



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

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

Proc Folder: 97110

Doc Description: Door Replacement EOI Design Services(Multiple Facilities)

Proc Type: Central Purchase Order

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**BID RECEIVING LOCATION**

BID CLERK

DEPARTMENT OF ADMINISTRATION

PURCHASING DIVISION

2019 WASHINGTON ST E

CHARLESTON

WV 25305

US

**VENDOR**

Vendor Name, Address and Telephone Number:

05/14/15 11:39:30  
 WV Purchasing Division

**FOR INFORMATION CONTACT THE BUYER**

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

Signature X

FEIN #

55-0676608

DATE

12-MAY-2015

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

**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.

ZMH, Inc.  
(Company)

ARV      ADAM R. KRASON, PRINCIPAL  
(Authorized Signature) (Representative Name, Title)

204.342.0159 / 304.345.8144      13.MAY.2015  
(Phone Number) (Fax Number) (Date)



# Expression of Interest for:

Architectural and Engineering Services

Interior and Exterior Door Replacements at Various  
West Virginia Army National Guard Facilities

ADJ1500000005

May 14, 2015

 **ZMM**  
ARCHITECTS & ENGINEERS

ORIGINAL



May 14, 2015

Ms. Tara Lyle, Senior Buyer  
Department of Administration, Purchasing Division  
2019 Washington Street, East  
PO Box 50130  
Charleston, West Virginia 25305-0130

**Subject: EOI for Architectural and Engineering Services for Interior and Exterior Door Replacement at Various West Virginia Army National Guard Facilities**

Dear Ms. Lyle:

ZMM Architects and Engineers is pleased to submit the attached information to demonstrate our experience and our qualifications to provide professional architectural and engineering services for an interior and exterior door replacement project at AASF #1 in Williamstown, AASF #2 in Wheeling, the Clarksburg Armory, and the Salem Armory. Established in 1959, ZMM is a Charleston based, full service A/E firm, and is noted for design excellence and client focus. ZMM has had the opportunity to work with the West Virginia Army National Guard on projects throughout the State of West Virginia since 1960. These projects have involved new construction as well as technically intensive renovation projects. Additionally, in 2013 ZMM was commissioned by the WVARNG to conduct a study of the Williamstown and Wheeling Army Aviation Support Facilities. Our study noted that:

**AASF#1 (Williamstown)**

"The exterior doors and frames are starting to rust which could eventually allow unauthorized personnel entry into the facility. The doors should be replaced and the source of the water infiltration should be resolved. This would likely involve resealing and/or repainting the exterior split face CMU and resealing the exterior caulk joints."

**AASF#2 (Wheeling)**

"The exterior doors pose a serious security threat. Most of the doors are showing advanced stages of rust and many are beginning to rust off of the hinges. Also, many of the doors no longer latch."

Our experience with these facilities, as well as our previous door replacement and renovation experience will help ensure the success of your projects.

Thank you for taking the time to review the attached expression of interest that includes information about our proposed project team, as well as ZMM's qualifications and relevant project experience. Additionally, please visit our website at [www.zmm.com](http://www.zmm.com) to see the full range of renovation projects that we have designed. We appreciate your consideration for this important assignment.

Respectfully submitted,

ZMM, Inc.

  
Adam R. Krason, AIA, NCARB, LEED-AP  
Principal

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# History and Philosophy of ZMM



**LOCATION:**  
222 Lee Street, West  
Charleston, WV

**CONTACT:**  
Phone 304.342.0159  
Fax 304.345.8144  
[www.zmm.com](http://www.zmm.com)

## History



ZMM was founded in 1959 in Charleston, West Virginia by Ray Zando, Ken Martin, and Monty Milstead. Since the inception of the firm, ZMM has been dedicated to providing an integrated approach to building design for our clients. ZMM delivers this integrated approach by providing all building related design services, including architecture, engineering (civil, structural, mechanical, and electrical), interior design, and construction administration from our office in Charleston. Our integrated design approach makes ZMM unique among architectural firms in West Virginia, and helps to ensure the quality of our design solutions by providing more thoroughly coordinated construction documents.

Over the last decade, ZMM has become a leader in sustainable or 'green' design in West Virginia. In addition to participating in sustainable design and construction seminars throughout the State (Beckley, Fayette County, Morgantown, Charleston, and Parkersburg), ZMM designed one of the first sustainable educational facilities in West Virginia (Lincoln County High School). ZMM's unique design approach has proven invaluable on projects that employ sustainable design principles, which often require a more integrated approach to building design.

As ZMM enters our second half-century providing professional design services in West Virginia, we remain committed to the ideal of providing high quality, client focused, design solutions that meet budget and schedule requirements. This commitment to quality has been recognized through both State and National design awards, as well as through the long-term client relationships that we have developed.



ZMM has been dedicated to the integrated approach to building design which is unique to architectural firms of our size. Our past successful experience demonstrates that providing multi-disciplined services within one organization results in a fully coordinated project. ZMM has the qualified professionals available to provide services throughout the duration of a project from the initial planning phases through post-occupancy evaluations and beyond.

**Advantages of an integrated Design Approach:**

- The Owner has a Single Point of Design Responsibility
- Improved Design Schedule
- Improved Coordination of Documents
- Improved Construction Phase Services
- Well Coordinated Documents Lead to Better Bids for the Owner

Additionally, ZMM is constantly working to improve the services we offer by addressing emerging and evolving trends that impact the design and construction market. ZMM has eight LEED accredited Professionals on staff to address the needs of our clients who are interested in designing buildings that meet the US Green Building Council's standards. This continues ZMM's active implementation of sustainable design principles on our projects.

**ZMM has maintained an average of 35 employees over the last five years. Our team has the expertise to provide the services below:**

**Pre-Design**

Educational Facility Planning  
Programming  
Space Planning  
Feasibility Studies  
Existing Building Evaluation  
Site Evaluation and Analysis  
Master Planning  
Construction Cost Estimating

**Post Design**

Construction Administration  
Value Engineering  
Life Cycle Cost Analysis  
Post-Occupancy Evaluation

**Design**

Architectural Design  
Sustainable Design  
Interior Design  
Landscape Architecture  
Structural Engineering  
Mechanical Engineering  
Electrical Engineering  
Civil Engineering  
Lighting Design  
Energy Consumption Analysis



# Award Winning Design



## 2015

**AIA West Virginia Chapter: Honor Award**  
*Achievement in Architecture in Sustainable Design*  
Edgewood Elementary School  
Charleston, West Virginia



**AIA West Virginia Chapter: Merit Award**  
*Achievement in Architecture*  
Kenna Pk-5 School  
Kenna, West Virginia



## 2014

**AIA West Virginia Chapter: Merit Award**  
*Achievement in Architecture in Sustainable Design*  
Huntington East Middle School  
Huntington, West Virginia



**AIA West Virginia Chapter: Merit Award**  
*Achievement in Architecture*  
Southern West Virginia Community & Technical College  
Williamson, West Virginia



**AIA West Virginia Chapter: Merit Award**  
*Achievement in Architecture in Interiors/Graphics*  
Girl Scouts of Black Diamond Council  
Charleston, West Virginia

## 2012

**AIA West Virginia Chapter: Honor Award**  
*Excellence in Architecture*  
West Virginia Housing Development Fund Building  
Charleston, West Virginia



## 2011

**AIA West Virginia Chapter: Honor Award**  
*Excellence in Architecture in Historical Preservation*  
Southside Elementary/Huntington Middle School  
Huntington, West Virginia



## Additional Award Winning Design



**AIA West Virginia Chapter: Honor Award**  
*Excellence in Architecture*  
Joint Interagency Training & Education Center  
Kingwood, West Virginia

**AIA West Virginia Chapter: Merit Award**  
*Excellence in Architecture in Interiors*  
WV State Office Building #5, 10th Floor Renovation  
Charleston, West Virginia

### **2010**

**AIA West Virginia Chapter: Honor Award**  
*Excellence in Architecture*  
Hacker Valley PK-8 School  
Hacker Valley, West Virginia

### **2009**

**AIA West Virginia Chapter: Merit Award**  
*Excellence in Architecture*  
Construction & Facilities Management Office (CFMO)  
Charleston, West Virginia

### **2008**

**AIA West Virginia Chapter: Honor Award**  
*Excellence in Architecture*  
Erma Byrd Center  
Beaver, West Virginia

### **2007**

**AIA West Virginia Chapter: Honor Award**  
*Excellence in Architecture*  
Lincoln County High School  
Hamlin, West Virginia

### **2006**

**AIA West Virginia Chapter: Merit Award**  
*Excellence in Architecture*  
Gene Spadaro Juvenile Center  
Mt. Hope, West Virginia



# Adam R. Krason, AIA, NCARB, LEED AP



## Role

Architect, Principal

## Professional Registrations

Registered Architect (WV, OH, KY, VA)

LEED Accredited Professional

NCARB (55,984)

Construction Specifications Institute (CSI)

Construction Documents Technician (CDT)

Mr. Krason has served in the capacity of Architect and Project Manager for a variety of projects at ZMM. This experience includes Military, Educational (K-12 and Higher Education), Office, Justice (Courthouses, Correctional, Justice Centers), and Multi-Unit Residential projects. Mr. Krason's responsibilities include programming, design, documentation, coordination of the architectural and engineering team, as well as construction administration. Mr. Krason began his career in 1998, working on a variety of educational, commercial office, and correctional projects throughout Ohio, West Virginia, and North Carolina.

Mr. Krason has been an advocate of sustainable design in West Virginia, participating in a variety of sustainable design seminars throughout the State, and serving on the West Virginia School Building Authority Green Schools Sub-Committee. Recently, Mr. Krason helped coordinate the "Making the Business Case for Sustainability" conference at the University of Charleston that included speakers from Armstrong Industries, American Electric Power, CB Richard Ellis, and Interface Raise. Mr. Krason also assisted Habitat for Humanity Kanawha and Putnam County develop a commercial recycling program to fill a void in the sustainable design infrastructure in West Virginia. Mr. Krason has noted that, "I became a LEED Accredited Professional because I believe that good design has value, and the ability to impact our daily lives. Sustainable design showcases the value of design through demonstrated improvements in the performance of the students and employees who occupy our buildings." In addition to his design and project management responsibilities, Mr. Krason serves on the Board of Directors and is responsible for business development at ZMM.

