankfort, KY	$4,000,000	2018	N/A
148. 2016 ODOT D12 CI OE #19838, Varies (see each task) OH. GPI, as the prime consultant will perform construction administration and inspection services. Project Type: 19: Construction Inspection	Ohio Department of Transportation Garfield Heights, OH	$1,000,000	2018	N/A
149. 2009 SHA Wetland Services OE, Annapolis Junction MD. GPI was retained to supply on call wetland mitigation design and associated environmental services statewide for the Environmental Programs Division of the State Highway Administration. Project Type: 05: Environmental Sciences	Maryland State Highway Administration Baltimore, MD	$1,377,500	2017	N/A
150. 2010 Statewide Bridge Insp. & Rating Serv, statewide MD. Bridge inspection, rating and report preparation services for bridge located statewide in Maryland for the MSHA's OOS. Project Type: 02: Bridge/Structural Eng.	Maryland State Highway Administration Baltimore, MD	$1,865,062	2017	N/A

17. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM WAS THE DESIGNATED ENGINEER OF RECORD				
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
151. 2014 Ohio Bridge Partnership CI/CE #18183, Various (see each task) OH. GPI is providing construction management and inspection services for Ohio Department of Transportation Project Type: 19: Construction Inspection	Ohio Department of Transportation Columbus, OH	$1,000,000	2017	N/A
152. 2015 ODOT D09 CI OE #19036, Various (based on tasks) OH. GPI is providing construction administration and inspection services for Ohio Department of Transportation Project Type: 19: Construction Inspection	Ohio Department of Transportation Chillcothe, OH	$750,000	2017	N/A
153. 2015 ODOT D12 Opport. Corridor CI #18688, Cleveland OH. GPI is providing construction management and inspection services for Ohio Department of Transportation. Project Type: 19: Construction Inspection	Ohio Department of Transportation Garfield Heights, OH	$3,000,000	2017	N/A
154. 2015 ODOT D3 CI OE #19238, Various (check each task) OH. GPI provided construction administration and inspection services for Ohio Department of Transportation Project Type: 19: Construction Inspection	Ohio Department of Transportation Ashland, OH	$1,000,000	2017	N/A
155. 2016 ODOT D11 CI OE #19459, Various (see each task) OH. GPI, as the prime consultant provided construction administration and inspection services. Project Type: 19: Construction Inspection	Ohio Department of Transportation New Philadelphia, OH	$1,000,000	2017	N/A

NOTE: THIS LIST IS A REPRESENTATION OF PROJECTS FROM OUR COLUMBIA, MD OFFICE, NOT FIRMWIDE

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

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST OF YOUR FIRM'S PORTION	YEAR	CONSTRUCTED (YES OR NO)	FIRM ASSOCIATED WITH
1. 2019 ODOT D3 CI US30 # 34077, Mansfield OH Project Type: 19: Construction Inspection	Maryland Transit Administration Baltimore, MD	$600,000	2023	N/A	True Inspection Services
2. 2018 DelDOT #1769 I-95 & SR 896 Interchange, Newark DE Project Type: 02: Bridge/Structural Eng.	Ohio Department of Transportation Ashland, OH	$450,000	2022	N/A	Century Engineering, Inc.
3. 2019 ODOT D4 CI OE #34085, Varies (see each assignment) OH Project Type: 19: Construction Inspection	Delaware Dept. of Transportation Dover, DE	$10,000,000	2021	N/A	Hill International, Inc.
4. 3595.01 Grosvenor Park EQR, North Bethesda MD Project Type: 17: Survey/GPS/GBLS	Environmental Quality Resources, Inc. Millersville, MD	$6,900	2021	N/A	Environmental Quality Resources, Inc.
5. 3636.01 Welzenbach EQR, Edgewood MD Project Type: 17: Survey/GPS/GBLS	Environmental Quality Resources, Inc. Millersville, MD	$25,960	2021	N/A	Environmental Quality Resources, Inc.
6. Apple Creek NPDES, Waldorf MD Project Type: 17: Survey/GPS/GBLS	Environmental Quality Resources, Inc. Millersville, MD	$6,125	2021	N/A	Environmental Quality Resources, Inc.
7. Chapel Road Bridge +1, Bethlehem WV Project Type: 19: Construction Inspection	West Virginia Department of Transportation Moundsville, WV	$230,500	2021	N/A	GAI Consultants, Inc.
8. DEC-Kratz TRC Solar Greenwood DE, Greenwood DE Project Type: 17: Survey/GPS/GBLS	TRC Companies Inc. West Chester, PA	$30,075	2021	N/A	TRC Companies Inc.
9. EQR WORIW (TO 9) Oxen Run, Temple Hills MD Project Type: 17: Survey/GPS/GBLS	Environmental Quality Resources, Inc. Millersville, MD	$6,600	2021	N/A	Environmental Quality Resources, Inc.

