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Statement of Qualifications for

WVARNG



RFQ# DEFK12012

ZMM

Professional
Architectural &
Engineering Services

Mail Processing Center &
ID Card Issue Center at
Camp Dawson, Kingwood WV

Adam R. Krason, AIA, LEED AP
Principal
ark@zmm.com



222 Lee Street West
Charleston, West Virginia 25302
304.342.0159 voice • 304.325.8114 fax

ARCHITECTS & ENGINEERS

February 7, 2012



ARCHITECTS & ENGINEERS

February 7, 2012
Ms. Tara Lyle, Buyer
State of West Virginia Purchasing Division
2019 Washington Street, East
P.O. Box 50130
Charleston, West Virginia 25305-0130

Subject: Expression of Interest to provide architectural and engineering services for the design of the Camp Dawson Mail and ID Center – DEFK12012

Dear Ms. Lyle:

ZMM Architects and Engineers is pleased to submit the attached information to demonstrate both our experience and our capability to provide professional architecture and engineering services for the Camp Dawson Mail and ID Center. ZMM will lead a team effort for this project that continues a legacy of successful collaboration between ZMM and CEI, firms who have previously worked together on the design of the Joint Interagency Training and Education Center (JITEC) Billeting Wing at Camp Dawson, the Jackson County AFRC, the Glen Jean AFRC, the Morgantown Readiness Center, the Logan-Mingo Readiness Center, and the CFMO Expansion.

Established in Charleston in 1959, ZMM is one of few full service A/E firms in West Virginia, and is noted for design excellence and client focus. ZMM's military and public safety design experience in West Virginia spans five decades, and has been recognized with both statewide and national planning and design awards. As noted above ZMM's expertise will be complimented by CEI, a local civil engineering firm whose experience working with the WVARNG, and knowledge of the existing site and utilities at Camp Dawson, is unsurpassed.

Our recent experience working on the JITEC and ACP at Camp Dawson as well as our experience designing mailrooms, cost efficient pre-engineered buildings, and facilities that meet AT/FP standards makes our team uniquely qualified to provide architectural and engineering services on this project. To ensure that the experience gained on recent projects at Camp Dawson will be captured, the ZMM-CEI team commits to providing complete architectural and engineering design services with the same key participants from the JITEC and ACP projects.

Thank you for taking the time to review the attached information that details our project team and approach, as well as our firm history and philosophy, relevant experience, and qualifications. Additionally, please visit our website www.zmm.com to learn more about ZMM. We look forward to presenting our approach for this project, and appreciate the opportunity to be considered for this important assignment.

Respectfully submitted,
ZMM

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



State of West Virginia
Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

Request for Quotation

RFQ NUMBER

DEFK12012

PAGE

1

ADDRESS CORRESPONDENCE TO ATTENTION OF:

TARA LYLE
304-558-2544

*709055254 304-342-0159

ZMM INC
222 LEE STREET W

CHARLESTON WV 25302

DIV ENGINEERING & FACILITIES
ARMORY BOARD SECTION

1707 COONSKIN DRIVE
CHARLESTON, WV
25311-1099 304-341-6368

DATE PRINTED

12/22/2011

TERMS OF SALE

SHIP VIA

F.O.B.

FREIGHT TERMS

BID OPENING DATE:

02/07/2012

BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
0001	1	JB		906-07		
<p>A/E SERVICES</p>						
<p>RECEIVED DEC 27 2011 ZMM, INC</p>						
<p>EXPRESSION OF INTEREST (EOI)</p>						
<p>THE WEST VIRGINIA PURCHASING DIVISION, FOR THE AGENCY, DIVISION OF ENGINEERING & FACILITIES, WV ARMY NATIONAL GUARD, IS SOLICITING EXPRESSIONS OF INTEREST FOR PROFESSIONAL ARCHITECTURAL ENGINEERING DESIGN SERVICES FOR A MAIL PROCESSING CENTER AND ID CARD ISSUE CENTER AT CAMP DAWSON LOCATED IN KINGWOOD, WV PER THE FOLLOWING BID REQUIREMENTS AND ATTACHED SPECIFICATIONS TECHNICAL QUESTIONS CONCERNING THIS SOLICITATION MUST BE SUBMITTED IN WRITING TO TARA LYLE VIA MAIL AT THE ADDRESS SHOWN IN THE BODY OF THIS EOI, VIA FAX AT 304-558-4115, OR VIA EMAIL AT TARA.L.LYLE@WV.GOV.</p>						
<p>DEADLINE FOR ALL TECHNICAL QUESTIONS IS 01/20/2012 AT THE CLOSE OF BUSINESS. ANY TECHNICAL QUESTIONS RECEIVED WILL BE ANSWERED BY FORMAL ADDENDUM ISSUED BY THE PURCHASING DIVISION AFTER THE DEADLINE HAS LAPSED.</p>						
<p>CANCELLATION: THE DIRECTOR OF PURCHASING RESERVES THE RIGHT TO CANCEL THIS CONTRACT IMMEDIATELY UPON WRITTEN NOTICE TO THE VENDOR IF THE COMMODITIES AND/OR SERVICES SUPPLIED ARE OF AN INFERIOR QUALITY OR DO NOT CONFORM TO THE SPECIFICATIONS OF THE BID AND CONTRACT HEREIN.</p>						
SEE REVERSE SIDE FOR TERMS AND CONDITIONS						
SIGNATURE <i>ARL</i>				TELEPHONE 304-342-0159		DATE 02/07/2012
TITLE VICE PRESIDENT		FEIN 55-0676608		ADDRESS CHANGES TO BE NOTED ABOVE		

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

GENERAL TERMS & CONDITIONS REQUEST FOR QUOTATION (RFQ) AND REQUEST FOR PROPOSAL (RFP)

1. Awards will be made in the best interest of the State of West Virginia.
2. The State may accept or reject in part, or in whole, any bid.
3. Prior to any award, the apparent successful vendor must be properly registered with the Purchasing Division and have paid the required \$125 fee.
4. All services performed or goods delivered under State Purchase Order/Contracts are to be continued for the term of the Purchase Order/Contracts, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise available for these services or goods this Purchase Order/Contract becomes void and of no effect after June 30.
5. Payment may only be made after the delivery and acceptance of goods or services.
6. Interest may be paid for late payment in accordance with the **West Virginia Code**.
7. Vendor preference will be granted upon written request in accordance with the **West Virginia Code**.
8. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.
9. The Director of Purchasing may cancel any Purchase Order/Contract upon 30 days written notice to the seller.
10. The laws of the State of West Virginia and the **Legislative Rules** of the Purchasing Division shall govern the purchasing process.
11. Any reference to automatic renewal is hereby deleted. The Contract may be renewed only upon mutual written agreement of the parties.
12. **BANKRUPTCY:** In the event the vendor/contractor files for bankruptcy protection, the State may deem this contract null and void, and terminate such contract without further order.
13. **HIPAA BUSINESS ASSOCIATE ADDENDUM:** The West Virginia State Government HIPAA Business Associate Addendum (BAA), approved by the Attorney General, is available online at www.state.wv.us/admin/purchase/vrc/hipaa.html and is hereby made part of the agreement provided that the Agency meets the definition of a Cover Entity (45 CFR §160.103) and will be disclosing Protected Health Information (45 CFR §160.103) to the vendor.
14. **CONFIDENTIALITY:** The vendor agrees that he or she will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the agency's policies, procedures, and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in <http://www.state.wv.us/admin/purchase/privacy/noticeConfidentiality.pdf>.
15. **LICENSING:** Vendors must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, and the West Virginia Insurance Commission. The vendor must provide all necessary releases to obtain information to enable the director or spending unit to verify that the vendor is licensed and in good standing with the above entities.
16. **ANTITRUST:** In submitting a bid to any agency for the State of West Virginia, the bidder offers and agrees that if the bid is accepted the bidder will convey, sell, assign or transfer to the State of West Virginia all rights, title and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the State of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to the bidder.