## Project Experience

**Joint Interagency Training & Education Center (WVARNG), Kingwood, WV** Mr. Krason was responsible for the preliminary programming, and participated in the schematic design of the 180,000 SF addition to the Regional Training Institute at Camp Dawson. Mr. Krason was also responsible

## Education

Bachelor of Architecture, The Catholic University of America, 1998

Bachelor of Civil Engineering, The Catholic University of America, 1997

## Employment History

2007 - Present, Principal, ZMM

2007 - Present, Board of Directors, ZMM

2003 - Present, Architect, Project Manager, ZMM

1998 - 2003, Architect, Project Manager, Charleston Area Architectural Firm

## Civic Affiliations

- American Institute of Architects, Member
- Habitat for Humanity Kanawha & Putnam County, Board of Directors 2011 - 2014
- WV Qualification Based Selections Council, President, 2012/2013
- Leadership WV 2010 - 2012
- Charleston Rotary
- West Side Main Street, Board of Directors 2008 - 2014
- City of Charleston Land Trust 2008 - 2014

for managing the production effort for the billeting (hotel) expansion, which increased the total billeting capacity at the JITEC to 600 rooms. The project is aiming for LEED Silver Certification.

**Morgantown Readiness Center (WVARNG), Morgantown, WV**

Mr. Krason was the project architect on the new Morgantown Readiness Center. This facility is a unique due to its location on an abandoned airport runway at the Morgantown Municipal Airport. The 54,000 SF Readiness Center occupies a 35 acre tract at the airport. This center supports traditional military functions including the 1-201<sup>st</sup> Field Artillery. A significant portion of the Morgantown Readiness Center supports the 249<sup>th</sup> Army Band. The Readiness Center contains a performance hall, pre-function spaces, as well as a variety of training and rehearsal areas.

**Construction and Facilities Management Office Expansion (WVARNG), Charleston, WV**

Mr. Krason was responsible for the programming, architectural design, and project management of the office expansion. The project included the renovation and addition to an existing pre-engineered metal building. The design, which was honored with a 2009 AIA Merit Award, focused the client's resources on a new entry and corridor that separated the existing office space from the addition.

**Wood County Justice Center, Parkersburg, WV**

Mr. Krason was the Project Manager for this adaptive reuse project. The existing 32,000 SF building creates a new Magistrate Court and Sheriff's Department. The justice center is LEED Silver Certified.

**Tucker County Courthouse Annex, Parsons, WV**

Mr. Krason was the Project Architect for the courthouse annex addition in Parsons, WV. The Annex is a 4-story, 21,000 Square Foot building that is adjacent to the Tucker County Courthouse. The annex will house spaces for the Circuit Court, Circuit Clerk, Family Court, Magistrate Court, Prosecuting Attorney, County Commission, County Clerk, Community Corrections, and Probation Office.

**Edgewood Elementary School, Charleston, WV**

Mr. Krason is currently participating on a design team that is developing the new Kanawha County Elementary School on Charleston's West Side. The school is being designed as a 21<sup>st</sup> Century Learning Environment, with a focus on integrating technology into the delivery of the curriculum. Instructional areas will be located off of an open 'exploratorium' that is being designed to function like a children's museum, providing a variety of learning opportunities, and flexible educational spaces. The school will also visibly integrate sustainable design principles to serve as a teaching tool for the students. Mr. Krason is currently working with students from Watts and Robbins Elementary Schools in Kanawha County, assisting them in an effort to actively participate in the design process.

**Bridgemont Community and Technical College - Davis Hall Renovation and Master Plan, Montgomery, WV**

Mr. Krason led an architectural and engineering investigation into the condition of Davis Hall to help Bridgemont Community and Technical College to develop a scope for the current renovation project, as well as a plan to undertake deferred maintenance at the facility. The project scope included remedying several life safety deficiencies, as well as improvements to the building envelope.

**State Office Building #5, 10<sup>th</sup> Floor Renovation (Office of Technology), Charleston, WV**

Mr. Krason led an architectural and engineering team that completed a detailed assessment of State Office Buildings 5, 6, & 7. Once the assessment was complete, ZMM had the opportunity to implement the proposed improvements on the 10<sup>th</sup> Floor of State Office Building #5 for the Office of Technology. The renovations, aiming for LEED-CI Certification, re-oriented the layout by drawing all private offices into the building core, providing access to daylight and views for all employees. The design also utilized acoustical ceiling clouds and bulkheads to maximize the acoustical performance, while also increasing the volume of the space.

**Participated on the team that won the following awards and acknowledgements:**

2014 WV AIA Merit Award *Girl Scouts of Black Diamond Council, Charleston, WV*  
2011 WV AIA Honor Award *Joint Interagency Training and Education Center (JITEC), Kingwood, WV*  
2011 AIA Honor Award *State Office Building #5, 10<sup>th</sup> Floor Renovation, Charleston, WV*  
2009 AIA Merit Award *WVARNG Construction and Facilities Management Office, Charleston, WV*

## Robert Doeffinger, PE



### Role

Engineering Principal, Project Manager

### Professional Registrations

Professional Engineer (WV, VA, PA, OH, TN, KY, NY, NH, ME, NC, SC, FL, NJ, GA)

As ZMM's Principal Engineer, Mr. Doeffinger is in charge of the engineering disciplines, it is his responsibility to ensure that the mechanical and electrical engineering components of ZMM's design are coordinated and integrated into the final product.

After graduate school in Architectural Engineering, Mr. Doeffinger joined ZMM. He has 35 years design experience in mechanical and electrical systems for buildings. He has a broad range of engineering experience in education, industrial and manufacturing facilities, large retail, correctional and jails, office buildings, and military facilities.

Mr. Doeffinger is responsible for new design and retrofit of chilled water systems for all building types including large regional shopping malls. He is involved daily with the firm's selection of appropriate systems for all building types and performs life-cycle cost analysis and energy studies.

Mr. Doeffinger is a member of the American Society of Heating, Ventilation and Air-Conditioning Engineers. He is the current national Chairman of the Technical Committee on Heating and Air-Conditioning Load Calculation. He is involved in writing the National Standard on the Method of Calculation, which will shape the nature of the future building energy use for the nation.

### Project Experience

**West Virginia Army National Guard, Joint Interagency Training & Education Center, Kingwood, WV** Mr. Doeffinger was responsible for the mechanical engineering design of the 600 room billeting expansion to the Regional Training Institute at Camp Dawson. The project is aiming for LEED Silver Certification. The project is served by a 4 - pipe hot and chilled water system with an energy recovery ventilation system.

**State Office Buildings #5, 10<sup>th</sup> Floor Charleston, WV** Mr. Doeffinger was the Project Engineer for this renovation project. The renovation of the tenth floor of State Office Building #5 on the State of West Virginia Capitol Campus was recently completed for the Office of Technology. The renovation was designed to meet the United States Green Building Council's

### Education

Master of Science Architectural Engineering, Pennsylvania State University, 1976

Bachelor of Science Mechanical Engineering, West Virginia University, 1973

### Employment History

2010 - Present, President, ZMM

1976 - 2010, Vice President and Engineering Principal, ZMM

### Civic Affiliations

- ASHRAE – Member of the Technical Committee Load Calculations Data and Procedures for 15 years, serving as chairman. Presently Chairman of the Research Subcommittee
- Advisory Board for the Department of Electrical Engineering Technology, Bridgmont Community and Technical College
- City of Pt. Pleasant, WV – 2<sup>nd</sup> Ward Councilman for 20 years

LEED for Commercial Interiors standard. The renovations also include a low profile cable management system which maximizes the flexibility of the space. To commence the project, ZMM conducted a detailed investigation of State Office Buildings 5, 6, & 7, which included recommendations for improvement of the facilities. The renovation of the 10<sup>th</sup> floor of Building #5 was the first major interior renovation project that responded to the recommendations.

**West Virginia Capitol Complex - Buildings #5, 6, & 7, Charleston, WV** Mr. Doeffinger was the Project Engineer for the in-depth analysis of Buildings #5,6,& 7 at the State Capitol Campus. The study included the preparation of as-built plans, as well as an analysis of all building systems, including: Life Safety; Vertical Transportation; Mechanical; Electrical; Data; Façade; Structure; and Roofing. The analysis also included a study related to potential hazardous materials in the facility.

**Bridgemont (BridgeValley) Community and Technical College Davis Hall Renovation, Montgomery, WV** Mr. Doeffinger led an architectural and engineering investigation into the condition of Davis Hall to help Bridgemont Community and Technical College to develop a scope for the current renovation project, as well as a plan to undertake deferred maintenance at the facility. The project scope included remedying several life safety deficiencies, as well as improvements to the building envelope.

**West Virginia Research, Education, and Technology – Building 704, South Charleston WV** Mr. Doeffinger is the engineering principal-in-charge of preparing a life safety analysis of the building as well as design services to improve the exterior façade of Building 704 at the WV Research, Education, and Technology Park. Building 704 had previously been utilized as a campus maintenance facility by Union Carbide and DOW Chemical. Bridgemont began utilizing the facilities for instruction in the Spring of 2011.

**West Virginia Regional Technology Park (WVRTP) - Building 740, South Charleston WV** Mr. Doeffinger is the engineering principal-in-charge of the new Steam Plant for Building 740. This project involves designing and constructing the Interim Steam Heating System throughout Building 740.

**West Virginia Regional Jails, Mr. Doeffinger** was the Project Engineer on ten West Virginia Regional Jails. In 2009 he was responsible for the HVAC renovation on four regional jails, including the replacement of rooftop HVAC units and Building Automation Systems.

**The Plaza at King of Prussia, Pittsburgh, PA** One of the largest retail centers in the east. Mr. Doeffinger has performed engineering services for the past 20 years. The project consists of a 5,000 -ton chilled water plant and 1,500,000 cfm variable volume system for tenants and constant volume air system for common areas and an engineered smoke control system. The most recent project is a 2011, 100,000 square foot expansion of tenant spaces, a renovation of the food court, and a 1,250-ton chiller addition to the central chilled water plant.

**NGK Oxygen Sensor and Spark Plug Plant, Sissonville, WV** Mr. Doeffinger was in charge of engineering design of the 250,000 SF NGK facility. The most recent 130,000 SF expansion moved NGK's spark plug production for the west coast to West Virginia. For both the oxygen sensor plant and spark plug plant Mr. Doeffinger designed a cycle water system for the manufacturing equipment.