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

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST OF YOUR FIRM'S PORTION	YEAR	CONSTRUCTED (YES OR NO)	FIRM ASSOCIATED WITH
10. EQR WPKPC TO1A WSSC Bond Mill, Laurel MD Project Type: 17: Survey/GPS/GBLS	Environmental Quality Resources, Inc. Millersville, MD	$3,300	2021	N/A	Environmental Quality Resources, Inc.
11. ERC - Rte. 264 Temporary Jacking, Portsmouth VA Project Type: 02: Bridge/Structural Eng.	Marksmen Company Curtis Bay, MD	$22,500	2021	N/A	Marksmen Company Curtis Bay, MD
12. I-95/I-495 over MD 214 SWM As-Built Certification, Largo MD Project Type: 12: Stormwater Mgmt/Drainage	Wagman Heavy Civil, Inc. York, PA	$56,157	2021	N/A	Wagman Heavy Civil, Inc. York, PA
13. Ken Gar Palisades Wetland Mitigation, Kensington MD Project Type: 17: Survey/GPS/GBLS	Environmental Quality Resources, Inc. Millersville, MD	$15,350	2021	N/A	Environmental Quality Resources, Inc.
14. Listravia Ave Boundary and Topographic Survey, Morgantown, WV Project Type: 17: Survey/GPS/GBLS	Frederick Ward Associates Bel Air, MD	$11,500	2021	N/A	Frederick Ward Associates Bel Air, MD
15. Masseys Mill Pond Dam, Smyrna DE Project Type: 17: Survey/GPS/GBLS	O'Brien and Gere Engineers, Inc. Edison, NJ	$10,075	2021	N/A	O'Brien and Gere Engineers, Inc. Edison, NJ
16. NAVFAC – Indian Head NSF B759, Indian Head MD Project Type: 11: Site Planning/Land Dev.	Greenman-Pedersen, Inc. Springfield, VA	$10,500	2021	N/A	Greenman-Pedersen, Inc. Springfield, VA
17. PGC Bladensburg South Park Pond, Bladensburg MD Project Type: 17: Survey/GPS/GBLS	Environmental Quality Resources, Inc. Millersville, MD	$9,850	2021	N/A	Environmental Quality Resources, Inc.
18. Preliminary Plan Coordination, Newark DE Project Type: 02: Bridge/Structural Eng.	Delaware Dept. of Transportation Dover, DE	$12,733	2021	N/A	Century Engineering, Inc.

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

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST OF YOUR FIRM'S PORTION	YEAR	CONSTRUCTED (YES OR NO)	FIRM ASSOCIATED WITH
19. Quantico Marine Base Runway ADTEK, Quantico VA Project Type: 15: Airport	Adtek Engineers, Inc. Fairfax, VA	$31,945	2021	N/A	Adtek Engineers, Inc. Fairfax, VA
20. Ruth Swann EQR 3652, Bryans Road MD 1. Project Type: 17: Survey/GPS/GBLS	Environmental Quality Resources, Inc. Millersville, MD	$27,450	2021	N/A	Environmental Quality Resources, Inc.
21. Slope Analysis - Rte 460 (BUS) over Rte. 460, Nottoway VA Project Type: 02: Bridge/Structural Eng.	Marksmen Company Curtis Bay, MD	$5,000	2021	N/A	Marksmen Company
22. T201907002 Cantilever and Overhead Sign Structures, New Castle DE Project Type: 19: Construction Inspection	Delaware Dept. of Transportation Dover, DE	$125,178	2021	N/A	AECOM Transportation, Inc.
23. T201907104 Rehab. of I-95, Bearing Replacements, New Castle DE Project Type: 19: Construction Inspection	Delaware Dept. of Transportation Dover, DE	$173,017	2021	N/A	AECOM Transportation, Inc.
24. T201907402.02 Rehab. of I-95, 2nd Street On-Ramp, New Castle DE Project Type: 19: Construction Inspection	Delaware Dept. of Transportation Dover, DE	$345,223	2021	N/A	AECOM Transportation, Inc.
25. T202007404,T202007405 & T202007406 Early Work Packages, New Castle DE Project Type: 19: Construction Inspection	Delaware Dept. of Transportation Dover, DE	$241,284	2021	N/A	AECOM Transportation, Inc.
26. TRC MHGH&S, West Friendship MD Project Type: 17: Survey/GPS/GBLS	TRC Companies Inc. West Chester, PA	$21,175	2021	N/A	TRC Companies Inc. West Chester, PA
27. TRC Streaker Clear View, West Friendship MD Project Type: 17: Survey/GPS/GBLS	TRC Companies Inc. West Chester, PA	$16,375	2021	N/A	TRC Companies Inc. West Chester, PA

