

WVDEP-DLR-AML | PELL ROAD DOSER UPGRADE CEOI 0313 DEP2100000005

Submitted by: The Thrasher Group, Inc. May 11, 2021



COMPLEX PROJECTS
REQUIRE RESOLVE
THRASHER'S GOT IT

May 11, 2021

Attn: Joseph E. Hager III
Department of Administration, Purchasing Division
2019 Washington Street East
Charleston, WV 25305-0130

RE: West Virginia Department of Environmental Protections | Pell Road Doser Upgrade - CEOI 0313 DEP2100000005

Dear Mr. Hager and selection committee members:

The Thrasher Group, Inc. is pleased to present our qualifications to the West Virginia Department of Environmental Protection for the Pell Road Doser Upgrade. As a West Virginia-based company that has been serving the state for over 37 years, we take pride in projects that so clearly improve our state's landscape and restore the safety of our communities.

We have a longstanding reputation for successfully completing projects such as this one. Our experience in drainage conveyances, waterline design, stream-bank stabilization, and lime dosing installation will allow us to work with you to efficiently identify project goals, establish accurate budgets, and develop successful outcomes.

Thrasher has a longstanding history with this region of West Virginia, having worked on many projects in this general area with the same scope, make us an the right choice for the Pell Road Project. We consider ourselves partners with WVDEP, Division of Land Restoration, and Office of Abandoned Mine Lands and Reclamation – our support spans beyond general infrastructure to include community projects.

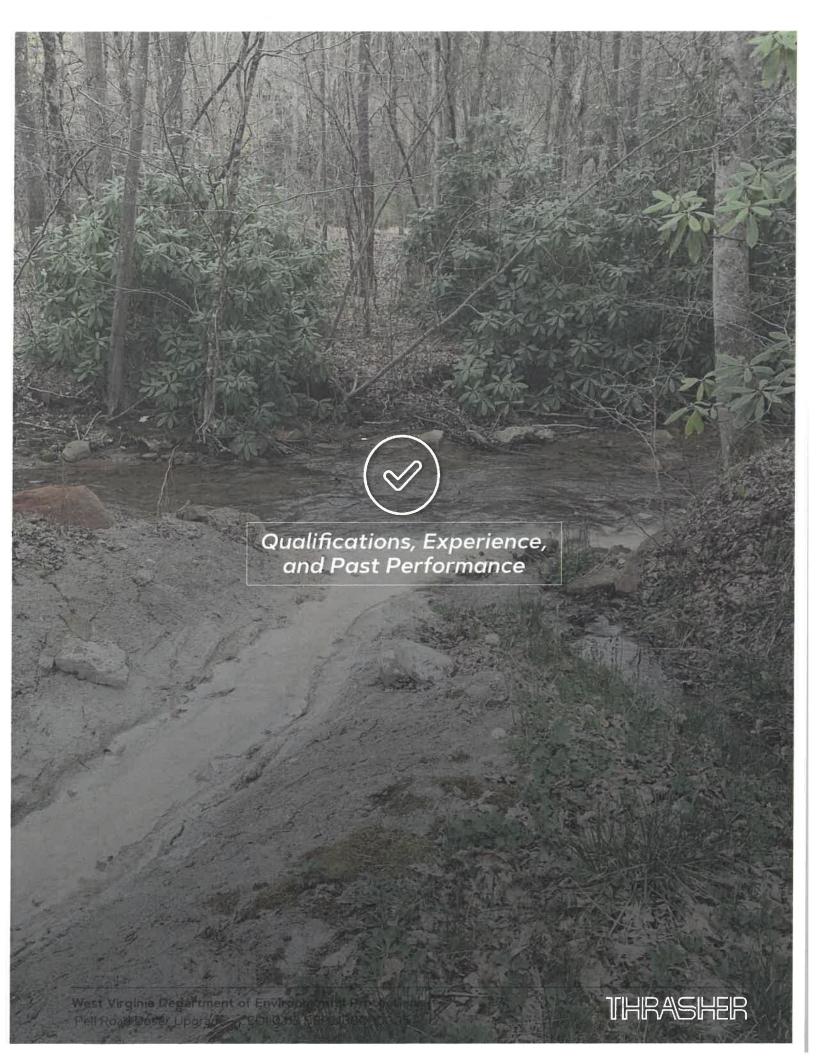
We appreciate the opportunity to partner with you and look forward to further speaking with you about the needs of this project.

Sincerely,

The Thrasher Group, Mc.

Richard Hovatter Jr., PE

Project Manager





- Site Engineering
- Environmental
- **Utility Engineering**
- Architecture
- Survey
- Transportation
- **Construction Services**
- Geospatial

#### **Main Point of Contact:**

Richard Hovatter Jr., PE

Project Manager

rhovatter@thethrashergroup.com

Cell: 304-669-6848 Office: 304-205-8809



300

#### **EMPLOYEES**

- **39** Licensed Professional Engineers
  - 11 Licensed **Professional Surveyors**
  - Licensed Professional Architects
  - Licensed 3 Professional Landscape Architects



#### **YEARS**

of delivering successful projects

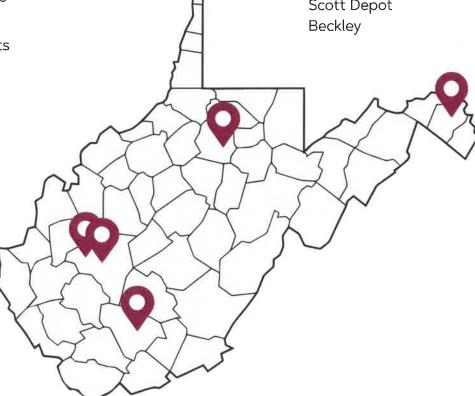


#### **OFFICES**

in West Virginia

Bridgeport Martinsburg

Charleston Scott Depot



With a commitment to building business through "successful projects and repeat clientele," H. Wood Thrasher, PE and the late Henry A. Thrasher, PE, formed Thrasher Engineering, Incorporated in Clarksburg, West Virginia in 1983. Since that time, the company – now known as The Thrasher Group, Inc. – has transformed into one of the Mid-Atlantic region's largest full-service privately owned architectural and engineering firms.

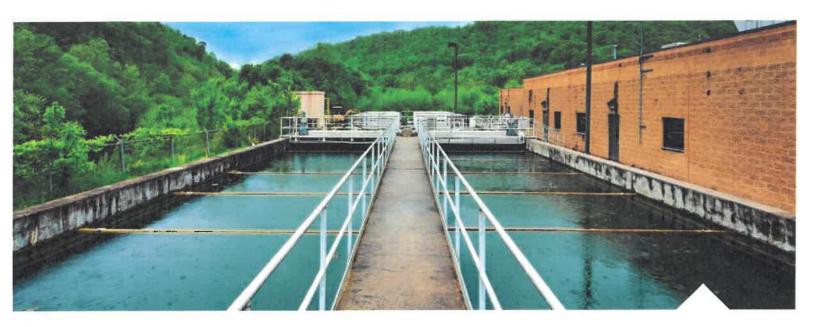
Thrasher has grown from its original three employees to a current staff of over 300 and continues to prosper. Instilled in each employee is a commitment to maintaining the highest standards of professional service. Our team has the experience, knowledge, versatility, and integrity to get the job done. With a 37-year history of driving infrastructure development for public and private clients, we have a reputation of keeping our word and completing projects on time and on budget.



Diverse services that grow communities.

THRASHER'S GOT IT.





# CIVIL ENGINEERING

#### **AML Design**

**Drainage Design:** All AML projects completed by Thrasher have required design of drainage structures. These have included vegetated, grouted, riprap channels, as well as culverts and storm sewers. Drainage calculations are completed to properly size all conveyences.

Permitting: the permitting process can delay projects if they are not submitted correctly or in a timely manner. Thrasher takes pride in on our ability to quickly obtain permits for our clients. We are able to utilize our excellent relationship with the WVDEP for NPDES permits as well as our relationship with the West Virginia Division of Highways for entrance and drainage permits. We are also experienced in obtaining Army Corp of Engineers permits from both the Pittsburgh and Huntington District Offices for stream bank restoration, wetland mitigation, and construction, linear transportation and utility line projects, and temporary construction access and dewatering.

#### Stormwater Systems

Thrasher is prepared to take on challenges to make your stormwater management project a success. In the not so distant past, storm water management was not a significant issue. It was "out of sight, out of mind." That is no longer the case. Ever-increasing regulations, the creation of public storm water utilities, and the focus on downstream effects of development are pushing stormwater management issues to the forefront.