**The Boulevard at 2412, Charleston, WV** Mr. Doeffinger was on the design team for the proposed Kanawha Boulevard Condominium project. The sixty unit project, located in the East End Historic District, included a design that increased in height as it stepped back from the Kanawha River, providing the opportunity for a series of outdoor living areas, while also respecting the massing of the adjacent residences in the Historic District.



**Role**  
Architect

**Professional Registrations**  
Registered Architect (WV)

Mr. Spencer is responsible for coordinating the efforts of the design team in preparing thorough and clear design documents. He has experience in all phases of design working on a wide range of building types including; military, educational, office, justice, and residential.

He has worked on several projects that are currently pursuing LEED certification. In addition to production, Mr. Spencer, is also experienced in 3d modeling. He has worked on several preliminary concept study models as well as high quality renderings and 3d models later in the design process. Mr. Spencer is also experienced in high quality physical models.

Mr. Spencer began his career in architecture with ZMM in 2003, working as a summer intern. After graduating in 2003, he began working at ZMM full time.

### Project Experience

**Joint Interagency Education and Training Center (WVARNG), Kingwood, WV** Nate participated in the schematic design of the 180,000 SF addition to the Regional Training Institute at Camp Dawson. Mr. Spencer was also responsible for coordinating the production effort for the billeting (hotel) expansion, which increased the total billeting capacity at the JITEC to 600 rooms. The project is aiming for LEED Silver Certification.

**Jackson County Armed Forces Reserve Center, Ripley, WV** Mr. Spencer participated in the schematic design of the 76,000 SF Reserve Center in Jackson County, West Virginia. Mr. Spencer was also responsible for coordinating the production effort for the project. Mr. Spencer also produced several 3D models throughout the design process. The project is aiming for LEED Silver Certification.

**Morgantown Readiness Center (WVARNG), Morgantown, WV** Mr. Spencer was a member of the production team for the 58,000 SF project, which housed the Army Band and associated performance spaces. Mr. Spencer also produced several 3d models throughout the design process. He also participated on all production work through all phases. The project is aiming for LEED Silver Certification.

### **Education**

Bachelor of Architecture, University of Tennessee, 2007

### **Employment History**

2009 - Present, Architect, ZMM  
2007 - 2009, Intern Architect, ZMM  
2003 - 2007, Summer Intern, ZMM

### **Civic Affiliations**

- American Institute of Architects, Member

**Cabell County Bus Transportation Complex, Huntington, WV** Mr. Spencer was the project Architect on the Cabell County Transportation Complex is located on the site of the old Cox Landing Junior High School. Challenges on the project involved retrofitting the old school and site to accommodate the new use. The rear portion of the school was demolished to make room for the new maintenance portion of the building. The remaining front section of the school was renovated to include office space, storage areas, and a new staff development room. The new maintenance area includes a high-bay metal building with 14 back to back workbays, three of which have hydraulic bus lifts. A hand wash bay and a state of the art automatic wash bay were also included in the project. Extensive sitework was also involved in the retrofit project including a fueling station, bus parking, a sediment pond, and an extensive rework of the existing site utilities.

**Tucker County Courthouse Annex, Parsons, WV**

Mr. Spencer is the Project Architect for the Courthouse Annex renovation project. The Annex is a 4-story 21,000 Square Foot building that is adjacent to the Tucker County Courthouse. The annex will house spaces for the Circuit Court, Circuit Clerk, Family Court, Magistrate Court, Prosecuting Attorney, County Commission, County Clerk, Community Corrections, and Probation Office.

**Judge Black Courthouse Annex, Parkersburg, WV**

Mr. Spencer assisted with the design and programming of the adaptive reuse of a former commercial space and movie theaters into a modern courthouse annex. The Judge Black Annex included two independent circulation paths – a secure entry and lobby for access to the Family Court and Prosecuting Attorney, and public access to the Assessor and Sheriff's Tax Department. The facility also houses several large public meeting rooms.

**Edgewood Elementary School, Charleston, WV** Mr. Spencer is currently participating on a design team that is developing the new Kanawha County Elementary School on Charleston's West Side. The school is being designed as a 21<sup>st</sup> Century Learning Environment, with a focus on integrating technology into the delivery of the curriculum. Instructional areas will be located off of an open 'exploratorium' that is being designed to function like a children's museum, providing a variety of learning opportunities, and flexible educational spaces. The school will also visibly integrate sustainable design principles to serve as a teaching tool for the students. A dental and health clinic is also on site for all enrolled students in the Kanawha County School District.

**Highland Medical Facility, Charleston, WV**

Mr. Spencer was the Architect on Highland Medical Facility. This project consisted of 87,300 SF, \$26M addition to Highland Hospital in Charleston. The addition will include: administrative offices, training spaces, 165 patient beds, nurses stations, an out-patient treatment department, pharmacy, laundry, and building service spaces. A pedestrian bridge will connect the new facility to the existing hospital. Mr. Spencer was responsible for coordinating the production effort for the 60,000+ SF mental health facility. Mr. Spencer also produced several 3-D models throughout the design process.

**Additional Projects:**

Wayne High School, Wayne, WV  
Crum PK-8 School, Crum, WV  
Logan-Mingo Readiness Center, Logan, WV  
Goodwill Industries, Charleston, WV



**Role**  
Architect

**Professional Registrations**  
Registered Architect (WV)  
LEED Accredited Professional

Mr. Walker is responsible for overseeing the planning, design, and construction of a variety of types of building projects to meet the needs of the clients. Mr. Walker works with other in-house engineers and design professionals throughout the building process to provide a thoroughly integrated product. Mr. Walker also coordinates with various consultants, code officials, and government agencies to provide a quality building.

Mr. Walker has broad experience in scopes of both new and renovation projects throughout his years at ZMM.

### **Project Experience**

#### **WV State Capitol Complex, Charleston, WV**

Mr. Walker has worked on several renovation projects on the State Capitol Complex including: roof replacements, culture center gift shop, window replacements to buildings 5, 6, & 7, door and security project, and renovations to building #5, 10<sup>th</sup> floor - Office of Technology.

**Tackett Family Readiness Center (WVARNG), Charleston, WV** Mr. Walker was responsible for the design of a two story building set on a sloped hillside. The new facility will provide a variety of offices and public spaces including a chapel, multi-purpose area, a lobby, and a lounge.

#### **Cedar Lakes Conference Center, Ripley, WV**

Mr. Walker has worked on several renovation projects at Cedar Lakes including the reroofing project which was completed in 2006. This project included new metal roofing to 11 buildings.

#### **The Retreat at Glade Springs Resort, Daniels, WV**

Mr. Walker was responsible for the design of a variety of townhouses assembled into a multi-unit building that fit into the hilly terrain of the site.

#### **Blackwater Falls and Cacapon WV State Parks, Davis, WV**

Mr. Walker was responsible for the design of additions to the existing historical lodge building for the two state parks. Mr. Walker incorporated new meeting rooms, elevator, pool and health spas into the existing lodge building and incorporated

### **Education**

Bachelor of Science Architecture; 1973  
The University of Cincinnati

### **Employment History**

1979 - Present, Project Architect, ZMM  
1977 - 1979, Designer, ZMM  
1977, Designer, Holderby Engineering  
1973 - 1976, City Planning, American Peace Corps, Iran

### **Civic Affiliations**

- American Institute of Architects, Member
- West Virginia Society of Architects, Member
- Charleston Salvation Army advisory board 1990 – Present
- Advisory Board Chairman 1997 - 1998



various renovations to existing buildings to make the buildings more usable for large groups.

**Alderson Federal Prison Camp - New Housing Units** Mr. Walker was responsible for the design of two new 500 bed housing units. These units were constructed on the historical site of the first federal prison for women. The prison was in operation during the new construction of both housing units.

**Barboursville Middle School, Barboursville, WV** Mr. Walker was part of the design team that was responsible for designing a replacement building for the existing middle school. The design required that the new school building be built where the existing building was occupied on the same size. An existing large gymnasium was renovated and incorporated into the next education complex.

**Braxton County Memorial Hospital, Gassaway, WV** Mr. Walker has worked on a variety of additions and renovations projects at the hospital. The renovations and additions were completed on the emergency room floor, medical surgical, radiology, laboratory, and outpatient areas while the hospitals departments were kept in operation.

**Awards and Acknowledgements:**

Design Award Received from the Corps of Engineers for: The Stonewall Jackson State Park Facilities.

Mr. Walker received recognition in the *Charleston Gazette* Newspaper for his own home residence, which incorporated "passive solar" and other "Green" Design principals.



**Role**  
Structural Engineer

**Professional Registrations**  
Professional Engineer (WV)

Mr. Hedrick is responsible for overseeing the design of the Structural systems, ensuring that the structural systems not only meet the building code requirements, but meet the long-term needs of the owner. He performs the analysis and design of the structural components to resist the loads from lateral and gravity forces. He coordinates with the other disciplines in order to integrate the Structural system into the building, working with the architects to determine the most economical way to construct the components of the building. Mr. Hedrick has participated on several LEED registered projects. Mr. Hedrick also oversees the work of other engineers and coordinates the office structural standards.

Mr. Hedrick began his career in structural engineering by designing large scale residential and light commercial structures for hurricane force winds. He has a broad range of experience in masonry, concrete, steel and timber design. In 2007, Mr. Hedrick moved back to Charleston, WV, to take a structural engineering position with ZMM where he supervises the design and production of the structural engineering projects, as well as serving on the Board of Directors.

### **Project Experience**

**Joint Interagency Training and Education Center (WVARNG) Kingwood, WV** Mr. Hedrick was responsible for the overall structural design of the three story billeting addition. The project met the requirements of the building code along with the additional requirements of the Department of Defense for blast and progressive collapse resistance.

**Jackson County Armed Forces Reserve Center, (WVARNG) Millwood, WV** Mr. Hedrick was responsible for the overall structural design of the single story armory type structure. The project included the design of light weight metal trusses and long-span steel joists in the drill hall.