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

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST OF YOUR FIRM'S PORTION	YEAR	CONSTRUCTED (YES OR NO)	FIRM ASSOCIATED WITH
28. 2018 ODOT D03 CI Agreement #32666, Varies (see each assignment) OH. GPI, as a sub-consultant to KEM, Inc will perform construction administration and inspection services. Project Type: 19: Construction Inspection	Ohio Department of Transportation Ashland, OH	$1,000,000	2020	N/A	K.E. McCartney & Assoc., Inc. ,
29. 2018 ODOT D12 CI OE #32697, Varies (see each assignment) OH. GPI, as a sub-consultant to Hill will perform construction administration and inspection services. Project Type: 19: Construction Inspection	Ohio Department of Transportation Garfield Heights, OH	$220,000	2020	N/A	Hill International, Inc. ,
30. 2018 ODOT D12 CI OE #32699, Varies (see each assignment) OH. GPI, as a sub-consultant to SEO will perform construction administration and inspection services. Project Type: 19: Construction Inspection	Ohio Department of Transportation Garfield Heights, OH	$100,000	2020	N/A	Somat Engineering of Ohio ,
31. 2019 ODOT D12 CI OE #32696, Varies (see each assignment) OH. GPI, as a sub-consultant will perform construction inspection services. Project Type: 19: Construction Inspection	Ohio Department of Transportation Garfield Heights, OH	$2,000,000	2020	N/A	Quality Control Services, LLC ,
32. 2019 ODOT D9 CI OE #34102, Varies (See each assignment) OH. GPI, as a sub-consultant to Resource International will perform construction administration and inspection services. Project Type: 19: Construction Inspection	Ohio Department of Transportation Chillcothe, OH	$150,000	2020	N/A	Resource International, Inc. ,
33. 3404.01 Rolling Stream Restoration, Owings Mills MD. Limits of Disturbance Stream Stakeout Final As-Built Plans Project Type: 17: Survey/GPS/GBLS	Environmental Quality Resources, Inc. Millersville, MD	$22,060	2020	N/A	Environmental Quality Resources, Inc. ,
34. 3499.01 Western Branch - Picot Site, Upper Marlboro MD. Limits of Disturbance Construction Stakeout GPS Machine Control Modeling Final As-Built Plans Project Type: 17: Survey/GPS/GBLS	Environmental Quality Resources, Inc. Millersville, MD	$13,100	2020	N/A	Environmental Quality Resources, Inc. ,
35. Carrie Downie ES Waterline, New Castle DE. This project proposes to install a new water service at the Carrie Downie Elementary School in New Castle, Delaware. Project Type: 41: K-12	StudioJAED Bear, DE	$15,720	2020	N/A	StudioJAED Inframap,
36. Coatings Inspection Task Order #32680, Varies (see each assignment) OH. GPI, as a sub-consultant will perform coatings inspection services. Project Type: 35: Corrosion Cont./Coatings	Ohio Department of Transportation Sidney, OH	$50,000	2020	N/A	KEC Services, LLC ,

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

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST OF YOUR FIRM'S PORTION	YEAR	CONSTRUCTED (YES OR NO)	FIRM ASSOCIATED WITH
37. McLean BGE Holiday Testing, Baltimore MD. Performing QA inspection of steel piles during cleaning and painting Project Type: 35: Corrosion Cont./Coatings	McLean Contracting Company Glen Burnie, MD	$8,750	2020	N/A	McLean Contracting Company ,
38. Sherman Minton Coatings Design, Louisville KY. GPI is providing protective coating design assistance for the Sherman Minton Bridge Rehabilitation. This is a design build best value contract, led by the Indiana Department of Transportation. GPI is working for Michael Baker International. Project Type: 35: Corrosion Cont./Coatings	Indiana Dept. of Transportation Indianapolis, IN	$45,550	2020	N/A	Michael Baker International ,
39. Structure Point INDOT Vincennes, Vincennes IN. GPI is providing on-site Bridge rehabilitation and painting support to the Vincennes District of Indiana DOT. Project Type: 35: Corrosion Cont./Coatings	Indiana Dept. of Transportation Vincennes, IN	$30,000	2020	N/A	American Structurepoint, Inc.
40. Wellsburg Bridge, Wellsburg WV. Quality Assurance Management for the new Wellsburg Bridge over the Ohio River between West Virginia and Ohio. Contracting type is Public Private Partnership. Project Type: 19: Construction Inspection	West Virginia Department of Transportation Charleston, WV	$2,455,996	2020	N/A	Stantec Consulting
41. Witcher Creek Bridges Deck Survey, Charleston WV. GPI, as a subconsultant will perform various engineering services related to materials control, soils & testing. Project Type: 19: Construction Inspection	West Virginia Department of Transportation Charleston, WV	$3,412	2020	N/A	Specialized Engineering ,
42. WVDOH 2020 Eng. Serv. For MCS&T, Varies WV. GPI, as a subconsultant will perform various engineering services related to materials control, soils & testing. Project Type: 19: Construction Inspection	West Virginia Department of Transportation Charleston, WV	$2,500,000	2020	N/A	Specialized Engineering ,
43. 2017 MDTA AE 2795 Coating Services, Baltimore MD. Project Type: 35: Corrosion Cont./Coatings	Maryland Transportation Authority Baltimore, MD	$70,000	2019	N/A	Rummel Klepper & Kahl LLP (RK & K)
44. 2017 ODOT D3 CI OE #31104, Varies (see each task) OH. GPI, as a sub-consultant to CTL Engineering, Inc will perform construction administration and inspection services. Project Type: 19: Construction Inspection	Ohio Department of Transportation Ashland, OH	$150,000	2019	N/A	CTL Engineering, Inc. ,

