

ENGINEERING ARCHITECTURE FIELD SERVICES RECEIVED

2019 FEB 20 AM 10: 38

WV PUNUHASING DIVISION

February 22, 2019

Attn: Mr. Guy Nisbet 2019 Washington Street East Charleston, WV 25305

RE: Canaan Valley Resort State Park Lodge Wastewater Plant and Collection System Renovations - DNR19*01

Dear Mr. Nisbet and members of the selection committee:

Canaan Valley Resort is in need of an engineering firm that can improve the wastewater treatment and collection system at its lodge. With significant inflow and infiltration (I&I) problems and issues with the aeration system, this is a job that requires a high level of technical expertise and a longstanding history of success. The Thrasher Group can bring both to your project.

Thrasher has a full in-house I&I team, equipped with the most sophisticated technology needed for the job. We are able to provide a series of tests to your system that will pinpoint the exact locations of your I&I issues so we can resolve the problems in the most efficient manner possible.

As a company that has built itself on public utility projects, our experience over the last 35 years has shown us every scenario you may come across in the wastewater world. Our team has the knowledge to evaluate your extended aeration system and make recommendations on options for improvement. We will work with you side-by-side to ensure Canaan Valley Resort is set up for long-term ease of operation.

As a firm strongly rooted in West Virginia, we appreciate the role Canaan Valley Resort plays in promoting our state and look forward to the opportunity to partner with you in that effort. The materials enclosed will further show you why Thrasher is the right team for the job and exactly how we can add value to Canaan's wastewater system.

Sincerely,

THE THRASHER GROUP, INC.

Jesse Alden, PE Project Manager **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.

Jene let a file)	
(Name, Title)	
Jenelle Armstrong, PE - Principal	
(Printed Name and Title)	
600 White Oaks Boulevard, Bridgeport, WV 26330	
(Address)	
304-624-4108 / 304-624-7831	
(Phone Number) / (Fax Number)	
jarmstrong@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)	
(Anthorized Signature) (Representative Name, Title)	
(Afthorized Signature) (Representative Name, Title)	
U	
Jenelle Armstrong, PE - Principal	
(Printed Name and Title of Authorized Representative)	
February 14, 2019	
(Date)	
304-624-4108 / 304-624-7831	
(Phone Number) (Fax Number)	

STATE OF WEST VIRGINIA Purchasing Division

PURCHASING AFFIDAVIT

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

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

EXCEPTION: The prohibition fisted above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

DEFINITIONS:

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

"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-20-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

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

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

WITNESS THE FOLLOWING SIGNATURE: The Thrasher Group, Inc. Vendor's Name: Authorized Signature: State of West Virginia County of Harrison to-wit: Taken, subscribed, and sworn to before me this Hthay of February My Commission expires _ **NOTARY PUBLIC** AFFIX SEAL HER OFFICIAL SEAL NOTARY PUBLIC urchasing Affidevit (Revised 01/19/2018) State of West Virginia CYNTHIA CAMEON 209 Benedum Dr Bridgeport, WV 26330 sion Expires April 18, 2022

ADDENDUM ACKNOWLEDGEMENT FORM SOLICITATION NO.:

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received: (Check the box next to each addendum	received)
Check the box heat to each undersum	1700000000
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 further understand that any verbal rep discussion held between Vendor's repr	receipt of addenda may be cause for rejection of this bid resentation made or assumed to be made during any oral esentatives and any state personnel is not binding. Only dded to the specifications by an official addendum is
The Thrasher Group, Inc.	
Company Jene Met M	
Authorized Signature	
February 14, 2019	
Date	
NATE: This addendum acknowledgem	ent should be submitted with the hid to expedite

Revised 06/08/2018

document processing.

THE THRASHER GROUP

MISSION

To improve the communities where we live and work by driving infrastructure development.

CORE PRINCIPLES

Quality Adaptability Integrity



OFFICES

in six states:

West Virginia Virginia Pennsylvania Ohio Maryland Kentucky



9 580

EMPLOYEES

Licensed Professional Engineers

Licensed Professional Surveyors

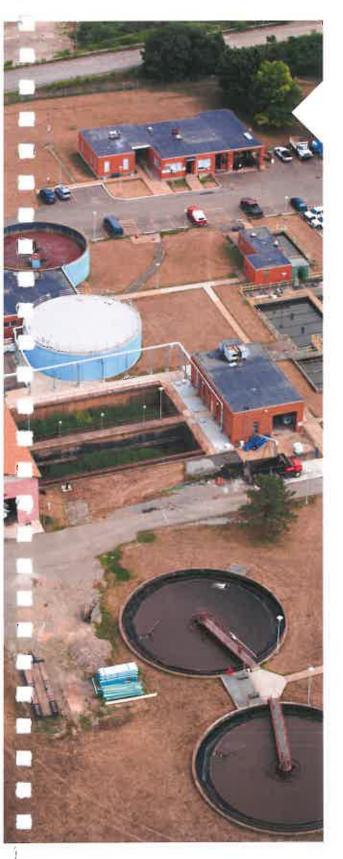
Licensed Professional Architects



YEARS

of delivering successful projects







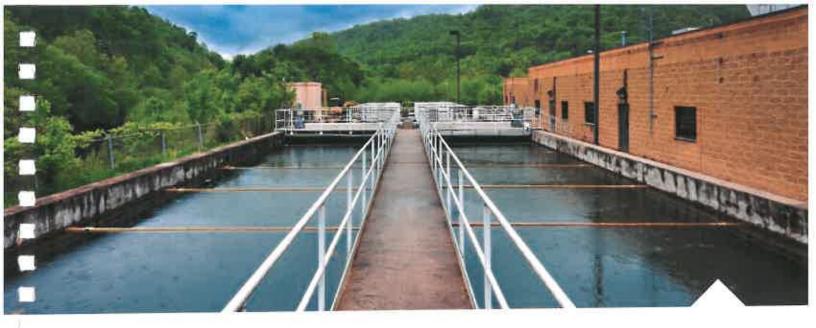
SERVICES

- > Engineering
- > Environmental
- > Survey
- > Materials Testing and Inspection
- > Construction Management
- > Architecture



CORE MARKETS

- > Public/Private Utilities
- > Land Development
- > Highways and Roads
- > Industrial
- > Commercial
- > Oil and Gas
- > Education (K-12, Higher Ed)



CIVIL ENGINEERING

Water Treatment & Distribution

Thrasher brings experience, practical knowledge and advanced technology to clients ranging from regional to small communities' water systems. Our engineers have designed and managed the construction of hundreds of miles of water distribution lines, millions of gallons of storage, and numerous system rehabilitations that successfully reduced water loss and increased reliability.

Wastewater Collection & Treatment

Wastewater collection and treatment systems are vital to the health of rural communities and municipalities. Cost-versus-benefit Environmental and technological issues are all involved.

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.





WASTEWATER COLLECTION AND TREATMENT

Thrasher has planned, designed, and supervised the construction of municipal, industrial, and individual wastewater collection and treatment projects throughout the entire Mid-Atlantic region. When designing a wastewater system, many factors - including the environment, technology, and cost-effectiveness - come into play. Wastewater system projects require both experience and a strong understanding of regulations and requirements.

Having successfully designed and completed wastewater system projects ranging from \$50,000 to \$50 million, the Thrasher team employs some of the most skilled and sought after professionals in the industry. Our approach allows us to develop unique solutions for our clients while providing a helping hand through difficult funding and regulatory hurdles.

Wastewater Services:

- New Collection Systems and Extensions
- Rehabilitation and Replacement of Existing Systems
- > Combined Sewer Overflow (CSO) Reduction
- > Long-Term Control Plans
- > Construction Monitoring
- > Wastewater Treatment Plant Design
- > Feasibility Studies
- > Facility Planning
- > Geographical Information Systems (GIS)
- Inflow and Infiltration (I&I) Testing and Evaluation

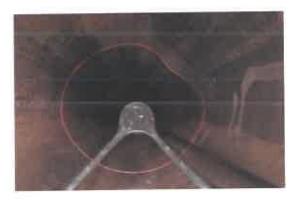
INFLOW AND INFILTRATION



Camera Inspection



Smoke Testing



Pipe Profiling



Dye Testing

Thrasher has a full Inflow and Infiltration (I&I) team in-house. These employees are specially trained and fully knowledgeable on the I&I process and all that it entails.

The team uses a variety of methods to pinpoint exactly where an issue is within your sewer system. This can be done through camera inspection, smoke testing, pipe profiling, and dye testing, among other methods.