## Site Development

Engineering for site development is far from a "one size fits all" approach. Every project is unique and requires a blend of technical expertise combined with quality planning principles, efficient design, market realities, and flexibility to seize opportunities. With our diverse staff, Thrasher has the right blend of talent to make your project a success.

## Roadways & Bridges

From industries to local families, the nation depends on the strength of highways, bridges, and even pedestrian walkways. No matter what the mode of land transportation, Thrasher gets our clients where they want to be.





# SITE DEVELOPMENT

Engineering for site development is far from a "one size fits all" approach. Every project is unique and requires a blend of technical expertise, planning principals, efficient design, market realities, and the flexibility to seize opportunities. With our diverse staff, Thrasher has a winning combination of talent to take projects from design to reality.

At Thrasher, we understand that the design of a successful site development project must factor in economic landscape, political implications, and strategic planning that takes projects beyond engineering. The Thrasher team possesses expertise in every facet of development, including site selection and planning, grading, storm water management, erosion and sediment control, permitting, and infrastructure design.

We pride ourselves on being a partner in projects that improve the quality of life for residents and provide economic sustainability to communities.

#### Site Development Expertise:

- > AML Project Sites
- > Slip Repairs
- > Industrial and Business Parks
- > Mixed-Use Developments
- > Athletic Facilities
- > Federal Correctional Facilities
- > Streetscapes and Sidewalk Planning
- > Commercial Developments
- Single and Multi-Family Residential Development
- Primary, Secondary, and Higher Education Facilities
- > Recreational Resorts and Guest Lodging
- > Shopping Plazas





# **ENVIRONMENTAL SERVICES**

In today's ever-changing regulatory landscape, compliance with federal and state environmental laws is critical to the success of projects. Compliance can often seem at odds with the project vision and financial constraints. The Thrasher team partners as a technical and regulatory advocate to overcome obstacles and guide our clients through complicated policies to achieve their goals. From initial investigations to final design, our environmental experts are there to assist in all facets of our clients' projects. Our team has developed relationships with academic consultants from multiple universities that are here to aid in specialized assessments.

Thrasher's offers a range of environmental services, from abandoned mine land reclamation to stream and wetland delineations and everything in between. We have extensive experience with site assessments, permitting, and every aspect of environmental work that your project will encompass.

In addition, our team has a host of experience with Abandoned Mine Land (AML) projects and are familiar with the intricacies involved

#### **Environmental Services:**

- > All Appropriate Inquiry (AAI)
- > Environmental Site Assessments
- > NEPA Compliance for Publicly Funded Projects
- > Ecological Studies
- > Brownfield Redevelopment
- > Industrial Hygiene and Demolition Planning
- > Underground Storage Tank (UST) Consulting Services
- > Wetland Delineation, Design, and Mitigation
- > Remediation Investigation, Feasibility Studies, and Design
- > Hydrogeologic and Geologic Investigations
- > Groundwater Monitoring
- > Sampling and Laboratory Analysis
- > Solid and Hazardous Waste Management
- > SPCC, GPP, SWPPP, GWPP, SWPPP Environmental Compliance
- Coal Combustion Residuals Rule Compliance (CCR)
- > Stream Assessments, Design, and Mitigation
- > Erosion and Sediment Control Plans
- > Voluntary Remediation Program
- > Uniform Environmental
- > Covenants Act
- > CERCLA Preliminary Assessment
- > CERCLA Site Investigation





# **ENVIRONMENTAL PERMITTING**

The Environmental Division of the Thrasher Group provides permitting, consulting, and assessment services to a multitude of clients spanning the Mid-Atlantic region. With a combined 40 years of permitting experience, Thrasher's Environmental Scientists, Permitting Leads, and Project Managers are able to take even the most complex and time restrictive projects and provide clients with cost effective and timely solutions.

#### **Federal Permitting**

- National Historic Preservation Act Section 106 Consultation
  - > State Historic Preservation Office or Division of Culture and History
- Endangered Species Act Section 7 and Section 9 Consultations
  - United States Fish and Wildlife Service
- > Clean Water Act Section 404 Permits
  - United States Army Corps of Engineers

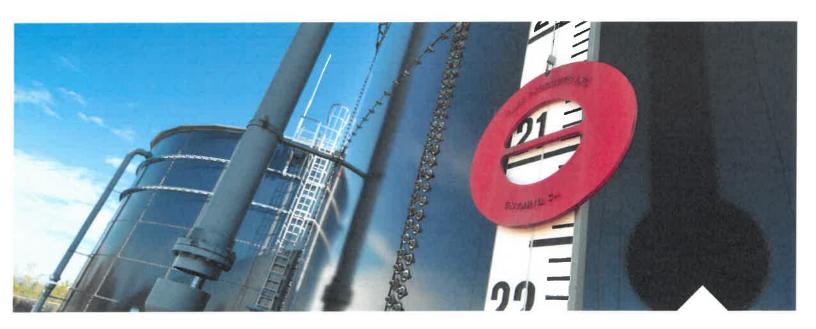
- National Environmental Policy Act –
   Categorical Exclusions, Environmental

   Assessments, and Short Environmental
   Assessment Forms
  - > United States Army Corps of Engineers; Federal Aviation Administration; Division of Transportation; and Federal Communications Commission

#### State and Local Permitting

- State Responsible Regulations of the Clean Water Act – Section 401 and 402 Permits
- State Level Rare, Threatened, or Endangered Species Consultations
- > State Level Aquatic Resource Encroachment and Impact Permits
- State Level Roadway Encroachment,
   Crossing, and Occupancy Permits
- State Level Industrial Waste Discharge Permits
- > Local Level Floodplain or Building Permits





# WATER TREATMENT AND DISTRIBUTION

Meeting increasingly stringent water quality standards demands experienced and dedicated water system specialists. Since our very first water project more than 30 years ago, there has always been a potable water project underway at Thrasher. These projects provide safe drinking water to towns, cities, and entire counties. The team at Thrasher is highly skilled and practiced in both conventional ground and surface treatment systems involving rapid mix, flocculation, sedimentation filtration, membrane, and reverse osmosis processes.

Whether it is designing more efficient processes, integrating alternative energy sources, reducing infiltration, or restoring function to aged piping systems, our clients can count on Thrasher to find practical, low cost, environmentally friendly solutions to their supply needs.

#### Water Services:

- > Distribution System Design
- > Booster Stations and Hydraulic Modeling
- > Water Loss Evaluation and Analysis Studies
- > Feasibility Studies/Facility Planning
- > Water Treatment Plant Design
- > SCADA and Telemetering Systems
- > Existing System Evaluation
- > Storage Facility Design
- > Pump Station Design
- > Construction Monitoring
- > Geographical Information Systems (GIS)





#### **GOALS AND OBJECTIVES**

A critical step in meeting your goals is first ensuring we understand them. Thrasher's team has thoroughly reviewed the Expression of Interest request and is confident in our ability to deliver the highest-quality solutions to your problems. We are capable of meeting each goal/objective you have outlined and feel strongly that you will be satisfied with the outcomes you receive.

# Our team is prepared to complete all of the following services:

- » Evaluate and design stream-bank stabilization on site.
- » Access or accesses as required.
- » Geotechnical analysis.
- » Hydrologic and hydraulic analyses clear and grub affected areas.
- » Regrade as necessary.
- » Concrete foundation pad for a lime dosing system for an AMD affected stream.
- » Develop site-specific lime dosing system based on a pre-designed system.
- » Develop plans and specifications for removal of existing lime dosing system.
- » Condition and revegetate all disturbed areas.
- » Obtain required permits as determined at the pre-design meeting.

We understand your goals for the Pell Road Doser project and will handle them in the following manner:

# ► GOAL/OBJECTIVE | 2.1

Thrasher will evaluate the current site and dosing system and determine a location for the new proposed dosing system that can utilize as much of the current infrastructure as possible and to allow the existing system to operate while the new system is being installed. Once the new site is selected Thrasher will design

the new system based upon the information collected in the field and information provided from the existing system. This design will include a pH monitoring system, internet service extension, PSD waterline extension, and all other features necessary for the function of the new system.

#### ► GOAL/OBJECTIVE | 2.2

Thrasher will develop a site of site plans and specifications for the installation of the items mentioned in Goal 2.1. These plans will be designed to control any onsite and offsite stormwater runoff associated with the site.

