

Request for Architectural Services Proposal

# The West Virginia Division of Natural Resources

Wildlife Resources Section Storage Buildings

For Elk River & Handley Wildlife Management Areas

(CEOI - 0310 – DNR 150000016)



October 14, 2014

Presented By:

**THREE DESIGNS, PLLC**

1045 Nease Drive  
Charleston, WV 25387  
(304) 807-0841

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

10/14/14 12:13:32PM  
West Virginia Purchasing Division

# TABLE OF CONTENTS

<b>I. PROJECT TEAM DESCRIPTION .....</b>	<b>1</b>
<b>Three Designs' Firm Profile</b>	
<b>Project Team Consultants</b>	
<b>CAS Structural Engineering's Firm Profile</b>	
<b>Miller Engineering's Firm Profile</b>	
<b>2. EXPERIENCE .....</b>	<b>5</b>
<b>Three Designs, PLLC</b>	
<b>CAS Structural Engineering, Inc.</b>	
<b>Miller Engineering, Inc.</b>	
<b>3. PERSONNEL.....</b>	<b>19</b>
<b>Three Designs, PLLC</b>	
Ron L. Bolen, AIA, LEED AP	
Aaron L. Bolen	
Laura Cox, PLA, ASLS, LEED GA	
<b>CAS Structural Engineering, Inc.</b>	
Carol A. Stevens, PE, F ASCE, SECB	
<b>Miller Engineering, Inc.</b>	
B. Craig Miller, PE, LEED AP	
Kelly C. Brett	
Travis Taylor, PE	
Robert Angus	
Jack Jamison	
Joseph Machnik	
<b>4. PROJECT APPROACH .....</b>	<b>33</b>
<b>Storage Buildings Project</b>	
<b>Project Management</b>	
<b>Project Execution</b>	
<b>Miller Project Method and Approach</b>	
<b>Miller Owner Communication</b>	
<b>Miller Cost Control</b>	
<b>5. ATTACHMENTS .....</b>	<b>39</b>
<b>Purchasing Affidavit</b>	
<b>Addendum Acknowledgement</b>	

# I. PROJECT TEAM DESCRIPTION

## Three Designs' Firm Profile

Three Designs, PLLC (Three Designs) will provide the experience and expertise to successfully develop the Demolition and Disposal of the three remaining Modular Sleeping Units Project. Three Designs has been designing demolition of buildings of all sizes and types for new uses of the site.

Utilizing the total team concept delivery model, our local project team will be supplemented by individuals bringing specific experience and knowledge of construction of this type. These select project team members may be located in other Three Designs offices, yet will provide service through Three Designs' interconnected electronic network and in-person specifically when their physical presence is needed.

Three Designs is a firm sized for this project and the West Virginia Division of Natural Resources (WV DNR) without the huge overhead of larger firms, in which will focus on three design principles, giving the very best functional / aesthetic design for the most **cost effective project design**.

Three Designs provides architecture planning and design, engineering, and construction services for clients statewide in West Virginia. Three Designs is a small firm based in Charleston, WV, with an emphasis on service delivery and relationships with local clients, seeking to provide design expertise benefiting the local community where we live and work. The local Charleston office has a professional staff providing architecture and planning services.

We utilize a total team concept to its operational model whereby local talent and expertise is supplemented where necessary by team members 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.

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

Ron L. Bolen, AIA, LEED AP

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)

We have qualified employees and will perform projects across the State of West Virginia. We are familiar with all the design codes and standards and the level of quality required to perform planning

# I. PROJECT TEAM DESCRIPTION

and design work for the West Virginia Division of Natural Resources (WVDNR). This experience, coupled with our technical expertise, has helped us to understand our customers and meet their expectations in the delivery of a quality product.

## PROJECT TEAM CONSULTANTS

We are teaming together with **CAS Structural Engineering, Inc. (CAS)** for structural engineering services for this project, and with **Miller Engineers, Inc. (Miller)** for mechanical / electrical engineering services. This team has worked together previously very successfully and we believe this the very best team for this project. The team will provide complete documentation for Storage Buildings for Elk River (Braxton County) and Handley (Pocahontas County) Wildlife Management Areas and assisting the WVDNR will be provided with key 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.

Miller, the mechanical / electrical engineering component to the team brings critical design performance to the project for all the mechanical, electrical and plumbing components. Miller's previous design experience with WV DNR and other facility endears was key in having them as a vital part of the team. They have very good decision making skills, accurate documentation, performance and cost-estimating abilities which we feel is significant for your project's success.



# I. PROJECT TEAM DESCRIPTION

## CAS Structural Engineering's Firm Profile

**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 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)

*Technical Bid for:*

*West Virginia Division of Natural Resources*

*Wildlife Mgt. Storage Buildings: (CEOI - 0310 – DNR 150000016)*

# I. PROJECT TEAM DESCRIPTION

## Miller Engineering's Firm Profile



### Engineering Design and Consultation Capabilities

- Mechanical
- Electrical
- Plumbing
- Fire Alarm and  
Suppression
- Telephone/Data
- MEP Construction  
Administration

### **Our firm capabilities and experience, uniquely qualify Miller Engineering (MEI) for this project.**

Each and every project is approached with a **complete assessment process**. Miller Engineering values the relationship with the client and other professional stakeholders to deliver projects in a timely, constructable, and professional manner.

Miller Engineering is an integral and active solutions provider within this process. We **partner** with clients to control first and life cycle cost. This provides a value to the building project both in the short-term and long-term for the owner.

The Miller Team maintains professional competencies through on-going training and education.

Excellence in design solutions is practiced and maintained through consistent site visits during the construction process. Miller Engineering designs mechanical, electrical, and plumbing systems for new construction, renovations, feasibility studies, and system repairs.

### **Relevant Benefits to the Project -**

- Experienced and Licensed Professional Engineers
- Quality, Value-Engineered Project Delivery
- Below Industry Change Order Status
- LEED-AP Certified
- Qualified Construction Representative on Staff
- Building Information Modeling
- Consistent, Professional, Hands-on Service
- Emergency Facility Response
- Extensive Experience with WV Construction for Renovation
- Availability to Ensure Project Success

## 2. EXPERIENCE



year completed 1994 / 1995

owner Information Parkways Authority

project description Mr. Bolen provided design for these two similar facilities and they were built in 1994 for the WV Parkways Authority to maintain the vehicles on the WV Turnpike. The prime objective of the project was to construct an integrated facilities providing seamless interaction between both maintenance yards.

These two facilities have been in use for over 18 years and are still very functional. The main differences in the facilities are in office and storage areas with the maintenance and wash bays operate similarly.

The roof pitch is on a 4:12 slope allowing for the height of the facility to be at a lower eave height, while allowing the trucks to be raised in the center of the bay for maintenance. This controlled the construction cost while keeping the function of the facility. These projects were bid separately and both were within budget and on time.

## 2. EXPERIENCE



year completed 2014

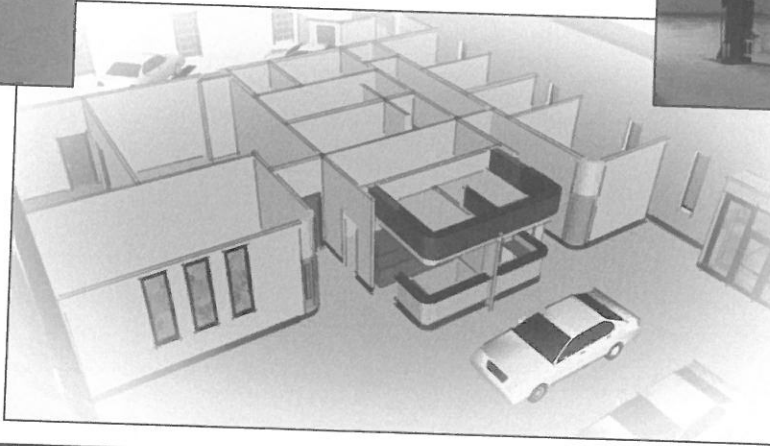
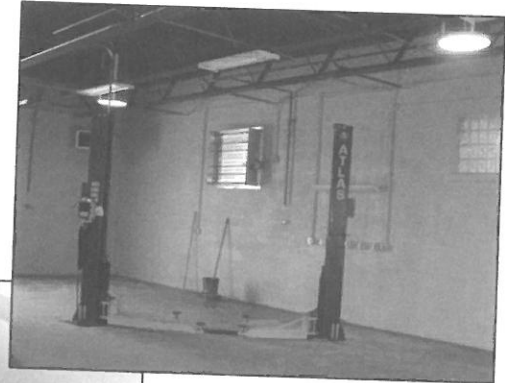
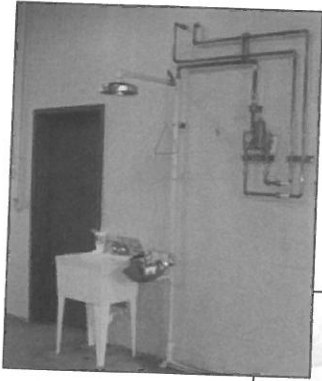
owner Information Little Kanawha Bus

project description Mr. Bolen provided complete architectural design and construction administration services include the construction of a pre-engineered metal and brick construction, sited on the available property allowing for future expansion needs. Parking for the buses (in the rear of the building) and employee vehicles will surround the building. The site of the facility is located in Mt. Zion, West Virginia. The site is approximately 4.55 acres.