**Girl Scouts of Black Diamond Council, Charleston, WV** Mr. Hedrick was the structural Engineer on the new Volunteer Resource Center and Girl Zone/Urban Camp in Charleston, WV. The 18,000 SF project will completely renovate an old car dealership into administrative offices, a community gathering space, and a small hotel (Urban Camp) for Girl Scouts visiting

### **Education**

Master of Science, Civil Engineering,  
University of Tennessee, 2003

Bachelor of Civil Engineering,  
West Virginia Institute of Technology,  
2001

### **Employment History**

2013 - Present, Board of Directors, ZMM  
2007 - Present, Structural Engineer,  
ZMM  
2003 - 2007, Structural Engineer, McCall  
Engineering, Inc.

### **Civic Affiliations**

- American Institute of Steel  
Construction, Member

the Charleston area. This new main building will bring all the operations of the Girl Scouts of the Black Diamond Council under one roof. Steve was responsible for site visits and examining the exterior structure of the existing building.

**Wood County Justice Center, Parkersburg, WV**

Mr. Hedrick was responsible for the structural design for this adaptive reuse project in Parkersburg WV. The existing 32,000 SF building will create a new Magistrate Court and a Sheriff's Department. The project received LEED Silver Certification.

**Tucker County Courthouse Annex, Parsons, WV**

Mr. Hedrick was responsible for the structural design for the courthouse annex addition in Parsons, WV. The Annex is a 4-story, 21,000 Square Foot building that is adjacent to the Tucker County Courthouse. The annex will house spaces for the Circuit Court, Circuit Clerk, Family Court, Magistrate Court, Prosecuting Attorney, County Commission, County Clerk, Community Corrections, and Probation Office.

**Edgewood Elementary School, Charleston, WV** Mr. Hedrick is involved with structural design on the new Kanawha County Elementary School on Charleston's West Side. The school is being designed as a 21<sup>st</sup> Century Learning Environment, with a focus on integrating technology into the delivery of the curriculum. Instructional areas will be located off of an open 'exploratorium' that is being designed to function like a children's museum, providing a variety of learning opportunities, and flexible educational spaces. The school will also visibly integrate sustainable design principles to serve as a teaching tool for the students.

**Huntington East Middle School, Huntington, WV** Mr. Hedrick was responsible for the overall structural design of the single story school building. The design included masonry wall, metal panel walls and storefront glazing in order to allow additional light for the LEED designed project.

**Kenna Elementary School, Kenna, WV**

Mr. Hedrick is responsible for the structural design for the new Kenna Elementary School. The new school will serve approximately 375 students in grades Pre-Kindergarten through 5<sup>th</sup> Grade. The new facility replaces the existing school that was falling into disrepair and lacked the essential spaces for a thriving 21<sup>st</sup> Century learning environment. The site includes a separate bus drop-off area and parent drop-off area. There is also a designated Pre-K drop-off. A fenced Pre-K/K play area is provided, as well as a play area for the Grades 1-5. Several playing fields will be located on site as well.

**Bridgemont Community and Technical College (Davis Hall, Building 704), Montgomery, WV**

Mr. Hedrick was responsible for the structural design for a design team that is currently preparing construction documents for the renovation to an existing 7-story, 77,215 SF educational building. The project scope includes remedying several engineering and life safety deficiencies, as well as architectural improvements to the building envelope.

**Southern West Virginia Community and Technical College, Williamson, WV** Mr. Hedrick was responsible for the structural design of the new 22,000 SF Applied Technology Center. The building featured large, flexible teaching areas that can adapt as the curriculum changes for each program. The project is targeting LEED Silver Certification.

**West Virginia Housing Development Fund Building, Charleston, WV** Mr. Hedrick was responsible for the overall structural design of the two story steel frame and masonry building. The structure consisted of a composite concrete floor slab supported by steel beams and columns supported on a deep pile foundation.

**Other Firm Experience:**

Mr. Hedrick has researched and developed design criteria for structural insulated panels, prepared designs for earthquake and wind on FRP tanks. His role has also included supervising the work of design engineers in preparation of construction documents.



**Role**  
Electrical Engineer

**Professional Registrations**  
Professional Engineer (WV)

Mr. Casdorff serves as an Electrical Engineer with ZMM providing electrical design services for a vast number of projects consisting of commercial, educational, correctional, institutional, and military facilities.

Mr. Casdorff is responsible for many facets of the project pertaining to electrical design such as interior and exterior lighting, power distribution, data system design, security, fire alarm, low voltage control systems, equipment specifications and performs electrical assessments during construction prior to the project's substantial completion date. Mr. Casdorff has participated on several LEED registered projects using energy conserving methods and utilizing lighting control systems and other means to meet or exceed ASHRAE 90.1, LEED, and energy code requirements.

### **Project Experience**

**Joint Interagency Education and Training Center (WVARNG), Kingwood, WV** Mr. Casdorff was responsible for the electrical design of the 180,000 SF 3-story billeting/hotel expansion for the Army National Guard campus style facility for training and operational mission support. The expansion more than triples the facility size and increases the total capacity from 189 guest rooms to 600 guest rooms and suites. The project is targeted for LEED Silver Certification.

**Jackson County Armed Forces Reserve Center, (WVARNG), Millwood, WV** Mr. Casdorff was responsible for the electrical design of the 76,000 SF single story military reserve center which serves both the West Virginia Army National Guard and the United States Army Reserves (USAR) units. The multi-use facility provides educational spaces for classrooms, distance learning, physical training and a weapons simulation center. The project is targeted for LEED Silver Certification.

**Glen Jean Armed Forces Reserve Center, (WVARNG), Glen Jean, WV** Mr. Casdorff was responsible for the electrical design of the 102,000 SF military training facility which houses the Armed Forces Reserve Center (AFRC), Military Entrance Processing Station (MEPS), and an Organizational Maintenance Shop (OMS). The AFRC contains the

### **Education**

Bachelor of Science, West Virginia Institute of Technology, 1995

### **Employment History**

2000 - Present, Electrical Engineer, ZMM  
1995 - 2000 Electrical Controls Systems Manager, WV Engineering Firm

administrative and training space for the 77<sup>th</sup> Brigade Troop Command, the 1863<sup>rd</sup> Transportation Company, and the 150<sup>th</sup> Armored Regiment Company. The MEPS houses their administrative, medical, headquarters, testing and storage functions at the facility. A comprehensive 8,500 SF OMS vehicle maintenance shop provides space for six large service workbays for maintaining the military fleet.

**J.M. Chick Buckbee Juvenile Center, Romney, WV** Mr. Casdorff was responsible for the electrical design of the maximum security juvenile detention center. The single story 26,000 SF facility houses intake, medical care, recreation, food service and offers educational programs to help rehabilitate young individuals.

**Gene Spadaro Juvenile Center, Mt. Hope, WV** Mr. Casdorff was responsible for the electrical design of the minimum security juvenile detention center which offers a softer approach to rehabilitation relying more on the affection from the caregivers than the restraints of lockdown helping young individuals make better life decisions.

**Lakin Correctional Facility for Women, Lakin, WV** Mr. Casdorff was responsible for the electrical design of a dormitory style expansion on site of an existing correctional facility built exclusively for women. The new 124 bed, 24,000SF dormitory style housing unit provides ample amenities and a culinary arts program for the inmate population. An additional 9,500 SF Correctional Industries building was located near the dormitory and offers a garment, sewing and embroidery factory and manufactures inmate clothing, linens and office chairs.

**Lincoln County High School, Hamlin, WV** Mr. Casdorff was responsible for the electrical power distribution throughout the 216,000 SF facility containing high school classes, vocational education, technical community college classes and a community health clinic. The project was a 2007 AIA Honor Award Winner.

**Milton Middle School, Milton, WV** Mr. Casdorff was responsible for the electrical design of the new 96,000 SF facility housing 700 middle school students grades 6 through 8.

**Southern WV Community & Technical College, Williamson WV** Mr. Casdorff was responsible for the electrical power and lighting distribution design of this 22,000 SF higher education facility. This project is being designed to meet the USGBC LEED Silver.

**West Virginia Research, Education, and Technology – Building 704 WV**

Mr. Casdorff is the electrical engineer for building 704 and responsible for electrical power and lighting distribution. Building 704 had previously been utilized as a campus maintenance facility by Union Carbide and DOW Chemical. Bridgemont began utilizing the facilities for instruction in the Spring of 2011.

**West Virginia Housing Development Fund Office, Charleston, WV** Mr. Casdorff was responsible for the electrical design of the 37,000 SF office building which provides natural daylighting into its interior spaces coupled with an automatic dimming system and motorized shade controls. This 2-story administrative facility houses approximately 95 to 100 employees with a flexible open office floor plan utilizing modular under-floor wiring to accommodate any future modifications of the workspace with minimal disruption to the employees. The project is targeted for LEED Silver Certification.

**Current Education Projects:**

Valley High School, Smithers, WV  
Divide Elementary School, Lookout, WV



**Construction Administrator**

**Professional Credentials**

CSI, Certified Construction Specifier (Construction Specification Institute)

CDT, Certified Construction Document Technologist

Mr. Unrue is responsible for overseeing the construction of ZMM projects. He is the liason between the Owner and Contractor. Responsible for biweekly site visits, attend progress meetings, certify applications for payment, change order processes, Request for information.

Mr. Unrue has performed construction administration services on a variety of building types including: Educational Facilities, Correctional Facilities, and Office/Light Industrial Facilities.

His past experience in the construction testing and environmental fields is a benefit to clients during the site preparation and foundation installation.