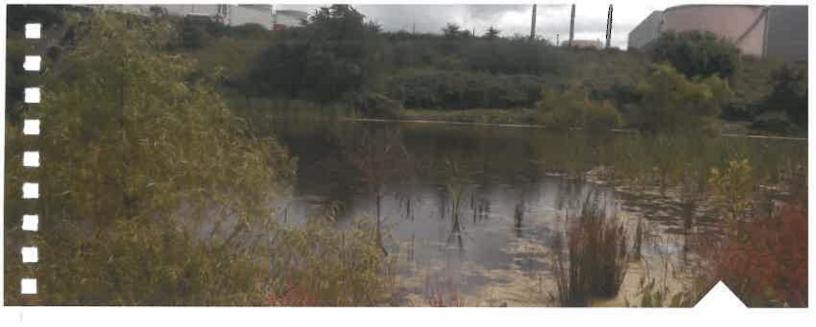
The I&I team includes:

- > Butch Brown, I&I Manager
- > Andrew Kelley, I&I Technician
- > Jared Smith, I&I Technician
- > Steve Six, I&I Technician
- > John Channel , I&I Technician
- > Brian Channel, I&I Technician
- > Scott Pacifico , I&I Technician
- > Brant Busdeker, I&I Technician



Thrasher's I&I team is headed by Butch Brown, who has more than 30 years of experience working on sewer projects in West Virginia.





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 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





CONSTRUCTION ADMINISTRATION

Effective management of our projects ensures that both clients and contractors work in an efficient and safe manner. From pre-construction activities – such as bid conferences and surveys – to inspections, job progress reviews, and on through final completion, our goal is work that proceeds in accordance with plans and specifications.

At Thrasher, we inspect and manage a wide variety of projects designed by our firm in addition to projects for contractors and other designers. We have certified project representatives responsible for overseeing every element of design integrity. Our methods have earned the respect of not only our clients, but contractors and project owners alike.

Construction Inspection Services:

- > Construction Materials
- > Pipelines
- > Structural Steel & Concrete
- > Paving
- > Drainage
- > Embankments
- > Work Zone Safety & Traffic Control
- > Erosion and Soil Control

Quality Control and Assurance Methods:

- Regularly Scheduled Planning and Progress Meetings
- > Engineering During Construction
- > Daily Logs and Progress Sheets
- > Cut Sheets
- > Quantity Tracking



MEETING YOUR GOALS



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.

We understand your goals for Canaan Valley Resort State Park's project and will handle them in the following manner:

GOAL/OBJECTIVE 1

The Thrasher Group will review existing plans and conditions at Canaan Valley, allowing us to fully evaluate your wastewater treatment and collection system. This evaluation will also include communication and planning to ensure minimal disruption to the facility's operation.

GOAL/OBJECTIVE 2

We are confident that Thrasher can provide all of the necessary services to design the wastewater facilities needed by Canaan Valley Resort State Park, and will keep all designs consistent with the Division of Natural Resource's needs and objectives while adhering to all applicable codes and laws, as well as the project budget.

GOAL/OBJECTIVE 3

Construction Administration is always part of the Thrasher package. This is a piece that we feel is important to offer for every project, and we consistently bid more projects than any other firm in the state. Thrasher has the competent professionals your team needs to ensure your project is constructed correctly and functions as designed.



COMMUNICATION PROCEDURES

Communication throughout any project is a primary key to success. To that end, Thrasher will begin communication with The WVDNR immediately upon notification of award and will maintain consistent lines of communication for the duration of the project. This will ensure all parties involved - owner, contractor, and engineer - will always be apprised of the project happenings.

The two main components of the project approach will be design and construction. Each will have its own plan for communication.

Communication During Design

Prior to the initiation of design services, Thrasher's Project Manager, Jesse Alden, will discuss preferred methods of communication with the WVDNR's point of contact. Updates during the design phase can occur in numerous ways:

- Weekly status updates via email
- Weekly conference calls
- Monthly progress meetings.

No matter the methods preferred, our project teams are well versed in keeping our clients abreast of project status. We can customize your project's communication plans to best fit your teams' wants and needs.

Communication During Construction

Before construction begins, Jesse will again meet with the WVDNR team to determine preferred communication tools for this phase of the project. Open, consistent communication will be paramount to keep the project on-time and within budget.

Additionally, Thrasher will conduct monthly progress meetings with the contractor, the WVDNR, and key project stakeholders throughout the duration of the project. Meeting minutes will be distributed to all attendees and any other agents identified by the WVDNR. Action items will be documented within the meeting minutes.

Throughout construction, Thrasher will have people on-site for project representation as well as material testing. Anytime a Thrasher employee is on site during construction, a field report will be prepared. Field reports will be reviewed by the engineering team and distributed to the WVDNR's construction representative on a weekly basis.



PROJECT APPROACH

Thrasher's goal is always to complete projects on-time and within budget for our clients, and we have a long history of achieving that goal. Throughout this Expression of Interest, you will see projects that illustrate these qualities and represent successful outcomes.

While achieving this isn't always an easy task, our tried-and-true project approach is what consistently gets us to that end result.