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

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST OF YOUR FIRM'S PORTION	YEAR	CONSTRUCTED (YES OR NO)	FIRM ASSOCIATED WITH
45. 2017 ODOT D4/11 CI OE #31107, Various (see each task) OH. GPI, as a sub-consultant to Resource International will perform construction administration and inspection services. Project Type: 19: Construction Inspection	Ohio Department of Transportation Akron, OH	$1,500,000	2019	N/A	Resource International, Inc. ,
46. 2017 ODOT D6 C OE #31114, Various (see each task) OH. GPI, as a sub-consultant to TIS, was awarded a 2 year contract to provide coating inspection services in District 6. Project Type: 35: Corrosion Cont./Coatings	Ohio Department of Transportation Delaware, OH	$600,000	2019	N/A	True Inspection Services ,
47. 2017 ODOT D9 CI OE #31132, Varies (see each task) OH. GPI, as a sub to Terracon, is providing construction administration and inspection services for Ohio Department of Transportation Project Type: 19: Construction Inspection	Ohio Department of Transportation Chillcothe, OH	$1,500,000	2019	N/A	Terracon ,
48. 2018 ODOT D10 CI ER OE #31978, Laings OH. GPI, as a sub-consultant to TIS, was awarded a contract to provide construction inspection services for ODOT District 10. Project Type: 19: Construction Inspection	Ohio Department of Transportation Marietta, OH	$1,250,000	2019	N/A	True Inspection Services
49. 2018 ODOT D5 CI OE #32245, Varies (see each task) OH. GPI, as a sub-consultant to True Inspection Services, will perform construction administration and inspection services. Project Type: 19: Construction Inspection	Ohio Department of Transportation Jacksontown, OH	$1,500,000	2019	N/A	True Inspection Services ,
50. EKPC Spurlock Ash design phase 2, Ashland KY. GPI is providing coating design services for a bridge located on the EKPC facility. Project Type: 35: Corrosion Cont./Coatings	QK4 Louisville, KY	$18,099	2019	N/A	QK4 ,
51. 2016 ODOT D12 CI OE #19840, Varies (see each task) OH. GPI, as a sub-consultant to QCS, was selected to provide construction inspection services on various Projects in District 12. Project Type: 19: Construction Inspection	Ohio Department of Transportation Garfield Heights, OH	$166,882	2018	N/A	Quality Control Services, LLC ,
52. 2016 ODOT D12 CI OE #19841, Varies (see each task) OH. GPI, as a sub-consultant to Somat, was awarded a Contract to provide construction inspection services on various Projects in District 12. Project Type: 19: Construction Inspection	Ohio Department of Transportation Garfield Heights, OH	$396,972	2018	N/A	Somat Engineering of Ohio ,
53. 2016 ODOT D4 CI OE #19814, Varies (check each task) OH. GPI, was a sub-consultant to TIS, was awarded a 2 year contract to provided construction inspection services in District 4. Project Type: 19: Construction Inspection	Ohio Department of Transportation Akron, OH	$125,000	2018	N/A	True Inspection Services ,

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

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST OF YOUR FIRM'S PORTION	YEAR	CONSTRUCTED (YES OR NO)	FIRM ASSOCIATED WITH
54. 2016 ODOT D4 CI OE #19815, varies (see each task) OH. GPI, as a sub-consultant to Hill International will perform construction administration and inspection services. Project Type: 19: Construction Inspection	Ohio Department of Transportation Akron, OH	$110,000	2018	N/A	Hill International, Inc. ,
55. 2017 ODOT D11 CI OE #30176, Varies (see each task) OH. GPI, as a sub-consultant to DLZ, was awarded contract to provide construction inspection services to ODOT District 11. Project Type: 19: Construction Inspection	Ohio Department of Transportation New Philadelphia, OH	$168,278	2018	N/A	DLZ Ohio ,
56. 2017 ODOT D2 Coatings OE #30145, Varies (see each task) OH. GPI, as a sub-consultant to QCS, was awarded a contract to provide coating inspection services in District 2 for the Anthony Wayne suspension bridge over the Maumee River. Project Type: 35: Corrosion Cont./Coatings	Ohio Department of Transportation Bowling Green, OH	$21,095	2018	N/A	Quality Control Services, LLC
57. 2017 ODOT D3 CI OE #30150, Varies (see each task) OH. GPI, as a sub-consultant to K.E. McCartney & Assoc will perform construction administration and inspection services. Project Type: 19: Construction Inspection	Ohio Department of Transportation Ashland, OH	$150,000	2018	N/A	K.E. McCartney & Assoc., Inc. ,
58. 2017 ODOT D3 CI OE #30595, Various (see each task) OH. GPI, as a sub-consultant to True Inspection Services will perform construction administration and inspection services. Project Type: 19: Construction Inspection	Ohio Department of Transportation Ashland, OH	$150,000	2018	N/A	True Inspection Services ,
59. 2017 ODOT D5 CI OE #30155, Varies (see each task) OH. GPI, as a sub-consultant to True Inspection Services will perform construction administration and inspection services. Project Type: 19: Construction Inspection	Ohio Department of Transportation Jacksontown, OH	$153,611	2018	N/A	True Inspection Services ,
60. 2018 MDTA AE3042 Prel Eng & Final Design Serv, Annapolis Junction MD. Services as directed by the MdTA for highway design, structural design, coatings inspection and design Project Type: 02: Bridge/Structural Eng.	Maryland Transportation Authority Baltimore, MD	$675,000	2018	N/A	Century Engineering, Inc./Gannett Fleming, Inc. Joint Venture ,
61. 2013 KYTC Louisville Bridge, Lousiville KY. GPI as a subconsultant to HDR was awarded the Louisville Southern Indiana Ohio River Bridge project providing construction management and inspection services. Project Type: 19: Construction Inspection	Kentucky Transportation Cabinet Frankfort, KY	$10,830,335	2017	N/A	HDR Engineering, Inc.
62. 2015 ODOT D1 CI OE #19231, Varies (see each task) OH. GPI was a sub-consultant to MSG that performed construction administration and inspection services. Project Type: 19: Construction Inspection	Ohio Department of Transportation Lima, OH	$100,000	2017	N/A	The Mannik & Smith Group, Inc. ,

