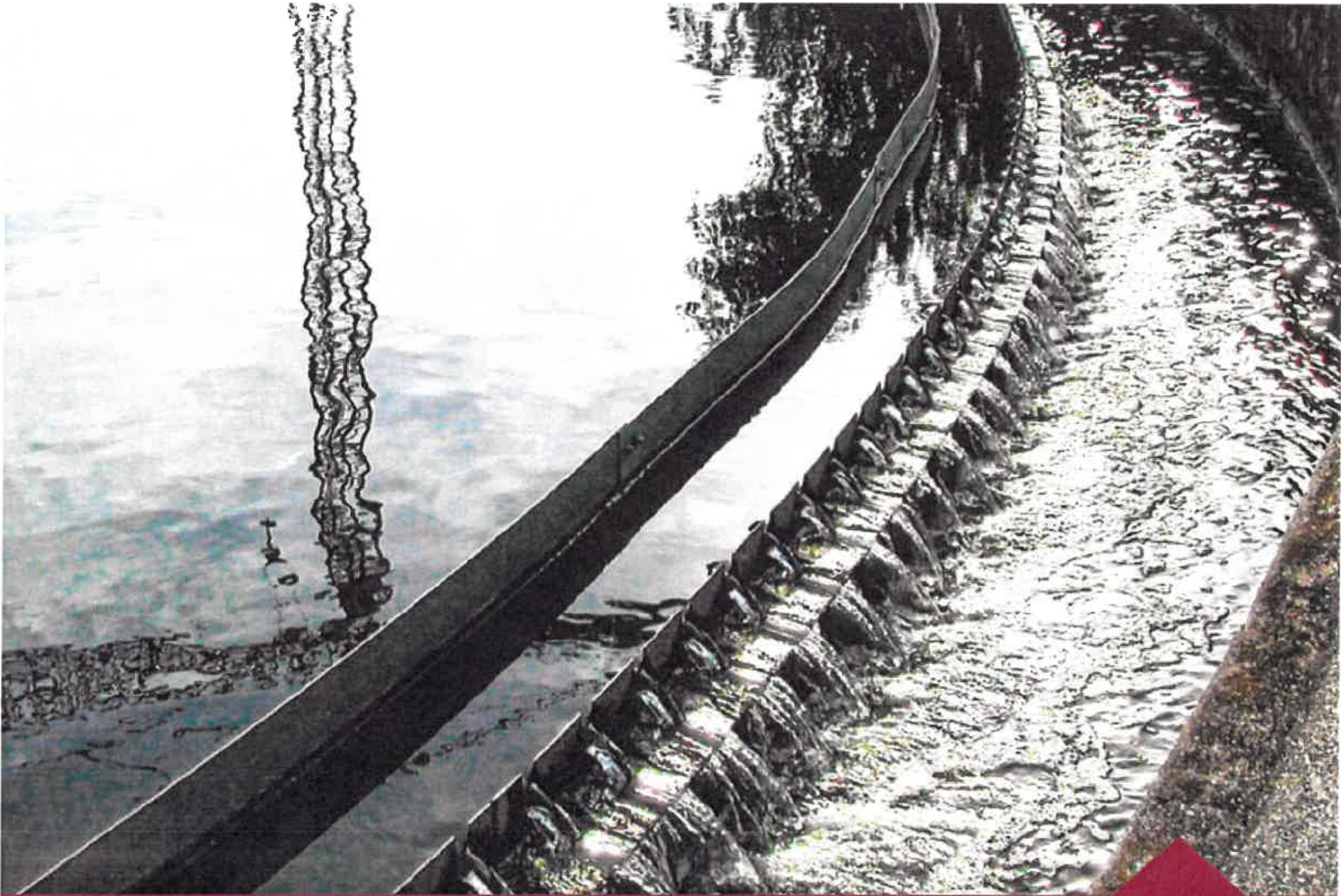


THRASHER



WV DEPARTMENT OF HEALTH AND HUMAN RESOURCES

CEOI BHS2100000004

Submitted by:
The Thrasher Group, Inc.
June 23, 2021

RECEIVED
06/22/21 09:35:37
WV PURCHASING DIVISION



COMPLEX PROJECTS
REQUIRE RESOLVE
THRASHER'S GOT IT

June 23, 2021

Attn: Ms. Crystal Husted, Buyer
2019 Washington Street East
Charleston, WV 25305

RE: WV Department of Health and Human Resources CEOI BHS210000004

Dear Ms. Husted and Selection Committee Members:

The Barboursville School provides a round-the-clock space for West Virginia teens to receive the education and care they need. As a building being constantly occupied, it's important to have updated, functional facilities at all times. To make that happen, the School needs to connect their wastewater to the existing Village of Barboursville sewer system and decommission the current treatment plant. The Thrasher Group is the right consultant for the job.

Thrasher has nearly 40 years of experience in public utility infrastructure across the state. Our dedicated utility engineers have provided treatment plant designs for several schools and other developments over the years. This gives us the in-depth knowledge of these small, contained systems that you will need - both their operation and decommissioning. We also have vast experience with system improvement and extension projects, including the Pea Ridge Public Service District and all around Cabell County.

In addition to our technical skill set, Thrasher's hands-on approach will be an asset to the Barboursville School. We pride ourselves on being more than your engineer - we are your partner through every step of a project. Our Charleston team is just 40 minutes away, allowing for quick response times and on-site availability. We are also always available by phone, email, or video conference to ensure project communication is consistently available when you need it.

We appreciate the opportunity to share our qualifications with you and look forward to further discussing how The Thrasher Group can make this project a successful for the Barboursville School.

Sincerely,
The Thrasher Group, Inc.

