

# Statement of Qualifications

Prepared for  
**The West Virginia Division of  
Corrections**  
RFQ # CDR61489

*Engineering Services for  
Water Storage Tank Replacement  
Denmar Correctional Center*

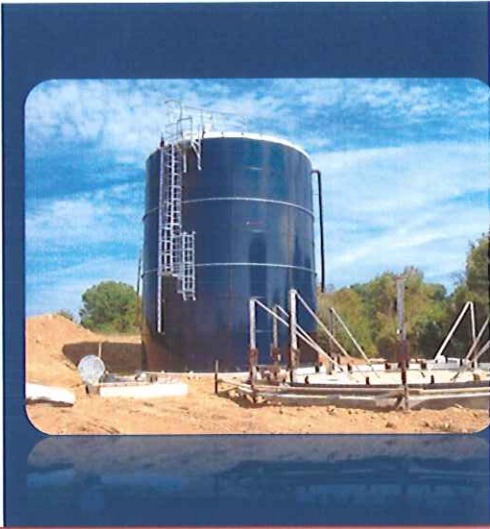
February 7, 2012

RECEIVED

2012 FEB -7 A 9:37

ENGINEERING DIVISION  
STATE OF WV

30 Columbia Boulevard  
Clarksburg, West Virginia 26301  
304-624-4108  
304-624-7831-Fax  
thrasher@thrashereng.com  
[www.thrashereng.com](http://www.thrashereng.com)



February 4, 2012

WV Division of Corrections  
c/o Ms. Tara Lyle  
Department of Administration / Purchasing Division  
Building 15  
2019 Washington Street, East  
Charleston, WV 25305-0130d

**RE: Request for Proposal for Qualifications – RFQ#61489**  
**Water Storage Tanks Replacement / Denmar Correctional Facility**

To Whom It May Concern:

In the past 10 years alone, Thrasher Engineering, Inc. has provided engineering services, survey and inspection and project management for the design and construction of **69 water storage tanks totaling a capacity of over 12 Million gallons of storage**. This experience and expertise makes TEI the right choice for the Denmar Correctional Facility water storage tanks replacement project. We are confident in saying that few, if any, other firms responding to this Request for Qualifications can bring a track record such as ours to this project.

For 29 years, Thrasher Engineering, Inc. (TEI) has provided high quality engineering services for water projects to municipalities, public service districts, federal and state agencies and private clientele throughout the Mid-Atlantic Region. Through doing so, we have been able to live up to our company philosophy of "Successful Projects...Repeat Clientele". We appreciate the opportunity to present our qualifications to the Division of Corrections in anticipation of providing you with the expertise that has allowed us to retain many of our first clients for project after project.

As you will see from our information, TEI has the experience, technical expertise and personnel resources necessary to fully provide the required scope of services for the replacement of the Denmar storage tanks.

We appreciate the opportunity to work with the Division of Corrections and look forward to the interview process to further demonstrate our abilities. Our commitment to our clients is the key to our success; Thrasher Engineering looks forward to developing a positive working relationship with the Division of Corrections through our selection as the engineering firm for this project.

Sincerely,

THRASHER ENGINEERING, INC.



WM. RANDY WATSON  
Partner/Project Manager



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

# Request for Quotation

RFQ NUMBER
COR61489

PAGE
1

ADDRESS CORRESPONDENCE TO ATTENTION OF:
TARA LYLE 304-558-2544

RFQ COPY

TYPE NAME/ADDRESS HERE

VENDOR

Thrasher Engineering, Inc.  
 30 Columbia Blvd.  
 Clarksburg, WV 26301

SHIP TO

DENMAR CORRECTIONAL CENTER  
 HC-64, BOX 125  
 DENMAR ROAD  
 HILLSBORO, WV  
 24946

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
01/19/2012				
BID OPENING DATE: 02/07/2012		BID OPENING TIME 01:30PM		

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
				ADDENDUM NO. 1		
				1. QUESTIONS AND ANSWERS ARE ATTACHED.		
				2. THE BID OPENING HAS BEEN MOVED FROM 01/25/2012 TO 02/07/2012.		
				3. ADDENDUM ACKNOWLEDGEMENT IS ATTACHED. THIS DOCUMENT SHOULD BE SIGNED AND RETURNED WITH YOUR BID. FAILURE TO SIGN AND RETURN MAY RESULT IN DISQUALIFICATION OF YOUR BID.		
				END OF ADDENDUM NO. 1		
001	1	JB		906-00-00-001		
				ARCHITECT/ENGINEERING SERVICES, PROFESSIONAL		
				***** THIS IS THE END OF RFQ COR61489 ***** TOTAL:		

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE	TELEPHONE	DATE
	30 304-624-4108	2/4/2012
TITLE	FEIN	ADDRESS CHANGES TO BE NOTED ABOVE
Partner / Project Manager	55 0633 596 6	

WHEN RESPONDING TO RFQ INSERT NAME AND ADDRESS IN SPACE ABOVE LABELLED 'VENDOR'

EXHIBIT 10

REQUISITION NO.: .COR61489

ADDENDUM ACKNOWLEDGEMENT

I HEREBY ACKNOWLEDGE RECEIPT OF THE FOLLOWING CHECKED  
ADDENDUM(S) AND HAVE MADE THE NECESSARY REVISIONS TO MY  
PROPOSAL, PLANS AND/OR SPECIFICATION, ETC.

