



# West Virginia Purchasing Division

2019 Washington Street, East  
Charleston, WV 25305  
Telephone: 304-558-2306  
General Fax: 304-558-6026  
Bid Fax: 304-558-3970

The following documentation is an electronically-submitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at ***wvOASIS.gov***. As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at ***WVPurchasing.gov*** with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.

## Header

List View

### General Information

Contact


Default Values

Discount

Document Information

Procurement Folder: 102615

Procurement Type: Central Purchase Order

Vendor ID: VC0000006473 

Legal Name: THREE DESIGNS PLLC

Alias/DBA: RONNIE L BOLEN

Total Bid: \$0.00

Response Date: 06/01/2015 

Response Time: 15:43

SO Doc Code: CEOI

SO Dept: 0603

SO Doc ID: ADJ150000009

Published Date: 5/4/15

Close Date: 6/2/15

Close Time: 13:30

Status: Closed

Solicitation Description: Marshall County Readiness Center  
EOI Design Services 

Total of Header Attachments: 0

Total of All Attachments: 0



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

**State of West Virginia  
 Solicitation Response**

**Proc Folder :** 102615

**Solicitation Description :** Marshall County Readiness Center EOI Design Services

**Proc Type :** Central Purchase Order

Date issued	Solicitation Closes	Solicitation No	Version
	2015-06-02 13:30:00	SR 0603 ESR06011500000004139	1

**VENDOR**

VC0000006473  
 THREE DESIGNS PLLC  
 RONNIE L BOLEN

**FOR INFORMATION CONTACT THE BUYER**

Tara Lyle  
 (304) 558-2544  
 tara.l.lyle@wv.gov

**Signature X** **FEIN #** **DATE**

All offers subject to all terms and conditions contained in this solicitation

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	Marshall County Readiness Center EOI-Design Engineering				

Comm Code	Manufacturer	Specification	Model #
81101508			

**Extended Description :** The WV Purchasing Division for the agency, WV Army National Guard's Division of Engineering and Facilities, is soliciting expression of interests for professional design services to architectural and engineering design services to provide for the interior design, including mechanical, HVAC systems and electrical as needed at the Marshall County Readiness Center, in Moundsville, WV.

Qualification Proposal for:

**WVARNG-CFMO – Marshall County Readiness Center  
Interior Design and Mechanical – HVAC - Electrical Renovation  
Moundsville, West Virginia**



June 2, 2015

Presented By:

**THREE DESIGNS, PLLC**

1045 Nease Drive  
Charleston, WV 25387

(304) 807-0841

[www.threedesignswv.com](http://www.threedesignswv.com)

June 2, 2015

Ms. Tara Lyle, Buyer Supervisor  
Department of Administration, Purchasing Division  
2019 Washington Street, East  
Charleston, West Virginia 25305-0130

**Reference:** Marshall County Readiness Center - Interior Design and Mechanical – HVAC - Electrical Renovation

Ms. Tara Lyle:

Three Designs, PLLC, Architects and Planners is pleased to submit the attached information to demonstrate our team's experience, qualifications and commitment to the project for the Interior Design and Mechanical – HVAC - Electrical Renovation to the Marshall County Readiness Center. Three Designs is based out of the Charleston area and has teamed with CAS Structural, EL Robinson Engineering and Miller Engineering. This team is uniquely qualified to provide professional design services on the proposed site for the following reasons:

- ▽ **Experienced Team Members** – Three Designs' team members have worked on various types of renovation and rehabilitation of projects from National Guard facilities and related facilities, including renovations of structural, mechanical, electrical, plumbing as well as architectural elements of these types of facilities.
- ▽ **Quality Assurance** – At Three Designs, we specialize in design services and we implement all of our knowledge, skills, and training to fit the needs of any customer. We are based in Charleston and have serviced clients throughout West Virginia. What sets Three Designs apart from the others is that we don't just say we will listen to our clients; we treat all of our client's issues or problems with the highest problem solving skills in a timely fashion.
- ▽ **Method of Approach** - Three Designs abides by the elements and principles of design on every project. Our three design principles of functionality, cost control and aesthetics are vital components for every client. When these are brought together and balanced, the client has the project they have sought from the designer.

Thank you in advance for taking time to review our attached expression of interest in your project including our team's relevant project experience, qualifications and commitment to your success of the West Virginia Army National Guard Construction and Facilities Management Office (WVARNG-CFMO) project. We appreciate your consideration to the Three Designs' team for your valuable community project.

Best Regards,



Ron L. Bolen, AA, LEED AP  
President / Senior Architect

Web site: [www.threedesignswv.com](http://www.threedesignswv.com)  
Cell phone: 304-807-0841

# TABLE OF CONTENTS

<b>1. PROJECT TEAM DESCRIPTION</b>	<b>1</b>
The Success of Your Project Three Designs, PLLC Consultants CAS Structural Engineering, Inc. E.L. Robinson Engineering Miller Engineers, Inc.	
<b>2. EXPERIENCE</b>	<b>8</b>
Ron L. Bolen of Three Designs, PLLC CAS Structural Engineering, Inc. E.L. Robinson Engineering Miller Engineers, Inc.	
<b>3. PERSONNEL</b>	<b>27</b>
<b>Organizational Chart</b>	
<b>Three Designs, PLLC</b> Ron L. Bolen, AIA, LEED AP Caterina McFadden, AIA Assoc. Aaron L. Bolen Laura Cox, PLA, ASLA, LEED GA	
<b>CAS Structural Engineering, Inc.</b> Carol A. Stevens, PE, F ASCE, SECB	
<b>E. L. Robinson Engineering</b>  Eric Coberly, PE Timothy Cart, PE, PS Jeff Nelsen, PL A James Yost Brian Morton, PE	
<b>Miller Engineering, Inc.</b> B. Craig Miller, PE, LEED AP Travis Taylor, PE Robert Angus Jack Jamison Joseph Machnik	
<b>4. PROJECT APPROACH</b>	<b>53</b>
<b>Marshall County Readiness Center - Interior Design and Mechanical – HVAC – Electrical Renovation</b> Project Management The Success of Your Project Project Execution	
<b>5. ATTACHMENTS</b>	<b>56</b>
Purchasing Affidavit Certification & Signature	

# 1. PROJECT TEAM DESCRIPTION

## Three Designs' Firm Profile

**Three Designs, PLLC** (a Veteran-Owned Small Business) provides the experience and expertise to successfully develop the Interior Design and Mechanical – HVAC - Electrical Renovation Project. Three Designs has assembled a team with the ideal experiences to ensure that the design for the WVARNG-CFMO will be a successful project for the Marshall County Readiness Center Project. The design team has designed various phased projects of similar size and type throughout the region.





The Team has blended well together on similar projects in the past, of varying Renovation of existing educational facility projects, as well as related projects this team has previously worked on facilities of similar nature. Collating this talent his gives us an excellent basis of working together on similar types of facilities and will be the very best team for your project.

Given our Team members past experiences, we know what has worked and can adapt our experiences to the Interior Design and Mechanical – HVAC - Electrical Renovation Project to the Marshall County Readiness Center. Three Designs’ selected project team leaders know how to effectively collaborate to provide services through your project; we will spend the time necessary to complete every task effectively. As necessary, the person that is required for the task (whether Architect or Engineer or Technician) will be available during the planning phases.

Three Designs, PLLC would be a strategic partner to ensure project needs are met with the WVARNG-CFMO Project without the huge overhead of larger firms. We focus on our Three Designs’ principles for every project, giving the very best project design.

### Functional / Aesthetic / Cost Effective

We utilize a total team concept to supplement the operational model whereby contractual, project based local talent and expertise is supplemented when necessary by Three Designs that may possess specific proficiency in the project type being designed. This project delivery method results in the client receiving the highest level of talent and experience for the execution of their project.

We have qualified employees and our assembled team has designed projects across the State of West Virginia. We are familiar with all the up to date and effective design building codes and standards and the level of quality required for performing planning of the WVARNG-CFMO Project.

Our Three Designs’ office in Charleston WV provides a full range of architectural services, led by:

**Ron L. Bolen, AIA**

President

## THREE DESIGNS, PLLC

1045 Nease Drive

Charleston, WV 25387

Cell Phone: 304-807-0841

Email: [rlbolen@threedesignswv.com](mailto:rlbolen@threedesignswv.com)

Web site: [threedesignswv.com](http://threedesignswv.com)

## Consultants

We are teaming together with:

- **CAS Structural Engineering, Inc.** (CAS) for structural services
- **E. L. Robinson Engineering** (ELR) for civil / landscape architect services
- **Miller Engineers, Inc.** (MEI) for mechanical / electrical engineering services

This team has worked together previously very successfully and we believe this the very best team for this your project to be very prosperous and abundantly enjoyable for the community. The team will provide complete documentation for Planning, Designing, and Provide Construction Administration for Renovations to the Marshall County Readiness Center with services from Programming through Construction by the design team.



CAS, the team member for structural engineering ensures the quality analysis and design for the safety of structures and personnel during the project. CAS's structural engineering design utilizes simple, yet sound [structural elements](#) to build complex building [structural systems](#). CAS will be responsible for making creative and efficient use of funds, structural elements and materials to achieve the goals of the client.



ELR, the civil engineering / landscape architectural component to the team brings critical design performance to the project for all the civil and landscape architectural components. ELR is a diversified civil engineering and planning firm with proven performance and established experience. For 35 years, ELR has built a solid foundation based on consistently surpassing client expectations through the hard work and determination of its talented professionals.



MEI, the mechanical / electrical engineering component to the team brings critical design performance to the project for all the mechanical, electrical and plumbing components. MEI will analyze the building HVAC, electrical, and plumbing loads to determine the facility requirements. MEI will work with the Owner to determine the mechanical, electrical, and plumbing requirements of the facility.



**CAS Structural Engineering, Inc.** – CAS Structural Engineering, Inc. is a West Virginia Certified Disadvantaged Business Enterprise structural engineering firm located in the Charleston, West Virginia area.

Providing any required structural engineering design and/or analysis on a variety of projects throughout the state of West Virginia, CAS Structural Engineering has experience in excess of 25 years on the following types of building and parking structures:

- Governmental Facilities (including Institutional and Educational Facilities)
- Industrial Facilities
- Commercial Facilities

Projects range from new design and construction, additions, renovation, adaptive reuse, repairs and historic preservation (including use of The Secretary of the Interior’s Standards for Rehabilitation) to evaluation studies/reports and analysis.