Thrasher will establish a design kick-off meeting with the WVDNR and key members of our project team to review the project and clearly define the Scope of Services. Following contract approval, our team will take the following steps to ensure completion:

Step 1 - Site Visit

Your assembled team of engineers and technicians will conduct a site visit. This group will evaluate the project conditions and identify and document potential problem areas. We will coordinate with your team and any identified key stakeholders to take all the facts into consideration during this process.

Step 2 - Conceptual Design and Report

Thrasher will prepare a conceptual design for the needed services at Canaan Valley Resort State Park. Where applicable, we will also provide design alternatives for consideration by the WVDNR. We will then prepare a written report of the conceptual designs and outline any issues.

Step 3 - Construction Documents

Our team will provide design solutions and construction documents to the appropriate personnel for the project. These plans will be carried forward to final design based upon the conceptual design report. Thrasher proposes to prepare two submissions preliminary design and final design. The preliminary design submission will be used

to review the proposed project with the WVDNR. After review and comment, we will complete the final design documents based upon comments received and conclusions reached at the preliminary design review. Our field evaluations and design approach will specifically address these issues in the construction documents.

Step 4 - Cost Estimates

Our project team will provide itemized cost estimates at the following stages: conceptual design, preliminary design, and final design.

Step 6 - Bid Process

We will assist the WVDNR in preparation of the bid documents and will attend pre-bid meetings and assist in issuance of addenda.

Step 7 - Construction Administration

The project team will review project submittals, attend project meetings, and provide inspection of the construction being completed. The project team will also provide final punch list inspection at project completion.

Thrasher will also develop a program to keep the WVDNR abreast of potential construction issues. Our project team will prepare design repairs with the adjacent property owners in mind. We plan to address any issues that may arise through clear and concise construction notes, details, and specifications to ensure the safety of the workers and environment.

Step 8 - Project Close Out

Upon completion of the project, the Thrasher team will provide final as-built drawings in both CAD and PDF format to the WVDNR and any appropriate personnel as needed.



SCHEDULING AND BUDGETING

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 specialized scheduling software 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 our number one goal and ensures occupancy and owner supplied equipment are scheduled accordingly.

Budgeting:

Construction estimating and budgeting is the most important part 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 the 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.



Berkeley County Public Service Sewer District

Client Contact:

Mr. Curtis Keller, General Manager 65 District Way | Martinsburg, WV 25401 | 304-263-8566

Location: Berkeley County, WV

Project Type: Sewer System Upgrade

Initially, Thrasher conducted the planning, preliminary design, detailed design, bid and construction phase services for the mandated upgrade to the four (4) main wastewater treatment plants that provide service to Berkeley County. The project was carefully planned and designed to allow the Owner to comply with the Chesapeake Bay requirements regarding nutrient removal specially nitrogen and phosphorus.

During the previous plant upgrade we constructed two additional (spare) SBR basins at the Baker Heights WWTP and the Inwood WWTP. These were constructed earlier in anticipation of future growth or advanced treatment requirements. In 2011, we developed a plan to maximize the existing treatment plant infrastructure in order to minimize the capital expenditures required to meet the new nutrient levels. The wastewater treatment plants were designed to have the flexibility to be able to meet Enhanced Nutrient Removal (ENR) Requirements (3 mg/L nitrogen and 0.3 mg/L phosphorus) if required in the future.

After the completion of the wastewater treatment plant upgrades, Thrasher prepared a Capital Improvement Plan for BCPSSD. First, we consolidated all available mapping into a single KMZ file (as well as shapefiles), to be able to view the existing system within Google Earth®. Thrasher worked directly with the Owner by conducting a series of workshops to



understand the existing issues and limitations within the system. Thrasher worked with the Owner to develop a list and associated scope for all identified improvements needed within the overall system. Thrasher prepared an estimate of the construction costs and ranked the projects. The overall prioritized list was then used by the Owner to evaluate rates. Thrasher is now designed the first 7 projects on the prioritized list.



Paden City - Sewer System Upgrade

Client Contact: Ken Sneed, Mayor 208 West Main Street | Paden City, WV 26159 304-337-8004

Location: Tyler and Wetzel Counties, WV **Project Type:** Sewer System Upgrade

The City of Paden City needed to upgrade their existing sewer system due to the aging infrastructure of the sewer lines. The City hired Thrasher to be the engineer of record to address these issues. After a preliminary investigation, Thrasher concluded that the City had to:

- > Remove and replace approximately 6,000 linear feet of gravity sewer line with new 8" PVC sewer line
- > Install approximately 3,000 linear feet of new storm sewer pipe to divert storm water from the sewer system
- > Remove and replace twelve (12) existing sanitary manholes
- > Replace approximately 6,000 linear feet of 4" PVC service lateral piping in City
- > Add new headworks unit at wastewater treatment plant



Malden Public Service District

Client Contact:

Mr. Chet Williamson, General Manager PO Box 35 | Tad, WV 25201 304-925-6997

Location: Kanawha County, WV

Project Type: Treatment Plant Upgrade

Malden Public Service District had a 38-year old wastewater treatment plant that was inefficient and out of compliance. It was facing significant problems with treatment efficiency, didn't have the capacity to properly serve its customers, and was not meeting raw sewage discharge permits set forth by the West Virginia Department of Environmental Protection.

