



Expression of Interest
West Virginia - General Services Division
Capitol Campus Steam Line/Vault Rehabilitation
CEOI 0211 GSD1800000002
January 17, 2017



01/17/18 13:59:55
WV Purchasing Division

BID RECEIVED LATE
Buyer Tanya
Witness Linda Harper
DISQUALIFIED

Department of Administration
Purchasing Division
2019 Washington Street East
Charleston, WV 25305-0130

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The Miller Engineering Difference



We are very pleased to submit our response for the Capital Complex Steam Vault Project. In many applications and areas, steam system design and operation is becoming a "lost art", as more and more facilities move to decentralized plants using condensing hot water boilers. However, in a campus environment, steam remains a highly effective and reliable manner to provide heating from a central plant. As steam has become less common, the work force has less practical knowledge of these systems. As such it is imperative that the facilities be operable and maintainable in a personnel safe manner. During my tenure at WVU, I provided engineering support to the maintenance staff in the form of real-time field assistance, as well as design of modifications to and repairs of the campus steams systems. These systems operate at 125 psi and 100 degrees of superheat with tremendous energy and potential for harm. The problems of employee access, limited outage availability, and aging infrastructure are likely similar to the problems faced by GSD. In addition to this experience, I operated a 90 psi central plant at Uniontown Hospital and, since founding Miller Engineering, have assisted clients with evaluation, repair, and in some cases, decommissioning of their steam systems in favor of hot water.

We're not your typical MEP firm; we ensure our designs meet very specific, time-tested criteria, including but not limited to being constructible, operable and maintainable. We want to set up our clients to be self-sufficient, but we work to be available every step of the way.

Our hands-on staff takes great pride in their construction and operations backgrounds, which help us visualize the project as it would be built instead of just lines on paper. We don't sit clients down and lecture to them about what they're going to get; we listen to them so we can strive to deliver exactly what they want and need. It costs too much time and money (for both our clients and us) to not deliver exceptional service every single time, and we work tirelessly to keep projects on time and on budget. We're proud to say that our change order percentage over the last 8 years is less than 0.1%, and that's not just a statistic; it's a proclamation of our commitment and determination to make sure things are done right the first time, every time.

Miller Engineering has completed several successful projects for WV General Services Division in the previous two years. We currently have an HVAC renovation project under construction at Building 22. We have experience with the requirements and processes of state procurement, and can deliver a successful project from design through close-out and warranty. I would like to personally thank you for affording Miller Engineering the opportunity to propose on the Capitol Campus Steam Line/Vault Rehabilitation for West Virginia General Services Division.

Best regards,



Craig Miller
President/Owner
Miller Engineering, Inc.



TAB 1 – CONCEPT



WV Capitol Campus Steam Lines/Vault Project Concept

Concept:

The first step in addressing the concerns related to the State Capitol steam lines and vaults is detailed evaluation. This will include discussions with the Owner concerning operational issues, review of restrictions, and an on-site evaluation of the steam vaults and system in general. Particular attention will be given to access/ operability concerns for GSD personnel. MEI understands that the nature of this campus requires consideration of the unique security, safety, and logistics necessary.

Once the existing systems are evaluated, then a written report with recommendations will be prepared to serve as the basis of discussion of the scope of work with the Owner. There are certain items which, once the system is "touched" for renovation, must be addressed by code. The recommendations will be broken down with such items as "mandates" and others as "options". Deferred maintenance concerns observed will be included in the report and discussion. MEI will review these in detail with the Owner and utilize the Owner's decisions to prepare documents and competitively bid the renovations necessary to meet the operational goals of the project. The team will evaluate the bids as requested and will perform construction administration to implement the renovation.

MEI will likely perform the project entirely unless detailed industrial analysis or major structural or sitework modifications were discovered to be necessary. MEI has relationships with industrial hygienists should OSHA accommodations be part of the solutions MEI will be the sole contracting entity for the project.

MEI understands that the work product will become the property of the agency and may be used or shared. It is also our understanding that, with WV state law, such use results in indemnification of our firm for any outcomes related to use in this manner.

MEI has never had a vendor complaint filed against it. In the history of Miller Engineering, there have been no adverse professional regulatory assertions or actions against our firm. We have never been terminated from a contract, had any debarments, suspensions or sanctions from any state Board governing our services. MEI has been involved as a defendant in one litigation since its inception in 2003. The claim related to an asserted HVAC design deficiency which was never proven. The matter was settled by our insurance carrier; whose professional witnesses found our design to be in accordance with professional design standards.

Project Organization (Timing):

Our current work load is such that providing the services requested presents no concerns at this time.

Anticipated Schedule:

Evaluation - 4 weeks
Report and Recommendations – 4 weeks
Owner Review and Decisions - 2 weeks
Contract Documents – 8 to 12 weeks
Bidding – Assumes 8 weeks
Construction – TBD

Respectfully submitted this 17th day of January 2018.



