



Purchasing Division  
 2018 Washington Street East  
 Post Office Box 50130  
 Charleston, WV 25305-0130

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

Proc Folder: 356210

Doc Description: STF BUILDINGS CAMP DAWSON EOI DESIGN

Proc Type: Central Purchase Order

Date Issued	Solicitation Closes	Solicitation No	Version
2017-07-20	2017-08-15 13:30:00	CEOI 0603 ADJ1800000001	1

**BID RECEIVING LOCATION**

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

WV 25305

**VENDOR**

Vendor Name, Address and Telephone Number.

**E.T. Boggess Architect, Inc.**  
**PO Box 727**  
**Princeton, WV 24740**

**101 Rockledge Avenue**  
**304-425-4491**

08/15/17 09:46:54  
 WV Purchasing DIVISION

**FOR INFORMATION CONTACT THE BUYER**

Crystal Rink  
 (304) 558-2402  
 crystal.g.rink@wv.gov

Signature X


FEIN #

55-0515917

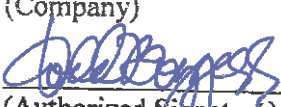
August 14, 2017  
 DATE

All 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.

 President  
(Name, Title)  
Todd Boggess, President  
(Printed Name and Title)  
PO Box 727, Princeton, WV 24740  
(Address)  
(P) 304-425-4491 / (F) 304-425-2028  
(Phone Number) / (Fax Number)  
etb@etbarchitects.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contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated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.

E.T. Boggess Architect, Inc.  
(Company)  
  
(Authorized Signature) Todd Boggess, President  
(Representative Name, Title)

Todd Boggess, President  
(Printed Name and Title of Authorized Representative)

August 14, 2017  
(Date)

(P) 304-425-4491 / (F) 304-425-2028  
(Phone Number) (Fax Number)

**ADDENDUM ACKNOWLEDGEMENT FORM**  
**SOLICITATION NO.: CE01 ADJ1800000001**

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.

E.T. Boggess Architect, Inc.

Company

Authorized Signature

August 14, 2017

Date

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

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: E.T. Boggess Architect, Inc.

Authorized Signature: *E.T. Boggess*

Date: August 14, 2017

State of West Virginia

County of Mercer, to-wit:

Taken, subscribed, and sworn to before me this 14 day of August, 20 17.

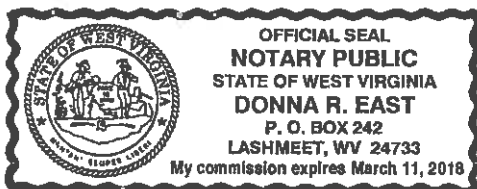
My Commission expires March 11, 20 18

AFFIX SEAL HERE

NOTARY PUBLIC

*Donna R. East*

*Purchasing Affidavit (Revised 07/01/2012)*





# Letter of Transmittal

8/14/2017

**TO:** Department of Administration, Purchasing Division  
 2019 Washington Street East  
 Charleston, WV 25305

**Project:**  
 WVARNG / Camp Dawson

**Atten:** Crystal Rink

**Sending Via:**  
 UPS

**Subj:** Qualifications

<b>CODE LEGEND</b>	<input type="checkbox"/> 1. For payment	<input type="checkbox"/> 4. For your signature	<input type="checkbox"/> 7. Send 1 to Contractor
	<input checked="" type="checkbox"/> 2. For your review	<input type="checkbox"/> 5. As requested	<input type="checkbox"/> 8. Return 1 to ETB
	<input checked="" type="checkbox"/> 3. For your files/use	<input type="checkbox"/> 6. Owner keeps 1	<input type="checkbox"/> 9. Office Copy

# of copies	DATE	DESCRIPTION	CODE
		<b>ADJ 180000001</b>	
1		Statement of Qualifications - Original	2
3		Statement of Qualifications - Convenience Copies	2
1		WV Purchasing Forms - Unbound	3

**REMARKS:**

Thank you for this opportunity and we look forward to hearing from you.

Signed: Todd Boggess, AIA, NCARB, Architect

August 15, 2017

EXPRESSION OF INTEREST  
for Architectural / Engineering Services

# BUILDINGS A & B at Camp Dawson

Design Services Project  
for the WVARNG  
ADJ1800000001



E.T. BOGGESS ARCHITECT, INC.





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

■ August 15, 2017

REF: ADJ1800000001

Dear Ms. Rink:

In response to your qualifications request for the professional Architectural and Engineering Design services, the E.T. Boggess Architect, Inc. team is pleased to submit information regarding our experience. We will provide the services necessary to accomplish the design and construction documents for Building B, as well as preliminary design of Building A, both proposed for Camp Dawson. Our team will work with the State of WV and the WVARNG to ensure that everyone's vision for each project is achieved.

I will be your architect and will be the person-in-charge for all aspects of the project. Our team combines firms familiar with Camp Dawson, as well as consultants who offer a unique perspective for addressing various issues and challenges. We will join forces to bring the best knowledge and experience to the design process.

ETB emphasizes a client-centered design approach, incorporating mutually defined project objectives. Through this focus, we can assure the State of West Virginia and the WVARNG that needs and project issues will be clearly identified and addressed through an engaged, interactive programming, design, and construction process. Our design process will be conducted with an attention to detail, creative problem solving and with a passion towards project success.

We value this opportunity to serve you and look forward to personally presenting our credentials.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Todd Boggess', is written over a blue circular stamp.

Todd Boggess, AIA, NCARB, Architect  
President

Cover Letter

Qualifications – 1

Approach & Scope of Services – 2

Firm Profiles – 3

Projects / Prior Experience – 4

Management & Staffing – 5

West Virginia Forms – 6



## INTRODUCTION

The E.T. Boggess Architect, Inc. understands the importance of providing our military with the facilities and equipment they need to help serve our state and country. Disasters come in many forms and being prepared for the next tragedy, whether man-made or natural, takes training. We are proud of the reputation Camp Dawson has when it comes to military training and we would appreciate the opportunity to design Buildings A & B to help the guard continue to improve their entire camp.

Flexible, multi-use training facilities that can adapt to ever-changing technologies are the cornerstone of our design approach for the community college system. The Advantage Valley Advanced Technology Center (South Charleston), the North Central Advanced Technology Center (Fairmont), and the New River Community & Technical College Headquarters (Beaver) were all designed as part of a hi-technology campus setting, made up of private high-technology companies, government entities, and higher education. Two of the projects also had spaces specifically dedicated to Allied Health programs. As industry needs change and evolve, our **flexible-use design** will allow the buildings to adapt and respond to the new requirements. The two Advanced Technology Centers each have specialized labs that are specifically designed for flexibility and adaptability. Some of the specialized labs include nanotechnology, process controls, hydraulics/pneumatics, mechatronics, motor control, power lab and analog circuit lab. Although some of these labs had very specific requirements for certain equipment and technology needs, there was a consistent theme of redundancy and adaptability with the building infrastructure. In addition to the multi-use spaces, these centers include classrooms, offices, and meeting rooms.



ETB is currently designing a multi-use training facility for the Princeton Rescue Squad. This building will also be used to provide emergency shelter for the community during a disaster. Our experience with weight/training areas includes a large health and fitness center, a YMCA (shown above), and an auxiliary building for a high school athletic program.

ETB and team members have acquired experience working with ICF and we believe that the building envelope system not only saves considerable money long-term, but also is now cost efficient and competitive when compared to many of the “standard” approaches to similar-type of construction. In the past, many system design decisions have been driven by cost and the construction budget. We have to find better ways to get the project built, as well as stay within the budget.

The team that ETB has put together to complete this project includes experts in their respective fields, including:

**Site/Civil, Geotechnical, and Structural Consultant:**

**E.L. Robinson Engineering**  
207 Brookshire Lane                      Beckley, WV

E.L. Robinson is a multi-disciplined engineering and planning firm with a staff of over 135 fulltime professionals and support personnel located in nine offices. Over the last 39 years, E.L. Robinson has grown to be one of the most respected firms in the region, offering realistic project solutions. Their Charleston office will provide the identified scope of services for the buildings at Camp Dawson. This team of professional engineers, surveyors, and construction inspectors have been specifically assembled for this WVARNG project because of their specific areas of expertise.

**Mechanical/Electrical/Plumbing Consultant:**

**CMTA**  
2429 Members Way                      Lexington, KY

Founded in 1968, CMTA is a top 50 MEP consulting engineering firm. The firm is known nationwide for its expertise in sustainable, high performance design. CMTA specializes in energy efficient design that is cost efficient for “first cost” as well as cost efficient for long-term operation costs. To date, they have engineered 141 buildings that have been awarded the **ENERGY STAR** designation.

## PHILOSOPHY

**Communication, collaboration, and consensus** are the three elements we feel are essential to the planning, design and building process. The architect is responsible for the finished product, but the design process must include guidance and review by you and representatives from the various agencies. Our goal is to develop a “*partnership*” with our clients – a relationship that includes a long-term commitment, trust, and shared vision.

ETB believes architectural design should be an *interactive process*. We work closely with you to identify and define all your project goals, objectives, functions, responsibilities, and relationships. This interactive approach enables us to develop facilities that meet your requirements, as well as being aesthetically distinctive. Design cannot be mass produced or provided in a “cookie cutter” fashion, it must be developed from scratch with the unique attributes of each individual project in mind. Our approach is *not only* about our ideas . . . it is about *you and your ideas*. We **look** at your existing armories, **listen** to what you need, and then provide **designs** to satisfy those needs.

## METHOD for MEETING GOALS

**The Integrated Design Process** is our process of design in which the owners, users and the ETB team (architects and engineers) are all integral team members. This integrated process and the implementation of high performance design requires both efficiency and innovation. In our role with this team as the design leader and project organizer, ETB will be responsible for coordinating and orchestrating the work of our in-house team with the appropriate consultants and users involved throughout the design, documentation, and administrative functions of the project.

Utilizing the interactive design approach will best serve the needs of the WVARNG by allowing us to better identify your objectives and produce long-term solutions. Your projects will be completed by emphasizing the following activities:

- **Understanding goals.** We develop a plan for identifying and prioritizing individual goals as a means for addressing the overall project.
- **Brainstorming ideas.** We investigate opportunities for greater service through value engineering, strategic partnering, or an alternative delivery method.
- **Assuring timelines.** We generate a management plan to fulfill deliverables and meet milestones on schedule. All team members participate in and monitor this plan.
- **Maintaining client contact.** We are accessible, convenient, and committed to success from the beginning through the design process, and after completion.
- **Inviting performance feedback.** We involve all team members and clients in project evaluation at closeout and determine how well time, cost, and design goals were met.

**Project Management** - Our project managers provide extraordinary leadership managing the team dynamics, budget, schedule, and the flow of information. The project manager's role also includes assisting the client with the management of services and consultants that may not be a part of this contract, but still may have an impact on workflow and infrastructure coordination. The effective implementation of your goals and objectives will be realized thru early and consistent collaboration among all the design disciplines. This will result in opportunities and challenges being discussed and addressed as we proceed thru the design process.

**Cost Management** - We believe that the management of cost and/or risk begins with the development of fully vetted alternatives which enable you to make informed choices about the project. We search for simple and effective solutions for each armory. We also believe that the evaluation of cost must extend beyond the cost of construction, and consider the costs of operations, human resources, energy and sustainability.

**Project Schedule Management** - Completing projects on time requires effective schedule management and a commitment of the entire project team. The process begins with the development of the project schedule with input from each stakeholder engaged in the process. Accelerated schedules require even more dedication to benchmarks and deadlines, identifying production problems early and making the necessary adjustments before issues become too great to be effectively managed. We also want to insure as little disruption as possible to the day-to-day training activities at Camp Dawson during the construction process.

**Quality Assurance** - We feel quality assurance is the ability of an architect to provide the client with a set of documents that satisfies the client's needs and are as accurate as possible. ETB believes quality assurance is an ongoing process, not just a one-time occurrence. No project is perfect, however, we strive to achieve maximum client satisfaction. An active role during construction contract administration services provided an opportunity for our team to better respond to existing conditions that may differ from the design intent.

To that end, we have set the following goals for ourselves:

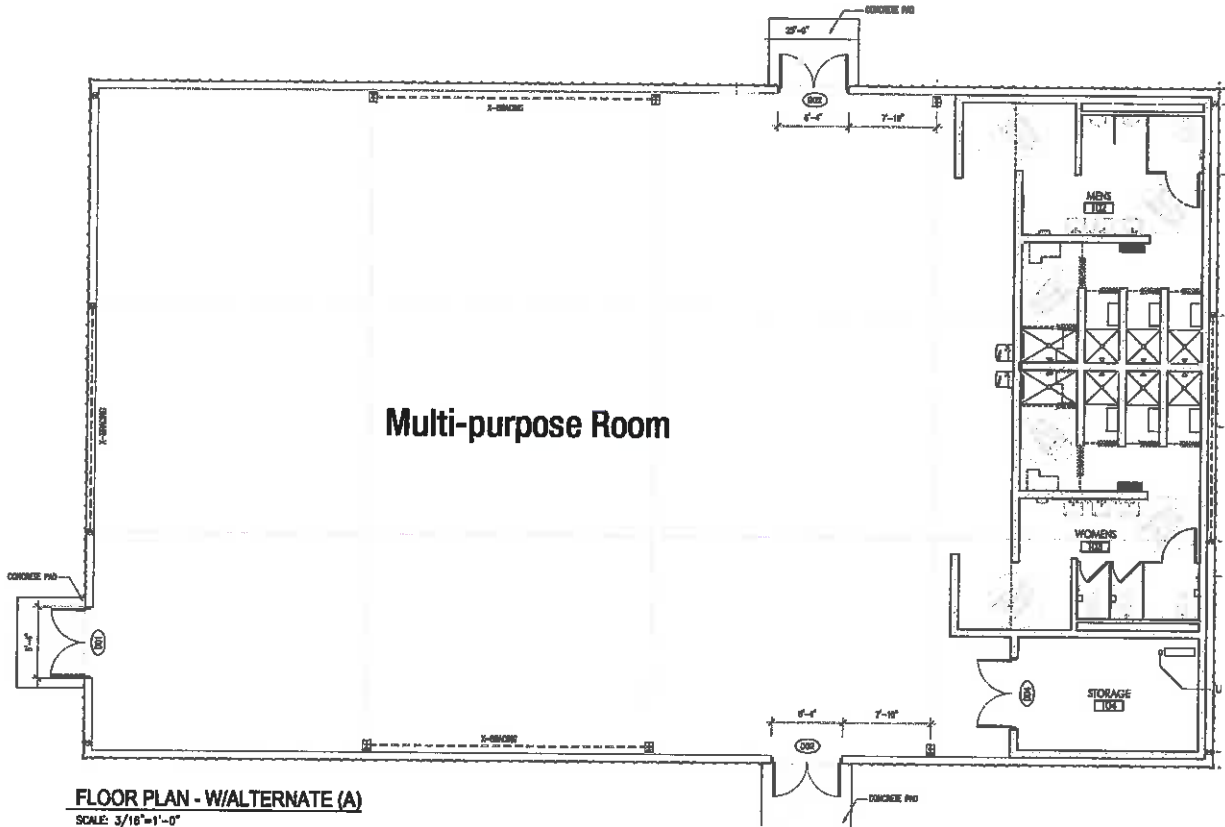
- Promote teamwork
  - within the office
  - with outside consultants
  - with representatives from the State of WV and the WVARNG
  - with representatives from Camp Dawson
- Quality management throughout entire project – *Website*
- Prompt response to client's requests – *Availability*
- Creation of quality construction documents – *Purpose Driven*
- Error prevention, not error catching – *Standard Practices*
- Personal pride in our work - *Motivation*
- Education and Training in-house (staff mentoring) – *Continuing Education*
- Go the extra mile whenever necessary – *Service Oriented*

**Quality Control** - Quality control starts with matching expectations about quality standards and life cycle costs with budget and scope during planning and design reviews. This continues through construction delivery with a program of inspections, tests, and certifications that are typically handled through a third-party agency. Quality control should flow seamlessly from one phase to another. The "partnership" we develop during the project assists us in maintaining a high level quality control standard with everyone working together in the project's best interest. We strive to coordinate performance among the entire project team in order for a completed building program to fully satisfy your needs and expectations. The quality control plan we follow should help eliminate errors, reduce cost and improve overall building quality.