Through a complex, multi-phase project, The Thrasher Group solved those problems and then some, creating a state-of-theart new facility for Malden that is more cost effective and environmentally friendly for the surrounding area.

The \$20 million project saw construction of six new buildings at the Malden Public Service District. All renovations and construction were completed on the same site as the existing plant, which remained operational throughout all phases of the project.

The biggest enhancement to Malden was the installation of a new treatment process – a Vertical Loop Reactor and SmartBNR control system – to increase Malden's operational efficiency and treatment capacity. This technology is uncommon in West Virginia and its ease of maintenance and operation can open doors for the future of the utility sector in the state.







Not only is this beautiful, functional new facility a more efficient system than its predecessor, it has had a vastly important environmental impact as well. The biggest factor in this change is the elimination of overflow sewage discharging into a local creek. This improves the quality of not only this creek, but also the river it feeds into, greatly reducing the potential for serious health hazards to local residents and directly impacting the safety of recreational use of the river.

PROJECT EXPERIENCE

Dominion Natrium Facility - NGL Fractionation Plant - Wastewater System Upgrades

Client Contact:

Mr. Warren Green, Supervisor of Facilities 927 White Oaks Blvd. | Bridgeport, WV 26330 304-627-3681

Location: Harrison County, WV

Project Type: Wastewater System Upgrades







This project consisted of the decommission and demolition of the existing wastewater treatment, installation of a new packaged wastewater treatment plant, new duplex pump station, the procurement and installation of a prefabricated storage shed, chain link fencing, gates, piping, fittings, cleanouts, mounting hardware, and site work such as grading, gravel, and cleanup.

ADDITIONAL PROJECT EXPERIENCE

PROJECT NAME	LOCATION	ТҮРЕ	
Anderson Equipment	Marion County, WV	Wastewater Treatment Plant Replacement	
Calhoun-Gilmer Career Center	Calhoun County, WV	Wastewater Treatment Plant Upgrade	
Century Volga Public Service District	Barbour County, WV	Sewer System Installation	
City of Piedmont	Mineral County, WV	Pump Station Replacement	
City of Ripley	Jackson County, WV	Sewer System Evaluation and improvements	
City of Romney	Hampshire County, WV	Wastewater Treatment Plant	
Dominion Natrium Facility	Harrison County, WV	Wastewater System Upgrades	
Greater Paw Paw Public Service District	Marion County, WV	Sewer System Improvements	
Paden City	Tyler and Wetzel Counties, WV	Sewer System Upgrade	
Town of Capon Bridge	Hampshire County, WV	Sanitary Sewer Upgrades	

The Thrasher Group has built itself on public utility projects. Our business started in this sector in 1983 and we have continuously worked to improve local utility systems ever since.



CLIENT	ESTIMATE	LOW BID	# of BIDDERS
Town of Bath	\$2,198,725 (3 contracts combined)	\$1,963,048 (3 contracts combined)	13 (3 contracts combined)
Lewis County EDA	\$2,795,000 (2 contracts combined)	\$2,447,385 (2 contracts combined)	16 (2 contracts combined)
Greater Harrison PSD	\$2,623,110	\$2,219,115	9
Hamrick PSD	\$5,239,000	\$4,698,733	18
Fountain PSD	\$9,140,300	\$8,186,810	15
City of Ripley	\$10,762,000	\$9,948,288	15
Town of Rowlesburg	\$3,300,000 (2 contracts combined)	\$2,706,749 (2 contracts combined)	8 (2 contracts combined)
River Road PSD	\$1,860,470	\$1,497,060	14
Hundred-Littleton PSD	\$1,015,000	\$894,040	8
Paw Paw Rt. 19 PSD	\$300,000	\$315,620	8
City of Oak Hill	\$18,135,700	\$16,245,767	25
River Road PSD	\$1,860,470	\$1,497,060	14
Gilmer County PSD	\$595,000	\$443,151	12

Our team of highly skilled engineers spend the time upfront to ensure accurate estimates for each and every project we undertake. Our engineers formulate comprehensive project estimates, reach out to numerous contractors, and work with the project owner to secure competitive bids and quickly move projects from bidding to award.