#### ► GOAL/OBJECTIVE | 2.3

Thrasher shall include the necessary erosion and sediment control BMPs during construction. In addition to the Doser installation these plans shall include the design of streambank stabilization near the proposed site.

# ► GOAL/OBJECTIVE | 2.4

Thrasher shall include a demolition plan of the existing system which will include a construction sequence to maximize the amount of time the current system can remaining functioning before switching to the new system.

## ► GOAL/OBJECTIVE | 2.5

During the design process Thrasher shall determine all necessary permits for the project. Thrasher shall apply for and obtain these permits in accordance with State and Federal regulations at the earliest time possible in an attempt to minimize any possible construction delays due to approvals.



#### PROJECT MANAGEMENT PLAN

Thrasher is a statewide, full-service group with the experience and ability to work on complex-natured projects and the necessary environmental capabilities to handle the Ethel Hollow Phase II and Phase III project. To make sure your project is completed successfully, Thrasher follows the approach outlined below:

#### **Project Inception**

Thrasher not only takes the time to understand the scope of work, but takes the time to understand other issues that may arise while executing your project. We attend various meetings to provide progress updates, listen to the constituents and their concerns, and focus on ways to address them to ensure everyone is working together.

#### **Availability**

Thrasher has a unique advantage because of our strategically placed office locations throughout the state of West Virginia. Our team has the capability to respond quickly and effectively to meet client needs as they arise, including emergency situations that allow very little notice.

## Addressing Each Project

Every project has unique issues and needs. We take an individualized approach to ensure those needs are being met to the fullest of our capability. As each project arises, it will be assessed and broken down into manageable phases laid out as a roadmap to success.

#### Coordination/Communication

Your project manager, RJ Hovatter, will serve as your main point of contact for this project. Initial support will begin with consistent communications and internal Thrasher Quality Control processes (site surveys, stakeholder reviews, comment resolution, etc.). RJ will also be in constant contact with members of the WVDEP in order to maintain transparency during the process.

#### Portal Closure

Thrasher will provide plans and specifications for the closing of the existing mine portals based upon their current conditions.

#### **Drainage Design**

Thrasher has completed many AML projects drainage structures, like the Ethel Hollow project. In the past, these have included vegetated, grouted, rip-rap channels, as well as culverts and storm sewers. Drainage calculations were completed to properly size all conveyances.

#### Permitting

The permitting process can delay projects if they are not submitted correctly or in a timely manner. Thrasher takes pride in on our ability to quickly obtain permits for our clients. We are able to utilize our excellent relationship with the WVDEP for NPDES permits as well as our relationship with the West Virginia Division of Highways for entrance and drainage permits. We are also experienced in obtaining Army Corps of Engineers permits from both the Pittsburgh and Huntington District Offices for stream bank restoration, wetland mitigation and construction, linear transportation and utility line projects, and temporary construction access and dewatering. You can be confident in knowing that any permitting necessary for your project will be handled swiftly by the Thrasher team.





Thrasher has an internal Quality Control Policy to ensure our projects move forward efficiently and effectively. The objectives of this manual are to continually improve the quality of the design and technical deliverables Thrasher provides to its internal and external clients.

This manual illustrates the basic requirements for quality control in our projects. It describes the methods for checking and reviewing product elements and client deliverables, and includes rigorous comprehensive written check-lists for each stage of the design process, document production, and construction activities.

The purpose of these QC methodologies is to reduce or eliminate the potential for errors, omissions, ambiguities, and inconsistencies.

The policy outlines three main areas:

- General
   Defines the purpose, intent and limitations, definitions, and implementation
- Project Management Procedures
   Presents required procedures specific to this practice that allow for the efficient and accurate management of projects
- Check and Final Review Procedures
   Presents required procedures specific
   to this practice that are used to insure
   technical accuracy of the work product







Cost is a concern in every project and one that we take seriously – it is important to us that we provide a transparent, thorough look at what it will take to get your project completed. To make sure that happens, we follow four important principles:

- > Thorough construction documents Starting off with detailed construction documents helps the entire project run more smoothly. By laying an accurate, realistic picture at the beginning of the process, we are able to complete your project more efficiently and with fewer change orders.
- > In-depth review process The Thrasher team participates in an in-depth review process to ensure there is a thorough understanding of your project. Our construction administration team visits your site in person so we know exactly what is needed for the space.
- > Understanding of what things cost Thrasher has a knowledgeable construction administration team that understands what it truly costs to make things happen. Rather than relying on general industry standards, our Construction Estimator, Jim Decker, can tell you what something will cost in actuality. Jim, who has a contracting license, knows how to navigate both sides of a bid process and can deliver an accurate look at your project costs up front.
- > Respect for your wallet We respect your business needs and work to ensure the lowest-cost options we can find. We also keep you updated of budget throughout the process: An initial construction cost will be calculated to reflect your budget, and construction cost estimates will be delivered with the drawings at the end of Schematic Design, Design Development, and Construction Documentation. Adjustments to size and/or quality will be made, as necessary, during each design phase to maintain your budget.





# **Budgeting:**

Construction estimating and budgeting is one of the most important parts of what Thrasher can provide you. Without accurate budgets, there is no tool to guide the design process and issues will be inevitable. By including cost estimating as a part of the project scope from day one, we are able to avoid issues before they arise and keep your project within a reasonable cost.

And our estimates go beyond the typical system - rather than simply providing cost per foot or lump sum price, Thrasher will provide contractor-grade estimates that look at every part of the project. We do detailed take-offs of materials and look at every man hour needed to complete a project and factor this in accordingly. Then, we use our thorough understanding of the local market and material costs to accurately design within your budget.



# Scheduling:

Thrasher realizes the importance of establishing and maintaining project schedules. Time means money and making sure we help you spend your money wisely is our number one goal. Because of this, our team puts an emphasis on ensuring project timetables are met and communication is upheld throughout the process.

To accomplish these goals, Thrasher utilizes scheduling to track every stage of a project - from design and bidding through construction completion. We also require contractors working on our projects to regularly update their project schedules and give a detailed progress report at each job meeting, again focusing on the communication component of scheduling. This helps to ensure all parties are informed and aware of potential delays. Keeping our owners up to speed with progress is always our priority and ensures occupancy and owner supplied equipment are scheduled accordingly. Then, we use our thorough understanding of the local market and material costs to accurately design within your budget.







## **CHAD BILLER, PE**

Principal-in-Charge



Education

Bachelor of Science,

Civil Engineering

West Virginia University

#### Registrations

Professional Engineer:

- > West Virginia
- > Ohio

#### **Affiliations**

- American Society of Highway Engineers
- American Society of Civil Engineers
- National Society of Professional Engineers

Chad Biller, PE has extensive experience in all aspects of civil engineering, but his primary emphasis lies in site development, transportation, and airport projects. Chad's expertise has made him a go-to source for the design and site layout of numerous residential and commercial sites all throughout the Mid-Atlantic region. His knowledge of site design in the mountainous terrain of West Virginia and the surrounding Appalachian basin is second to none.

As part of his role as in the Site Division, Chad is responsible for the development of project design, production of project specifications and plans, bidding, quality assurance/quality control, and project monitoring. He brings a deep breadth of knowledge to the table, including creative problem solving skills, and decades of hands-on experience implementing unique project delivery methods individually tailored for his clients.

#### Experience

# WVDEP AML Landgraph Refuse Pile

Role: Principal-in-Charge > McDowell County, WV

# WVDEP AML Stowe Landslide

Role: Principal-in-Charge
> Logan County, WV

#### **WVDEP AML Anglins Run**

Role: Principal-in-Charge > Nicholas County, WV

#### WVDEP AML Squires Creek

Role: Principal-in-Charge > Preston County, WV

#### WVDEP Isaac Creek Landslide

Role: Principal-in-Charge > Harrison County, WV

#### WVDEP AML Owl Creek Highwall #2 Refuse

Role: Principal-in-Charge
> Monongalia County, WV

#### City of Salem Slip Repairs

Role: Project Manager
> Harrison County, WV

#### Fairmont State University Storm Water Management Plan

Role: Principal-in-Charge > Marion County, WV

#### Old Bridgeport Hill Storm Drainage

Role: Principal-in-Charge > Harrison County, WV





## RJ HOVATTER, PE

Project Manager



Education

Bachelor of Science,

Civil Engineering

Fairmont State University

#### Registrations

- Professional Engineer:
  > West Virginia
- > Pennsylvania

#### Certifications and Trainings

- Level I Rosgen Natural
   Stream Construction
- Level II Rosgen Natural
   Stream Construction
- > HEC—RAS Operator Training Short Course
- Annual Oil & Gas Training Pennsylvania—Expedited Review of ESCGP-1
- > MSHA Training

Richard "RJ" Hovatter, PE has spent most of his career working with private and public clients on various site development projects. His team of engineers are able to develop strategies to fit the needs of each client. RJ is well versed in site design, grading, storm water and erosion and sediment control plans. He has also managed over 35 Abandoned Mine Land Emergency and Abandoned Mine Land projects across West Virginia, Maryland, and Ohio. His experience provides clients with the reassurance that projects are inspected thoroughly.