ETB normally follows the plan as outlined below:

- Keep the lines of communication open and consistent between all team members
  - Regular/scheduled project meetings
- Share lessons learned from recent similar projects, include value engineering
  - Up-to-date detailing
- In-house reviews to address issues with constructability and budget restraints
- Utilize past experiences related to construction administration
  - Address before issue or occurrence

- Provide post construction administration services to be utilized on future projects
  - Every project or opportunity can be a learning experience for continued growth to better serve clients



**PikeView High School Multi-purpose / Weight / Training Building**

## APPROACH

Based on the information you have provided in the EOI, the planning/programming for Buildings A & B has already been accomplished. You have very specific needs and these can be easily accommodated during our design process. As you directed, Building A will only be designed thru 10% of the process and may be completed once funding is made available. Building B is to accommodate storage, interview rooms, and sewing/laundry equipment. This new 120' x 60' building will be completed through construction documents. Construction administration services will also be included.

Both of these buildings can be designed with energy efficiency emphasized from the ground up. An example would be the utilization of ECF (Insulated Concrete Forms) for perimeter wall and building envelope. The ICF (Insulated Concrete Forms) System simplifies the building envelop and delivers a system that can reduce HVAC equipment and loading by up to 50%. Instead of just reducing the typical unit's sizes and ductwork reductions, other more substantial systems are implemented. CMTA are experts in alternative, proven, system designs, most notably geo-thermal systems. The geo-thermal system is very economical to operate and will save our county tax payers money for a long time. Along with the ICF building system, this approach is realized within established budgets and is simple to work on and easy to maintain.

For Building A, our services will begin and end with Schematic Design Phase.

For Building B, our services will begin with Schematic Design Phase, followed by Design Development Phase. Once you approve the final design, we start the Construction Documents Phase, then proceed to the Bidding Phase, and, finally, the Construction Administration Phase.

We will not begin work on the next phase of the project without your approval and written authorization. The information that follows will help you understand each phase.

### Schematic Design Phase

ETB and our consultants will work with the WVARNG to design the Building B to address your specific needs. The schematic design documents will establish the general scope and conceptual design of your project, and the scale and relationships of the building components. The main goal of this phase is to arrive at a clearly defined, feasible concept and to present it in a form that will result in your understanding and acceptance.

You will have the following items to review at the end of this phase:

- Conceptual Site Plan
- Preliminary Building Plan with elevations or space adjacency studies
- Perspective Sketches/Computer Images/Mass Model Studies
- Preliminary Cost Estimates

## Design Development Phase

Services in the design development phase strive to achieve the refinement and coordination necessary for a complete polished work of architecture. Here decisions made in schematic design are worked out at a more detailed level to minimize the possibility of major modifications being needed during the development of construction documents. Our design team arrives at a clear, coordinated description of all aspects of the design, including . . .

- Architectural
- Mechanical
- Electrical
- Plumbing
- Structural
- Fire Protection Systems

## Construction Document Phase

Construction documentation is the bridge between building design and physical building form. A key element of documentation services, construction drawings provide the instructions for transforming the design solution into brick, mortar, landscapes, access, etc. The purpose of providing construction document drawings is to provide graphic documentation for bidding and execution of construction services.

Services/tasks include . . .

- Prepare construction drawings based on approved design development drawings.
- Coordinate and incorporate drawings from all team members.
- Prepare specifications to accompany drawings to establish a desired level of performance.
- Submit documents to building code officials.
- Prepare bid packages.

## Bidding Phase

Construction procurement activities assist the client in obtaining competent construction services. Our team will attend any pre-bid meetings and will respond to bid questions as requested by the State of West Virginia.

## Construction Phase / Contract Administration Services

Contract administration services are important in order to ensure construction conforms to the design intent of the construction documents; to lessen project risks; and to identify and resolve construction problems early. We also strive to assist you in understanding the construction process. The architect, serving as a construction administrator, observes construction for conformity to construction drawings and specifications. We will coordinate our activities with the Owner's designated representative.

Services/tasks included . . .

- Establish lines of communication.
- Maintain and distribute paperwork/records.
- Respond to contractor's requests for information.
- Review contractor's requests for payment.
- Review shop drawings and product information.
- Prepare field reports and records.
- Supervise completion and closeout.
- Assist with any post-occupancy issues.



## HISTORY

E. T. Boggess Architect, Inc. was established in Princeton, West Virginia, by Ted Boggess in 1966. ETB has been a successful architectural firm primarily because of a team approach and partnership-type attitude with all involved in the design and construction process. Having grown up in the practice and with a life-long love of architecture, Todd became a full time presence with the firm in 1988 after receiving a Masters in Architecture from Clemson University. Their unique relationship as father/son/mentor/apprentice and, now, partners is both exciting and rewarding as the practice continues to flourish and evolve.

## REPUTATION

Our firm lives or dies by its reputation. We have cultivated a team that strives to deliver the highest level of project management, service, and design. Our approach is client and site specific, and questions conventional assumptions. The greatest testament to the success of ETB's work goes beyond the organizational, operation and business stewardship we provide; it is in our enduring client relationships.

The architects at ETB are well-respected for their high ethical standards, as well as professional and civic activities. They have been asked to serve as expert witnesses and arbitrators in legal disputes. They have also been selected to serve on various local, state and national committees. These committees cover areas from determining local zoning ordinances to reviewing and developing educational requirements for future architects, to preserving West Virginia's historic architecture. In 2014, Todd was appointed to the WV Board of Architects by Governor Tomblin. The Board of Architects protects the life, health, and property of the people of the State of West Virginia by ensuring that proper architecture practices are used in the state.

## SIZE

Bigger is not always better. ETB has purposely controlled size in order to maintain personal involvement and quality control. We feel that it is important to maintain close client contact so we can respond to your needs and questions, as well as address any situations that may arise in a timely manner. Our talented staff is ready to accommodate the needs of your project and ensure the successful completion of our current workload. The depth of our personnel is such that we can assign individuals to the appropriate task during each phase to ensure all your project's needs are satisfied.

## TEAMWORK

Our projects and design services are dependent on both our abilities as architects and our commitment to perform and implement a set of standards in order to create a design that responds to the needs of our client. In house, ETB actually functions as a team of consultants with individual strengths and abilities emphasized by each employee's role within the team. In addition to being a strong design oriented firm, we offer expertise in communication, construction documentation, construction administration, and quality control.

Throughout our state, we have developed relationships with government agencies, contractors and material suppliers which will be valuable as we address the challenges associated with this project. ETB has worked with many of the code officials, including the state fire marshal, and consider them an extension of our team, another member who is concerned about the final design. We review our designs with the Office of the State Fire Marshal in Charleston at regular intervals during the design process, as well as on-site inspections during construction.

## ATTITUDE & EXPERIENCE

Over the past 50 years, ETB has accomplished many different types of buildings in 12 different states and 1 foreign country. We have not limited ourselves by focusing on one particular type of project or a single location. Instead, we choose to maintain a diverse practice which allows us to begin each project with renewed enthusiasm. Our strength is in the delivery of appropriate and analytical solutions for complex buildings in strict conformance with budget and time constraints.

ETB was one of the first architectural firms in the state to implement the use of computer-aided design and drafting into the everyday practice of architecture more than thirty-five years ago. Today we continue to implement current technology as we have become very efficient with photorealistic imagery through computer modeling and digital photography. The building 3-D model and associated imagery can be developed early in the design process for presentations. This helps everyone better understand design approaches and project contextual relationships within a setting.

## SCHEDULES & BUDGETS

ETB understands the importance of ensuring that all schedules and budgets are met. Our past experience designing within the confines of strict budgets and tight construction schedules makes us even more diligent in these areas. Some of our most recent projects, especially for state agencies, have presented us with very rigorous scheduling goals. Our projects for the West Virginia School Building Authority have penalties built in if schedules and established budgets are not adhered to as an added incentive to meet the deadlines.

Our team will do everything within our power to ensure the project stays within budget and on schedule. Once a general contractor has been selected, we will provide him with the information he needs as quickly as possible. As mentioned earlier, the key to addressing issues during construction will be **communication, collaboration, and consensus.**

## Firm Overview



E.L. Robinson is a multi-disciplined engineering and planning firm with a staff of over 135 full-time professionals and support personnel located in nine offices throughout West Virginia (Charleston, Beckley, Bridgeport, and Chapmanville), Ohio (Little Hocking, Columbus, Cleveland, and Ironton), and Kentucky. Over the last 39 years, E.L. Robinson has grown to be one of the most respected firms in the region, offering a diverse scope of services. E.L. Robinson provides a full range of quality engineering services, from planning and analysis to design and implementation.

Named for its founder and president, Edward L. Robinson, P.E., P.S., ELR has based its success on a commitment to quality projects and superior client service. Finding new and creative ways to say yes to challenges has brought our vision of excellence into reality. Along with this “yes, we can do it” attitude, the firm has grown to understand the ingredients of a professional service firm include not only brick and mortar, but also leading edge technology and a talented, motivated staff that is continually growing and advancing their skills. This dedication rewarded ELR with being named one of the Engineering News Record’s top 500 engineering firms in the country.

The use of technology has allowed ELR to expand engineering capabilities and make use of new resources such as satellite imagery and digital mapping. In addition to the use of technology, E.L. Robinson also continues to strive to invent new and more effective ways to serve our clients. One of these ways is to provide a thorough pre-analysis of every project, saving the client time, money, and legal exposure. When the client is educated on every phase of the job and every challenge, the reputation of the firm grows stronger and attracts business from a larger marketplace.

E.L. Robinson has been providing its clients with quality products and superior service since 1978. Our staff combines state-of-the-art technology, experienced professionals, and innovative methods to help our clients meet their challenges in the following disciplines:

- Site Development
- Infrastructure
- Transportation
- Bridge Design
- Structural Engineering
- Geotechnical Engineering
- Environmental Engineering
- Right-of-Way Services
- Construction Administration/Observation
- Surveying/Global Positioning
- Landscape Architecture

E.L. Robinson has a strong background in site facility development and renovations. Our team has over 39 years of experience working with various communities, developing a diverse range of capabilities to handle the most complex development projects. From the initial planning and layout through the construction phase, the team at ELR provides clients with top quality site development services. Our areas of expertise include community and public facilities, business parks, recreational areas, residential neighborhoods, urban planning and streetscape design, planned unit and community development, park and recreation design, and campus planning.

E.L. Robinson has over 135 staff members including 57 degreed engineers, 37 of which are registered professional engineers; 15 construction inspectors and a support team of administrative and technical personnel. Our firm's office in Charleston will provide the identified scope of services. This team of professional engineers, funding specialists, surveyors and construction inspectors has been specifically assembled for this project because of their experience relating to your project and for preparing solutions that are realistic.

ELR's team has been fortunate to assist other clients with various types of site design projects including numerous building facilities and centers to serve various communities.

- Greenfield Cabinetry Building Expansion
- Putnam PSD Maintenance Facility
- Mingo County 911 Center
- Putnam County 911 Command Center and EMS Garage
- Mason County 911 Center
- Wetzel County 911 Center
- Chief Logan State Park Recreational Facility
- Aldersgate United Methodist Church Recreation Facility
- Logan County Airport Business and Industrial Park
- Williamson DHHR Building
- Mingo County Memorial Building Handicap Accessibility
- Williamson Coal House
- Williamson City Hall Exterior Updates
- Williamson Fire-Police Station
- Logan County Courthouse ADA Upgrades



## About CMTA

CMTA is the largest MEP consulting engineering firm in Kentucky. Ranked in the top 50 MEP firms as ranked by *Consulting-Specifying Engineer* magazine. In 2016, CMTA was named to the Zweig Group's Hot Firms List debuting as the 12<sup>th</sup> fastest growing firm in North America.

CMTA has over 200 employees in its Louisville, Lexington, southern Indiana, Ohio, Houston (Texas) and DC offices. This includes 71 licensed professional engineers (PEs) and 20 FEs, 70 LEED Accredited Professionals, 20 Certified Commissioning Agents (CxA), six licensed technology designers (RCDDs), six Certified GeoExchange Designers, seven Certified Energy Managers and three licensed Fire Protection Engineers.

CMTA is known nationwide for its expertise in sustainable, high performance design. CMTA President Ken Seibert and other firm principals speak nationally on the subject of high performance buildings. CMTA's engineers put their high performance design principles to work when they designed their corporate headquarters in 2008. CMTA's new office building was the first LEED Gold building in Jefferson County. The 20,000 square foot building features geothermal heating and cooling, ICF walls, energy efficient lighting, daylighting, solar PV and recycled materials. CMTA's new office building in Lexington was designed utilizing the same design principles and is certified LEED Platinum.