Rob Milne, PE Client Relationship Manager

WEST VIRGINIA DIVISION OF NATURAL RESOURCES



Jenelle Armstrong, PE, PMP QA/QC



Jesse Alden, PE Project Manager



Michael Stone, PE Project Engineer



Jeff Ekstrom, PETreatment Plant Process Engineer



Fred RomanClass IV Wastewater Operator

Inflow and Infiltration

Construction Services

Environmental Permitting

JENELLE ARMSTRONG, PE, PMP

QA/QC



Education

Master of Engineering

Environmental Engineering

University of Texas at El Paso

Bachelor of Science Civil Engineering University of Texas at El Paso

Registrations

Professional Engineer:

- > West Virginia
- > Texas
- > New Mexico
- > Ohio
- > Pennsylvania

Project Management Professional (PMP)

Affiliations

- American Water Works
 Association, West Virginia
 Section—Trustee
- > American Society of Engineers—Past President
- > OSHA—HAZWOPER, 40 hour Training
- Project Management, 40 hour Training
- Material Selection, 80 hour Training
- Basic Offshore Survival and Emergency Training, 20 Hours
- AWWA Board Member -West Virginia Section
- > WEA Membership Chair West Virginia Section
- West Virginia Executive
 Magazine 2018 Young Gun

Jenelle Armstrong, PE, PMP thrives on the challenges of water, stormwater, and wastewater projects. With more than 20 years of civil and environmental engineering experience, Jenelle consistently finds innovative solutions to clients' specific needs. Her drive to use the latest technology and methods have delivered programs and processes exceed regulations.

As the Utility Division Manager, Jenelle is fully committed to ensuring a positive experience for clients. She values collaboration, and encourages owners and operators of systems involvement in the design process. She keeps clients fully aware of project scheduling and delivery, and facilitates project meetings and regulatory agency discussions. Jenelle joined Thrasher in 2011, following 14 years of diverse experience in process, hydraulics and water modeling for both water and wastewater systems in the states of Texas and New Mexico. She is an experienced water system modeler using H2O Map Water, H2O Net, Water CAD and KY Pipe.

Experience Malden Public Service District Wastewater Treatment Plant Upgrade

Role: Project Engineer

> Kanawha County, WV

Beckley Sanitary Board Wastewater Treatment Plant Upgrades & Capital Improvement Plan

Role: Client Services Manager

> Raleigh County, WV

Berkeley County Public
Sewer Service District and
Berkeley County Public
Service Water District
Procter and Gamble Utility
Extension Project
Role: Principal-in-Charge

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

Town of Accident
Wastewater Treatment
System Improvements

Role: Principal-in-Charge

> Garrett County, MD

Town of Junior Wastewater Treatment Plant Upgrades

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



JENELLE ARMSTRONG, PE, PMP

Search: Details

JENELLE H. ARMSTRONG

WV Professional

PE License Number:

Engineer:

PE License Status: Active

PE Issue Date: 08/07/2009

PE Expiration Date: 12/31/2020

Continuing

Qualifying Hours from Last Renewal or Reinstatement: 55.00

Education Claim:

Carryover Hours for Next Renewal: 15.00

Last Renewal or Reinstatement Date*: 12/4/2018

WV Engineer

El Certification Number:

Intern:

El Issue Date:

Primary Address of

300 ASSOCIATION DRIVE

Record:

CHARLESTON, WV 25311

Primary Employer

THE THRASHER GROUP, INC. 300 ASSOCIATION DRIVE

of Record:

CHARLESTON, WV 25311

This date reflects the most recent license renewal (or reinstatement) date for this licensee. Continuing education hours earned prior to this date may not be used for future renewals.

This data was retrieved on 2/11/2019.

ROB MILNE, PE

Client Relationship Manager



Education

Master of Science,
Civil Engineering
West Virginia University

Bachelor of Science, Civil Engineering West Virginia University

Registrations

Professional Engineer:

- > West Virginia
- > Pennsylvania
- Virginia
- Ohio

Certifications

- Leadership Monongalia
 County, WV
- Foundations of Leadership/ National Leadership Institute
- > USACE-Access Control Point Design Training Course
- > ODOT Non-complex Roadway Design prequalification
- ODOT Complex Roadway
 Design prequalification
- ODOT Bridge Design Level
 1.1/1.2 prequalification

Robert Milne, PE has over 25 years of experience working with both public and private clientele throughout the Mid-Atlantic region to develop millions of dollars' worth of commercial, industrial, residential, and mixed-use sites. Rob's in-depth understanding of site layout, design, permitting, and funding have enabled him to complete several complex projects that have boosted economic development and delivered safe, sustainable building sites.