**Craig Miller PE
President
Miller Engineering, Inc**



TAB 2 – FIRM QUALIFICATIONS





Firm Profile

MILLER ENGINEERING is a solely held (S) corporation owned by Craig Miller PE, President. The corporation maintains a Certificate of Authority with the WV State PE Board and has carried professional liability insurance since its inception. Neither the firm nor its professional engineers have ever faced disciplinary action in any form from the states in which they are registered.

Our engineered solutions involve a detailed assessment process: investigation, observation, communication with stakeholders, system analysis, building modeling and engagement from our entire team. We approach each and every project with this process and the guiding principle that buildings are designed to be livable and function in their intended purpose.

Over the past 14 years Miller Engineering, Inc. (MEI) has engineered solutions for over \$23.2M in MEP system upgrades, repairs and renovations for projects of all scopes and sizes, with clients ranging from private owners to local and state governments. With a strict attention to detail and commitment to delivering a job done well and done right the first time, every time, MEI has accumulated a change order percentage of less than 0.1% over the past 8 years.

Our team has unique skill-sets regarding engineered renovation solutions. Each member of the team has hands-on mechanical system experience including installation, construction, design and maintenance.

*Miller Engineering takes pride in being **different by design**, and that difference shines through in all phases of our work and continued relationships with our clients.*

- Experienced and Licensed Professional Engineers
- Quality, Value-Engineered Project Delivery
- Qualified Construction Representative on Staff
 - LEED-AP Certified
- Below Industry Change Order Status
 - Building Information Modeling
 - Emergency Facility Response

Engineering Design and Consultation

- Mechanical
- Electrical
- Plumbing
- HVAC Design
- Renovation
- New Construction
- Building Information Modeling

Aquatic Facility Design

Public Pools & Areas
 ADA Compliance
 Indoor & Outdoor (air flow)
 Chlorination/Filtration

Construction Administration

Maintenance/Facility Improvement Plans
 Contract Administration
 Code Observation

Communication System

Intercomm & Public Address
 Voice/Data/CATV
 Urgent Response

Energy

Power Supply (main & backup)
 Green & Renewable Consulting
 Systems Utilization & Upgrades
 Sustainable Solutions

Facility Utilization

Systems Assessment & Solutions
 Adaptive Re-use
 Planning/Life-Cycle Control
 Engineered Replacement

Life Safety Inspection/Design

Fire Protection & Alarm Systems
 Access Control
 Fire & Electrical Investigation

Industry Experience

Education
 Local & State Government
 Commercial Development
 Healthcare





B. Craig Miller, PE

Craig founded Miller Engineering in 2003, and serves as President and Principal Engineer. He has more than 20 years experience in design, specification, operations and project management. During his employment with WVU, Craig was directly involved with approximately \$130 million in new capital construction and an equal value in infrastructure renovations. His experience with a wide range of projects including HVAC, electrical, plumbing, steam and chilled water central plants, infrastructure upgrades, building automation, energy efficiency and maintenance/renovation, among others,

allows him to serve in multiple capacities within a given project. Craig will serve as the main communication interface between the Owner, the design team, contractors, and end users.

Project Role: Relationship Manager – Primary Point of Contact

- *Engineer in Responsible Charge*
- *Design and Project Management of Mechanical, Electrical, Plumbing Projects*
- *Concept and Construction Design*
- *Business Operations and Financial Management Oversight*
- *Quality Assurance and Control*

Professional Project Highlights

- Morgantown High School Boiler Replacement/ HVAC Upgrades
- Graftek Steam System Improvements
- WVU Life Sciences Building and Student Recreation Center – Owner’s Engineer
- Hawks Nest/Twin Falls HVAC
- Mapletown High School HVAC Replacement Phase I & II
- Advanced Surgical Hospital
- WV State Building 25 HVAC Piping Replacement
- Cheat Lake Elementary & Middle School Renovations

Professional History

2003- Present	Miller Engineering, Inc.	President, Relationship Manager
2002-2003	Casto Technical Services	Existing Building Services Design Engineer
2001-2002	Uniontown Hospital	Supervisor of Engineering
1995-2001	West Virginia University	Staff Engineer
1990-1995	BOPARC	Caretaker – Krepps Park
1983-1988	University of Charleston	Electrician/HVAC Mechanic

Education

1995	West Virginia University	BS- Mechanical Engineering
1988	University of Charleston	BA- Mass Communications

Licenses and Certifications

- Professional Engineer (West Virginia, Pennsylvania, Maryland, and Ohio)
- Licensed Master Plumber
- LEED-AP Certified



Travis Taylor, PE

Experience in project management facilitates Travis's ability to create and design constructible projects. Prior to joining the Miller Engineering team he was directly responsible for managing \$10 million in electrical construction budgets. His experiences encompass both new construction and renovation. Travis maintains professional competencies by attending seminars and continuing education classes. These include local ASHRAE classes in addition to classes on electrical systems, and also steam systems through Shippenburg Pump Company. As lead engineer he provides HVAC, mechanical, plumbing, and electrical design solutions and services for our clients. In addition, he is part of our team's complete assessment process in both planning and MEP design through construction administration.