ADDENDUM NO.'S:

NO. 1 ....X.

NO. 2 .....

NO. 3 .....

NO. 4 .....

NO. 5 .....

I UNDERSTAND THAT FAILURE TO CONFIRM THE RECEIPT OF THE  
ADDENDUM(S) MAY BE CAUSE FOR REJECTION OF BIDS. VENDOR  
MUST CLEARLY 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.

.....  
  
SIGNATURE

Thrasher Engineering, Inc.  
.....  
COMPANY

.....February 4, 2012  
DATE



State of West Virginia  
 Department of Administration  
 Purchasing Division  
 2019 Washington Street East  
 Post Office Box 50130  
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**30 Columbia Blvd.**  
**Clarksburg, WV 26301**

SHIP TO

**DENMAR CORRECTIONAL CENTER**  
**HC-64, BOX 125**  
**DENMAR ROAD**  
**HILLSBORO, WV**  
**24946**

DATE PRINTED <b>12/07/2011</b>	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
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BID OPENING DATE: **01/25/2012** BID OPENING TIME **01:30PM**

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
0001	1	JB		906-00-00-001		
ARCHITECT/ENGINEERING SERVICES, PROFESSIONAL						NOT APPLICABLE
EXPRESSION OF INTEREST (EOI)						
<p>THE WEST VIRGINIA PURCHASING DIVISION, FOR THE AGENCY, WV DIVISION OF CORRECTIONS, IS SOLICITING EXPRESSIONS OF INTEREST FOR PROFESSIONAL ARCHITECTURAL ENGINEERING DESIGN SERVICES TO REPLACE TWO (2) EXISTING WATER STORAGE TANKS AT THE DENMAR CORRECTIONAL CENTER IN POCAHONTAS COUNTY, PER THE FOLLOWING BID REQUIREMENTS AND THE ATTACHED SPECIFICATIONS.</p> <p>TECHNICAL QUESTIONS CONCERNING THIS SOLICITATION MUST BE SUBMITTED IN WRITING TO TARA LYLE VIA MAIL AT THE ADDRESS SHOWN IN THE BODY OF THIS EOI, VIA FAX AT 304-558-4115, OR VIA EMAIL AT TARA.L.LYLE@WV.GOV.</p> <p>DEADLINE FOR ALL TECHNICAL QUESTIONS IS 01/10/2012 AT THE CLOSE OF BUSINESS. ANY TECHNICAL QUESTIONS RECEIVED WILL BE ANSWERED BY FORMAL ADDENDUM ISSUED BY THE PURCHASING DIVISION AFTER THE DEADLINE HAS LAPSED.</p> <p>CANCELLATION: THE DIRECTOR OF PURCHASING RESERVES THE RIGHT TO CANCEL THIS CONTRACT IMMEDIATELY UPON WRITTEN NOTICE TO THE VENDOR IF THE COMMODITIES AND/OR SERVICES SUPPLIED ARE OF AN INFERIOR QUALITY OR DO NOT CONFORM TO THE SPECIFICATIONS OF THE BID AND CONTRACT HEREIN.</p>						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE 	TELEPHONE <b>304-624-4108</b>	DATE <b>2/04/2012</b>
TITLE <b>Partner/ Project Mgr.</b>	FEIN <b>55 0966 596 6</b>	ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'



State of West Virginia  
 Department of Administration  
 Purchasing Division  
 2019 Washington Street East  
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**304-558-2544**

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**Thrasher Engineering, Inc.**  
**30 Columbia Blvd.**  
**Clarksburg, WV 26301**

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**DENMAR CORRECTIONAL CENTER**  
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**HILLSBORO, WV**  
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BID OPENING DATE: **01/25/2012** BID OPENING TIME **01:30PM**

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
<p><b>BANKRUPTCY: IN THE EVENT THE VENDOR/CONTRACTOR FILES FOR BANKRUPTCY PROTECTION, THE STATE MAY DEEM THE CONTRACT NULL AND VOID, AND TERMINATE SUCH CONTRACT WITHOUT FURTHER ORDER.</b></p> <p style="text-align: center;"><b>NOTICE</b></p> <p><b>A SIGNED BID MUST BE SUBMITTED TO:</b></p> <p style="text-align: center;"><b>DEPARTMENT OF ADMINISTRATION          PURCHASING DIVISION          BUILDING 15          2019 WASHINGTON STREET, EAST          CHARLESTON, WV 25305-0130</b></p> <p><b>THE BID SHOULD CONTAIN THIS INFORMATION ON THE FACE OF THE ENVELOPE OR THE BID MAY NOT BE CONSIDERED:</b></p> <p><b>SEALED BID</b></p> <p><b>BUYER: Tara Lyle</b> ----- <b>TL/32</b> -----</p> <p><b>RFQ. NO.:</b> ----- <b>COR61489</b> -----</p> <p><b>BID OPENING DATE:</b> ----- <b>01/25/2012</b> -----</p> <p><b>BID OPENING TIME:</b> ----- <b>1:30 PM</b> -----</p> <p><b>PLEASE PROVIDE A FAX NUMBER IN CASE IT IS NECESSARY</b></p>						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS		
SIGNATURE 	TELEPHONE <b>304-624-4108</b>	DATE <b>2/04/2012</b>
TITLE <b>Partner/Project Mng</b>	FEIN <b>55 0966 596 6</b>	ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'