Additionally, Rob has worked closely throughout his career with the WV Department of Natural Resources, and has developed a thorough understanding of the Department's goals and processes. His knowledge will greatly enhance our team's communication and project reporting to the WV DNR.

Experience WV Department of Natural Resources Boat Ramp Design at Palatine Park

Role: Project Manager > Marion County, WV

WV Department of Natural Resources Elk River Boating Access

Role: Project Manager
> Kanawha County, WV

WV Department of Natural Resources Broadband Services

Role: Project ManagerMultiple WV State Parks

Boy Scouts of America Welcome Center Site Planning and Master Conceptual Design

Role: Site Engineer > Fayette County, WV

City of Ripley Riverbank Stabilization Project

Role: Project Engineer

> Jackson County, WV

City of Clarksburg Stormwater Management Program

Role:

> Harrison County, WV

City of Bridgeport Stormwater Structures Phases I and II

Role: QA/QC

> Harrison County, WV

Harpers Ferry National Park Historic Train Station

Role: Project Manager
> Jefferson County, WV

Search: Details

Name:

ROBERT R. MILNE

WV Professional

PE License Number:

Engineer:

PE License Status: Active

PE Issue Date: 07/28/1999

PE Expiration Date: 12/31/2020

Continuing

Qualifying Hours from Last Renewal or Reinstatement: 47.50

Education Claim:

Carryover Hours for Next Renewal: 15.00

Last Renewal or Reinstatement Date*: 12/31/2018

WV Engineer Intern:

gineer El Certification Number:

El Issue Date: 07/01/1998

Primary Address of

Record:

Primary Empioyer

of Record:

THE THRASHER GROUP, INC. 600 WHITE OAKS BOULEVARD

PO BOX 940

BRIDGEPORT, WV 26330

* This date reflects the most recent license renewal (or reinstatement) date for this licensee. Continuing education hours earned prior to this date may not be used for future renewals.

This data was retrieved on 12/31/2018.

Your **ACTIVE PE** renewal fee has been received...

Your ACTIVE PE renewal fee has been received. Your pocket card indicating you are entitled to practice engineering in West Virginia until the noted expiration date may be detached and used unless invalidated as a result of Board audit of your renewal form or formal disciplinary action.

IMPORTANT REMINDERS:

- Please include your WV ACTIVE PE license number on any correspondence to this office.
- To use this license as a pocket card, please cut along the dotted line and laminate if desired.
- You are required to immediately notify the Board, in writing, of the following: loss or theft of license or seal, any name change, any address change, or any employment change.

West Virginia State Board of Registration for Professional Engineers

300 Capitol Street, Suite 910 Charleston, West Virginia 25301 304-558-3554 Phone 800-324-6170 Toll Free www.wvpebd.org

THIS IS ONE FORM OF YOUR RENEWAL RECEIPT

PLEASE SAVE THIS FOR YOUR RECORDS

Date of Renewal: December 4, 2018 Amount Paid: \$70.00



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.

EXPIRES December 31, 2020

JESSE LEE ALDEN THE THRASHER GROUP, INC. 300 ASSOCIATION DRIVE CHARLESTON, WV 25311

MICHAEL STONE, PE

Project Engineer



Education

Master of Engineering,
Environmental Engineering
Colorado State

Bachelor of Science, Civil Engineering WVU Tech

Registrations
Professional Engineer
West Virginia

Michael Stone serves as a Project Manager on Thrasher's public utility projects. Michael is responsible for developing, planning, and designing construction plans. He is also involved in the bid process and contract document preparation. Michael has also become a knowledgeable asset management advisor.

Prior to joining the Thrasher team, Michael received his Civil Engineering degree from WVU Tech and his Environmental Engineering degree from Colorado State.

Experience
City of Ripley Wastewater
Collection System

Role: Project Engineer

> Jackson County, WV

Paden City Phase II Sanitary Sewer Collection Upgrade Role: Project Engineer

> Wetzel County, WV

Town of Capon Bridge Asset Management Plan

Role: Project Engineer
> Hampshire County, WV

City of Oak Hill Sanitary Sewer System Improvements

Role: Project Engineer > Fayette County, WV

Union Public Service District Rocky Fork Sanitary Sewer Extension

Role: Project Engineer
> Kanawha County, WV

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Date of Renewal: December 4, 2018 Amount Paid: \$70.00

West Virginia State Board of Registration for Professional Engineers

MICHAEL PALMER STONE

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.