Project Role: Lead MEP Engineer

- *Design of Mechanical, Electrical, and Plumbing Systems*
- *Building Information Modeling - Revit*
- *Constructible Materials Evaluation*
- *Site Evaluation and Mechanical System Review*
- *Submittal and RFP Review*
- *RFI Coordination, Review, and Response*
- *Construction Observation*

Professional Project Highlights

- Blackwater Falls Lodge Boiler Replacement
- MTEC Welding Shop
- North Elementary Boiler Replacement
- WV State Building 36 HVAC Upgrades
- WV State Building 25 HVAC Piping Replacement
- Graftek Steam Systems Evaluations and Modifications
- Bobtown Elementary School HVAC Upgrades
- Holly River State Park Primary Electric Service Replacements Phase I & II
- Pipestem Lodge McKeever Lodge HVAC Piping Replacement

Professional History

2011-Present	Miller Engineering, Inc.	Staff Engineer
2006-2011	Tri-County Electric, Co.	Project Manager
2006-2006	Schlumberger	Field Engineer Trainee - MWD

Education

2006 West Virginia University, BS -- Mechanical Engineering

Licenses and Certifications

- Professional Engineer - State of West Virginia
- OSHA 10-hour Course: Construction Safety & Health



Robert Angus

20 Years of maintenance, operations, and construction management precede Rob's engagement with Miller Engineering. Professional expertise of construction project management was gained as an owner of his own contracting company specializing in residential and commercial construction, electrical, plumbing, and HVAC projects. Rob's hands-on approach, common sense and valuable work history knowledge enables him to interface with construction personnel seamlessly alongside engineers and architects. He is adept at preventing and handling issues. Rob is involved at both the design and estimation phase to allow for continuity within the project's design and construction; at times working as a project designer.

Project Role: Construction Representative

- Construction Project Representation and Management
- Construction Administration
- Project Cost Estimation
- Submittal Review
- RFI, RFPCO Review and Response

Professional Project Highlights

- MTEC Welding Shop
- Blackwater Falls Boiler Replacement
- Morgantown High School Boiler Replacement/HVAC Upgrade
- North Elementary School Boiler/AC
- Mapletown Jr./Sr. High School HVAC/Boiler Upgrade
- 3RD Party Construction Observation – Canaan Valley Resort
- Hawks Nest/Twin Falls HVAC
- WVU Research Building Office Renovation

Professional History

2009- Present	Miller Engineering, Inc.	Project Construction Representative
2000-2009	Angus Contracting, LLC	Owner/Operator
1991-2000	BOPARC	Director of Maintenance

Education

2000	Monongalia County Technical Education Center	Heating, Cooling, and Refrigeration Certification
1996	West Virginia University	Recreation and Parks Administration

Licenses and Certifications

- Licensed West Virginia General Contractor
- Licensed West Virginia HVAC Contractor
- Certified HVAC Mechanical Contractor
- Licensed West Virginia Journeyman Electrician
- Licensed West Virginia Master Plumber
- OSHA 10-Hour Construction Safety & Health

Staff – Qualifications and Experience



Jack Jamison

Jack brings 20 years as an electrical/building inspector and over 25 years of experience in the commercial electrical construction industry. His knowledge and experience are valuable resources to Miller's complete assessment process.

Project Role: Master Code Official

- *Facility Review, Code Research, Field Observations, Issue Resolutions, and Project Evaluation*

Professional History

2010- Present	Miller Engineering, Inc.	Code and Construction Specialist
1999-2010	Megco Inspections	Chief Inspector
1972-1998	Jamison Electrical Construction	Master Electrician

Education

1971 Fairmont State College, BS-Engineering Technology-Electronics

Licenses and Certifications

- Master Code Professional, IAEI Master Electrical Inspector, Class C Electrical Inspector – WV, PA, MD, & OH
- ICC Commercial Building, Building Plans, Commercial Plumbing, Residential Energy, and Accessibility Inspector/Examiner
- WV Master Electricians License
- NCPCCI-2B, 2C, 4B, 4C: Electrical & Mechanical General/Plan Review
- OSHA 30 Hour Course: General Industry
- NFPA Code Making Panel 14 – NEC 2014 Edition



Joseph Machnik

Joe has experience with AutoCAD, MEP and Revit MEP. He provides design modeling, drafting and supervised design services and construction support for Miller Engineering.