CAS Structural Engineering utilizes AutoCAD for drawing production and Enercalc and RISA 2D and 3D engineering software programs for design and analysis. Structural systems designed and analyzed have included reinforced concrete, masonry, precast concrete, structural steel, light gauge steel and timber.

Carol A. Stevens, PE is the firm President and will be the individual responsible for, as well as reviewing, the structural engineering design work on every project. Carol has over 25 years of experience in the building structures field, working both here in West Virginia and in the York, Pennsylvania vicinity. Carol is also certified by the Structural Engineering Certification Board for experience in the field of structural engineering.

CAS Structural Engineering, Inc. maintains a professional liability insurance policy.



**CAS Structural Engineering, Inc.**

P.O. Box 469

Alum Creek, West Virginia 25003-0469

(304) 756-2564 (voice) (304) 756-2565 (fax)

E.L. Robinson is a multi-disciplined engineering /planning firm with a staff of over 125 full-time professionals and support personnel located in eight offices throughout West Virginia (Charleston corporate office, Beckley, Bridgeport, and Chapmanville), Kentucky, and Ohio. Over the last 35 years, E.L. Robinson has grown to one of the largest firms in the region, offering a diverse scope of services. Since 1978, E.L. Robinson has provided 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., the firm has based its success on a commitment to quality projects with superior client service. Finding new and creative ways to say yes to challenges has brought the firm’s 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 the firm 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.

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





### Firm Profile

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

*Over the past 13 years Miller Engineering has engineered solutions for over \$17.2M in mechanical system upgrades, repairs, and renovations for projects of all scopes, with clients ranging from private owners to local and state governments.*

*Our team has engineered repairs and stabilized systems to assist an owner to plan for required upgrades, system repair or develop a maintenance plan to extend the life of a system.*

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

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

#### Additional Benefits

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



### Engineering Design and Consultation

- Mechanical
- Electrical
- Plumbing
- HVAC Design
- Renovation
- New Construction

#### Aquatic Facility Design

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

#### Construction Administration

- Maintenance/Facility Improvement Plans
- Contract Administration
- Code Observation

#### Communication System

- Intercomm & Public Address
- Voice/Data/CATV
- Urgent Response

#### Energy

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

#### Facility Utilization

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

#### Life Safety Inspection/Design

- Fire Protection & Alarm Systems
- Access Control
- Fire & Electrical Investigation

#### Industry Experience

- Education
- Local & State Government
- Commercial Development
- Healthcare
- Public Pools (indoor & outdoor)
- Department of Parks & Recreation

## The Miller Engineering Difference



When people ask me what it is exactly we do here at Miller Engineering, I like to explain our craft as “the stuff that makes people’s eyes roll into the back of their heads when we go into detail”. Our work isn’t exciting or pretty – it’s the behind-the-scenes stuff that makes the pretty, exciting facilities functional – but we know we’ve done the job right if nobody knows we were ever there.

I founded Miller Engineering in 2002 when, after 6 years working for West Virginia University and 20 years spent in facilities operation and maintenance, I decided it was time to provide a solution that was different by design. We’re not your typical MEP firm; we ensure our designs meet very specific, time-tested criteria, including but not limited to being constructible, operable and maintainable. It’s an improved process that, in short, helps owners and their staffs effectively operate and maintain their systems. We want to set up our clients to be self-sufficient, but we work to be available every step of the way.

Our hands-on staff takes great pride in their construction and operations backgrounds, which help us see the project as being constructed instead of just lines on paper. We don’t sit clients down and lecture to them about what they’re going to get; we listen to them so we can strive to deliver exactly what they want and need. It costs too much time and money (for both our clients and us) to not deliver exceptional service every single time, and we work tirelessly to keep projects on time and on budget. We’re proud to say that our change order percentage over the last 7 years is less than 0.1%, and that’s not just a statistic; it’s a proclamation of our commitment and determination to make sure things are done right the first time, every time.

I want to personally thank you for reviewing our proposal and giving us the opportunity to learn more about you and earn your business. Miller Engineering would be privileged to add you to our long history of satisfied customers. If you have any questions for me personally, please don’t hesitate to reach out to me at 304-291-2234, [cmiller@millereng.net](mailto:cmiller@millereng.net) or stop by our new office at 240 Scott Avenue Suite 1.

Best regards,



Craig Miller  
President/Owner  
Miller Engineering, Inc.

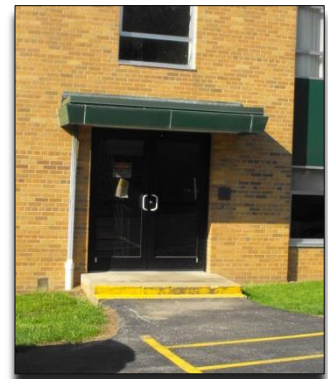
## 2. EXPERIENCE

The Three Designs Team brings together various experience capabilities for the Plan, Design, and provide Construction Administration for the Interior Design and Mechanical – HVAC - Electrical Renovation Project. We have compiled a cohesive team of professionals with extensive architectural and engineering experience to provide WVARNG-CFMO with a balance of personnel suited to the needs of this project.

Project profiles experience on the following pages shows the Principal, Project managers and other personnel's personal experience that have occurred with other firms prior to joining the Three Designs staff.

## WVARNG Headquarters Building

Administration Offices  
Renovations  
2010



Prior to founding Three Designs, Mr. Bolen provided complete architectural design for over 50,000 square feet and construction administration services include a renovation to an existing facility, Coonskin Armory Headquarters Building. The site of the facility is located in Charleston, West Virginia.

Mr. Bolen provided complete selective renovation design and construction administration services. Project elements included a new HVAC System for the entire facility with the loop pipe water source heat pump system. Other project elements included a new acoustical ceilings, flooring, energy-saving light fixtures, duplex outlets, communications jacks, several new wall partitions, exterior door replacements, new interior doors and hardware, new wall finishes and asbestos removal.

The construction was administered while the facility was in operation and after final balancing and adjusting was completed for the WVARNG-CFMO



## Coonskin Park Maintenance Facility Design

New Storage and  
Maintenance Facility  
2014



Prior to founding Three Designs, Mr. Bolen provided complete project architectural design services through bidding for a new pre-engineered metal building facility. The building was designed with a drive through bay, and two drive-in bays to the building. The site of the facility is located in Coonskin Park in Charleston, West Virginia.

This new facility was designed for a 6,000 sq. ft. maintenance / storage facility including, approximately 72 sq. ft. of toilet space for the facility. This addition was delivered to the Park Maintenance and was funded by the WVARNG-CFMO. The facility was designed with future infill consisting of two team shower / toilets / and locker areas for the adjacent soccer field.

The new facility blended into the existing park design aesthetically and integrated this facility with the property and the surrounding gravel parking and access road, which was designed for future paving as a primary requirement of the Park Maintenance. Mr. Bolen led the design team delivered a design program that fully realized the requirements of the WVARNG-CFMO and the Park Maintenance and achieved their project goals.

**Ronceverte Volunteer  
Fire Department /  
Community Center**

New Facility  
1999



Prior to founding Three Designs, This facility was developed as a design/build for the Ronceverte Volunteer Fire Department to replace an aging facility in the flood plain. The prime objective of the project was to construct an integrated facility providing a complete fire department facility and with a full community center on the second floor with a large meeting hall to be utilized for the community in the event of disaster could house approximately 100 people.

The fire department on the lower level is equipped with 5 truck bays, 2 offices, meeting/training room, radio room, equipment storage rooms, emergency generator, and full toilet facilities with showers for the firefighters.

On the upper level, the facility has a large community center, full commercial kitchen, offices, storage rooms, toilets with showers and is equipped for ADA compliance. The facility operates as a community center utilized as a dormitory style disaster relief facility, fund raising events for the fire department, and various events for the community.

The roof pitch is on a 4:12 slope allowing for the height of the facility to be at a lower eave height. Two heights of the finish floor within the truck bays, allowing the larger truck to be accommodated while the smaller vehicles to be stored in the shorter height bays. This controlled the construction cost by adapting to the site while keeping the function of the facility

# Berlin McKinney School Project

Renovations, Doors and  
Windows Replacement  
2010



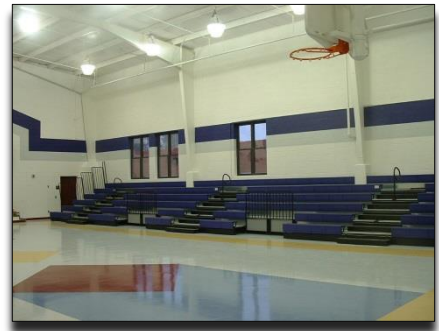
Prior to founding Three Designs, Mr. Bolen was project manager on this school renovation project which was developed as project to repair the school facility for the local community. Mr. Bolen provided complete architectural design and construction administration services include a renovation to an existing concrete block and brick facility, sited on the available property allowing for future expansion needs. The site of the facility is located in Wyoming County, West Virginia.

Mr. Bolen provided complete selective demolition, renovation design and construction administration services include the abatement of hazardous materials of asbestos removal. The facility was designed to house a K-8 classrooms, administrative offices and gymnasium.

The facility required replacement of windows, doors, floor tile, ceiling tile, lighting, and HVAC.

## Daniels School Project

Renovations  
2004



Prior to founding Three Designs, Mr. Bolen was project manager on this facility which was developed as a major demolition / renovation / addition project to repair and expand aging facility for the local community. The prime objective of the project was to demo the aging portions of the facility which could not economically be repaired and to construct and integrate the facility to current standards, providing a complete elementary school facility for nearly 750 students.

The demolition included large portions of the facility while roof steel and bearing walls required support during construction. Demolition required complete removal of toilets, classrooms, office space, and library with roofs, walls, floor slabs, sanitary lines, water system, and power system removed and rerouted for the new layout.

The facility has a large gymnasium, dining room, full commercial kitchen, offices, storage rooms, toilets, classrooms, and library and is equipped for ADA compliance. The facility was refinished with all new ceilings, floors, doors, windows and toilets. The facilities operate as a pre-kindergarten through fifth grade facility for the local community.

The roof pitch is on a low slope allowing for new rooftop HVAC units for the facility to be installed equipping the school with upgraded heating and cooling. This controlled the classrooms with individual control and controlled operational costs. The construction costs were eased by the client purchasing the HVAC equipment and the contractor installing.



## Smithville Elementary Additions and Renovations

Smithville, West Virginia

Existing classroom building was renovated, new entrance and classrooms were constructed. Multipurpose Room was renovated and new kitchen addition was constructed beyond the other.