**Project Experience**

Joint Interagency Training & Education Center (JITEC)  
Jackson County Armed Forces Reserve Center  
Morgantown Readiness Center  
Logan-Mingo Readiness Center  
State of West Virginia Division of Juvenile Services  
West Virginia Regional Jail & Correctional Facility Authority  
Tucker County Courthouse Annex  
Southside Elementary/Huntington Middle School  
Lincoln County High School  
St. Albans High School  
Milton Middle School  
Marshall University Elevator Project  
WV Housing Development Fund Office  
Huntington East Middle School  
Fort Gay Elementary School  
Job Corps Center, WV  
Sears, Roebuck & Company, Retail Centers  
Multiple Cabell County Schools, WV

**Education**

Bachelor of Science, University of Charleston, 1997

Associate of Science, West Virginia State University, 1992

**Employment History**

1991 - Present, Construction Administrator, ZMM

1985 - 1991, West Virginia Board of Regents, Charleston, WV

1979 - 1984, Charleston Area Architectural Firm, Charleston, WV

**Civic Affiliations**

- Associate Member, America Institute of Architects, West Virginia Chapter

# Joint Interagency Training & Education Center

WVARNG



**LOCATION:**  
Kingwood, WV

**SIZE:**  
285,000 SF

**COMPLETION:**  
2013

**COST:**  
\$78.4M

**OWNER:**  
COL Joseph Stephens  
WVARNG  
1707 Coonskin Drive  
Charleston, WV 25311  
304.561.6539

**AWARD:**  
2011 AIA Honor Award  
West Virginia Chapter  
*Excellence in Architecture*



ZMM Architects and Engineers, in association with AECOM, is providing architectural and engineering design services for the Joint Interagency Training and Education Center (JITEC), an Army National Guard campus-style facility for training and operational mission support. Sited on 30 acres at the northern end of Camp Dawson between the Cheat River and the foot of Brier Mountain, this 283,000-SF project includes the design of a new operations building; expansion of the billeting facility; renovation of the training facility; creation of a new base entry checkpoint and visitor center; and design for walkway connectors between all the facilities.

The project began with a review of the existing base master plan, followed by a revision of the master plan concept. JITEC is a training and educational facility – the vision behind the site design and updated master plan is that of a college campus atmosphere. The clients goal was to create a campus environment that integrates existing buildings with new ones, which was accomplished by using compatible, yet distinct building materials.

The new facilities are designed to meet all anti-terrorism/force protection criteria and are slated for LEED-NC silver certification from the U.S. Green Building Council. The new 82,000-SF operations building is prominently sited as the main focal point upon entering Camp Dawson through the secure access control point and visitor's center, also designed by AECOM. The building's exterior complements its West Virginia setting. The entire building front, composed of glass and pre-cast concrete walls, is open and inviting with glazing that reflects the surrounding trees and hills.



# Joint Interagency Training & Education Center



Security requirements for the command center influenced the design of the attached, copper-clad "black box" that is an homage to the native rock stratification seen throughout the state.

The building consists of four distinct areas: the Joint Operations Center; a suite of secure training rooms; base headquarters and JITEC administrative offices; and a 6,000 SF server and telecommunications room.

Entry to the Joint Operations Center (JOC) is provided by a secure mantrap adjacent to a dedicated security office. Built to SCIF standards, the JOC contains a state of the art command center housing 48 permanent work stations in a theater-style configuration facing a large video wall, flanked by conference rooms and offices for both officers and support staff. Within the JOC is a secure area consisting of workstations, offices, and two divisible conference rooms with secure video conferencing capabilities. The secure area construction dictates a windowless environment, requiring proper lighting and creative use of materials to create an agreeable work atmosphere.

The 180,000-SF billeting (hotel) expansion more than triples the facility size and increases the total capacity from 189 guest rooms to 600 guest rooms and suites. Designed to relate to the existing architecture with similar scale, materials, textures, and massing, the addition also brings in new elements, such as iconic glazed building corner elements, to integrate the design of the new operations building. A new dedicated lobby with terrazzo tile flooring leads to a monumental stair with terrazzo treads, open risers, and a glass/stainless steel railing for access to the open lounge areas on the second and third floors.

The lobby's design provides a hotel atmosphere, underscored by the new Liberty Lounge, an upscale bar and restaurant area, with wood finishes salvaged from the gymnasium floor in the existing headquarters building. The new six "executive suites", are designed to the full amenities of corporate hotels.



# Jackson County Armed Forces Reserve Center

WVARNG



**LOCATION:**  
Millwood, WV

**SIZE:**  
75,000 SF

**COST:**  
\$20M

**COMPLETION:**  
Fall 2011

**CONTACT:**  
COL Joseph Stephens  
WVARNG  
1707 Coonskin Drive  
Charleston, WV 25311  
304.561.6539



The new facility houses both the West Virginia Army National Guard (WVARNG) and the United States Army Reserves (USAR). The primary user for the WVARNG will be DET 1 821st Engineering Company, who will be supported by a FSC of the 1092nd. USAR occupants will include PLT AMMO 261 OD and PLT 1 (Postal) and PLT 6 (Postal) of the 44th Personnel Company. The facility also includes an expanded Drill Hall that can serve as a convention and meeting space, which is being funded by the Jackson County Commission, additional federal appropriations, and the State of West Virginia National Guard.

The relationship between the structures became crucial to the site layout. The new facility is centered on the existing house, increasing the exposure of the facility from Route 2 - the major route of vehicular travel that parallels the Ohio River. Once the aesthetic of the building was established, the massing of the new facility was defined by breaking-down the facility into smaller mass elements that more closely reflected the Georgian Style, and that of many Army posts, such as Fort Meyer in Northern Virginia. The larger programmatic elements such as the Drill Hall and the storage areas employ an aesthetic that more closely implies their function.

The layout of the facility includes a main entry with the USAR and WVARNG Recruiting, Family Support, and Administrative areas located on separate sides (USAR to the left, WVARNG to the right). A transverse wing on the left houses all functions that have the potential for public use, such as the Drill Hall and the Educational component, while all primary military spaces developed along a similar perpendicular wing on the right. This allows for separate entries to be developed for public functions, while the remainder of the facility can be secured. The layout also creates a large central courtyard or parade field that would be located at lower grade to define the edge facing the river. This edge is defined by a canopy that connects storage and locker areas to the expanded Drill Hall.



# Glen Jean Armed Forces Reserve Center WVARNG



**LOCATION:**  
Glen Jean, WV

**SIZE:**  
110,000 SF

**COST:**  
\$17M

**COMPLETION:**  
2004

**CONTACT:**  
COL Joseph Stephens  
WVARNG  
1707 Coonskin Drive  
Charleston, WV 25311  
304.561.6539



The Glen Jean Armed Forces Center contains three distinct military functions: a facility for routine maintenance of over-the-road and tracked military vehicles, an armory housing four West Virginia National Guard units, and the Southern West Virginia Military Entrance Processing Station, where new recruits officially enter the military system.

The brick exterior walls are highlighted with limestone and metal trim accents. A large assembly hall, plus classroom and training space, enhance the ability of the armory building to provide training for military personnel to provide space for community functions.



# Tackett Family Readiness Center

WVARNG



LOCATION:  
Charleston, WV

SIZE:  
7,400 SF

COMPLETION:  
February 2011

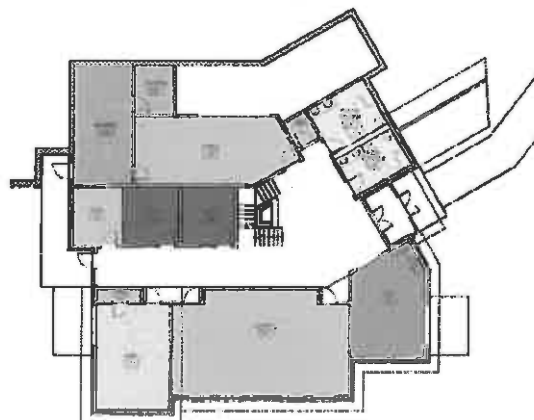
COST:  
\$1.57M

CONTACT:  
COL Joseph Stephens  
WVARNG  
1707 Coonskin Drive  
Charleston, WV 25311  
304.561.6539

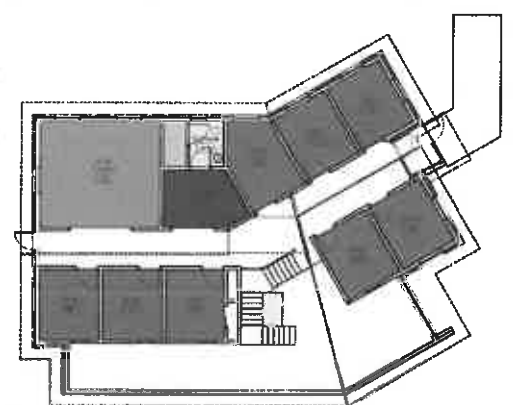


The Family Support Center is a two - story brick building with a sloped roof stepped into the wooded hillside adjacent to the Army National Guard facilities in Charleston. Due to the existing slopes, several analyses to determine the optimal finished floor elevations of the building. The building was set into the hillside to allow for on-grade access to both entrances. The building is designed to provide for a multitude of military family assistance, guidance, education, training, and mentoring programs.

The support center contains 11 office spaces, a chapel, and a variety of classroom and meeting spaces for various programs. The building provides an abundance of natural light and a central fireplace to project a warm, comforting and supportive atmosphere.



Lower Level



Upper Level

# Construction & Facilities Management Office

WVARNG



**LOCATION:**  
Charleston, WV

**SIZE:**  
19,935 SF

**COST:**  
\$3.5M

**COMPLETION:**  
2008

**CONTACT:**  
COL Joseph Stephens  
WVARNG  
1707 Coonskin Drive  
Charleston, WV 25311  
304.561.6539

**AWARD:**  
2009 AIA Merit Award,  
West Virginia Chapter,  
*Achievement in Architecture*



The Construction and Facilities Management Office (CFMO) Expansion project will bring all of the operations of the CFMO together under one roof. The branches that will occupy this facility include: Director of Engineering, Environmental, Planning and Programming, Facility Operations & Maintenance, Business Management, Resource Management, and Design and Construction. This new facility is located slightly to the front, and adjacent to the existing facility, lending prominence to the new construction, and providing a new aesthetic to the entire complex.



This transitional space was designed to connect the two structures, while maintaining a connection to the outside through use of natural light, direct visual connections to the exterior, large volumes, irregular geometries, and the use of natural materials.

The entry design was coordinated with the Recruiting and Retention building to create an outdoor courtyard, along with new sidewalks, stairs and signage. The entry roof is sloped to provide a greater massing, while a lower canopy provides scale and protection from the elements. Large gathering and work spaces were located on the north elevation to take advantage of large expanses of glazing located to capture indirect light and views of Coonskin Park.