I certify that this bid is made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership, or person or entity submitting a bid for the same material, supplies, equipment or services and is in all respects fair and without collusion or Fraud. I further certify that I am authorized to sign the certification on behalf of the bidder or this bid.

INSTRUCTIONS TO BIDDERS

1. Use the quotation forms provided by the Purchasing Division. Complete all sections of the quotation form.
2. Items offered must be in compliance with the specifications. Any deviation from the specifications must be clearly indicated by the bidder. Alternates offered by the bidder as **EQUAL** to the specifications must be clearly defined. A bidder offering an alternate should attach complete specifications and literature to the bid. The Purchasing Division may waive minor deviations to specifications.
3. Unit prices shall prevail in case of discrepancy. All quotations are considered F.O.B. destination unless alternate shipping terms are clearly identified in the quotation.
4. All quotations must be delivered by the bidder to the office listed below prior to the date and time of the bid opening. Failure of the bidder to deliver the quotations on time will result in bid disqualifications: Department of Administration, Purchasing Division, 2019 Washington Street East, P.O. Box 50130, Charleston, WV 25305-0130
5. Communication during the solicitation, bid, evaluation or award periods, except through the Purchasing Division, is strictly prohibited (W.Va. C.S.R. §148-1-6.6).



State of West Virginia
Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

Request for Quotation

RFQ NUMBER

DEFK12012

PAGE

2

ADDRESS CORRESPONDENCE TO ATTENTION OF:

TARA LYLE
304-558-2544

V
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*709055254 304-342-0159
ZMM INC
222 LEE STREET W
CHARLESTON WV 25302

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DIV ENGINEERING & FACILITIES
ARMORY BOARD SECTION

1707 COONSKIN DRIVE
CHARLESTON, WV
25311-1099 304-341-6368

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
12/22/2011				

BID OPENING DATE:

02/07/2012

BID OPENING TIME

01:30PM

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
BANKRUPTCY: IN THE EVENT THE VENDOR/CONTRACTOR FILES FOR BANKRUPTCY PROTECTION, THE STATE MAY DEEM THE CONTRACT NULL AND VOID, AND TERMINATE SUCH CONTRACT WITHOUT FURTHER ORDER.						
NOTICE						
A SIGNED BID MUST BE SUBMITTED TO:						
DEPARTMENT OF ADMINISTRATION PURCHASING DIVISION BUILDING 15 2019 WASHINGTON STREET, EAST CHARLESTON, WV 25305-0130						
THE BID SHOULD CONTAIN THIS INFORMATION ON THE FACE OF THE ENVELOPE OR THE BID MAY NOT BE CONSIDERED:						
SEALED BID						
BUYER:-----TL/32-----						
RFQ. NO.:-----DEFK12012-----						
BID OPENING DATE:-----02/07/2012-----						
BID OPENING TIME:-----1:30 PM-----						
PLEASE PROVIDE A FAX NUMBER IN CASE IT IS NECESSARY						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE	AD K.V.	TELEPHONE	304-342-0159	DATE	02/07/2012
TITLE	VIC PRESIDENT	FEIN	55-0676608	ADDRESS CHANGES TO BE NOTED ABOVE	

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'



State of West Virginia
Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

Request for Quotation

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DEFK12012

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TARA LYLE
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12/22/2011				

BID OPENING DATE:

02/07/2012

BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
TO CONTACT YOU REGARDING YOUR BID:						

CONTACT PERSON (PLEASE PRINT CLEARLY):						

***** THIS IS THE END OF RFQ DEFK12012 ***** TOTAL: _____						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE

Ad R K

TELEPHONE

304.342.0159

DATE

02/07/2012

TITLE

VICE PRESIDENT

FEIN

55-0676608

ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'



State of West Virginia
Department of Administration
Purchasing Division
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Charleston, WV 25305-0130

Request for Quotation

RFQ NUMBER
DEFK12012

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1

ADDRESS CORRESPONDENCE TO ATTENTION OF:

TARA LYLE
304-558-2544

RFQ COPY

TYPE NAME/ADDRESS HERE

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DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
01/20/2012				

BID OPENING DATE: 02/07/2012 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
ADDENDUM NO. 1						
1. QUESTIONS AND ANSWERS ATTACHED.						
2. ADDENDUM ACKNOWLEDGEMENT IS ATTACHED. THIS DOCUMENT SHOULD BE SIGNED AND RETURNED WITH YOUR BID. FAILURE TO SIGN AND RETURN MAY RESULT IN DISQUALIFICATION OF YOUR BID.						
END OF ADDENDUM NO. 1						
0001	1	JB		906-07		
	A/E SERVICES					
***** THIS IS THE END OF RFQ DEFK12012 ***** TOTAL:						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE <i>Ad R</i>	TELEPHONE 304.342.0159	DATE 02/07/2012
TITLE VICE PRESIDENT	FEIN 55-0676608	ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

EXHIBIT 10

REQUISITION NO.: DEPK 12012

ADDENDUM ACKNOWLEDGEMENT

I HEREBY ACKNOWLEDGE RECEIPT OF THE FOLLOWING CHECKED
ADDENDUM(S) AND HAVE MADE THE NECESSARY REVISIONS TO MY
PROPOSAL, PLANS AND/OR SPECIFICATION, ETC.

ADDENDUM NO.'S:

NO. 1 X

NO. 2

NO. 3

NO. 4

NO. 5

I UNDERSTAND THAT FAILURE TO CONFIRM THE RECEIPT OF THE
ADDENDUM(S) MAY BE CAUSE FOR REJECTION OF BIDS. VENDOR
MUST CLEARLY 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.

AD RK
SIGNATURE

ZMM, Inc.
COMPANY

02/07/2012
DATE

STATE OF WEST VIRGINIA
Purchasing Division**PURCHASING AFFIDAVIT**

West Virginia Code §5A-3-10a states: 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 the debt owned is an amount greater than one thousand dollars in the aggregate

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.

"Debtor" means any individual, corporation, partnership, association, Limited Liability Company or any other form or business association owing a debt to the state or any of its political subdivisions. "Political subdivision" means any county commission; municipality; county board of education; any instrumentality established by a county or municipality; any separate corporation or instrumentality established by one or more counties or municipalities, as permitted by law; or any public body charged by law with the performance of a government function or whose jurisdiction is coextensive with one or more counties or municipalities. "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.

EXCEPTION: The prohibition of this section does not apply where a vendor has contested any tax administered pursuant to chapter eleven of this 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.

Under penalty of law for false swearing (*West Virginia Code* §61-5-3), it is hereby certified that the vendor affirms and acknowledges the information in this affidavit and is in compliance with the requirements as stated.

WITNESS THE FOLLOWING SIGNATUREVendor's Name: ZMM, Inc.Authorized Signature: [Signature] Date: 02/07/2012State of West VirginiaCounty of Kanawha, to-wit:Taken, subscribed, and sworn to before me this 7th day of Feb., 2012My Commission expires 10-6, 2018**AFFIX SEAL HERE**NOTARY PUBLIC [Signature]

Project Approach: Camp Dawson Mail and ID Center

The ZMM-CEI team has significant experience providing design services at Camp Dawson. While our experience at Camp Dawson dates back to the early 1960's, recent, relevant experience includes work on the following projects:

- Joint Interagency Training and Education Center (JITEC) – Sitework, Billeting, Lighting
- Camp Dawson ACP
- Regional Training Institute (RTI)
- Camp Dawson AFRC

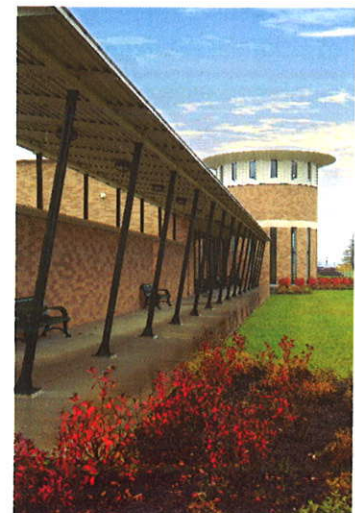


Our experience working on these projects provides our team with detailed knowledge of Camp Dawson, and includes experience working with site drainage, grading, and utilities in the area of the proposed project. This experience will be a direct benefit to the West Virginia Army National Guard (WVARNG) by helping to expedite the site investigation portion of the project. Our knowledge will also benefit the WVARNG by ensuring a seamless tie-in to the ongoing adjacent construction of the ACP and the JITEC.