# LEWIS COUNTY COURTHOUSE INVESTIGATION AND REPAIRS

Weston, West Virginia



This 1887 courthouse is constructed of brick masonry walls with heavy sandstone foundations and wood roof structure. This project involved several phases, including an assessment phase to detail the repair needs for the facility and a construction cost estimate for these repair items.

The bell tower and cupola framing need structural repairs, some of which were completed during the roofing repair phase of this project. Additional structural roof framing repairs have been identified but the design documents have not been developed at this time.



The roof repair work was completed in the fall of 2011. Structural repairs within the bell tower were completed at that time.





## Pocahontas County Wellness Center

Marlinton, West Virginia

The new approximately 13,000 SF Wellness Center was constructed adjacent to the existing Marlinton Elementary School. The facility includes a middle-school size gymnasium and basketball court, two multi-purpose rooms, a racquetball court, a wellness center and a warming kitchen/concession stand. The majority of the structure consists of a pre-engineered metal building, with the entrance being constructed using conventional stick-framed construction.

# STRUCTURAL INVESTIGATION MAIN CAPITOL BUILDING DOME

Charleston, West Virginia



The structural steel in the lantern level shows evidence of deterioration. Project included probing to determine extent of deterioration and preparation of plans and specifications for repairs.



The structural steel after being repaired and the regilding complete. Project included returning the dome to the original Cass Gilbert color scheme.

**AIA New York State Merit Award 2006**





## Logan County Courthouse ADA Upgrades



**CLIENT:**  
Logan County Commission

The Logan County Courthouse did not provide ADA compliant accessibility to handicap persons. ELR worked with the Logan County Commission to develop plans and specifications for a wheel chair ramp on the Stratton Street side of the courthouse. ELR assisted the Logan County Commission in obtaining bids from contractors and provided inspection oversight during construction.

The Logan County Commission purchased an existing two story building in downtown Logan. In order to make the second floor handicap accessible, the LCC needed an elevator installed in the building. ELR performed laser survey of the existing building and designed an elevator and elevator shaft to provide access to the second level. The plans and specifications were used to solicit bids from elevator companies. Logan County maintenance personnel constructed the elevator shaft as designed by E.L. Robinson. The elevator system was completed in 2013.

The Logan County Courthouse did not have any handicap accessible restrooms. The county commission worked with ELR concerning the ADA compliance issues. ELR made site visits and prepared plans of the existing facilities and developed a plan to convert one ground floor restroom to an ADA compliant restroom. ELR prepared plans and specifications for the modifications. The restroom currently serves the handicap visitors to the courthouse.



## Williamson City Hall Exterior Updates



**CLIENT:**

City of Williamson

**COMPLETION DATE:**

2012

**PROJECT COST:**

\$60,000

**OUR ROLE:**

Structural Design

ELR was contracted to provide the exterior updates to the Williamson City Hall allowing it to become ADA compliant. By providing the three main entrances to the building with handicap accessible ramps, repairing several sections of sidewalk and developing adequate handicap parking for the structure the city hall will then meet ADA standard.

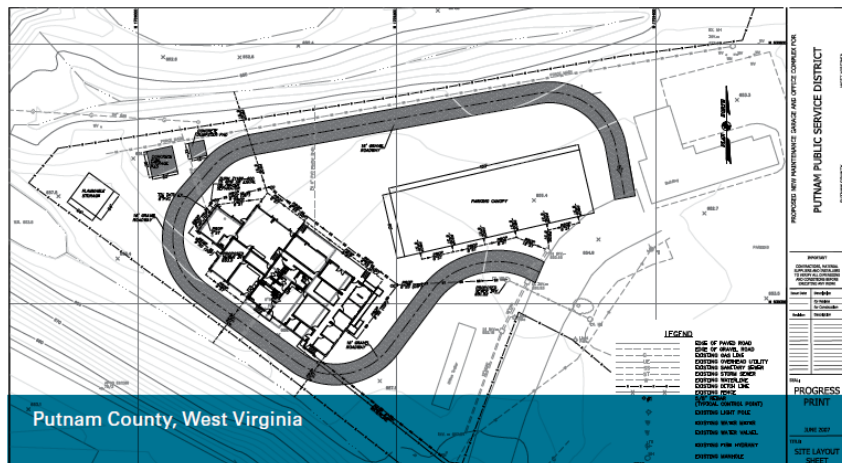
The improvements to the three main entrances provide an open 3' handicap ramp along with the adequate 5' wide platform at the top of each ramp. A railing is provided on each side for safety and follows the guidelines set by the Department of Justice.

New sections on sidewalk are to be replaced, fixing issues such as cracking and weathered deterioration that has taken place over time. Also this will correct any uneven pavement and provide the correct 2% cross slope for proper rain water drainage.

Also three handicap parking spaces will be added to the current lot along with the appropriate curb ramps to provide easy access to the sidewalk. The parking lot is currently an uneven pavement of brick that will be corrected with asphalt to allow for an even surface.



## Putnam PSD Maintenance Facility



**CLIENT:**  
Putnam PSD

**COMPLETION DATE:**  
2009

**PROJECT COST:**  
\$1.5 Million

**OUR ROLE:**  
Design Engineer, Inspection, Review 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.



### Putnam 911 Command Center and EMS Garage



Putnam County, West Virginia

**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.



## Mason County 911 Center



**CLIENT:**

Mason County Commission

**COMPLETION DATE:**

2008

**PROJECT COST:**

\$1.7 Million

**OUR ROLE:**

Environmental assessment, topography survey 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 field visitations as necessary to complete preliminary site/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.



## Project Experience: Renovation

### Berkeley Springs Bathhouse

#### Services Provided:

- Mechanical, Electrical, Plumbing
- Coordinate with Architect to Ensure ADA Compliance

**Estimated Budget: \$2.1M**

**Facility Area: 9,000 ft<sup>2</sup>**

**Owner: West Virginia**

**Department of Natural Resources**



The heated 1000-gallon per minute flow of 78.4 degree, mineral-laden water is used by spa guests prior to other activities via tubs or large Roman baths. The existing structure was lacking in proper ventilation and dehumidification systems. The goal of the MEP system design was to provide reliable, cost-effective, energy efficient systems that would enhance clients' spa experiences and protect the historic nature of the structure. The successful renovation entailed replacement of all MEP systems and their associated piping. With a need for hot water supply that is exceptionally large, it required a split into two systems: domestic (2,000 GPH) and Roman Bath water (3,000 GPH) units to fulfill demand requirements. A full VAV-HVAC system with terminal reheat and comfort radiant heating was installed over the client tubs and massage tables to produce optimal atmospheric temperatures. Upon completion, goals of proper ventilation and humidity conditions were met.

Project Contact:

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

## Project Experience: Locker Room Renovation

### Pipestem Plaza

**Services Provided:**

- Mechanical, Electrical, Plumbing
- HVAC
- Accommodation of Existing Systems

**Estimated Budget: \$2.2M**

**Facility Area: 63,000 ft<sup>2</sup>**

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



The Pipestem lodge has an outdoor plaza which is above the pool locker rooms and support areas.

The plaza concrete deck system has failed, allowing water to damage the structure and the spaces below. The team’s goal is to replace the plaza and structure and rebuild the locker rooms with all the associated mechanical systems.

Challenges include designing maintainable systems and “opening up” the building for 3-4 months to perform the work. The pool heating and air conditioning system has effectively failed and falls within the footprint of the project. Our mandate includes improving the system and modernizing the pool environment to meet current standards. In addition, the mechanical systems design has to be coordinated with a building-wide piping replacement project already in progress. This coordination ensures the new mechanical systems will “plug in” to the revised building piping.

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

## Project Experience: Development and Design

### Beech Fork State Park Lodge

#### Services Provided:

- Mechanical
- Electrical
- Plumbing
- Cost Estimation
- Phased Plan for Pools

**Estimated Budget: \$20M**

**Facility Area: 74,000 ft<sup>2</sup>**

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



Currently, the West Virginia Department of Natural Resources has engaged our team's services for design and development of a new, multi-million dollar lodge in the southern region of the state. Miller Engineering is providing all of the mechanical, electrical and plumbing design and pool design for the Beech Fork State Park. This project includes coordination with ZMM Architects, EL Robinson, the West Virginia Department of Environmental Protection, the West Virginia Division of Highways and the US Army Corps of Engineers. Development and design for guest, conference and public recreational areas, as well as commercial kitchen space, fire safety and public safety lighting are key elements of the project.

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



## Project Experience: Beach and Bathhouse

### Tygart Lake State Park

#### Services Provided:

- Mechanical
- Electrical
- Plumbing
- Commercial Kitchen Update
- Construction Administration

**Estimated Budget: \$995k**

**Facility Area: 4 acres**

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



Previously the beach area was nothing more than a concrete slab prone to algae infestation creating a slip hazard. Paths and recreation areas were ill-defined, lacking clear flow or direction and did not contribute to natural surroundings. After a site review, an overall plan was developed by Miller Engineering and is now a successfully completed project. The State Park is a popular recreation destination for Morgantown area residents. The beach area and access, volleyball, horse shoe, grilling and bath house were all renovated. The kitchen received code compliant updates and additional electric capacity to add a concession stand in the future.

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

### THREE DESIGNS' TEAM

The Three Designs Team brings together outstanding capabilities to meet and exceed the requirements for the Marshall County Readiness Center's Project. We have compiled a team of professionals with extensive architectural and engineering experience to provide the Interior Design and Mechanical – HVAC - Electrical Renovation Project with a cohesive balance of personnel suited to the needs of this project.

The qualifications and experience of our key team members will provide for a professional, dynamic mix - well suited to meet and exceed the Project's needs. A resume for key members of the Three Designs' Team is included on the following pages.