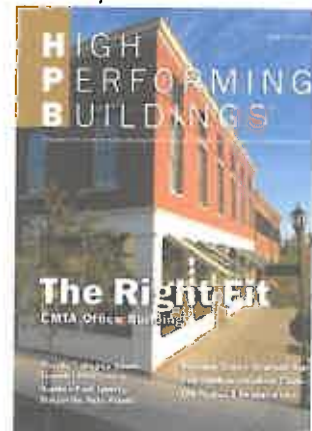


States where CMTA has completed projects.

Originally based in Lexington, Kentucky, CMTA established a Louisville office in 1990, primarily to serve Humana, its largest client. The Louisville office continued to expand serving both health care and education clients around the United States, and in 2006 the Louisville office became the firm's main office.

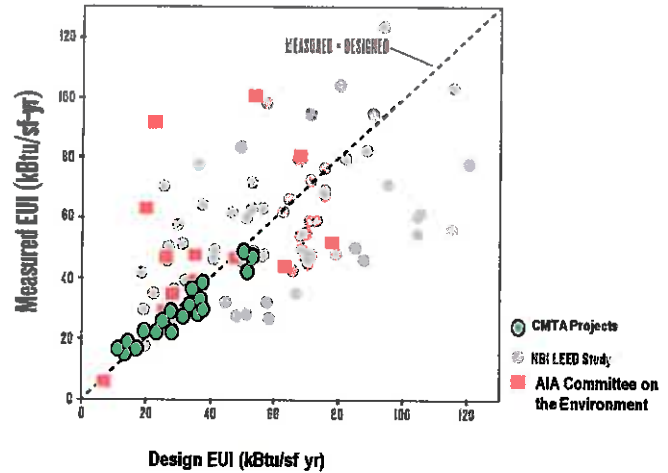
Even with the pressures of the recession in 2008 – 2010, CMTA maintained slow, but steady growth establishing an Indiana office and a Texas office in 2009 and 2010. Also in 2009, CMTA constructed a

new 'corporate headquarters' in eastern Jefferson County. This office was the first LEED Gold building in the Louisville Metro area. The CMTA Louisville office received consecutive perfect **ENERGY STAR** scores of 100. In 2013, CMTA's Lexington office designed and constructed their own office building which has received several awards, including perfect **ENERGY STAR** scores and achieved LEED Platinum certification. In November 2015, CMTA opened its Cincinnati office to serve our growing number of clients in Ohio, and in January 2016, CMTA opened our Washington, DC office in response to the need for sustainable, high performance engineering design in the mid-Atlantic region. We are currently phasing in a Virginia office and researching locations for a West Virginia office.



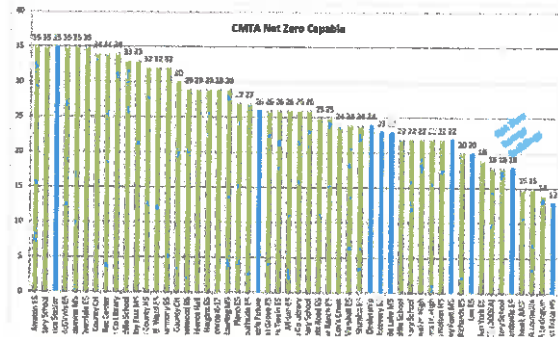
## Firm Approach to Sustainable Design

Our holistic design approach includes MEP systems, site orientation, building envelope, types of windows, building insulation systems, soffit conditions, infiltration of exterior openings, plumbing, water reclamation, occupancy schedules and maintenance. To maximize the energy efficiency and performance of a building; we cannot focus on the MEP systems alone. High performance, energy efficient buildings involve all aspects of the building and design process. CMTA believes in presenting many options to the stakeholders for system selections. We evaluate all the factors that can affect operational budgets: system types, life cycle cost, maintenance and energy usage. We have the knowledge and experience to evaluate all these factors and make recommendations based on 'real-world' data.



Life cycle cost is an important factor in all our high performance buildings. Site, building orientation, exterior wall/square foot ratio, MEP systems, renewable energy types and the availability of incentives and rebates have to be considered in the ROI equation.

At the beginning of a project, we work with the stakeholders to establish a sustainability goal. The sustainability goal will ultimately guide the design including MPE system selection and overall budget. Using energy modeling we can provide accurate energy use numbers based on proven data. We work closely with the design team to make sure everyone has a full understanding of options and are able to accurately look at cost and energy efficiency.



**CMTA's Net Zero Energy and Net Zero Capable Buildings**  
(EUI <35 kBtu/sf yr)  
As of September 2016

We have been benchmarking our buildings' performance for almost 15 years and have an extensive database of system performance. We can discuss the pros and cons of various systems and the caveats associated with system selection. We also understand the impact that use has on the efficiency of a building and work with the stakeholders to determine the parameters which will ultimately affect building performance.

## Firm Culture

We are not your typical engineers. Our focus is hiring and training engineers who are collaborative, ambitious and have the desire to be the best. There is no place for mediocrity at CMTA. Embedded in our culture is the goal of exceeding the expectations of the client. We understand that the building is not our building. We work throughout this project with the owner's needs in mind.

In order to meet those needs, we will bring new ideas and innovative approaches to our engineering designs to ensure that you get the best building possible within your scope and budget. We will challenge you with thoughts and ideas as well as challenging the team on issues that affect us all. We want more than our piece of the pie to be exceptional, we want to whole pie to be exceptional.

In addition to valuing collaboration and innovation, we foster longevity at CMTA. Several people have been with the firm for over 10 years. We also believe in "growing our own." Many of our team members began working at CMTA while they were engineering students.

We encourage our staff to enhance their engineering design skills through earning their professional engineer registration and achieving other certifications like Healthcare Design Facility Professional (HDFP), Leadership in Energy and Environmental Design Accredited Professional (LEED AP), Registered Communications Distribution Designer (RCDD), Certified GeoExchange Designer (CGD), Certified Commissioning Agent (CxA) and many others.

Finally, we are not just a collection of engineers. We are a collection of like-minded people who have become a family. We want our peers and friends to succeed as much if not more than ourselves – when the team wins – we all win. Because we sometimes spend more time at work than we do at home, the place and the work have to be something we enjoy.





## Why CMTA?

We understand the importance of benchmarking and follow our buildings after we turn them over to the owners. We are “data driven, results proven” as our buildings’ energy savings are demonstrated by the owners’ utility bills – not the energy model we developed in design.

At CMTA, we believe in “the first 30,” a collaborative process that goes beyond MEP systems encompassing whole building concepts. The goal of this process is getting design team members to think creatively and get motivated to develop innovative solutions in the first 30 percent of the design process.



We consider how the occupants of a building interact with the building in all our designs. CMTA's buildings are moving beyond energy efficiency and sustainability to lead the industry's focus on improving occupant health. Our team has a vast understanding of the building performance metrics and design strategies that improve the built environment for occupant comfort and wellness. This knowledge allows us to be successful in incorporating strategies that improve human health and focusing on the wellbeing of the occupant while still maintaining budget and energy efficiency goals.



Any large firm can say they have completed millions of square feet of buildings. But ***it's not the firm, it's the people.*** Our team are some of the best engineers you will ever work with. Not only do we produce exceptional, innovative designs, we're fun to work with.



# WV ARMY NATIONAL GUARD READINESS CENTER

Elkins, WV



COMPUTER VISUALIZATION

## PROJECT DETAILS

owner/district:  
WV Army National Guard

year:  
2012

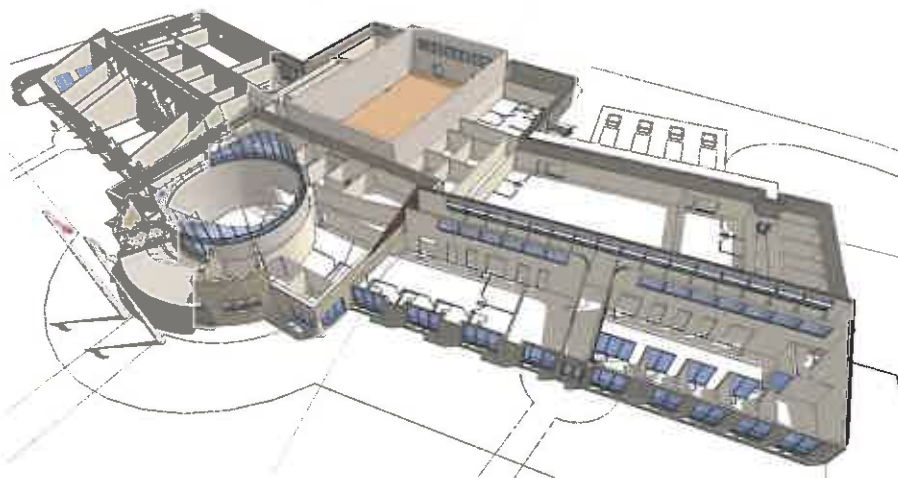
size:  
50,000 sf

The Readiness Center has two main entrances; the front into the lobby and the rear into the assembly hall. The circular central core of the entrance leads to the administrative wing (east) and classroom wing (west). The facility contains a learning center library, storage areas, locker rooms, kitchen, break-room, and Telcon spaces. Areas within the lobby will be used for recruiting, family support and distance learning.

The project also included the design and construction of a separate structure for secure storage maintenance/ workshop/ office structure.

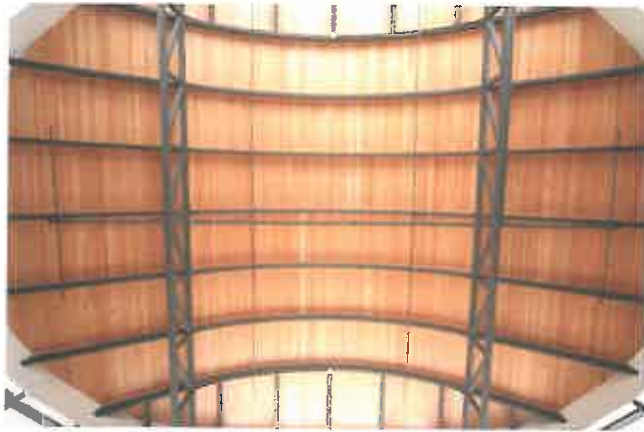
# WV ARMY NATIONAL GUARD READINESS CENTER

Elkins, WV



# WV ARMY NATIONAL GUARD READINESS CENTER

Elkins, WV



# WV ARMY NATIONAL GUARD MAINTENANCE SHOP

Elkins, WV



## PROJECT DETAILS

owner/district:  
WV Army National Guard

year:  
2012

size:  
Maint & Workshop 3,102 sf  
Organized Storage 2,560 sf

Along with the Readiness Center, ETB designed a separate structure to serve as a maintenance building/workshop. A secure, organized storage area was also designed in conjunction with the new maintenance building / workshop.



MAINTENANCE BUILDING

# WV ARMY NATIONAL GUARD JOINT FORCES HEADQUARTERS

Coonskin Park, Charleston, WV

## PROJECT DETAILS

### BEFORE



owner/district:  
WV Army National Guard

year:  
2016

type:  
Exterior Renovations

The exterior renovations ETB designed for the Joint Forces Headquarters included general facade updates, new window systems, and restoring the original metal cornice. The project was completed earlier this summer.



# WV DOH DISTRICT COMPLEXES

Statewide

## PROJECT DETAILS

owner/district:  
WV DOH

year:  
on-going

size:  
various



DISTRICT 1 OFFICE BLDG

ETB provided the original complex design for District Ten, which included an office building, a maintenance building (now called the equipment shop), a bridge/sign shop, and a lab building. The buildings have been modified over the years to satisfy the needs of the DOH and each specific site. The design brings together a variety of services and functions that were previously scattered throughout the district onto a single, campus-like setting. This lay-out has been very effective and is being repeated throughout the state.



DISTRICT 6 OFFICE BLDG

District Six has completed all but the lab building. District Nine has completed only the main office building. The office building for District One was completed in 2014 and District 8 Equipment Shop was completed in 2015.

Both District 7 Office Building and Equipment Shop are currently under construction.



DISTRICT 10 OFFICE BLDG



DISTRICT 9 OFFICE BLDG

# WV DOH DISTRICT SIX COMPLEX

Moundsville, WV



## PROJECT DETAILS

owner/district:  
WV DOH

year:  
2000 thru 2008

size:  
various

District Six has completed an Office Building, Maintenance Building and Bridge/Sign Shop. These three buildings were modified to accommodate the specific site and district.

ETB provided the original complex design for District Ten, which included these three buildings along with a Lab Building. The new buildings are being phased-in throughout the state, depending on the immediate needs of each district. The following projects have already been completed:

District One Office Building

District Eight Equipment Shop

District Nine Office Building

District Ten Entire Complex



# WV DOH DISTRICT EIGHT EQUIPMENT SHOP

Elkins, WV



owner/district:  
WV DOH

year:  
2015

size:  
21,675 sf

The District Eight Equipment Shop is nearing completion. This building, originally called the maintenance building, has also been built for District Ten and Six. Each building is modified as needed to better serve the needs of the district and in order to accommodate the specific site conditions.



The equipment shop includes office space, maintenance/garage bays, storage areas, and roll-up doors.

ETB provided the original complex design for District Ten, which included an office building, maintenance building, bridge/sign shop, and a lab building. The new buildings are being phased-in throughout the state. At this time, the following projects have been completed:

District One  
Office Building

District Six  
Office, Maintenance, Bridge/Sign

District Nine  
Office Building

District Ten  
Entire Complex

District Seven  
Office Building  
Equipment Shop  
(under construction)





# PRINCETON HEALTH & FITNESS CENTER

Princeton, WV

## PROJECT DETAILS

owner/district:  
Princeton Community Hospital  
Foundation

year:  
1997

size:  
38,500 sf



The design of the Health & Fitness Center combines various factors that encourage activity, including physical, psychological, and social elements, that stimulate emotions. Architectural tools of light, rhythm and structure create a dynamic balance that motivates the user in their individual quest for achieving and maintaining optimum health.



# FOUR SEASONS YMCA

Tazewell, VA

## PROJECT DETAILS

owner/district:  
Four Seasons YMCA

year:  
2009

size:  
40,000 sf



The Four Seasons YMCA offers all the usual work-out equipment and programs in a very unique atmosphere.

Work-out equipment is positioned so that the user has an excellent view of the surrounding mountains.

The swimming pool enclosure has operable roof panels that can be opened to the sky, depending on the weather.

The center also provides a day-care area for your children while you enjoy your exercise routine.

A stone fireplace with seating creates a very pleasant environment where you and your friends can relax before or after your activities. There are additional seating areas throughout the facility and on the outside balcony.