To ensure that the experience gained on these recent projects will be captured, the ZMM-CEI team commits to providing complete architectural and engineering design services with the same key participants from the JITEC and ACP projects. The team will be led by Adam Krason, AIA, LEED-AP, an architect and principal with ZMM and Robert Fuller, PE from CEI. Other key team members will include:

- Nathan Spencer, AIA – Project Architect on the JITEC (Billeting)
- Bob Doeffinger, PE – Engineering Principal on the JITEC (Billeting)
- Scot Casdorff, PE – Electrical Engineer on the JITEC (Billeting)
- Mike Abernethy, IESNA – Site Lighting Designer on the JITEC
- Mark Epling, AIA – Specifications Writer on the JITEC and ACP
- David Unrue, CSI-CDT – Construction Administrator on the JITEC (Billeting)

In addition to our experience providing design services at Camp Dawson, the ZMM-CEI team has experience with the other key components of the project: designing mail receiving and distribution facilities for the WVARNG; designing cost efficient pre-engineered buildings; designing facilities that meet critical AT/FP standards. Based upon the information provided, we understand the project to include a new 3,000-5,000 SF pre-engineered building that will house a mail/package receipt and distribution building, a storage center, and a service member, dependent, and retiree ID card issue facility. Site improvements will include parking, exterior lighting, utilities, signage, and sidewalks.



Our recent experience designing mailrooms for the WVARNG includes the mailroom at the Jackson County AFRC, the mailroom at the Morgantown Readiness Center, as well as the mailroom at the Logan-

Mingo Readiness Center. In each case the mailroom met NGB and DoD requirements including independent HVAC systems and blast panels.

As noted above, the ZMM-CEI team also has experience designing cost effective pre-engineered structures for both the WVARNG and other clients. This experience includes the CFMO Expansion which included the renovation of an existing pre-engineered building, and a new pre-engineered addition for the shop area. This experience also includes unheated storage buildings for the WVARNG, as well as transportation and industrial facilities for clients throughout West Virginia.

The team has also demonstrated the ability to meet required AT/FP standards in a manner that supports the overall design of the facility – an important factor considering the proposed location of the Camp Dawson Mail and ID Center. ZMM-CEI has demonstrated this approach at the Glen Jean AFRC, which utilized steep, sloping stone berms, at the Jackson County AFRC with low retaining walls that match the aesthetic of the Georgian style inspired Reserve Center, and at the Morgantown Readiness Center, which utilizes a more cost effective perimeter fence to meet the standards.

ZMM-CEI is confident that the unique combination of experience providing design service at Camp Dawson, combined with our experience with each of the key components of the project makes our team uniquely qualified to provide services on the Camp Dawson Mail and ID Center. Additionally, our commitment to providing these services with the same key team members that designed the JITEC Billeting Wing and supporting facilities for the ACP will help ensure compatibility and continuity with existing projects, as well as the overall quality of the design process.



History and Philosophy of ZMM



LOCATION:
222 Lee Street, West
Charleston, WV

CONTACT:
Phone 304.342.0159
Fax 304.345.8144
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.

Community Support

In addition to our design efforts, ZMM is supportive of institutions and organizations that contribute to the cultural and educational landscape in West Virginia.

ZMM offers financial support to several community and state-wide institutions which reflect the superior quality that we strive to achieve on each of our projects. The following organizations also impact the educational environment through their support of local artisans, performances, broadcasts, and community service:





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 offers the following professional services:

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

History of Capitol Engineering, Inc.

**CEI**

LOCATION:
1206 Kanawha Blvd., E
Charleston, WV 25301

CONTACT:
Phone 304.344.0720
capitolengineering.com

History

Capitol Engineering is a locally owned consulting engineering firm founded in 1999. CEI has steadily grown since its inception with three employees. CEI possesses in-house services in civil, environmental and mining engineering, contract administration, and surveying and mapping. Our staff is made up of two Professional Engineers, a Professional Surveyor, Project Engineers and Scientists, CAD Operators, Technicians, and administrative personnel.

Our client base is comprised of contractors, architects, engineers, developers, private industry, and federal and state agencies. Capitol Engineering, Inc. (CEI) proposes to perform civil engineering and surveying services for the West Virginia National Guard to develop engineering plans and specifications for the Jackson County Readiness Center.

We have experience planning, designing, specifying, preparing contract documents, bidding and performing contract administration on many types of military facilities including Readiness Centers, Airfields, Training Areas and Ranges. Our experience and resources give us the ability to handle both complex and routine projects.

CEI offers the highly specialized experience, attention to minute detail, and the unparalleled level of personal client support provided by a small boutique firm. We are particularly attractive because:

- Our management, engineering and professional staff has a combined total of over 120 years of experience – much of it acquired while working on military facilities.
- Staff has participation and completion of 30 National Guard projects in West Virginia.
- Management team has 30+ years and over 50 projects total specialized experience providing timely, cost effective construction documents for military facilities.
- Experience to successfully handle all design situations and problem types anticipated to occur under this contract.
- Construction and Facilities Maintenance Office satisfaction with prior work/projects performed by key staff members.



LOCATION:
1206 Kanawha Blvd., E
Charleston, WV 25301

CONTACT:
Phone 304.344.0720
capitolengineering.com

Project Experience

WVARNG EXPERIENCE

- AASF #1 Boundary Monumentation
- AASF #1 Oil/Water Separator Modifications
- AASF #1 Wastewater Disposal Feasibility Study & Facility As-built Survey
- AASF Apron Expansion Civil Design, Construction Observation
- C&FMO Office Addition Civil Design, Construction Observation
- Camp Dawson Ranges Renovation Civil Design, Construction Observation
- Camp Dawson Runway Improvements, Construction Observation
- Child Development Center Siting Analysis
- Eleanor Rail Spur Layout & Quantity Determination
- Eleanor Utility Mapping & Boundary Monumentation
- Elkins Armed Forces Reserve Center Site Investigation, Civil Design
- Fairmont Armed Forces Reserve Center Site Investigation, Civil Design
- Fixed Wing Army Aviation Training Site Feasibility Study
- Glen Jean AFRC Site Investigation, Civil Design, Construction Observation (Site)
- Joint Interagency Training and Education Center Site Investigation, Civil Design
- Kingwood Readiness Center Site Investigation, Civil Design
- Lewisburg Readiness Center Site Investigation, Civil Design, Construction Observation (Site)
- Logan-Mingo Readiness Center Site Investigation, Civil Design
- Mountaineer Challenge Academy Site Investigation, Civil Design
- Ripley Armed Forces Reserve Center Site Investigation, Civil Design
- Summersville Readiness Center Site Investigation, Civil Design, Construction Observation (Site)

SIGNIFICANT POINTS

- Site investigation experience with undesirable/difficult sites - Glen Jean, Lewisburg, Fairmont, Elkins, Mingo/Logan Readiness Center
- Glen Jean civil design - nice use of site for both function and aesthetics - USPFO property has same potential
- AASF construction observation - worked with CFMO to maximize impact with the dollars available

Professional Services Capitol Engineering, Inc.