**WVARNG-CFMO**  
**Marshall County Readiness Center - Interior Design and Mechanical – HVAC - Electrical Renovation**

**THREE DESIGNS**

Ron L. Bolen, AIA  
 Principal in Charge / Architect

Caterina McFadden, AIA Assoc.  
 Project Manager / Intern Architect

Aaron L. Bolen  
 Graphics / CAD Manager

Laura Cox, PLA, ASLA, LEED GA  
 Landscape Architect / Planner



Carol A. Stevens, PE, TASCE., SECB  
 President / Structural Engineer




Jeff Nelsen, PLA  
 Landscape Architect

Eric Coberly, PE  
 Project Engineer

Timothy Cart, PE, PS  
 Project Engineer

James Yost  
 Land Planner



B. Craig Miller, PE, LEED AP  
 President / Principal Engineer

Travis Taylor, PE  
 Staff Engineer

Jack Jamison  
 Code Professional

Joseph Machnik  
 MEP Designer

Robert Angus  
 Construction Project Representative

<b>Office Location:</b>	Charleston, WV
<b>Experience:</b>	43 years
<b>Education:</b>	B.S. Architectural Design, Parkersburg Community College / WVU Ext., 1980
<b>Registration:</b>	Registered Architect, No. 3135, West Virginia, 1999 American Institute of Architects (AIA) LEED, AP (USGBC) -LEED® Accredited Professional, BD+C, 2012

### **General Qualifications**

Mr. Bolen brings over 40 years of design and project coordination experience to the project. Mr. Bolen insists on listening to the client's needs and bringing those desires to reality in a distinctive, functional and state of the art facility – on time and within budget. Project types include a multitude of small and large-scale designs, including office, fire-stations and multipurpose facilities, augmented by varied experience in a wide range of opportunities in renovation and new facility design. Truly innovative designs are based on a well-articulated program developed in a close and continuing interaction between the client and the design team.

While at Three Designs, Mr. Bolen has focused most of his time on design and coordination with clients while maintaining a close relationship with the design team. Increasingly, Mr. Bolen's facilities have become the result of collaborative problem solving with other design professionals and our clients. The results are design solutions that balance interests, intentions and objectives with concepts that reflect quality, integrity and aesthetic appeal.

### **Relevant Experience**

#### **Local Area Community Center -**

Mr. Bolen is currently providing Programming services for a local entrepreneur / community developer for a local Community Center with various needs, including Classrooms and Laboratories for Science, Technology, Engineering and Math Training Center, Pre-school classrooms, Art Center, various rental shops, office spaces and auxiliary spaces.

#### **Coonskin Park Maintenance / Storage Facility – Charleston, WV**

As Project Manager, Mr. Bolen provided Architectural Services from pre-design through all phases of document preparation, consultant coordination, client relations, and into construction administration. This new facility of a pre-engineered metal building complex included maintenance / storage bays and an ADA accessible restroom. A layout was also designed for the future two team shower / toilets / locker rooms for the adjacent soccer field.

**WVARNG Headquarters Facility Renovation– Charleston, WV**

Mr. Bolen provided a complete design and construction administration services for architectural improvements of the first floor of the Office of the Adjutant General (TAG), and to provide MEP and HVAC design improvements for the entire TAG Wing, Headquarters Building, and Armory / Drill Floor. Mr. Bolen performed complete planning, design, and construction management services for renovations to the Office of the Adjutant General at the State Army National Guard Headquarters in Charleston, West Virginia. Project elements included new acoustical ceilings, flooring, energy-saving light fixtures, duplex outlets, communications jacks, several new wall partitions, exterior door replacements, new interior doors and hardware, new wall finishes and asbestos removal. Mr. Bolen provided Construction Administration and inspection services as well as periodic site review during construction.

**Little Kanawha Bus Facility, Mt. Zion, West Virginia**

Mr. Bolen was responsible in providing a complete architectural design and detailed construction administration services include the construction of a pre-engineered metal and brick construction, sited on the available property allowing for future expansion needs. Mr. Bolen provided architectural and construction-phase support for a new, 10,000-square foot, pre-engineered, metal and brick bus maintenance and transit operations facility. The 4,500-square-foot administrative area will include offices, a conference room, a money-counting room, and a driver-training room, and the 5,500-square-foot bus maintenance area will include storage for seven buses. The facility will be ADA-compliant and is being designed to achieve a high degree of energy efficiency. Services include site survey and design, geotechnical testing, environmental compliance, utility coordination, bid documents, bid-phase support, and as-built drawings.

**Berlin McKinney Elementary School Renovation, Wyoming County, West Virginia**

Mr. Bolen provided Project Manager Services from pre-design through all phases of document preparation, consultant coordination, client relations, and construction administration. This major renovation design repaired classrooms, toilets and auxiliary spaces for an existing school which was flooded and provided the project within the required state guidelines.

**Daniels Elementary School Addition / Renovation, Daniels, West Virginia**

Mr. Bolen provided Project Manager Services from pre-design through all phases of document preparation, consultant coordination, client relations, and construction administration. This major renovation / addition design replaced two existing schools within the required state guidelines, and the project was funded by the School Building Authority.

**Vocational Tech. Renovation / Addition – Raleigh County Board of Education**

He provided Project Manager services from pre-design through all phases of document preparation, consultant coordination, and client relations. This addition / renovation design provided four shops, two classroom and toilets within the required state guidelines.

**Ronceverte Vol. Fire Station & Community Center**

As Principal / Project Manager, Mr. Bolen provided services from pre-design through all phases of document preparation, consultant coordination, client relations, and construction administration. The design replaced an existing fire station. The facility was designed with five truck bays, office spaces, and conference hall, large meeting hall, toilets, and kitchen facilities and equipped with facilities for community flood relief. The facility is equipped to house approximately 75 people with full kitchen facilities, restroom / showers, and housing in the event of a natural disaster in the community.

**Lincoln County Courthouse Annex**

Prior to founding Three Designs, Mr. Bolen provided responsibilities which included are Architectural support during construction, cost estimating for future phases of the over all project, Architectural design for rehabilitating the existing Historical Train Depot. The Town of Lost Creek required the planning and design of the rehabilitation of a historic train depot adjacent to the Harrison County Rail Trail. Ron prepared a plan to raise the structure, make repairs to the deteriorated timber, excavate and repair the exterior of the facility, including providing a new deck platform.

**Sam Perdue Juvenile Detention Center, Princeton, West Virginia.**

Mr. Bolen provided design, bidding and construction administration services during the renovation and expansion of the South Regional Juvenile Detention Center. Responsibilities included site visits, periodic project walk through, documentation of contractor progress, and approving contractor billings.

**Lorrie Yeager Juvenile Detention Center, Parkersburg, West Virginia.**

Mr. Bolen provided design and construction administration services during the renovation and expansion of the North Central Juvenile Detention Center. Responsibilities included site visits, periodic project walk through, documentation of contractor progress, and approving contractor billings.

**Cheat Lake Elementary and Middle School, Monongahela County , West Virginia**

Mr. Bolen was Project Job Captain through Pre Design and all phases of Document Preparation, Consultant Coordination, and Client Relations. Design for a major addition / renovation to the existing facility to replace four existing schools with new facility within the required state guidelines. The two schools shared the dining / kitchen facilities.

**Office Location:** Charleston, WV  
**Experience:** 10 years  
**Education:** M. Arch. Architecture - Virginia Tech  
B. A. Architectural Design - William Smith College  
**Registration:** Associate AIA - NCARB IDP

**General Qualifications**

Ms. McFadden provides diverse experiences executing projects, ranging from both new constructions to adaptive reuse, demonstrating a level of professionalism and the expertise to handle your complex project needs. Ms. McFadden understands the value of collaborating with clients and occupants; to assess spatial needs, design goals and stay in the budget. Having extensive training and education in architecture, she consistently exhibits a proficient level of quality, value, and knowledgeable design solutions that ensure the health, safety, and welfare of our clients.

Familiar scope of works include detailed feasibility studies, master planning, new construction, renovations to existing construction, tenant renovations, adaptive reuse, historic preservation and historic renovation, investigative reports and promotional drawings and renderings for a wide range of project types, commercial, institutional, residential, religious and recreational.

Ms. McFadden values the process of collaboration in design. Working successfully with everyone involved, ensures the end result is completed to the highest level of standards. Across the boards, she devotes the same level of attention and service to each and every project.

**Relevant Experience**

**Harrison County E911 - Harrison County, WV**

As Assistant Project Manager, Ms. McFadden provided architectural services from pre-design research through all phases of consultant coordination and document preparation. The architectural program included analysis of an emergency facility per IBC 2012, NFPA 72, 110, 297, and 450 and WV State codes and municipal codes. The Emergency Building featured a communication center, and was structurally innovative with a second floor building within a building construction, a blast resistant wall envelope, and raised panel access flooring, a multi-system security, emergency and standby power systems and back up mechanical systems.

The building contained classrooms, training facilities, multiple ADA restrooms, elevator tower, secure entry access points, card readers, and security cameras. As a secure Emergency facility housing a communication center, much of the construction was rated, to prevent any intruders from causing harm to the center. Care was taken in detailing the three stall garage, which would house different sized emergency vehicles, and need to be accessed quickly by emergency personnel but yet needed to be connected to the facility in the most secure way possible.

**Doddridge Controls, Fairmont WV**

As Project designer, Ms. McFadden provided architectural services from pre-design through document preparation, consultant coordination, client relations, and into construction documentation for the layout of the office space within this warehouse building, Formerly SM Kisner & Sons Sheet Metal Work Company. The building was purchased by W. Heimbuch for his expanding fabrication and IT company founded in West Union W.V. Most of the fourth story building was converted into a shop for the company's fabrication needs, prior to design. McFadden was careful to document the character of the building, including historical window detailing and structural components. Demolition and restoration was taken to preserve beautiful historic flooring and new high performance windows were specified that both preserved the character of the original building, and yet, provide a fully functional new use, and further helped the efficiency of the new mechanical system. The architectural layout included creating several office spaces, a conference room, two ADA compliant restrooms, multiple storage spaces and a kitchenette.

**Sourcefire, Columbia MD and Vienna VA**

(purchased by CISCO in 2013)

As Project Architect, Ms. McFadden provided architectural services from pre-design and space planning, through all phases of document preparation, bidding procedures and construction administration. This project had unique challenges as a high performance, government contracted internet security company, using open source intrusion detection services, and as a result, the design including details for secure rooms, electrical back-up supply, generator back-up, mechanical back-up to protect the valuable and sensitive data, and various security measures to ensure any breach of data was prevented. Both tenant outfits were in multi - use buildings, and both required minimum penetrations created to the exterior brick support walls, for adequate sized penetrations for ductwork and electrical components that were required of this type of work. An additional challenge to this project included satisfying both the building owner's specifications and approval with the SourceFire brands requirements. The architectural program included a total of 23 individual office spaces, a large open office for over 20 employees with open cubicle layout attached to power/data poles, multiple ADA and code compliant bathrooms based on occupancy and multiple secure rooms accessed by card reader and other high security protocol.