The operations facility will have approximately 10,000 square feet of which 4,500 square feet will house four - five offices, a conference room, and money counting room, office storage space, copier and supply room, and a driver training room which will accommodate approximately 25 individuals.

The remaining 5,500 square feet is dedicated to the maintenance functions. The garage will require a ceiling of a minimum of 16 feet to accommodate bus hoisting. With the structural roof members, the overall roof height will be about 18 feet. This area will also include space for indoor bus storage for approximately seven (7) vehicles.

## 2. EXPERIENCE



year completed 2014

owner Information Good News Mountaineer Garage

project description Mr. Bolen provided complete architectural design and construction administration services include the construction of a renovation to an existing concrete block and brick facility, sited on the available property allowing for future expansion needs. Parking for the vehicles to be repaired and sold (in the rear of the building) and employee and visitor vehicles will be in the front of the building. The site of the facility is located in Charleston, West Virginia.

The operations and showroom area will have approximately 3,500 and will house four - four offices, a conference room, office storage space, copier space and supply room. The showroom area will also include space for indoor vehicle storage for approximately ten (10) vehicles.

The remaining 2,500 square feet is dedicated to the maintenance functions. The garage equipment required a ceiling of a minimum of 12 feet to accommodate vehicle hoisting.

## 2. EXPERIENCE



year completed    1988

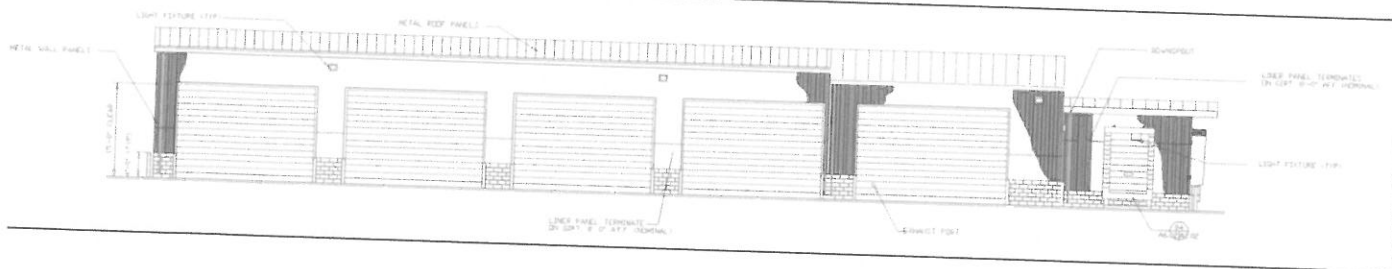
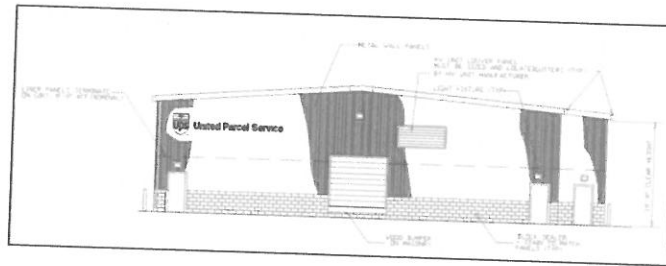
owner Information    Raleigh County Board of Education – Woodrow Wilson High School

project description    Mr. Bolen provided this addition design for a 6,500 sq. ft. maintenance training facility including, 6,000 sq. ft. of classroom space, and a 1,000 sq. ft. of toilet space for the facility. This addition was delivered to the Board of Education on schedule and on budget.

This was accomplished primarily during the spring and summer session, the user was not interrupted for the construction process that maximized the efficiency of facility design.

The addition blended into the existing facility design aesthetically and integrated this facility with the property and the surrounding landscape, which was a primary requirement of the Board. The design team delivered a design program that fully realized the requirements of the Board of Education and achieved their project goals and budget. The facility consists of four bays, four classrooms and restroom facilities

## 2. EXPERIENCE



year completed 1995

owner Information United Parcel Service

project description Mr. Bolen provided the design of this UPS Facility is a 13,500 sq. ft., eight-vehicle bay facility, with a vehicle maintenance bay. The interior design provides approximately 1,800 sq. ft. for office and working spaces for personnel.

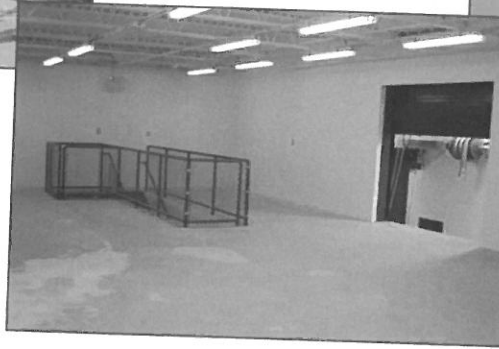
Services provided a full consultant services including programming, schematic design, design development and construction document phases, bidding, and construction administration. The facility continues to operate as a distribution center and its staff is utilized daily.

A site selection study was conducted to determine the best location for the new facility. Some of the criteria included improving response time, accommodating deliveries to the local area, and locating the facility for good public access.

The exterior is finished with a metal panel system and split face concrete block at the base of the exterior walls, which designed to increase thermal and energy performance for both aesthetics and material durability. The interior design provides a comfortable and inviting facility for the men and women working therein. The result is a simple exterior with a series of unique interior spaces and finishes to make the building a functional and aesthetically pleasing space for the staff and public.



## 2. EXPERIENCE



---

year completed	1999
owner Information	Raleigh County Board of Education

project description     Mr. Bolen developed the design for the Raleigh County Board of Education and the staff a program for a new Bus Maintenance Facility on a limited site, which tied into the existing bus storage yard.

The design of the facility provides for a new building of approximately 4,950 sq. ft., including two vehicle maintenance bays. The facility includes mezzanine storage (approx. 1,470 sq. ft.) The mezzanine area is located above the office / restroom area. The facility also designed with drive-thru capabilities for both multi-function maintenance bays. The building is comprised of conventionally framed system. Construction documents were completed in less than two months from schematic layouts.



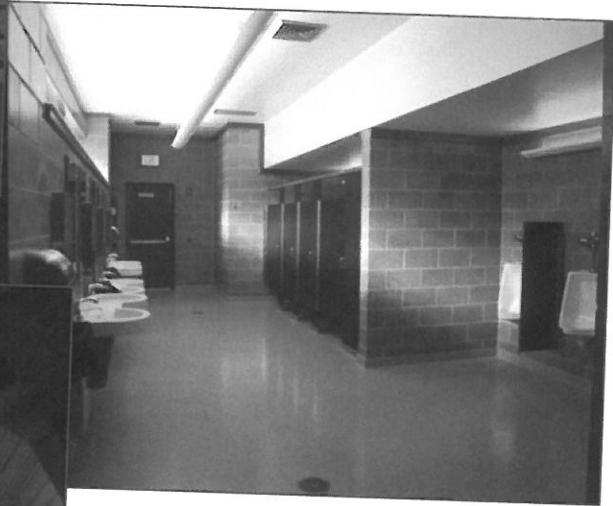


## **New Pocahontas County Wellness Center**

Marlinton, West Virginia

The Wellness Center was constructed adjacent to, but separate from, the existing Marlinton Elementary School. The Pocahontas County Board of Education provided the property in exchange for daytime use of the gymnasium, which the school did not have. The new construction is approximately 13,000 square feet and includes a middle-school size gym and basketball court; a wellness center; two multi-purpose rooms, one of which can be divided into two classroom size rooms with a folding, sound attenuating partition; a racquetball court; and a warming kitchen/concession stand.

The facility is configured with separate entries to allow use by the school and the public at all times of the day while limiting or prohibiting interaction of the various groups.



## BURNSVILLE I-79 REST AREAS

Burnsville, West Virginia

The rest areas consist of three buildings, the rest area building, the vending building and the maintenance building. Each of the buildings was constructed with a local West Virginia stone façade.

The existing rest area buildings were demolished and replaced with these new state-of-the-art facilities. The main lobby framing consists of a tube steel beam, glulam beams and timber decking.

