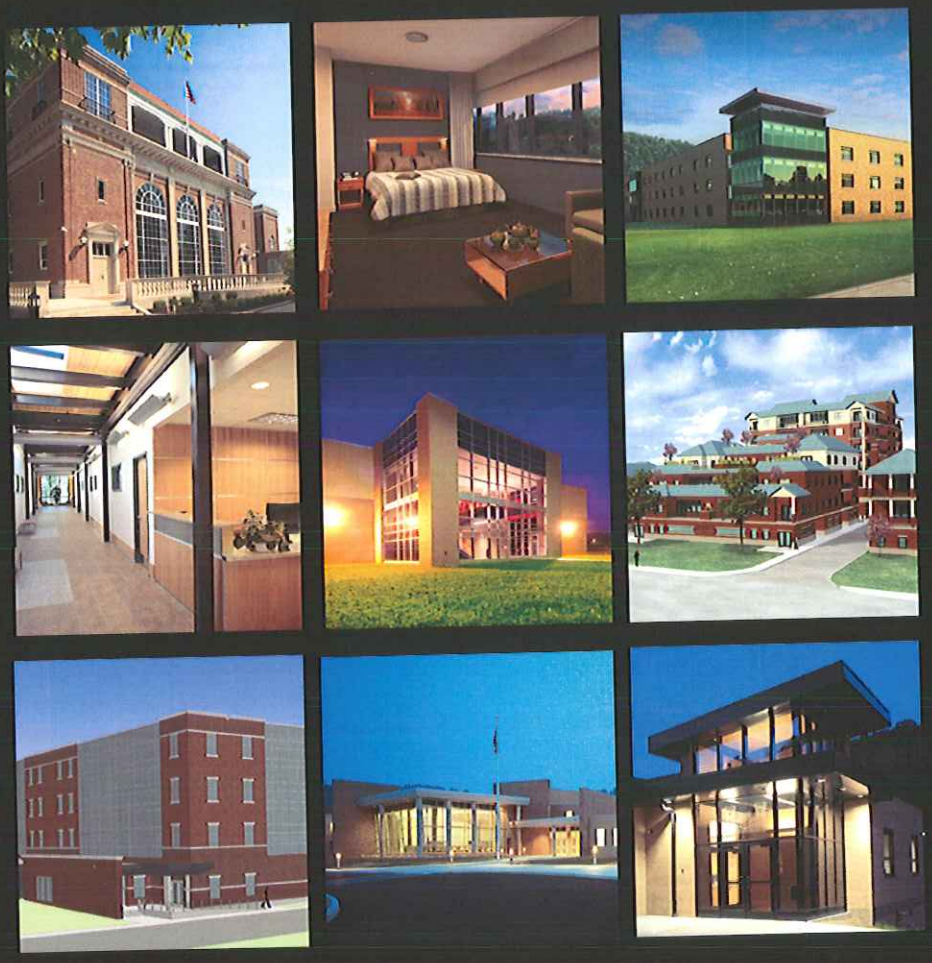
Statement of Qualifications for:

50 Bed Expansion at Sharpe Hospital
Weston, WV

RFQ# WSH12067



ZMM
ARCHITECTS & ENGINEERS

October 27, 2011

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October 27, 2011

Ms. Roberta Wagner, Buyer
Purchasing Division
2019 Washington Street, East
PO Box 50130
Charleston, WV 25305-0130

Subject: **Expression of Interest – 50 Bed Expansion at Sharpe Hospital WSH12067**

Dear Ms. Wagner:
ZMM is pleased to submit the attached information to demonstrate both our experience and our capability to provide professional architectural, engineering, interior design, and construction administrative services for the 50-Bed Patient Care Unit at the William R. Sharpe, Jr. Hospital in Weston. We are confident that the expertise gained through our recent experience designing an 80-bed patient care unit and outpatient clinic for Highland Hospital in Charleston will help to ensure the quality of your project.

In addition to our recent mental health design experience, **ZMM** has had the opportunity to participate on a wide range of healthcare, correctional, and institutional design projects throughout West Virginia including: Regional Jails; Juvenile Centers; and Rural Health Clinics – all with design and security features that are relevant to the Sharpe Hospital Expansion. This diverse experience, as well as our commitment to creating innovative and award winning facilities, will make **ZMM** a great partner for the William R. Sharpe Jr. Hospital.

Since 1959, **ZMM** has been consistently recognized as one of the largest, fully integrated architecture and engineering firms in the State of West Virginia. If selected, **all** design and construction administrative services for the Sharpe Hospital Expansion will be provided from our office located in Charleston. As a fully integrated architecture and engineering firm, **ZMM** is uniquely qualified to provide design services on complex renovation and addition projects, as well as projects with aggressive design schedules. If selected to provide services on your project, **ZMM** will commit to providing all of the resources required to meet your 220 day design schedule.

In addition to our ability to meet your schedule, **ZMM** also has recent experience coordinating work with ZDS at the West Virginia Regional Technology Park (WVRTP) in Charleston where the firms worked jointly on a study of the efficiency of the existing steam plant. If selected to provide services at the William R. Sharpe, Jr. Hospital, we would work closely with ZDS to ensure the compatibility of all building systems.

Thank you for taking the time to review the attached proposal which has been formatted to meet the requirements outlined in the EOI. Additionally, please visit our website at www.zmm.com to learn more about working with **ZMM** from a client's perspective. **ZMM** understands the importance of this expansion to the William R. Sharpe, Jr. Hospital, and we are committed to providing the resources required to deliver solutions that will help ensure the Hospital's continued success. We appreciate your consideration for this important endeavor.

Respectfully submitted,
ZMM, Inc.

Adam R. Krason, AIA, NCARB, LEED-AP
Principal
ZMM, Inc.
222 Lee Street West • Charleston, West Virginia 25302
304.342.0159 voice • 304.345.8144 fax
zmm.com

Table of Contents

Statement of Program Understanding

The following description of the scope of work was developed based upon the information provided in the request for proposal.

- The project will include the design of a new 27,000 SF 50-bed patient care unit at the William R. Sharpe, Jr. Hospital in Weston."
- The current facility includes 150 adult beds (juveniles are not treated at this facility).
- The addition will be a single-story 50-Bed Patient Care Unit, which will be an attached wing on the northwest side of the current hospital structure.
- Renovation of ancillary spaces, including:
  Corrections to Meet Current Code Requirements
  Redesign of the Existing Loading Dock
  Design of a New grease Trap

If selected to participate in the design of the addition, **ZMM** would work with the appropriate members of the Hospital administration and staff to establish a project vision and design objectives. An analysis of the existing floor plan of the Hospital would be undertaken to identify any weaknesses or deficiencies that could be improved as part of the current project. **ZMM** will also work closely with ZDS Design to ensure the compatibility of the proposed design solution with other ongoing building system improvements.

All design work for the addition will be completed in accordance with Mental Health Facility Design Standards, and the interior design would be developed with a focus on promoting recovery. Understanding the unique function of a Mental Health Facility, safety and security will be critical design features; however, these features should be designed in a manner that reduces their visual impact (i.e. they will be included, but not visible).