Jonathan Carpenter, PE
Principal



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

Main Point of Contact:

Corey Smith, PE
Project Manager
CASmith@thethrashergroup.com
Cell: 304-641-2804
Office: 304-343-7601



38

YEARS
of delivering
successful
projects



9

OFFICES
in five states:
West Virginia
Virginia
Pennsylvania
Ohio
Maryland



300+

EMPLOYEES

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

Diverse services that grow communities.

THRASHER'S GOT IT.

DISCLOSURE OF INTERESTED PARTIES



West Virginia Ethics Commission Disclosure of Interested Parties to Contracts (Required by W. Va. Code § 6D-1-2)

Name of Contracting Business Entity: The Thrasher Group, Inc. Address: 600 White Oaks Blvd. Bridgeport, WV 26330

Name of Authorized Agent: Jonathan Carpenter Address: 300 Association Dr. | Charleston, WV 25311

Contract Number: 304-624-4108 Contract Description: Principal

Governmental agency awarding contract: West Virginia Dept. of Health and Human Resources

Check here if this is a Supplemental Disclosure

List the Names of Interested Parties to the contract which are known or reasonably anticipated by the contracting business entity for each category below (attach additional pages if necessary):

1. Subcontractors or other entities performing work or service under the Contract

Check here if none, otherwise list entity/individual names below.

2. Any person or entity who owns 25% or more of contracting entity (not applicable to publicly traded entities)

Check here if none, otherwise list entity/individual names below.

H. Wood Thrasher

3. Any person or entity that facilitated, or negotiated the terms of, the applicable contract (excluding legal services related to the negotiation or drafting of the applicable contract)

Check here if none, otherwise list entity/individual names below.

Signature: Date Signed: 06/18/2021

Notary Verification

State of West Virginia, County of Harrison

I, Jonathan Carpenter, the authorized agent of the contracting business entity listed above, being duly sworn, acknowledge that the Disclosure herein is being made under oath and under the penalty of perjury.

Taken, sworn to and subscribed before me this 19 day of June, 2021

Notary Public's Signature

To be completed by State Agency:
Date Received by State Agency: _____
Date submitted to Ethics Commission: _____
Governmental agency submitting Disclosure: _____



PURCHASING AFFIDAVIT



STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

CONSTRUCTION CONTRACTS: Under W. Va. Code § 5-22-1(f), 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 §6A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

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

DEFINITIONS:

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

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

"Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceeds 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 §81-5-3) that: (1) for construction contracts, the vendor is not in default on any monetary obligation owed to the state or a political subdivision of the state, and (2) for all other contracts, that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

WITNESS THE FOLLOWING SIGNATURE:

Vendor's Name: The Thrasher Group, Inc.

Authorized Signature: [Signature] Date: 06/18/2021

State of West Virginia

County of Harrison to-wit:

Taken, subscribed, and sworn to before me this 18 day of June, 2021

My Commission expires May 4 2026 20

AFFIX SEAL HERE

NOTARY PUBLIC

[Signature]

Purchasing Affidavit (Revised 01/18/2018)



ADDENDUM ACKNOWLEDGMENT



ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: CE01 BHS210000004

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)

- | | |
|---|--|
| <input type="checkbox"/> Addendum No. 1 | <input type="checkbox"/> Addendum No. 6 |
| <input type="checkbox"/> Addendum No. 2 | <input type="checkbox"/> Addendum No. 7 |
| <input type="checkbox"/> Addendum No. 3 | <input type="checkbox"/> Addendum No. 8 |
| <input type="checkbox"/> Addendum No. 4 | <input type="checkbox"/> Addendum No. 9 |
| <input type="checkbox"/> Addendum No. 5 | <input type="checkbox"/> 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 _____



Authorized Signature _____

06/18/2021 _____

Date _____

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

Revised 04/21/2021

DESIGNATED CONTACT



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.

Jonathan Carpenter, Principal

(Printed Name and Title)

300 Association Drive | Charleston, WV 25311

(Address)

304-624-4108 | 304-624-7831

(Phone Number) / (Fax Number)

jcarpenter@thetrashergroup.com

(email address)

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

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

The Thrasher Group, Inc.

(Company)

(Authorized Signature) (Representative Name, Title)

Jonathan Carpenter, PE, Principal

(Printed Name and Title of Authorized Representative)

06/18/2021

(Date)

304-624-4108 | 304-624-7831

(Phone Number) (Fax Number)

Revised 04/21/2021

PROJECT UNDERSTANDING AND APPROACH

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 outcome.

We understand your goals for the Barboursville School Wastewater Treatment Plant project and will handle them in the following manner:

GOAL/OBJECTIVE 2.1

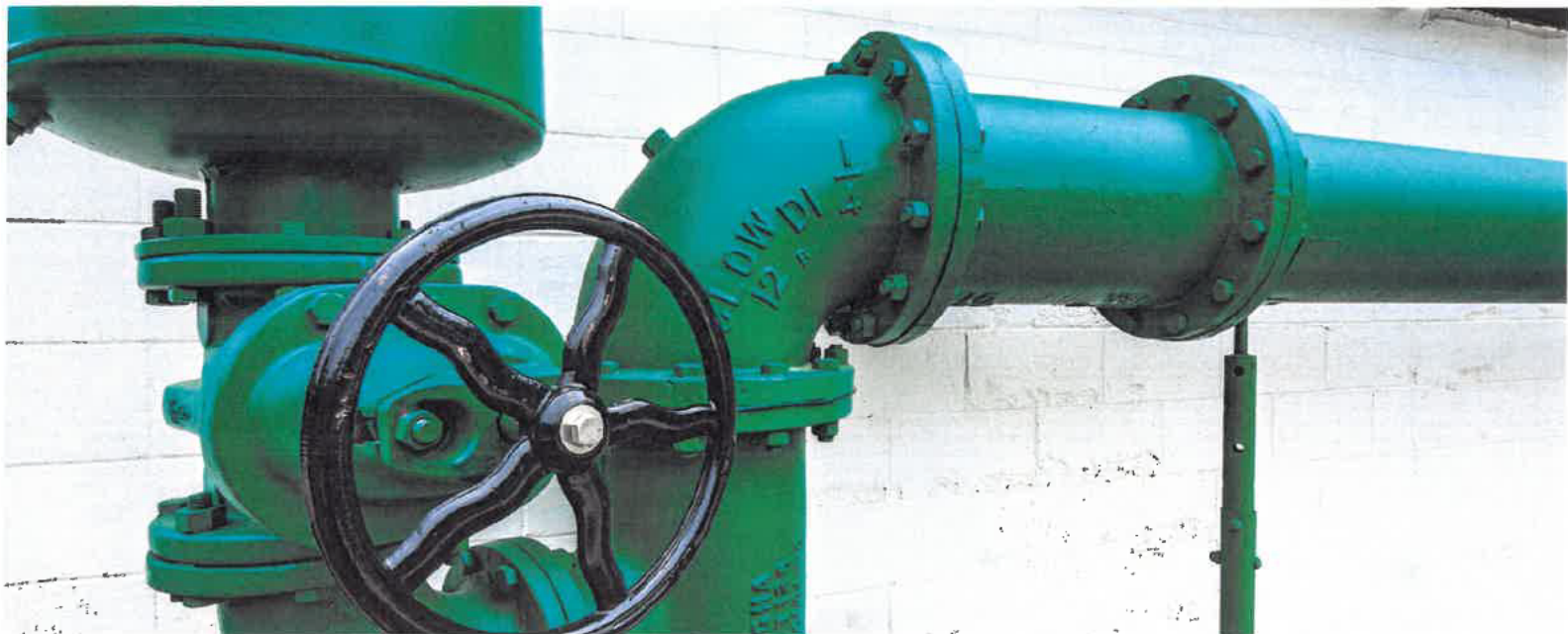
The Thrasher Group acknowledges that the Barboursville School needs complete design plans to connect the Barboursville School wastewater system to the existing Village of Barboursville sewer system. Thrasher has in-house expertise in designing extensions for projects just like this. Our firm is built on public utility design and understands how to handle all components required for the work you need.

GOAL/OBJECTIVE 2.2

Next, we understand that the work you're seeking must include the shutdown and removal of the existing wastewater treatment plant. Our team has handled the decommissioning of plants both large and small and can design this project to provide a seamless transition between the operation of the existing treatment plant and the new facility so service is not interrupted.

GOAL/OBJECTIVE 2.3

Last but not least, we understand that Thrasher must assist with any permits, fees, and licenses required for the Barboursville School project. Our licensed engineers will oversee the project, all of whom have experience navigating the permitting processes that come along with public utility projects.



PROJECT UNDERSTANDING AND 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 conduct a design kick-off meeting with the Barboursville School and key members of our project team to review the project and clearly define the Scope of Services. Following contract approval, Thrasher 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 plan for the extension and connection between Barboursville School and the Village of Barboursville. Where applicable, we will also provide design alternatives for consideration by the School. 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 Barboursville School. 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 conceptual design and final design stages.

Step 5 | Bid Process

We will assist the Barboursville School in preparation of bid documents, will attend a pre-bid meeting, and assist in issuance of addenda.

Step 6 | Construction Administration

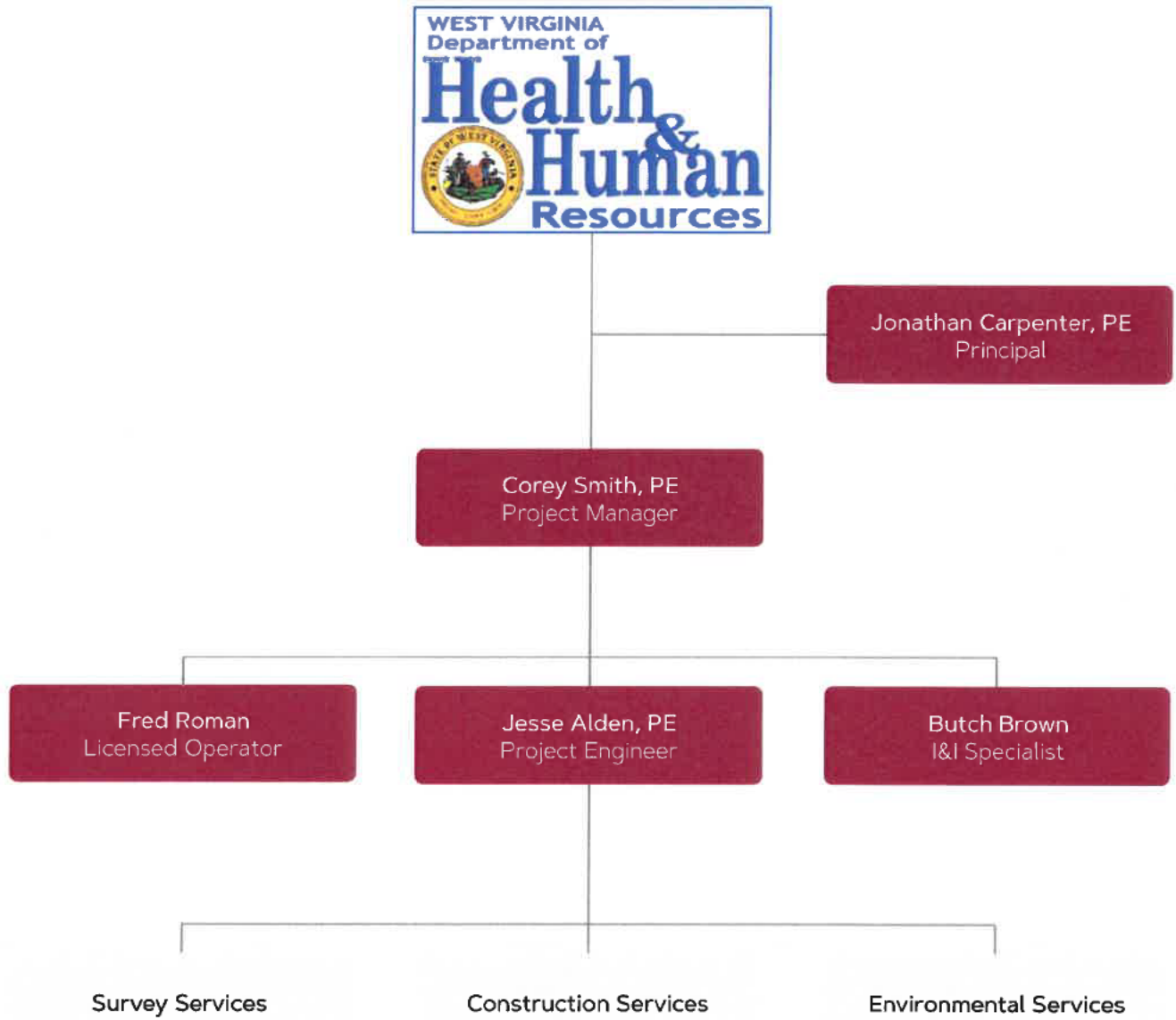
The project team will review project submittals, attend project meetings, and provide inspection of the construction being completed. Thrasher will also provide final punch list inspection at project completion.