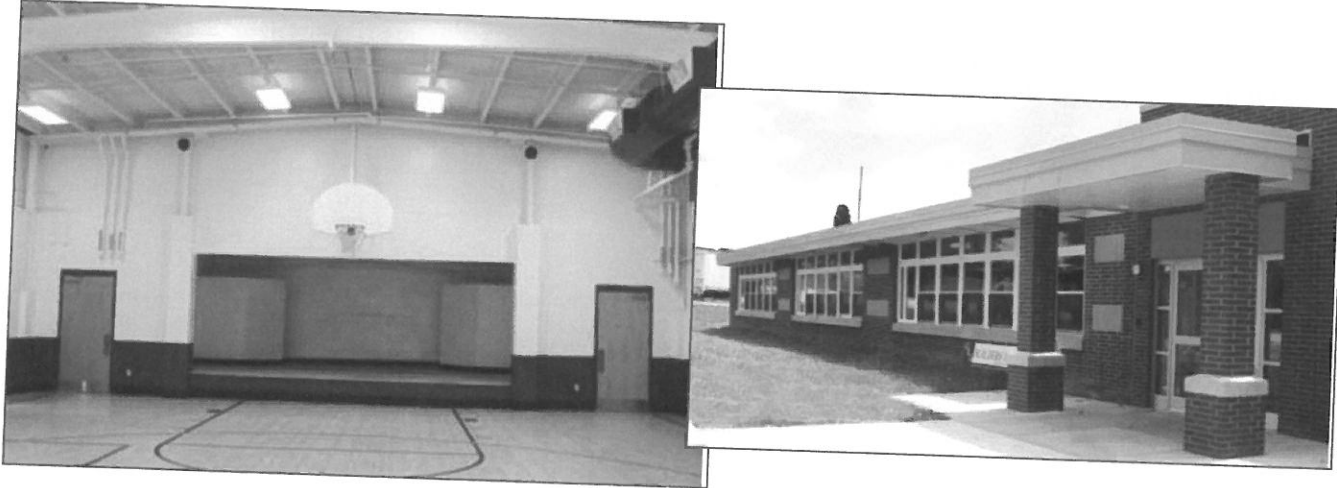


## **EASTERN WEST VIRGINIA REGIONAL AIRPORT TERMINAL BUILDING**

Martinsburg, West Virginia

This facility replaced an existing, undersized terminal building at the airport. The building houses normal airport terminal building functions such as rental car space, restaurant ticket counters, baggage areas and offices.

The building structure consists of structural steel frame with metal stud infill. Both the air side and the public side have attractive brick and limestone exteriors, with a standing seam metal roof.



## 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.

## Experience – Electrical Infrastructure

### Holly River

#### Engineering Design

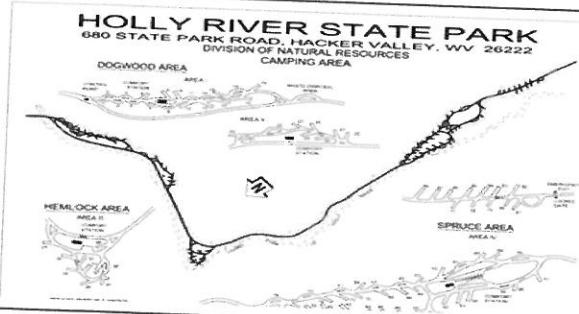
- High Voltage Electric Design
- MEP Construction Design
- Emergency Restoration

MEP Budget: Phase 1 - \$1.16M

Phase II - \$1.25M

Location: Hacker Valley, WV

Park Size: 8, 101 acres



#### Project Outcome Highlights:

- Designed and developed a plan restoring power to the park and reduce future outages
- Coordinated with both the DOH and the DEP to ensure prompt completion.
- Designed solution opting for burying (2.5 miles) of electrical supply cable in conduit to prevent future outages.

#### Project Goals:

*In 2012, hurricane Sandy incapacitated the park's main electrical supply. The goal of the project was to return electric supply to the park.*

*Site study and work to meet the owner's initial goal uncovered potential hazards.*

*Thus, Miller Engineering developed a (2) phase approach to meet both the current goal and address code issues.*

**The project goals were met by addressing both the short and long term goals of the owner as well as the electrical needs of the park.**

#### Project Reference: Bradley S. Leslie, PE

Assistant Chief State Parks Section  
324 Fourth Ave., Charleston, WV 25303  
Phone: (304) 558-2764

## Experience – Generator Power

### Preston County 911

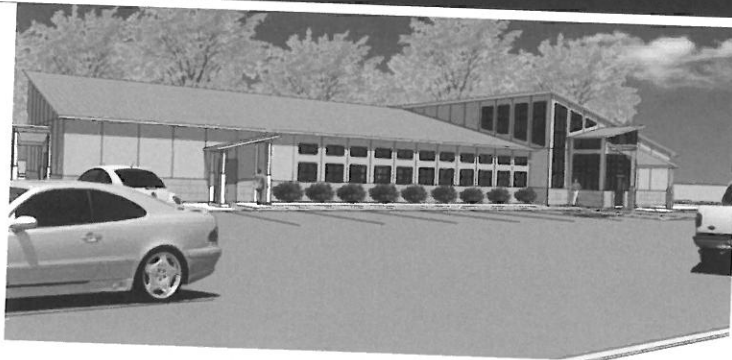
#### Engineering Design

- Public Utilities Integration
- Mechanical, Electrical, Plumbing
- Telephone/Data
- Back-up Generator Power

Total Project Budget: \$2 M

Location: Kingwood, WV

Facility Area: 7,000 ft<sup>2</sup>



Rendering Courtesy of  
Mills Group

#### Project Goals:

*The primary goal was to provide MEP engineering design solution for the new facility; increasing its utilization capacity.*

*In addition, provide redundant generator power, telephone/data wiring systems, HVAC specified for a newly built 911 Call Center.*

*The facility includes a training facility which, in the event of an emergency, can be converted to an emergency operations center.*

#### Project Outcome Highlights:

- MEI's facility design solution called for a dual fuel emergency generator to be utilized for solving back-up power needs.
- Safe connection was added to the back-up generator to create redundant power options without injury.
- Building water, electric, and tel/data/cable utilities each required special coordination with utility service providers.
- HVAC system designed to be redundant and incorporate a "shelter in place" function to seal them from outside air in the event of a catastrophic emergency.

**The project was constructed successfully, on- time and budget with "zero" change orders.**

#### Project Reference: Michael Mills, AIA

Mills Design Group  
206 High Street  
Morgantown, WV 26505

## WVU Willowdale Walkway

### Engineering Design

- Public Utilities
- Generator Tie-in
- Electric Design and Upgrade
- Back-up Generator Power

Total Project Budget: \$185K

Location: Morgantown, West Virginia

Facility Area: N/A



### Project Goals:

*Create pedestrian and driver safe exterior lighting and tie-in to back-up power supply.*

*Illumination of the newly created walkway has increased pedestrian safety, especially for medical students commuting to Ruby hospital and for WVU fans heading to the stadium on game day.*

### Project Outcome Highlights:

- Electrical design tied-in to emergency generator back-up to permit egress.
- Created ample illumination while avoiding a blinding hazard for motorists.
- Computer modeling was performed prior to construction to help ensure the elimination of hazards.

**The project goals were met by achieving safe lighting and avoiding light pollution or blinding hazards.**

### Project Reference: Paul Hanko

WVU Facilities Management PDC  
979 Rawley Lane, Morgantown, WV 26506  
Phone: (304) 293-7773



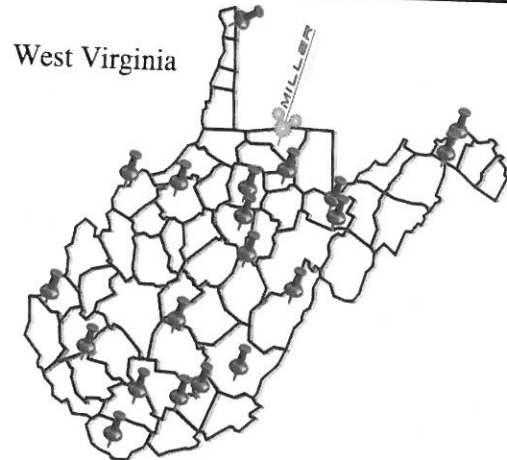
## Experience – WV Remote Locations

### West Virginia State Parks

#### Engineering Design

- High Voltage Electric
- Electrical
- Mechanical
- Plumbing
- HVAC, Hydronic Pipe
- Construction Administration
- Electrical Code Observation
- Feasibility studies
- Fire/Life Safety

Total Project Budget: Varies by Project



#### Project Goals:

*Manage MEP specifications of projects in remote locations while providing quality assurance to more local projects.*

*Recruit contractors near the project locations to help control cost associated with travel.*

#### Project Outcome Highlights:

- Our team has completed projects in (20) of the state's parks as indicated by the pins on this map of West Virginia.
- Projects vary in scope and size.
- Team is adept at remote location work.
- Public utility coordination is part of our process prior to the design process.
- Our team has a "below" industry order change order rate.