COMPUTER GENERATED IMAGERY

# ASHLAND KOA CAMPGROUND BATHHOUSE

Ashland, WV



## PROJECT DETAILS

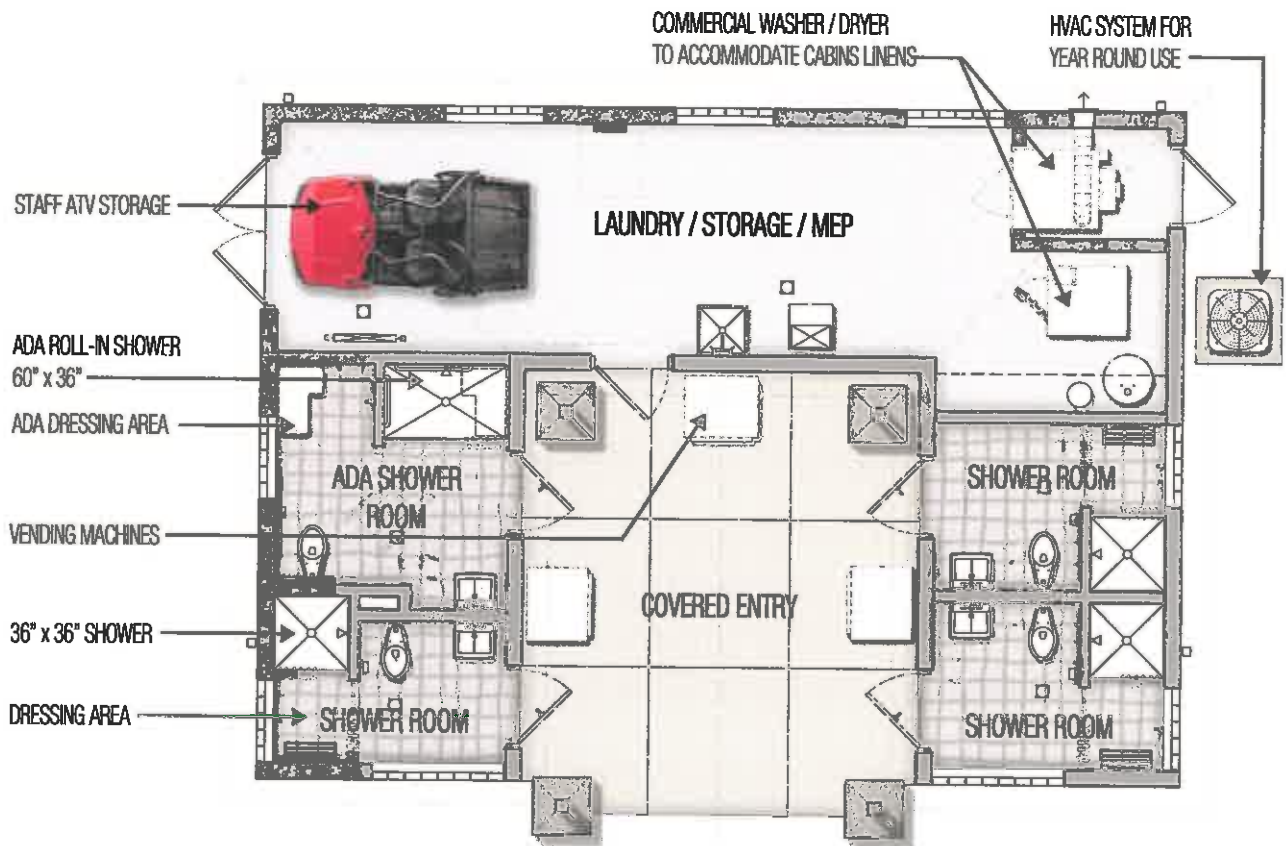
owner/district:  
Ashland KOA Campground

year:  
2014

type:  
new construction

ETB designed the bathhouse shown here to serve the ATV riders/campers at the Ashland KOA. In addition to shower and restrooms, laundry facilities are also available.

This proto-type design will be utilized at several planned locations along the Hatfield/McCoy Trail.



# BATHHOUSE DESIGN & CONSTRUCTION SUMMIT BECHTEL FAMILY NATIONAL SCOUT RESERVE

Mt. Hope, WV

## PROJECT DETAILS

owner/district:  
Boy Scouts of America

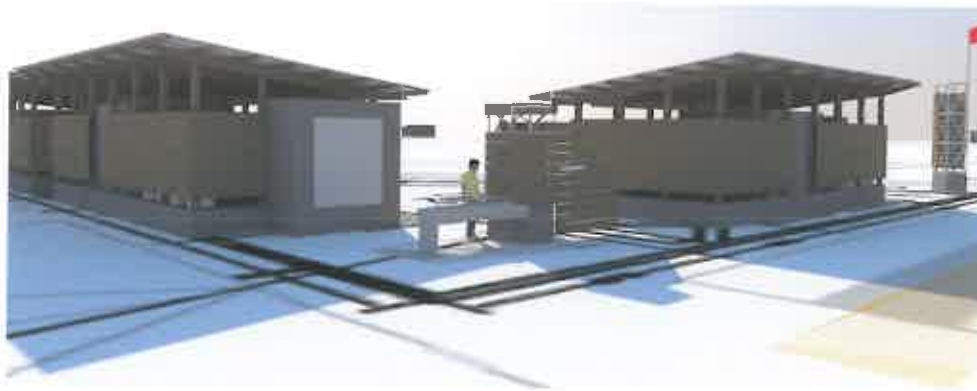
year:  
2013

size:  
330 units



ETB provided design, graphic imagery construction documentation and administration for 330 bathhouses which were located throughout the national scout reserve. The bathhouses were spread throughout the six villages.

ETB worked in conjunction with Lake Flato Architects on this project.



## Project Information

E.T. Boggess Architect, Inc.

Project	Type	Goals	Size	Cost	Comp.
<b>WVARNG Readiness Center</b>					
Location: Elkins	<b>New</b>	<i>Provide offices, classrooms, kitchens, showers</i>	56,000 sf	\$15.5 mil	2012
Project Manager for the WVARNG: Dan Clevenger - 304-561-6451		<i>for local armed forces to train &amp; prepare. Serve as base of operations in emergency.</i>			
<i>Goals were met by as a result of diligent research, planning/programming and coordination between team members and the Owner's rep.</i>					
<b>Advantage Valley Advanced Tech Center</b>					
Location: So. Charleston	<b>New</b>	<i>Three educational facilities with similar objectives - address needs of WV C&amp;TCS</i>	50,000 sf	\$15 mil	2014
<b>North Central Adv Tech Center/Allied Health</b>					
Location: Fairmont	<b>New</b>	<i>program. Provide classrooms, labs, offices, and high-tech learning environment for</i>	60,000 sf	\$17.4 mil	2016
<b>New River Headquarters &amp; Allied Health</b>					
Location: Beckley	<b>New</b>	<i>secondary education programs that can be modified easily to satisfy market/demand.</i>	72,500 sf	\$15 mil	2015
Project Manager - Senior Director of Facilities for the WV Higher Education Policy Commission Richard Donovan - 304-558-0281 ext - 212					
<i>Goals were met as a result of diligent research, planning/programming and coordination between team members and the Owner's rep. ETB was also responsible for state-wide planning &amp; programming for the entire Community &amp; Technical College System.</i>					
<b>WVDOH District 7 Headquarters</b>					
<b>Office Building</b> and	<b>New</b>	<i>Provide centralized office and meeting room for DOH district operations.</i>	29,915 sf	\$6.5 mil	Under Construction
<b>Equipment Shop</b>	<b>New</b>	<i>Provide centralized maintenance and repair facility for all DOH district equipment.</i>	22,996 sf	\$4.75 mil	Under Construction
Location: Weston					
Project Manager for the WVDOH: Brian Cooper - 304-473-5381					
<i>Goals were met by reviewing previous designs with Owner's rep and district personnel. Revisions were made to accommodate specific needs.</i>					

## Chief Logan State Park Recreational Facility



**CLIENT:**  
WV Dept. of Natural Resources

**COMPLETION DATE:**  
2009

**PROJECT COST:**  
\$5.2 Million

**OUR ROLE:**  
Geotechnical, civil and structural  
design services

The facility consists of a 37,050 SF first level that has a tennis facility surrounded by an elevated walking track, and a 25 meter indoor swimming facility. A second level consisting of 8563 square foot includes a weight lifting facility as well as several other exercise areas.

E. L. Robinson Engineering provided Geotechnical, Civil and Structural Design services for the facility. We also served as the Prime Consultant on the project and worked with our sub contractors the project architect and the project mechanical engineer. The site was a former mine fill area with 70 -80 feet of rock over burden placed on site during mining operations. E. L. Robinson worked with the owner after performing a geotechnical investigation to develop a plan to remove soil at the site to a depth of 12 feet removing oversized materials and replacing the material with an engineered fill. Upon completion of the earthwork, plans and specifications for the structure and the foundation system were developed. In addition sewage and water infrastructure was designed to serve the facility. Working with the owner, project architect, and mechanical engineer the facility was bid documents were developed. E. L. Robinson assisted the owner in the solicitation of bids and award of the contract and also provided on-site review of the construction as needed.

## Putnam County 911 Command Center and EMS Garage



**CLIENT:**  
Putnam County Commission

**COMPLETION DATE:**  
2009

**PROJECT COST:**  
\$3.4 Million

**OUR ROLE:**  
Topography survey, geo-technical, structural, site/civil engineering, construction observation and administration

ELR served as the prime design consultant providing the following services:


Provided field visitations as necessary to complete preliminary sit/civil engineering and the preparation of bid documents which included a site layout, grading, storm drainage plan, and utilities plan.

Provided structural plans and construction documents for architectural floor plans, building elevations, and sections for the proposed facility. Plumbing, Mechanical, and Electrical were also provided as a part of subconsultants' role.

Provided construction specifications for the proposed facilities including architectural, plumbing, sprinkler, HVAC, electrical, fire alarm, security, data and telephone (rough-in only) and associated electrical systems, structural, and civil specifications as a part of the project.

Reviewed required contractor shop drawings and provide coordination for the contractor in answering any design clarification questions during construction.

Attended construction meetings for a pre-bid meeting, a bid-opening meeting, pre-construction meeting, two construction observation visits per month during construction, one substantial completion observation, punch list development and final inspection.

 Prepared all the necessary permitting for project construction

## Wetzel County 911 Center



**CLIENT:**  
Wetzel County Commission

**COMPLETION DATE:**  
2009

**PROJECT COST:**  
\$3 Million

**OUR ROLE:**  
Environmental assessment, topography and boundary survey, geo-technical, structural, site/civil engineering, construction observation and administration

ELR served as the prime design consultant providing the following services:

Provided boundary and topographical mapping for the proposed one acre site. Completed exploratory borings and soil samples for a geotechnical report

Provided field visitations as necessary to complete preliminary sit/civil engineering and the preparation of bid documents which included a site layout, grading, storm drainage plan, utilities plan and structural plan

Provided construction documents for architectural floor plans, building elevations, and sections for the proposed facility. Plumbing, Mechanical, and Electrical were also provided as a part of subconsultants' role.

Provided construction specifications for the proposed facilities including architectural, plumbing, sprinkler, HVAC, electrical, fire alarm, security, data and telephone (rough-in only) and associated electrical systems, structural, and civil specifications as a part of the project.

Reviewed required contractor shop drawings and provide coordination for the contractor in answering any design clarification questions during construction.





## Mason County 911 Center



**CLIENT:**  
Mason County Commission

**COMPLETION DATE:**  
2008

**PROJECT COST:**  
\$1.7 Million

**OUR ROLE:**  
Environmental assessment,  
topography and boundary survey,  
geo-technical, structural, site/civil  
engineering, construction observa-  
tion and administration

ELR served as the prime design consultant providing the following services:

Provided field visitations as necessary to complete preliminary sit/civil engineering and the preparation of bid documents which included a site layout, grading, storm drainage plan, and utilities plan.

Provided structural plans and construction documents for architectural floor plans, building elevations, and sections for the proposed facility

Provided construction specifications for the proposed facilities including architectural, plumbing, sprinkler, HVAC, electrical, fire alarm, security, data and telephone (rough-in only) and associated electrical systems, structural, and civil specifications as a part of the project.

Reviewed required contractor shop drawings and provide coordination for the contractor in answering any design clarification questions during construction.

Attended construction meetings for a pre-bid meeting, a bid-opening meeting, pre-construction meeting, two construction observation visits per month during construction, one substantial completion observation, punch list development and final inspection.

 Prepared all the necessary permitting for project construction.

## Mingo County 911 Center



**CLIENT:**  
Mingo County Commission

**COMPLETION DATE:**  
2000

**PROJECT COST:**  
\$500,000

**OUR ROLE:**  
Planning, design, and construction management

ELR served as the prime design consultant providing the following services:

Our team converted an existing garage with limited office space at Mingo County Airport into new office space for the new county 911 center.

Provided specifications for all the required 911 equipment and electronics.

Updated 3 tower sites within the county with new antennas and equipment.

ELR attended construction meetings for a pre-bid meeting, a bid-opening meeting, pre-construction meeting, two construction observation visits per month during construction, one substantial completion observation, punch list development and final inspection.

Prepared all the necessary permitting for project construction.



## Logan County Airport Business and Industrial Park



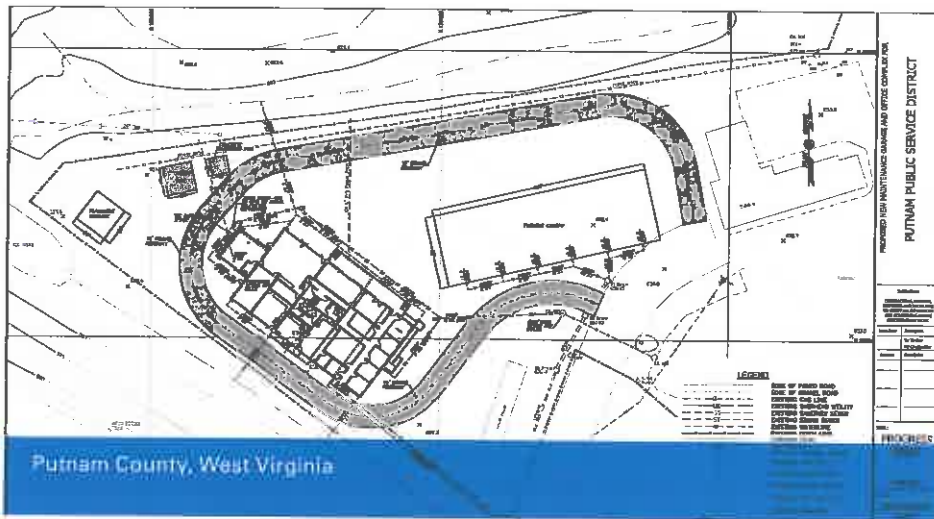
**CLIENT:**  
Logan County Airport Authority

E.L. Robinson Engineering was asked by the Logan County Airport Authority and the Logan County Development Authority to create a Master Plan for improvements and expansion to the existing Logan County Airport. The need arose from County Officials' request for better air transportation opportunities, and conversations with National Guard Officials in developing a new training facility in the southern region of West Virginia.