EXPIRES December 31, 2020

MICHAEL PALMER STONE

JEFF EKSTROM, PE

Treatment Plant Process Engineer



Education

Bachelor of Science,

Civil Engineering

West Virginia Institute of

Technology

Registrations

Professional Engineer:

- > West Virginia
- > Ohio
- > Kentucky
- > Maryland
- > Virginia

Affiliations

- American Water Works
 Association Board Member,
 National Director
- > Water Environment, West Virginia Section

Jeffrey Ekstrom, PE is a Project Manager who thrives on managing multiple tasks to meet the needs of clients. Throughout his 24 years of experience, Mr. Ekstrom has used his organizational, problem solving and leadership skills to manage, and lead the design of infrastructure projects ranging from \$100,000 to \$31 million in construction costs.

His area of specialty is environmental engineering with focus on the design of water and wastewater treatment plants. Mr. Ekstrom is noted for being the first engineer to design treatment plants that implement new technologies in the state of West Virginia. This accomplishment has made him a sought after water and utility engineer. Mr. Ekstrom puts clients first and provides them with options on the most practical and economical ways are to solve a problem. His problem-solving skills and knowledge on water and wastewater plants make him invaluable to Thrasher.

In June of 2018, Jeff took over as the 2018–2021 West Virginia Representative on the American Water Works Association's (AWWA) National Board of Directors. Jeff was nominated and voted in by the West Virginia Section of AWWA Board of Trustees. As part of his duties with the National Board, Jeff will be working to help establish policies for the overall management and direction of National AWWA affairs.

Experience City of Romney Wastewater Treatment Plant and Lift Station Upgrades

Role: Project Engineer

> Hampshire County, WV

Oak Hill Sanitary Board Wastewater Treatment Plant Upgrade

Role: Treatment Plant Engineer

> Fayette County, WV

Shepherdstown Wastewater Treatment Process Design for Chesapeake Bay Initiative

Role: Project Engineer

> Jefferson County, WV

Berkeley County Public Service District Inwood Wastewater Treatment Plant Bay Upgrade

Role: Treatment Plant Engineer

> Berkeley County, WV

Beckley Sanitary Board Wastewater Treatment Plant Upgrade

Role: Project Engineer
> Raleigh County, WV

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West Virginia State Board of Registration for Professional Engineers

300 Capitol Street, Suite 910 Charleston, West Virginia 25301 304-558-3554 Phone 800-324-6170 Toll Free www.wvpebd.org

THIS IS ONE FORM OF YOUR RENEWAL RECEIPT

PLEASE SAVE THIS FOR YOUR RECORDS

Date of Renewal: December 7, 2018 Amount Paid: \$70.00

West Virginia State Board of Registration for Professional Engineers

JEFFERY D. EKSTROM

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.

EXPIRES December 31, 2020

JEFFERY D. EKSTROM THE THRASHER GROUP, INC. 300 ASSOCIATION DRIVE PO BOX 2431 CHARLESTON, WV 25311



FRED ROMAN

Class IV Wastewater Operator



Education

Bachelor of Science,

Wildlife Management

West Virginia University

Certifications

Licensed Class IV
 Wastewater Operator

Following a 15 year career serving as the Superintendent for a large municipal system in north-central West Virginia, Fred Roman joined the team at Thrasher as a Project Representative. Fred brings a high level of hands-on experience in the technical operations of city utilities including water, stormwater, and wastewater service. While Fred is well-versed in all of these areas, he has a specific interest in wastewater systems. Fred is a licensed Class IV wastewater operator, which means he is able to thoroughly walk his clients through the operation of their unique plant step-by-step. He uses his knowledge and practical expertise to aid in not only the construction process, but the start-up of new facilities. Fred's dedication to his clientele goes beyond simply starting their plants; he is there to troubleshoot problems and help municipalities solve their operational issues.

Experience Town of Capon Bridge Wastewater Treatment Plant

Role: Wastewater Operator > Hampshire County, WV

City of Romney Wastewater Treatment Plant Construction Management Oversight

Role: Construction Manager > Hampshire County, WV

Potomac Park & Resort Wastewater Treatment Plant

Role: Wastewater Operator > Berkeley County, WV

Town of Terra Alta Wastewater Treatment Plant

Role: Wastewater Operator > Preston County, WV

City of Weston Wastewater Treatment Plant

Role: Wastewater Operator > Lewis County, WV



REFERENCES



Malden Public Service District

Mr. Chet Williamson, General Manager PO Box 35 Tad, WV 25201 304-925-6997

City of Weirton

Mr. Butch Mastrantoni, Utilities Director 125 East Bellview Drive Weirton, WV 26062

Union Public Service District

Mr. Earl Burks, General Manager 5110 Washington Street West Cross Lanes, WV 25313 304-776-3131