State of West Virginia  
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BID OPENING DATE: **01/25/2012** BID OPENING TIME **01:30PM**

LINE	QTY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
TO CONTACT YOU REGARDING YOUR BID: -----304-624-4108 (Phone) 304-624-7831 (Fax)----- CONTACT PERSON (PLEASE PRINT CLEARLY): -----Wm. Randy Watson-----						
***** THIS IS THE END OF RFQ COR61489 ***** TOTAL:						<u>Not Applicable</u>

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE 	TELEPHONE <b>304-624-4108</b>	DATE <b>02/04/2012</b>
TITLE <b>Partner/Project Mgr.</b>	FAX <b>55 0633 596 6</b>	ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

RFQ No. COR61489

STATE OF WEST VIRGINIA  
Purchasing Division

**PURCHASING AFFIDAVIT**

West Virginia Code §5A-3-10a states: 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 the debt owned is an amount greater than one thousand dollars in the aggregate

**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.

"Debtor" means any individual, corporation, partnership, association, Limited Liability Company or any other form or business association owing a debt to the state or any of its political subdivisions. "Political subdivision" means any county commission; municipality; county board of education; any instrumentality established by a county or municipality; any separate corporation or instrumentality established by one or more counties or municipalities, as permitted by law; or any public body charged by law with the performance of a government function or whose jurisdiction is coextensive with one or more counties or municipalities. "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.

**EXCEPTION:** The prohibition of this section does not apply where a vendor has contested any tax administered pursuant to chapter eleven of this 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.

Under penalty of law for false swearing (West Virginia Code §61-5-3), it is hereby certified that the vendor affirms and acknowledges the information in this affidavit and is in compliance with the requirements as stated.

**WITNESS THE FOLLOWING SIGNATURE**

Vendor's Name: Thrasher Engineering, Inc.

Authorized Signature: [Signature] Date: 2/6/12

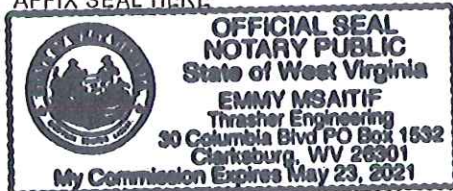
State of West Virginia

County of Harrison, to-wit:

Taken, subscribed, and sworn to before me this 4<sup>th</sup> day of February, 2012

My Commission expires May 23<sup>rd</sup>, 2021

AFFIX SEAL HERE



NOTORY PUBLIC

[Signature]



# PAST TEN YEARS

## 69 STORAGE TANKS

### 12.3 MILLION GALLONS OF STORAGE

## EXPERIENCE

### STATEMENT OF QUALIFICATIONS

As *West Virginia's leading engineering firm*, Thrasher Engineering, Inc. brings extensive qualifications to the West Virginia Division of Corrections in the areas of experience, job performance and quality control in water storage tank design and in the staff capacity and expertise to "get the job done".

Thrasher Engineering was formed 29 years ago, with a major focus on civil engineering and field services for the study, design and construction of water and wastewater projects. Although our services have been expanded over the years, *the "bread and butter" of our company remains in public utility projects.*

Thrasher has provided engineering services to over 50 municipalities and public service districts for water treatment distribution, and storage projects. The majority of those are repeat clients for whom we have worked on large multi-phase projects. As demonstrated in our project experience, these include *projects that have served correctional facilities* (Hazelton Federal Prison in Preston County and Glenville Federal Prison) *and those which required keeping service intact during installation of new tanks.*



### ENGINEERING FOR WATER TREATMENT AND DISTRIBUTION

Meeting increasingly stringent water quality standards demands experienced and dedicated water system specialists.

Thrasher Engineering brings experience, practical knowledge and advanced technology to clients ranging from small communities to regional 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.

Our water treatment design specialists are highly skilled and practiced in both conventional ground and surface treatment systems involving rapid mix, flocculation, sedimentation, filtration, membrane and reverse osmosis processes.

**Our capabilities include:**

- ❑ *Water Storage Tanks*
- ❑ *Intake Structures*
- ❑ *Pumping Stations*
- ❑ *Water Treatment Plants*
- ❑ *Distribution System Review and Repair*
- ❑ *Water Loss Reduction*
- ❑ *Hydraulic Modeling*
- ❑ *Feasibility Studies*
- ❑ *Rate Case Studies*



Beyond engineering design, our project team also excels in project financing procedures and regulatory agency requirements, ensuring each project moves forward efficiently.

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## LAND SURVEY

TEI employs one of the largest survey groups within the Mid-Atlantic region, with personnel strategically located allowing us to mobilize the crews necessary for your projects. The depth of our staff, with their skills and expertise, allows us to serve major businesses without sacrificing service and quality for private surveys. Our clients and project types include oil and gas, wind power, coal, telecommunications, construction, transportation, public utilities and private surveys.



Well trained teams conduct static, real time kinematic (RTK), and real-time differential Global Positioning System (GPS) surveys to deliver accurate mapping and control data for projects. Regardless of the business sector or size of client, our crews provide a wide spectrum of survey services including:

## TECHNICAL PROFICIENCY

### PRELIMINARY ENGINEERING

Each water project engineered by Thrasher begins with a thorough study of the proposed service area, developing a preliminary engineering report with various alternates presented. Thrasher Engineering will review any previous plans and utilize them in developing the report which will include cost estimates.