**Office Location:** Charleston, WV  
**Experience:** 20 years  
**Education:** 2003, Concord College  
**Registration:** American Institute of Architects (AIA Allied Member)

### General Qualifications

Mr. Bolen has spent the last ten years working to develop the graphic design development and to implement the drawing development for projects. Since 1994, he has been responsible for overseeing and auditing many aspects of graphic design for Three Designs' projects. For building projects, he ensures that all graphic design features have been incorporated in order to meet the appropriate levels of the owner's requirements. Project types include: University, Administrative offices, Vehicle Maintenance Facilities, Interior spaces, Churches, Equipment Layouts and Storage Buildings.

As a designer, he has been able to solve visual / communication problems or challenges. In doing so, he has identified the communications issue, gathered and analyzed information related to the issue, and generated potential approaches aimed at solving the problem. As a graphic designer, he understands the social and cultural norms of the audience and develops visual solutions that are perceived as relevant, understandable and effective.

Mr. Bolen has a thorough understanding of production and rendering methods. Some of the technologies and methods of production are drawing, offset printing, photography, and time-based and interactive media (film, video, computer multimedia). Frequently, as a designer, he is called upon to manage color in different medias.

### Relevant Experience

#### Good News Mountaineer Garage, Charleston, West Virginia

Graphic Design Manager. Responsible for the 3D graphic representations of the proposed Auto Repair garage and administrative office facility for this non-profit organization. The Good News Mountaineer Garage graphic three dimensional image representations assisted the client in fund raising and visualization of the finished product.

#### WVU - P, Parkersburg, West Virginia

Graphic Design Manager. Responsible for the 3D graphic representations of the proposed maintenance and office facility for the WVU branch at Parkersburg. The graphic three dimensional image representations assisted the client in visualization of the finished product.

**WVSU, Institute, West Virginia**

Graphic Design Manager. Responsible for the 3D graphic representations of the proposed maintenance, classroom, laboratories and office facility for the WVSU at Institute. The graphic three dimensional image representations assisted the client in visualization of the finished product.

**Lincoln County Annex, Hamlin, West Virginia**

Graphic Design Manager. Responsible for the graphic three dimensional image representations of the proposed office facility and maintenance facility for the Lincoln County Commission at Hamlin. The graphic representations assisted the client and the contractors in visualization of the finished product.

**Little Kanawha Bus Maintenance Facility, Mt. Zion, West Virginia**

Graphic Design Manager. Responsible for the graphic three dimensional image representations of the proposed office facility and maintenance facility for the Little Kanawha Bus at Mt. Zion. The graphic three dimensional image representations assisted the client and the contractors in visualization of the finished product.

**Church of God Youth Center Annex, Princeton, West Virginia**

Graphic Design Manager. Responsible for the graphic three dimensional image representations of the proposed Youth Center facility for the COG at Princeton. The graphic three dimensional image representations assisted the client and the contractors in visualization of the finished product.

**Office Location:** Charleston, WV  
**Experience:** 34 years  
**Education:** B.S., 1978, Landscape Architecture, West Virginia University  
Certificate, 1995, Computer Aided Drafting, Putnam County Technical Ctr  
**Registration:** Landscape Architect, Virginia, 1987  
NICET III Transportation-Highway Construction, West Virginia, 1983  
Registered Landscape Architect, West Virginia, 2008  
Licensed Landscape Architect, New Jersey, 2010  
LEED Green Associate, 2010

### **General Qualifications**

Ms. Cox is a Registered Landscape Architect with over 30 years of experience in the fields of landscape architecture and land planning. She has knowledge of all phases of design from site analysis and conceptual planning through construction documentation, permitting and administration. Her design experience includes large scale site preparation and grading, drainage analysis, storm water conveyance and detention, and utility and infrastructure design.

Ms. Cox has an extensive background in site and land use planning for counties and municipalities including, feasibility studies, review and evaluation of preliminary and final subdivision plans, special exceptions, rezoning applications, yield studies, special use permits and client representation at public hearings and meetings with civic groups.

### **Relevant Experience**

#### **Campus Master Planning Services for State Capitol Complex**

Prior to working with Three Designs, Ms. Cox provided Landscape Architect responsibilities including assisting in various phases of the Master Planning effort including site analysis, design recommendations, and coordination of graphics for publication. Master planning services included plans for expansion, location of new buildings, pedestrian and traffic circulation, landscaping, utilities, and site security. Responsibilities include assisting in various phases of the Master Planning effort including site analysis, design recommendations, and coordination of graphics for publication. Master planning services included location of new buildings, pedestrian and traffic circulation, landscaping, utilities, and site security.

#### **Parsons City-Wide Comprehensive Parks and Recreation Master Plan**

Prior to working with Three Designs, Ms. Cox provided services as Project Planner for Parsons Parks Board.

#### **Erma Byrd Center, Beaver, Raleigh County, West Virginia**

Prior to working with Three Designs, Ms. Cox provided Project Landscape Architect services.



# Carol A. Stevens, P.E.

## Structural Engineer

### EDUCATION

West Virginia University, BSCE, 1984  
Chi Epsilon National Civil Engineering Honorary  
The Pennsylvania State University, ME Eng Sci, 1989

### PROFESSIONAL REGISTRATION

P.E.	1990	Pennsylvania
P.E.	1991	West Virginia
P.E.	1994	Maryland
P.E.	2008	Ohio

### BACKGROUND SUMMARY

2001 – Present	President, Structural Engineer CAS Structural Engineering, Inc.
1999 – 2001	Structural Engineer Clingenpeel/McBrayer & Assoc, Inc.
1996 – 1999	Transportation Department Manager Structural Engineer Chapman Technical Group, Inc.
1995 – 1996	Structural Engineer Alpha Associates, Inc.
1988 – 1995	Structural Department Manager Structural Engineer NuTec Design Associates, Inc.
1982 – 1988	Engineer AAI Corporation, Inc.

### PROFESSIONAL ASSOCIATIONS

American Society of Civil Engineers  
National Society of Professional Engineers  
American Concrete Institute  
American Institute of Steel Construction  
West Virginia University Department of Civil and Environmental Engineering Advisory Committee  
WVUIT Department of Civil Engineering Advisory Committee

### CIVIC INVOLVEMENT

ASCE Christmas in April Project  
Engineer’s Week Speaker

### EXPERIENCE

**West Virginia, State Capitol Complex, Governor’s Mansion:** Structural analysis and design in addition to evaluation report for modifications and renovations to several areas of mansion. Building is on State Historic Register.

**West Virginia, State Capitol Complex, Main Capitol Building Dome:** Exploratory investigation of structural steel components of Lantern Level of dome and development of contract documents for repairs. Construction is currently under contract. Building is on State Historic Register.

**West Virginia, State Capitol Complex, Building 3:** Structural design and construction administration of repairs to limestone canopy.

**West Virginia, State Capitol Complex, Main Capitol Building Parapet:** Exploratory investigation of limestone/brick parapet/balustrade of Main Capitol Building to determine cause of movement/cracking/leaks.

**West Virginia, Spruce River Volunteer Fire Department, Boone County:** Structural design of additions and renovations to existing volunteer fire department.

**West Virginia, Kanawha County Schools:** Structural design of additions to George Washington, Sissonville, Herbert Hoover, South Charleston and Nitro High Schools.

**West Virginia, Hampshire County Courthouse Elevator:** Designed structure for incorporation of elevator into existing courthouse building.

**West Virginia, Upshur County Courthouse:** Designed renovations to 3-story building addition, renovations to existing 1899 building main entrance and dome structure.

**West Virginia, Eastern West Virginia Regional Airport:** Designed foundations and structural steel framing for new 2-story terminal building.

**West Virginia, Star USA Federal Credit Union:** Designed foundations and roof framing for new one-story commercial building.

**West Virginia, Mt. Calvary Baptist Church:** Designed foundations and floor framing for new activities building.

PO Box 469 • Alum Creek, WV 25003-0469 **PHONE** 304-756-2564 **FAX** 304-756-2565 **WEB** [www.casstruceng.com](http://www.casstruceng.com)

PROVIDING STRUCTURAL ENGINEERING SOLUTIONS FOR YESTERDAY, TODAY AND TOMORROW  
COMMERCIAL, GOVERNMENTAL AND INDUSTRIAL STRUCTURAL DESIGN, ANALYSIS AND RESTORATION  
A WEST VIRGINIA CERTIFIED DBE CONSULTANT • CERTIFIED IN THE PRACTICE OF STRUCTURAL ENGINEERING

**WV VA KY OH MO PA**



## **PREVIOUS EXPERIENCE**

**West Virginia, State Capitol Building:** Designed structural system to replace deteriorated reinforced concrete slab at landing on north side of Capitol steps.

**West Virginia, Johnson Ave Professional Building:** Structural design of new 9,400 SF steel framed office building.

**West Virginia, Covenant House:** Structural design of new 3-story, 13,700 SF steel frame and light-gauge steel roof truss building.

**West Virginia, Sissonville Library:** Structural design of new 7,000 SF branch library. Structure consisted of wood framing.

**West Virginia, Cabell Huntington Hospital Boiler Mezzanine:** Structural analysis and testing of existing reinforced concrete mezzanine with significant degradation from brine tank leakage. Developed new structural system to replace existing concrete mezzanine utilizing steel framing and steel grating.

**West Virginia, North Fork Hughes River Water Treatment Plant:** Designed reinforced concrete structure for new water treatment facility.

**West Virginia, Beckley Wastewater Treatment Plant:** Designed reinforced concrete tanks and masonry support structures for new wastewater treatment plant.

**West Virginia, Morgantown High School Additions:** Designed steel framing and foundations for science classroom, cafeteria and gymnasium additions to existing education complex.

**West Virginia, Grafton High School Addition:** Designed steel framing and foundations for new science classroom addition to existing high school.

**Pennsylvania, Metropolitan Edison Company, Headquarters:** New 80,000 SF two-story office addition to existing complex.

**Pennsylvania, York County Government Center:** Structural analysis and design of 1898 former department store converted to county government offices. Interior renovations included adding floor framing at mezzanine level, analyzing and redesigning deficient floor framing, and adding new elevators. Exterior renovations included complete façade rework to recreate original appearance.

**Pennsylvania, Defense Distribution Region East:** Structural engineering and design for a 33,000 SF Hazardous Materials Storage Warehouse.

**Maryland, U.S. Army Corps of Engineers, Baltimore District, Administration Building:** Seismic design of new 10,000 SF masonry building.

**Pennsylvania, Carlisle Syntec:** Design of foundation supports for 800,000 lb rubber vulcanizing machine; enlargement of foreman's office including new framing to support mechanical equipment on roof; new monorail installation; extension of existing gantry rail.