# Logan-Mingo Readiness Center

WVARNG



**LOCATION:**  
Holden, WV

**SIZE:**  
54,000 SF

**COMPLETION:**  
2014

**COST:**  
\$12M

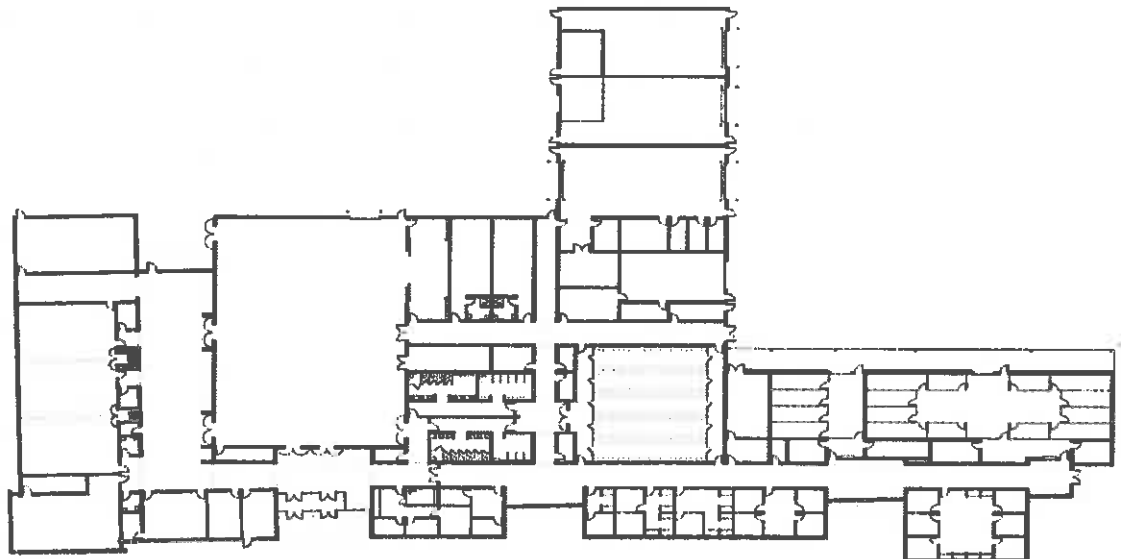
**CONTACT:**  
COL Joseph Stephens  
WVARNG  
1707 Coonskin Drive  
Charleston, WV 25311  
304.561.6539



The design of the Logan-Mingo Readiness center was developed by examining both the program and building site, and developing strategies to design a facility that is functional, responds to site, security, and aesthetic parameters, while requiring minimal maintenance.

The building layout was developed by working closely with the end-users to determine the appropriate configuration of building spaces to maximize the efficiency of the operations, and to respond to the unique missions of the 150<sup>th</sup> Armored Reconnaissance Squadron and the 156<sup>th</sup> Military Police (LNO) Detachment. Clear separation of "public" and "private" areas within the facility, unique office configurations related to training requirements, and the addition of State Funded additional spaces.

The exterior (and in many cases the interior) aesthetic of the facility was driven by the location of the Readiness Center within an industrial park on a reclaimed surface mined site. The decision led to the use of reinforced cast-in-place retaining walls that became both a functional and visual focus. Similar pre-cast walls are used to anchor the facility at the Distance Learning Center, while a cast-in-place retaining wall serves as a part of the Anti-Terrorism/Force Protection design.



# Morgantown Readiness Center

WVARNG



**LOCATION:**  
Morgantown, WV

**SIZE:**  
54,000 SF

**COMPLETION:**  
2013

**COST:**  
\$18.5M

**CONTACT:**  
COL Joseph Stephens  
WVARNG  
1707 Coonskin Drive  
Charleston, WV 25311  
304.561.6539



The Morgantown Readiness Center is a unique military facility for several reasons. While the Readiness Center supports traditional military functions including the 1-201<sup>st</sup> Field Artillery, a significant portion of the Morgantown Readiness Center supports the 249<sup>th</sup> Army Band. To support the band, the Readiness Center contains a performance hall, pre-function spaces, as well as a variety of training and rehearsal areas.

To efficiently create the stage and performance area the design team utilized a variety of dual function spaces. The stage is actually a large rehearsal space with an adjacent elevated recording area. Two large operable partitions are used – one to separate the rehearsal area from the remainder of the stage and the auditorium – while the other separates the auditorium from the Drill Hall. This configuration allowed the design team to maximize the West Virginia Army National Guard's investment by utilizing federally authorized space to also function as a large performance area. Acoustically, this challenge was met by creating a Drill Hall with an irregular shape that was contained within a rectilinear sloped barrel arch form. The geometry was complimented by acoustically engineered interior surfaces and finishes to create a vibrant and rich auditorium.

The facility is also unique due to its location on an abandoned airport runway at the Morgantown Municipal Airport. The 54,000 SF Readiness Center occupies a 35 acre tract at the airport. Additionally, the Readiness Center is located approximately twenty (20) miles from Camp Dawson, a large State and Federal training campus. As troops will often be travelling to Camp Dawson through the Morgantown Readiness Center, the facility needed to function as a 'gateway.'

# Morgantown Readiness Center

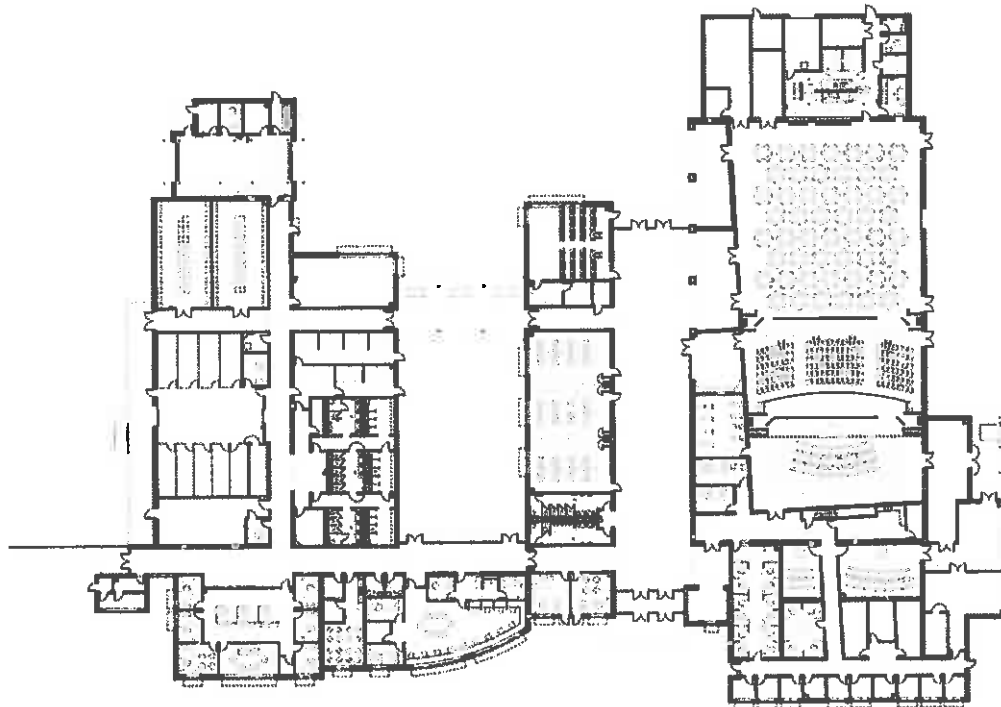
WVARNG



The creation of a 'gateway' facility was accomplished through exterior material choices (compatible with Camp Dawson), as well as the decision to utilize a tower-like feature to mark entry – a very prominent feature of the Regional Training Institute (RTI) at Camp Dawson. Where the RTI utilized a large cylindrical mass, the tower at the Morgantown Readiness Center respects the context of the former runway by reflecting the aesthetic of an airport control tower.

The Morgantown Readiness Center is also a sustainable building, and is in the process of pursuing LEED Certification from the USGBC. The 'U' shaped layout of the facility improves access to daylighting and views, while also limiting public access to the Guard's administrative and storage areas. Additional sustainable features include a reflective roof, the use of regional materials, and efficient lighting and HVAC systems.

While many features are addressed in the design of the Morgantown Readiness Center, the final result is a harmonious composition that reflects both its function and the environment, while deferring to its location on an abandoned runway.





# State Office Buildings 5,6, & 7



**LOCATION:**  
Charleston, WV

**COMPLETION:**  
On-Going

**CONTACT:**  
Greg Melton  
Director of General Services  
Capitol Complex Building  
Building 1, Room MB-60  
1900 Kanawha Blvd., E.  
Charleston, WV 25305  
304.558.2317



More than forty (40) years ago, ZMM (as Zando, Martin, and Milstead) designed the original State Office Buildings 5, 6, & 7. Over the last several years, ZMM has been assisting the State of West Virginia General Services with various improvements to the buildings. These improvements have ranged from substantial renovations to maintenance and repair type projects, and include:

#### **Roof Replacement**

ZMM assisted the General Services Division with a roof replacement for all three buildings. The roof replacement utilized a white EPDM roofing material, with consideration being given to sustainability. The existing ballast, roof membrane, and rigid insulation were also salvaged as part of the roof replacement project. Several unused mechanical penthouses, antennas, and other abandoned equipment was also removed.

#### **Electrical Courtyard Improvements**

ZMM assisted the General Services Division with a project to expand the electrical courtyard adjacent to Building 7, and simultaneously improve the electrical service entry to buildings 5, 6, & 7. This project required both historical (matching the existing granite panels), as well as very technical electrical engineering design considerations.

#### **Door and Window Replacement**

ZMM has assisted with two separate projects, one to replace the windows in Buildings 5 & 6, and the second the replace the doors at the entries to Buildings 5, 6, & 7. These projects included building envelope and security considerations. The projects were designed and staged to minimize disturbance to the buildings occupants.



# State Office Buildings 5,6, & 7

## Major Renovations

ZMM provided design services for the renovation of the 10th Floor of Building 5 for the Office of Technology - a project that was recognized with a design award from the West Virginia Chapter of the American Institute of Architects. The project focused on demonstrating the potential that exists in State Office Buildings 5 & 6 if the floors are renovated in a more contemporary manner that moves the open office spaces to the perimeter, and pulls the offices adjacent to the building core. The project also involved close coordination with the State Fire Marshal, the introduction of a new sprinkler service and fire pump into the building, demolition, construction management, and hazardous material abatement. The project was delivered considerably under the anticipated project budget. ZMM has also assisted on renovations to the 8th Floor of Building 6 for the Department of Education and the 2<sup>nd</sup>, 3<sup>rd</sup> & 4<sup>th</sup> Floors of Building 6 for the Department of Education and Division of Personnel. Work on the 8<sup>th</sup> Floor of Building 6 is the only additional renovation constructed to date. ZMM has recently been released to provide design services for Floor 7, 8 & 9 of Building 5 and the 7<sup>th</sup> Floor of Building 6.