**Providing quality, efficient, engineered solutions for the client that meets both budget and time line.**

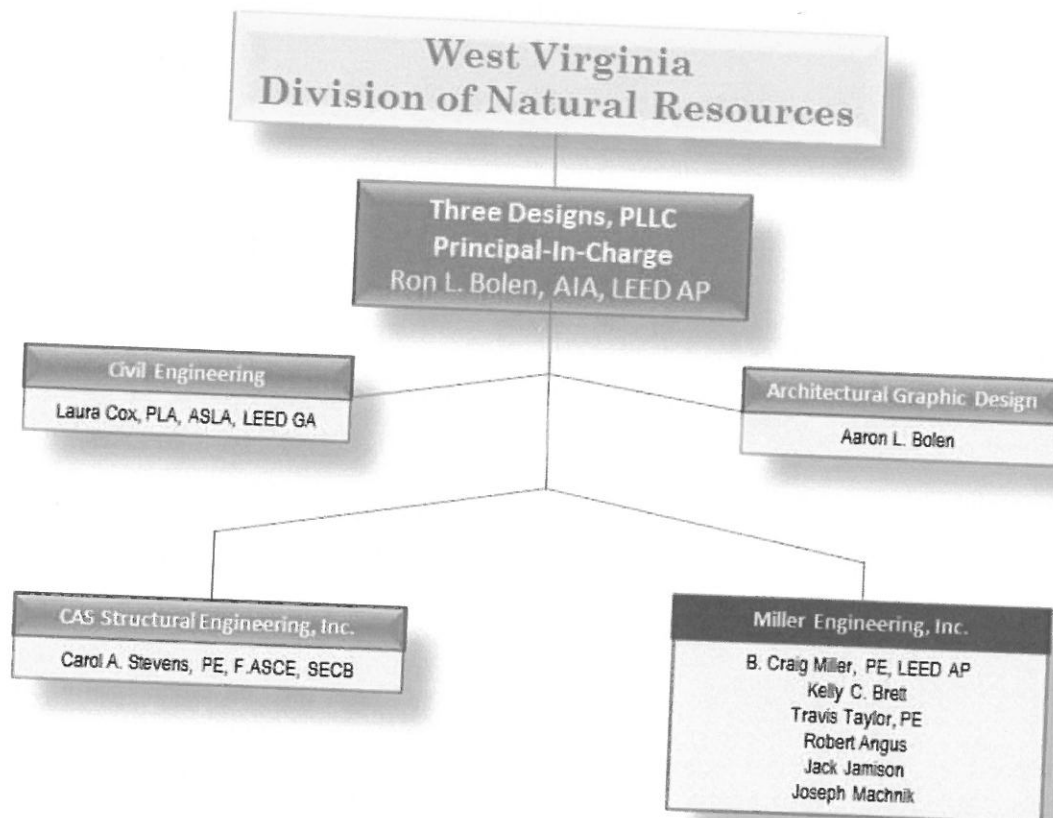
#### Project Reference: Bradley S. Leslie, PE

Assistant Chief State Parks Section  
324 Fourth Ave., Charleston, WV 25303  
Phone: (304) 558-2764



### 3. PERSONNEL

The Three Designs Team brings together outstanding capabilities to meet and exceed the requirements for the West Virginia Division of Natural Resources project. We have compiled a team of professionals with extensive architectural and engineering experience to provide the Wildlife Resources Section Storage Buildings 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 the West Virginia Division of Natural Resources' needs for this project. A resume for key members of the Three Designs' Team is included on the following pages.

### 3. PERSONNEL

## Ron L. Bolen, AIA, LEED AP

Principal in Charge

**Office Location:**

Charleston, WV

**Experience:** 43 years

**Education:**

B.S. Architectural  
Design,  
Parkersburg Community  
College / WVU Ext.,  
1980

**Registration:**

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

Responsible in providing a complete design and detailed construction administration services include the demolition of five buildings on the farm land, including remediation of hazardous materials of asbestos and lead based paints and 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 the demolition of the facilities on the farm and 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.

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

Responsible for the Architectural Design, Document Preparation, and Construction Administration for the selective demolition of a garage facility for

Technical Bid for:

West Virginia Division of Natural Resources

Wildlife Mgt. Storage Buildings: (CEOI - 0310 – DNR 150000016)

### 3. PERSONNEL

renovation to the Auto Repair garage and administrative office facility for this non-profit organization. The Good News Mountaineer Garage purchased a facility that required a major demolition ranging from selective structural to mechanical / electrical complete systems removal to hazardous materials remediation for the renovation of an upgraded facility.

#### **Harrison County Emergency Squad Facility**

As Principal / Project Manager, Mr. Bolen provided services from pre-design through selective demolition to all phases of document preparation, consultant coordination, client relations, and construction administration. The design replaced an existing emergency squad facility.

The facility was designed with four truck bays, office spaces, and conference / training room, meeting hall, toilet and kitchen facilities.

#### **Hilltop Baptist Church / Community Center**

As Principal / Project Manager, Mr. Bolen provided services from pre-design through selective demolition to all phases of document preparation, consultant coordination, client relations, and construction administration. The design demoed, replaced, renovated and converted an existing elementary school facility into a newly renovated church / community center.

The demolition portion was the original aged portion of the facility, which had failed to the extent the floor structure, was collapsed. Approximately 5,000 SF of the 19,900 SF facilities were demolished and a new sanctuary, lobby, daycare and restrooms were designed in lieu of the removed portion. Other areas were renovated into classrooms, community center, kitchen and offices.

#### **Grandview State Park Amphitheater**

As CADD Manager, Mr. Bolen provided services from pre-design through selective demolition to all phases of document preparation, consultant coordination, client relations, and construction administration. The design renovated the existing stage facility and back stage areas for the Amphitheater at Grandview State Park.

### 3. PERSONNEL

## Aaron L. Bolen

### Graphic Design Manager

**Office Location:**

Charleston, WV

**Experience:** 20 years

**Education:**

2003, Concord College

**Registration:**

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

### 3. PERSONNEL

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.

### 3. PERSONNEL

## Laura Cox, PLA, ASLA, LEED GA

*Landscape Architect/Planner*

**Office Location:**

Charleston, WV

**Experience:** 34 years

**Education:**

B.S., 1978, Landscape  
Architecture, West  
Virginia University  
Certificate, 1995,  
Computer Aided  
Drafting, Putnam  
County Technical Center

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

Landscape Architect / Civil Designer. Responsibilities include providing a complete landscaping design, site and civil design aspects of a pre-engineered metal and brick construction, sited on the available property allowing for future expansion needs. Ms. Cox provided landscape architecture, and construction-phase support for a new, 10,000-square foot, pre-engineered, metal and brick bus maintenance and transit operations facility. The facility is designed to be completely ADA-compliant.

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

Responsible for complete landscaping design, site and civil design for the newly renovated Auto Repair garage and administrative office facility for this non-profit organization. The Good News Mountaineer Garage accepts donations of vehicles that are repairable for a reasonable amount of money. These donated cars are then distributed to families with low incomes for transportation to work.

Technical Bid for:

West Virginia Division of Natural Resources

Wildlife Mgt. Storage Buildings: (CEOI - 0310 - DNR 150000016)



# Carol A. Stevens, PE, F.ASCE

## 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
P.E.	2010	Kentucky

### 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 Chair  
West Virginia University Institute of Technology  
Department of Civil Engineering Advisory Committee

### CIVIC INVOLVEMENT

ASCE Christmas in April Project  
Engineer's Week Speaker

### EXPERIENCE

**West Virginia, Canaan Valley Resort State Park:**  
Structural investigation and recommendations for repairs to the five (5) existing overnight sleeping facilities.

**West Virginia, Twin Falls Resort State Park Lodge Addition:** Structural design for new 28,000 SF addition to existing facility, including new entrance lobby, conference areas, sleeping rooms and indoor pool.

**West Virginia, Hawks Nest State Park Lodge:** Analysis of structural cracks in lodge building. Work included probes to determine condition of existing connections between structural elements.

**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 and was constructed in the 1920's.

**West Virginia, State Capitol Complex, Holly Grove Mansion:** Structural evaluation report for preliminary condition assessment of building structure. Building is on State Historic Register and was constructed in the 1830's.

**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. Construction contract for repairs has been completed. Building is on State Historic Register and was constructed in the 1920's and 1930's.

**West Virginia, Twin Falls Resort State Park:** Structural evaluation of existing recreation building.

**West Virginia, Pipestem Resort State Park:** Structural evaluation of existing recreation building.

**West Virginia, Cabwaylingo State Forest:** Structural evaluation of existing dormitory buildings constructed in the 1950's.

**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. 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

is on State Historic Register and was constructed in the 1930's.

**West Virginia, Historic Putnam-Houser House (Parkersburg):** Designed system for stabilization and upgrades to floor framing of building that was constructed in the 1700's.

**West Virginia, Upshur County Courthouse:** Developed construction documents for structural repairs to main entrance, dome and monumental sandstone columns of 1899 structure. Work was recently completed and received a WVAIA Honor Award for Design Excellence.

**Ohio, Mahoning County Courthouse:** Completed preliminary structural observation report of exterior façade conditions to recommended phased repairs for terra cotta and granite façade. Building is on State Historic Register and was constructed in the early 1900's.

**West Virginia, State Capitol Complex, Building 5:** Structural design and analysis for support of new boilers and other mechanical equipment to be placed in mechanical penthouse.

**West Virginia, State Capitol Complex, Building 7:** Investigation and development of Construction Documents for new elevators.

**West Virginia, State Capitol Complex, Building 3:** Structural design and construction administration of repairs to limestone canopy. Building is eligible to be placed on State Historic Register and was constructed in the 1950's.

**West Virginia, State of West Virginia Office Building #21, Fairmont, WV:** Preliminary structural observation report for condition assessment of building structure.

**West Virginia, State Capitol Complex, Building 5:** Structural design and analysis for support of new boilers and other mechanical equipment to be placed in mechanical penthouse.

**West Virginia, Hampshire County Courthouse:** Structural design for new elevator for existing historic building.

**West Virginia, Shinnston Park:** Structural design of new outdoor pool.

### **PREVIOUS EXPERIENCE**

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

steps. Building is on State Historic Register and was constructed in the 1930's.