**Pennsylvania, Engel Worldwide:** Steel framing and foundations for new 12,000 SF two-story office building; design of crane beams and columns for adjacent 60,000 SF crane building.

**Pennsylvania, AMP IMF:** Structural design for the renovation and conversion of a stamping facility into an integrated manufacturing facility (IMF) housing operations for stamping as well as blow molding processes.

**Texas, York International:** Structural survey of existing building structure for modifications to incorporate large testing and manufacturing areas for mechanical equipment.

**Maryland, Columbia 100:** Design of structural steel framing for new two-story 43,000 SF office building.

**Pennsylvania, York Federal Savings and Loan Association/New Service Corporation:** Design of steel framing, reinforced concrete retaining wall and foundations for new 14,400 SF two-story office building.

**Pennsylvania, Yorktowne Parking Garage:** Study of reinforced concrete/steel framed parking garage.

**Pennsylvania, Blakey Yost Bupp & Schaumann:** Re-construction of a 3-story 10,200 SF, fire damaged urban building and conversion into law offices.

**Pennsylvania, Queensgate Theaters:** Structural analysis of existing mall area for conversion to movie theaters.

**Pennsylvania, College Misericordia:** Structural design of new 50,000 SF student resident hall utilizing precast concrete planks and masonry bearing walls.

**Pennsylvania, Homewood Suites:** Structural and foundation design for new two-story hotel.

**Pennsylvania, Comfort Inn:** Structural and foundation design of new 5-story hotel.

**Pennsylvania, Glatfelter Insurance:** Design of steel framing and foundations for new 30,200 SF building.

## Education

Bachelor of Science in Landscape Architecture  
West Virginia University, 1976

## Registrations

Professional Landscape Architect in West Virginia, Indiana, Kentucky, Ohio, Maryland, and Virginia

## Professional Experience

Mr. Nelsen has practiced landscape architecture for over 38 years principally in West Virginia but also has completed projects in Ohio, Indiana and Pennsylvania. His professional experience has afforded him opportunities to assist clients with park and recreation planning and design, community and urban planning, streetscape design, campus planning for elementary, secondary and higher education facilities and site planning and design for residential, commercial and public places. He has been involved in environmental planning and restoration especially lands degraded from past mining practices. He has managed site development on significant projects such as the Stonewall Jackson Resort and the Tamarack Art Center yet enjoys working with clients and communities assisting them visualize the improvements for their parcels and neighborhoods.

## Representative Projects

**Clay Center for the Arts and Sciences, Charleston, WV:** Prepared construction and bidding documents and provided construction administration for a new public plaza space at the corner of Leon Sullivan Way and Washington Street for Charleston's premier performing arts and science center. The site's design called creating a cool green zone for people to gather informally and as an entertainment venue for special events. The relative flat site consisted of a circular plaza and fountain surrounded by a concentric ring of granite seat walls at the edge of the pavement radiating outward into the lawn area. Large 4" and 6" caliper Linden and Honeylocust trees were planted to create a shaded canopy for the space in front of the center.

**Washington Street Streetscape, Charleston's East End, WV:** Prepared master plan, construction and bidding documents and provided construction administration services for the remaining segment of the Washington Street streetscape from the state Capitol grounds to Charleston Area Medical Center which entailed a ½ mile of sidewalk replacement, new street lighting, brick accent pavements, street trees, landscaping, utility line relocation and burial and new underground electrical service for 30 structures. Total budget for the project was approximately two million dollars.

## **Rich Mountain, Laurel Hill and Corrick's Ford Civil War Battlefields, Randolph, Barbour and Tucker Counties, WV:**

These are three distinct battlefields but are all related to each other because they are a progression of the first major conflict in northwestern Virginia in July, 1861 between approximately 9000 Union soldiers led by General George McClellan and 5000 Confederate troops led by General Robert Garnett. The armies engaged each other at these three locations over a week's time resulting in the defeat of the Confederate forces. This early Union victory allowed Union sympathizers in the western counties of Virginia to organize a secessionist movement to form the new state of West Virginia. Services included providing master planning, interpretation recommendations, signage and trail development for each of these sites with archeological and historical consultants on the team. The planning and design efforts of these new public lands were focused on preservation and interpretation of each site's story about West Virginia's role in the Civil War.



**Tamarack Art Center, Beckley, WV:** Working with the architect for the project prepared the site master plan and managed design for all exterior improvements including access road, bus and car parking, earthwork, stormwater management, utility design, pedestrian walkways and plaza spaces, fountain design, landscaping, and irrigation design. This \$20 million facility is widely recognized in West Virginia and surrounding states as one of the finest venues for West Virginia artisans.

**Stonewall Jackson Resort, Roanoke, WV:** In the most recent major expansion of a West Virginia State Park, assisted the developer in an unique public private partnership to build new facilities at the park which included master planning for a lodge, golf course, expanded campgrounds, cabins, expanded day use facilities, trails and other site features. Prepared documents for regulatory review by the USACOE, WVDEP, and WVDNR. Managed the development of site preparation construction documents for the lodge, golf clubhouse, cabin area, and future campground areas. Assisted the golf course design team with storm water management and permitting issues. After the completion of new facilities have continued to assist the developer on future proposed amenities for the resort.

**BOPARC Master Plan Update, Morgantown, WV:** Due to the significant growth in Morgantown, assisted the Morgantown Board of Park and Recreation Commission with an update of the existing and proposed park facilities maintained by the City of Morgantown. This involved site review of approximately 20 facilities, development of a needs analysis survey and interpretation of its findings, preparation of new master plans for each park, preparation of cost opinions and phased recommendations for the planned \$12 million of improvements.

**Aspen Village, Timberline Resort, Canaan Valley, WV:** Provided master planning and managed site design, permitting and engineering for a new 50 lot subdivision near Timberline. The development involved grading layout for lots, roads, drives, utilities, pond enlargement, and site amenities. Project entailed 30 duplex and triples units and 20 single family lots. Coordinated utility extensions with each respective company and assisted several of the property owners with site planning of their home sites.

**West Side Community Renewal Plan, Charleston, WV:** Working with the Charleston Urban Renewal Authority, Charleston Planning Department and community leaders on the West Side developed the largest urban renewal plan within the city encompassing 228 acres and almost 900 buildings. With assistance of a public facilitation consultant held a series of meetings with residents and business owners to gain input into their vision for the plan. The adopted recommendations identified significant public and private recommendations with the strongest focus on a new home ownership zone around the new elementary school planned on Florida Street.

**Beech Fork State Park Lodge Development, Lavalette, WV:** Provided feasibility studies of three different sites for new lodge for the state park beginning in 2008 through 2011. Working with WVDNR and the architectural firm ZMM of Charleston to develop a conceptual plan for the lodge and site improvements for a 75 room lodge near the lake's beach area with a total construction cost of approximately \$29 million.



### **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, specifically in mining, site development, water and wastewater projects.

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 the operations of the Abandoned Mine Lands Office. This program is responsible for reclaiming lands damaged due to coal mining that occurred prior to 1977. The Office investigates, plans, designs, bids and oversees construction projects reclaiming these abandoned mines. The budget for the Office is approximately \$66 Million with a staff of nearly 60 employees.

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.

### **Representative Projects**

Project Manager on over 80 West Virginia Department of Environmental Protection Abandoned Mine Lands reclamation projects

Glen Rogers waterline replacement Project: Project Manager responsible for design and construction oversight of waterline replacement project.

Lavalette PSD Route 52 Waterline Extension Project: Project Manager responsible for design and construction oversight of \$5 Million waterline extension project.

Mingo County Redevelopment Wood and Belo Industrial Parks: Project Manager responsible for design and construction oversight of \$4.5 million site development project that involved over 2 million cubic yards of earthwork and infrastructure development of over 120 acres.

Williamson DHHR Facility: Project Manager responsible for design and construction oversight of \$2.5 million office facility. Project included the geotechnical analysis, foundation design, site grading, water, sewer and storm water design for the facility.





Mason County 911 Facility: Project Manager responsible for design and construction oversight of \$1.5 million office facility. Project included the geotechnical analysis, foundation design, site grading, water, sewer and storm water design for the facility.

Flatwoods Canoe Run PSD - Exchange Road Waterline Extension Project Phase I: Project Manager responsible for the design of a \$3 million waterline extension project.

Norton Harding Jimtown PSD - Scott Road/Findley Orad Waterline Extension Project: Project Manager responsible for design of \$1.2 million waterline extension project.

Putnam Development Authority - Business Park Utility Extension Phase II: Project Manager responsible for design of \$1 million multiple utility extension.

Wayne County 2010 Plan - Project Manager responsible for the development and implementation of a county wide plan for waterline extensions.

Additionally, Mr. Coberly was the initial Project Manager through funding on several projects including Lavalette Route 37, Crum PSD Route 152, Dingess Phase I, Twin Branch Racetrack and Holden Water Project.



### **Education**

B.S. Civil Engineering, West Virginia University, 1981

### **Registrations**

Registered Professional Engineer in West Virginia and Ohio  
Registered Professional Surveyor in West Virginia

### **Professional Memberships**

American Society of Civil Engineers

### **Professional Experience**

Mr. Cart has over 25 years of experience in providing consulting engineering services. Clients served have included Industrial, Public and Private Institutions and State and Federal Agencies.

Mr. Cart has served as Project Engineer on numerous geotechnical investigations over the years. These projects have included highways, bridges, industrial sites and private development.

Mr. Cart has been involved in numerous projects where demolition of an existing structure was deemed the best way to alleviate dangers to the public. These projects have ranged from providing structural inspections of existing structures for government agencies, for single family dwellings in rural areas and multi-story hotels in urban areas.

Mr. Cart has also served as the Sewer Project Engineer for numerous projects revolving new structures where the existing property was occupied by an existing building. Demolition of the existing structure was necessary to prepare the site for the new facility.

He has designed numerous waterline extensions and sewer collection systems. These extensions have included providing service to many residential as well as industrial customers. The sewer collection systems have included design of systems to collect sewage from residential and industrial sites. Mr. Cart served as project engineer on several major waste water treatment plant upgrades for industrial clients in the Kanawha Valley. He has designed several plants to serve industrial as well.

Mr. Cart has performed over 100 Abandoned Mine Land Reclamations projects throughout Appalachia. These projects have been mainly in Ohio, West Virginia and Eastern Kentucky. These projects have involved draining flooded mine workings, support of ground experiencing or subject to Mine subsidence and the stabilization of landslides.