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

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST OF YOUR FIRM'S PORTION	YEAR	CONSTRUCTED (YES OR NO)	FIRM ASSOCIATED WITH
63. 2015 ODOT D12 CI OE #18695, Varies (see each task) OH. GPI, as a sub-consultant to Somat, was added to their Contract to provide construction inspection services on various Projects in District 12. Project Type: 19: Construction Inspection	Ohio Department of Transportation Garfield Heights, OH	$244,725	2017	N/A	Somat Engineering of Ohio ,
64. 2015 ODOT D2 CI OE #19235, Varies (see each task) OH. GPI, as a sub-consultant to Hill International will perform construction administration and inspection services. Project Type: 19: Construction Inspection	Ohio Department of Transportation Bowling Green, OH	$100,000	2017	N/A	Hill International, Inc. ,
65. 2015 ODOT D6 Coat OE #18675, various (see each task). GPI, as a subconsultant to TIS, was awarded a 2 year contract and provided coating inspection services in District 6 in Ohio. Project Type: 35: Corrosion Cont./Coatings	Ohio Department of Transportation Delaware, OH	$151,390	2017	N/A	True Inspection Services ,
66. 2015 ODOT D6 Coat OE #19250, Varies (see each task) OH. GPI, as a sub-consultant to TIS, was awarded a 2 year contract to provide coating inspection services in District 6. Project Type: 35: Corrosion Cont./Coatings	Ohio Department of Transportation Delaware, OH	$120,000	2017	N/A	True Inspection Services ,
67. 2016 ODOT D05 CI OE #19436, Varies (see each task) OH. GPI, as a sub-consultant to Resource International will perform construction administration and inspection services. Project Type: 19: Construction Inspection	Ohio Department of Transportation Jacksontown, OH	$150,000	2017	N/A	Resource International, Inc. ,
68. 2016 ODOT D12 CI/CA OE #19463, Varies (see each task) OH. GPI, as a sub-consultant to QCS, was awarded a 2 year contract to provide construction inspection services on various Projects in District 12. Project Type: 19: Construction Inspection	Ohio Department of Transportation Garfield Heights, OH	$200,000	2017	N/A	Quality Control Services, LLC ,
69. 2016 ODOT D12 CI/CA OE #19464, Various (see each task) OH. GPI, as a sub-consultant to QCI, was awarded a 2 year contract that provided construction inspection services on various Projects in District 12. Project Type: 19: Construction Inspection	Ohio Department of Transportation Garfield Heights, OH	$88,866	2017	N/A	Quality Control Inspection, Inc. ,
70. 2014 ODOT D12 CI OE #18694, Varies (see each task) OH. GPI was as a sub-consultant to QCS, was added to the contract to provide construction inspection services on various Projects in District 12. Project Type: 19: Construction Inspection	Ohio Department of Transportation Garfield Heights, OH	$75,000	2016	N/A	Quality Control Services, LLC ,
71. 2014 ODOT D2 Coat OE #18462, various (see each task) OH. GPI, as a sub-consultant to TIS, was awarded a 2 year contract to provided coating inspection services in District 2. Project Type: 35: Corrosion Cont./Coatings	Ohio Department of Transportation Bowling Green, OH	$45,738	2016	N/A	True Inspection Services ,