Finally, **ZMM** understands the importance of designing a facility with ease of operation and maintenance as a primary design objective. Providing access to plumbing chases, standardizing building components, and properly locating serviceable equipment will help reduce operational and maintenance costs for the Hospital. Standardizing the systems by coordinating with ZDS will also help achieve this objective.

Mental Health Facility Design Standards

Through our recent experience working on the expansion of Highland Hospital in Charleston, **ZMM** has a detailed understanding of current Mental Health Facility Design Standards, including:

- AIA Guidelines for Design & Construction of Health Care Facilities
- U. S. Department of Health & Human Services Standards

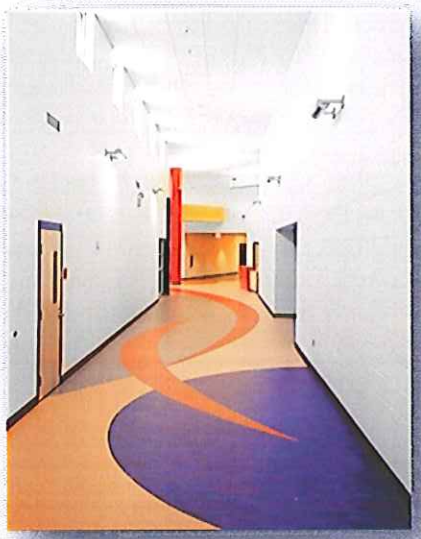
- WV Department of Health & Human Resources Standards
- NFPA 101, Title 87 (State Fire Code)
- International Building Code (2003)
- US Green Building Council – Leadership in Energy and Environmental Design (LEED) Rating System

Creating Interior Environments that Promote Recovery

In keeping with **ZMM's** commitment to sustainable architecture, we understand the direct connection the interior environment has on patient health. We design interiors that are focused on high quality lighting, increased indoor air quality (through the use of efficient mechanical systems and non-toxic materials), an abundance of daylight and views, and appropriate color selections. Current evidence-based design research shows the following:

"Even briefly viewing nature settings can produce substantial and rapid psychological and physiological restoration from stress. Restorative or stress-reducing effects of looking at nature are manifested as a constellation of beneficial changes that include reduced levels of negatively toned emotions (fear, anger), elevated positive emotions (pleasantness), and changes in physiological systems...." [from Biophilic Design] **ZMM** interior designers work closely with our architects and engineers to provide healthy interior spaces with views to the natural world outside. In urban environments, this can be achieved through site landscaping, and even through the use of nature-oriented artwork.

"Findings from several rigorous studies indicate that exposure to light – daylight or bright artificial light – is effective in reducing depression and improving mood, even for patients hospitalized with severe depression." [from Biophilic Design] **ZMM** incorporates daylighting strategies on the vast majority of our projects, and our clients have noticed the benefits.



"There are no direct linkages between particular colors and health outcomes of people [and] no evidence for a direct connection between environmental colors and emotional states." [Color in Healthcare Environments] **ZMM's** approach to interior color palettes is always client- and project- focused. For Highland Hospital, an urban site required a soft and natural interior color palette inspired by nature. Drapery and curtain fabrics with natural scenes and woven affirmations work well with bio-based resilient flooring, natural wood furniture and a multifaceted color scheme.

Designing Secure Facilities

The design of a mental health facility has to accommodate both improved safety of the patients (injury and suicide prevention) and the improved safety and security of the staff. Designing a facility that meets these standards requires both a thoughtful layout of the program elements to help improve visual control of the environment, as well as improved security electronics.

Through our work with the State of West Virginia Regional Jail and Correctional Facility Authority, the State of West Virginia Division of Juvenile Services, and the State of West Virginia Army National Guard, **ZMM** has had the opportunity to participate in the design of secure facilities. While there are many differences between a correctional facility and a mental health facility, some of the security standards apply to both. For example, **ZMM** would recommend the following security standards be incorporated into the design of the Sharpe Hospital Expansion:

- Plumbing chases for both routine maintenance and the security of the patients and staff would be recommended. These chases will allow staff to access the piping without having to enter a patient room. This will improve serviceability, and keep the patients removed from any service related equipment.

- "Bolt-down" or weighted furniture would also be recommended. Safety of both the patients and the staff is improved by eliminating the potential hazard caused by loose furnishings.

- Segregation of patients from visitors unless they are located within a supervised environment will also help improve safety and security.

- Utilizing security drywall in patient rooms and security metal accessible ceilings in the corridors improves safety by helping to restrict patient access.

While these steps will help improve the safety and security of the patients and staff, a thorough analysis of the program and preliminary layout will be undertaken to help identify and mitigate any potential risk.

Mental Health Facilities Engineering Systems and Maintenance

As a full service architecture and engineering firm, **ZMM** regularly provides design services with an emphasis on improving the serviceability of a facility, simultaneously reducing maintenance costs. Some potential methods for reducing maintenance costs on the Sharpe Hospital Addition include:

- Coordinate with ZDS to ensure compatibility of mechanical, electrical, data, fire alarm, and plumbing systems.

- Location of serviceable mechanical / electrical components (valves, electrical panels, dampers, etc.) away from patient / treatment areas in locations available to maintenance staff 24 hours a day.

- Adequate pipe chase / ceiling plenum utility trench space to allow for routine repair / maintenance without requiring dismantling of existing construction.
- Standardization of building components requiring routine replacement / maintenance (light bulbs, door hardware, plumbing washers / seals, air-handling unit filters, etc.).
- Where practical, all furniture should be securely attached to the floor / walls of the facility – reducing the ability for damage to furnishings (while improving safety and security).

ZMM

Healthcare Experience

Highland Medical Facility

CAMC Teays Valley - Intensive Care Expansion Planning

Webster County Memorial Hospital - New Hospital Site Selection

St. Francis Hospital - Various Projects

Parkersburg Women's Center

CAMC Hospital - Cancer Treatment Center

CAMC Hospital - Patient Room Expansion

Braxton Memorial Hospital - Various Projects

Pleasant Valley Hospital Addition

Clinic Experience

West Side Elementary School - Health & Dental Clinic

Lincoln County High School - Health Clinic

Glen Jean Armed Forces Center - Health Clinic

St. Albans High School - Health Care Clinic Design

New River Elementary School - Health Clinic

Mount View Middle/High School - Health Clinic

Highland Medical Facility

Healthcare / Rural Clinic Design

ZMM

LOCATION:
Charleston, West Virginia

SIZE:
87,300 SF

COMPLETION:
TBA

COST:
$26 Million

CONTACT:
Mike Casdorph,
Director of Facility Development
300 56th Street
Charleston, WV 25304
304.926.1600

ZMM has completed the design services for a five level, 87,3000SF, $26M addition to Highland Hospital in Charleston. The addition will include: administrative offices, training spaces, 165 patient beds, nurses stations, an out-patient treatment department, pharmacy, laundry, and building service spaces. A pedestrian bridge will connect the new facility to the existing hospital.

The new design complements the existing Highland Hospital, and was coordinated with a variety of community organizations, as well as the City of Charleston Planning Department. Site design features include a "pocket-park" that utilizes a permeable pavement system for the walkways, reducing the need for storm water detention.