Accurately estimating construction costs is vitally important. At Thrasher Engineering, we provide accurate estimates even though there may be time lapses and economic changes between estimating and construction. ***Our track record of estimates vs. actual construction has***

*earned us the respect of our clients, contractors and funding agencies.* We will review any earlier cost estimates to ensure they are in line with current market pricing.

## DESIGN

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Thrasher’s personnel utilize the most current technology available for design of your project, providing accuracy, flexibility for modifications and clear, concise and understandable drawings. *Thrasher Engineering has earned a reputation among funding agencies and contractors for well-designed projects resulting in more competitive bids and costs that meet funding allocations.*

## PREPARATION OF BIDDING AND CONTRACTING DOCUMENTS / EVALUATION OF BIDS

---

The Project Engineers assigned to the Denmar water storage tanks project will thoroughly review the plans to ensure accuracy and flexibility for modifications, as they are needed. Based upon that review, we will prepare the necessary bidding and contracting documents. A well-designed project has more bidders with a closer spread in bids than a poorly designed project. *Over the past two years, Thrasher Engineering's public utilities projects have averaged ten (10) bidders per contract. To promote your projects to potential bidders, Thrasher Engineering includes the project information in the "Out to Bid" section of its website ([www.thrashereng.com](http://www.thrashereng.com)) if requested by the client. The site is updated with new plan-holders daily.*

## CONSTRUCTION MANAGEMENT AND INSPECTION

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Thrasher Engineering has experience in providing construction management and inspection services for projects designed by us in addition to those designed by other engineering firms. Our teamwork approach with the owner and contractor allows for a well-organized process.

Our approach to a successful construction project includes good interaction between the Engineer, Construction Manager and Owner along with the use of Experienced Surveyors, Inspectors and Technicians. We strive for positive dealings with Contractors, Funding Agencies, Regulatory Agencies and we believe in teamwork with all parties involved with a project. *Thrasher Engineering’s team provides the communication needed and the documentation necessary to meet the client’s needs and those of funding and regulatory agencies.*



## SPECIFIC PROJECT EXPERIENCE

WATER STORAGE TANKS -2000 TO PRESENT		
CLIENT	SIZE	(in Gallons)
MASONTOWN WATER WORKS		22,000
TOWN OF ROWLESBURG		105,000
HODGESVILLE PUBLIC SERVICE DISTRICT		70,000
SHORTLINE PUBLIC SERVICE DISTRICT		151,000
		151,000
SOUTHWESTERN PUBLIC SERVICE DISTRICT		75,000
		100,000
SUN VALLEY PUBLIC SERVICE DISTRICT		471,000
TOWN OF TERRA ALTA		142,000
		53,000
COONS RUN PUBLIC SERVICE DISTRICT		105,000
GREATER HARRISON PSD		162,000
		107,000
		57,000
TUNNELTON		70,000
PAW PAW RT19		122,000
ELIZABETH		50,000
NORTON HARDING JIMTOWN PSD		158,000
FARMINGTON		158,000
HURRICANE		220,000
GRANDVIEW DOOLIN PSD		31,000
PARSONS		576,000
LEWIS COUNTY EDA		100,000
		100,000
WEIRTON		1,000,000
DOMINION		1,000,000
CITY OF BRIDGEPORT		500,000
		500,000
GREEN SPRING VALLEY		157,000
HARDY COUNTY PSD		71,000
		100,000
		150,000
		154,000
		22,000
RALEIGH COUNTY PSD		75,000
		150,000
GILMER COUNTY PSD		53,000
		53,000
HUNDRED-LITTLETON PSD		50,000

WATER STORAGE TANKS -2000 TO PRESENT		
CLIENT	SIZE	(in Gallons)
CLINTON		100,000
		100,000
		150,000
		75,000
FRANKLIN		43,000
HAMRICK PSD		71,000
HEDGESVILLE		246,000
PRESTON CO EDA		1,000,000
		100,000
		100,000
		150,000
		150,000
CHESTNUT RIDGE PSD		53,000
LUMBERPORT		157,000
		157,000
ELIZABETH		156,000
		100,000
ROUTE 16		63,000
RIVER ROAD PSD		105,000
HARDY COUNTY		100,000
KINGWOOD		255,000
MINGO		256,000
		256,000
		256,000
		256,000
		71,000
		139,000
		53,000
PRESTON COUNTY PSD 1		39,000
TOWN OF PAW PAW		200,000

## SELECTED PROJECT EXAMPLES

### SHORTLINE PUBLIC SERVICE DISTRICT

**Client/Contact:**

**Short Line PSD**

**PO Box 188**

**Wallace, WV 26448**

**Gene Rodgers, Chairman**

**304-796-4667**

**Project Location:**

**Wallace, West Virginia**

**Total Project Cost:**

**\$3,400,000**

**Construction Estimate:**

**\$3,340,000**

This project included upgrading the existing system and extending the potable water service to approximately 147 new customers in the areas of Upper Jones Rune, Flag Run, Little Elk Run, Big Elk Run, Stout Run, and Pricetown.

The Jay Farm Water Storage Tank was removed and replaced with 2 151,000 gallon tanks. The engineering design for the Folsom and Brown water storage tanks required upgrades and improvements. Again, one tank was kept operational until improvements were completed on the other, thereby avoiding any lack of service to customers. Improvements included new control valves with telemetering units and the delayed acting altitude valve.