E.L. Robinson Engineering prepared a master plan to include a National Guard Training Facility, business park, industrial facilities, expanded airport facilities to include a 7500 foot runway, security measures, and an area for a future commercial shipping hub. County and municipal agencies are currently in the process of extending infrastructure to the site in support of its future development.



## Putnam PSD Maintenance Facility



**CLIENT:**  
Putnam PSD

**COMPLETION DATE:**  
2009

**PROJECT COST:**  
\$1.5 Million

**OUR ROLE:**  
Design Engineer, Inspection, Re-  
view of Shop Drawings, and Final  
Inspection

E.L. Robinson Engineering worked with Associated Architects to develop plans and specifications for the new Putnam PSD Maintenance Facility. The building designed for the project included an office, garage, shop facility, storage building and a vehicle storage building. The contract was awarded in January 2008. The facility was completed in January 2009.



**Army Aviation Support Facility**  
**Boone National Guard Center**  
**Frankfort, Kentucky**  
**Target – Net Zero Energy**  
**Target – LEED Silver**

**Owner**

Boone National Guard  
Colonel Steven King  
502-607-1481  
Frankfort, Kentucky

**Cost**

\$31,000,000

**Completed**

2015

The Army Aviation Support Facility at Boone National Guard is a 122,000 square foot facility consisting of 10 Hangar Bays, a shop area, and a two story administration space. The building is being designed as a Net Zero "ready" facility with a portion of the Photovoltaics System provided in the project design and construction. The project is also LEED Silver targeted.

The facility will better protect the Boone National Guard Center's fleet of 12 UH-60 Blackhawk helicopters, five OH-58 Kiowa helicopters and one C-12 fixed-wing aircraft. The Kiowas will be replaced by more technologically advanced UH-72 Lakota helicopters.

A geothermal HVAC system will be used for the facility with the central well field located under the parking lot. The well field will have 108 wells on 20 foot centers at a depth of 400 foot each. High efficient water-source heat pumps will be used for zone control in the administration and shop spaces. Each heat pump will have a dedicated circulating pump that will cycle on with the compressor. A dedicated outside air unit with energy recovery will provide the required ventilation for the administration and shop spaces.



Occupancy sensors will control the demand for ventilation to the large spaces. The Hangar bays will maintain space temperature by an under floor radiant heating system supplied by multiple high efficiency water to water geothermal heat pumps. Each bay can be controlled independently with dedicated circuits and slab sensors to maintain space temperature. The bays will also have low velocity, high volume fans to enhance air circulation.

The AASF is will be served by a 3000 amp, 277/480 volt, 3 phase, 4 wire service with a 300 KVA back-up diesel generator. Interior lighting utilizes mostly LED with high efficiency linear fluorescent fixtures in maintenance and storage bay areas. Building features full occupancy sensor coverage with an open loop daylight harvesting system in the maintenance bays. Exterior lighting is all LED and parking lot poles feature motion sensors of reduced light levels during periods of inactivity.

A roof mounted 80kW monocrystalline photovoltaic system helps to reduce electricity demand and offset approximately 15% of building energy usage. This system can be upgraded to offset 100% of total electricity consumption at a future date.



## Wendell H. Ford Regional Training Center Solar Photovoltaic Installations - 557 kW Greenville, Kentucky

### **Owner**

Kentucky Army National Guard  
Greenville, Kentucky

### **Contact**

Mr. Chuck Ammons, Director of Facilities  
Kentucky Cabinet of Health & Family Services  
275 E. Main St.  
Frankfort, Kentucky 40621  
(502) 564-5455  
chuck.ammons@ky.gov

### **Matt Partymiller**

Solar Energy Solutions, LLC  
832 Nandino Blvd., Suite K  
Lexington, Kentucky 40511  
(859) 312-7456  
matt@solar-energy-solutions.com

### **Status**

Complete

CMTA has served as the Engineer of Record for multiple solar design build projects at the Wendell H. Ford Regional Training Center in Greenville, Kentucky. The purpose of the projects was to integrate solar energy technology in a sustainable and cost-effective manner. Installations include:

#### **81 kW Solar Photovoltaic Array**

The facility was studied and the potential for incorporating solar energy was evaluated. A master plan was developed showing conceptual ideas for application of solar technologies. A detailed cost and energy savings analysis was prepared for each proposed measure. Existing structures and electrical distribution systems were evaluated to define the most cost effective approach for the solar energy retrofits. This grid-tied system of crystalline photovoltaic panels was completed in 2009 at an installed price of \$6.65/W. There were multiple arrays located on multiple buildings, each with SREC qualifying metering and remote, internet



accessible monitoring for tracking performance and troubleshooting. At the time this was the largest solar PV array in Kentucky.

#### **29 kW Solar Photovoltaic Array**

This project, completed in 2010, was installed on multiple standing seam metal roofs at a price of \$6.65/W.

#### **150 kW Solar Photovoltaic Array**

This project, completed in 2011, was installed on multiple standing seam metal roofs at a price of \$4.33/W.

#### **297 kW Solar Photovoltaic Array**

This project was completed in 2013 at an installed price of \$2.07/W. The arrays were installed on three Controlled Humidity Warehouses. Each roof was designed to accommodate a roof mount 99 kW array utilizing three 1000V DC to 480V AC three phase inverters. The array consisted of 250W polycrystalline panels. Each building was provided with a new electrical panel to accommodate new inverter breakers and output of the panel was tied directly into the feeder serving the existing warehouse panel. Rough-in was provided for future communication and monitoring by the owner. This was a design build project in conjunction with Solar Energy Solutions, LLC.



## **CMTA Department of Military Affairs Experience**

**Armed Forces Reserve Center and  
Field Maintenance Shop**  
Bluegrass Army Depot  
Richmond, Kentucky

**Army Aviation Support Facility**  
Boone National Guard Center  
Frankfort, Kentucky  
**Target – Net Zero Energy**

**Harold L. Disney Training Center**  
Artemus, Kentucky  
**Target – Net Zero Energy**

**Wendell H. Ford Training Center**  
Greenville, Kentucky

**Department of Military Affairs  
Commonwealth of Kentucky**  
Design Exhaust System/Upgrade  
Various Maintenance for:

- Louisville – FMS # 8
- Glasgow – Glasgow Readiness Center FMS # 9, Calvary Drive
- Bowling Green - FMS # 10
- Lexington – FMS # 3
- London – FMS # 2
- Frankfort – FMS # 5, Boone National Guard Center, Minute Man Parkway
- Jackson – FMS # 6, 672 Armory Drive

**Jackson FMS-6**  
Latrine Upgrade & Window Refurbish  
Jackson, Kentucky 41339

**Camp Atterbury**  
Edinburgh, Indiana

- Fire Station ADRS
- Conference Center
- Officer Quarters

**Indiana National Guard Building 15**  
Franklin, Indiana

## Management & Staffing Capabilities

**Todd Boggess** is President of E.T. Boggess Architect, Inc., and will serve as the design team leader. Todd will be the architect-of-record and will be assisted by . . .

**Stephen Mackey** is responsible for design, code review, project programming, and research standards review.

**Nathan Turner** will be the project manager responsible for coordinating all project information amongst the team.

**Dale East** will be managing the construction documentation and, along with Mr. Mackey, they will be generating the design and construction approach to realize the project.

**Chris Canterbury** is ETB's construction contract administration manager. With over 18 years of CA experience, Chris' knowledge and background of all building systems has been an invaluable asset to our team. Nathan Turner, as project manager, and Todd Boggess also remain very active during the CA phase to help ensure the design intent is realized.

A component of our management approach is the development of an individual strategy for each project, focused on the specific problems to be solved. This strategy considers the staff members assigned to the project, the scheduling and duration of work phases, the use of special consultants or specialized studies. Our Project Management Plan (PMP) will document key management and oversight tasks and is updated throughout the project as changes occur. The plan will include a definition of your program goals, technical requirements, schedules, resources, budgets, and management programs.

Once we gain a better understanding of your scheduling targets, we will be able to determine exactly what resources we will need to dedicate to the project. Regardless of the schedule, we are confident that our manpower and skill level will remain more than adequate, even in the early, labor intensive phases. Our projected workloads and the depth of personnel available are such that staffing projects of this size and complexity will have no adverse impact on any current or future projects in our office.

Resumes for our design team can be found on the following pages.



Todd Boggess, AIA, NCARB, Architect  
*President*



## EDUCATION

- Master of Architecture, Clemson University School of Architecture
- International Studies, Clemson University Daniel Center for Urban Design & Building Studies, Genoa, Italy
- Bachelor of Arts Degree in Design, Clemson University School of Architecture

## RESPONSIBILITIES

Todd joined ETB as a project architect and office manager in 1988 after graduating from Clemson University. In January, 2001, he assumed the office of President.

Todd is responsible for . . .

- architectural design and development
- project management and coordination
- computer aided design and visualization
- interior design
- site planning

Your project will receive his complete attention, from the interview and project meetings, through the construction process. As the president of the firm, you are putting your trust in him and he takes that commitment very seriously. He wants to make sure you are satisfied with our service, performance, and design.

## COMMITTEES

West Virginia Board of Architects (2014) – Governor Tomblin recently appointed Todd to this board which is responsible for protecting the life, health and property of the people of the State of WV by ensuring that proper architecture practices are used in the state.

Princeton Zoning Board of Appeals (since 2000) – Todd has been asked to serve on this local committee for the past 15 years. He currently serves as vice-chair. The board is responsible for reviewing and ruling on appeals to the existing Princeton Zoning Laws.

## PROJECTS – Governmental & Educational

- WVARNG Readiness Center, Elkins
- WVARNG Coonskin Joint Facilities Exterior Renovation, Charleston
- WVDOH District 10 Headquarters Complex
  - Office Building
  - Maintenance Building
  - Bridge & Sign Shop
  - Laboratory
- WVDOH District 6 Headquarters Complex
  - Office Building
  - Maintenance Building
  - Bridge & Sign Shop
- WVDOH District 9 Headquarters Complex - Office Building
- WVDOH District 1 Headquarters Complex - Office Building
- WVDOH District 8 Equipment Shop
- WVDOH District 7 Office Building
- WVDOH District 7 Equipment Shop
- Princeton Health & Fitness Center, Princeton, WV
- Four Seasons YMCA, Tazewell, VA
- Multi-use & Weight/Training Building for PikeView High School Athletics, Gardner, WV

## AWARDS

- WVAIA "Honor Award" for Renovation Design of the Princeton Public Library – April 2012
- Princeton/Mercer County Chamber of Commerce "Excel Award" – January, 2011
- *West Virginia Executive Magazine's* "Young Guns" - Fall, 2003
- Princeton/Mercer County Chamber of Commerce "Citizen of the Year - 2000"
- Princeton Elks Club "Citizen of the Year - 2000"

**Stephen Mackey**  
*Planning & Design*



## EDUCATION

- Bachelor of Arts Degree in Design, Clemson University School of Architecture
- Master of Architecture, Clemson University School of Architecture

## RESPONSIBILITIES

With over 30 years of experience in all phases of design and construction, Mr. Mackey brought strong design, management and leadership skills to the firm. His significant experience has enabled him to successfully oversee the design and construction of a number of large educational projects. Specific project responsibilities include:

- code review and analysis
- program development
- conceptual design
- design visualization
- project coordination
- construction specifications

## PROJECTS

Mr. Mackey rejoined ETB Architects in 2009 after serving as Executive Vice President for two architectural firms in Florida. During his absence, Mr. Mackey also served as project manager on several large school projects in the state of Florida and has been focused on education projects since his return to ETB.

- Advantage Valley Advanced Technology Center for the WVC&TCS, So. Charleston, WV
- North Central Advanced Technology Center for the WVC&TCS and Allied Health, Fairmont, WV
- New River Community and Technical College Headquarters and Allied Health Building, Beaver, WV
- Yoga Science Center, Bland, VA
- Princeton Rescue Squad Multi-Use Building, Princeton, WV
- Summit Bechtel Family National Scout Reserve, Mt. Hope, WV

Nathan Turner, LEED G.A.  
Project Manager



## EDUCATION

- Bachelor of Science, Engineering – Architecture, Fairmont State University
- Master of Architecture (May, 2009), Boston Architectural College

## RESPONSIBILITIES

Mr. Turner joined ETB in 2009 and brought with him a wealth of experience in architectural design, as well as construction methods and practices. His prior experience with educational facilities has already proven extremely valuable as we have several elementary, middle, and high school projects at various stages of completion. Nathan has obtained LEED certification and will assist in our efforts to provide a "green" approach to as many projects as possible.

Specific project responsibilities include:

- architectural programming
- construction documentation
- project management
- project coordination
- construction specifications
- construction administration

## PROJECTS

- Advantage Valley Advanced Technology Center for the WVC&TCS, So. Charleston
- North Central Advanced Technology Center for the WVC&TCS and Allied Health, Fairmont
- New River Community and Technical College Headquarters and Allied Health Building, Beaver
- Yoga Science Center, Bland, VA
- Princeton Rescue Squad Multi-Use Building, Princeton, WV
- Summit Bechtel Family National Scout Reserve, Mt. Hope, WV

Dale East  
*Production Management*



## EDUCATION

- Bachelor of Science - Architectural Engineering  
Bluefield State College

## RESPONSIBILITIES

Mr. East is an architectural intern with 10 years of experience who joined ETB in November of 2013. Prior to returning to Princeton, his work at architectural firms in Tennessee allowed him to manage projects from New Jersey to Atlanta, ranging from educational facilities to zoological exhibits. Dale is involved in all phases of design documentation and production and is eager to handle any task needed to ensure a smooth project flow from start to finish.