The floor plan was designed to give direct visual control of the entire facility from the nurses station. In addition to the direct visual control, security, and safety are monitored through the use of state of the art security systems. The patient floors are designed to allow flexible segregation of patient types based on current patient classifications. Patient toilet room entrances are visible from the nurses stations. Additional security features include secure drywall ceilings in patient rooms, tamper proof sprinkler heads, security suspended ceilings in the corridors, and bolt-down furniture in the group meeting or "dayroom" area.

Lincoln County Comprehensive High School

Southern West Virginia Community College

ZMM

LOCATION:
Hamlin, West Virginia

SIZE:
216,500 SF

COMPLETION:
August 2006

COST:
$32 Million

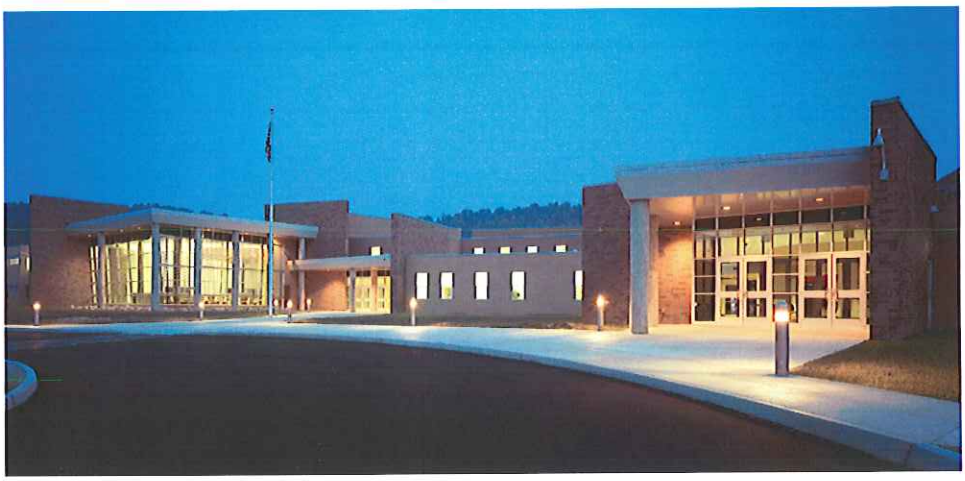
CONTACT:
Mr. David Roach
Superintendent
Loncoln County Schools
10 Marland Avenue
Hamlin, WV 25523
304.824.3033

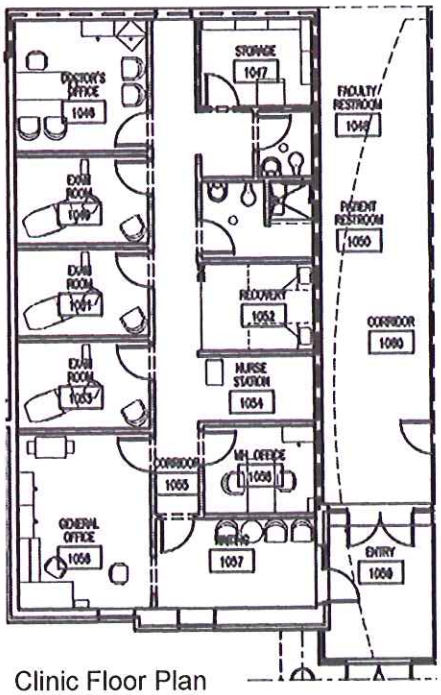
AWARDS:

2007 AIA Honor Award
West Virginia Chapter
Excellence in Architecture

Education Design Showcase
Project of Distinction award

American School & University
Outstanding Building Design





Clinic Floor Plan

The new Lincoln County High School combines four existing high schools into one school. To formulate a more "comprehensive approach to this project the local school system added vocational school programs.

Along with the new vocational classrooms a new health occupations lab will operate in conjunction with the on-site doctors office. Students enrolled within that program will have the opportunity to "job shadow" within the clinic setting. The clinic will be open six days a week and twelve months a year.

In keeping with the new high school becoming the focal point of the community, a college wing was added to the facility. Southern West Virginia Community College will offer classes during the day and evening. Students will have the opportunity to take college classes during the day.

The building provides a unique learning opportunity for the students. Daylighing along with automatic lighting controls provide state of the art technology for students to see how sustainable design, energy conservation, and technology work together. This facility is one of the first educational buildings in the state of West Virginia to include sustainable building design features.

Glen Jean Armed Forces Center

Healthcare / Rural Clinic Design

ZMM

LOCATION:
Glen Jean, West Virginia

SIZE:
109,000 SF

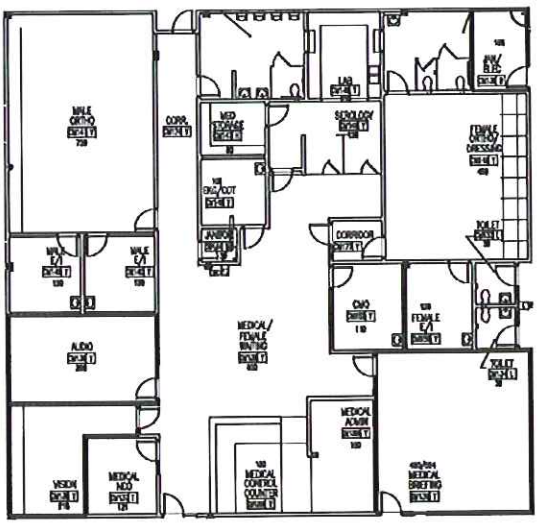
COMPLETION:
2003

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

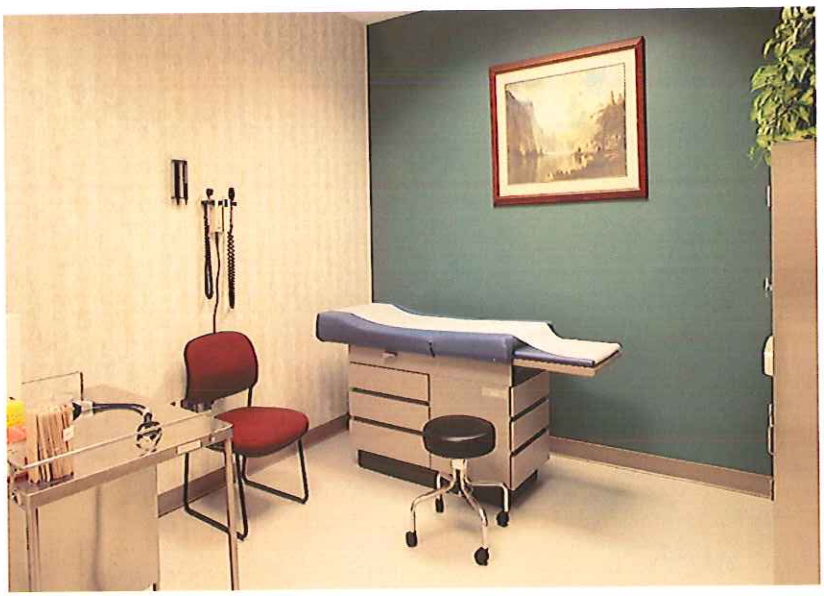
The Glen Jean Armed Forces Center contains three distinct military functions: a facility for routine maintenance of over-the-road and tracked military vehicles, an armory housing four West Virginia National Guard units and the Southern West Virginia Military Entrance Processing Station, where new recruits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

A health clinic was added to the facility that includes multiple exam rooms, a medical lab, vision exam room, administrative office area, a nurse station and medical storage space.