LOCATION:
1206 Kanawha Blvd., E
Charleston, WV 25301

CONTACT:
Phone 304.344.0720
capitolengineering.com

Civil Engineering

Geotechnical Engineering
Project Management
Rail Siding Design
Roadway Design
Site Development & Grading Plans
Siting Studies
Slope Stability Analysis
Stormwater Systems
Wastewater Treatment System

Environmental Engineering

Environmental Due Diligence
Environmental Site Reviews
Erosion & Sedimentation Control
NPDES, GPCC, SPCC Plans
Solid Waste & Landfill Design
Stormwater Management Plans

Surveying & Mapping

Control Surveys
Floodplain Studies
GPS Surveys
Mineral Reserve Surveys
Planimetric Surveys
Quantity Determination Surveys
River & Lake Soundings
Topographic Survey

Construction Administration

Bid Analysis & Management
Construction Observation
Damage Settlement
Submittal Review

Mining Engineering

Abandoned Mine Land Reclamation
Acid Mine Drainage Passive Treatment
Geologic & Hydrologic Evaluations
Mine-Related Subsidence Investigations
Mining Permits, Modifications, & IBR's
Reclamation Liability Audits
Surface Mine Surveying & Mapping



At ZMM, we strive to be the best. Our Quality Assurance Program is one step in the process of exceeding our clients' expectations. Our QA/QC Program is led by Mr. Rod Watkins, REFP, who brings more than 30 years of experience ensuring the quality of every ZMM project.

1. Selecting the Project Team

ZMM's diverse staff ensures that each project team is made up of highly qualified members, each dedicated to the project's success. Project team members are selected based upon relevant experience, and ability to help achieve the client's vision.

2. Identifying Project Requirements

Project team members are fully integrated in each phase of the design process, ensuring a quality project from the beginning, to take advantage of early sustainable design decision-making. The project requirements are included in a 'Basis of Design' that each member of the project team can access. The 'Basis of Design' helps guide important project decisions.

3. Identifying Client Expectations

Knowing and understanding our clients' expectations is our goal. This knowledge gives ZMM a baseline for exceeding expectations.

4. Ongoing Project Reviews

As part of the ongoing project reviews, we conduct quality assurance evaluations during each stage of the project:

- Schematic Design Phase
- Design Development Phase
- Construction Documents Phase
- Construction Administration Phase

ZMM has developed a series of QA/QC review documents that are completed during each phase, and include a programmatic review, technical review, and review of the project schedule and budget.

5. Post Project Review

At the completion of every project, ZMM staff members participate in a learning session to gain insight useful for future projects. These reviews typically include participation from the owner and the contractor

6. Staff Training, Assessment and Enhancement

Ongoing staff development and training is very important to ZMM. Providing increased opportunities for learning and advancement leads to improved employee performance more successful projects.

Quality Assurance



The quality of our work is key to our continued success and repeat client base.



Joint Interagency Training & Education Center

WVARNG



LOCATION:
Kingwood, West Virginia

SIZE:
285,000 SF

COMPLETION:
Est. 2012

COST:
\$110 Million

OWNER:
MG Melvin L. Burch
WVARNG
1707 Coonskin Drive
Charleston, WV 25311
304.561.6450

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



ZMM, 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 design intent is to create a campus environment that integrates existing buildings with new ones 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. Continued...



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.

Robert C. Byrd - Regional Training Institute

WVARNG



LOCATION:
Camp Dawson, West Virginia

SIZE:
148,000 SF

COMPLETION:
2002

COST:
\$21 Million

CONTACT:
MG Melvin L. Burch
WVARNG
1703 Coonskin Drive
Charleston, WV 25311
304.561.6450



The Robert C. Byrd Regional Training Institute at Camp Dawson is a new 148,000 SF facility designed to provide training, dormitory, dining, and recreational facilities for the West Virginia Army National Guard. The facility, which includes 183 private dormitory rooms in addition to a wide range of training spaces is designed to accommodate a variety of both military and civilian training functions.

In addition to the housing and educational components, the facility also includes dining and recreational functions, including: a full-service dining, snack-bar, fitness center, an auditorium; and group study rooms.

The design employs a large cylindrical mass that marks the main entry where guests can coordinate both their housing and educational needs. The housing wing is joined to the recreational and educational components with a large gathering/transitional space that often serves as an informal meeting area. Due to the success of the project, and growing use of the facilities, ZMM is currently assisting the West Virginia Army National Guard with training and dormitory expansions.



Kingwood Armed Forces Reserve Center

WVARNG



LOCATION:
Camp Dawson,
West Virginia

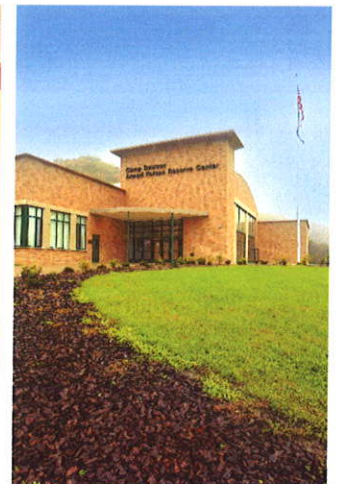
SIZE:
56,200 SF

COMPLETION:
2000

CONTACT:
MG Melvin L. Burch
WVARNG
1703 Coonskin Drive
Charleston, WV 25311
304.561.6450



The Armed Forces Reserve Center will house five National Guard and Army Reserve Units and their support personnel. Its mission is twofold: first, to maintain readiness for its attached units and second, to serve as a resource to the surrounding community.



The primary readiness mission for the center's attached units is accomplished by providing designated spaces for each unit as well as general educational and gathering spaces that can be shared among the units. The building's community mission is to provide a gathering space for social functions, a shelter-in-place in times of natural disaster, and a community education resource with distance learning network capabilities. It also includes kitchen and dining facilities and physical fitness areas.



Jackson County Armed Forces Reserve Center

WVARNG



LOCATION:
Milwood, West Virginia

SIZE:
75,000 SF

COST:
\$20 Million

CONTACT:
MG Melvin L. Burch
WVARNG
1707 Coonskin Drive
Charleston, WV 25311
304.561.6450



The new facility will house 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 will also include 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 will also be 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, West Virginia

SIZE:
110,000 SF

COST:
\$17 Million

COMPLETION:
2004

CONTACT:
MG Melvin L. Burch
WVARNG
1703 Coonskin Drive
Charleston, WV 25311
304.561.6450



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.



Morgantown Readiness Center

WVARNG



LOCATION:
Morgantown,
West Virginia

SIZE:
54,000 SF

COMPLETION:
Est. 2012 (Bidding)

COST:
\$ 18.5 Million

CONTACT:
MG Melvin L. Burch
WVARNG
1707 Coonskin Drive
Charleston, WV 25311
304.561.6450

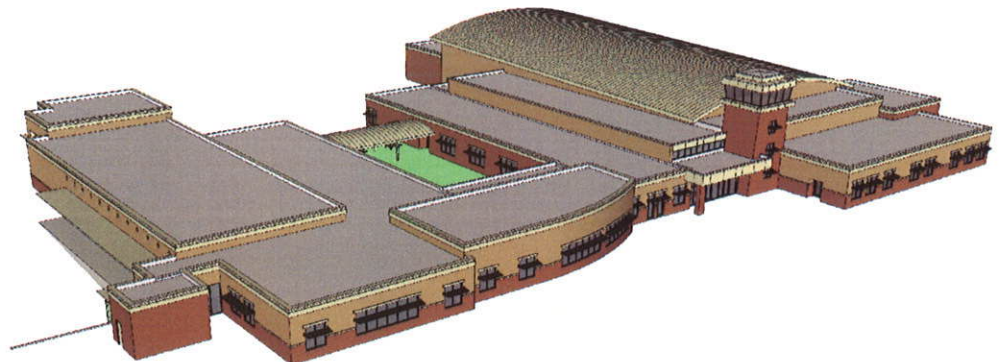


ZMM provided professional design services for the design of the Morgantown Readiness Center in Monongalia County for the West Virginia Army National Guard. The 54,000 SF Readiness Center will occupy a 35-acre tract on a former runway at the Morgantown Municipal Airport.