**This project closely resembles the Denmar Facility Project.**

*Shortline PSD's project required the replacement of a 300,000 gallon tank with (2) 151,000 Gallon Water Storage Tanks. One tank was kept operating at all times to supply service during demoltion and construction.*



## TOWN OF FARMINGTON WATER LINE AND STORAGE TANK REPLACEMENT

**Client Contact:**

**Town of Farmington**  
**Mayor Donna Costello**  
**1314 Mill St., P.O. Box 520**  
**Farmington, WV 26571**  
**Phone: 304-825-6442**  
**Fax: 304-825-6325**  
**Total Project Cost: \$1,500,000.00**



Thrasher Engineering provided all engineering and construction management services for the Town of Farmington's water line replacement to fix their 63% water loss problem. In their system by replacing the majority of the water mains in the downtown area. This includes replacing as much of the old cast iron water lines with new 6" and 8" PVC water lines. This project consists of replacing approximately 17,400 LF of water line within the Town of Farmington, including 165 new meter settings to existing customers. Additionally, this project involved the construction of a 158,000 gallon welded steel water storage tank, including valve vault, piping, demolition of existing 150,000 gallon water storage tank, and site work and access road.

TEI services for this particular project included survey, construction monitoring, facility planning, civil engineering, engineering during construction, hydraulic services, materials testing and various other services as needed and agreed upon.

**TECHNICAL DESIGN SPECS: - Contract #1:** This project involves the installation of approximately 3.3 miles of various size water line, 165 new meter settings to existing customers, 3" solenoid operated control valve station, various lengths of 3/4" and 1" service tubing, miscellaneous valves, fire hydrants, casings, and trench repair items.

**TECHNICAL DESIGN SPECS: - Contract #2:** This project involves the construction of a 158,000 gallon glass-lined water storage tank, including valve vault, piping, demolition of existing 150,000 gallon water storage tank, and site work and access road as shown in the plans.

## CHARLES POINTE WATER DISTRIBUTION LINE AND BOOSTER PUMP STATION

**Client/Contact:**  
**City of Bridgeport**  
**P.O. Box 1310**  
**515 West Main Street**  
**Bridgeport, WV 26330**  
**304-842-8200**  
**Tom Brown, P.E. – Dir. Of Public Works**



This project involved the installation of potable water distribution lines including an 800 GPM booster pump station and two 522,000 gallon water storage tanks to the Charles Pointe Development.

Contract 1 of this project included:

- **Approximately 1998 LF of 16" ductile iron water line,**
- 5,600 LF of 12" PVC water line,
- 2,484 LF of 12" ductile iron water line,
- 70 LF of 10" ductile iron water line,
- 80 LF of 8" PVC water line,
- 20 LF of 6" PVC water line,
- **An 800 GPM booster pump station**
- A 2-unit telemetering system
- Numerous gate valves, fire hydrants, air release valve



Contract 2 of this project included the construction of two (2) 522,000 gallon water storage tanks, including valve vault and piping, site work, access road, and fencing, complete, for the storage tanks.



## PRESTON COUNTY EDA HAZELTON PRISON WATER SYSTEM

**Client/Contact:**  
**Preston County EDA**  
**330 East Main Street, Ste 100**  
**Kingwood, WV 26537**  
**304-329-2299**  
**Ms. Robbie Baylor, Executive Director**

This project consisted of preliminary engineering, survey, design and construction management to provide water service to the U.S. Federal Prison located near Hazelton, WV.

### **Contract 1, Glade Run Water Treatment Plant.**

Design and construction management of:

- A 700 GPM water treatment plant, including 3 new water supply wells,
- Backwash holding and decant system,
- Flocculation,
- Clarification and filtration system along with necessary structures.

### **Contract 2 Water Line Extension.**

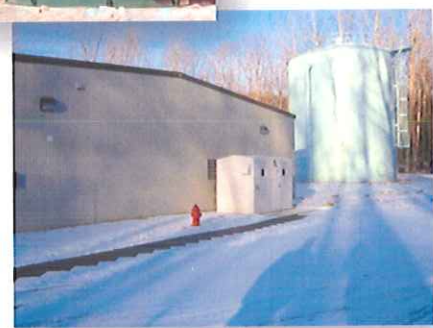
Included the design and construction management of over **11 Miles of water line, including 16" to 6" line.**

### **Contract 3, Elevated Water Storage Tank.**

**Design and construction management for a 1 Million Gallon water storage tank** to serve the Federal Prison.

### **Contract 4, Storage Tanks:**

Design and Construction Management of four (4) water storage tanks including two (2) 100,000 gallon and two (2) 150,000 gallon water storage tanks.



## STAFF AND RESOURCES

TEI offers a staff of nearly 300 highly qualified personnel in all areas of expertise. The engineering staff includes registered professional engineers, design engineers, engineering technicians, CAD designers, environmental engineers and scientists. The field services staff brings registered professional surveyors, sixteen survey crews and over 40 construction managers, inspectors and material testing personnel to the group. We also staff personnel in a GIS mapping and software development department in addition to an architectural division.

### EXPERIENCE / CAPABILITIES OF THE PROJECT TEAM

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We believe the working relationships between the project team and the client is one of the most important elements of a successful project. Therefore, the Thrasher Engineering personnel with specialization in water system projects will be assigned to this project. Wm. Randy Watson, a partner in the firm with 25 years of experience will serve as Principal-in-Charge and Project Manager with Steve Haynes as Design Technician and Field Engineer and Tom Urquhart, P.E., BCEE providing hydraulic evaluation, and quality control. As shown in their resumes, the team brings extensive experience in the design of water system projects including the majority of water storage tanks included in the experience of this submittal.