Project Role: MEP Designer

- *Revit/CADD Coordination of New Construction and Renovation Designs*
- *Building Information Modeling Specialist*

Professional Project Highlights

- Bobtown Elementary HVAC
- WV State Building 25 HVAC Piping Replacement
- Blackwater Falls Boiler Replacement
- Suncrest **Middle Gym HVAC**
- North Elementary **Gym HVAC**
- Graftek Steam Systems Evaluations and Modifications
- WV State Building 36 HVAC Upgrades
- Pipestem Lodge HVAC Piping Replacement
- Westwood Middle Cooling Tower

Professional History

2010 – Present Miller Engineering, Inc. MEP Designer

Education

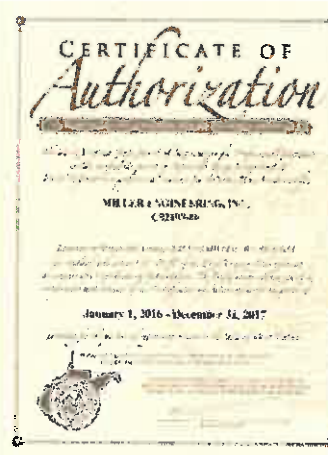
2008 Penn State – Fayette, AS - Building Engineering Systems Technology: *Building Environmental Systems Technology*

2007 Penn State – Fayette, AS - Building Engineering Systems Technology: *Architectural Engineering Technology*

Additional Training

2016 – Shippenburg Pump Company – Steam Systems Training

Licenses and Certifications



West Virginia State Board of Registration
for Professional Engineers

BRIAN C. MILLER
WV [REDACTED]

This is to certify that the above named PROFESSIONAL ENGINEER has met the requirements for such registration and is hereby certified to practice engineering in the State of West Virginia.
EXPIRES December 31, 2017

West Virginia State Board of Registration
for Professional Engineers

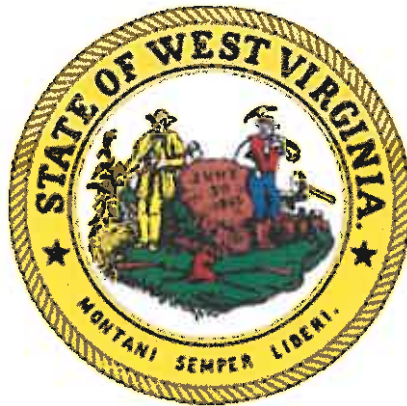
TRAVIS M. TAYLOR
WV [REDACTED]

This is to certify that the above named PROFESSIONAL ENGINEER has met the requirements for such registration and is hereby certified to practice engineering in the State of West Virginia.
EXPIRES December 31, 2015