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

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST OF YOUR FIRM'S PORTION	YEAR	CONSTRUCTED (YES OR NO)	FIRM ASSOCIATED WITH
72. 2015 ODOT D12 CI OE #18692, Various (check each task) OH. GPI, as a sub-consultant to QCI, was awarded a 2 year contract that provided construction inspection services on various projects in District 12. Project Type: 19: Construction Inspection	Ohio Department of Transportation Garfield Heights, OH	$435,501	2016	N/A	Quality Control Inspection, Inc. ,
73. 2015 ODOT D12 CI OE #18693, Various (check each task) OH. GPI, as a sub-consultant to DLZ, was awarded a 2 year contract that provided construction inspection services on various projects in District 12. Project Type: 19: Construction Inspection	Ohio Department of Transportation Garfield Heights, OH	$300,000	2016	N/A	DLZ Ohio ,
74. 2015 ODOT D3 CI OE #18850, Various (check each task) OH. GPI, as a sub-consultant to Resource International performed construction administration and inspection services. Project Type: 19: Construction Inspection	Ohio Department of Transportation Ashland, OH	$79,678	2016	N/A	Resource International, Inc.
75. 2009 (AECOM) MdTA Eng Design Serv MD. Greenman-Pedersen, Inc is a sub to AECOM to provide coating related services system wide to the Maryland Transportatin Authority. Project Type: 35: Corrosion Cont./Coatings	Maryland Transportation Authority Baltimore, MD	$100,000 Fee	2015	N/A	AECOM Transportation, Inc.
76. 2013 ODOT D2 CI OE #18026. Project Type: 19: Construction Inspection	Ohio Department of Transportation Akron, OH	$500,000	2015	N/A	Hill International, Inc. ,
77. 2013 ODOT D4 CI OE #17339, Akron OH. GPI, as a sub-consultant to Hill International, was awarded a 2 year contract to provide construction inspection services for ODOT District 4 Project Type: 19: Construction Inspection	Ohio Department of Transportation Akron, OH	$170,721	2015	N/A	Hill International, Inc. ,
78. 2013 ODOT D7 Coat OE #17557, Tipp City OH. Project Type: 35: Corrosion Cont./Coatings	Ohio Department of Transportation Sidney, OH	$26,439	2015	N/A	Resource International, Inc. ,
79. 2014 ODOT D4 CI OE #18268, Akron OH. Project Type: 19: Construction Inspection	Ohio Department of Transportation Akron, OH	$284,124	2015	N/A	Hill International, Inc.

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

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST OF YOUR FIRM'S PORTION	YEAR	CONSTRUCTED (YES OR NO)	FIRM ASSOCIATED WITH
80. 08 ICC-B Environmental Contract MD. Project Type: 05: Environmental Sciences	Kiewit Infrastructure Beltsville, MD	$760,000,000	2014	N/A	Kiewit Infrastructure
81. 2012 ODOT D4 Coat and CI OE #16879, Columbus OH. GPi as a sub to Hill International was awarded a two year contract to provide construction and coatings inspection services for ODOT District 4. Project Type: 19: Construction Inspection	Ohio Department of Transportation Akron, OH	$50,000	2014	N/A	Hill International, Inc.
82. 2012 ODOT D6 CI OE #17014, Columbus OH. GPi is a sub to Hill International was awarded a two year contract to provide construction inspection services for ODOT District 6. Project Type: 19: Construction Inspection	Ohio Department of Transportation Akron, OH	$100,000	2014	N/A	Hill International, Inc. ,
83. 2014 MDTA CEI - AE 2626 CMCI Services. Project Type: 19: Construction Inspection	Maryland Transportation Authority Baltimore, MD	$89,690	2014	N/A	Maryland Transportation Authority

NOTE: THIS LIST IS A REPRESENTATION OF PROJECTS FROM OUR COLUMBIA, MD OFFICE, NOT FIRMWIDE

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

20. The foregoing is a statement of facts.

Signature: Douglass Robb Title: Executive Vice President

Date: August 21, 2023

Printed Name: Douglass Robb

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
AML CONSULTANT QUALIFICATION QUESTIONNAIRE **Attachment "A"**

PROJECT NAME	DATE (DAY, MONTH, YEAR)	FEIN
	16, August, 2023	35-2031487

1. FIRM NAME	2. HOME OFFICE BUSINESS ADDRESS	3. FORMER FIRM NAME
Beam, Longest and Neff, LLC DBA Neff, Longest & Beam and Associates, LLC	8320 Craig Street Indianapolis, IN 46250	Neff, Longest & Beam and Associates, Inc.