The Morgantown Readiness Center will house the 249th Army Band, and includes private and group practice spaces, rehearsal rooms, instrument storage, and a performance stage and fixed auditorium. To provide maximum flexibility the auditorium can be expanded into the adjacent Drill Hall through the use of a series of moveable partitions. All band spaces have been designed to maximize their acoustical performance.

The exterior of the facility was designed to meet the WVARNG's objective of providing a gateway to Camp Dawson. The exterior material selections as well as the building's massing (with a vertical element at the entry) reflect architectural features common at Camp Dawson. The vertical tower also mimics the aesthetics of an airport tower.



Construction & Facilities Management Office

WVARNG



LOCATION:
Charleston, West Virginia

SIZE:
19,935 SF

COST:
\$3.5 Million

COMPLETION:
2008

CONTACT:
MG Melvin L. Burch
WVARNG
1707 Coonskin Drive
Charleston, WV 25311
304.561.6450

AWARDS:
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



Tackett Family Readiness Center

WVARNG



LOCATION:
Charleston, West Virginia

SIZE:
7,400 SF

COMPLETION:
February 2011

COST:
\$1.57 Million

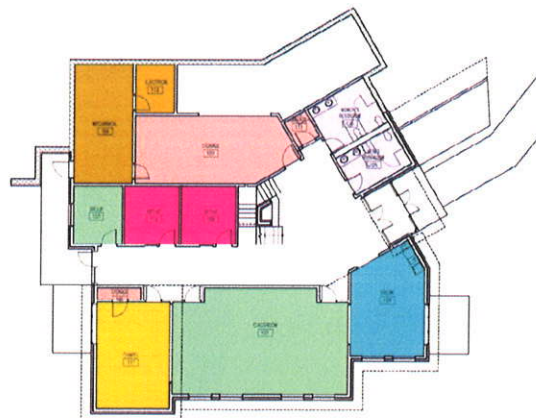
CONTACT:
MG Melvin L. Burch
WVARNG
1707 Coonskin Drive
Charleston, WV 25311
304.561.6450



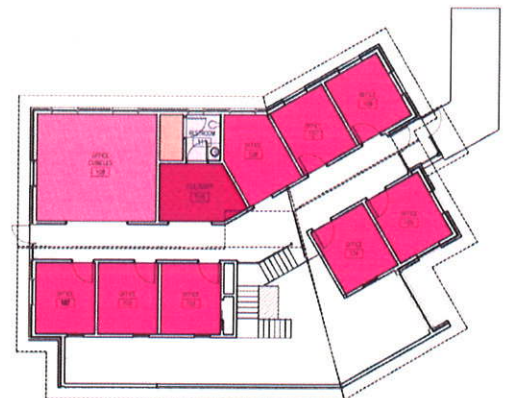
The Family Support Center is a two - story brick building with a sloped roof stepped into the wooded hillside adjacent to the Army National Guard facilities in Charleston, West Virginia.

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



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

West Virginia Army National Guard, Joint Interagency Education and Training Center, Camp Dawson, 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

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
- WV Qualification Based Selections Council, President-Elect, 2011
- Leadership WV 2010
- Charleston Rotary
- West Side Main Street, Board of Directors 2008 -2010
- City of Charleston Land Trust 2008 - 2011
- West Side Elementary School LSIC, Volunteer

also responsible 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.

Construction and Facilities Management Office Expansion, West Virginia Army National Guard, 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 2008 AIA Merit Award, focused the client's resources on a new entry and corridor that separated the existing office space from the addition.

Judge Black Courthouse Annex, Wood County Commission, Parkersburg, WV. Mr. Krason was responsible for the programming and design 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.

Bridgemont Community and Technical College Davis Hall Renovation, 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 remediating several life safety deficiencies, as well as improvements to the building envelope.

The Boulevard at 2412, Charleston, WV. Mr. Krason was responsible for the design of 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. Mr. Krason also assisted with developing marketing materials for the project.

State Office Building #5, 10th 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 10th Floor of State Office Building #5 for the Office of Technology. The improvements, 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.

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 21st 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.

Awards and Acknowledgements:

AIA Honor Award (2011): WVARNG Joint Interagency Training and Education Center (JITEC)

AIA Honor Award (2011): State Office Building #5, 10th Floor Renovation

AIA Merit Award (2009): WVARNG Construction and Facilities Management Office

Organizer: Making the Business Case for Sustainability Conference, University of Charleston (2010)

Speaker: West Virginia Sustainability Summit, Discover the Real West Virginia Foundation (2010)

Speaker: Sustainable Schools West Virginia Summit, WVU (2009)

Article: The West Side Needs Structural Help, Charleston Daily Mail, January 2005

Article: Memorial to Vertical Towers: A Critical Review, West Virginia Executive, Summer 2004



Role

Site Design & Civil Engineer

Professional Registrations

Registered Professional Engineer (WV, PA, OH)
OSHA 40-Hour Health and Safety Training
OSHA Supervisor Training

Project Manager with 20 years of experience with: site investigation, planning, design and contract administration services on military, site development and mine reclamation projects. Mr. Fuller has been fully responsible technically, managerially and administratively for the planning, investigation, design and contract document preparation for over 70 projects in the State of West Virginia.

Mr. Fuller has served as Associate Professor of Civil Engineering Technology at West Virginia University Institute of Technology on a full-time, part-time, and adjunct basis.

Mr. Fuller was principal or project manager for the following West Virginia Army National Guard Projects completed by Capitol Engineering, Inc. Descriptions of the projects with asterisks are provided elsewhere in this proposal.

- Joint Interagency Training and Education Center (JITEC)*
- Morgantown Readiness Center*
- Jackson County Armed Forces Reserve Center*
- Fairmont Armed Forces Reserve Center
- Elkins Armed Forces Reserve Center
- Glen Jean Armed Forces Reserve Center*
- Summersville Readiness Center
- Lewisburg Readiness Center
- C&FMO Office Expansion*
- AASF #1 Apron Expansion/Rehabilitation and Taxiway Replacement
- Camp Dawson Runway Extension
- Camp Dawson Range Renovations
- Camp Dawson Qualification Training Range Preliminary Design Drawings
- AASF #1 Emergency Taxiway Repair
- JISOTF Initial Planning Study

Education

Master of Science, Engineering, Marshall University Graduate College, 1997

Bachelor of Science, Engineering Technology, West Virginia Institute of Technology, 1989

Military Background

Service

- US Army Reserve, 1985-1988, Enlisted
- WV Army National Guard, 1988-2010, Lieutenant Colonel (Retired)

Key Tours

- Operation Enduring Freedom/Operation Iraqi Freedom, 2003-2004, Major, EN, Plans Officer
- Operation Iraqi Freedom, 2007-2008, Lieutenant Colonel, EN, Design Engineer

Civic Affiliations

- Society of American Military Engineers
- American Society of Civil Engineers
- American Institute of Architects
- Construction Specifications Institute



Role

Engineering Principal

Professional Registrations

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

As, 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 Education and Training Center, Camp Dawson, 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.

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, Bridgemont Community and Technical College
- City of Pt. Pleasant, WV – 2nd Ward Councilman for 20 years

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.

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.

Bridgemont 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.

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

West Virginia Army National Guard, Joint Interagency Education and Training Center, Camp Dawson, WV.

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, 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

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

models throughout the design process. He also participated on all production work through all phases. The project is aiming for LEED Silver Certification.

Judge Black Courthouse Annex, Wood County Commission, 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.

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.

New Kanawha County 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 21st 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 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.



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.

Project Experience

Joint Interagency Training and Education Center (JITEC), 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 AFRC, Ripley, 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.

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 Sheriffs Department. The project is targeting a LEED Certification.

Education

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

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

Employment History

2007 - Present, Structural Engineer, ZMM
2003 - 2007, Structural Engineer, McCall
Engineering, Inc.

Civic Affiliations

- American Institute of Steel
Construction, Member

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.