TAB 3 – PROJECT ORGANIZATON

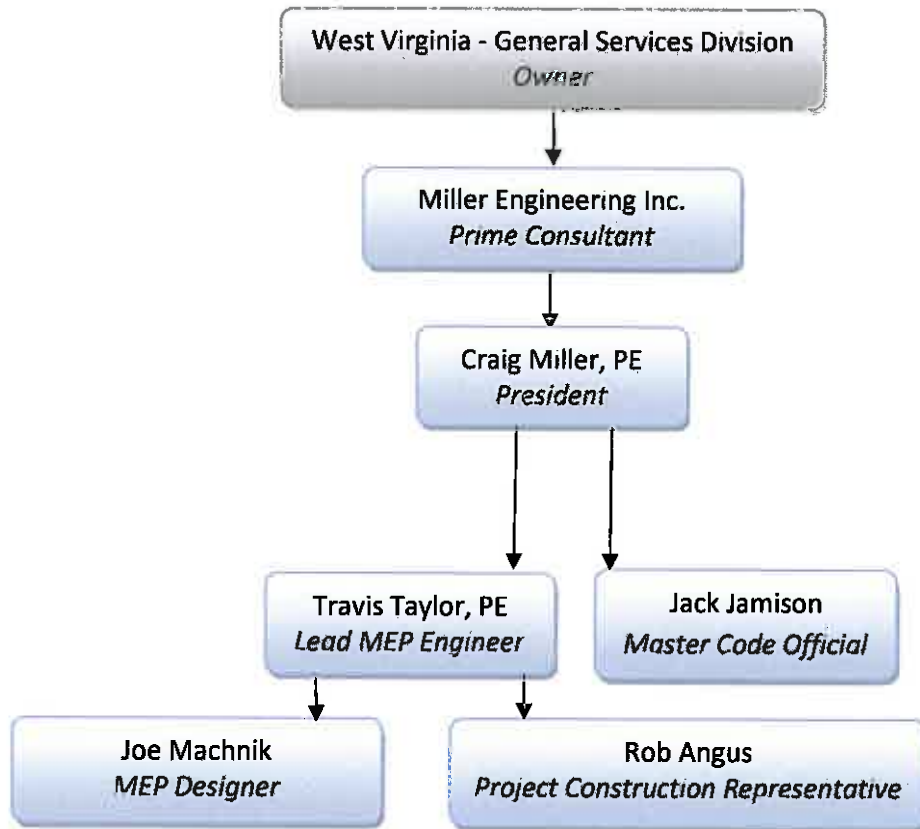


Staff – Proposed Staffing Plan

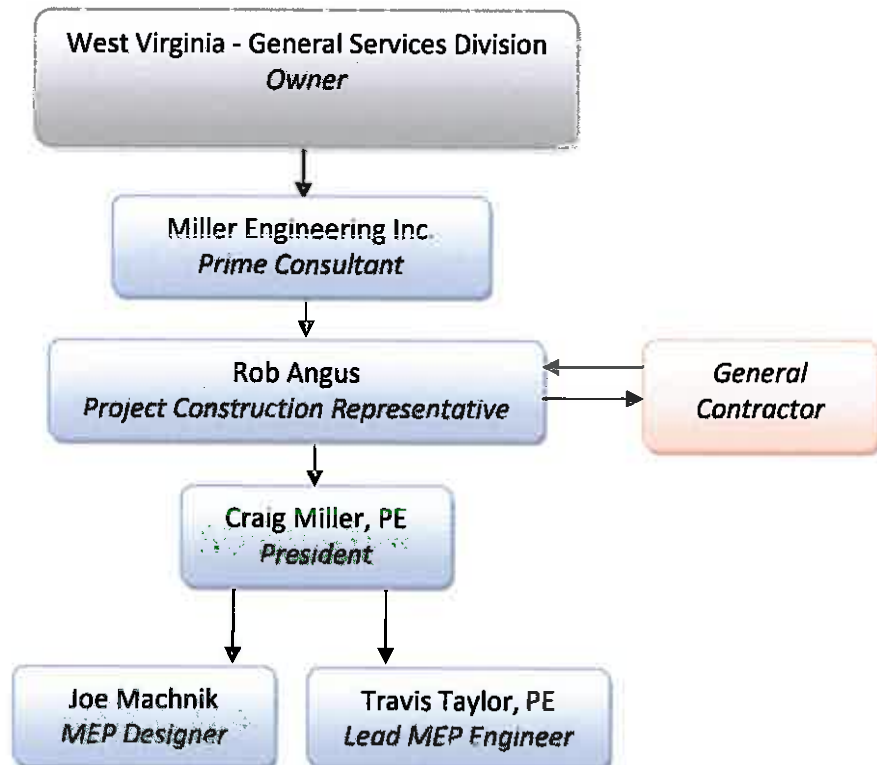
Team Leader	<i>Craig Miller, PE</i>
Primary Point of Contact	<i>Craig Miller, PE</i>
Engineer in Responsible Charge	<i>Craig Miller, PE</i>
Lead MEP Engineer	<i>Travis Taylor, PE</i>
Project Construction Representative	<i>Robert Angus</i>
Lead Designer/BIM Specialist/ BIM Coordinator	<i>Joseph Machnik</i>

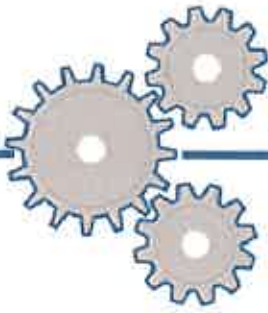
** See Appendix for Staffing Resumes*

Organization Chart – Design



Organization Chart – Construction

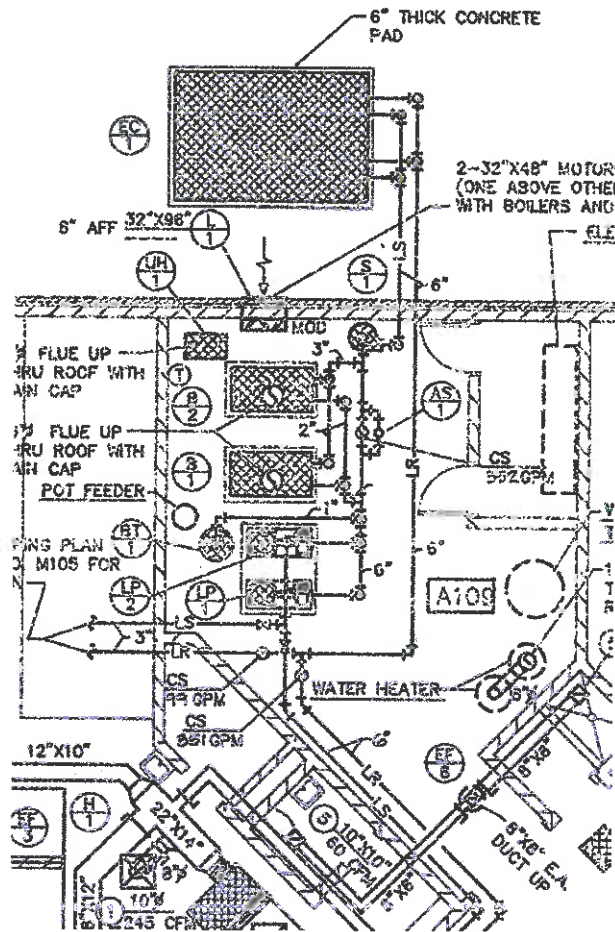




MILLER

ENGINEERING, INC.