Clinic Floor Plan



St. Albans High School

Healthcare Clinic Design

ZMM

LOCATION:
St. Albans, West Virginia

SIZE:
216,500 SF

COMPLETION:
2003

COST:
$24 Million

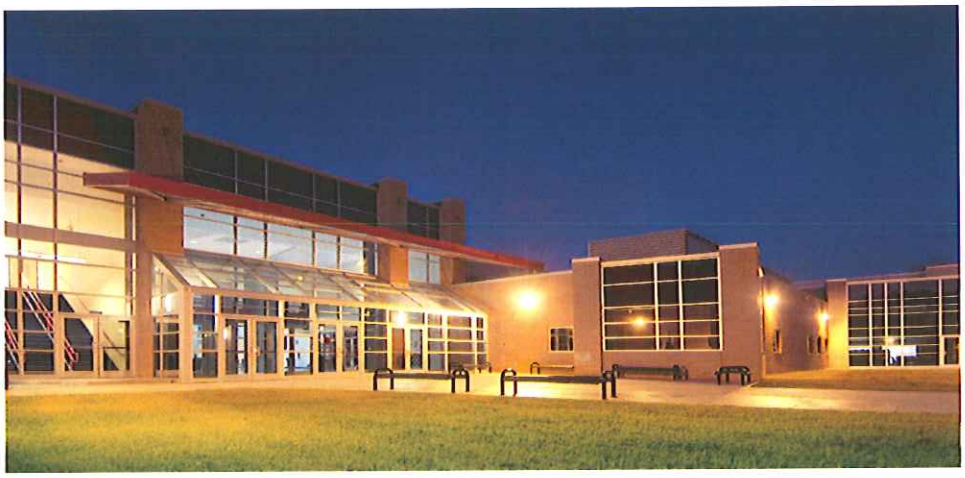
CONTACT:
Dr. Ron Duerring
Superintendent
Kanawha County Schools
200 Elizabeth Street
Charleston, WV 25523
304.348.7732

AWARDS:

Impact on Learning Award
Effective Transformation

Education Design Showcase
Outstanding Building Design

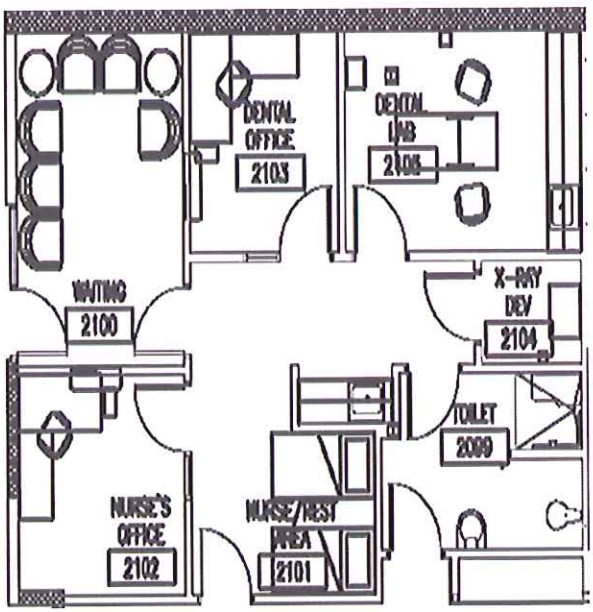
American School & University
Outstanding Building Design



The renovation and additions to St. Albans High School included the razing of about 40% of the existing structure and the construction of 124,000 SF of new construction. The completed facility will house 1050 students, grades 9 thru 12.

The new facility includes a distance learning center with duplex teleconferencing, and a state of the art media center with technology distribution throughout the entire facility.

It also includes a new healthcare clinic, waiting room, and a dental clinic. The full service food facility along with the dining/commons area will serve as the focal point for access to the gymnasium and auditorium.



Clinic Floor Plan

Joint Interagency Training & Education Center

WVARNG - Billeting (Hotel)

ZMM

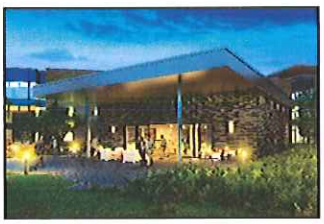
LOCATION:
Kingwood, West Virginia

SIZE:
285,000 SF

COMPLETION:
Est. 2012

COST:
$110 Million

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



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.

As the scale of the project includes several miles of roads, parking, and utility upgrades affecting the entire base, the project is being phased over a four-year construction period. Simultaneous construction of all of the new facilities, as well as phased construction in existing buildings, will minimize the disruption to current operations.

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. 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.

Joint Interagency Training & Education Center

WVARNG - Billeting (Hotel)

ZMM

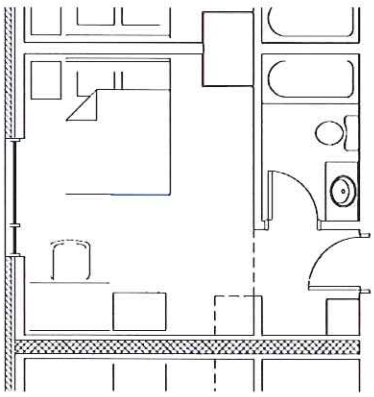
LOCATION:
Kingwood, West Virginia

SIZE:
285,000 SF

COMPLETION:
Est. 2012

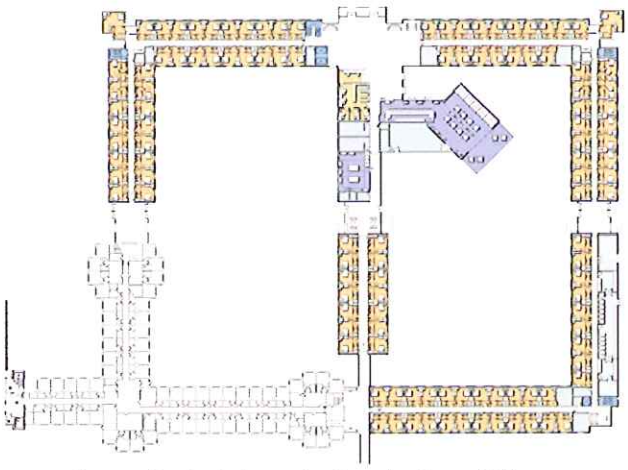
COST:
$110 Million

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



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.

Adjacent to the JOC are three large training rooms, capable of seating 70 persons each. Lining the front of each room are LCD video walls with large, open areas for workstations, desks, and office equipment, as well as space for private offices. These rooms function primarily as training areas; however, their close proximity to the JOC allows maximum flexibility in securing the entire area from the rest of the building by means of card access-only doors.



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 salvage from the gymnasium floor in the existing headquarters building. The new six "executive suites", are designed to the full amenities of corporate hotels.