**Principal –In- Charge and Project Manager, Wm. Randy Watson**, will oversee the project and will be the main contact with the DOC. Particular focus will be overall management of design and construction of the project, including project scheduling and quality assurance. Randy joined the firm in 1984 and was named a firm partner in 2001. A graduate of Fairmont State University, Randy’s experience in water distribution projects includes project management and design of water system projects throughout the State.

Working with Randy will be **Steve Haynes**, and **Tom Urquhart, P.E., BCEE**. Steve will serve as Project Designer and Field Engineer. Steve received his Bachelor of Science degree in Civil Engineering Technology from Fairmont State University and joined TEI in 1999. . He is responsible for engineering design and construction management of sanitary sewer collection system and extension projects, wastewater treatment projects, and water distribution, storage and treatment projects.

**Thomas E. Urquhart, P.E., BCEE** will serve as **Consulting Engineer** for the project, with specific responsibilities in the review of storage, transmission and hydraulic modeling. Mr. Urquhart joined Thrasher Engineering in 1996 after serving as General Manager/ Chief Engineer of the Morgantown Utility Board (previously the Morgantown Water Commission) for 33 years. As a consulting engineer for Thrasher, his primary responsibility is providing hydraulic modeling and design for water distribution systems. Mr. Urquhart is both a Certified Master Modeler by Haestad Methods for Water Systems and is trained in KY Pipe Modeling Software for pipe system hydraulic flow analysis. He received his Master of Science Degree in Civil Engineering, as well as his Bachelor of Science Degree in Civil Engineering from West Virginia University. A Registered Professional Engineer in the States of West Virginia, Pennsylvania, Ohio and Maryland, Mr. Urquhart is also a Board Certified Environmental Engineer from the American Academy of Environmental Engineers.

Resumes for these project team members follow.

## WM. RANDY WATSON – PARTNER / PROJECT MANAGER

### QUALIFICATIONS SUMMARY

*Mr. Watson joined Thrasher Engineering in 1984 and serves as Principal and Partner in the firm. Mr. Watson is responsible for the development of public water system feasibility studies and subsequent design work for private, state and federally funded projects. Additionally, Mr. Watson oversees project acquisition, project funding applications, engineering design and construction management on public utilities projects.*

#### Specialties Include:

- Funding Applications: Developing preliminary engineering reports and determining the best source of public/private funding scenarios to suit the applicant.*
- Utility Design: Primary focus on water projects including distribution system replacements and extensions including pump stations, storage facilities, raw water intakes, ground water acquisition and evaluations. Other duties include existing water treatment plant additions/retrofitting. Sanitary sewer extension designs including pump stations and force mains.*
- Construction Management: Overseeing construction projects from the preconstruction conference to the final inspection. Duties involve reviewing contractor pay requisitions, change orders, attending monthly progress meetings, and managing the project budget.*

### EDUCATION

- B.S., Mining Engineering Technology, 1982 – Fairmont State University*
- A.S., Design / Drafting, 1980 – Fairmont State University*

### AFFILIATIONS / CERTIFICATIONS

- AWWA Member*

### REPRESENTATIVE PROJECT EXPERIENCE

- City of Cameron (2008): Project manager for the partial water system replacement for a \$2,900,000 project involving the replacement of approximately seven miles of distribution system. Project was to reduce an extreme amount of water loss in the distribution system.*
- Town of Elizabeth (2008): Project manager for the Jessica Lynch water extension project involving 28 miles of potable water line serving 200 customers and a 50,000 gallon water tank. Total project cost of \$4,623,000.*
- Town of Farmington (2007): Project manager for a partial water distribution system replacement to reduce water loss. Project also involved a 150,000 gallon water tank and a solenoid valve station. Total project cost of \$1,500,000.*
- Town of Bath (Berkeley Springs Water Works) (2006): Project manager for a partial water distribution system replacement to reduce water loss. Total project cost of \$2,675,000. Project involved the replacement of approximately 5 miles of lines including service, valves, meters, and road repairs.*
- Dominion Resources (2002): Project manager for fire line suppression system including a 1,000,000 gallon fire water supply storage tank approximately 5000LF of 16" HDPE*

- water line and miscellaneous valves, tie-ins, and appurtenances. Total project cost was approximately \$1,300,000 for the Hastings pumping facility in Pine Grove, WV.*
- ❑ *Hodgesville PSD (2003): Project manager for a water distribution extension involving approximately 30 miles of water line to serve 250 new customers. Project involved a new 240,000 gallon welded steel water tank and a 250 GPM package water booster pump station. The areas served were to the north of Buckhannon, WV. Total project cost of \$3,500,000.*
  - ❑ *Preston County PSD #1 (1996): Project manager for a new 700 GPM water treatment plant, 12" raw water line, a 158,000 gallon and a 336,000 gallon glass-lined bolted steel water tank packaged 165 GPM water booster pump station and 24 miles of distribution lines to serve 225 new customers and 459 existing customers. Total project cost was approximately \$7,200,000.*
  - ❑ *Grandview-Doolin PSD, Project Manager for Water Line Extension and Storage Project*
  - ❑ *Haymond PSD, Project Manager for the Cherry Run Water Line Extension*
  - ❑ *Town of Lumberport (2003), Water Line Replacement, Reservoirs, and Water Treatment Plant Improvements*
  - ❑ *Hamrick PSD, Water Line Extension, Reservoir, Booster Pump Station, and Water Treatment Plant Improvements*
  - ❑ *City of Mannington, Raw Water Pump Project*
  - ❑ *Clinton Water Association (2004), Project Manager for 4 reservoirs, 2 booster station upgrades, waterline extension*
  - ❑ *Town of Terra Alta (1998), New 500,000 gpd WTP*
  - ❑ *Town of Tunnelton (1992), Complete Replacement of Water Distribution System*
  - ❑ *Town of Terra Alta (1996), Complete Replacement of Water Distribution System*