Additionally, we will develop a program to keep the Barboursville School staff abreast of potential construction issues. 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 7 | 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 Barboursville School and any appropriate personnel as needed.

KEY PERSONNEL



JONATHAN CARPENTER, PE

Principal



Education

Bachelor of Science,
Civil Engineering
University of Tennessee

Registrations

Professional Engineer:

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

Affiliations

- > ACEC Water Resources Gold Award
- > ACEC Water Resources Silver Award
- > ACEC Waste and Storm Water Gold Award
- > AWWA Fuller Award Recipient
- > AWWA West Virginia – Past National Director and Chairman

Jonathan Carpenter, PE serves as managing partner of the firm's Charleston and Beckley, WV locations and leader of the Water Resources Market. In this role, he oversees numerous public utility projects of varying size and complexity. Jonathan has been with Thrasher for over twenty years, and brings an unsurpassed expertise to the company, particularly as it relates to the design of water and wastewater treatment facilities in rural areas.

Jonathan has spent the vast majority of his career working with small WV municipalities to help them identify issues within their water and sanitary sewer systems, and to develop innovative solutions that are both sustainable and economical. His diligent work throughout the state has garnered national recognition from the American Water Works Association (AWWA), where he was honored as a 2013 George W. Fuller Award recipient for his distinguished service to the water supply field and sound engineering skills.

Experience

Pea Ridge Public Service District B Plant Evaluation

Role: Principal

- > Cabell County, WV

Pea Ridge Public Service District Route 2 Sewer Extension

Role: Project Manager

- > Cabell County, WV

Pea Ridge Public Service District Holiday Park Wastewater Treatment Plant Replacement

Role: Project Manager

- > Cabell County, WV

Pea Ridge Public Service District Route 2 Wastewater Treatment Plant

Role: Project Manager

- > Cabell County, WV

Oak Hill Sanitary Board Arbuckle Pump Station and Decommissioning Arbuckle Wastewater Plant

Role: Principal

- > Fayette County, WV

City of Milton Sanitary Sewer System Improvements

Role: Principal

- > Cabell County, WV

Mingo County Public Service District Regional Wastewater System Upgrades

Role: Project Manager

- > Mingo County, WV

Huntington Sanitary Board On-Call Services

Role: Principal

- > Cabell County, WV

JONATHAN CARPENTER, PE

Principal

Licensure Verification

Search: Details

Name:	JONATHAN C. CARPENTER
WV Professional Engineer:	PE License Number: [REDACTED]
	PE License Status: Active
	PE Issue Date: 12/18/2002
	PE Expiration Date: 12/31/2022
Continuing Education Claim:	Qualifying Hours from Last Renewal or Reinstatement: 33.50
	Carryover Hours for Next Renewal: 3.50
	Last Renewal or Reinstatement Date*: 12/9/2020
WV Engineer Intern:	EI Certification Number:
	EI Issue Date:
Primary Address of Record:	[REDACTED]
Primary Employer of Record:	THE THRASHER GROUP, INC. 300 ASSOCIATION DRIVE 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.

COREY SMITH, PE

Project Manager



Education

Bachelor of Science,
Civil Engineering
West Virginia University

Registrations

Professional Engineer:

- > West Virginia

Certifications

- > SafeLand Training
- > MSHA Training – Class 32
Safety Personnel Card
Holder
- > GO Training (Chevron Safety
Program)

Corey Smith, PE is a Project Manager and Project Engineer for The Thrasher Group's Water Resources Market. He has experience in a host of areas, including construction monitoring and management, materials testing, and pipeline inspection. His areas of expertise, however, lie in wastewater, water, and stormwater systems.

One of Corey's several areas of expertise is sanitary sewer rehabilitations. He has worked on both the design and construction sides of these projects over the last several years. Corey's work on sanitary sewer rehabilitations ranges from inflow and infiltration investigation and system assessment to design and construction of rehabilitation projects. Recent work of this type has included wastewater treatment plant improvements, gravity sanitary sewer line rehabilitation, package wastewater treatment plant replacement, and pump station rehabilitation.

Having worked both in the office and the field, Corey has a clear understanding of all project aspects, from inception to completion. This knowledge and experience make Corey an excellent project manager, taking each piece of a project into consideration.