Construction & Facilities Management Office

WVARNG

ZMM

LOCATION:
Charleston, West Virginia

SIZE:
19,935 SF

COST:
$3.5 Million

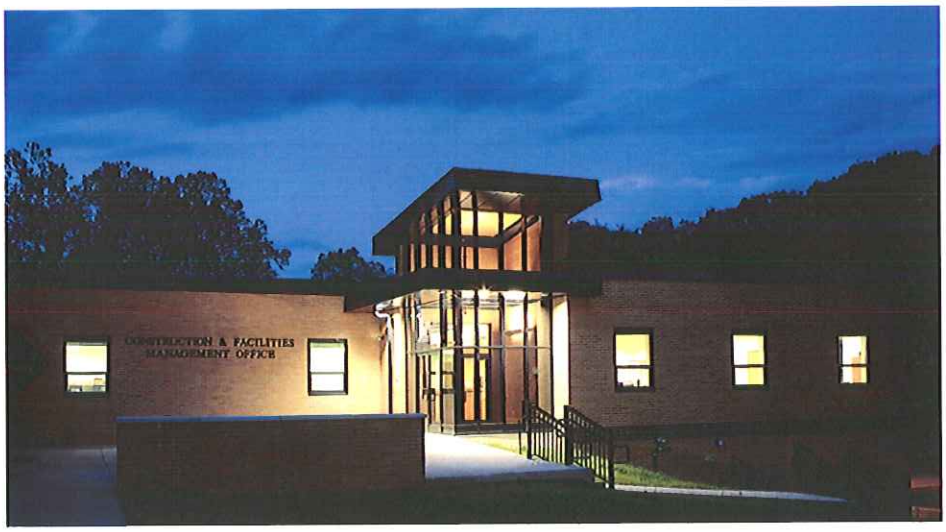
COMPLETION:
2008

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.



Southside Elementary & Huntington Middle School

Cabell County Schools

ZMM

LOCATION:
Huntington, West Virginia

SIZE:
158,194 SF

COMPLETION:
2010

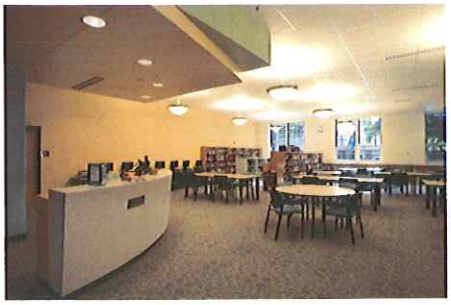
COST:
$27 Million

CONTACT:
Mr. William Smith
Superintendent
2850 5th Avenue
Huntington, WV 25702
304.824.3033

AWARDS:
2011 AIA Honor Award
West Virginia Chapter
Excellence in Architecture Preservation

The two schools that previously occupied the site of the New Southside Elementary School and Huntington Middle School were known as Cammack Elementary School and Cammack Middle School. The new facility houses a combined 1,014 Elementary and Middle School students. When the Cabell County Board of Education proposed a $61M bond issue in 2006, the Huntington community expressed the importance of saving this neighborhood landmark.

The new facilities were designed to blend with the architectural character of the existing facility. More than 70% of the existing building was demolished and the portion remaining was completely renovated. Two new stair towers provide a vertical architectural element that separates the existing structure from the new construction. The result is a cohesive design that blends the unique elements of the former Cammack School into a modern educational complex that exceeds the requirements of 21st century learning. Continued...

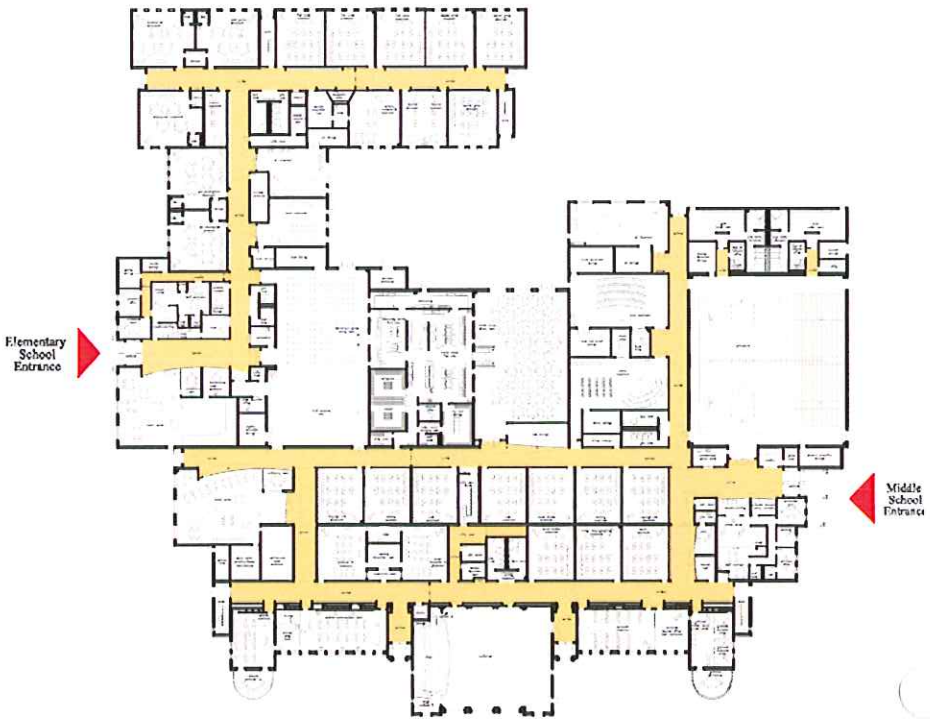


Southside Elementary & Huntington Middle School

ZMM

Although the expanded facility houses both an elementary and a middle school, each have their own distinct entrance and administrative complex and the students remain physically separated on opposite sides of the facility. The new schools only share a kitchen, which has been located to serve separate dining facilities.

With the community's support of the bond, ZMM has designed a facility that maintains the historic character of the façade and auditorium, while replacing the remainder of the facility. The community has maintained a landmark, while developing new state of the art elementary and middle schools.



The Boulevard at 2412

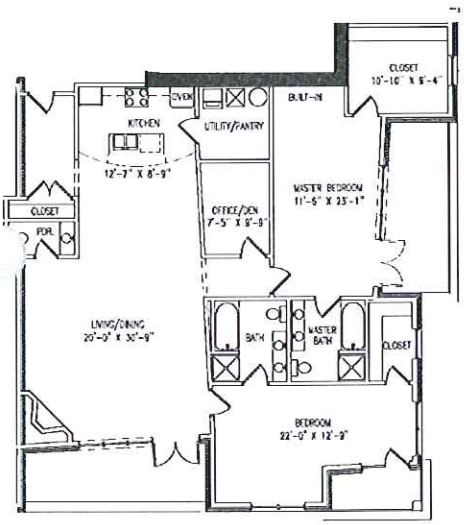
Multi-Unit Housing

ZMM

LOCATION:
Charleston, West Virginia

CONTACT:
2412 Kanawha Blvd, East
Charleston, WV 25311
304.343.2412

The Boulevard @ 2412 is a proposed mixed-use development on Kanawha Boulevard located in Charleston's East End. When completed, the development will include the construction of sixty new residential units and professional office space.