## STEVE HAYNES – DESIGN AND FIELD ENGINEER

### QUALIFICATIONS SUMMARY

*Mr. Haynes joined Thrasher Engineering in 1999 and serves as a Project Designer and Field Engineer following 10 years as a Project Representative Construction Manager. Mr. Haynes is responsible for engineering design and construction management of sanitary sewer collection system and extension projects, wastewater treatment projects, and water distribution, storage and treatment projects. He also provides direction to Engineering Technicians on his staff.*

### EDUCATION

- B.S. Civil Engineering Technology, 1999 – Fairmont State University*

### CERTIFICATIONS

- Fairmont State University Level V Certification (Transportation Engineering Technologist – Engineering Specialization)*
- WVDOH Portland Cement Concrete Inspector/Technician*
- WVDOH Compaction Inspector*
- WVDOH Aggregate Sampling Inspector*

### AFFILIATIONS

- American Society of Highway Engineers, (ASHE)*

### REPRESENTATIVE PROJECT EXPERIENCE

- Town of Rowlesburg, New 200 GPM Water Treatment Plant and Pump Station upgrades: Responsibilities include inspection and documentation of the construction of the control building, sediment basins, decant tank and chemical feeds from start to finish.*
- White Oaks Business Park – Bridgeport: Provided documentation and quality assurance for this large volume fast pace project that included nearly 1 million yards of material moved in the cut/fill operations for this site development project which included roads and utilities in conjunction with erosion and sediment control for the project.*
- Brooke County PSD, Colliers Area Water and Sewer Projects: Responsibilities included inspection and testing of water and sewer mains, daily logs, testing records, development of customer information sheet and compliance of plans and specifications.*
- WVDOH South High Street Bridge: Provided Consultant Inspection for District 4 on this 5 span structure located in downtown Morgantown. This unique project dealt with a multitude of challenges including asbestos abatement of an adjacent apartment building and demolition, removal of parking area attached to the old structure and an adjacent retail store, implosion of the existing bridge structure and working within the tight constraints of town.*

**THOMAS E. URQUHART, PE, BCEE – HYDRAULICS / CONSULTING ENGINEER**

**QUALIFICATIONS SUMMARY**

*Mr. Urquhart joined Thrasher Engineering in 1996 and serves as Consultant for the firm. Mr. Urquhart is experienced in civil engineering of public utilities including design and construction of water storage tanks, new and replacement water and sanitary sewer lines, pump stations and water treatment and wastewater treatment plants. Mr. Urquhart previously served as General Manager/Engineering for the Morgantown (WV) Utility Board.*

**EDUCATION**

- M.S. Civil Engineering – West Virginia University*
- B.S. Civil Engineering – West Virginia University*

**CERTIFICATIONS**

- Registered Professional Engineer (PE) – State of West Virginia #05262*
- Registered Professional Engineer (PE) – State of Pennsylvania #PE014449E*
- Registered Professional Engineer (PE) – State of Ohio #64320*
- Registered Professional Engineer (PE) – State of Maryland #30289*
- Certified Master Modeler by Heastad Methods for Water Systems, 2002*

**REPRESENTATIVE PROJECT EXPERIENCE**

- Pocahontas County PSD Hydraulic Modeling for County-Wide Water System*
- City of Bridgeport/Charles Pointe, Used Computer Hydraulic Model to design wastewater pumps at four locations pumping into common force main*
- City of Weston, Used Computer Hydraulic Model to design wastewater pumps at four locations pumping into common force main*
- Mingo County PSD, Used Existing Computer Hydraulic Model used to design extension out of Ragland*
- City of Parsons Design of Improvements to Water Filters*
- Town of Rowlesburg, Used Computer Model of Water System to Design of High Service Pumps*
- Fairmont State University, Computer Hydraulic Model of Existing Water System and Design Improvements to Provide Fire Protection*
- City of Weirton, Complete Hydraulic Model and Study for New Tank, Pump Station, and Elevated Tank*
- City of Tunnelton, Used Computer Hydraulic Model to design connection to Taylor County PSD water system*
- Raleigh County Airport Industrial Park, Used Computer Hydraulic Model to design water system to provide maximum fire flows from Beckley water system*
- Sun Valley PSD, Complete Computer Hydraulic Model prepared to design system improvements, including providing water to the City of Salem*
- Greater Harrison County PSD, Existing Computer Hydraulic Model used to design improvements to provide more water to Lost Creek area*
- Craigsville PSD, Complete Computer Hydraulic Model prepared to examine several alternatives for constructing new water plant and feeding water from Summersville*

## CONSTRUCTION MANAGEMENT

Comprehensive oversight of every stage of a construction project provides the greatest possible benefit by keeping projects on time, on budget, and assuring that the outcome meets the designer's and the owner's standards. That assurance is the mission of TEI's construction managers and project representatives.