**West Virginia, Beech Fork State Park Pool, Bathhouse and Cabins:** Designed structure for new bathhouse, swimming pool and cabins.

**West Virginia, Moncove Lake State Park Pool:** Designed structure for new swimming pool.

**West Virginia, Upshur County Courthouse Annex:** Performed structural evaluation and design for repairs to existing multi-story Annex addition.

**West Virginia, Canaan Valley Resort and Conference Center:** Structural feasibility study to upgrade lodging units.

**West Virginia, West Virginia University Masterplan:** Investigated structural floor load capacity of several university buildings as a consultant to a large national architectural firm for masterplan.

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

**Pennsylvania, Hampton Inn:** Structural design of new 5-story masonry and precast plank hotel building.

**Pennsylvania, Comfort Inn:** Structural design of new 5-story masonry and precast plank hotel building.

**Pennsylvania, Misericordia University:** Structural design of new 4-story masonry and precast plank dormitory building.

**Pennsylvania, Metropolitan Edison Company, Headquarters:** Structural design of 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.

Technical Bid for:

West Virginia Division of Natural Resources

Wildlife Mgt. Storage Buildings: (CEOI - 0310 - DNR 150000016) 26





**B. Craig Miller PE, LEED-AP**

**President • Principal Engineer**

Founder of Miller Engineering in 2003, he serves as President and Principal Engineer; Craig has more than (20) years of experience in project solution and design.

During his employment with WVU, he was directly involved with approximately \$130 million in new capital construction. Experienced in a wide range of projects and building types, including: renovations and adaptive reuse for building systems; he can add value to projects by leading the team to design constructable solutions. He is experienced at working with both owner's and teams to complete project goals.

### **Profile**

#### **President**

- Design of MEP, Fire, Data, and Project Solutions
- Project Personnel Management
- Business Operations and Financial Management Oversight
- Quality Assurance and Control

### **Project Highlights**

- \$75M in MEP Projects Completed to Date
- Multiple Project Experience with Buildings Aged 70+ years
- Metropolitan Theater Historic Renovation
- Bartlett House Phased Adaptive Renovation
- West Virginia Capitol Building Renovation
- Veteran's Memorial and Reflecting Pool

### **Professional History**

2003- Present	Miller Engineering, Inc.	President and Principal Engineer
2002-2003	Casto Technical Services	Existing Building Services Staff Engineer
2001-2002	Uniontown Hospital	Assistant Director 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

### **LICENSE/CERTIFICATION**

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





**Kelly C. Brett**

**Applied Technology Coordinator**

As a project coordinator, Kelly oversaw design coordination efforts on many general construction projects of varying scope and size. These projects have provided Kelly with experience in construction and the integration of multidiscipline construction projects. Kelly is an **Autodesk Revit Certified Associate** and is responsible for Miller Engineering's Building Information Modeling initiative. Kelly has extensive experience in providing design visualization services to enhance the communication between Architect/Engineer and the client. He provides General Trades, HVAC, Mechanical, Plumbing, and Electrical design services for Miller Engineering along with estimation, and construction administration services.

### **PROFILE**

#### **Coordination of General Trades, Mechanical, Electrical, and Plumbing Systems**

- Design of General Trades, Mechanical, Electrical, and Plumbing Systems
- Design Visualization
- BIM Coordination
- Submittal Review
- RFI Review and Response

### **PROFESSIONAL HIGHLIGHTS**

- 1,000,000 SF Primary/Secondary Renovation and New Construction
- 500,000 SF Higher Education Renovation and New Construction
- UHS Middle School Renovation - Project Manager
- Adjunct Professor of 2D/3D Autocad® and Solidworks®

### **EMPLOYMENT HISTORY**

2013-Present	Miller Engineering, Inc.	Applied Technology Coordinator
2013-Present	Fairmont State University	Adjunct Professor
2007-2012	Alpha Associates, Inc.	CAD Coordinator/Project Manager
2004-2004	Fairmont State University	Adjunct Professor
2002-2007	Alpha Associates, Inc.	Architectural Technician

### **EDUCATION**

2002 Fairmont State University, BS – Architectural Engineering Technology

### **CERTIFICATION**

- Autodesk Revit Certified Associate



**Travis Taylor, PE**

**Staff Engineer**

Experience in project management facilitates Travis's ability to create and design constructable 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 a staff engineer, he provides HVAC, Mechanical, Plumbing, Electrical, and Fire Protection design solutions and services for our clients. Travis's hands-on construction experience enables him to provide engineered solutions for all types of building's fire protection and suppression requirements.

### **Profile**

#### **Staff Engineer**

- Design of MEP, Fire, Data, and Phone Systems
- Constructable Design and Materials Evaluation
- Site Evaluation and Mechanical System Review
- Submittal and RFP Review
- RFI Coordination, Review, and Response
- Construction Observation

### **Project Highlights**

- WVU Football Stadium Scoreboard
- Electrical Contractor Project Manager for the *Louis Johnson VA Hospital*  
-- 3<sup>rd</sup> floor Inpatient Renovation
- WVU Temperature Control Upgrades
- Adaptive Renovation of Urlings General Store into Apartments
- Pipestem state Park Switchgear, Piping, and Fire Alarm Upgrades
- WVU Eiesland Hall Fire Alarm and Sprinkler Upgrades
- Bartlett House Fire Alarm and Sprinkler System Design

### **Professional History**

2011-Present

Miller Engineering, Inc.

Staff Engineer

2006-2011

Tri-County Electric, Co.

Project Manager

### **Education**

2006 West Virginia University, BS – Mechanical Engineering

### **LICENSE/CERTIFICATION**

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



**Robert Angus**

**Construction Project Representative**

Expertise in project management is at the forefront of Robert's abilities and during the past (10) years he has been directly involved with over \$30 million dollars of construction projects. Years of maintenance, operations, plumbing, and HVAC construction add valuable knowledge and expertise to our complete assessment process.

Robert's hands-on experience enables him to interface with construction personnel seamlessly alongside engineers and architects. He is adept at preventing, mitigating, and resolving construction issues. He is involved at the site evaluation and estimation phase to enhance outcomes of collaboration for all stakeholders' interest and to help ensure constructable designs which meet project goals.

**Profile**

**Construction Administration**

- Construction Estimation and Building Information Modeling
- Site Evaluation, Mechanical System Review
- Submittal Review and Project Planning
- RFI, RFPCO Review and Response

**Project Highlights**

- 3<sup>RD</sup> Party Construction Observation – Canaan Valley Resort
- WVU Willowdale Walkway
- Veteran's Memorial and Reflecting Pool
- Blackwater Falls Kitchen HVAC Renovation, Fire/Sprinkler System
- Holly River Electric Project
- Preston County 911 Call Center

**Professional History**

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

**Education**

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

**LICENSE/CERTIFICATION**

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



**Jack Jaminson**

**Code Professional**

Jack brings (15) years as an electrical/building inspector and over (25) years of experience in the commercial electrical construction industry. Through his experience, he is familiar with many local and state code enforcement officials. His knowledge and experience are valuable resources to Miller's complete assessment process.

**Profile**

**Design and Construction Observation of Electrical Systems**

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

**Project Highlights**

- Board Member of the West Virginia 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 Professional
1999-2010	Megco Inspections	Chief Inspector
1972-1998	Jamison Electrical Construction	Electrician

**Education**

1971 Fairmont State College, BS-Engineering Technology-Electronics

**LICENSE/CERTIFICATION**

- 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**

**MEP Designer**

Joe's is our in house specialist for AutoCAD, MEP and Revit MEP. He provides design modeling, drafting, and supervised design services and construction support.

**Profile**

**Drafting Design of Mechanical, Electrical, Plumbing, and Fire Safety Systems**

- CADD Coordination of New Construction and Renovation Designs
- Revit MEP Drafting

**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*

## 4. PROJECT APPROACH

Three Designs' approach to the West Virginia Division of Natural Resources' wildlife Resources Section Storage Buildings for the Elk River and Handley Wildlife Management Areas can and will be consistent with the strategy employed by the company on all its professional service design projects.

### STORAGE BUILDINGS PROJECT

Should we be tasked with developing a design/construction package for Storage Buildings Project to design the new facilities, the following approach will be followed. This approach is described in two components – our project plan and the tools by which we intend to accomplish the West Virginia Wildlife Resources Section's aspirations for your project.

### PROJECT MANAGEMENT

**Communication** is paramount to the success of any project. Communication is built as a result of open lines, phones, emails, faxes, etc., but especially face to face. And the main factor of communication is not talking, but listening to the needs and wishes of the client / users.

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. Establishing this trust is the initial objective of the design team and may be achieved through providing creativity, diligence, and attentive service.

Through initial interviews and meetings, the design team will seek to maximize concurrent input from the West Virginia Division of Natural Resources Officials to gain insight into the rationale for establishing communications as follows:

**Goals of the project** – Will include criteria that will be used by the West Virginia DNR Officials to determine a successful project.



Facility performance criteria - among those to be explored:

- Function
- Energy usage
- Security
- Image/Community context
- Circulation

**Project scope control** – We are ascertaining that the architectural program and conceptual design will address needs and goals of the West Virginia Division of Natural Resources.