Mr. Cart has designed numerous retention and retaining ponds for sites. These designs have involved the determination of storm runoff and design of structures to safely retain and pass the required storm peak flows.



His experience includes permitting activities for projects which have included:

- Railroad Occupancy Permits for Utilities
- NPDES Permits for Industrial and Public Wastewater Facilities
- Highway Permits for Utility Occupancy and Access Road Tie Ins
- Health Department Permits for Water and Sewer Projects
- US Corps of Engineers Permits - Nationwide and Individual
- West Virginia Public Lands Permits

### **Representative Projects**

**WVDOH - Nicholas County - Maintenance Headquarters Facility:** Mr. Cart performed a structural analysis on wall panels, garage door headers and pre-fabricated truss system for a wood framed building. Panels and trusses were originally designed by 84 Components Company. St. Albans West Virginia and E.L. Robinson Engineering Staff determined loads based on BOCA and ASCE-7 and performed check calculations of all wall panels, trusses and other building components. Where stresses were found to be too high, additional members or alternative members were added. After correction a summary report of the analysis was provided to the WVDOH for review.

**Pump Station Buildings - South Putnam PSD:** Mr. Cart designed several pump station buildings to house the potable water pumps for the South Putnam PSD – Water System. These designs included overhead rail systems To assist maintenance personnel in the removal of pumps from the facilities.

**Preston County - Buckwheat Express - Bus Storage Facility:** Mr. Cart designed the concrete foundation system for the 132' x 80' metal building to be erected in a high snow load and high wind load environment. Building loading was based on the International Building Code and applicable portions of the ASCE-7 for wind loading.

**Blackwater Falls State Park:** He has designed 75 x 60 timber framed building to provide shelter and screening of a WWTP in a state park. The design included a foundation system capable of resisting both vertical, lateral and uplift loading. The design incorporates rough timber to blend the building into the natural surroundings.

Mr. Cart has performed numerous structural inspections of homes and buildings throughout the Kanawha Valley and State of West Virginia. He has also prepared reports which detail the structural deficiencies and recommendations on necessary repairs.



## Education

Bachelor of Science in Landscape Architecture, West Virginia University, 2011

## Registrations

Certified AutoCAD Technician

Currently pursuing Landscape Architect registration in the state of West Virginia

## Professional Memberships

American Society of Landscape Architects

West Virginia Chapter of the American Society of Landscape Architects

Chapter Director of Public Relations

## Professional Experience

Mr. Yost provides experience with on-site project inspections and group management. Providing a strong background in graphic details and site design, he will serve as a vital role in the creation and development of each project. He was recognized by the West Virginia American Society of Landscape Architects as one of three Honor Award recipients from his works completed at West Virginia University. Mr. Yost also adds the ability to communicate to the public and clientele to accomplish a collaborative design approach to all projects.

## Graphic Developer / Company Marketing

Mr. Yost provides extensive knowledge of rendering and graphics tools such as the Adobe Suit, Sketch-Up, SU Podium, ArcMap, and AutoDesk Software. By utilizing these programs he is able to provide visual assistance in all areas of project development. Areas include: Project Presentation, Project Funding, Advertisements, Website Development, Proposal and Qualification Statement Documentation, Rendered Master Plans and Site Specific Rendering.

## Representative Projects

**Beech Fork State Park - Lavalette, WV:** On site inventory and analysis was taken to review the feasibility of a 75 room lodge. A conceptual master plan, road alignment, earth work calculations, and slope analysis maps were completed to determine a feasible budget for the project.

**Bridgeport Comprehensive Plan - Bridgeport, WV:** Assisted the City Planning Department in updating the Comprehensive Plan which was last completed in 2004. Together with Compass Point Planning we performed numerous stakeholder interviews, public meetings and workshops. With this information a new plan was developed focusing on growth opportunities for key business and economic drivers, the expansion of public lands for new park and trail systems, public safety, education and infrastructure to keep pace with the cities rapid growth. Working in ArcMap, we were able to create detailed plans



guiding the city development for the next several years.

**Gilbert Town Hall and Sidewalk Enhancements - Gilbert, WV:** Planned new parking and pedestrian plaza space at Town Hall and new sidewalk along Central Avenue are the first phase of this construction. Our next phase of this project will be to design a inner city pedestrian trail along a abandoned rail right of way including a bridge across the Guyandotte River.

**Harrisville Sidewalk Enhancements - Harrisville, WV:** This design is over 700 linear feet of new sidewalk along Cross Street, East South Street and Spring Street in historical Harrisville. This project, when completed, will help create better access to the residence and local businesses as well as improve the rain water collection in the historical downtown. Developing cost efficient construction documents we were able to develop this design with little cost to the town.

**John Henry Historical Park Phase I Construction - Talcott, WV:** The first phase of the park consisted of an access road and parking to create connections to the existing nature and interpretive trails of this park. The relocation of the John Henry statue was brought closer to the Great Bend Tunnel opening, and the location preparation for picnic shelter were determined.

**Man Sidewalk Enhancements - Man, WV:** Assisted the Town with the design and providing the construction documents needed for approximately 13,000 square feet of sidewalk along the Town of Man's Main Street.

**South Charleston Trail Systems Study - South Charleston, WV:** Completed on site inventory and analysis to assess the ability to develop new sidewalks, bicycle lanes, cycle tracks and sharrows throughout the community of South Charleston. Generated a conceptual master plan as well as individual neighborhood plans to be presented for approval. Used skill sets in graphics and land planning to place together a completed study for the City of South Charleston to have for future development.

**Sutton Safe Routes to School Project - Sutton, WV:** The design for this project implemented a cost effective design using site imagery that was taken and then superimposed with the details to enhance four different sections of sidewalk.

**Stonewall Jackson Resort Park Pathway Project - Roanoke, WV:** Development of a new pedestrian pathway along the main park road from the intersection with the park office / marina road to a trail head parking area near the cabin area totalling over 1 mile in length. This phase of the project will allow pedestrians to safely hike along the main park road away from vehicular traffic.

**Williamson City Hall Upgrades - Mingo County, WV:** Completed on site inventory and analysis and assessed the condition and ADA accessibility of the current city hall entrance, sidewalks and parking. Details and working drawings were generated and presented for these city hall upgrades.





## **B. Craig Miller, PE**

Craig founded Miller Engineering in 2003, and serves as President and Principal Engineer. He has more than 20 years experience in design, specification, operations and project management. During his employment with WVU, Craig was directly involved with approximately \$130 million in new capital construction. His experience with a wide range of projects including HVAC, electrical, plumbing, infrastructure upgrades, building automation, energy efficiency and maintenance/renovation, among others, allows him to serve in multiple capacities within a given project. Craig will serve as the “Relationship

Manager” for Miller Engineering as the main communication interface between the Owner, the design team, contractors and end users.

### **Project Role: Relationship Manager – Primary Point of Contact**

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

### **Professional Project Highlights**

- **WVU Recreation Center Indoor Pool – Owner’s Engineer**
- **WVU Life Sciences Building and Student Recreation Center – Owner’s Engineer**
- **Camp Virgil Tate**
- **Mapletown High School HVAC Replacement**
- **Advanced Surgical Hospital**
- **Holly River State Park Primary Electric Service Replacements Phase I & II**
- **Beech Fork State Park – MEP New Construction Design**
- **WVU Willowdale Walkway**

### **Professional History**

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

### **Education**

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

### **Licenses and Certifications**

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



## Travis Taylor, PE

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

planning and MEP design through construction administration.

### **Project Role: Lead MEP Engineer**

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

### **Professional Project Highlights**

- **Krepps Park ADA Upgrades**
- **Holly River State Park Primary Electric Service Replacements Phase I & II**
- **Beech Fork State Park Lodge Design Development**
- **Pipestem Lodge McKeever Lodge HVAC Piping Replacement**
- **WV Veterans Memorial Restoration**
- **Bobtown Elementary School HVAC Upgrades**

### **Professional History**

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

### **Education**

2006 West Virginia University, BS – Mechanical Engineering

### **Licenses and Certifications**

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



## **Rob Angus**

*(20) Years of maintenance, operations, and construction management precede Robert’s engagement with Miller Engineering. Professional expertise of construction project management was gained as an owner of his own contracting company specializing in residential and commercial construction, electrical, plumbing, and HVAC projects.*

*(Robert’s hands-on, common sense, and valuable work history knowledge, enables him to interface with construction personnel seamlessly alongside engineers and architects. He is adept at preventing and handling issues. Robert is involved at the estimation phase to allow for continuity within the project’s design and construction.*

### **Project Role: Aquatic Construction Representative**

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

### **Professional Project Highlights**

- **BOPARC Pool and Ice Skating Rink** (Previous Employment Experience)
- **Camp Virgil Tate – WVU 4-H Pool Renovation**
- **Greenbrier State Park Pool Renovation**
- **Bluestone State Park Pool Renovation**
- **Maintains a change order rate of less than (5%) consistently**
- **(10) Years of owner experience in large scale construction**
- **(20) Years of experience in pool operations, maintenance, and design**

### **Professional History**

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

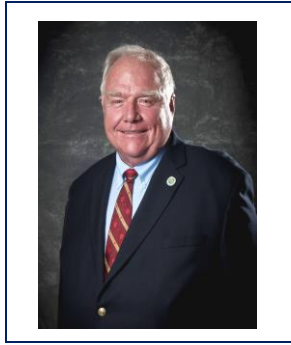
### **Education**

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

### **Licenses and Certifications**

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





## Jack Jaminson

Jack brings (15) years as an electrical/building inspector and over (25) years of experience in the commercial electrical construction industry. His knowledge and experience are valuable resources to Miller’s complete assessment process.

### **Project Role: Code and Construction Specialist**

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

### **Professional Project Highlights**

- *Board Member of the WV Code Officials*
- *Founder and Secretary of the West Virginia Division of the International Association of Electrical Inspectors*
- *IAEI Ohio Chapter – Membership Chair*

### **Professional History**

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

### **Education**

1971 Fairmont State College, BS-Engineering Technology-Electronics

### **Licenses and Certifications**

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



## Joseph Machnik

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

### **Project Role: MEP Designer**

*Revit/CADD Coordination of New Construction and Renovation Designs*

### **Professional History**

2010 – Present Miller Engineering, Inc. MEP Designer

### **Education**

2008 Penn State – Fayette, AS - Building Engineering Systems Technology: *Building Environmental Systems Technology*  
 2007 Penn State – Fayette, AS - Building Engineering Systems Technology: *Architectural Engineering Technology*

### ➤ Design & Permitting

Miller Engineering, Inc. (MEI) will work with the design team along with any owner's representatives and stakeholders to determine the requirements of the project. MEI will meet with the owner's staff to ensure the project meets ADA design standards in addition to interfacing with any existing facility building systems. MEI will also consult with local and state code officials for compliance in regards to applicable construction and life safety codes. A preliminary budget will be created, which will be updated to help the owner better understand the associated costs with any design options or scope changes prior to bidding.