He also leads a team of highly skilled engineers in developing innovative slip remediation projects all across the Appalachian basin. RJ has spent a large portion of his career evaluating critical land slips and assessing feasible, sustainable solutions that serve both public and private entities. His diverse portfolio of work has given RJ a refined eye for potential land issues and slip-prone terrain, which ensures his clients projects are designed on safe, stable sites

#### **Experience**

#### WVDEP AML Ridegway Drive Landslide Emergency Project

Role: Project Manager

#### > Harrison County, WV

#### WVDEP AML Ed Gower Highwall Reclamation Project

Role: Project Manager > Upshur County, WV

#### WVDEP Isaac Creek Landslide

Role: Project Manager
> Harrison County, WV

#### WVDEP AML Stowe Landslide Emergency Project

Role: Project Manager

> Logan County, WV

#### MDE AML Shallman Doser

Role: Project Manager
> Garrett County, MD

#### WVDEP AML Nutter Run Landslide Emergency Project

Role: Project Manager
> Harrison County, WV

#### WVDEP AML Owl Creek Highwall Reclamation Project

Role: Project Manager

> Monongalia County, WV

#### WV DEP Shinns Run Portals

Role: Project Engineer
> Harrison County, WV

#### MDE AML Aaron's Run Treatment and Stream Stabilization

Role: Project Manager
> Allegany County, MD



RICHARD G. HOVATTER, JR WV

This is to certify that the above named PROFESSIONAL ENGINEER has met the requirements of the law, is duly registered and is entitled to practice engineering in the State of West Virginia.

EXPURES December \$1, 2000



# STEVEN BUCHANAN, PE

Project Engineer



Education

Bachelor of Science,

Civil Engineering

West Virginia University

#### Registrations

Professional Engineer:

- > West Virginia
- > Maryland
- > Pennsylvania
- > Ohio

#### **Trainings**

 Infrastructure Rehab with Sprayroq Structural Spray Applied Lining System Training Steve Buchana¬n, PE has over three decades of professional experience working on various municipal projects all throughout the Mid-Atlantic region. Steve holds licensure in both engineering and surveying, which has given him the ability to develop projects with a comprehensive understanding of the technical components, as well as land restrictions and site considerations

Over the years, Steve has primarily been involved with public utility projects, and has worked on a wide array of jobs including stormwater management, site planning, hydrologic and hydraulic analysis, wastewater collection system design, water distribution systems, and highway engineering. Steve is heavily involved in all facets of his projects; he manages project design, funding applications, mapping development, and construction coordination for numerous

#### Experience

City of Piedmont Pump Station Replacement

Role: Project Manager

> Mineral County, WV

City of Romney Water Storage Tanks Repair and Replacement

Role: Project Engineer

> Hampshire County, WV

Fountain Public Service
District Phase II Contract #1
Water Line Extension

Role: Project Manager

> Mineral County, WV

Fountain Public Service
District Phase II Contract
#2 Burlington System Water
Line Extension

Role: Project Manager

> Mineral County, WV

Mountain Water Association Multiple Water Projects

Role: Project Manager > Fayette County, PA

Fountain Public Service
District Phase II Contract
#3 Fountain and Burlington
Water Storage Tanks and
Rehabilitation Project

Role: Project Manager
> Mineral County, WV

Fountain Public Service
District Phase II Contract
#4 Fountain and Burlington
Water System Plant and Well
Project

Role: Project Manager
> Mineral County, WV

Lewis County Economic
Development Authority Alum
Fork and Laurel Lick Water
Line Extensions

Role: Project Manager > Lewis County, WV



This is to certify that the above named PROFESSIONAL ENGINEER has met the requirements of the law, is duly registered and is entitled to practice engineering in the State of West Virginia.

EXPERSE Passable \$1, 1889



#### **JEFFREY HARTLEY**

#### Design Engineer



**Education**Bachelor of Science,
Civil Engineering Technology
Fairmont State University

Jeffrey Hartley currently serves as a Staff Engineer for the firm. Jeffrey has a notable background in the site design of corporate and retail centers, road upgrades, access roads, and well pads. He has detailed understanding of site layout, design, and permitting while being actively involved in the development of various site plans, grading plans, erosion and sediment control measures, and project specifications.

Jeffrey's experience working on developments from their initial stages through to completion has allowed him to apply project knowledge to his work in site design. Jeffrey is a successful Staff Engineer by utilizing his leadership skills and proficiency in site design on every project.

#### Experience

Preston County School
Paving Program
Role: Project Engineer

> Preston County, WV

#### Hatfield-McCoy Trails Ivy Branch Cabins Procurement

Role: Project Engineer
> McDowell County, WV

#### WestRidge Corporate Park

Role: Construction Administration/Staff Engineer > Monongalia County, WV

#### WestRidge Commerce Center

Role: Construction
Administration/Staff Engineer
> Monongalia County, WV

#### WestRidge Commons

Role: Construction
Administration/Staff Engineer
> Monongalia County, WV

# WestRidge Exit 155 Development

Role: Construction
Administration/Staff Engineer
> Monongalia County, WV

# Central Station Road Improvements

Role: Staff Engineer
> Doddridge County, WV

#### Morgan Ashland Road Upgrades

Role: Staff Engineer
> Wetzel County, WV

# Arsenal Scotch Hill Road Improvements

Role: Staff Engineer
> Preston County, WV

#### Antero Margery Run Road Improvements

Role: Staff Engineer > Tyler County, WV

### **NGE CONSULTING**

Sub-consultant



# Locations West Virginia Office

650 MacCorkle Avenue West St. Albans, WV 25177 P: (304) 201-5180 F: (304) 201-5182

#### Pennsylvania Office

171 Montour Run Road Moon Twp, PA 15108 P: (412) 722-1970 F: (412) 722-1929

#### Company Overview

NGE was founded in the fall of 2002 by Amy Veltri and John Nottingham, a management team with a combined forty years of industry experience. The family-based entrepreneurial spirit that defined NGE's beginnings remains evident in the innovative solutions we deliver to our loyal clients each and every day. Advances in engineering, science and technology, coupled with regulatory, legal, and compliance pressures create increasingly complex challenges for businesses. NGE strives to keep pace with these changes, with an eye to supporting our clients' changing needs.

NGE has grown into a dependable and flexible environmental and geotechnical consulting firm providing a wide range of professional services, including Environmental Consulting, Geotechnical Engineering and Environmental Construction / Remediation. With clients across the nation, NGE added a second office location in West Virginia in 2003, and seeks to grow in the future by providing consistent, quality service in a family-oriented atmosphere.

Since its inception, NGE has hired and retained the best and brightest talent in the industry. Our staff have relevant experience and qualifications to complete complex environmental and geotechnical projects. NGE's future is bright as we pursue a course of planned, measured growth to meet the challenge of expansion without diluting leadership or weakening the company's ability to perform. After establishing a solid foundation and longstanding reputation in the region and across the nation as an innovative, sophisticated, forward-thinking environmental and geotechnical consulting firm, we are proud of our roots and the progressive environment we have created for our dedicated employees.

NGE is an organization that is small enough to focus time on each client but with a depth in talent and resources to successfully complete large and complex projects. NGE provides superior environmental and geotechnical services at a manageable price A family oriented work atmosphere has fostered the growth of NGE's staff with the best and brightest talent in the industry.

NGE has garnered a variety of certifications and awards over the years in the environmental and geotechnical consulting industry. These accomplishments and accolades bear testament to the impeccable standards that we strive to achieve at NGE. They help differentiate our company from our competitors and serve to distinguish our employees as the "best of the best."



Our team's current workload will allow for immediate response to your needs. Thrasher is available to attend any meetings regarding your project(s).

Thrasher has a history of successfully delivering projects that were developed out of solid/sound professional surveying, engineering, and architectural services. We understand our role to be an extension of your staff, working closely to provide quality work in a timely manner. We also understand that turnaround time on a task may be short, and that timely service is critical. Thrasher routinely meets aggressive deadlines. We have assembled a team of responsive professionals who possess the qualifications and experience necessary to handle all aspects of this project.