Experience

Pea Ridge Public Service District Route 2 Phase II Sewer Extension

Role: Project Engineer

- > Cabell County, WV

Pea Ridge Public Service District Holiday Park Wastewater Treatment Plant Replacement

Role: Project Engineer

- > Cabell County, WV

Milton Municipal Utilities Commission Sewer Rehabilitation and Extension, Lift Station, and Gravity Lines

Role: Project Manager

- > Cabell County, WV

Twin Hollow Sanitary Sewer Improvements

Role: Project Engineer

- > Cabell County, WV

Cowen Public Service District Upper Glade Sewer Extension Phase I and II

Role: Project Manager

- > Webster County, WV

City of Winfield Sewer System Improvements

Role: Project Manager

- > Putnam County, WV

City of Milton Sanitary Sewer System Improvements

Role: Project Manager

- > Cabell County, WV

City of Winfield Sewer System Improvements

Role: Project Manager

- > Putnam County, WV



Licensure Verification

Search: Details

Name:

COREY ALLEN SMITH

WV Professional Engineer:

PE License Number: [REDACTED]

PE License Status: Active

PE Issue Date: 01/02/2019

PE Expiration Date: 12/31/2022

Continuing Education Claim:

Qualifying Hours from Last Renewal or Reinstatement: 7.00

Carryover Hours for Next Renewal: 7.00

Last Renewal or Reinstatement Date*: 12/2/2020

WV Engineer Intern:

EI Certification Number: 9922

EI Issue Date: 06/16/2014

Primary Address of Record:

[REDACTED]

Primary Employer of Record:

THE THRASHER GROUP, INC.
300 ASSOCIATION DRIVE
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.

JESSE ALDEN, PE

Project Engineer



Education

Master of Science,
Environmental Engineering
Marshall University

Bachelor of Science,
Civil Engineering Technology
Fairmont State University

Associate Degree,
Pharmaceutical Science
National Institute of Technology

Registrations

Professional Engineer:

- > West Virginia
- > Virginia
- > Ohio

Certifications

- > OSHA General Industry Certification
- > HAZWOPER Certification
- > T & L Contractor Safety Orientation Certification—2011
- > First Aid / CPR Certification

Jesse Alden, PE has become one of Thrasher's leading Project Engineers and Managers for several critical utility projects throughout the Mid-Atlantic region. Jesse designs and oversees both water and wastewater system upgrades for public and private clientele. His detailed understanding of pump system design and plant flow hydraulics allows him to design and troubleshoot complex hydraulic issues at various types of treatment facilities.

Aside from his expertise in hydraulics, Jesse prepares design plans, contract specifications, and complex permitting applications for his clients. He oversees the design and administration of contracts, and works closely with both project Owners and contractors to ensure projects are progressing on budget and within scheduling parameters

Jesse has been involved in some of Thrasher's largest utility expansions to date. He worked with several of the firm's most tenured engineers to help design numerous infrastructure improvements for the Malden Public Service District's massive renovation and upgrade endeavors in Kanawha County, WV. For years, the PSD worked to quickly patch up problems throughout their system, before deciding in 2016 to do a complete system overhaul. Jesse was a key member of the design team and helped make this \$23 million-dollar project a grand success.

Experience

Pea Ridge Public Service District Wastewater Treatment Plant Evaluation
Role: Project Manager
> Cabell County, WV

Pea Ridge Public Service District Route 2 Sewer Extension
Role: Project Engineer
> Cabell County, WV

Berkeley County Public Service Sewer District Austin Wastewater Treatment Plant Decommissioning
Role: Project Engineer
> Berkeley County, WV

City of Milton Sanitary Sewer System Improvements
Role: Project Engineer
> Cabell County, WV

Town of Ceredo/Huntington Tri-State Airport Sewer Extension
Role: Project Engineer
> Wayne County, WV

Berkeley County Public Service Sewer District Timberwalk Sewer Extension
Role: Project Engineer
> Berkeley County, WV

Weirton Sanitary Board Pennsylvania Avenue Sewer Line Relocation
Role: Project Engineer
> Hancock County, WV

Licensure Verification

Search: Details

Name:

JESSE LEE ALDEN

WV Professional Engineer:

PE License Number: [REDACTED]

PE License Status: Active

PE Issue Date: 12/20/2017

PE Expiration Date: 12/31/2022

Continuing Education Claim:

Qualifying Hours from Last Renewal or Reinstatement: 45.00

Carryover Hours for Next Renewal: 15.00

Last Renewal or Reinstatement Date*: 11/30/2020

WV Engineer Intern:

EI Certification Number: 9777

EI Issue Date: 06/17/2013

Primary Address of Record:

[REDACTED]

Primary Employer of Record:

THE THRASHER GROUP, INC.
300 ASSOCIATION DRIVE
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.

FRED ROMAN

Licensed Class IV Wastewater Operator



Education

Bachelor of Science,
Wildlife Management
West Virginia University

Certifications

- > Licensed Class IV
Wastewater Operator
- > West Virginia Department
of Environmental Protection
Certified Lab Technician

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

Ritchie County Board of Education Smithville Elementary School Wastewater Treatment Plant

Role: Wastewater Operator
> Ritchie County, WV

City of Ripley Wastewater Treatment Plant Improvements

Role: Project Representative
> Jackson County, WV

Town of Capon Bridge Wastewater Treatment Plant Upgrades

Role: Construction Manager and
Operator Assistance
> Hampshire County, WV

Town of Accident Wastewater Treatment Plant Upgrade

Role: Construction Manager
> Garrett County, MD

Warms Spring Public Service District Wastewater Treatment Plant

Role: Construction Manager
> Morgan County, WV

City of Romney Wastewater Treatment Plant

Role: Project Representative
> Hampshire County, WV

City of McMechen FEMA Damage Evaluations for the Wastewater Treatment Plant

Role: Construction Manager
> Marshall County, WV

Oak Hill Sanitary Board Sewer System Upgrades

Role: Construction Manager
> Fayette County, WV

Jefferson County Public Service District Pump Station Improvements

Role: Project Representative
> Jefferson County, WV

BUTCH BROWN

Inflow and Infiltration Specialist



Butch Brown started his career with Thrasher as a computer aided drafting (CAD) designer in 1987. Within his design responsibility, Butch has worked closely with the Utility, Site, and Survey Divisions.