### ➤ Construction Administration

Miller Engineering will be available to provide construction administration (CA) services for the project if necessary. MEI will be present during pre-bid meetings and will assist in answering questions from contractors and vendors during the bidding process. MEI will provide support to the design team and client in issuing addenda, and will take part in kick-off meetings and in agreed upon progress meetings. It is company policy to answer any RFIs and review submittals in an expedient manner, as any delays can cost the project time and money. CA services can also include performing project observation outside of scheduled progress meetings. MEI will be available to perform punch lists related to substantial and final completions.

### Project Close-out

Another company policy is to require the contractor to provide training and demonstration to the owner's maintenance staff, at which MEI will be present. CA duties will also include reviewing operation and maintenance manuals, close-out documentation and record drawings.

## Client References

*What our satisfied customers have to say...*

“I chose Miller Engineering because they are not a purely design based firm. They have real world construction experience and the work ethic to ensure that the project is completed on time, on budget. I have confidence that my agency’s interest is well served in design and in construction contract administration. I cannot say that about every firm I have worked with.”

*--Bradley S. Leslie, PE*

“Hard working, very customer oriented, diligent and your team at Miller Engineering will do ‘whatever it takes’ 24/7 to meet our needs or any customers’ needs. Willing to come in on days off, weekends, nights, and holidays - no questions asked!”

*--Christopher T. Halterman*

<p><b>Brad Leslie, PE</b>  <i>Assistant Chief</i>  <i>WV Division of Natural Resources</i>  <i>State Parks Section</i>  <i>324 4<sup>th</sup> Avenue</i>  <i>South Charleston, WV 25303-1228</i>  <b>(304) 558-2764 ext. 51823</b>  <a href="mailto:Bradley.S.Leslie@wv.gov">Bradley.S.Leslie@wv.gov</a></p>	<p><b>Kerri J. Wade, MSW</b>  <i>Extension Agent - Kanawha</i>  <i>County</i>  <i>West Virginia University</i>  <i>4700 MacCorkle Avenue, SE</i>  <i>Suite 101</i>  <i>Charleston, WV 25304</i>  <b>304.720.9573</b>  <a href="mailto:Kerri.Wade@mail.wvu.edu">Kerri.Wade@mail.wvu.edu</a></p>	<p><b>Christopher T. Halterman</b>  <i>Director of Operations</i>  <i>The Dominion Post</i>  <i>1201 Earl Core Rd.</i>  <i>Morgantown, WV 26505</i>  <b>(304) 291-9479</b>  <a href="mailto:chalterman@dominionpost.com">chalterman@dominionpost.com</a></p>
<p><b>Pat Sweeney</b>  <i>Business Manager</i>  <i>Southeastern Greene School</i>  <i>District</i>  <i>1000 Mapletown Rd.</i>  <i>Greensboro PA 15338</i>  <b>(724) 943-3052</b>  <a href="mailto:Sweeney.pat@segsd.org">Sweeney.pat@segsd.org</a></p>	<p><b>Mike Trantham</b>  <i>Program Administrator Senior</i>  <i>WVU Environmental</i>  <i>Health &amp; Safety</i>  <i>P.O. Box 6551</i>  <i>975 Rawley Avenue</i>  <i>Morgantown, WV 26506</i>  <b>(304) 293-5785</b>  <a href="mailto:Mike.Trantham@mail.wvu.edu">Mike.Trantham@mail.wvu.edu</a></p>	<p><b>Randy Kolson</b>  <i>Vice President</i>  <i>Aqua Pool, Inc.</i>  <i>1438 Electric Avenue</i>  <i>Pittsburgh, PA 15112</i>  <b>(412) 824-6900</b>  <a href="mailto:randy@aquapoolinc.com">randy@aquapoolinc.com</a></p>

***For more information contact – Craig Miller, PE, Owner of Miller Engineering, Inc.***  
*Phone: 304-291-2234, 250 Scott Avenue Suite 3, Morgantown, WV 26508*

## 4. PROJECT APPROACH



### **Marshall County Readiness Center - Interior Design and Mechanical – HVAC - Electrical Renovation**

**Three Designs'** approach to the Marshall County Readiness Center Project is consistent with the strategies employed by the Three Designs' team on its professional service design projects.

As we be tasked with the Interior Design and Mechanical – HVAC - Electrical Renovation Project for the Marshall County Readiness Center to address the renovations, the following approach will be followed. The WVARNG-CFMO Approach is described in components in this section with our project plan and the tools by which we intend to accomplish the aspirations for your project.

#### **PROJECT MANAGEMENT**

Our project management is outlined on the following pages with particular emphasis on your project as we understand it currently. Successfully produced projects are the result of establishing trust with the client that the Three Designs' Team will commit to meeting the client's goals, schedule and budget concerns in a timely, comprehensive manner. Mr. Bolen has worked hard to give successful project solutions to clients and some of his personal reference contacts are:

**Mr. Joseph D. McClung** – Project Manager - WV Army National Guard Construction & Facilities Management Office – (304) 561-6548 (*WVARNG Headquarter Building*)

**Mr. Robert P. Krause, PE, AIA** – Architecture & Engineering – West Virginia General Services Div. – (304) 957-7143 (*WV Capitol Mater Plan/ Restroom Restorations Renovations/Restoration Study*)

**Mr. Todd M. Dorcas** – Community Development Specialist - WV Public Transit Authority – (304) 558-0428 (*Little Kanawha Bus Maintenance Facility*)

**Mr. Jason Hudak, PE** – MSHA D4 - Impoundments – (304) 877-3900 EXT 202

**Mr. Charles Hurley** - Chief Financial Officer – Good News Mountaineer Garage– (304) 344-8445 (*Garage Admin Office / Garage Renovations*)

## THE SUCCESS OF YOUR PROJECT

Projects are successful when the design team members are available during all phases of the project, this means when an architect or engineer is needed to be at the job site, we commit that we will have that individual there. Establishing this trust is the initial objective of the design team and may be achieved through providing:

- **Attentive Service** during all phases – insuring the owner’s wishes are defined in the Plan documents and followed up in the construction
- **Due Diligence** to detail through the investigative and documentation phases - hard work in defining the intent of your needs
- **Creativity Process** for a well-developed project during the design phase – for fees and project costs, aesthetic designs and economic functional facility

### ***Project scope control***

We are ascertaining that the architectural program and conceptual design will address needs and goals of the WVARNG-CFMO. We have posted your Description of goals and objectives as a preliminary beginning to the project scope.

### ***Project and Goals***

- Goal 1            Develop drawings and specification for renovating / updating the existing building(s) for the purpose of advertising and awarding construction contract(s).
- Goal 2            Provide drawings and specifications for interior design / renovations including mechanical, HVAC, systems and electrical as needed and as directed by the Owner for the Marshall County Readiness Center, located at Moundsville, West Virginia.

These Project Goals above go to the Three Designs’ principles that it was founded upon and gives us a very good start to setting up the project and helps us in understanding how the needs can be met as follows:

- a.            Building systems selections will be closely discussed with the Owner prior to any selection.
- b.            Building materials preferences of key materials to be carefully considered and incorporated.
- c.            Budget control. Successful projects result from remaining within budget constraints.
- d.            Schedule control. Design components must developed within your coordinated schedule.

## PROJECT EXECUTION

For execution of this project, Three Designs will create a Work Plan that identifies accomplishing the following project phases/tasks/ progression:

### **a. Facilitate a project kick-off conference**

1. The objective will be to introduce the design team to the history of the project, the progress made to-date, and for the WVARNG-CFMO Project to present the criteria, concept design and/or vision.
2. This meeting is to be interactive and to familiarize the design team with WVARNG-CFMO goals, ideas, and expectations for the project. It is an opportunity to become more familiar with design team members and their particular expertise.

### **b. Existing Building Analysis**

Building Analysis – The team will assess existing all building systems, including architectural, structural, mechanical, electrical and plumbing to determine the building needs.

- Consider the most efficient and cost effective options to complete the renovations
- Develop understanding of the Owner’s design goals, decision-making rationale
- The team will consider the following:
  - a. Operational needs and standards
  - b. Security
  - c. Safe working environment
  - d. Cost effectiveness
- Develop a Codes and Accessibility Analysis of the facility for review
- Understand budget / schedule / milestones
- Understanding the design context and preferences of WVARNG-CFMO

### **c. Existing as-built Drawings**

Develop existing as-built plans used for the project bidding and construction phases

- The existing plans will be used to develop the location of the addition and renovations
- This portion of the project will be performed as quickly as practical
- Prepare drawings for the WVARNG-CFMO addition and renovation needs
- Submit the existing drawings and report to the WVARNG-CFMO project team for review

### **d. Construction Documents**

Preparation Renovation Drawings and Specifications for bidding and construction

- After approval of the assessment and as-built drawings of each facility, develop the drawings and specifications for final review by WVARNG-CFMO
- Submit Plans and Specification Update package to WVARNG-CFMO project team for approval
- Develop Bid Package(s) for the construction of the project
- Provide Our Team’s Complete Construction Administration services
- Close out for a WVARNG-CFMO successful project

## 5. ATTACHMENTS

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 exceed five percent of the total contract amount.

**AFFIRMATION:** By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (*W. Va. Code §61-5-3*) that 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: Three Designs, PLLC

Authorized Signature: *[Handwritten Signature]* Date: June 2, 2015

State of West Virginia

County of Kanawha, to-wit:

Taken, subscribed, and sworn to before me this 2 day of June, 2015.

My Commission expires September 8, 2021.

**AFFIX SEAL HERE**

**NOTARY PUBLIC** *[Handwritten Signature]*





**CERTIFICATION AND SIGNATURE PAGE**

By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation in its entirety; understand the requirements, terms and conditions, and other information contained 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.

THREE DESIGNS, PLLC

(Company)

Ron L. Bolen      RON L. BOLEN  
PRESIDENT

(Authorized Signature) (Representative Name, Title)

304.807.0841      06/02/2015

(Phone Number) (Fax Number) (Date)