Specific project responsibilities include:

- 3D modeling
- graphics/imagery
- construction documentation
- project coordination

## PROJECTS

- WVARNG Coonskin Joint Facilities Exterior Renovation, Charleston
- WVDOH D7 Office Building, Lewis County
- WVDOH D7 Equipment Shop, Lewis County
- Princeton Rescue Squad Multi-Use Building, Princeton, WV
- Multi-use & Weight/Training Building for PikeView High School Athletics, Gardner, WV
- Four Seasons YMCA, Tazewell, VA
- Ashland KOA Campground Bathhouse, Ashland, WV

**Chris Canterbury**, Associate AIA  
*Construction Administration Manager*



## EDUCATION

- Bachelor of Science Engineering Technology/Architecture, Fairmont State University

## RESPONSIBILITIES

Chris joined ETB in 2000 as a CADD Technician. His focus in recent years has been project administration and his current position of Construction Administration Manager reflects that area of expertise. Your project will benefit from his superb organizational skills. He attends meetings and keeps track of your needs and wishes through notes and minutes. His timely response to submittals will ensure that your project stays on its construction schedule.

Chris is responsible for . . .

- construction administration
- organizing and attending meetings
- distribution of minutes and progress reports
- contacting material suppliers
- responding to contractor's requests for information
- reviewing submittals and shop drawings
- site visits/observations

## PROJECTS

- WVDOH District 6 Headquarters Complex - Maintenance Building, Bridge & Sign Shop
- WVDOH District 9 Headquarters Complex - Office Building
- WVDOH District 1 Headquarters Complex - Office Building
- WVDOH District 8 Equipment Shop
- WVDOH District 7 Office Building and Equipment Shop
- Advantage Valley Advanced Technology Center for the WVC&TCS, So. Charleston, WV
- North Central Advanced Technology Center for the WVC&TCS and Allied Health, Fairmont, WV
- New River Community and Technical College Headquarters and Allied Health Building, Beaver, WV

Eric Coberly, P.E.  
Project Manager



### **Education**

M.S. Engineering of Mines, West Virginia University, 1990

B.S. Engineering of Mines, West Virginia University, 1983

### **Registrations**

Registered Professional Engineer in West Virginia, Kentucky, Ohio, and Maryland

### **Professional Experience**

Mr. Coberly has more than 30 years of experience as an infrastructure and mining engineer. He has extensive experience in project planning, funding coordination and design. Mr. Coberly has managed projects with ELR which have involved site development, infrastructure planning, water, sewer, geotechnical analysis, abandoned mine reclamation projects, building construction, active surface mining projects, insurance investigations, providing expert witness services and various post mining land use projects.

Additionally, Mr. Coberly served as the Chief for the West Virginia Department of Environmental Protection Abandoned Mine Lands Division for more than 4 years. In this position he was responsible for managing and directing all operations. He has spent his career working to better the State of West Virginia in both the private and public sectors.

### **Representative Projects**

The following is a sample list of recent projects on which Mr. Coberly has served as Project Manager

- Scott Findley Road Waterline Extension Project - \$1.2 Million
- Exchange Road Phase I Waterline Extension - \$3.1 Million
- Putnam Business Park Utility Extension Phase II - \$1 Million
- Kenova Downtown Water System Upgrade - \$1.9 Million
- Kenova Prichard Waterline Replacement and Upgrade Project - \$4.7 Million
- Route 18 South-Snowbird Road Waterline Extension Project - \$969,000
- Big Flint Waterline Extension Project - \$7.8 Million
- Poca Belt Press - \$1.6 Million
- Blue Knob Waterline Extension Project - \$2.3 Million
- Town of Burnsville Sewer Study - \$2.7 Million

Eric Coberly, P.E.  
(continued)



- Bergoo Wastewater Collection and Treatment System Project - \$2.7 Million
- City of Bluefield Commercialization Center - \$2.55 Million
- Greenfield Cabinetry Building Expansion - \$3.64 Million
- Cow Creek Waterline Extension Project - \$815,000
- WVDEP OSR Viking Preston Mining Project - \$2.3 Million
- Over 100 West Virginia Department of Environmental Protection Abandoned Mine Lands reclamation projects



Tim Cart, P.E.  
Civil Engineer



### **Education**

B.S. Civil Engineering, West Virginia University, 1981, Magna Cum Laude

### **Registrations**

Registered Professional Engineer West Virginia (1986)

Registered Professional Surveyor in West Virginia (1995)

### **Professional Memberships**

American Society of Civil Engineers (ASCE)

### **Professional Experience**

Mr. Cart has over 34 years of experience in providing consulting engineering services. Clients served have included Industrial, Public and Private Institutions and State and Federal Agencies. He has served as Project Engineer on numerous geotechnical investigations over the years. These projects have included highways, bridges, industrial sites, buildings and various developments.

Mr. Cart has been the lead engineer for the design of structures including garage maintenance facilities, 911 centers, student resident housing additions, building renovations including additions of elevations and stairways. The projects vary in complexity to single story slab on grade structures to multi-story 911 centers. Additionally, Mr. Cart has also provided clients with evaluation of existing structures to determine the modifications required for proposed changes in the structural loading. He has worked with architects and the fire marshall's office to provide structures designed to the latest code requirements.

### **Representative Projects**

Mr. Cart has served as senior project engineer for numerous structural projects including the following:

Buckwheat Express Bus Garage- Kingwood, WV

Mason County 911 Center and Garage- Point Pleasant, WV

Putnam County 911 Center and Maintenance Garage- Winfield, WV

Mingo County 911 Center- Williamson, WV

Wetzel County 911 Center- New Martinsville, WV

CAMC General Student Resident Housing- Charleston, WV

State Credit Union Building Addition- Charleston, WV

Chief Logan Recreational Center- Logan, WV

Tim Cart, P.E.  
(continued)



Aldersgate United Methodist church Gym and Fellowship Building- Sissionville, WV

Lincoln County Courthouse File Room Modifications- Hamlin, WV

Logan County Commission Building Elevator and Stairway Project- Logan, WV

Logan County Courthouse Annex, Elevator and Stairway Project- Logan, WV

Logan Welcome Center- Logan, WV

Historic Coal House Restoration- Williamson, WV

Flatwoods Canoe Rune PSD Maintenance & Treatment Building- Sutton, WV

Putnam County Pre-Sed Basin and Building- Teays Valley, WV

Delbarton Sewage Treatment Plant & Facility Buildings- Delbarton, WV

Putnam County PSD Maintenance Garage- Teays Valley, WV

Scott LeRose, P.E.  
Roadway Engineer



### **Education**

B.S. Civil Engineering, West Virginia Institute of Technology, 1997

### **Registrations**

Registered Professional Engineer in West Virginia and Ohio

### **Professional Memberships**

American Society of Civil Engineers (ASCE)

### **Professional Experience**

Prior to joining E.L. Robinson Engineering Co., Mr. LeRose worked for Potesta & Associates, where he gained experience in landfill design, abandoned mine land reclamation, surveying and earthwork calculations. He also worked several co-op terms for the West Virginia Department of Highways. During these co-op terms, he performed bridge construction inspections including the preparation of daily field reports, supervised core drilling operations, participated in groundwater sampling projects, aided in the process of underground storage tank removal and replacement and was involved in various highway design projects.

Since joining E.L. Robinson Engineering Co., Mr. LeRose has worked with the Highway Design Group. He has worked on several DOH projects, which include US 52 Kermit Bypass, multiple sections of Corridor H, Meadowbrook Road, I-79 Bridgeport to Meadowbrook, Lower Gassaway Bridge Replacement, Meadowbrook Bridge, and US Route 35. While working on these projects, he has gained experience in horizontal and vertical geometry, major drainage design, site-grading design, utility relocation, MOT, signing and pavement striping. He has performed quantity calculations for pavement, drainage, seeding, pollution control quantities, and other items associated with roadway plans. He has also participated in the development of ROW plans, including deed plots and legal descriptions.

Mr. LeRose has been instrumental in the completion of numerous sanitary sewer extension/upgrade projects as well. These projects include Ridgeview Sanitary Sewer Extension Project, Crooked Creek Sanitary Sewer Extension Project, Island Creek Sanitary Sewer Extension Project, Mozart Sanitary Sewer Project, Lake Washington/Vaughts Run Sanitary Sewer Extension Project, Red Jacket Sanitary Sewer Upgrade Project and City of South Charleston Sanitary Board Spring Hill Mountain Sanitary Sewer Extension Project.

Mr. LeRose has also worked on smaller site development and subdivision layout projects. Included in these are Saturn of Charleston/Huntington, Hurricane Chevrolet Dealership, Charleston Area Medical Center Division parking area, Sherwood Forest Subdivision and Centre Court Subdivision.

Mr. LeRose has also been heavily involved in the preparation of gas line relocation plans for several sites owned by Consumers Gas as well as the creation of a land use master plan for Mingo County Redevelopment Authority.

### Representative Projects

Ridgeview Sanitary Sewer Extension Project, Logan County, WV: This project will provide service to approximately 310 customers in the Logan County communities of Ridgeview, Shamrock, Mt. Gay, Logan Heights, Cora and Camps 5 & 6. The project consists of construction of approximately 32,150 feet of 12-inch and smaller diameter gravity sewer pipe, 155 feet of 8-inch and smaller diameter force main, 275 manholes, 1 major pumping station, cleanouts, service laterals and other related appurtenances.

Crooked Creek Sanitary Sewer Extension Project, Logan County, WV: This project will provide service to approximately 83 customers in the Logan County community of Crooked Creek. The project consists of construction of approximately 9,350 feet of 8-inch and smaller diameter gravity sewer pipe, 4,500 feet of 12-inch or smaller diameter force main, 107 manholes, 3 major pump station upgrades, cleanouts, service laterals and other related appurtenances.

Mozart Sanitary Sewer Project, Marshall County, WV: This project will provide service to approximately 310 customers in the community of Mozart in Marshall County. Sewage treatment will be provided by the City of Wheeling. The project consists of the construction of approximately 30,000 feet of 12-inch or smaller diameter gravity sewer pipe, 7,400 feet of 4-inch or smaller diameter force main, 277 manholes, 2 major pumping stations, cleanouts, service laterals and other related appurtenances.

Lake Washington/Vaughts Run Sanitary Sewer Extension Project, Wood County, WV: This project will provide service to approximately 90 customers in the area surrounding Lake Washington, a small community near Parkersburg, in Wood County. The project consists of the construction of approximately 16,300 feet of 10-inch or smaller diameter gravity sewer pipe, 2,400 feet of 2-inch or smaller force main, 121 manholes, cleanouts, service laterals and other related appurtenances.

Red Jacket Sanitary Sewer Upgrade Project, Mingo County, WV: This project will provide service to approximately 160 customers in the communities of Newtown and Meador in Mingo County. The project consists of construction of approximately 22,350 feet of 8-inch or smaller diameter gravity sewer pipe, 183 manholes, cleanouts, service laterals and other related appurtenances.

Spring Hill Mountain Sanitary Sewer Extension Project, Kanawha County, WV: This project will provide service to approximately 70 customers in the Spring Hill Mountain area of South Charleston in Kanawha County. The project consists of the construction of approximately 9,550 feet of 8-inch or smaller diameter gravity sewer pipe, 6,400 feet of 4-inch diameter or smaller force main, 90 manholes, 1 major pumping station, cleanouts, service laterals and other related appurtenances.

US Route 35 - Couch to Little Five Mile, Mason County, WV: Mr. LeRose served as project manager and designer for the roadway and right-of-way plans for 2.8 miles of four-lane divided highway, 0.5 miles of access road design, one at-grade intersection and two sets of twin structures. This project includes approximately 2.2 million cubic yards of excavation, with an estimated total construction cost of \$35 million.

Scott LeRose, P.E.  
(continued)



Corridor H - Forman to Moorefield, Hardy County, WV: Mr. LeRose served as project manager and design engineer for the roadway and right-of-way plans for nearly 5 miles of a new four lane divided highway and nearly 3 miles of access road design and a truck escape ramp. The roadway plans included signing and delineator layout, maintenance of traffic and pavement marking plans. This project has an estimated total construction cost of \$77 million.

Interstate 79 - Bridgeport to Meadowbrook, Harrison County, WV: Mr. LeRose served as design engineer for the roadway construction plans for the widening of 2.1 miles of Interstate 79 from four to eight lanes including three bridges and tie-ins to two interchanges. The roadway plans included signing plans, maintenance of traffic plans and pavement marking plans. This project has an estimated total construction cost of \$30 million.

### **Education**

B.S. Civil Engineering, West Virginia Institute of Technology, 1975

Master of Science Sanitary Engineering, Virginia Polytechnic Institute and State University, 1976

### **Registrations**

Registered Professional Engineer in West Virginia and Florida

Class III Public Water Supply Operator [REDACTED]

Class IS Wastewater Treatment Works

### **Professional Experience**

Mr. Tilley's experience in the water and wastewater field brings clients a unique perspective to their projects. He has worked as a regulator, a PSD Manager and operator as a consulting engineer, and has experience in grantsmanship. His varied experience offers clients an engineer who can assist in the funding of projects, prepare the necessary studies, design the project, work with regulators to secure approvals and oversee implementation. Most importantly, Mr. Tilley has the background necessary to see a project from the perspective of not only an engineer but also a utility manager and operator.

During his career, Mr. Tilley has taken many water and wastewater projects from inception to successful completion. Mr. Tilley has also read meters, flushed water systems and operated water treatment plans and wastewater systems. The understanding gained from that experience offers valuable insight to his clients.

### **Representative Projects**

#### **Wastewater System Planning:**

Town of Ansted: Mr. Tilley drafted the facility plan for making improvements to the Town's wastewater collection and treatment facilities.

City of Charleston: Oversaw portions of a Combined Sewer Overflow (CSO) study as a sub-consultant to a national engineering firm.

White Oak PSD: Assisted the District in revising plans to upgrade its wastewater treatment facility.

Town of Burnsville: Assisted the Town in revising planned improvements to its wastewater treatment system.

#### **Wastewater System Design & Construction**

Crab Orchard, MacArthur PSD: Mr. Tilley served as Design Engineer on the layout of the northern area of the wastewater collection system. He also designed the pretreatment and flow measuring facilities at the wastewater treatment plant.

Ray Tilley, P.E.  
(continued)



White Oak PSD: Mr. Tilley served as Project Manager for the upgrade of this PSD's wastewater treatment facility which included pretreatment and flow measuring facilities and addition of a second clarifier.

City of Mullens: Mr. Tilley served on the Sanitary Board of Mullens overseeing construction during wastewater collection system improvements and construction of a new Sequencing Batch Reactor treatment plant. The collection system improvements included relining of much of the system.

Town of Burnsville: Design of improvements to a 100,000 gallon per day (GPD) aerated lagoon and replacement of portions of the collection system.

Town of Hillsboro: Consulted with the Town in the conversion of a stabilization pond to an aerated lagoon.

#### **Wastewater System Operation**

While serving as Managing Engineer of Logan County PSD, Mr. Tilley oversaw the refurbishment and return to service of a 20,000 GPD package sewage treatment plant serving the community of Green Valley. He also served as plant operator.