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.

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.

Southern West Virginia Community College, Williamson, WV. Mr. Hedrick is 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.

Bridgemont Community and Technical College (Davis Hall, Building 704), Montgomery, WV. Mr. Hedrick is responsible for the structural design for a design team that is currently preparing construction documents for the renovation to an existing 7-story, 77,000 SF educational building. The project scope includes remedying several engineering and life safety deficiencies, as well as architectural improvements to the building envelope.

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 21st 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.

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

West Virginia Army National Guard, Joint Interagency Education and Training Center, Camp Dawson, 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 AFRC, Ripley, 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, 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

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

Station (MEPS), and an Organizational Maintenance Shop (OMS). The AFRC contains the administrative and training space for the 77th Brigade Troop Command, the 1863rd Transportation Company, and the 150th 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.

Southern WV Community & Technical College, Williamson WV. Mr. Casdorph 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. Casdorph 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.

Lincoln County High School, Hamlin, WV. Mr. Casdorph 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. Casdorph was responsible for the electrical design of the new 96,000 SF facility housing 700 middle school students grades 6 through 8.

West Virginia Housing Development Fund Office, Charleston, WV. Mr. Casdorph 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 floorplan utilizing modular underfloor wiring to accommodate any future modifications of the workspace with minimal disruption to the employees. The project is targeted for LEED Silver Certification.

J.M. Chick Buckbee Juvenile Center, Romney, WV. Mr. Casdorph 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. Casdorph 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. Casdorph 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.



Role

Lighting Designer and Electrical Technician

Professional Registrations

Master Electrician – WV License #M02891

Lighting Certification with the National Council on Qualification for Lighting Professionals (NCQLP)

Mr. Abernethy is responsible for overseeing the design of the lighting and electrical systems, ensuring that the electrical systems not only meet the program requirements, but also meet the long-term needs of the owner. He performs lighting, electrical and low voltage systems design, electrical load calculations and specifies the type of systems to be incorporated into the building. He coordinates with the other disciplines in order to integrate the Lighting and Electrical systems into the building. Mr. Abernethy has participated on several LEED registered projects; one of his key contributions to these projects is designing lighting systems that comply with energy codes and LEED requirements.

Mr. Abernethy began his career in engineering with ZMM in 1968. From 1970 through 1971 he was a construction drafting specialist and model maker in the US Army and after his honorable discharge in 1972 he became a staff engineering designer for FMC Inorganic Chemicals Corporation. In 1973 Mr. Abernethy returned to ZMM. He has a broad range of experience in the design and construction of commercial lighting and electrical systems, including K-12 schools, higher education facilities, industrial, manufacturing, military, commercial offices, malls and large retail facilities. Mr. Abernethy also has five years of experience as the office manager, estimator and purchasing agent for a highway lighting and traffic signal construction company.

Project Experience

Wood County Justice Center, Parkersburg, WV.

Mr. Abernethy is responsible for the lighting design electrical work for the Wood County chose an existing building in downtown Parkersburg to renovate for its Magistrate Courts, Sheriff's Department and Holding Center.

Judge Black Courthouse Annex, Wood County

Commission, Parkersburg, WV. Mr. Abernethy was responsible for lighting designs and electrical work on this annex renovation. The Judge Black Annex included two independent circulation paths – a secure entry and lobby for access to the

Education

Associate in Science Drafting and Design Engineering Technology, West Virginia Institute of Technology, Montgomery, WV, 1997

Illuminating Engineering Society of North America (IESNA), Certificate of Technical Knowledge (TKE), 1996

Employment History

1992 - Present, Lighting Designer and Electrical Technician, ZMM

1988 - 1992, Estimator and Purchasing Agent, WV Signal and Light

1973 - 1988, Lighting and Electrical Designer, ZMM

1972 - 1973, Draftsman and Designer, FMC Inorganic Chemicals Division

Civic Affiliations

- Illuminating Engineering Society of North America – 15 Yr. Member
- Elder and Session Member – First Presbyterian Church, Charleston, WV

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

Tucker County Courthouse Annex, Parsons, WV.

Mr. Abernethy is responsible for electrical and lighting designs for the Courthouse Annex renovation project and responsible for the HVAC systems. 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.

Bridgemont Community and Technical College Davis Hall Renovation, Montgomery, WV.

Mr. Abernethy was in charge for the interior lighting design on the Davis Hall building renovations. The project scope included remedying several life safety deficiencies, as well as improvements to the building envelope.

West Virginia Army National Guard, Joint Interagency Education and Training

Center, Camp Dawson, WV. Mr. Abernethy was responsible for the interior and exterior lighting design of both the billeting expansion and the operations training center. The project utilizes less than 0.8 watts/SF for interior lighting, which has helped reduce energy consumption on the project by 40% compared to a baseline analysis.

WV State Capitol Buildings #5, 6, & 7 - Electrical Switchgear up-grades, Charleston, WV.

Mr. Abernethy was the project manager, designer and field investigator for a large medium and low voltage electrical switchgear emergency replacement which was accomplished over a long 2009 New Year's weekend.

Edgewood Elementary School, Charleston, WV. Mr. Abernethy is responsible for the electrical and lighting design for this new school. The school is being designed as a 21st 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.

St. Albans High School, St. Albans, WV. Mr. Abernethy was responsible for the initial electrical survey to determine the extent of demolition prior to reconstructing the school. As the lighting and electrical designer, he was responsible for ZMM receiving an IESNA Sectional Award for the building lighting design.

Lincoln County Comprehensive High School, Hamlin, WV. Mr. Abernethy performed the lighting and electrical design for this award winning ZMM project. The facility is a comprehensive school containing high school classes, vocational education, community technical college classes and a community health clinic.

NGK Oxygen Sensor and Spark Plugs Plants, Sissonville, WV. Mr. Abernethy has been the chief lighting and electrical designer for several projects for NGK. He was the designer for the initial Oxygen Sensor Plant and subsequent up-grades as well as the new Spark Plugs Plant and its continuing up-grades.



Role

Civil Engineer

Professional Registrations

Professional Engineer (WV)

Ms. Cleland is responsible for the site design for ZMM projects. She coordinates with the project architects and mechanical and electrical engineers to integrate the site layout with the building requirements. Ms. Cleland works with the client and the architect to plan the site circulation, parking, and green space. She is responsible for storm water management and utility layout. For sites with environmental concerns, Ms. Cleland coordinates with the appropriate agencies and assists in permit applications.

Ms. Cleland began her career as a 2nd Lieutenant in the US Air Force as a project engineer for aerospace projects. After serving four years in the Air Force, she moved back to West Virginia and began her career in civil engineering. She began assisting lead engineers at an environmental and engineering consultant firm with air quality permitting, utility extension projects, and site development projects. After gaining experience at the consultant firm, Ms. Cleland joined ZMM as the civil engineer for the firm. She has experience with urban and rural site, storm water management system, and site design.

Project Experience

Family Readiness Center (WVARNG): Ms. Cleland was responsible for site design for a two story building located on a hillside. Due to the existing slopes, Ms. Cleland performed 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 access road was design with handicap parking at both entrances. The client wanted the building to have the least impact as practical for the site development. A large segmental block wall was utilized to limit disturbance of cut slopes.

Wood County Justice Center: Ms. Cleland was responsible for site design for this adaptive reuse project in Parkersburg WV. The existing 32,000 SF building will create a new Magistrate Court and a Sheriffs Department. The project is targeting a LEED Certification.

Education

Bachelor of Science in Education,
West Virginia State University, 2001

Bachelor of Science in Aerospace
Engineering, United States Naval
Academy, 1993

Employment History

2009 - Present, Civil Engineer, ZMM

2002 - 2009, Project Engineer, Potesta &
Associates, Inc.