**a. Building systems preferences** and current pricing market for select systems to be considered. Systems may include structural, building envelope, vertical circulation, and heating, ventilation, and air-conditioning systems.

**b. Building materials preferences** and cost comparisons that could be considered. This input amounts to early value engineering for selection of key materials to be considered and incorporated. This can save and will save your project considerable time and expense to obtain this initial input.

### SCHEDULE AND BUDGET MANAGEMENT

**Budgets and Schedules** are critical elements of your project and which require attention to detail in order to keep in check. All projects are subject to unknown or undiscovered factors that cause potential change orders. To control these factors, it is very important for our team in discovering all of the facts about the project as possible.



## 4. PROJECT APPROACH

**a. Budget control.** Successful projects will then result from all members of the project team developing a good understanding of the limitations that the project budget establishes, and then working to remain within those budget constraints.

Our experience with budgets has been effective for our client's. Mr. Bolen's experience will lead the team in controlling the project from overruns and discovery and dealing with any unknown conditions of the project.

**b. Schedule control.** Just as with selecting reasonable materials and systems that meet the design criteria, intent, and budget, it is also critical to ensure that the design components are developed within a designated schedule that meets the West Virginia Wildlife Resources Section's needs.

Long lead items and items that require unnecessary major installation times result in increased budget and will be controlled as well.

### PROJECT EXECUTION

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

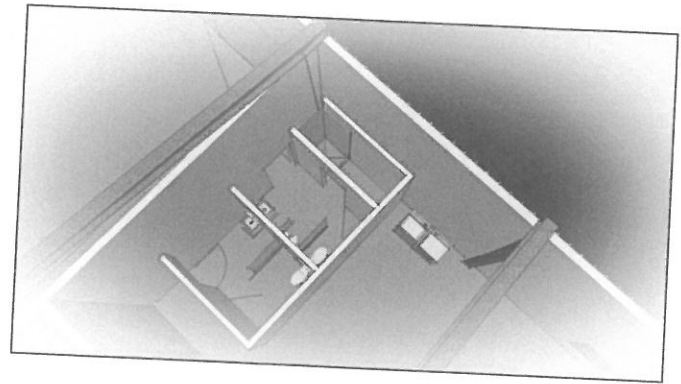
#### **a. Facilitate a project kick-off conference**

The objective will be to introduce the design team to the history of the project, the progress made to-date, and for the West Virginia Wildlife Resources Section to present the concept design and/or vision.

This meeting is to be interactive and to familiarize the design team with the West Virginia Wildlife Resources Section's goals, ideas, and expectations for the project. It is an opportunity to become more familiar with design team members and their particular expertise.

#### **b. Architectural Program Verification**

1. Develop insight and understanding of



- design goals, decision-making rationale
2. Identify key techniques, operations.
3. Confirm the West Virginia Wildlife Resources Section's approach to:
  - a. Operational standards
  - b. Security
  - c. Safe working and living environment
  - d. Cost effectiveness
  - e. Apparatus
4. Confirmation of space needs
5. Explore precepts for systems and materials
6. Understand budget limitations
7. Understand schedule ramifications / confirm milestones

#### **c. Concept Design Verification**

1. Develop an understanding of the design context and preferences of the West Virginia Wildlife Resources Section
2. Develop an understanding of the site design, including accessibility, vehicle, and pedestrian circulation
3. Develop insight and confirmation of spatial relationships
4. Develop insight and confirm style, context and material preferences
5. Explore budget ramifications of design precepts

#### **d. Schematic Design**

1. Refine site layout, vehicular/ pedestrian access, ancillary spaces, and parking
2. Identify preliminary hydrology concept
3. Refine floor plan and concepts



## 4. PROJECT APPROACH

4. Confirm preferences for apparatus bay configurations and equipment
5. Identify preliminary structural system including foundations and superstructure
6. Identify preliminary HVAC, electrical lighting/power and plumbing systems
7. Submit schematic package, including drawings, outline specifications to the West Virginia Wildlife Resources Section's project team for initial review and comment

### **e. Design Development**

1. Refine site, hydrology, landscape designs through added detail
2. Refine floor plan, room finishes, door and window schedules, building envelope, exterior elevations with dimensional confirmation
3. Refine building structural systems with dimensional control and sizing of members
4. Refine the preferred HVAC, building controls, plumbing, electrical lighting, emergency power, security systems and fire protection systems
5. Prepare a preliminary cost estimate based on the design as established from the Schematic Phase along with the refinements of this phase.
6. Submit the design development package, including drawings and edited specifications to the West Virginia Wildlife Resources Section's project team for review.

### **f. Construction Documents Phase**

1. Finalize site, site hydrology, landscaping designs and documentation
2. Finalize the building layout, building envelope, structural, interior and exterior documentation
3. Finalize the HVAC, plumbing, electrical, fire protection, security systems and documentation
4. Finalize the refined cost estimate
5. Submit the construction documents

package including drawings, and project manual to the West Virginia Wildlife Resources Section's project team for final review and acceptance

### **g. City Plan Review and Permitting**

1. Submit completed package to the West Virginia Wildlife Resources Section for review
2. Address review comments and make adjustments as required to facilitate the review and acceptance by the West Virginia Wildlife Resources Section

### **h. Construction**

1. Three Designs' approach to construction contract administration and interaction is more fully explained later in this section. The designs team will assist the Contractor by expediting reviews of shop drawings and submittals; by answering requests for information or clarification on the documents.
2. Make periodic site visits to monitor and report to the West Virginia Wildlife Resources Section on the progress and conformance of the work during construction.
3. Perform a formal inspection of the work at the substantial completion stage and prepare a punch-list of deficiencies or items needing further attention.
4. Perform a pre-final inspection for the purpose of clearing the punch-list items.
5. Perform a final inspection and issue final acceptance.

### **i. Post-Construction**

1. Using record documents created in the field by the Contractor, Three Designs will refine the as-built drawings to reflect final field-constructed conditions.



## 4. PROJECT APPROACH

### Project Method and Approach

#### **Method:**

Miller Engineering believes in creating MEP systems that are both constructable and maintainable and are a solution for the project's needs. Various staff members of MEI have practical commercial construction experience and can apply this knowledge to the Wildlife Management Project to help ensure a quality outcome.

#### **Evaluation and Review:**

Our team will meet in-person and phone-conference with, as the situation applies, all stakeholders of the project to gain insight and affirm goals before developing a design specific to the project's needs/goals. In addition, the sites will be visited to identify electric capacity and water availability and exact location on the property for the building's construction. Specific attention will be on the placement of utilities and the facility's need for domestic/sanitary water services.

#### **Design Process:**

We believe in all stakeholders being actively involved throughout the entire design process. Miller Engineering will begin design development and initial estimates. Plans will be presented to the owner upon completion of schematic and design development. Revisions will be made, owner approval sought, and construction documents then will be created. Project budget estimates will have several iterations to lessen any surprises during bidding. Local code officials and utility companies will be consulted during design for compliance.

#### **Bidding, Construction, and Quality Assurance:**

MEI will assist in the bidding process by taking part in pre-bid meetings and answering any questions arising prior to bidding. We offer one of the most comprehensive construction administration services in the industry. Our staff will be active in progress meetings, RFI and submittal review, and construction observation. Prompt response is critical and will be essential in keeping the project schedule and budget on target.

#### **Post Construction:**

After construction is complete, Miller Engineering will make their services available as a technical reference. We will ensure during project close-out that the Owner's staff is educated on the system's operation and maintenance. Any post construction questions will be handled by our team. MEI's staff will also ensure that the owner is provided with accurate as-built drawings and owner and operator manuals.

## 4. PROJECT APPROACH

### Owner Communication

Miller Engineering utilizes a communications process and procedure designed to minimize downtime while ensuring neither the Owner, nor design team, or contractor is left out of the loop.

Milestones of the project will be outlined and upon notification of an award of a project, Craig Miller, lead engineer determines the "best fit" for the project and communicates this with the owner. The chart below shows an example of the main point of contact with a back-up contingency so that the owner can have assurance of consistent communication.

#### Communication plan with architect:

Regular progress meetings will be held with the architect, owner, and other involved stakeholders. Meetings will be held on-site, in person, and via telephone as the situation necessitates. E-mail will be used to confirm and document meetings. The architect will be the primary contact with the owner and the principal engineer will be a secondary contact and technical resource for the owner on this project. *MEP elements will be communicated as followed:*

#### Owner Communication Plan:

Milestone	Main	Back-up	Copied On
Design	Craig Miller	Travis Taylor	Joe Machnick & Kelly Brett
Estimating	Craig Miller	Rob Angus	Travis Taylor
Bidding	Craig Miller	Travis Taylor	Rob Angus
Construction	Rob Angus	Travis Taylor	Craig Miller
Warranty	Rob Angus & Craig Miller	Travis Taylor	Joe Machnick

#### Vendor and Code Officials Communication Plan:

Milestone	Main	Back-up	Copied On
Estimating	Rob Angus & Travis Taylor	Craig Miller	Travis Taylor & Rob Angus
Bidding	Craig Miller	Rob Angus	Joe Machnick & Kelly Brett
Construction	Rob Angus, Jack Jaminson	Travis Taylor	Craig Miller

## 4. PROJECT APPROACH



### Cost Control

*Coordination is a key determinant affecting any budget.*

#### Estimating Methodology and Avoiding Change Orders

- Perform budgetary estimate of probable cost, review with owner to determine possible changes in scope and/or design.
- Perform estimating at each design phase and update as necessary throughout
- Listen and review the owner's goals. Discuss methods for arriving at those goals with the entire team.
- If feasible, review the project with Code officials and any authority having jurisdiction to ensure compliance.
- Explore viable options for alternative design and or construction.
- Ensure the plans being set forth are constructible, maintainable, and within budget.