As Bluewell PSD General Manager, Mr. Tilley oversaw operation of the wastewater collection and disposal systems of Bluewell PSD and Bramwell PSD. The Bluewell PSD system includes gravity collection, five lift stations and a 400,000 GPD contact stabilization treatment plant. The Bramwell PSD collection system includes both vacuum and pressure sewers. A 100,000 GPD extended aeration plant provides treatment.

#### **Water System Planning**

Mercer County Water Study, Mercer County Commission: In the early 1980's, Mr. Tilley prepared a county-wide water study for the Mercer County Commission looking at areas of Mercer County that needed water service. Over the last two decades, that plan has been used as the basis for many projects, and continues to provide a valuable planning tool today.

Logan County PSD Rum and Huff Creek Regional Water System Studies: Mr. Tilley prepared the Rum Creek Water Study and oversaw the preparation of the Huff Creek Study. These documents were used as a planning tool to extend water service to much of Logan County.

Northern Fayette County Regional Water Study: In the 1990's, Mr. Tilley prepared this engineering report. It has provided an outline for providing water to northern Fayette County.

McDowell County PSD Water Study: Because of his previous experience in county-wide water system planning, Mr. Tilley was sought to prepare the engineering report for replacing failing water systems in McDowell County. The complete study recommended a phased approach which has been closely followed to successfully replace those failing systems.

#### **Water System Design & Construction**

Raleigh County PSD: As a Design Engineer, Mr. Tilley worked to layout and quantify this project to extend water service to Arnett and other communities along WV Route 3. He also served as Design Engineer on the extension of the Sycamore Water System near Colcord.

Logan County PSD: Working as Project Manager, Mr. Tilley was involved in the design and construction of the

Ray Tilley, P.E.  
(continued)



Mud Fork Water System Extension, Rum Junction-Lyburn Water System Extension, Greenville Water System (including a 700 gpm surface water treatment plant), Dehue Water System Extension and designed and bid the Huff Junction-Green Valley Water System Extension. He also oversaw the design of the Atenville extension of the PSD's Big Creek water system.

Town of Ansted: As Project Manager, Mr. Tilley worked to implement this project to add 330,000 gallons of storage to the Town's water system and to provide raw water intake in the New River.

McDowell County PSD: Mr. Tilley served as Project Manager on the separate Coalwood and Caretta Water Systems.

Each of these systems involved a ground water treatment plant to remove iron and manganese. Mr. Tilley also designed water system extensions to serve Hemphill, Capels, Havaco, Wilco and Premier and did the preliminary design for the Bartley-English Water System. He also assisted the District in the installation of a microfiltration water plant for the community of Buchanan and consulted with the PSD during the development, design and construction of the Berwind Water Project.

Cool Ridge-Flat Top PSD: Served as Project Manager for this effort to increase the pumping capacity of this water system.

Bluewell PSD: Mr. Tilley served as Project Manager for the extension of water along the Falls Mills Road to the Virginia State Line. He also served as Project Manager on the project to extend water along Route 20 to the community of Littleburg and along the upper portion of the Littleburg Road. During that same project, water was extended to the communities of Duhring and Flipping. As the PSD's General Manager, he prepared the preliminary engineering report for a project to extend water to the Kirby Addition area of Bluewell and to make improvements to the Town of Bramwell Water System and incorporate it into Bluewell PSD.

#### **Water System Operation**

As Managing Engineer at Logan County PSD, Mr. Tilley operated a 700 gallon per minute (gpm) surface water treatment plant having an upflow clarifier and mixed media filtration. He also operated a 100 gpm groundwater plant having pressure greensand filters. Logan County PSD had approximately 1,200 customers in five water systems when Mr. Tilley left in 1989.



### **Education**

M.S. Geography, Marshall University, 1994

B.S. Geology, Marshall University, 1977

### **Registrations**

Registered Professional Geologist in Virginia and Kentucky

### **Professional Memberships**

Geological Society of America and Association of Engineering Geologist

### **Professional Experience**

Mr. Watts has more than 38 years of experience in providing consulting services as a senior geologist. He has also served as project manager on numerous projects.

Mr. Watts is primarily an engineering geologist whose range of project experience has encompassed numerous projects concerning geologic investigation, rock and soils engineering, landslides, abandoned mine land reclamation, forensic damage investigations, hydro-geology and the coal industry.

He has performed hundreds of slope stability analyses for landslides and other projects involving the design of stable slopes. In addition, he has performed several studies involving landslide prediction to aid clients in land use and safety planning. Projects involving rock slope stability have included high rock cuts for surface mining operations and highways.

Geotechnical experience has included numerous projects involving soils, foundations, landfills and damage studies. These projects have encompassed such areas as pile driving, caisson installation, earth fill placement, subsurface exploration, site reconnaissance, grout and concrete placement and quality control.

### **Representative Projects**

- Huntington Mall, Barboursville, WV
- Best Buy, Barboursville, WV
- Fiesta Bravo Restaurant, Barboursville, WV
- McDonalds, Gilbert, WV
- Numerous Cell Phone Towers Cites
- Wallick Developers - Townhouses, Charleston, WV
- KFC, Beckley, WV

Richard Watts, P.G.  
(continued)



- McDonalds, Lavalette, WV
- King Coal Highway
- Coal Fields Expressway
- Charleston Town Center Mall
- New River Gorge- Cunard Access
- WVDEP - Carswell
- WVDEP - Prenter Road Waterline Feasibility
- WVDEP - Jolo/Paynesville/Wolfpen
- WVDEP - Swiss Drennan Areas, Gauley River
- WVDEP - Coal Mountain Waterline Feasibility
- WVDEP - Hanover Waterline Feasibility
- WVDEP - Brownton Landslide
- Veterans Hospital - Seven Landslides, Huntington, WV
- WVDOH - Five Landslides, Charleston, WV
- WVDOH - I-79 Landslide
- WVDEP - New River Gorge Landslide
- WVDEP - Herndon/Covel/Garwood Waterline
- WVDEP - Spy Rock/Edmond/Flanagan Waterline
- Marshall University - Corbly Hall
- Marshall University - Henderson Center Floor Cracking Study

Faheem Ahmad, P.E., P.S.  
Structural Engineer



### **Education**

M.S Civil Engineering, Virginia Tech (VPI & SU), 1991

B.S. Civil Engineering, West Virginia University Institute of Technology, 1988

M.S Information Systems, Marshall University, 2004

### **Registrations**

Registered Professional Engineer in West Virginia, Florida, Virginia, Ohio, Texas, New York, North Carolina, Kentucky, Pennsylvania, Maryland and Delaware

NCEES

Registered Professional Surveyor in West Virginia (1678)

Certified Bridge Safety Inspector – N

Certified Floodplain Manager (CFM)

### **Professional Memberships**

American Society of Civil Engineers – Structural Engineering Institute (SEI)

Association of State Floodplain Managers (ASFPM) - Member

Transportation Research Board (TRB)

### **Professional Experience**

Mr. Ahmad is an experienced engineering manager with over 27 years experience in highway and bridge projects. He is a seasoned project manager with a track record of managing and delivering projects within budget and on schedule. He has managed all types of projects including design-bid-build, design-build, and value engineering. Mr. Ahmad has over 10 years of experience in alternative delivery methods such as design-build, public-private-partnerships (PPP) and value engineering (VE).

Mr. Ahmad has implemented Accelerated Bridge Construction (ABC) methodology on multiple projects to reduce construction duration and impacts on traffic.

Mr. Ahmad has thorough knowledge of West Virginia design directives and policies, WVDOH Bridge Design Manual and AASHTO LRFD specifications. He has used Critical Path Analysis and Gantt charts to schedule and manage projects.

He has thorough knowledge of bridge erection techniques, stage construction analysis and analysis for constructability. He has had extensive experience in directing the preparation of the design and on-site construction engineering and inspection of bridges and structural engineering projects.

He has over 27 years of professional experience in Finite Element Modeling (linear and non-linear) for bridge projects. He has conducted bridge inspections (NBIS, Element Level) and performed load rating evaluations and analysis in accordance with AASHTO Manual for Condition Evaluation of Bridges (now the Manual for Bridge Evaluation – 2nd Edition) of complex highway bridges ranging from thru trusses to curved girder bridges to bascule bridges. Mr. Ahmad has extensive experience in analysis software such as MDX, LUSAS, STAAD PRO, LARSA 4D, MIDAS and ABAQUS.

Mr. Ahmad also has over 22 years of experience with hydraulics engineering projects in West Virginia. Mr. Ahmad is also Certified Floodplain Manager (CFM) from the Association of State Floodplain Managers. Mr. Ahmad is proficient in conducting hydrologic and hydraulic (steady flow/unsteady flow/2D-flow) of rivers and creeks. Representative projects include FEMA flood studies and map revisions, hydrologic studies, floodplain studies, erosion protection design, bridge hydraulics and scour studies. He is also experienced with water resources regulations, and permitting requirements in West Virginia.

Prior to joining ELR, Mr. Ahmad had over six years of professional affiliation with the Structures Divisions of Delaware and Virginia Department of Transportation.

### **Representative Projects**

Corridor H – Kerens to Parsons– Design Build Project, Randolph and Tucker Counties, WV.

Lead Bridge Engineer for the \$ 200 million design build project. This project includes following major bridges/structures:

- Bridge Over Baldlick Fork is 560 ft long horizontally curved bridge with layout of three continuous spans as follows: 170 ft – 220 ft – 170 ft. The steel plate girders have 86” deep web. Overall deck width is 84’-6”. Pier heights are approximately 94 ft.
- Panther Run Bridge Over Panther Run is a 620 ft long bridge with layout of three continuous spans as follows: 175 ft – 270 ft – 175 ft. The steel plate girders have 93” deep web. Overall deck width is 84’-6”. Pier heights are approximately 77 ft.
- South Branch Haddix Run Bridge Over South Branch Haddix Run is a horizontally curved 780 ft long bridge with layout of three continuous spans as follows: 250 ft – 280 ft – 250 ft. The steel plate girders have 90” deep web. Overall deck width is 84’-6”. Pier heights are approximately 130 ft.
- Bridge Over Tributary of South Branch Haddix Run is 600 ft long bridge with layout of three continuous spans as follows: 180 ft – 240 ft – 180 ft. The steel plate girders have 86” deep web. Overall deck width is 84’-6”. Pier heights are approximately 82 ft.
- Bridge Over US 219 and Haddix Run is 1200 ft long bridge with layout of five continuous spans as follows: 205 ft – 280 ft – 280 ft – 280 ft – 155 ft. The steel plate girders have 100” deep web. Overall deck width is 84’-6”. Pier heights range from 75 ft – 202 ft.
- CR 3 underpass structure is a 230 ft long box cast-in-place concrete single cell box type structure with a 28 ft clear span

**Cottageville Bridge:** Lead Design Engineer and Lead Bridge Engineer for the design-build project to construct a new bridge to carry WV 331 over Little Mill Creek in Jackson County. The proposed bridge consists of three spans of 80 ft – 80 ft – 40 ft with a concrete beam superstructure with a composite concrete deck. The substructures consist of integral abutments founded on H-piles and single column piers. Other design features included drainage, maintenance of traffic, signing, pavement markings, environmental permits (404, NPDES) and construction inspection. Cost for the bridge was \$ 1.9 million.

**S. Lee Exxon Bridge:** Lead Design Engineer and Lead Bridge Engineer for the design-build project to construct a new bridge to carry WV 68 over South Fork Lee in Wood County. The bridge is 190 ft long, bearing to bearing, and 38'-6" out to out. Span 1 is 75 ft long and Span 2 is 115 ft long. The proposed bridge is a two span bridge with a concrete beam superstructure and a cast-in-place concrete deck. The pier is of the two column type with pile caps and driven H-piles supporting each column. Other design features included drainage, maintenance of traffic, signing, pavement markings, environmental permits (404, NPDES) and construction inspection. Cost for the bridge was \$ 2.4 million.

**I-77 Bridges: Surface Drive Overpass Bridges:** Lead Design Engineer and Lead Bridge Engineer for the design-build project involving renovation of two dual I-77 bridges: Surface Drive Overpass Bridges on I-77 over CR 119/37 and Eden's Fork Interchange Bridges on I-77 over CR 27 in Kanawha County, WV. Beams/girders for each of the bridges are made composite by having shear connectors installed on them. Abutments are converted to semi-integral type. Other design features include drainage, maintenance of traffic, signing, pavement markings, environmental permits (404, NPDES) and construction inspection. Cost for the bridges was \$ 5.4 million.

**Tuppers Creek-Pocatalico Bridges:** Lead Design Engineer and Project Manager for the replacement of (3) three replacement of existing dual Tuppers Creek-Pocatalico Bridges (Bridge Nos. 2191, 2192, and 2193) carrying I-77 North and South bound in Kanawha County, West Virginia. The bridges consisted of composite steel plate girders on semi-integral/integral abutments and multi-column bents. The project also included structural inspection of existing bridges, geotechnical investigations and preparation of permits. Construction cost for the project was \$ 9.8 million.

**Guyandotte River Bridge:** Lead Design Engineer and Project Manager for the Value Engineering of Guyandotte River Bridge (Bridge No. 4971). It carries WV Route 10 over Guyandotte River as a part of the Stollings to Logan Road upgrade in Logan County, WV. The Guyandotte River Bridge is a four (4) spans steel girder bridge with lengths of: 185'-0", 240'-0", 240'-0", and 185'-0". The superstructure consists of six (6) welded steel plate girders with cast-in-place concrete deck which acts composite with the steel girders. The piers consists of pier cap that is supported by two columns, each column is based on drilled caisson with rock socket. The pier heights range from 50 to 75 ft. Prepared VE Plans for the project that included Roadway, Bridge, Geotechnical and Hydraulic Studies for the Value Engineered Bridge and Roadway. Performed Girder Erection and Deck Overhang analyses and prepared plans for the contractor.

**I-77 City Beer Overpass Bridge:** Lead Design Engineer and Project Manager for the Value Engineering of I-77 City Beer overpass bridge in Wood county. The VE bridge is a three span bridge (56'-0" - 96'-0" - 49'-0") South Bound and (51'-6" - 96'-0" - 62'-0") north bound. The structure has a skew of 57 degrees. The superstructure consists of 6 prestressed AASHTO Type III beams. The bridge substructure consists of two piers and two semi-integral abutments. The abutments are designed with single row of HP 14x73 piles oriented in strong direction

and two Wingwalls supported by piles. Due to the severe skew and stage construction, a 3-D finite element model was developed to capture all the on the semi-integral abutments due to thermal expansion/contraction of the girders and the deck and due to lateral earth pressure. Prepared VE Plans for the project that included Roadway and Bridge plans.