1993 - 1997, Aerospace Engineer, United
States Air Force

Civic Affiliations

- National Society of Professional Engineers
- West Virginia Society of Professional Engineers

Highland Medical Facility:

Ms. Cleland was responsible for the site development including utility extensions and relocations, stormwater drainage design, site pedestrian and traffic circulation, and parking area layout. Ms. Cleland also coordinated with the City Engineer to meet local requirements for stormwater management, zoning ordinances, and driveway layout. In addition to coordinating with the City, Ms. Cleland was responsible for permitting required by state agencies for site development.

Harts PK-8 School: Ms. Cleland was responsible for site design and permitting. The site was constrained by the Guyandotte River, State Route 10, and an unmarked cemetery in the middle of the site. The site was laid out to avoid disturbance of the cemetery and create a building pad and access roads to satisfy the client, State Fire Marshall, and vehicular circulation. The site preparation package included building pad grading, rough site grading, and storm water management. Ms. Cleland coordinated with the local utility agencies, WV Department of Transportation, the United States Army Corps of Engineers, the local floodplain manager, and the WV Department of Environmental Protection.

West Side Elementary School: Ms. Cleland was responsible for the site design and stormwater management for this site located within a city block. The site utilities were readily available and minimal grading was required for this site. The challenge was the stormwater management requirements. The pre-construction site conditions were a small school building and a large play field took up most of the site. The post- construction site conditions were the opposite creating a significant increase in stormwater runoff rate. A stormwater retention system was designed to infiltrate the majority of the stormwater and recharge the groundwater.

Project Experience with Other Firms: Ms. Cleland assisted with site development projects, utility extensions, pump station design, outlet structure design, and wastewater treatment plant design prior to coming to ZMM. In the eastern panhandle of West Virginia, Ms. Cleland designed the site layout and utilities for a planned hill side community with phased development plans. She assisted on the site utilities and sanitary sewer extension project for a two schools in Southern West Virginia.

Ms. Cleland also has experience with environmental investigations and air quality permitting. She assisted industrial clients with preparation and assembly of air permit application to the West Virginia Department of Environmental Protection. Ms. Cleland coordinated with the agencies through to permit issuance.



Role

Interior Designer/Sustainability Coordinator

Professional Registrations

NCIDQ Certification

LEED Accredited Professional, Building Design & Construction

Ms. Watkins is ZMM's interior designer and sustainability coordinator. After earning a BS in Interior Design from the University of Tennessee, Ms. Watkins lived in Cleveland and Boston for 13 years before coming back home to Charleston in 2008. During that time she worked on a wide variety of commercial interiors projects, and nurtured a passion for sustainable design.

She was one of the founding members of the Cleveland Green Building Coalition; interior designer and sustainability coordinator for the Federal Courthouse in Youngstown Ohio, which was the first courthouse in the country and the first building in Ohio to become LEED Certified; she was interior designer and sustainability coordinator for Cubellis' corporate headquarters in Boston, which is now LEED for Commercial Interiors Gold Certified; Ms. Watkins led the green effort that has since become part of Procter & Gamble's green building standards; she was Chapter President of the International Interior Design Association in Ohio for 4 years; and is currently involved with all of ZMM's LEED projects and several green building outreach efforts on behalf of the firm.

Project Experience

West Virginia Army National Guard, Joint Interagency Education and Training Center, Camp Dawson, WV.

Targeted for LEED for New Construction v2.2 Silver Certification.

For this multi-faceted and complex project, Ms. Watkins assisted in coordinating interior design for the entire project, and led the interiors effort for the Billeting (hotel) building. Jill also played a leadership role in the LEED process as co-LEED Administrator and was instrumental in the team achieving several LEED credits. She was responsible for interior finish selections, finish plans, reflected ceiling plans, interior elevations, custom casework design and interior details.

Education

Bachelor of Science in Interior Design,
The University of Tennessee, 1993

Employment History

2008 - Present, Interior

Designer/Sustainability Coordinator, ZMM

2005 - 2007, Project Designer, Boston

Architecture/Engineering Firm

1995 - 2005, Interior Designer, Various

Cleveland Architecture/Engineering Firms

Civic Affiliations

- Bridgmont Sustainability Institute
Advisory Council, Member
- FestivALL Steering Committee,
Member
- Clay Center Development
Committee, Member

Jackson County AFRC, Ripley, WV.

Targeted for LEED for New Construction v2.2 Silver Certification.

Jill worked closely with ZMM architects and engineers to fully develop the interiors package. Primary focus occurs in the main lobby, where coordination of exterior and interior finishes, lighting, and ceiling design was critical. In the Assembly/Drill Hall, Jill coordinated the interior acoustic requirements with finishes and architectural elements to create a unique, flexible space for many types of uses.

Morgantown Readiness Center, Morgantown, WV.

Targeted for LEED for New Construction v2.2 Silver Certification.

Jill worked alongside ZMM architects and engineers to fully develop the interiors for this multi-functional building that houses offices and performance facilities for the band, as well as traditional readiness center functions. Design of the main gallery space was foremost, where coordination of durable interior finishes, lighting, and ceiling design was important. In the Drill Hall and Auditorium, Jill coordinated the interior acoustic requirements with finishes and architectural elements to create a stage area, performance space, and drill hall that will seamlessly function in a variety of ways. Jill is LEED Administrator for the project.

Bridgemont Community and Technical College Davis Hall Renovation, Montgomery, WV. Ms. Watkins is responsible for the interior design efforts to the Davis Hall renovations. She is also responsible for interior finishes and furniture selections.

Huntington East Middle School, Huntington, WV.

Targeted for LEED for Schools 2009 Silver Certification.

As LEED Administrator, Ms. Watkins assisted in coordinating design decisions to maximize LEED points and overall operational savings for the client. She was also responsible for interior color selections and finish plans.

West Virginia Housing Development Fund Office, Charleston, WV. Ms. Watkins was responsible for programming, interior elevations and details, lighting design, reflected ceiling plans and furniture and finish selections for this new 30,000 square foot office building.

Wood County Justice Center, Parkersburg, WV.

Targeted for LEED for New Construction v2.2 Certification.

Wood County chose an existing building in downtown Parkersburg to renovate for its Magistrate Courts, Sheriff's Department and Holding Center, and Ms. Watkins was responsible for programming, space planning, coordination with consultants, researching multiple standards and codes, interior finish selections, reflected ceiling plans and furniture selections.

Tucker County Courthouse Annex, Parsons, WV.

Ms. Watkins is responsible for the interior design and finishes for the Courthouse Annex renovation project and responsible for the HVAC systems. 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.

Other Firm Experience:

Procter & Gamble Gillette Corporate Headquarters, Boston, MA; to meet Boston Green Building Standards
Cubellis Corporate Headquarters, Boston, MA; LEED for Commercial Interiors Gold Certified
University of Akron Arts & Sciences Classroom Building, Akron, OH
University of Akron Student Affairs Building [programming], Akron, OH
Nathaniel R. Jones Federal Building and U.S. Courthouse, Youngstown, OH; LEED Certified
Beachwood Middle School, Beachwood, OH
Cleveland State University Library [schematic design], Cleveland, OH



Role

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 AFRC
Morgantown 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
Ft. Gay Elementary School
Job Corps Center, WV
Sears, Roebuck & Company, Retail Centers
Various 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, American Institute of Architects, West Virginia Chapter

Sustainable Design



"I became a LEED Accredited Professional because I believe that good design has value and the ability to impact our daily lives. The application of sustainable design principles enhances this value, and employs an integrated design approach that can improve both our environment, as well as the performance of building occupants. Sustainable design showcases the value of design through demonstrated improvements in the performance of the students and employees who occupy our building."

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



"I became a LEED Accredited Professional in order to have a greater influence on sustainable design. I believe that a truly sustainable design requires the building systems to be integrated into the design of the building. Being a LEED AP has allowed me to become much more involved at earlier stages in our projects, greatly enhancing the integrated design process"

- John A. Pruett, PE, LEED AP



"Becoming a LEED AP was the culmination of years of environmental advocacy in the design community. Since then, it has allowed me to explore new avenues of design projects, and to provide leadership to clients, colleagues and the community. I believe LEED allows design teams to be more creative and cohesive because of the benefits of early project decision-making. It also makes design more fun!"