The scope of the development encompasses nearly one-half of the city block between Chesapeake Avenue, East Avenue, Kanawha Boulevard, and Washington Street East. Four of the twenty lots targeted for development fall within the East End Historic District.

The following features have been included in the conceptual design to integrate the development into the East End Historic District:

- The building massing has been broken down into a series of smaller volumes, making the overall plan more compatible with existing structures in the neighborhood. The design was developed with a goal of maintaining a residential scale along Kanawha Boulevard.
- Off street parking has been developed primarily to the rear of new

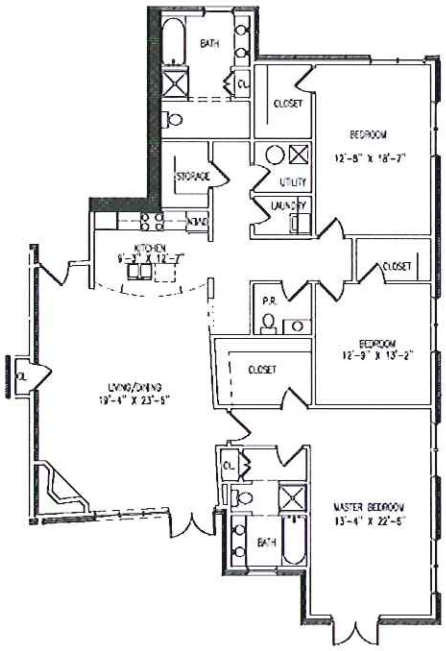
The Boulevard at 2412

Multi-Unit Housing

ZMM

LOCATION:
Charleston, West Virginia

CONTACT:
2412 Kanawha Blvd, East
Charleston, WV 25311
304.343.2412



- The architectural aesthetic of the new buildings is being developed in a way that reflects existing buildings (i.e. similar materials, geometries, setbacks, etc.). Additionally, the character of the overall elevation along Kanawha Boulevard will be improved as the new development completes existing "gaps" in the streetscape.

- The massing of the new development has been designed in a way that responds to and respects the massing of the adjacent residential properties. By using the existing adjacent properties to inform the aesthetic and material choices for the new project, the characteristics of the East End Historic District are incorporated throughout the new development. Architectural salvage will be undertaken at the site of the family home (2412) to preserve the distinctive framing members and terra-cotta roof tile. Where possible, these elements will be incorporated into the new development.

The New Retreat at Glade Springs Resort

Multi-Unit Housing

ZMM

LOCATION:
Daniels, West Virginia

COMPLETION:
TBD

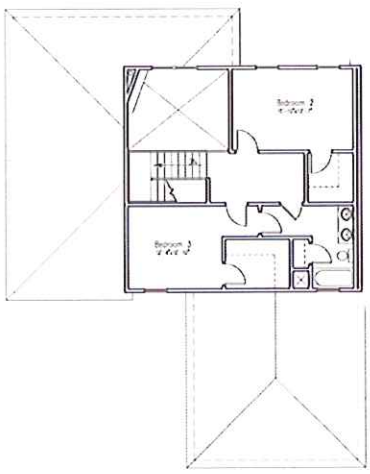
COST:
$249,000 - $269,000
(per unit cost)

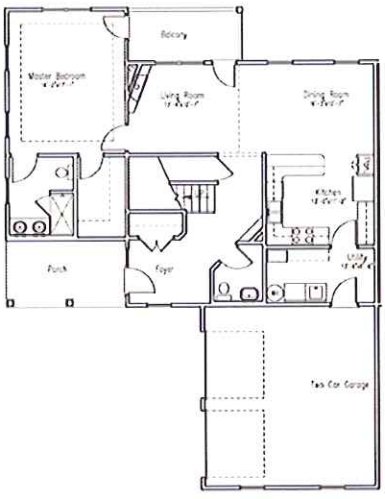
CONTACT:
Mr. Doug Pauley
Encore Management Co.
1591 Washington Street, E
Charleston, WV 25311
304.343.3535

The New Retreat at Glade Springs is a gated community located in a wooded area near the 3rd hole of the Stonehaven Golf Course. Several townhouses had already been constructed on the site by a previous developer. Due to the wooded hillside site the new 2 and 3 bedroom units were designed to resemble a mountain lodge, while also blending with the existing townhouses.

The material palette was selected to help define the lodge aesthetic and for ease of maintenance, and includes a stone veneer, prefinished composite siding and trim, as well as natural wood doors. The layout of the units was developed to provide end unit master suites with no second level, and a core that includes an open floor plan with a two story living room. Additional bedrooms and loft space are located on the upper level. Each unit has a distinct and well defined entry, while the overall grouping of townhomes resembles a mountain lodge.

ZMM's services included the preparation of a preliminary site design, as well as full architectural, engineering, and interior and lighting design services for a variety of units that could be configured in various manners to fit the site conditions. ZMM also assisted the client in determining a base finish, plumbing, lighting fixture, and appliance package for the units. Construction of Phase I of the townhouse development is scheduled to commence in late 2010.





ZMM

Award Winning Design

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

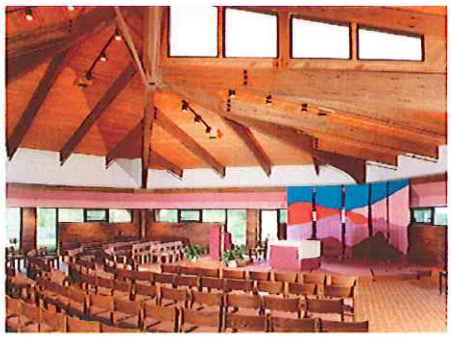
Gene Spadaro Juvenile Center
Mount Hope, WV
2006 - Merit Award
"Achievement in Architecture"
AIA West Virginia Chapter

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

ZMM



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

History and Philosophy of ZMM

ZMM

LOCATION:
222 Lee Street, West
Charleston, WV

CONTACT:
Phone 304.342.0159
Fax 304.345.8144
ww.zmm.com

Current Principals:


R. Doeffinger


D. Ferguson


A. Krason


R. Watkins

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:

Kanawha County Public Library

ZMM Architects & Engineers Series
West Virginia Symphony Orchestra

West Virginia Public Broadcasting

Professional Services

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

Quality Assurance

ZMM

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 20 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

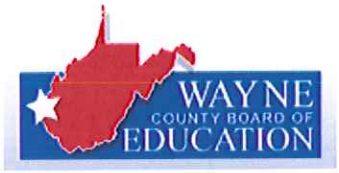
6. Staff Training, Assessment and Enhancement

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

ZMM

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



Personnel List

ZMM

Principals

Robert Doeffinger, PE	Engineering Principal
David E. Ferguson, AIA	Project Architect, REFP
Adam R. Krason, AIA	Project Architect, Marketing, NCARB, LEED AP
Rod Watkins, AAIA	REFP Marketing, Educational Planning

Architects

Hank Walker, AIA	Architect, LEED AP
Brian Estep, AIA	Project Architect/Project Manager
Nathan Spencer, AIA	Project Architect
Rodney Pauley, AIA	Project Architect
Mark Epling, AIA	Architect, LEED AP, Specifications