Thrasher is fully staffed with survey, engineering, architectural, environmental, construction management, and materials testing personnel to meet your needs. The employees identified as key personnel on your projects bring specific areas of expertise to the Team.

Why Thrasher? The Thrasher Team has technical qualifications, skills, experience, and resources that are integrated with a proven management infrastructure. We want to perform projects for the WVDEP, office of DLR, and AML, and will provide high quality engineering services in a timely and cost-effective manner.





#### **PROJECT EXPERIENCE**







# CITY OF KINGWOOD

Whetsell Settlement Water Extension

#### **Client Contact:**

Ms. Mary Howell 313 Tunnelton Street | Kingwood, WV 26537 304-329-1225

The citizens of the Preston Country Club / Whetsell Settlement area on the outskirts of the City of Kingwood formed a committee to lobby for the extension of water service from the City of Kingwood to the homes and business in the area.

Thrasher Engineering was retained to prepare preliminary engineering, funding acquisition support, design, survey and construction management. Thrasher also served as the liaison between the committee and City.

This project involves the installation of approximately 9,500 LF of 6" water line, 5,400 LF of 2" water line, and 38 new meter settings for new water customers. This project also includes miscellaneous fire hydrants, valves, and trench repair items.

#### PROJECT EXPERIENCE



## WVDEP AML Swamp Run Refuse #1

#### Client Contact:

Buckhannon River Watershed Association 112 Fayette Street | Buckhannon, WV 26201 304-472-3317

This project, located in Alton, WV, involved a large ferric iron "mushroom" that takes up approximately 0.87 acres. This was caused by acid mine drainage (AMD) emanating from an entombed refuse fill above an unnamed tributary of Swamp Run. The Swamp Run #1 passive AMD treatment system utilized open limestone channels channeling the toxic water to a forebay, which controls larger storm event flow and separates that flow between primary and secondary limestone leech beds. These beds are self-flushing with an automated inline water level control structure. The treated

water from the leech beds will then discharge into flushing ponds for solids removal before being conveyed into a wetland finishing pool prior to being released back into the unnamed tributary.

The proposed treatments have been designed to remove approximately 80% of the acid load and should have a lifespan of 20 years.



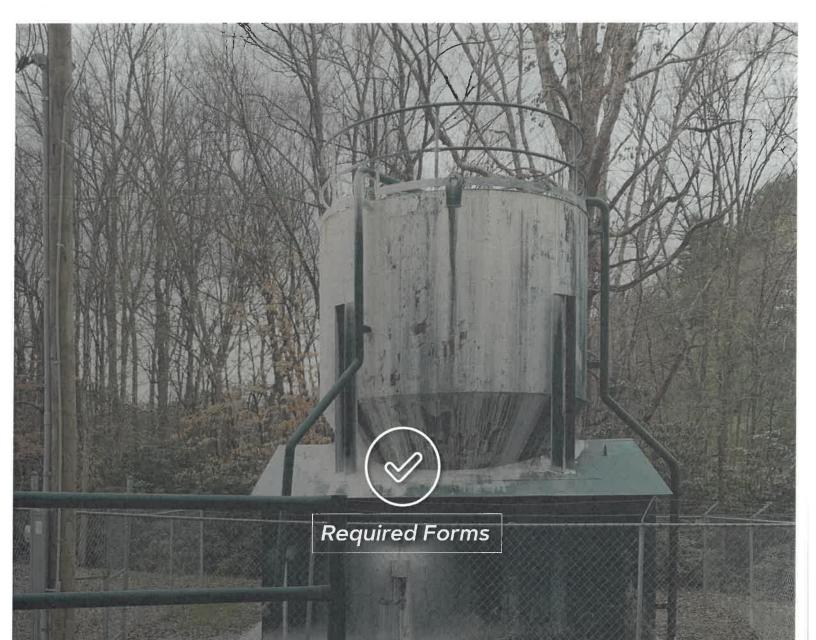


#### WVDEP AML Lambert's Run #7

Client Contact:
Mr. John Eleyette
Guardians of the West Fork
830 Benoni Avenue | Fairmont, WV 26554
304-627-1019

This project located in Clarksburg, WV involved 3 wet-seal portals that drain into a 0.7 acre impoundment. The three portals discharge approximately 500 to 3,000 gallons per minute of iron laden water into the main stem of Lambert Run. This project is another in a series of projects aimed at removing Lambert Run (WV MW-16) from the state's 303(d) list of impaired watersheds. This is a project which will combat acid mine drainage emanating from three portals in the central region of the Lambert Run watershed.

Thrasher's plan for the project included, constructing, aeration channels and approximately 4 acres of aerobic wetlands to provide passive treatment of AMD. The proposed treatments have been designed to remove approximately 80% of the acid load.



THRASHER

			T OF ENVIRONME			
			N QUESTIONNAIR			ent "A"
PROJECT NAME	1	DATE (DAY, MONTH	I, YEAR)		FEIN	
KEMPTON REFUSE REHABILITATION PROJE	SEPTEMBER 10, 2020			55-0633596-6		
1. FIRM NAME		2. HOME OFFICE E				FIRM NAME
THE THRASHER GROUP, INC.		600 WHITE OAKS BOUL	LEVARD, BRIDGEPORT, W	NV 26330	THRASHE	R ENGINEERING
4. HOME OFFICE TELEPHONE	5. ESTABLI	SHED (YEAR	6. TYPE OWNERSHI	P		6a. WV REGISTERED DBE
304-624-4108	1983			Corporat		(Disadvantaged Business
			Partnership	Joint-Ve	nture	Enterprise)
7. PRIMARY AML DESIGN OFFICE:						YES NO X
600 WHITE OAKS BOULEVARD, BRIDGEPOI				& TELEP	HONE NUMBI	ER - OTHER PRINCIPALS
CHAD RILEY - PRESIDENT & CEO RON STANLEY - VP, CFO, AND TREASURER CLAY RILEY, PE - SECRETARY			WM. RANDY WATSON - SICHADWICK BILLER, P.E SHARI CRAIG BAKER, CEFP - SHARI ROBERT MILNE, P.E SHARI JONATHAN CARPENTER, PCLAYTON WHITE, EI, PMPKYLEA RADCLIFF, P.E SHASTEVEN HAMIT, P.E SHASTEVEN HAMIT, P.E SHARE JASON BOYD, P.E SHARE JOE LOWTHER, P.S SHARE JOE LOWTHER, P.S SHARE	SHAREHOLDE EHOLDER (30 REHOLDER (3 AREHOLDER (3 P.E- SHAREHO - SHAREHOLDER IAREHOLDER EHOLDER EHOLDER	R (304) 624-410 4) 624-4108 04) 624-4108 804) 624-4108 BLDER	98
9. PERSONNEL BY DISCIPLINE						
14 ADMINISTRATIVE  8 ARCHITECTS  15 BIOLOGIST  16 CADD OPERATORS  17 CHEMICAL ENGINEERS  18 CONSTRUCTION INSPECTORS	<ul> <li>ECOLOGI</li> <li>ECONOMI</li> <li>ELECTRICA</li> <li>ENVIRONI</li> <li>ESTIMATO</li> <li>GEOLOGIS</li> <li>HISTORIA</li> </ul>	STS ALENGINEERS MENTALISTS IRS TS ANS	3 LANDSCAPE AI 1 MECHANICAL — MINING EN 3 PHOTOGRAM 2 PLANNERS: UI 44 SANITARY ENG — SOILS ENGI	ENGINEERS NGINEERS IMETRISTS RBAN/REGIO GINEERS INEERS	ONAL	2 STRUCTURAL ENGINEERS 150 SURVEYORS 3 TRAFFIC ENGINEERS 4 GIS SPECIALIST 3 PIPELINE INSPECTOR 15 MATERIALS TESTING TECH. 22 OTHER
3 DESIGNERS  — DRAFTSMEN  TOTAL NUMBER OF WV REGIS *RPEs other than Civil and Mir this type of work.		ESSIONAL ENGINEE		FICE: <b>17</b>		m to supervise and perform
SHES SING OF HORKI						
10. HAS THIS JOINT-VENTURE WOR	RKED TOGETH	ER BEFORE?	YES X NO NO	OT APPLIC	ABLE	