## Caulk Replacement

ZMM provided design services to remove and replace all of the caulk located between the limestone and precast panels on the exterior of Buildings 5, 6, & 7. The project also included cleaning of the building's exterior along with some repair work. The project was coordinated with the Capitol Building Commission, although to date, the construction for this improvement has not commenced.

## Valve Replacement

ZMM assisted with a valve replacement project to isolate mechanical risers in Building 5 & 6. This technically intensive mechanical project will give the General Services Division greater control over the system, and will help isolate various risers in the event of significant system failures in the future.



# West Virginia State Police

*Information Services Center*

**LOCATION:**  
So. Charleston, WV

**SIZE:**  
14,000 SF Renovation  
4,000 SF New Construction

**CONTACT:**  
Major Gary Tincher  
Chief of Staff Services  
West Virginia State Police  
725 Jefferson Road  
So. Charleston, WV 25309  
304.746.2115  
Gary.r.tincher@wvup.gov



The West Virginia State Police is currently renovating a structure that previously served as the State Medical Examiner's Office, and prior to that, an elementary school. The building is located adjacent to the State Police's main campus in South Charleston, WV. The building is currently undergoing extensive renovation, with the intent of transforming it into an Information Services Center. The divisions are currently housed in the main state police headquarters building.

The scope of the work includes a complete renovation to the 14,000 SF, two-story main building with a new 4,000 SF, one-story addition on the back. The old exterior masonry façade will be enveloped with a thin-brick veneer facing Jefferson Road and an exterior insulation and finish system in rear of the facility. New aluminum windows, high-performance glazing and new single-ply roof membrane complete the exterior. The interior will be converted into professional office space on both floors housing their Communications Division, Criminal Records Division and Traffic Records Division. The space was maximized by utilizing the wide corridors as office space, and creating new, appropriately scale corridors in a loop pattern through the existing classrooms



# Wood County Justice Center



**LOCATION:**  
Parkersburg, WV

**SIZE:**  
32,000 SF

**COMPLETION:**  
2011

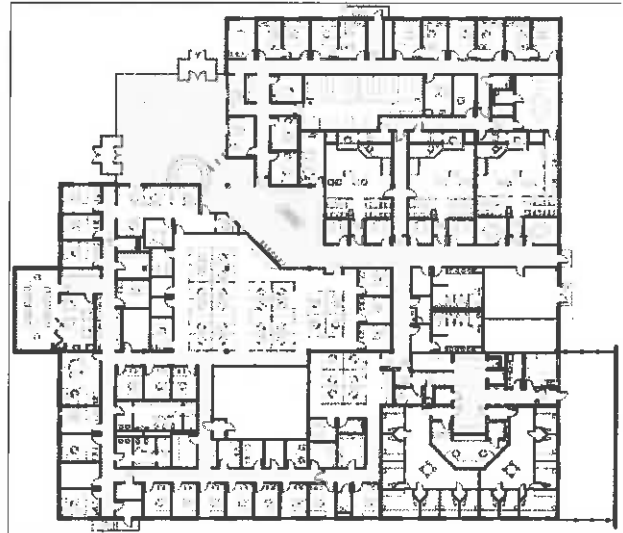
**PROJECT COST:**  
\$5M

**CONTACT:**  
Mr. Blair Couch  
Commissioner  
No. 1 Court Square  
Suite 205  
Parkersburg WV 26101  
304.424.1978



This project was an extensive renovation of a 15 year old, 32,000 square foot, single story office building located in downtown Parkersburg, West Virginia. The building was purchased by the Wood County commission with the purpose of bringing together 3 government functions that had outgrown the 3 separate buildings that they occupied.

The renovated building consists of offices and 3 Courtrooms for the County's Magistrate Court system, public service windows for document pick-up and payment of fines, offices for the Sheriff's Department and Home Confinement and a 12-hour Inmate Holding Center.



Due to the building's new use, the interior was completely demolished leaving only the shell. The building's main entrance was relocated and redesigned to provide a new, more prominent identity to the building and to align with the new parking area created by the demolition of the adjacent existing magistrate court building. The old HVAC system was removed and replaced with a more energy efficient system and new, energy efficient lighting was installed. The project was designed around the U.S. Green Building Council's New Construction and Major Renovation Guidelines and is LEED Silver Certified.

# Judge Donald F. Black Courthouse Annex

Wood County



**LOCATION:**  
Parkersburg, WV

**SIZE:**  
36,828 SF

**COST:**  
\$3.5M

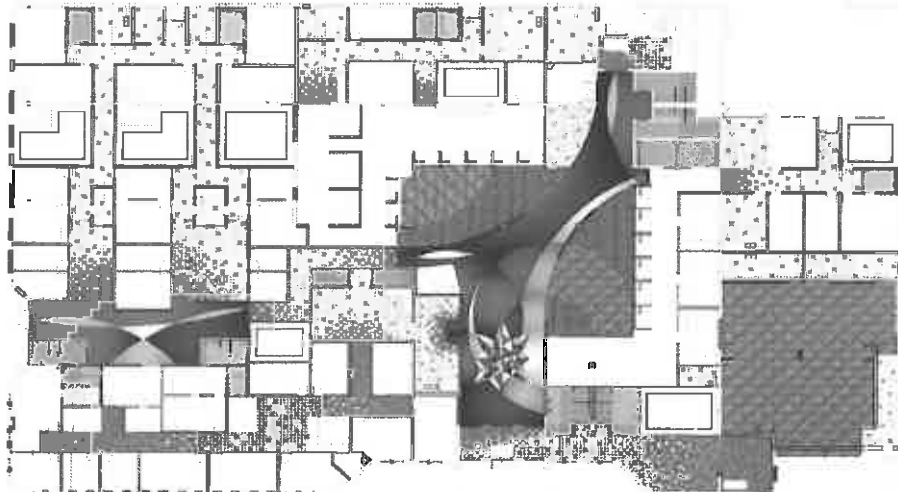
**COMPLETION:**  
2005

**CONTACT:**  
Mr. Blair Couch  
Commissioner  
No. 1 Court Square  
Suite 205  
Parkersburg WV 26101  
304.424.1978



The Judge Black Annex project involved renovating an existing commercial building into county office and courtroom space for the Sheriff's Tax Office, Assessor's Office, Prosecuting Attorney's Office, and the Family Court. The design provided both secure and non-secure circulation, while taking advantage of the existing structural configuration to create large open volumes that lend the building prominence.

The interior design utilized rich colors and dramatic visual accents in public areas, with finishes selected for durability. Layered planes of varying colors accent the building's depth, and skylights provide daylight to county staff throughout the renovated office areas. Exterior improvements included the elimination of an existing storefront system as well as a change in the fenestration, to more closely match the existing courthouse and to change the character and typology of the existing facility.



# Tucker County Courthouse Annex Renovation



**LOCATION:**  
Parsons, WV

**SIZE:**  
21,000 SF

**COST:**  
\$4M

**COMPLETION:**  
2013

**CONTACT:**  
Mr. Joel Goughnour  
Tucker Cty Commission  
211 1st Street, Suite 307  
Parsons, WV 26287  
304.478.2866 Ext 207



The Tucker County Courthouse Annex is 4-story, 21,000 square foot building located adjacent to the Tucker County Courthouse in Parsons, WV. The annex sits on the same lot as the courthouse with the original jailor's residence between the two. The location of the existing jailor's residence, which is listed on the National Register, created a challenging planning dilemma. ZMM explored three options for developing the Courthouse Annex. The first option, the original concept proposed by Tucker County, anticipated connecting the Annex at multiple levels via a connector.

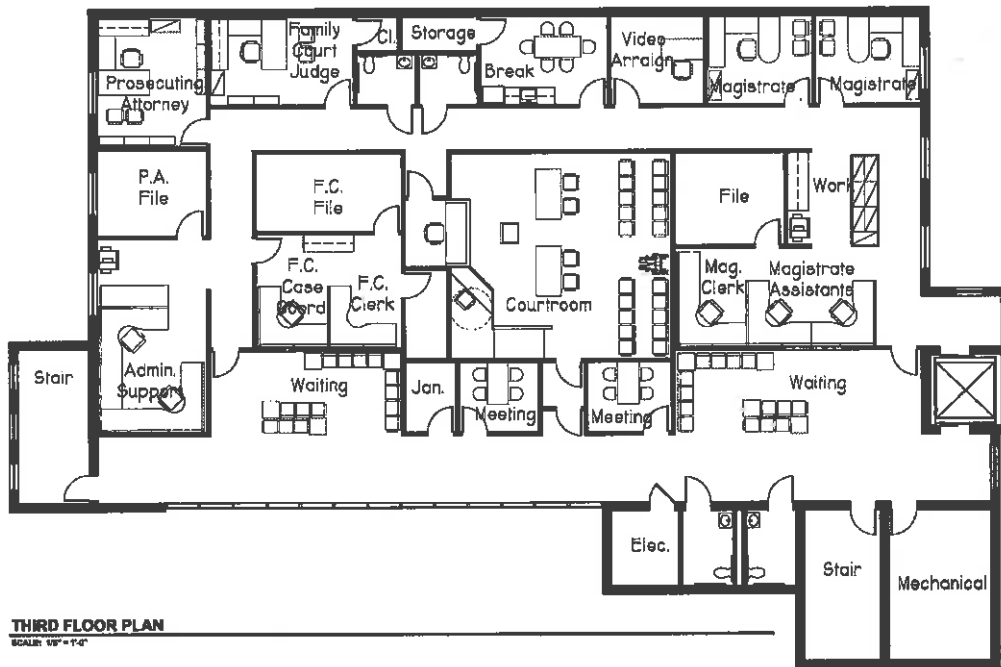
The problem with this approach was that the jailor's residence appeared like a building stuck within a larger complex, as well as the cost of the connector structure. ZMM also explored the option of relocating the jailor's residence, an approach that proved not feasible as the location of the facility justifies its historical quality. The final solution that was examined, and is currently being implemented, involved adding a separate elevator to the existing Tucker County Courthouse, and connecting the entry to the two facilities with an enclosed single level connector. This approach is the most efficient use of the County's resources, and also the best approach for the overall Courthouse site. The annex will house spaces for the Circuit Court, Circuit Clerk, Family Court, Magistrate Court, Prosecuting Attorney, County Commission, County Clerk, Community Corrections, and Probation Office.