Engineers

Steve Cook, PE	Senior Mechanical Engineer
John Pruett, PE	Mechanical Engineer, LEED AP
Steve Hedrick, PE	Structural Engineer
Chris Rose, PE	Structural Engineer
Scot Casdorph, PE	Electrical Engineer
Mary Jo Cleland, PE	Civil Engineer

Designers & Technicians

Mike Abernethy	Electrical Design, LC, IESNA
Bob Groom	Mechanical Design Technician
Mike Flowers	Mechanical Design Technician
Patricia Shaffer	Engineering Designer
Matt Engle, AAIA	Architectural Designer
Lauren Smith, AAIA	Architectural Designer
Marie McCauley, AAIA	Intern Architect
Chad Raynes, AAIA	Intern Architect
Christopher Litton, AAIA	Intern Architect, LEED AP
Amanda Bush, AAIA	Intern Architect
Jessica Ellis	Graphic Designer/Marketing

Interior Designers

Jill Watkins, IIDA	Interior Design, NCIDQ, LEED AP BD&C

Construction Administration

Glenn Savage, AAIA	Construction Administrator
David Unrue , AAIA	Construction Administrator
Theresa Dorsey	Administrative Assistant

Administration and Support Services

Amy Clendenin	Business Development
Steve Ledahawsky	Business Manager
Joe Blizzard	IT Technical Support
Lisa Bowles	Executive Secretary
Delores Fisher	Receptionist
Robert Estep	Production Assistant

David E. Ferguson, AIA, REFP

ZMM

Role
Architect, Principal

Professional Registrations
Registered Architect (WV, OH)
Recognized Educational Facility Professional (REFP)

Mr. Ferguson has served in the capacity of Architect, Project Manager, and Principal in Charge for a variety of projects at ZMM. This experience includes Educational (PK-12, Vocational and Higher Education), Retail, Corporate Office, Industrial, Military, Medical Office Facilities, General Healthcare Hospital and Psychiatric Hospital Projects. Mr. Ferguson's responsibilities include programming, design, documentation, architectural/engineering coordination and construction administration.

Mr. Ferguson began his career at ZMM in 1984 working on a variety of retail, educational and military projects throughout West Virginia, Pennsylvania, Ohio, Virginia, Maryland, New York, North Carolina, South Carolina, Florida, and Washington DC. In 1996 Mr. Ferguson expanded his expertise into the Healthcare and Industrial and Corporate Office facilities and since then has led the effort at ZMM in Educational Design. Mr. Ferguson is a Recognized Educational Facility Professional (REFP) and has been involved in planning, designing and the construction of over 90 educational facilities in West Virginia. As the architect for the first "green" school building in West Virginia Mr. Ferguson has been an advocate for sustainable design and was involved starting the first US Green Building Chapter in West Virginia.
Mr. Ferguson has also participated in developing West Virginia Department of Education's Policy 6200 *Handbook on Planning School Facilities* and the West Virginia School Building Authority's *Handbook of Quality and Performance Standards.*

In addition to Mr. Ferguson's project management responsibilities, as a principal of the firm he has corporate administrative duties and serves on the Board of Directors.

Project Experience

Highland Hospital: Mr. Ferguson was responsible for the programming and design effort for this 90,000 sq. ft. Psychiatric Hospital. The design of this facility creates a new lobby space that connects the existing hospital to the new 4 story structure. The new facility replaces older antiquated spaces within the existing facility and adds new patient rooms to allow the hospital

Education
Bachelor of Science; Industrial Technology/Architectural Design; West Virginia State University; 1979

Employment History
2007 - Present, Vice President, Secretary/Treasurer, ZMM
2002 - 2007, Vice President, ZMM
2001 - Present, Board of Directors, ZMM
1996 - Present, Architect, Project Manager, ZMM
1984 – 1996, Designer. ZMM

Civic Affiliations
- West Virginia Chapter, American Institute of Architects, Board Director
- American Institute of Architects, Member
- Member, Council of Educational Facility Planners International (CEFPI)
- Recognized Educational Facility Professional (REFP) by the CEFPI
- Professional Member, US Green Building Council
- High School Mentoring/Job Shadowing Program for 6 County School Systems
- WV AIA IDP Program Mentor/Advisor

the expansion of patient care. The implementation of water recycling for the laundry facility and other "green" components were used as energy saving methods that have a long term impact on the hospital operation.

Southside Elementary and Huntington Middle School: Mr. Ferguson led the programming and design effort on this 156,000 sq. ft. facility. This project encompasses all phases of construction; demolition, major renovation and new construction. The original historic 26,000 sq. ft. three story school building was preserved and the remaining less than adequate facility was strategically removed to accommodate the new addition. The existing facility was completely renovated and brought up to new construction standards to blend with the new addition. The project consisted of two distinct school facilities existing on the same piece of property. The new construction blends seamlessly with the older historic structure.

Lincoln County Comprehensive High School: Mr. Ferguson was responsible for the programming and design effort for this one-of-a-kind facility. This 800 student, 217,000 sq. ft. school was a ground breaking facility for the county, West Virginia School Building Authority and the WV Department of Education. This facility was the first school in West Virginia to incorporate "green" design principals. The school was the first school east of the Mississippi River to encompass a fully comprehensive High School, Vocational School, Health Clinic (open 12 months a year), and Community College within one building. This facility is also the proud recipient of the 2007 WV AIA Honor Award.

Cabell County Bond Program: Mr. Ferguson assisted Cabell County in developing budgets, project scopes and passing the largest bond program in West Virginia. This encompassed four projects and with additional funding from the West Virginia School Building Authority exceeded $72 million dollars. As Principal, Mr. Ferguson led the programming and design effort on all four facilities.

Huntington East Middle School: Mr. Ferguson is currently responsible for the programming, design, and project management for the new 800 student, 94,000 sq. ft. facility. This is projected to be the first LEED Silver Middle School in West Virginia and encompasses the latest in technology and distance learning within the classroom. The building will be used as a teaching tool along with large interactive monitors throughout the building. Students will be able to learn how the building operates through hands on learning and monitoring the building systems.

Hacker Valley PK-8 School: Mr. Ferguson was responsible for the programming and design effort for this facility. This 65 student, 31,000 sq. ft. school was a ground breaking facility for the county, West Virginia School Building Authority and the WV Department of Education. The project didn't fit within any standard guidelines or protocol for a new school. Mr. Ferguson was instrumental in developing new guidelines for schools of this size and grade level configurations. The design of this facility is also the recipient of the 2010 WV AIA Honor Award.

Awards and Acknowledgements:

2010 WV AIA Honor Award *Hacker Valley PK-8 School*, Webster County Schools, Hacker Valley, WV

2007 WV AIA Honor Award *Lincoln County High School*, Lincoln County Schools, Hamlin, WV.

2004 Education Design Showcase "Project of Distinction", *School Planning & Management Magazine*. St Albans High School, St Albans West Virginia, Kanawha County Schools.

2004 Impact on Learning Awards, "Effective Transformation", *School Planning & Management Magazine/CEFPI*. St Albans High School, St Albans West Virginia, Kanawha County Schools.