<ol> <li>OUTSIDE KEY CONSULTANTS/SUB-CONSULTA Questionnaire".</li> </ol>	NTS ANTICIPATED TO BE USED. Attach "AML C	Consultant Confidential Qualification
NAME AND ADDRESS: NGE CONSULTING 650 MACCORKLE AVE. WEST, ST. ALBANS, WV 25177 304-201-5180	SPECIALTY: GEOTECHNICAL SERVICES	WORKED WITH BEFORE Yes No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFOREYes No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE  Yes  No
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFOREYesNo
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 BEFOREYesNo
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFOREYesNo

12.	Α.	Is your firm experienced in Abandoned Mine Lands Remediation/Mine Reclamation Engineering?  X YES Description and Number of Project: Thrasher performs engineering design services to the WV DEP for drainage, portal seals, highwall and other remediation projects, as well as for water line and water treatment plant projects related to AML. Numerous projects involving land remediation, storm water drainage, slip repair, mass grading in relation to site development and highway projects are engineered by the firm on a regular basis.
	В.	Is your firm experienced in Soil Analysis?  X YES Description and Number of Projects: Thrasher maintains an AASHTO Certified materials testing and analysis lab at both the Bridgeport and Beckley offices. Soil analysis experience is specifically in gradations and classification.
	c.	Is your firm experienced in hydrology and hydraulics?  X YES Description and Number of Projects: Throughout the state Thrasher has done planning and design of bridges for the West Virginia Department of Highways and the design of multiple private and municipal development projects located within floodplains. Thus, Thrasher has extensive experience in hydrology. We also have a vast amount of experience in hydraulic modeling for water and wastewater projects throughout West Virginia.
	D.	Does your firm produce its own Aerial Photography and Develop Contour Mapping?  X YES Description and Number of Projects: Thrasher acquires aerial imagery using in-house resources on smaller area projects. We own and operate three UAS (unmanned aerial systems) for a variety of imagery missions for projects up to approximately 500 acres. For large mapping projects, we use a commercial flying service. Thrasher has three FAA Certified pilots.  Thrasher has expertise and software in-house and routinely performs aero triangulation, planimetric compilation, surface modeling, contour mapping and digitally rectified imagery.  Thrasher has mapped and flown hundreds of projects during the last year.
	Ε.	Is your firm experienced in domestic waterline design? (Include any experience your firm has in evaluation of aquifer degradation as a result of mining.)  XYES Description and Number of Projects: Thrasher has designed many successful water line systems in West Virginia. Projects include new systems, extensions, and replacements of water line distribution systems, many of which have been affected by Abandoned Mine Lands. Design of the projects includes lines, booster stations, water treatment plants, and storage facilities.  Thrasher's analysis and design also includes improvements and alternatives for water sources deemed ground water under the direct effect of surface water.
	F.	Is your firm experienced in Acid Mine Drainage Evaluation and Abatement Design?  XYES Description and Number of Projects: Thrasher has been awarded and has successfully completed numerous reclamation projects for WV DEP related specifically to acid mine drainage and abatement, as well as multiple passive treatment systems designed for watershed protection groups. The Charleston, WV branch of our company designed an award-winning water treatment plant for Martinka mines in Marion County, West Virginia to treat mine drainage.

13. PERSONAL HISTORY STATEMENT OF PRoduct data but keep to essentials)	INCIPALS AND ASSOCIATES RESPO	NSIBLE FOR AML PROJECT DESIGN	(Furnish complete
NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
BILLER, CHADWICK D. – PRINCIPAL-IN-CHARGE	YEARS OF AML DESIGN EXPERIENCE: 16	YEARS OF AML RELATED DESIGN EXPERIENCE: 21	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 21
Brief Explanation of Responsibilities Chadwick. Biller has experience in all aspects of enging Group, Inc. in 1999 and is a partner of The Thrasher Cairports, highways, roads, and bridges. As Project Mastandards.	neering with specific emphasis on site deve Group. Chad is responsible for WV DEP AM	IL project and public and private site deve	lopment projects, specializing in
EDUCATION (Degree, Year, Specializati Bachelor of Science, Civil Engineering, 1992 – West V			
MEMBERSHIP IN PROFESSIONAL ORGANIZAT:	IONS	REGISTRATION (Type, Year, St Professional Engineer, 1998, West Virgin Professional Engineer, 1999, Pennsylvan Professional Engineer, 2000, Ohio	ia
13. PERSONAL HISTORY STATEMENT OF PRIdata but keep to essentials)	INCIPALS AND ASSOCIATES RESPON	SIBLE FOR AML PROJECT DESIGN	(Furnish complete
NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
	YEARS OF AML DESIGN EXPERIENCE: 13	YEARS OF AML RELATED DESIGN EXPERIENCE: 13	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: <b>13</b>
Brief Explanation of Responsibilities As Project Manager, RJ has completed the site design He has also managed over 35 Abandoned Mine Land numerous slip remediation projects.  EDUCATION (Degree, Year, Specializati Bachelor of Science, 2002, Civil Engineering Technolo MEMBERSHIP IN PROFESSIONAL ORGANIZATI N/A	n, grading, storm water and erosion and se Emergency and Abandoned Mine Land pro Lon) gy – Fairmont State University	diment control plans for over twenty privolects in West Virginia, Maryland and Ohio  REGISTRATION (Type, Year, St. Professional Engineer, 2009, West Virgini Professional Engineer, 2010, Pennsylvani	ate) a #018460