Using his knowledge in utility line replacements and extensions, Butch played an integral role in the development of the firm's Pipeline Inspection department, developing procedures and training for field personnel.

Butch currently serves as the Pipeline Inspection Supervisor; he is primarily responsible for scheduling and supervising inflow and infiltration investigations and GIS field crews. Butch is responsible for collection of field data and mapping for Long Term Control Plans. He also works with CADD designers and provides mentoring to young professionals work related to those projects. Butch enjoys working with Thrasher's summer interns and teaching them leading techniques used in the field.

Certifications

- > Microsoft Networking
- > AutoDesk Civil Design
- > OSHA Permit-Required Confined Space Entry
- > WVDOH - Inspection and Testing

Experience

Pea Ridge Public Service District GIS Mapping and I&I Investigation

Role: I&I Specialist
> Cabell County, WV

Charleston Sanitary Board I&I Investigation

Role: I&I Specialist
> Kanawha County, WV

City of Mount Hope I&I Investigation and GIS Mapping

Role: I&I Specialist
> Fayette County, WV

Malden Public Service District Pipeline Inspection Supervision and I&I Investigation

Role: I&I Specialist
> Kanawha County, WV

Kingmill Valley Public Service District Long-Term Flow Monitoring

Role: I&I Specialist
> Marion County, WV

Jane Lew Public Service District Pipeline Inspection Supervision

Role: I&I Specialist
> Harrison County, WV

Oak Hill Sanitary Board Sewer System Upgrades

Role: I&I Specialist
> Fayette County, WV

Craigsville Public Service District I&I Improvements and Wastewater Treatment Plant Upgrades

Role: I&I Specialist
> Nicholas County, WV

PROJECT EXPERIENCE

GRANT COUNTY BOARD OF EDUCATION Union Education Complex Package Plant

Client Contact:

Mr. Brent Nelson, Director of Facilities and Maintenance

204 Jefferson Avenue | Petersburg, WV 26847
304-257-1011 ext. 18

The Grant County Board of Education (GCBOE) received SBA funding to upgrade their facilities. As part of this project, Thrasher's Buildings and Facilities team was hired to design and bid an upgrade to the roof at the Union Educational Complex (UEC, a K-12 facility in the county). During this project, the GCBOE team mentioned that the grease trap and the existing 8,000 GPD extended aeration wastewater treatment plant (WWTP) at the school were in need of replacement. Thrasher met on-site with the GCBOE and faculty members who maintain the WWTP to understand the issues and evaluate possible solutions. The existing aerated package plant was steel construction and difficult to maintain in the winter months. The grease trap was located just outside of the kitchen for the school's cafeteria and was in poor condition. GCBOE extended a contract to Thrasher's Water Resources team to address these issues.

A site survey was carried out by Thrasher to gather topographical information and locate existing features while preliminary design of the project began. Design included a new pre-cast concrete package plant to be built next to the existing WWTP in order to keep the existing plant in operation during construction. Once the new WWTP was constructed, the existing plant could be demolished. A pavilion structure was also designed to shelter the new



WWTP to increase ease of operation during the winter months. A new grease trap, new gravity sewer lines, and new manholes were constructed and tied-in to the existing sewer lines.

Additionally, water lines and fire lines needed relocated to accommodate the new WWTP. The public service district that the school buys water from requested that a dual check valve be installed on the relocated fire line. A new hydrant and water meter were also included in the water line relocation. The owner noted the need for an upgrade to the storm line, which carried flow from several downspouts to the stream due to water backup during rain events. Thrasher designed the upgraded storm line and the contractor carried out the work.

PROJECT EXPERIENCE

RITCHIE COUNTY BOARD OF EDUCATION Smithville Elementary School Wastewater Treatment Plant

Client Contact:

Ora E. Coffman, III
134 South Penn Ave. | Harrisville, WV 26362
304-643-2991



The Ritchie County Board of Education has been a long-time client for Thrasher's Architecture Division. When the County's Smithville Elementary School experienced problems with their old, dilapidated package plant, Thrasher's engineering team was hired to design a new concrete package wastewater treatment plant for the school. There were several complications that had to be considered during the project, particularly with timing and student safety.

First and foremost, the new package plant could not disrupt the students' learning environment. It was being built in close proximity to the school's playground. To keep the site free of debris and safe for the students, the project included a pavilion over top of the wastewater treatment plant - this was a protection measure for students and created an easier operating environment during inclement weather.

Additionally, the school could not go without use of the plant during the school year. To make sure service was not interrupted, Thrasher had to design and bid the plant in a tight timeframe, with construction to be completed during the summer. This required a close working relationship with the BOE, who had to provide the necessary access to explore the operations of the plant.

PROJECT EXPERIENCE



LEWIS COUNTY BOARD OF EDUCATION Roanoke School Wastewater Treatment Plant

Client Contact:

Ms. Melissa Riley, Personnel Director
239 Court Avenue | Weston, WV 26452
304-269-8326



The Lewis County Board of Education selected The Thrasher Group to design a new Wastewater Treatment Plant for Roanoke Elementary School in Lewis County, WV. The existing plant had reached the end of its useful life and was in need of replacement.

Thrasher was selected for the job in January 2016. By May 2016, Thrasher opened bids for this project and began construction in June 2016. Thrasher wasted no time getting to work on this project because of the project schedule set by the client. The plant needed be put into service prior to school beginning in August 2016, when the staff and students returned. The plant was designed and reviewed within two short months of the selection. The project was placed out to bid and came in well under budget. Coordinating with the school board was imperative to the success of this project.