TAB 4 - EXPERIENCE



What our satisfied customers have to say...

“Hard working, do-whatever-it-takes, diligent team that provides excellent customer service is what you can expect from Miller Engineering.”

--Chris Halterman

“As a design/build team, working with Miller Engineering, our project involving a private surgical hospital together was a success – completed ahead of schedule and on budget. Miller worked with us throughout the project to consult, engineer and inspect the mechanical systems. Craig Miller, PE and his staff are working with us again, and are very important members of our design/build team. I highly recommend their services.

--Richard J. Briggs

<p>Brad Leslie, PE <i>Assistant Chief WV Division of Natural Resources State Parks Section 324 4th Avenue South Charleston, WV 25303 (304) 558-2764 ext. 51823 Bradley.S.Leslie@wv.gov</i></p>	<p>Kerri J. Wade, MSW <i>Extension Agent - Kanawha County West Virginia University 4700 MacCorkle Avenue, SE Suite 101 Charleston, WV 25304 304.720.9573 Kerri.Wade@mail.wvu.edu</i></p>	<p>J. Douglas Carter <i>General Manager Potomac Valley Transit Authority 185 Providence Lane Petersburg, WV 26847 (304) 257-1414 icarter@potomacvalleytransit.org</i></p>
<p>Bob Ashcraft <i>School Safety & Loss Coordinator Monongalia County Schools 533 East Brockway Street Morgantown, WV 26501 (304) 276-0152 rbashcraft@access.k12.wv.us</i></p>	<p>Mike Trantham <i>Program Administrator Senior WVU Environmental Health & Safety P.O. Box 6551 975 Rawley Avenue Morgantown, WV 26506 (304) 293-5785 Mike.Trantham@mail.wvu.edu</i></p>	<p>Richard J. Briggs <i>Vice President Lutz Briggs Schultz & Associates Inc. 239 Country Club Drive Ellwood City, PA 16117-5007 (724) 758-5455 lbsa@zoominternet.net</i></p>

From Jonathan Miller, Mechanical Project Manager, Nitro Mechanical:

“Miller Engineering is not your average engineering company; they work with the owner AND the contractor to solve all issues that arise throughout the project to make the process as fluid as possible.

Descriptions of Past Projects Completed – MEP

Graftech Steam System Evaluation and Upgrades

Services Provided:

- Steam System Evaluation
- Mechanical Design
- Prototyping
- HVAC Design

Project Budget: \$140k initial, \$2.4M estimated final cost
Owner: Graftech



The existing steam plant at the Graftech plant, in Clarksburg, WV had operated for some 70 years with many modifications and changes. The former Union Carbide Carbon (UCAR) plant manufactures many products from elemental carbon, and has produced a majority of the nation's rocket and missile cones since the 1940's. Graftech began to have problems some 15 years ago as the quality standard for graphite castings increased. They needed better control of temperature in their steam fired mixers to meet those standards.

MEI reviewed the steam systems with the immediate need of establishing better control. Though many had looked at the mixers, no one had been able to make them better. MEI looked at both the regulators as well as the condensate system and proposed changes to both. MEI then built a prototype regulating station and delivered to Graftech for installation. With the new station and condensate changes, the temperatures are "perfect". They have installed them on all of their 24 mixers. Our recommendations for the plant systems are being implemented as their budget allows.

Descriptions of Past Projects Completed – MEP

Blackwater Falls State Park Lodge Boiler Upgrades

Davis, WV

Services Provided:

- General Trades
- Plumbing
- Electrical
- Mechanical
- Steam System Evaluation

Estimated Budget: \$1.4 Mil

Facility Area: 46,000 ft²

**Owner: West Virginia Division of
Natural Resources**



Miller Engineering was recently contracted to evaluate the existing oil-fired steam boilers serving the Lodge at Blackwater Falls SP. The boilers were original to the building, circa 1956, and had exceeded their operational life. MEI made the recommendation to operate the boilers for one more season to permit adequate time to design and bid the project. During this period, MEI assisted the Owner's personnel in keeping the system functional with advice and direction.

MEI then designed the replacement of the existing boiler system and convert the system from steam to hot water. The project is currently in construction and includes the construction of a boiler room and resolving employee access and safety issues.