The Tucker County Sheriff, currently housed in leased space, will occupy the space that is being vacated in the original Courthouse.

# Tucker County Courthouse Annex Renovation

The office and courtroom spaces occupy the upper three floors, with enclosed parking on the ground floor. The enclosed parking on the ground level will ensure that all occupied spaces are located outside of the floodplain.

The architecture of the annex is meant to complement the existing Romanesque and Flemish styles of the Courthouse and jailor's residence. The red brick, stone base, brick banding, arched openings, and sloped rooflines help to create a unified feel, while the wall of glass adjacent to the public corridor that overlooks the courthouse brings a touch of modernity to the campus and provides natural light to the interior of the building.



# Girl Scouts of Black Diamond Council

## Volunteer Resource Center and Girl Zone/Urban Camp



**LOCATION:**  
Charleston, WV

**SIZE:**  
27,928 SF

**COST:**  
\$5M

**COMPLETION:**  
Fall 2013

**CONTACT:**  
Beth Casey, CEO  
GSBDC  
321 Virginia Street, W.  
Charleston, WV 25302  
304.345.7722

**AWARDS:**  
2014 AIA Merit Award  
West Virginia Chapter  
*Achievement in  
Architecture  
in Interiors/Graphics*



The New Girl Scouts of Black Diamond Council Volunteer Resource Center and Girl Zone/Urban Camp is located on the West Side of Charleston, WV. The 24,650 SF project completely renovates and upgrades the existing buildings at 321 Virginia Street. The buildings were built in the early and mid-1900's, and were used as a car dealership showroom and parts building until 2008. By the time the Girl Scouts took possession of the building, it had fallen into a state of disrepair. The facility required environmental remediation, and the entire roof structure was damaged and had to be removed.

The Girl Scouts of Black Diamond Council purchased the vacant buildings in 2011 with the intent of converting them into a girl-centered facility for members and a volunteer-enrichment center for program resources and training. The program for the facility includes administrative offices, community/meeting gathering spaces, as well as a small hotel (Urban Camp) for Girl Scouts visiting Charleston. The Girl Scouts undertook the effort to transform the facility, creating an architectural style that would appeal to girls and young women, while utilizing colors and materials that would not become dated.

The main building brings all of the operations of the Girl Scouts of Black Diamond Council together under one roof and on one level. This building includes a volunteer meeting room, employee office space, flexible conference spaces, and a retail shop. The Virginia Street façade of the existing facility was removed, and more contemporary elements are utilized to speak to each of the functions. The Girl Zone/Urban Camp reflects a more residential/outdoor tone with the use of a wood veneer, while the retail store has floor to ceiling storefront.



The storefront is etched with images of girl scouts and scouting slogans. The storefront is backlit in the evening, allowing the entire façade to reflect the function of the building. The entry is accentuated with a more vertical element and signage, giving hierarchy to the various elements, while the office areas are recessed from the corner with smaller openings, and a masonry veneer. Each zone has a unique identity.

The adjacent Girl Zone/Urban Camp conveys the feeling of a hotel or hostel and offers a place that Girl Scouts can stay during a visit to Charleston. While the main entry to the building faces Virginia Street, the entry for the Girl Scouts will be at the rear of the building. A small addition was developed to create a "check-in" area similar to a hotel. Adjacent to the "check-in" area is a great room where troops can gather to cook, congregate, and socialize. The "hotel rooms" utilize a dormitory arrangement, while the finishes and furnishings will be more like a youth hostel than a camp. The rear of the Girl's Zone/Urban Camp will reflect a more traditional camp environment, and includes an outdoor dining area and a fire pit.

With the mixed-use functions of retail, office, and residential, this unique project will be a vibrant addition to the emergent West Side community. The modern aesthetic of the facility will appeal to Girl Scouts and reflect the one of the Girl Scout's Journeys – "It's Your World – Change It!"



## References

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**COL Joseph Stephens, WVARNG**  
1707 Coonskin Drive  
Charleston, WV 25311  
304.561.6367

**Major Gary Tincher, Chief of Staff Services**  
West Virginia State Police  
725 Jefferson Road  
So. Charleston, WV 25309  
304.746.2115

**Greg Melton, Director of General Services**  
Capitol Complex Building  
Building 1, Room MB-60  
1900 Kanawha Blvd., E.  
Charleston, WV 25305  
304.558.2317

**Mr. Blair Couch, Commissioner**  
Wood County Justice Center  
No. 1 Court Square, Suite 205  
Parkersburg, WV 26101  
304.424.1978

**Ms. Beth Casey, CEO**  
Girl Scouts of Black Diamond Council  
3211 Virginia Street, East  
Charleston, WV 25302  
304.345.7722



**Major General Alan Tackett**  
**Retired Adjutant General – West Virginia National Guard**



**Description: Testimonial / ZMM Architects & Engineers**

"When you look at the design work and the construction that was done on our facilities there is none better in the United States of America so why wouldn't we use local talent and local companies to do that. I don't think anybody could have done a better job for the West Virginia National Guard than what ZMM and our other people have done in constructing and building the National Guard into the 21<sup>st</sup> Century.

We've built nearly a billion dollars worth of facilities in the State of West Virginia and ZMM was one of our major Architects through all of that construction and not one project did we have problems with, or have anything bad to say and their all well built. Their all built to last for years and years and years, into the future. All will provide excellent facilities for men and women who are serving in the West Virginia National Guard for centuries to come. The facilities built were built in a way to where the communities get the maximum benefit from the tax payer's dollars that paid for those projects, and your design and set up has made those economic tools. When you look at the Armories that we've built, or the Armed Forces Reserve Centers, they have become economic tools for those communities and it was just fabulous the way we worked together as a team to make sure everything got done on time. The things that you all went out of your way to do to make sure that we got the kind of buildings that we wanted was far and above the call of duty.

I would recommend ZMM above any Architect that I have ever worked with. Your work, your dedication to your customer, and bringing a project in on time and in budget is probably the best I have ever seen."

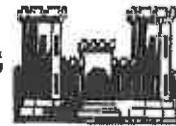


**WEST VIRGINIA ARMY NATIONAL GUARD  
CONSTRUCTION & FACILITIES MANAGEMENT OFFICE**

1707 Coonskin Drive

Charleston, West Virginia 25311-1085

Phone: 304-561-6339 Fax: 304-561-6458 DSN: 623-6339



15 April 2009

WV Higher Education Policy Commission  
Chief Procurement Officer  
Richard Donovan  
1018 Kanawha Blvd. East  
Suite 700  
Charleston, WV 25301

Dear Mr. Donovan,

The AECOM/ZMM Team has been assisting the West Virginia Army National Guard with the design of a 285,000 SF addition to the Robert C. Byrd Regional Training Institute (RTI) at Camp Dawson, near Kingwood, West Virginia. The new JITEC (Joint Interagency Training and Education Center) will include highly flexible educational facilities that will serve a dual use in the case of a state wide or national emergency. These facilities will include sophisticated data systems, video walls, and also incorporate a high level of electronic security.

The AECOM/ZMM Team has exceeded our expectations, delivering a high level of local expertise, complimented by the knowledge base of a large design firm. The Team's commitment to design quality has been demonstrated through the development of a site strategy that evokes a campus, while maintaining all of the programmed spaces in one facility. The JITEC design balances the need to re-orient the campus while also complimenting the existing RTI. The technical ability of the AECOM/ZMM Team has also been demonstrated through the design of redundant power and HVAC systems, as well as through the examination of various building components to meet the requirements of LEED Silver.

The AECOM/ZMM Team has been very responsive and has done an excellent job of communicating the West Virginia Army National Guard's vision for this project. Additionally, the design team has provided these services within a compressed timeframe to meet our requirements. Please contact me if I can provide any additional information about our experience with the AECOM/ZMM Team.

MELVIN L. BURCH

Brigadier General

West Virginia Army National Guard

Assistant Adjutant General



# girl scouts of black diamond

March 18, 2013

## To Whom It May Concern

The Girl Scouts of Black Diamond Council has had the opportunity to work with ZMM Architects and Engineers in a Design-Build plan for our renovation of building on Virginia and Maryland Streets in Charleston, West Virginia.

Girl Scouts of Black Diamond  
PO Box 507  
Charleston, WV 25322  
304-345-7722  
T: 800-756-7616  
F: 304-345-6477  
www.bdgsc.org

Adam Krason, and his team, Marie McCauley, Mary Jo Cleland, and Jill Watkins, met with staff and volunteers to discover our needs, and then develop a Girl Scout and Volunteer Resource, and a Girl Zone, an Urban Camp for Black Diamond, the first of its kind in the United States. They were very attentive to our needs, and were willing to visit and revisit several aspects of the "vision" we had for our membership. Each member of the team offered suggestions based on our needs and resources. We would share with the ZMM team our ideas, and they created the center we envisioned.

We met with ZMM to discuss the flow and movement of people in the new building and the ideas we had for both a volunteer resource center and Girl Scout Headquarters. We shared operating units configurations, staff flow patterns, conference needs, staff organizational charts, and space required for various operations. As we walked through this process the ZMM staff would ask questions, share work flow ideas, and offer ideas for a quality design. They were helpful, very creative, and always willing to listen throughout the process.

We began the renovation of the site in January 2013, and with each step we have met with ZMM and they have carefully reviewed the progress. They have notified us regarding each phase of the process.

I am pleased and honored to offer a recommendation for ZMM Architects and Engineers. This is a very professional firm, and the creative talents of the group are amazing.



Susan Thompson  
Chief Executive Officer

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: ZMM, Inc.

Authorized Signature: [Signature] Date: 14 MAY 2015

State of West Virginia

County of Kanwaha, to-wit:

Taken, subscribed, and sworn to before me this 14 day of May, 2015.

My Commission expires April 16, 2023.

**AFFIX SEAL HERE**



**NOTARY PUBLIC**

[Signature]  
Purchasing Affidavit (Revised 07/01/2012)