PROJECT EXPERIENCE



CALHOUN-GILMER CAREER CENTER New Package Plant

Client Contact:

Mr. Bryan Sterns, Director
5260 West Virginia 5 | Grantsville, WV 26147
304-354-6151

Thrasher worked with the Calhoun-Gilmer Career Center for several years to complete a multi-phase project that upgraded several facets of the Center. This project came to fruition out of sheer necessity for a safe, modern facility for the students of both Calhoun and Gilmer Counties to learn vocational trades.

Phase I of the project focused on upgrading the on-site wastewater treatment plant. Thrasher designed a new, 3,000 GPD package plant for the school adjacent to the existing plant. The existing

plant was taken out of service, the influent line was intercepted and routed to the new plant, and a new effluent line was built to take the flow to the Kanawha River.

In addition to the design work involved, Thrasher's Utility team saved the Calhoun-Gilmer Career Center time, money, and hassle on this project through two permit processes. We reached out to the Health Department to determine if any permitting was necessary for this project and were able to perform the work without additional permits. Thrasher also worked with the NPDES on wasteload allocation for the increased capacity of the plant.

While this work was being completed, the Thrasher Architecture Division was also working at the Career Center, completing ADA restroom upgrades. They also were involved in Phase II and Phase III of the Center's renovations, completing everything from roof repairs to security upgrades.

PROJECT EXPERIENCE

ANDERSON EQUIPMENT Wastewater Treatment Plant Replacement

Client Contact:

Mr. Don Larck, Service Manager
119 S Corridor G | South Charleston, WV 25303
304-756-2800

This project consisted of replacing an existing 600 GPD extended aeration wastewater treatment plant with a 1,000 GPD fixed media aeration wastewater treatment plant, dosing pump station, peat filter pods and UV disinfection system. The project also included significant permit modifications, which saved our client roughly \$10,000 per year in sampling costs.

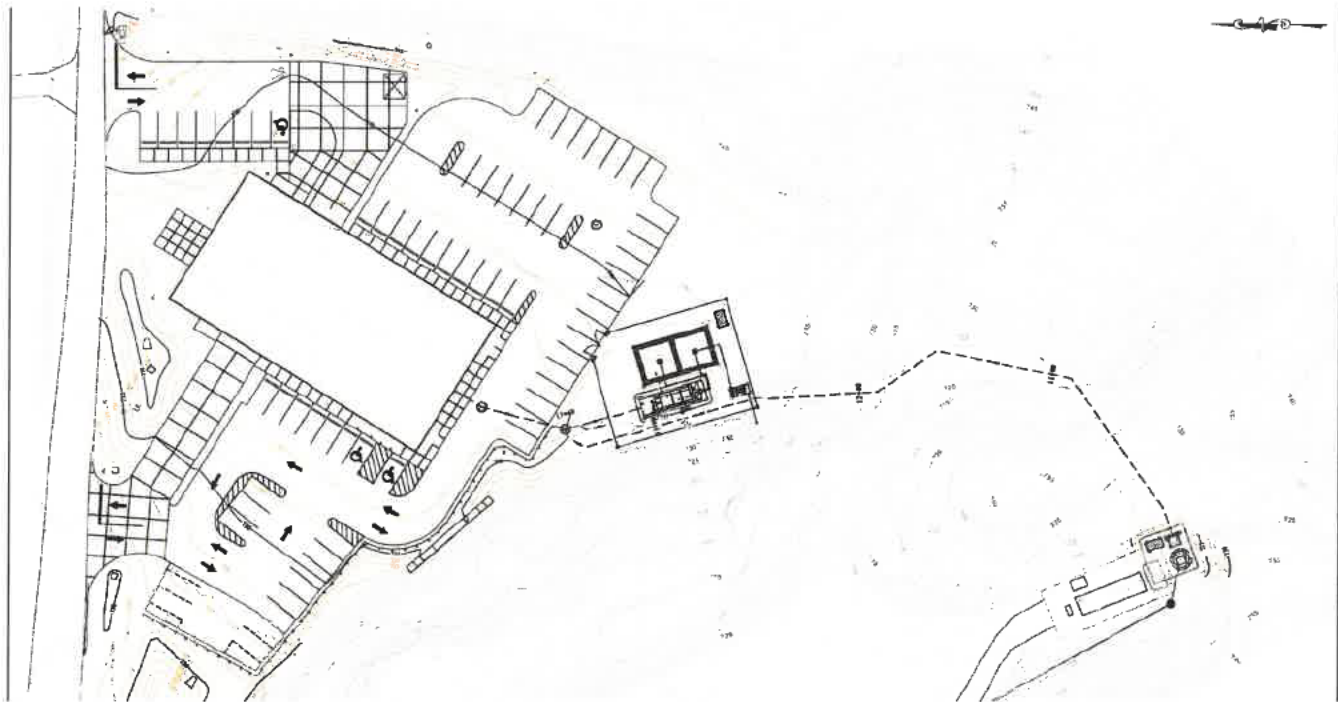




DOMINION NATRIUM New Wastewater Treatment Plant

The Thrasher Group was hired by Dominion to provide utility services at the Natrium processing facility. 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.

The team also assisted with site selection, taking the floodplain into consideration in the process. Thrasher engineers also provided site work such as grading, gravel, and cleanup.



ALUM CREEK FIRE STATION AND COMMUNITY CENTER Package Wastewater Treatment Plant

The Alum Creek Fire Station and Community Center Package Wastewater Treatment Plant (WWTP) project consists of the construction of a dual-purpose fire station and community center along U.S. Route 119. Thrasher is providing a variety of services for the project, including parking facilities and necessary site grading, as well as construction oversight for the building that will house the fire station and community center.