**Madam Creek Bridge:** Lead Design Engineer and Project Manager for the Value Engineering of Madam Creek Bridge (County Route 26) in Summers County. The VE Bridge is a simple span structure with 158'-0" center bearing to center bearing. The superstructure consisted of four lines of plate girders 9'-6" on centers. The superstructure has a 5% vertical slope. The substructure with architectural treatment consists of two integral abutments supported on HP14x73 piles. Prepared VE Plans for the project that included Roadway and Bridge plans.

**Morehead Bridge:** Lead Design Engineer and Project Manager for the Value Engineering of Morehead Bridge (County Route 26) in Wirt County. The VE Bridge is a simple span structure with 130'-0" center bearing to center bearing. The superstructure consisted of five lines of plate girders. The superstructure depth was minimized to meet the hydraulic requirements. Prepared VE Plans for the project that included Roadway, Bridge and Hydraulic Studies for the Value Engineered Bridge and Roadway.

**McQuain Brothers Bridge:** Lead Design Engineer and Lead Bridge Engineer for the design-build project for the construction of dual I-79 bridges over US 119 & Left Hand Creek in Kanawha County, WV. Each of the structures has three span layout with span lengths of 128'-0" – 122'-9" – 91'-0". The bridge has horizontally curved alignment (radius = 2865 ft). The horizontally curved cast in place deck is supported by four lines of straight Type IV-J Prestressed Concrete Beams kinked over the piers with a cast-in-place concrete deck. The beams are simple spans for dead loads and made continuous for live load. Abutment 1 is semi-integral while abutment 2 is integral. The design also involved 3-D slope Stability analysis. Other design features included drainage, maintenance of traffic, signing, pavement markings, environmental permits (404, NPDES) and construction inspection. Cost for the bridges was \$ 7.4 million.

**US35 Design-Build Project (WVDOH) Putnam County, West Virginia:** Served as Bridge Project Manager/Lead Design Engineer on this design- build project to construct dual 181 ft long single span dual bridges over Hurricane Creek and 110 ft long dual bridges over WV 34.

**Wyoming Truss Bridge:** Lead Bridge Design Engineer and the Project Manager for the Wyoming Truss Bridge Replacement in McDowell County, WV. The spans were 88 feet, 110 feet and 88 feet with a total length of 286 feet. The superstructure consists of HPS70W steel girders. Piers 1 and 2 are hammerhead piers. Piers 1 & 2 are founded on spread foundations. The abutments are semi-integral abutments founded on H-Piles. Estimated construction cost for the bridge is \$ 1,900,000.

**US 35 Over Upper & Lower Fivemile:** Lead Bridge Design Engineer and the Project Manager for the following dual bridges (1) US 35 Over Upper Five Mile Creek and CR 27 (2) US 35 Over Lower Five Mile Creek in Mason County, WV. The spans for US 35 Over Upper Five Mile Creek are 161 feet, 161 feet with a total length of 322 feet. The spans for US 35 Over Lower Five Mile Creek are 145 feet, 145 feet with a total length of 290 feet. The estimated construction cost for the bridges is \$ 7.6 million.

**Blennerhassett Island Bridge:** Lead Bridge Design Engineer and the Project Manager for the Ohio Approach spans of Blennerhassett Island Bridge over the Ohio River beginning in Washington County, Ohio and Blennerhassett Island. The spans were 171 feet, 179 feet and 139.75 feet with a total length of 489.75 feet. The superstructure consists of hybrid steel girders. Piers 1 and 2 are two column bents with parabolic tendon profile for the post-tensioned cap. Pier 1 is founded on a single caisson with a caisson cap whereas Pier 2 is founded on steel H bearing piles with pile cap.

**Corridor H Over Walnut Bottom Run:** Lead Bridge Design Engineer and the Project Manager for the Twin Bridges Over Walnut Bottom Run Carrying Corridor H in Hardy County, West Virginia. The bridge consists of single 184 ft long composite welded steel plate girders with integral abutments. Construction Cost for the bridges is \$ 2,388,000.

**Buffalo Creek Bridge:** Lead Design engineer and the project manager for the deck replacement of the existing WV 10 Buffalo Creek Bridge over CSX RR and Buffalo Creek in Logan County, WV. This bridge has a four (4) span layout as follows: 222'-0" 264'-6" 215'-9" and 117'-9". The superstructure consists of eight (8) welded steel plate girders with cast-in-place concrete deck. Construction cost is \$ 4.3 million.

**I-70 Ft. Henry IC Bridge:** Lead Design engineer and project manager for the Fort Henry I/C Bridge Over I-70 in Ohio County, West Virginia. The bridge consists of two 140 ft long composite welded steel plate girders with integral abutments and pier, on pile foundations.

**Lower Gassaway Bridge:** Design Review Engineer and Project manager for the replacement of Lower Gassaway Truss Bridge in Braxton County, WV. The bridge consisted of composite welded steel plate girder (81" deep) on semi-integral abutments on drilled shafts and hammerhead piers on single circular (63.8' high) column supported by deep spread footings. The project also included geotechnical investigations and hydraulic studies.

**I-79 Lodgeville Bridges:** Design engineer and manager for the replacement and widening of the existing dual I-79 Lodgeville and Simpson Creek Bridges in Harrison County, WV to eight lanes. The Simpson Creek Bridge consisted of curved plate girders on abutments and two-column bents (36' high) on spread footing. The project also included geotechnical investigations and hydraulic studies.

### **Representative Hydraulics Projects**

**South Branch of Potomac River:** Hydraulics and scour Analysis for the Proposed Corridor H Bridge crossing the South Branch of the Potomac River - Hardy County, WV The proposed structure crosses South Branch of the Potomac River and its flood plain. The total length of the bridge is 2200 ft. Developed hydraulic models to determine the velocities and flow depths for bridge scour. Evaluated scour potential of piers considering other factors such as river bed changes, instances of historical migration, effect of debris. Prepared hydraulic analysis for the Moorefield Flood Levee freeboard. Additionally, performed hydraulics and scour analysis associated with temporary causeway and access road needed for the construction of the bridge.

**Blennerhassett Island Bridge:** Hydraulic, scour and erosion countermeasures studies for Proposed Blennerhassett Island Bridge - Wood County, WV and Washington County, OH. The proposed structure consists of a simple span tied arch with a span length of 880 feet (center to center of pier) over the Ohio Channel of the Ohio River. The total length of the bridge is 3985 ft. including approach spans. Developed hydraulic models to determine the

velocities and flow depths for bridge scour evaluations. Evaluated scour potential of river piers on the Island considering other factors such as long term river bed changes, instances of historical migration. An erosion protection system to minimize the impact of barge traffic and bridge scour along the Island shore in the vicinity of Pier 4 was developed. Additionally, performed hydraulics and scour analysis associated with temporary cofferdams, temporary platforms and docks around bridge piers 3, 4, 8, and 9 including for the access roads on the Blennerhassett Island for the duration of construction.

#### **Publications/Presentation**

Published technical papers and made presentations at conferences:

Ahmad, F. and Mongi, A., Accelerated Bridge Construction of Martin Luther King Jr. Memorial Bridge – City of Bluefield, WV - Published in the proceedings of 2014 National Accelerated Bridge Construction Conference.

Ahmad, F. , Zoubi, N. and Mongi, A. Behavior of Integral Abutments with Tall Back walls - Published in the proceedings of 2007 International Bridge Conference

Presentation titled “Steel Spans Made Continuous for Live Loads at the Structures IV seminar by West Virginia Division of Highways – Charleston, WV, November 15, 2005

Ahmad, F. and Zoubi, N. Tension Field Action in the Hybrid Steel Girders for Ohio Approach Spans of Blennerhassett Island Bridge - Published in the proceedings of Third New York City Bridge Conference - Vol 3, No. 1, September 11 – 13, 2005

Co-Presenter on presentation titled “Hydraulic and Scour Analysis of Blennerhassett Island Bridge at the 2002 FHWA Hydraulics Conference – Louisville, KY, September 17-19, 2002



**Jess Farber, PE, LEED AP, CxA**  
*Partner/Lead Mechanical Engineer*



## Education

Mr. Farber graduated with a Bachelor of Mechanical Engineering degree from the Georgia Institute of Technology in 1993.

## Registrations

Mr. Farber is a licensed professional engineer in the states of Kentucky (#██████), Alabama, Indiana, Maryland and Texas.

LEED (Leadership in Energy and Environmental Design) Accredited Professional

Certified Commissioning Agent,  
AABC Commissioning Group (CxA)

## Related Projects

Campus Fire/Water/Site Water  
System Analysis  
Kentucky Exposition Center  
Louisville, Kentucky

Campus Electric Utility Upgrades  
Kentucky Exposition Center  
Louisville, Kentucky

Building Analysis  
Kentucky Medical Examiner's Office  
Louisville, Kentucky

Chilled Water Improvements  
Brown Forman Louisville Campus  
Louisville, Kentucky

Campus Master Plan  
Norton Audubon Hospital  
Louisville, Kentucky

Campus Master Plan  
Riverview Hospital  
Noblesville, Indiana

Campus Master Plan  
TJ Samson Community Hospital  
Glasgow, Kentucky



## Experience

Mr. Farber joined CMTA in 1999 and has worked in consulting engineering since his graduation from the Georgia Institute of Technology (Georgia Tech). He is the director of the mechanical department in the Louisville office and assists in the overall management of the Louisville office. He has a reputation of providing excellent service to his clients and is well respected for his responsiveness to project related issues.

Mr. Farber's experience is diverse and includes health care, education, convention centers, courthouses, and other commercial facilities. He is experienced with various sustainable design elements including geothermal systems, heat recovery systems, solar water heating and rainwater collection systems. He has recently completed design and assisted in start-up for the first geothermal acute care hospital facility in Kentucky. The facility is currently tracking to have approximately a one year payback.

As the leader of CMTA's Mechanical Engineering Department, he works on daily basis with the senior and junior members of the staff. With a mechanical engineering staff of over 20 people, Mr. Farber coordinates project production requirements as well as quality control. He is a strong proponent of mentoring and places special emphasize on training and developing younger engineers.

**Brian Baumgartle, PE, LC, LEED AP BD+C**  
*Principal, Electrical Engineer*



## Education

Mr. Baumgartle graduated from the University of Louisville in 1998 with a Bachelor of Science Degree in Electrical Engineering.

## Registrations

Mr. Baumgartle is a Licensed Professional Engineer in the state of Kentucky [REDACTED]

Lighting Certified (LC) by the National Council on Qualifications for the Lighting Professions (NCQLP)

LEED (Leadership in Energy and Environmental Design) Accredited Professional

## Related Projects

Campus Electric Utility Upgrades  
Kentucky Exposition Center  
Louisville, Kentucky

Building Analysis  
Kentucky Medical Examiner's Office  
Louisville, Kentucky

Campus Master Plan  
Norton Audubon Hospital  
Louisville, Kentucky

Campus Master Plan  
Riverview Hospital  
Noblesville, Indiana

Campus Master Plan  
TJ Samson Community Hospital  
Glasgow, Kentucky



## Experience

Mr. Baumgartle joined CMTA's Louisville office in 2007. Mr. Baumgartle understands that lighting design can make or break a project. His extensive experience and knowledge of lighting and daylighting design ensures that it will be memorable, visually comfortable, cost effective and energy efficient.

He has given seminars on lighting and daylighting design to numerous organizations and companies including Lightfair International and the University of Louisville Fine Arts Interior Architecture program. He has also written articles for Consulting-Specifying Engineer on lighting and commissioning. He is Lighting Certified (LC) by the National Council on Qualifications for the Lighting Professions (NCQLP) and is a member of the Illuminating Engineering Society of North America (IESNA).

Mr. Baumgartle has project managed and engineered numerous projects for educational, health care, corporate, retail, hospitality, performance and museum facilities. His projects include Richardsville Elementary School (first Net Zero Energy school in the U.S.), Oldham County Library (IESNA illumination award), Army Aviation Support Facility at Boone National Guard Center, Van Meter Hall Renovation (Theater) at Western Kentucky University, Fourth Street Live! and Parklands of Floyds Fork. He has also designed over one megawatt of solar photovoltaic systems. In addition to his lighting expertise, Mr. Baumgartle has a broad knowledge of solar photovoltaic, fire alarm, security, data/voice, power distribution, uninterruptible power and emergency generator back-up systems.



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: 356210

Doc Description: STF BUILDINGS CAMP DAWSON EOI DESIGN

Proc Type: Central Purchase Order

Date Issued	Solicitation Closes	Solicitation No	Version
2017-07-20	2017-08-15 13:30:00	CEOI 0603 ADJ1800000001	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:

E.T. Boggess Architect, Inc.  
 PO Box 727 101 Rockledge Avenue  
 Princeton, WV 24740 304-425-4491

**FOR INFORMATION CONTACT THE BUYER**

Crystal Rink  
 (304) 558-2402  
 crystal.g.rink@wv.gov

signature X

FEIN # 55-0515917

August 14, 2017  
 DATE

All 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.

Todd Boggess, President  
(Name, Title)  
Todd Boggess, President  
(Printed Name and Title)  
PO Box 727, Princeton, WV 24740  
(Address)  
(P) 304-425-4491 / (F) 304-425-2028  
(Phone Number) / (Fax Number)  
etb@etbarchitects.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.

E.T. Boggess Architect, Inc.  
(Company)  
Todd Boggess, President  
(Authorized Signature) (Representative Name, Title)

Todd Boggess, President  
(Printed Name and Title of Authorized Representative)

August 14, 2017  
(Date)

(P) 304-425-4491 / (F) 304-425-2028  
(Phone Number) (Fax Number)

ADDENDUM ACKNOWLEDGEMENT FORM  
SOLICITATION NO.: CE01 ADJ180000001

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)*

- Addendum No. 1
- Addendum No. 2
- Addendum No. 3
- Addendum No. 4
- Addendum No. 5

- Addendum No. 6
- Addendum No. 7
- Addendum No. 8
- Addendum No. 9
- 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.

E.T. Boggess Architect, Inc.

Company

Authorized Signature

August 14, 2017

Date

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

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: E.T. Boggess Architect, Inc.Authorized Signature: *E.T. Boggess* Date: August 14, 2017State of West VirginiaCounty of Mercer, to-wit:Taken, subscribed, and sworn to before me this 14 day of August, 20 17.My Commission expires March 11, 20 18.

AFFIX SEAL HERE

NOTARY PUBLIC *Donna R. East**Purchasing Affidavit (Revised 07/01/2012)*