#### Programming/Schematic Design

- Communicate with all stakeholders in a clear/open fashion from the first meeting
- Review installation requirements with local construction standards.
- Assess design short and long term goals with architect, owner, and MEI team.
- Continuously review the design for constructability
- Communicate MEP system requirements to all members of the team as early as possible. Resolve any conflicts within a timely manner.
- Review the MEP system vendors with the Owner prior to the start of specifications. Any changes will be communicated to the owner in writing.

#### Construction Documents/Bidding Phase

- Perform full review of documents with design team and owner.
- Review specifications and notes to determine appropriate level of MEP system install.
- Ensure documents clearly define coordination amongst all trades.
- Perform final review of documents with owner. Discuss in detail of how the project is implemented according to the plans/specifications.
- During the bidding process, answer any question in writing for distribution to all bidders. Ensure answers become part of the project requirements. Answer questions in a timely manner to prevent delays.

#### Construction Phase

- Perform timely review of shop drawings and submittals to reduce the potential for a delay based claim.
- Answer RFIs in timely manner/issue clarification drawings (CSD) as necessary. Distribute CSDs to all potentially affected trades.

## 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 exceeds five percent of the total contract amount.

**AFFIRMATION:** By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (W. Va. Code §61-5-3) that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

**WITNESS THE FOLLOWING SIGNATURE:**

Vendor's Name: Three Designs, PLLC

Authorized Signature: [Signature] Date: October 14, 2014

State of West Virginia

County of Kanawha, to-wit:

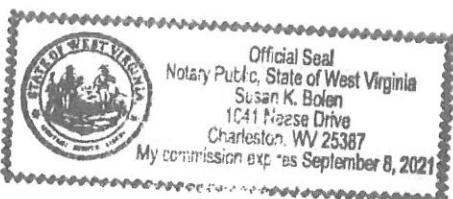
Taken, subscribed, and sworn to before me this 14 day of October, 2014.

My Commission expires September 8, 2021.

**AFFIX SEAL HERE**

NOTARY PUBLIC [Signature]

Purchasing Affidavit (Revised 07/01/2012)



**ADDENDUM ACKNOWLEDGEMENT FORM**  
**SOLICITATION NO.: DNR1500000016**

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

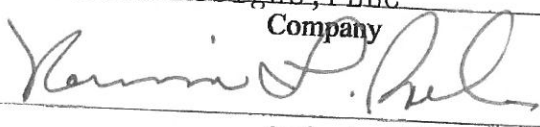
**Acknowledgment:** I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

**Addendum Numbers Received:**

(Check the box next to each addendum received)

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Addendum No. 1 | <input type="checkbox"/> Addendum No. 6  |
| <input type="checkbox"/> Addendum No. 2            | <input type="checkbox"/> Addendum No. 7  |
| <input type="checkbox"/> Addendum No. 3            | <input type="checkbox"/> Addendum No. 8  |
| <input type="checkbox"/> Addendum No. 4            | <input type="checkbox"/> Addendum No. 9  |
| <input type="checkbox"/> Addendum No. 5            | <input type="checkbox"/> Addendum No. 10 |

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

\_\_\_\_\_  
Three Designs, PLLC  
Company  
  
\_\_\_\_\_  
Authorized Signature  
  
\_\_\_\_\_  
October 14, 2014  
\_\_\_\_\_  
Date

**NOTE:** This addendum acknowledgement should be submitted with the bid to expedite document processing.  
Revised 6/8/2012

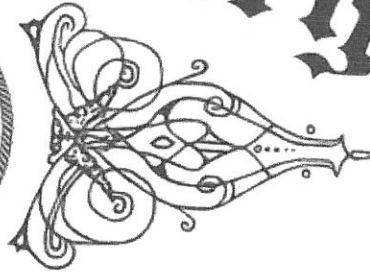
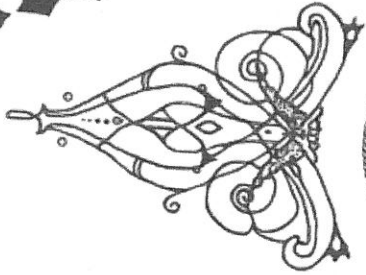


### CERTIFICATION AND SIGNATURE PAGE

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  
[Signature] PRESIDENT  
(Authorized Signature) (Representative Name, Title)  
304.807.0841 10/14/14  
(Phone Number) (Fax Number) (Date)

# State of West Virginia



## Certificate

*I, Natalie E. Tennant, Secretary of State,  
of the State of West Virginia, hereby certify that*

Three Designs, PLLC

has filed the appropriate registration documents in my office according to the provisions of the West Virginia Code and hereby declare the organization listed above as duly registered with the Secretary of State's Office.

*Given under my hand and  
the Great Seal of West Virginia  
on this day of  
July 29, 2014*



*Natalie E. Tennant*

*Secretary of State*

# The West Virginia Board of Architects

certifies that

RON L. BOLEN

is registered and authorized to practice  
Architecture in the State of West Virginia.

In testimony whereof this certificate has been issued  
by the authority of this board.

Certificate Number [REDACTED]

*The registration is in good standing until June 30, 2015.*



*Lepa C. Lewis*

Board Administrator

# WEST VIRGINIA UNIVERSITY



THE COLLEGE OF ENGINEERING

KNOW ALL PERSONS BY THESE PRESENTS  
THAT THE UNIVERSITY OF WEST VIRGINIA BOARD OF TRUSTEES  
UPON THE RECOMMENDATION OF THE FACULTY  
HAS CONFERRED UPON

CRAIG MILLER

THE DEGREE OF

BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING

WITH ALL THE RIGHTS, HONORS AND PRIVILEGES THEREUNTO  
APPERTAINING, WITNESS THE SEAL OF THE UNIVERSITY  
AND THE SIGNATURES OF ITS DULY AUTHORIZED OFFICERS  
HEREUNTO AFFIXED THIS FOURTEENTH DAY OF MAY,  
NINETEEN HUNDRED NINETY-FIVE

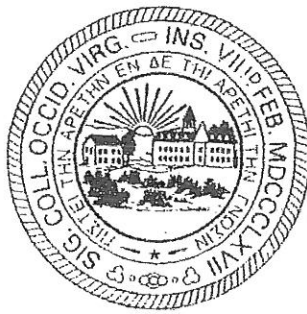
*Neil S. Bucklew*  
\_\_\_\_\_  
PRESIDENT OF THE UNIVERSITY

*Robert M. Adamson*  
\_\_\_\_\_  
DEAN OF THE COLLEGE

*John R. Hollister*  
\_\_\_\_\_  
CHAIR, UNIVERSITY OF WEST VIRGINIA  
BOARD OF TRUSTEES

*Charles H. Mearns*  
\_\_\_\_\_  
CHANCELLOR, UNIVERSITY OF WEST VIRGINIA  
BOARD OF TRUSTEES

# WEST VIRGINIA UNIVERSITY



## COLLEGE OF ENGINEERING AND MINERAL RESOURCE

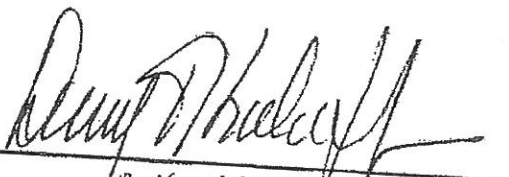
*Know all persons by these presents  
that the West Virginia University Board of Governors  
upon the recommendation of the faculty  
has conferred upon*

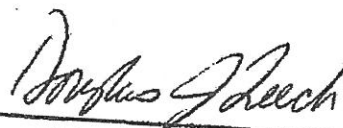
**TRAVIS WAYNE TAYLOR**

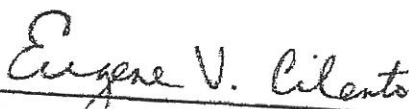
*The Degree of*

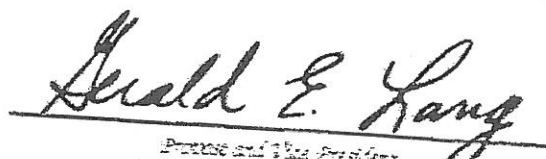
## BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING

*With all the rights, honors, and privileges thereunto  
appertaining. Witness the seal of the university and  
the signatures of its duly authorized officers hereunto  
affixed this fourteenth day of May,  
two thousand six.*

  
President of the University

  
Chair, West Virginia University  
Board of Governors

  
Dean of the College

  
Provost and Vice President

# State of West Virginia



**Fairmont State College**

**This Diploma Makes Known**

*That the Fairmont State College Board of Governors upon the recommendation  
of the Faculty of the College has conferred upon*

**Kelly Chandler Brett**

*the degree of*

**Bachelor of Science in Engineering Technology**

*In Testimony thereof, the signatures of the duly authorized officers of Fairmont State  
College and of the Faculty of the College have been affixed.*

*Given under the seal of Fairmont State College, this eleventh day of May, 2002.*

A handwritten signature in cursive script, appearing to read "D. J. Brett", written over a horizontal line.