Project Contact:

*Bradley S. Leslie, PE, Assistant Chief
State Parks Section
Phone: (304) 558-2764 ext. 51826*

Descriptions of Past Projects Completed – Boiler

Morgantown Municipal Building

Services Provided:

- **Mechanical**

Estimated Budget: \$155k

Facility Area: 9,800 ft²

Owner: City of Morgantown



The Morgantown Municipal Building is heated by low-pressure steam with a combination of radiators and fan-coil units. The existing naturally aspirated boiler developed a leak in a short period of time which necessitated replacement. Additionally, the steam piping, condensate piping and gas piping all had issues that needed resolved. Miller Engineering's services were requested by the contractor retained to perform the replacement under a design-build contract. MEI teamed with the owner and contractor to evaluate the existing installation for deficiencies, calculate the actual heating demand and verify the sizing of the equipment, headers and piping for installation. MEI worked on site with the contractor through the New Year holiday weekend to observe and help with the project by offering real-time advice and answers during the installation. The contractor had a short time frame in which to perform the demolition and installation prior to the building being damaged due to cold weather. The project was successfully achieved in the necessary timeline.

Project Contact:

Jay Wade

City Plumbing and Heating

304-376-3475

Descriptions of Past Projects Completed – MEP

Mapletown Junior/Senior High School

Services Provided:

- HVAC Design and Renovation
- Energy Savings of \$50,000 in the First Year

Contract Amount: \$1.2M

Facility Area: 18,500 ft²

Owner: Southeastern Greene School District



A field study determined that steam systems within the structure were degenerated, lacking capacity, unreliable and inefficient. The goal of the project was to evaluate the existing steam system recommend the best systems to the facility that will balance cost, reliability, improve function and provide long-term energy efficiency. The Miller Engineering project planning method utilized computer modeling of the building and its current systems in order to generate options to fit within the owner's construction time-frame and budget. The owner opted for a 2-phase construction process; with Phase 1 of construction so successful and energy savings so great, the owner opted to include a cooling system upgrade during Phase 2 of construction, which is also complete. School Administration has observed improved classroom conditions, air quality and test scores.

Project Contact:

Patrick R. Sweeney, Business Manager
Southeastern Greene School District
(724) 943-3630 ext. 2243

Descriptions of Past Projects Completed – MEP

Morgantown High School Boiler Replacement/ Area 4 HVAC Renovation

Services Provided:

- Mechanical
- Electrical
- Plumbing
- Fire Alarm

Estimated Budget: \$1.0M

Contract Amount: \$1.038M

**Owner: Monongalia County Board of
Education**

Status: Complete



Project Contact:
Robert Ashcraft
Monongalia County Facilities
Phone: (304) 276-0152

Morgantown High school, like others throughout the state, has seen many changes through the years. Unfortunately, the steam boiler plant remained in operation with little maintenance for a number of years. The 45 year old boilers had exceeded their operational life and were experiencing reliability issues. MEI evaluated the boilers and the associated 80 years old steam systems, recommending their replacement. Steam heating control was a significant issue, as were safety issues caused by failed traps and inoperable valves.

Previous projects installed split DX refrigerant based systems in several classrooms within the science and technology wing. These units were obsolete and required replacement with a more reliable system, which can meet current ventilation standards. Additionally, there were 3 classrooms, which were heating only with little or no control, that require addition to the overall solution for this section of the building. Based on the conditions of the steam systems piping and devices, new hot water boiler were installed.

This project was completed in late 2017.

Descriptions of Past Projects Completed – MEP

North Elementary Boiler Replacement

Services Provided:

- Electrical
- Plumbing
- HVAC Design

Project Budget: \$160k

Owner: Monongalia County Board of Education



The existing steam boiler at North Elementary in Morgantown, WV was outdated and required excessive maintenance. MEI was hired to design a replacement to this system. The existing gas fired tube boiler was replaced with a highly efficient gas fired modulating boiler. This allows the boiler to adjust its operation based upon the building load, creating utility cost savings. The hot water loop pumps were replaced including new motor starters and controls. MEI discovered some existing piping that was installed incorrectly, and was reconfigured to operate properly. The existing fresh air intakes and vents were replaced as well. The work was coordinated and the boilers were replaced during the school year with no interruptions to school activities.

Project Contact:
Ron Lytle, Board Member
Monongalia County Board of Education
Phone: (304) 276-0669

Descriptions of Past Projects Completed – HVAC Piping

Pipestem McKeever Lodge

Pipestem, WV

Services Provided:

- HVAC
- Plumbing
- Electrical
- Accommodation of Existing Systems

Estimated Budget: \$1.7M

Facility Area: 63,000 ft²

Owner: West Virginia Division of Natural Resources



The original HVAC piping at McKeever Lodge had exceeded its lifespan and had been suffering from corrosion leading to multiple leaks, including one causing an electrical service outage. Miller Engineering was hired to investigate the existing piping, discovering all of the some 4,000 linear feet of piping required replacement. As this lodge is regularly occupied for larger conferences, the project had to be phased to minimize the amount of guest rooms taken out of service at one time. MEI also designed provisions to interconnect the lodge's two separate boiler/chiller plants so one plant could operate the entire lodge at a partial capacity while the other plant was replaced and re-piped. This interconnect also allows the lodge to operate in the event of a boiler or chiller outage.