13. PERSONAL HISTORY STATEMENT OF PR data but keep to essentials)	INCIPALS AND ASSOCIATES RESPO	NSIBLE FOR AML PROJECT DESIGN	(Furnish complete				
NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE					
. , ,	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN	YEARS OF DOMESTIC				
Steven Buchanan - Project Engineer	N/A	EXPERIENCE:	WATERLINE DESIGN EXPERIENCE: 20				
		30	EXPERIENCE: 30				
Brief Explanation of Responsibilitie	s						
Steve Buchana¬n, PE has over three deca	des of professional experience work	ing on various municipal projects all	throughout the Mid-Atlantic				
region. Steve has primarily been involved wi	th public utility projects, and has wo	ked on a wide array of jobs including	g stormwater management,				
site planning, hydrologic and hydraulic analy	sis, wastewater collection system de	esign, water distribution systems, an	d highway engineering.				
EDUCATION (Degree, Year, Specializat	ion)						
Bachelor of Science, Civil Engineering, Wes	t Virignia University						
MEMBERSHIP IN PROFESSIONAL ORGANIZAT	IONS	REGISTRATION (Type, Year, Sta					
		Registered Professional Engineer (PE States of West Virginia	≣)				
N/A		Maryland (#26197), Pennsylvania	and Ohio				
		Maryland (#26197), Pennsylvania					
N/A  12. PERSONAL HISTORY STATEMENT OF PR data but keep to essentials)	CURCIPALS AND ASSOCIATES MASTO	Maryland (#26197), Pennsylvania					
12. PERSONAL HISTORY STATEMENT OF PR		Maryland (#26197), Pennsylvania  ISTRIA FOR AND FROMES HASTON  YEARS OF EXPERIENCE	(Parnish complete				
12. PERSONAL HISTORY STATEMENT OF PR data but keep to essentials)	TEARS OF AML DESIGN EXPERIENCE:	Maryland (#26197), Perinsylvania					
12. PERSONAL HISTORY STATEMENT OF PR data but keep to essentials) NAME & TITLE (Last, First, Middle Dat.) Telling Hardey - Design Engineer  Brief Explanation of Responsibilities	YEARS OF AMI. DESIGN EXPERIENCE:	Maryland (#26197), Pennsylvania  HEIRIA FOR AM. PROJECT HASIGE  YEARS OF EXPERIENCE  YEARS OF AM. RELATED RESIGN  EXPERIENCE: 4	(Parnish ensplets YEARS OF DOMESTIC WATERLINE RESIGN ENSPERISECE: 4				
12. PERSONAL HISTORY STATEMENT OF PR data but keep to essentials)  NAME & TITLE (Last, First, Middle Int.)  Letter Hardey - Design Engineer  Brief Emplanation of Responsibilities  Letter Hardey correctly series as a Staff Engineer in  made, and well pade. He has detailed understanding plans, engine and sestiment control measures, and  Letter's experience woulding on developments from	YEARS OF AMI. DESIGN EXPERIENCE:  11/A  15  16 or the firm. Jeffrey has a notable backgroun 16 site layout, design, and permitting whi 16 project specifications.  16 their initial stages through to completion	Maryland (#26197), Perinsylvania  INTELLA FULL PARE, PROJECT HARICA  YEARS OF EXPERIENCE  TEARS OF AND RELATED DESIGN  EXPERIENCE: 4  Ind in the site design of curporate and retail to being actively involved in the development.	(Parnish complete YEARS OF DOMESTIC HATERLIEF RESIGN EXPERIENCE: 4 Locates, madappades, access at of various site plans, grading				
12. PERSONAL HISTORY STATEMENT OF PRoducts but keep to essentials)  NAME & TITLE (Last, Pirst, Middle Int.)  Leftrey Hartley - Design Engineer  Brief Emplanation of Responsibilities being that ley currently serves as a Staff Engineer in made, and stell pads. He has detailed understanding plans, emaion and sessionent control measures, and befiney's experience working on developments from helicy's experience working on developments from helicy's experience working on developments from helicy's a successful Staff Engineer by utilizing his leftrey's a successful Staff Engineer by utilizing his leftrey's a successful Staff Engineer by utilizing his leftrey's and successful Staff Engineer by utilizing his leftrey's and successful Staff Engineer by utilizing his leftrey in the successful Staff Engineer by utilizing his leftrey in a successful Staff Engineer by utilizing his leftrey in the successful Staff Engineer by utilizing his leftrey in the successful Staff Engineer by utilizing his leftrey in the successful Staff Engineer by utilizing his leftrey in the successful Staff Engineer by utilizing his leftrey in the successful Staff Engineer by utilizing his leftrey in the successful Staff Engineer by utilizing his leftrey in the successful Staff Engineer by utilizing his leftrey in the successful Staff Engineer by utilizing his leftrey in the successful Staff Engineer by utilizing his leftrey in the successful Staff Engineer by utilizing his leftrey in the successful Staff Engineer by utilizing his leftrey in the successful Staff Engineer by utilizing his leftrey in the successful Staff Engineer by utilizing his leftrey in the successful Staff Engineer by utilizer by utilizer by the successful Staff Engineer by the successful Staff Engineer by the succ	YEARS OF AMI. DESIGN EXPERIENCE:  11/A  or the furn. Jeffrey has a notable backgroung of site layout, design, and permitting whi project specifications.  their initial stages through to completion exactership shifts and professory in site design.	Maryland (#26197), Perinsylvania  INTELLA FULL PARE, PROJECT HARICA  YEARS OF EXPERIENCE  TEARS OF AND RELATED DESIGN  EXPERIENCE: 4  Ind in the site design of curporate and retail to being actively involved in the development.	(Formish complete YEARS OF DOMESTIC HATERLINE RESIGN EXPERIENCE: 4 Locaters, mad appeales, access at of various site plans, grading				
12. PERSONAL HISTORY STATEMENT OF PR data but keep to essentials)  NAME & TITLE (Last, First, Middle Int.)  Letter Hardey - Design Engineer  Brief Emplanation of Responsibilities  Letter Hardey correctly series as a Staff Engineer in  made, and well pade. He has detailed understanding plans, engine and sestiment control measures, and  Letter's experience woulding on developments from	YEARS OF AMI. DESIGN EXPERIENCE:  11/A  or the firm. Leffrey has a notable backgroun, of site layout, design, and permitting whi project specifications.  of their initial stages through to completion is a stage of the same professions of the same stages.	Maryland (#26197), Perinsylvania  INTELLA FULL PARE, PROJECT HARICA  YEARS OF EXPERIENCE  TEARS OF AND RELATED DESIGN  EXPERIENCE: 4  Ind in the site design of curporate and retail to being actively involved in the development.	(Formish complete YEARS OF DOMESTIC HATERLINE RESIGN EXPERIENCE: 4 Locaters, mad appeales, access at of various site plans, grading				
12. PERSONAL HISTORY STATEMENT OF PRoducts but keep to essentials)  NAME & TITLE (Last, Pirst, Middle Int.)  Leftry Hartley - Design Engineer  Brief Emplanation of Responsibilities before Hartley convextly serves as a Staff Engineer in made, and well pade. He has detailed understanding plans, engine and sediment control measures, and before's experience woulding on developments from before is a successful Staff Engineer by utilizing his in EDUCATION (Congree, Year, Specialization)	TEARS OF AID. DESIGN EXPERIENCE:  II/A  or the firm. Leffney has a notable backgroung of site layout, design, and permitting whin project specifications.  I their initial stages through to completion expects ship shifts and proficiency in site design.  I their initial stages through to completion expects ship shifts and proficiency in site design.	Maryland (#26197), Perinsylvania  INTELLA FULL PARE, PROJECT HARICA  YEARS OF EXPERIENCE  TEARS OF AND RELATED DESIGN  EXPERIENCE: 4  Ind in the site design of curporate and retail to being actively involved in the development.	(Parnish complete  YEARS OF DOMESTIC  PATERLINE RESIGN  EXPERIMENT: 4  Domins, mad upgrades, access ant of various site plans, grading  p to his work in site design.				
12. PERSONAL HISTORY STATEMENT OF PR data but keep to essentials)  NAME a TITLE (Last, First, Middle Int.)  Letter Hartley - Design Engineer  Brief Emplanation of Responsibilities Letter Hartley correctly serves as a Staff Engineer is mads, and well pads. He has detailed understanding plans, emains and sestiment control measures, and Letter's experience woulding on deschapments from Letter's experience woulding on deschapments from Letter's a successful Staff Engineer by willing his I EDUCATION (Degree, Year, Specialisat Endedor of Science, 2014, Girl Engineering - Fairm	TEARS OF AID. DESIGN EXPERIENCE:  II/A  or the firm. Leffney has a notable backgroung of site layout, design, and permitting whin project specifications.  I their initial stages through to completion expects ship shifts and proficiency in site design.  I their initial stages through to completion expects ship shifts and proficiency in site design.	Maryland (#26197), Perinsylvania  INTERIOR FOR PARK, PROJECT HAS IGN  YEARS OF EXPERIENCE  YEARS OF AME RELATED DESIGN  EXPERIENCE: 4  In the site design of unporate and retail the heige actively involved in the design of	(Parnish complete  YEARS OF DOMESTIC  PATERLINE RESIGN  EXPERIMENT: 4  Domins, mad upgrades, access ant of various site plans, grading  p to his work in site design.				

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

The Thrasher Group, Inc. will design work for this project utilizing one of the largest networks of computer aided design (CAD) equipment, software and trained personnel in the state of West Virginia.

Connected through a virtual private network, our CAD staff has the ability to share necessary plans among our locations. This will allow work designed for AML to be prepared and updated at the office location that best meets the needs of the scope of services.

Civil 3D, Carlson and Microstation V8 Software is utilized at 35 CAD stations throughout our locations. Additionally, equipment includes 10 large format (Size E) plotters and 5 large format plotter / scanners. CAD plans are prepared by both dedicated cad employees and by staff engineers and engineering technicians in each of the firm's offices.

Thrasher also utilizes top-of-the line survey equipment. Our survey work is accomplished with global positioning systems (GPS) and electronic distance measuring (EDM) survey stations with data gathering capabilities. The survey crews and office support staff generate mapping deliverables in virtually any digital format referenced to specified projection systems.

Additional survey services include: high accuracy monumentation, astronomic observations / orientation, NGS blue booking, hydrographic, terrestrial scanning, 3D asbuilts, 3D monitoring, sub-surface utility location / designation. The field crews are all equipped with late model four-wheel drive vehicles stocked with the most modern equipment available to perform professional land surveying services.

- 111 TRIMBLE GNSS UNITS
- 68 TRIMBLE ROBOTS
- 2 PRECISE DIGITAL FIRST ORDER LEVELS WITH INVAR RODS
- 39 LEICA, NIKON OR TOPCON TOTAL STATIONS ALL MANAGED BY
- TRIMBLE TSC3 FIELD COMPUTERS
- 2 REMOTE CONTROLLED/UNMANNED MAPPING AERIAL PLATFORM
- HYDROGRAPHIC SURVEY VESSEL

- CIVIL 3D
- CARLSON AND MICROSTATION V8 SOFTWARE
- 35 CAD STATIONS
- 10 LARGE FORMAT (SIZE E) PLOTTERS AND
- 5 LARGE FORMAT PLOTTER / SCANNERS
- 7 3D SUB-SURFACE UTILITY LOCATORS

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

THE THRASHER GROUP IS CURRENTLY THE DESIGNATED "ENGINEER OF RECORD" ON MORE THAN 200 ON-GOING PROJECTS. THESE PROJECTS RANGE FROM SIMPLE BOUNDARY

SURVEYS WHICH ARE COMPLETED WITHIN A FEW DAYS' TIME TO COMPLETE MUNICIPAL PROJECTS WHICH ARE COMPLETED OVER AN EXTENDED AMOUNT OF TIME. A PARTIAL LISTING

OF CURRENT PROJECTS FOLLOWS WHICH DEMONSTRATES THE RANGE OF SERVICES PROVIDED BY THE THRASHER GROUP.