- Jill M. Watkins, IIDA, LEED AP



"I have been interested in sustainable design since learning about it while studying architecture and indigenous building techniques in the 1970's. I have continued my interest in sustainable design while designing various passive solar buildings. Becoming a LEED AP is a natural continuation in my interest in green building."

- Hank Walker, AIA, LEED AP



"I became a LEED Accredited Professional as a step in enabling and preparing myself for the design requirements of today, and certainly, the future. I believe that the continued and increased practice of sustainable design and living will be that bridge between losing an irreplaceable environmental health and flourishing in a world that is still unfolding."

- Mark T. Epling, AIA, NCARB, LEED AP

Sustainable Design



At ZMM, we believe that sustainable design is just good design. We are leaders in West Virginia through our projects and our sharing of knowledge.

Reduced Energy Consumption:

A Major component of sustainable design is reduced energy consumption. ZMM has utilized several methods to reduce energy consumption in our designs, including:

- Design of High Efficiency HVAC Systems
- Utilize Daylighting, Automatic Dimmers, and Occupancy Sensors
- Utilize LED Light Fixtures
- Utilize Additional Insulation in the Construction of the Building Envelope

by Employing These Strategies, ZMM has Designed Buildings that Utilize up to 40% Less Energy and Saving Our Clients Significant Operational Expenses.



Sustainable design partnerships with and LEED presentations for:

- Bridgemont CTC "Sustaining LEAN"
- University of Charleston "Making the Business Case for Sustainability"
- The Clay Center
- Natural Capital Investment Fund
- West Virginia Department of Education
- West Virginia School Building Authority
- West Virginia Association of School Administrators
- West Virginia Department of Environmental Protection
- Habitat for Humanity of Kanawha and Putnam County
- Kanawha County Solid Waste Authority
- Half Moon Seminars
- Travel Green Appalachia

Current LEED Registered projects:

State of West Virginia Office Buildings #5, 6 and 7

These 3 existing office buildings, comprising nearly 500,000 square feet of space are in need of extensive upgrades to improve life safety and environmental safety of employees. Interior renovations will also significantly improve workers' morale and productivity. The project is registered under LEED-NC v2.2.

Highlights include:

- Recycling of all existing demountable partition systems plus construction waste management
- New Energy Star roofs reduce heat island effect
- Low flow fixtures and dual-flush toilets to reduce water use
- New windows and central HVAC system will reduce energy consumption
- Significant indoor air quality improvements





West Virginia Army National Guard Joint Interagency Training and Education Center

This 230,000 square foot project at Camp Dawson in Kingwood, West Virginia is registered under LEED-NC v2.2. Program elements incorporate an operations training and simulation center for the National Guard Bureau, homeland defense and training offices, classroom spaces and a billeting (hotel) component. While the project and existing site is complex in nature, the project expects to achieve LEED Silver. Highlights include:

- Stormwater reduction measures (vegetative roof, bioswales, etc.)
- Low flow fixtures, waterless urinals and dual-flush toilets to reduce water use
- Enhanced commissioning
- Highly efficient HVAC systems
- Construction waste management
- Increased use of local materials
- Increased indoor air quality measures



West Virginia Army National Guard Morgantown Readiness Center

At almost 70,000 square feet, this new readiness center will serve as a gateway to the Joint Interagency Training and Education Center at Camp Dawson. Registered under LEED-NC v2.2, sustainable design highlights include:

- Stormwater – reduced quantity and increased quality measureHeat island effect reduction
- Low flow fixtures, waterless urinals and dual-flush toilets to reduce water use
- Highly efficient HVAC system
- Increased use of local materials
- Construction waste management
- Increased acoustical performance



West Virginia Army National Guard Jackson County AFRC, Ripley WV

At 63,000 square feet, this new reserve center gets its inspiration from a Georgian-style house that sits on the site. Registered under LEED-NC v2.2, sustainable design highlights include:

- Stormwater – reduced quantity and increased quality measures
- Low flow fixtures, waterless urinals and dual-flush toilets to reduce water use
- Vertical and horizontal exterior sunshades plus superior glazing
- Highly efficient HVAC system
- Construction waste management
- Increased use of local materials
- Increased indoor air quality measures



In addition to the above, ZMM's Sustainability Coordinator, Jill Watkins, has nearly 15 years of experience with sustainable design and LEED, including significant contributions to:

- New Federal Courthouse, Youngstown, Ohio – the first courthouse in the U.S. and the first building in Ohio to become LEED Certified
- Cleveland State University New Recreation Center – LEED Consultant – project is LEED Certified
- Procter & Gamble / Gillette Headquarters – Boston Green Building Standards required strict adherence to LEED-NC – Anticipated LEED credits and sustainable design features led to P&G's green building standards for all U.S. facilities
- Cubellis, Inc., Boston, Massachusetts – LEED-CI Gold Registered
- Raytheon, Waltham, Massachusetts – LEED-CI Gold Registered



2011

Southside Elementary/
Huntington Middle School
2011 - Honor Award
"Historical Preservation"
AIA West Virginia Chapter



2011

Joint Interagency Education
& Training Center (JITEC)
2011 - Honor Award
"Excellence in Architecture"
AIA West Virginia Chapter



2011

State Office Building #5, 10th
Floor - Office of Technology
2011 - Merit Award
"Architecture in Interiors"
AIA West Virginia Chapter



2010

Hacker Valley PK-8 School
Hacker Valley, WV
2010 - Honor Award
"Excellence in Architecture"
AIA West Virginia Chapter



2009

Construction & Facilities
Management Office
Charleston, WV
2009 - Merit Award
"Achievement in Architecture"
AIA West Virginia Chapter



2008

Erma Byrd Center
Beckley, WV
2008 - Honor Award
"Excellence in Architecture"
AIA West Virginia Chapter



2007

Lincoln County High School
Hamlin, WV
2007 - Honor Award
"Excellence in Architecture"
AIA West Virginia Chapter
Education Design Showcase
"Project of Distinction Award"
American School & University
"Outstanding Building Design"



2006

Gene Spadaro
Juvenile Center
Mount Hope, WV
2006 - Merit Award
"Achievement in Architecture"
AIA West Virginia Chapter



2004

St. Albans High School
St. Albans, WV
2004 - Impact in Learning Award
"Effective Transformation"
Education Design Showcase
"Outstanding Building Design"
American School & University
"Outstanding Building Design"



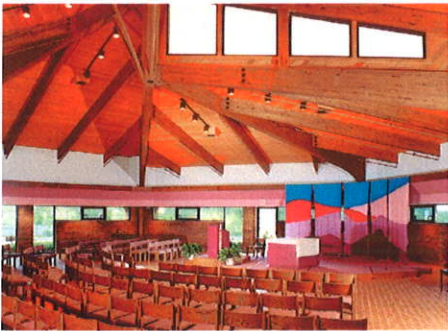
Additional Award Winning Design



West Virginia Society of Architects Design Honor Awards

Corporate Headquarters Facility
Blue Cross / Blue Shield of West Virginia
Charleston, West Virginia

John XXIII Pastoral Center
Wheeling-Charleston Diocese
Charleston, West Virginia



Corporate Office Building
Contractors' Association of West Virginia
Charleston, West Virginia

One Bridge Place Office Renovation
Fisher-Bryson Properties
Charleston, West Virginia



**United States Navy
Admiral's Commendation
Operations Building Alterations**
Naval Security Group
Sugar Grove, West Virginia



**Construction Specifications Institute
Honorable Mention
Restoration and Renovation Projects**
Cottage Renovations to Federal Prison Camp
Alderson, West Virginia

**Stonewall Jackson Lake
Merit Award
Design and Environmental Program**
Recreation Area Basic Park
Weston, West Virginia