PRESIDENT

A handwritten signature in cursive script, appearing to read "L. J. Fisher", written over a horizontal line.

PROVOST AND VICE PRESIDENT FOR ACADEMIC AFFAIRS

A handwritten signature in cursive script, appearing to read "Stephen Brooks", written over a horizontal line.

CHAIR, BOARD OF GOVERNORS

A handwritten signature in cursive script, appearing to read "Blair Montgomery", written over a horizontal line.

PROVOST, COMMUNITY AND TECHNICAL COLLEGE

# State of West Virginia



## Fairmont State College This Diploma Makes Known

*That the West Virginia Board of Regents upon the recommendation  
of the faculty of the College has conferred upon*

**Jack E. Jamison, Jr.**  
*the degree of*

**Bachelor of Science**

*In Testimony thereof, the signatures of the duly authorized officers of the  
West Virginia Board of Regents and of the Faculty of the College and  
the seal of the West Virginia Board of Regents have been affixed.*

*Done at Fairmont, West Virginia, this 15th day of May, 1971.*

WEST VIRGINIA BOARD OF REGENTS

*Earle T. Andrews*

PRESIDENT OF THE BOARD OF REGENTS

*Samuel Ballard*

CHANCELLOR

*E. R. Seaster*

PRESIDENT OF COLLEGE

*William A. Bovan*

DEAN OF ACADEMIC AFFAIRS



# The Pennsylvania State University



By Authority of the Board of Trustees and  
Upon Recommendation of the Faculty, Hereby Confers Upon

Joseph M. Machnik  
the degree of

Associate In Engineering Technology  
College of Engineering  
In recognition of the completion of the Major in  
Architectural Engineering Technology

In Testimony Whereof the Undersigned Have Subscribed Their Names  
and Affixed the Seal of the University this month of May, 2007.

*James S. Broadhurst*  
President of the

*Graham B. Spanier*  
President of the University

*Robert D. O'Brien*  
Executive Vice President

# CERTIFICATE OF *Authorization*

STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

*The West Virginia State Board of Registration for Professional Engineers  
having verified the person in responsible charge is registered in  
West Virginia as a professional engineer for the noted firm, hereby certifies*

**MILLER ENGINEERING, INC.**

**C02108-00**

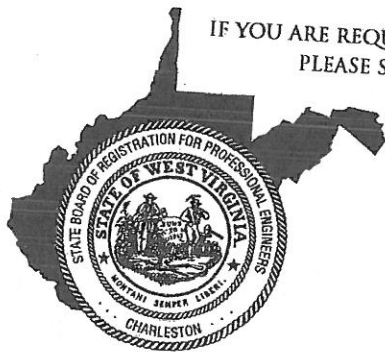
**Engineer in Responsible Charge: BRIAN MILLER - WV PE 015184**

*has complied with section §30-13-17 of the West Virginia Code governing  
the issuance of a Certificate of Authorization. The Board hereby notifies you of its  
certification with issuance of this Certification of Authorization for the period of:*

**July 1, 2013 - June 30, 2014**

*providing for the practice of engineering services in the State of West Virginia.*

IF YOU ARE REQUIRED TO REGISTER WITH THE SECRETARY OF STATE'S OFFICE,  
PLEASE SUBMIT THIS CERTIFICATE WITH YOUR APPLICATION.



IN TESTIMONY WHEREOF, THE WEST VIRGINIA STATE BOARD OF  
REGISTRATION FOR PROFESSIONAL ENGINEERS HAS ISSUED THIS COA  
UNDER ITS SEAL, AND SIGNED BY THE PRESIDENT OF SAID BOARD.

BOARD PRESIDENT

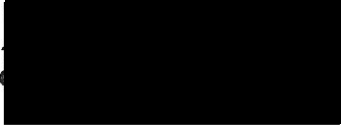
# Your ACTIVE PE renewal fee has been received...

Your ACTIVE PE renewal fee has been received. Your pocket card indicating you are entitled to practice engineering in West Virginia until June 30, 2014 may be detached and used until that date unless invalidated as a result of Board audit of your renewal form or formal disciplinary action.

## IMPORTANT REMINDERS:

1. Please include your WV ACTIVE PE license number on any correspondence to this office.
2. Please sign the back of this pocket card and carry the registration with you.
3. You are required to immediately notify the Board, in writing, of the following: loss or theft of license or seal, any name change, any address change, or any employment change.

BRIAN C MILLER



West Virginia State Board of Registration  
for Professional Engineers  
300 Capitol Street, Suite 910  
Charleston, West Virginia 25301  
304-558-3554 Phone  
800-324-6170 Toll Free

THIS IS YOUR RENEWAL PAYMENT RECEIPT  
(in addition to your secondary records of either a canceled check or credit card statement, as well as a confirmation email and printed confirmation page if renewing via our website)  
PLEASE SAVE THIS FOR YOUR RECORDS



West Virginia State Board of Registration  
for Professional Engineers

BRIAN C MILLER  
WV PE # [REDACTED]

This is to certify that the above named PROFESSIONAL ENGINEER has met the requirements of the law, is duly registered and is entitled to practice engineering in the State of West Virginia.

EXPIRES June 30, 2014



STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

**To** all to whom these presents shall come Greeting  
"Know Ye" That The State Board of Registration for Professional Engineers  
of the State of West Virginia, reposing special confidence in  
the Intelligence, Integrity and Discretion of

**Travis M. Taylor**

**DOES IN PURSUANCE OF AUTHORITY VESTED IN IT**  
by law hereby certify that he having submitted  
satisfactory evidence of his ability and experience is a

**REGISTERED PROFESSIONAL ENGINEER**

Registration Number 20244

**To Hold** and use such title in the practice of his profession,  
subject to the conditions prescribed by law.



Given under the hand of the  
Seal of the Board at the Capitol in the  
City of Charleston,  
This 23rd day of May  
in the year of our Lord 2013  
and of the State  
the One Hundred Forty-Ninth

Members of the Board

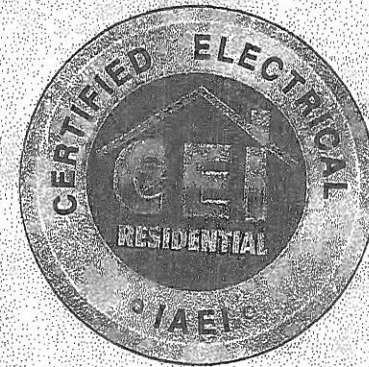
*James D. Timms, Jr.* *Richard E. Dlynas*

*Blair S. Smith* *William E. Viers*





Hereby Certifies that



**Jack E. Jamison, Jr.**

has demonstrated professional qualifications through a written examination based on the National Electrical Code® along with successful completion of field practice and documented expertise in required categories and has hereby achieved certification as

**Master Electrical Inspector**

Effective through:

September 30, 2013

Certification Identification No.



Secretary to the International Board  
International Association of Electrical Inspectors



International Code Council  
500 New Jersey Avenue, NW  
Washington, DC 20001

The individual named hereon is CERTIFIED in the categories shown, having been so certified pursuant to successful completion of the prescribed written examinations.

*Jack E. Jamison, Jr.*  
Not valid unless signed by certificate holder.  
ICC Certification attests to competent knowledge of codes and standards.



International Code Council  
500 New Jersey Avenue, NW  
Washington, DC 20001

The individual named hereon is CERTIFIED in the categories shown, having been so certified pursuant to successful completion of the prescribed written examinations.

*Jack E. Jamison, Jr.*  
Not valid unless signed by certificate holder.  
ICC Certification attests to competent knowledge of codes and standards.

Jack E. Jamison, Jr - 5171444  
Accessibility Inspector/Plans Examiner - Exp. 10/31/2014  
Certified Building Official - Exp. 10/31/2014  
Commercial Building Inspector - Exp. 10/31/2014  
Commercial Mechanical Inspector - Exp. 10/31/2014  
Electrical Inspector - Exp. 10/31/2014  
Master Code Professional - Exp. 10/31/2014  
Mechanical Plans Examiner - Exp. 10/31/2014  
Residential Combination Inspector - Exp. 10/31/2014

INTERNATIONAL  
CODE COUNCIL

Jack E. Jamison, Jr - 5171444  
Building Plans Examiner - Exp. 10/31/2014  
Combination Plans Examiner - Exp. 10/31/2014  
Commercial Electrical Inspector - Exp. 10/31/2014  
Commercial Plumbing Inspector - Exp. 10/31/2014  
Electrical Plans Examiner - Exp. 10/31/2014  
Mechanical Inspector - Exp. 10/31/2014  
Plumbing Plans Examiner - Exp. 10/31/2014  
Residential Energy Inspector/Plans Examiner - Exp. 10/31/2014

INTERNATIONAL  
CODE COUNCIL