Power was provided to new equipment, and motor control centers were added to control the building loop pumps. A new building controls system was installed to allow the plants to run at optimum efficiency while meeting the lodges heating and cooling needs.

Project Contact:
Carolyn Mansberger, Project Manager
State Parks Section
(304) 558-2764

Budget and Timeline History

Project Name	Project Type	Budget	Cost	Notes
Bluestone State Park	Pool Replacement	\$1,000,000	\$935,600	On budget
West Virginia State	HVAC Piping Renovation	\$650,000	\$533,400	On budget
Canaan Valley Resort	Emergency Electrical Repairs	\$225,000	\$129,829	On budget
Holly Grove Manor	Renovation	\$885,000	N/A	On hold
Mapletown Jr/Sr High School	HVAC Renovation	\$1,050,000	\$1,105,900	5.19% over budget
Pipestem – McKeever Lodge	HVAC Piping Replacement	\$1,600,000	\$1,776,000	10.43% over budget
Tygart Lake State Park	Beach and Bathhouse	\$750,000	\$695,000	On budget



= Delivered on budget/on time

Budget and Timeline History

Project Name	Project Type	Contract Length	Contract Delivery	Notes
Blackwater Falls State Park	Boiler Replacement	120 days	180 days*	*Extended 60 days due to equipment delivery issues
Bluestone State Park	Pool Replacement	180 days	180 days	Delivered on time
Canaan Valley Resort	Construction Administration	3.5 years	3.5 years	Long-term project with varying facets – no direct schedule
Twin Falls/Hawks Nest Lodge	HVAC Renovation	90 days	90 days*	*Expedited delivery
Mapletown Jr/Sr High School	Boiler/ HVAC Renovation	180 days	180 days	Delivered on time
Pipestem – McKeever Lodge	HVAC Piping Replacement	365 days	365 days	Delivered on time
Tygart Lake State Park	Beach and Bathhouse	270 days	270 days	Delivered on time



TAB 5 – PROJECT FORMS





Purchasing Division
 2019 Washington Street East
 Post Office Box 50130
 Charleston, WV 25305-0130

State of West Virginia
 Centralized Expression of Interest
 02 - Architect/Engr

Proc Folder: 399436

Doc Description: EOI: Capitol Campus Steam Line/Vault Rehabilitation

Proc Type: Central Purchase Order

Date Issued	Solicitation Closes	Solicitation No	Version
2017-12-22	2018-01-17 13:30:00	CEOI 0211 GSD1800000002	1

BID RECEIVING LOCATION

BID CLERK
 DEPARTMENT OF ADMINISTRATION
 PURCHASING DIVISION
 2019 WASHINGTON ST E
 CHARLESTON WV 25305
 US

VENDOR

Vendor Name, Address and Telephone Number:

FOR INFORMATION CONTACT THE BUYER

Jessica S Chambers
 (304) 558-0246
 jessica.s.chambers@wv.gov

Signature X

FEIN #

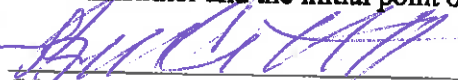
861081386

DATE

January 15, 2018

offers subject to all terms and conditions contained in this solicitation

DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.



(Name, Title)
Brian Craig Miller, President

(Printed Name and Title)
240 Scott Ave, Suite 1, Morgantown, WV 26508

(Address)
304-291-2234

(Phone Number) / (Fax Number)
craig@millereeng.net

(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.

Miller Engineering, Inc.

(Company)



(Authorized Signature) (Representative Name, Title)

Craig Miller, Owner

(Printed Name and Title of Authorized Representative)

January 15, 2018

(Date)

304-291-2234

(Phone Number) (Fax Number)

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

MANDATE: Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a 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 §61-5-3) 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: Miller Engineering, Inc.

Authorized Signature: [Signature] Date: January 15, 2018

State of West Virginia

County of Taylor, to-wit:

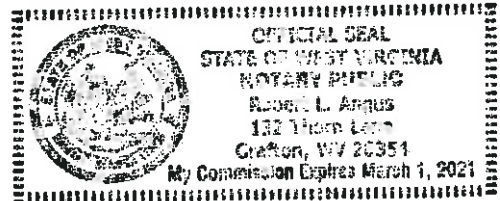
Taken, subscribed, and sworn to before me this 15 day of January, 2018

My Commission expires March 1, 2021.

AFFIX SEAL HERE

NOTARY PUBLIC [Signature]

Purchasing Affidavit (Revised 07/01/2012)



**ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.:**

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

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

Addendum Numbers Received:

(Check the box next to each addendum received)

- | | |
|--|--|
| <input checked="" 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.

Miller Engineering, Inc.

Company _____


Authorized Signature _____

January 15, 2018

Date _____

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