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
OWL CREEK HIGHWALL #2 ABANDONED MINE LANDS AND RECLAMATION NEAR MORGANTOWN, WV MONONGALIA COUNTY	ENVIRONMENTAL PROTECTION OFFICE OF AML&R 601 57TH ST SE CHARLESTON WV 25304	PROVIDE ENGINEERING SERVICES TO MITIGATE MINING RELATED PROBLEMS ASSOCIATED WITH ABANDONED MINE LANDS (PERMITTING, DESIGN, CONSTRUCTION MONITORING)	TBD	30%
ISAAC CREEK LANDSLIDE ABANDONED MINE LANDS AND RECLAMATION NEAR DOLA, WV HARRISON COUNTY	ENVIRONMENTAL PROTECTION OFFICE OF AML&R 601 57TH ST SE CHARLESTON WV 25304	DEVELOP CONSTRUCTION AND EROSION AND SEDIMENT PLANS ALONG WITH TECHNICAL SPECIFICATIONS TO STABILIZE THE LANDSLIDE AND RE-ESTABLISH THE ALIGNMENT OF ISAAC CREEK ROAD (CR 16-1)	TBD	95%
BERKELEY COUNTY PUBLIC SERVICE SEWER DISTRICT RIVERSIDE PUMP STATION INSTALLATION BERKELEY COUNTY, WV	BERKELEY COUNTY PSSD PO BOX 944 MARTINSBURG, WV 25402	FEASIBILITY STUDY, DESIGN, FUNDING AND PERMIT APPLICATIONS, CONTRACT DOCUMENTS, FIELD SERVICES OF SURVEY AND INSPECTION	\$7,000,000.00	90%
TOTAL NUMBER OF PROJECTS	:3 of our current projects 1	isted TOTAL ESTIMATED C	ONSTRUCTION COSTS: n/e	1

PROJECT NAME, TYPE AND LOCATION			ESTIMATED COMPLETION DATE	ESTIMATED CON	STRUCTION COST		
				ENTIRE PROJECT	YOUR FIRMS RESPONSIBILITY		
ACP PIPELINE NC TO WV	SURVEY	GAI 300 SUMMERS STREET, SUITE 100 CHARLESTON, WV 25301	SUMMER 2021	N/A	N/A		
CORRIDOR H SECTION 2 RANDOLPH COUNTY, WV	ROADWAY DESIGN, SURVEY, TESTING	MEAD AND HUNT 400 TRACY WAY #200 CHARLESTON, WV 25311	FALL 2021	\$100,000,000	N/A		

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
STOWE (PRINCE) LANDSLIDE EMERGENCY AML LOGAN COUNTY, WV	WV DEP, OFFICE OF AML&R 601 57 <sup>TH</sup> STREET, SE CHARLESTON, WV 25304	\$220,000.00	2016	YES
LAMBERTON RUN SITE 7 PASSIVE AMD TREATMENT SYSTEM HARRISON COUNTY, WV	GUARDIANS OF THE WEST FORK 830 BENONI AVE. FAIRMONT, WV 2554	\$340,000.00	2016	YES
SWAMP RUN #1 PASSIVE AMD TREATMENT SYSTEM UPSHUR COUNTY, WV	BUCKHANNON RIVER WATERSHED ASSOCIATION 112 FAYETTE STREET BUCKHANNON, WV 26201	\$440,000.00	2016	NO
NUTTER RUN LANSLIDE EMERGENCY AML HARRISON COUNTY, WV	WV DEP, NORTHERN EMERGENCY 101 CAMBRIDGE PLACE   BRIDGEPORT, WV 26330	\$10,000,000	2017	YES
RIDGEWAY DRIVE LANDSLIDE EMERGENCY AML HARRISON COUNTY, WV	WV DEP, NORTHERN EMERGENCY 101 CAMBRIDGE PLACE   BRIDGEPORT, WV 26330	\$20,000,000	2018	YES

	THIN LAST 5 YEARS ON WHICH F WORK FOR WHICH YOUR FIRM	YOU WERE ASSOCIATED WITH OTHER FIRM WAS RESPONSIBLE)	MS					
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			
BOONE COUNTY MINE ACCESS BOONE COUNTY, WV	WVDOH 1900 KANAWHA BLVD E CHARLESTON, WV 25311	\$1,207,900	2018	NO	BIZZACK CONSTRUCTION			
OAK MOUND WALDO RUN ELECTRIC TRANSMISSION LINE SUMMIT COUNTY, OH	FIRST ENERGY 76 SOUTH MAIN STREET AKRON, OH 44308	<b>\$1,294,493</b>	2016	YES	BURNS AND MCDONNELL			
19. USE THIS SPACE TO PROVIDE ANY ADDITIONAL INFORMATION OR DESCRIPTION OF RESOURCES SUPPORTING YOUR FIRM'S QUALIFICATIONS TO PERFORM WORK FOR THE WV ABANDONED MINE LANDS PROGRAM								
SEE ATTACHMENT – STATEMENT OF QUALIFICATIONS								
20. THE FOREGOING IS A STATEM		E: PROJECT MANAGER		DATE: MARCH 1	6, 2021			
PRINTED NAME: RICHARD HOVATTER								

#### Attachment "B"

PROJECT  Exp. Basis C-Corp P-Personal  *  Additional info provided in Section (s)  **	Ĉ-Corp		pa sal info ed in P-				Primary staff participation/capacity *** M-Management P-Professional												
		Forfeited Surface Mine Reclamation	Forfeited 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	Chadwick D. Biller	R.J. Hovatter	
Anglins Run Portals	С				х	х					x							М	
Roaring Creek	С		x	х		х			x		x							М	
Shinns Run Portals	P			х		х			x		x								M/P
Squire's Creek Portals	С	Project Experience	x		х	х					х				х			M	
Overfield (Laferty) CS&P	С		x		x	x					х						x	М	
Laurel Run	С		·x		x	х					х							M	P
Clarksburg Lyons Landslide	С		x			х					х						x	M	
Pleasant Valley	С		х		х	х					х							M	P
Roger Camp Hill	С		х			х					х							M	P
Owl Creek Highwall	С	Project Experience	x		x	х					x					x		M	P
Landgraff Refuse	С		x			х					х							M	P
Canyon Refuse & Dump	С	Project Experience	х		x	х					х				х			M	P
Stowe (Prince) Landslide	С					x					х						x	M	P
Lamberts Run Site 7	С		x			x					х	х	x	x		x		M	P
Swamp Run #1	С	Project Experience	х			х					x	х	х	х		х		M	P
Dans Branch	С	Project Experience				х					x						х	M	P
Ed Gower Highwall #2	С		х		х	х					х							M	P
Martinka Mine	С		х			х					x	х	х	х				M	P
Isaac Creek Landslide	С		x			х					х						х	M	P

<sup>\*</sup>List whether project

\*\* Use this area to pro

\*\*\* List primary designate or personnel based or both

\*\*\* List primary designate specific sections or pages if needed for reference

up personnel and their functional capacity for the projects listed.

**DESIGNATED CONTACT:** Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract. (Name, Title) Richard Hovatter - Project Manager (Printed Name and Title) 600 White Oaks Blvd, Bridgeport, WV 26330 (Address) 304-624-4108 / 304-624-7831 (Phone Number) / (Fax Number) rhovatter@thethrashergroup.com (email address) CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf, that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration. The Thrasher Group, Inc. (Company) Chad Biller, Principal (Authorized Signature) (Representative Name, Title) Chad Biller - Principal (Printed Name and Title of Authorized Representative) 04/14/2021 (Date)

304-624-4108 / 304-624-7831 (Phone Number) (Fax Number)

# ADDENDUM ACKNOWLEDGEMENT FORM SOLICITATION NO.: CEOI 0313 DEP2100000003

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.

	umbers Received: x next to each addendum rece	eivec	i)						
[ × ]	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.  The Thrasher Group, Inc.									
		_		Company					
				1100 800					

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing. Revised 6/8/2012

**Authorized Signature** 

04/14/2021 Date

# THRAISHER