Thrasher Engineering, Inc. offers its construction administration and inspection services through a philosophy of *value engineering*; we offer the full complement of engineering, construction management, inspection and materials testing.

Our Construction Managers have at their disposal a full staff of Licensed Professionals in various areas of expertise. These areas include, but are not limited to civil engineering, hydrology, structural, electrical and mechanical. By utilizing the capabilities of these professionals, Thrasher Engineering offers the following outline of our methods:

### ESTABLISH AND MAINTAIN A LINE OF COMMUNICATIONS

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Thrasher Engineering has years of experience representing the owner's interest in projects. Through this experience, we have developed successful methods of communicating with all participants in the project. We believe that face-to-face meetings with idea exchanges are most effective and recommend weekly meetings in the first stages of the project. If the project is progressing smoothly, the meeting schedule can be reduced to monthly, which would be the minimum. Additionally, we utilize conference calls, fax and e-mail to assure the line of communication remains open. We will determine, with the project principals the methods that are most agreeable with them and their procedures.

The Construction Managers from Thrasher Engineering will attend all bid, project award, and pre-construction meetings. This allows all parties in the project to understand the "rules" established prior to construction. At the pre-construction meeting, the project designers, successful bidders and our construction administration and inspection team will determine scheduling and chain of command, develop a meeting schedule and establish procedures for submittal of pay requests and pertinent data. Timetables will be established with the owners best interest in mind and based upon realistic time frames.

### SCHEDULING:

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Schedules of completion are monitored and updated monthly to determine contractor's progress and anticipated completion dates. Over our years of experience, we have determined that the most successful method of keeping a job on schedule is ***not letting it fall behind***. We accomplish this through our scheduled weekly progress meetings. At each meeting, completion schedules are reviewed. When delays occur, our team requires the contractors to show how the delay will be made up; from that documentation, a revised schedule is developed. This method is proven as being a constant reminder to contractors as to their contractual obligations for meeting the completion date.

## FINANCIAL CONTROLS

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Our lead Project Managers track all costs associated with projects. This includes costs for all work completed to the reporting date, in addition to all anticipated costs for project completion. Monthly estimates are provided showing these costs. We understand the importance of financial controls on publicly funded projects and have well-established methods for meeting the standards of the funding agencies.

## RECORD KEEPING:

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Project Representatives/ Inspectors maintain logs identifying work completed on a daily basis. These logs are required of each Thrasher Engineering Project Representative as the logs serve as the basis for job summaries and record drawings.

## PROVIDE DIGITAL DOCUMENTATION OF THE PROGRESS OF CONSTRUCTION

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Thrasher Engineering prides itself on up-to-date technology. Our construction managers will provide digital photographs of the work in progress. This photography is provided on our projects to not only document the progress of the work, but also to document any potential areas of concern. Additionally, our administrative system utilizes “e-documentation”. Meeting minutes and other correspondence will be scanned into our system and transferred to the Town and specified others in their preferred method.

## CONFLICT RESOLUTION:

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Thrasher Engineering’s Project Representatives act as liaisons between designers and contractors to resolve any conflicts that may arise. The mediation of conflicts is done in a teamwork fashion with the project owner, with continued communications to assure positive resolutions in the best interest of the owner. Also important is our approach of cooperating with and even helping a contractor. Thrasher Engineering, Inc. very much believes that successful projects result from the **“team” approach rather than a “watchdog” approach**. Thrasher Engineering performing its work quickly and cooperatively facilitates this approach. This, in turn, encourages the contractor to perform.

If after assistance, the contractor does not and will not improve its performance, a firm line is taken and discussed with the owner with all involved parties present. In other words, we do everything possible to insist that we expect performance. In cases where performance is still not seen, we will do what is required to correct the situation, including contacting the contractor’s bonding company to express concerns, recommend withholding payment or other items allowed in the contract. It is seldom necessary for Thrasher Engineering to resort to these measures due to our strong communication with the project designer during the value engineering stage. Our pre-planning and scheduling methods are geared to prevent conflicts.



TEI has nationally and state certified project representatives responsible for overseeing the integrity of design and the interests of its clients during the construction phase. Our methods of project monitoring and quality assurance developed over the years have earned the respect of not only our clients, but contractors, other designers and project owners.

**Our methods for quality control and assurance include:**

- ❑ *Regularly scheduled planning & progress meetings*
- ❑ *Engineering during construction*
- ❑ *Daily logs & progress sheets*
- ❑ *Cut sheets*
- ❑ *Quantity tracking*

Regardless of the project size, the goal of a TEI Project Representative is to utilize their professional skills to protect the interest of our client throughout the construction process.

Thrasher Engineering is staffed with over 40 persons that exclusively provide inspection services. Most of these inspectors and construction managers have 10 to 15 years of experience in coordinating construction projects and assuring quality control. A number of them are graduate engineers with specialties in construction management and inspection, as well. Our construction managers and inspectors are highly trained in the latest techniques. Thrasher Engineering holds yearly inspection training that includes safety, documentation and record keeping, materials testing and verification. The majority of our Construction Management/ Inspection staff is certified in concrete sampling and compaction testing.



*Digital photos taken throughout construction are just one of TEI's processes to ensure quality control.*