4. HOME OFFICE TELEPHONE	5. ESTABLISHED (YEAR)	6. TYPE OWNERSHIP	6a. WV REGISTERED DBE (Disadvantaged Business Enterprise)
317.849.5832	Home Office - 1945 WV Office - 1962	Individual Corporation Partnership Joint-Venture Limited Liability Corporation	YES (NO)

7. PRIMARY AML DESIGN OFFICE: ADDRESS/ TELEPHONE/ PERSON IN CHARGE/ NO. AML DESIGN PERSONNEL EACH OFFICE

300 Capitol Street, Suite 507, Kanawha Valley Building, Charleston, WV 25301 / 304.343.8036 / Todd West, PE / 3

8. NAMES OF PRINCIPAL OFFICERS OR MEMBERS OF FIRM	8a. NAME, TITLE, & TELEPHONE NUMBER - OTHER PRINCIPALS
James B. Longest - President Thomas C. Longest - COO	Mark A. Eckert, PE, PLS - Sr. Vice President

9. PERSONNEL BY DISCIPLINE

62 ADMINISTRATIVE	— ECOLOGISTS	— LANDSCAPE ARCHITECTS	15 STRUCTURAL ENGINEERS
— ARCHITECTS	— ECONOMISTS	— MECHANICAL ENGINEERS	5 **SURVEYORS**
— **BIOLOGIST**	— ELECTRICAL ENGINEERS	— **MINING ENGINEERS**	1 TRAFFIC ENGINEERS
9 **CADD OPERATORS**	5 ENVIRONMENTALISTS	— PHOTOGRAMMETRISTS	2 OTHER: Certified TRET
— CHEMICAL ENGINEERS	2 ESTIMATORS	1 PLANNERS: URBAN/REGIONAL	16 OTHER: Right-of-Way
4 **CIVIL ENGINEERS**	— **GEOLOGISTS**	8 SANITARY ENGINEERS	3 OTHER: Utility Coord.
24 CONSTRUCTION INSPECTORS	— HISTORIANS	— SOILS ENGINEERS	
6 DESIGNERS	— HYDROLOGISTS	2 SPECIFICATION WRITERS	182 TOTAL PERSONNELL
6 DRAFTSMEN			

TOTAL NUMBER OF WV REGISTERED PROFESSIONAL ENGINEERS IN PRIMARY OFFICE: 10

***RPEs other than Civil and Mining must provide supporting documentation that qualifies them to supervise and perform this type of work.**

10. HAS THIS JOINT-VENTURE WORKED TOGETHER BEFORE? ☐ YES ☐ NO

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

NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE _____ Yes _____ No

12. A. Is your firm's personnel experienced in Abandoned Mine Lands Remediation/Mine Reclamation Engineering?

YES Description and Number of Projects:_____

_____

NO

B. Is your firm experienced in Soil Analysis?

YES Description and Number of Projects:_____

_____

NO

C. Is your firm experienced in hydrology and hydraulics?

YES Description and Number of Projects:_____

_____

NO

D. Does your firm produce its own Aerial Photography and Develop Contour Mapping?

YES Description and Number of Projects:_____

_____

NO

E. Is your firm experienced in domestic waterline design? (Include any experience your firm has in evaluation of aquifer degradation as a result of mining.)

YES Description and Number of Projects:_____

_____

NO

F. Is your firm experienced in Acid Mine Drainage Evaluation and Abatement Design?

YES Description and Number of Projects:_____

_____

NO

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

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:

Brief Explanation of Responsibilities

_____

_____

_____

EDUCATION (Degree, Year, Specialization)

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	REGISTRATION (Type, Year, State)

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

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:

Brief Explanation of Responsibilities

_____

_____

_____

_____

EDUCATION (Degree, Year, Specialization)

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	REGISTRATION (Type, Year, State)

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

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:

Brief Explanation of Responsibilities

_____

_____

_____

EDUCATION (Degree, Year, Specialization)

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	REGISTRATION (Type, Year, State)

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

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:

Brief Explanation of Responsibilities

_____

_____

_____

EDUCATION (Degree, Year, Specialization)

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	REGISTRATION (Type, Year, State)

14. PROVIDE A LIST OF SOFTWARE AND EQUIPMENT AVAILABLE IN THE PRIMARY OFFICE WHICH WILL BE USED TO COMPLETE AML DESIGN SERVICES

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

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE

TOTAL NUMBER OF PROJECTS:	TOTAL ESTIMATED CONSTRUCTION COSTS: $

16. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS SERVING AS A SUB-CONSULTANT TO OTHERS

PROJECT NAME, TYPE AND LOCATION	NATURE OF FIRMS RESPONSIBILITY	NAME AND ADDRESS OF OWNER	ESTIMATED COMPLETION DATE	ESTIMATED CONSTRUCTION COST	
				ENTIRE PROJECT	YOUR FIRMS RESPONSIBILITY

17. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM WAS THE DESIGNATED ENGINEER OF RECORD				
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)

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

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

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

20. The foregoing is a statement of facts.

Signature: 

Title: Sr. Vice President

Date: 8/16/2023

Printed Name: Mark A. Eckert, PE, PLS

AML and RELATED PROJECT EXPERIENCE MATRIX

PROJECT	Exp. Basis C=Corp. P=Personnel *	Additional Info Provided in Section (s) **	PROJECT EXPERIENCE REQUIREMENTS															PRIMARY STAFF PARTICIPATION/CAPACITY *** M=Management P=Professional					

*** List whether project experience is corporate or personnel based or both.**

**** Use this area to provide specific sections or pages if needed for reference.**

***** List Primary Design personnel and their functional capacity for the projects listed.**

Attachment "B"

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.