Additionally, this project will provide wastewater collection and treatment services to this new facility as well as the nearby Southpointe subdivision. An existing package wastewater treatment plant owned and operated by the Southpointe subdivision homeowners' association will be decommissioned and a new package plant will be constructed on the fire station property. A lift station will be constructed at the former site of the Southpointe package wastewater treatment plant in order to transport wastewater approximately 350 linear feet from the Southpointe collection system to the new plant.

This project is currently moving into construction.

PROJECT EXPERIENCE



PEA RIDGE PUBLIC SERVICE DISTRICT
Route 2 Sanitary Sewer Improvements

Client Contact:
Ms. Dina Foster, General Manager
P.O. Box 86 | Barboursville, WV 25504
304-736-6711



This project consisted of a gravity sanitary sewer collection system, four (4) pump stations, and a 125,000 gallon per day wastewater treatment plant. The wastewater treatment plant consisted of an influent pump station, headworks structure with screening and grit removal, an oxidation ditch, two circular clarifiers, an ultraviolet disinfection system, aerated sludge holding tank, and sludge press building with sludge press and conveyor, laboratory, and operations center.

The project served approximately 180 residential customers and serves three commercial customers: Alcon Manufacturing, Rustoleum, and Green Acres. This project eliminated one existing 25,000 GPD package plant.



PROJECT EXPERIENCE

MINGO COUNTY PUBLIC SERVICE DISTRICT Chattaroy Sanitary Sewer System Improvements

Client Contact:

Mr. JB Heflin, General Manager
1 Riverside Drive | Naugatuck, WV 25685
304-235-2244

Contract 1: Chattaroy Sanitary Sewer System Improvements

This portion of the project consisted of upgrading the existing Chattaroy Wastewater Treatment Plant into a pump station and stormwater treatment unit, rehabilitating and repairing the control building, upgrading the Fairview lift station and force main, and repairing the creek crossings and manholes.

Contract 2: East Kermit Sanitary Sewer Collection and Treatment System

The second contract of this project included a new 12,000 GPD wastewater treatment plant and demolition of the existing plant. Additionally, this project included:

- » 4,035 LF of gravity sewer line,
- » 3,795 LF of force main,
- » 1,100 LF of lateral sewer line,
- » A duplex grinder pump station,
- » A duplex submersible pump station,
- » A simplex grinder pump station, and
- » 19 manholes.

Contract 3: Delorme Sanitary Sewer Collection System

The next phase of work for Mingo County Public Service District included:

- » 4,855 LF of gravity sewer line,
- » 1,525 LF of lateral sewer line,
- » 595 LF of force main,
- » A grinder pump station,
- » A duplex pump station, and
- » 26 manholes.



Contract 4: Shadee Woods Subdivision Sanitary Sewer Collection System and Wastewater Treatment Plant

Finally, Thrasher provided design and oversight for the construction of a 25,000 GPD wastewater treatment plant with influent pump station and demolition of the existing treatment plant. This project also consisted of the development of conceptual layout and final design drawings for the park, which included:

- » Drainage,
- » Sediment,
- » Erosion measures,
- » On-site utilities including water and sanitary sewer,
- » Design and permitting of a 12,000 GPD wastewater treatment plant.

PROJECT EXPERIENCE

CITY OF WESTON Sewage Collection System Replacement

Client Contact:

Mayor Kim Harrison
102 W. Second Street | Weston, WV 26452
304-269-6141



The City of Weston's collection system was constructed in the 1930s. The main collection system consists of two main interceptors located along the West Fork River and Stonecoal Creek. These interceptors consisted of clay sewer line and brick manholes. They experienced significant inflow and infiltration.

Thrasher completed a sewer rehabilitation and wastewater treatment plant project. This project consisted of sewer line rehabilitation to a portion of the collection system, upgrades to majority of the sewer lift stations, and the construction of a 2.5 MGD wastewater treatment plant.

Upon completion of the project, the Weston Sanitary Board undertook an extension project to serve Jackson's Mill and the WVU Fire Training Center. As part of this project, two main sewage pump stations were upgraded.

During the construction of this project, the City was able to utilize funds from a bid underrun to complete six projects outlined in their long-term control plan and performed a comprehensive I&I investigation of the system.

Contract #1

Served approximately 300 new sanitary sewer customers in the Jackson's Mill, Butchersville, and Turnertown areas.

Details of this phase include:

- » 2,700 LF of 10" ductile iron pipe
- » 1,400 LF of 8" ductile iron pipe
- » 900 LF of 6" ductile iron pipe
- » 20,000 LF 8" PVC of gravity sewer pipe
- » 2,300 LF of 6" gravity sewer pipe
- » 1,600 LF of 4" service lateral pipe
- » 14,000 LF of Force Main
- » 250 manholes

Contract #2 Highlights:

- » 1,000 LF 18" PVC of gravity sewer pipe
- » 1,700 LF of 16" ductile iron pipe
- » 2,700 LF of 12" ductile iron pipe
- » 900 LF of 6" ductile iron pipe
- » 1,000 LF of 6" gravity sewer pipe
- » 45 manholes

Contract #3

Converted a sludge holding tank to a flow equalization basin, replacing the headworks, adding filters to provide tertiary treatment and other miscellaneous improvements at the wastewater treatment plant.

Contract #4

Removed 360 Dry Tons of sludge from an existing sludge holding tank that was converted to a flow equalization basin in Contract #3.

REFERENCES



Pea Ridge Public Service District

Ms. Dina Foster, General Manager
P.O. Box 86
Barboursville, WV 25504
304-736-6711

Huntington Area Development Council

Mr. David Lieving, President and CEO
916 Fifth Avenue, Suite 400
Huntington, WV 25701
304-525-1161

Calhoun-Gilmer Career Center

Mr. Bryan Sterns, Director
5260 West Virginia 5
Grantsville, WV 26147
304-354-6151

THRASHER