(Printed Name and Title) Timothy Darrah, Civil and Survey Design Manager

(Address) 1091 Chaplin Road, Morgantown, WV 26501

(Phone Number) / (Fax Number) 304-292-1135 304-296-9302

(Email address) tdarrah@ctleng.com

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through *wv*OASIS, I certify that: I have reviewed this Solicitation/Contract 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/Contract 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 this bid or offer was made without prior understanding, agreement, or connection with any entity submitting a bid or offer for the same material, supplies, equipment or services; that this bid or offer is in all respects fair and without collusion or fraud; that this Contract is accepted or entered into without any prior understanding, agreement, or connection to any other entity that could be considered a violation of law; 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; and that pursuant to W. Va. Code 5A-3-63, the entity entering into this contract is prohibited from engaging in a boycott against Israel.

CTL Engineering
(Company)

(Signature of Authorized Representative)

Timothy Darrah, Civil and Survey Design Manager
(Printed Name and Title of Authorized Representative) (Date)

304-292-1135 304-296-9302
(Phone Number) (Fax Number)

tdarrah@CTLENG.COM
(Email Address)

OMB # 1029-0119
Expiration Date:
10/31/2024

ABANDONED MINE LANDS (AML) CONTRACTOR INFORMATION FORM

You must complete this form for your AML contracting officer to request an eligibility evaluation from the Office of Surface Mining Reclamation and Enforcement (OSMRE) to determine if you are eligible to receive an AML contract. This requirement can be found under OSMRE's regulations at 30 CFR 874.16. **NOTE:** This form must be signed and **dated within 30 days** of submission to be considered for a current bid.

Part A: General Information

Business Name:	CTL Engineering
Tax ID #:	55-063-1834
Address:	1091 Chaplin Road
City, State, & Zip:	Morgantown, WV 26501
Phone Number:	304-292-1135
Email Address:	tdarrah@CTLENG.COM

Part B: Obtain an Organizational Family Tree (OFT) from the Applicant Violator System (AVS)

If you plan to certify the existing AVS information or submit updates under Part C, you must include an OFT. Instructions for downloading an OFT from the AVS can be found at: https://www.osmre.gov/sites/default/files/2022-02/OMB%201029-0119%20instructions.pdf. If you require assistance you may contact the AVS Office by phone at: 800-643-9748, or by email at: avshelp@osmre.gov.

Part C: Certifying and updating information in the AVS

Select one of the options, follow the instructions for the selected option, sign, and date below.

I, Joe Stanley , have express authority to certify that:
(Print Name)

- [x] 1. Our business is listed in the AVS. The information is accurate, complete, and up to date. (If you select this option, you must attach an Entity OFT from the AVS to this form). Do not complete Part D.
- [ ] 2. Our business is in the AVS. The information needs to be updated. (If you select this option, you must attach an Entity OFT from the AVS to this form). Complete Part D to provide the missing or corrected information.
- [ ] 3. Our business is not listed in the AVS. The information needs to be added. Complete Part D to provide the information.

08/23/2023		Business Development
Date	Signature	Title

AVS OFT Report - 4/12/2022 11:21:16 AM

All OFT's where the selected entity is listed as an entity or related entity

Entity Selected (138901) CTL Engineering Inc

Parent Entity	Relationship	Description	Related Entity	% Ownership	Begin Date	End Date
(247114) CTL Engineering Inc ESOP	Shareholder		(138901) CTL Engineering Inc		1/15/1999	
(138901) CTL Engineering Inc	Owner		(247019) CTL Engineering of Indiana Inc	100%	12/1/2007	
(138901) CTL Engineering Inc	President		(138899) C K Satyapriya		5/10/1986	
(138901) CTL Engineering Inc	Shareholder		(138899) C K Satyapriya	17%	7/1/1980	
(138901) CTL Engineering Inc	Chief Executive Officer		(138899) C K Satyapriya		1/15/1999	
(138901) CTL Engineering Inc	Chairman of the Board		(138899) C K Satyapriya		1/15/1999	
(138901) CTL Engineering Inc	Shareholder		(247019) CTL Engineering of Indiana Inc	80%	3/20/1998	1/15/1999
(138901) CTL Engineering Inc	Chairman of the Board		(138898) Asbjorn Kvammen Jr		11/23/1980	1/15/1999
(138901) CTL Engineering Inc	Chief Executive Officer		(138898) Asbjorn Kvammen Jr		11/23/1980	1/15/1999
(138901) CTL Engineering Inc	Shareholder		(138898) Asbjorn Kvammen Jr	73%	6/27/1980	1/15/1999
(138901) CTL Engineering Inc	Shareholder		(247019) CTL Engineering of Indiana Inc	29%	1/15/1999	12/1/2007

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: DEP240000000□

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. 6
☐ Addendum No. 2	☐ Addendum No. 7
☐ Addendum No. 3	☐ Addendum No. 8
☐ Addendum No. 4	☐ Addendum No. 9
☐ Addendum No. 5	☐ Addendum No. 10

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

CTL Engineering
Company

Authorized Signature

8/2□/2023
Date

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