2004 Published *American School & University Magazine's Architectural Portfolio*, St Albans High School, St Albans West Virginia, Kanawha County Schools.

May 2005 Article, Building Blueprints, Science Classroom/Laboratory. *School Planning & Management Magazine*

March 2006 Article, Construction Progress, Lincoln County Comprehensive High School, Lincoln County. *West Virginia Construction News Magazine*, West Virginia Contractor's Association

Adam R. Krason, AIA, NCARB, LEED AP

ZMM

Role
Architect, Principal, Business Development

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
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

Education
Bachelor of Architecture, The Catholic University of America, 1998

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

Employment History
2007 - Present, Vice President, 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 - 2010
- West Side Elementary School LSIC, Volunteer

technology into the delivery of the curriculum. Instructional areas will be located off of an open 'exploratorium' that is being designed to function like a children's museum, providing a variety of learning opportunities, and flexible educational spaces. The school will also visibly integrate sustainable design principles to serve as a teaching tool for the students. Mr. Krason is currently working with students from Watts and Robbins Elementary Schools in Kanawha County, assisting them in an effort to actively participate in the design process.

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

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 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.

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.

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

Robert Doeffinger, PE

ZMM

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.

The Plaza at King of Prussia, Pittsburgh, PA. One of the largest retail centers in the east. Mr. Doeffinger has performed

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

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.

West Virginia Research, Education, and Technology – Building 704 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.

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. Mr. Krason also assisted with developing marketing materials for the project.

Nathan Spencer, AIA

ZMM

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
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.

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.

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

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

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.

Mary Jo Cleland, PE

ZMM

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
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

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

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.

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.

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.

Stephen Hedrick, PE

ZMM

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

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.

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.

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

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.

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.

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.

Scot Casdorph, PE

ZMM

Role
Electrical Engineer

Professional Registrations
Professional Engineer (WV)

Mr. Casdorph 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. Casdorph 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. Casdorph 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 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.

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.

Lincoln County Comprehensive 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.

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

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 Army National Guard, Joint Interagency Education and Training Center, Camp Dawson, WV. Mr. Casdorph 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. Casdorph 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. Casdorph was responsible for the electrical design of the 102,000 SF military training facility which houses the Armed Forces Reserve Center (AFRC), Military Entrance Processing Station (MEPS), and an Organizational Maintenance Shop (OMS). The AFRC contains the 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.

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.

Jill Watkins, NCIDQ, LEED AP BD&C

ZMM

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
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.

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

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

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.

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. Jill is LEED Administrator for the project.

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.

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.

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.

Other Firm Experience:
Procter & Gamble Gillette Corporate Headquarters, Boston, MA; designed 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

Awards and Acknowledgements:
President, Ohio/Kentucky Chapter of the International Interior Design Association
Advisory Board Member, Cleveland Green Building Association
Vice President of Membership & Communication, Coalition of Interior Designers for Legislation in Ohio

Description of ZMM Construction Administration Services

ZMM's effort during the construction phase is geared towards improving the construction process for Sharpe Hospital. **ZMM** has a dedicated, in-house, construction administrative staff that will work with the design team and the owner to help ensure a seamless construction process, and a completed project that meets the quality standards identified in the construction documents.

The construction administration staff is led by Mr. Rodney Watkins, AAIA, one of **ZMM's** Principals. Mr. Watkins brings more than thirty years of planning and construction experience on a wide range of Health Care, Education, and Commercial/Office Space projects. Mr. Watkins is assisted by Mr. Glen Savage and Mr. David Unrue, both Construction Specification Institute Certified Construction Document Technicians (CSI-CDT). Mr. Savage and Mr. Unrue are responsible for coordinating the construction phase services of the design team, and conduct regular observations of the project process. **ZMM's** construction administration staff is supported by Ms. Theresa Dorsey.


R. Watkins


G. Savage


D. Unrue


T. Dorsey

Mr. Savage will coordinate **ZMM's** effort during the construction phase of the Sharpe Hospital Expansion. Mr. Savage will be responsible for timely reviews of contractor submittals, attend all construction progress meetings, verify that all construction complies with the plans and specifications, monitor and update the owner regarding construction progress relative to the approved schedule, and process applications for payment. As construction nears completions, **ZMM** will conduct an inspection and prepare a "punch-list" that will advise the contractor of all outstanding work that remains to be completed, or requires repair. **ZMM** will also coordinate the furniture installation, including coordination with the vendor.

ZMM's responsibilities during the construction phase will include:

- Review Bids and Recommend a Construction Team
- Conduct a Pre-Construction Meeting
- Coordinate Preliminary Contractor Submissions (Bonds, Insurance, Schedule, Schedule of Values, Emergency Contact Information, etc.)
- Review and Process Shop Drawings
- Review and Process Payment Applications
- Update the Owner on Progress Relative to the Project Schedule
- Process Proposal Requests, Supplemental Instruction, and Change Orders
- Maintain a Current Overall Project Budget
- Conduct Regular Observations of Construction
- Attend Construction Progress Meetings
- Issue Timely Responses to RFI's (Contractor Questions)
- Conduct a Final Inspection
- Prepare a "Punch-List"
- Coordinate Furniture, Fixture, and Equipment Installation

Managing the quantity and amount of change orders is a function of the quality and coordination of the construction documents. Our ability to offer fully integrated design services from our office in Charleston helps to ensure a high level of coordination, as our architectural, interior design, and engineering staff will collaborate daily on your project. Additionally, **ZMM's** quality assurance/quality control process helps us deliver projects with minimal change orders during the construction process.

ZMM's work does not end when the construction is complete. Our staff will remain available to Sharpe Hospital as needed after the addition is completed to verify that the facility operates as intended. As demonstrated throughout the history of our firm, **ZMM** is committed to the long-term success of the Sharpe Hospital Addition.

Schedule and Budget Control

Project Schedule Control

During a typical construction project, the owner and the architect establish the construction duration, and the contractor's bid should accommodate any measures required to complete the project in the established timeframe. Liquidated damages are often used to ensure that the contractor meets the established schedule. **ZMM's** construction administration department will require the contractor to submit a project schedule prior to the first application for payment, and will then verify that the schedule is being maintained during progress meetings.

If Sharpe Hospital desires an aggressive schedule for the completion of the renovation, there are several ways to achieve this goal. Since the physical construction is the longest and most labor intensive part of the process, it is also the one that offers the most opportunities to compress the schedule.

ZMM has successfully completed projects in virtually every conceivable construction delivery method, from design-build to construction management with separate prime contracts (with pre-ordered construction materials), to design-bid-build. **In many of these instances it is important to select the construction team early in the design process so that many pre-construction tasks can be completed before final designs are complete.** Many of these methods can accelerate construction time significantly.

Compressing the design schedule is also possible, and is a direct function of available staff for production. **ZMM** will commit all of our staff required to meet the scheduling needs of Sharpe Hospital. We are one of the largest A/E firms in the State of West Virginia and maintain a staff that can accommodate the tightest of schedules.

This schedule control has recently been demonstrated in Cabell County where **ZMM** completed the design services on five (5) middle school projects (with a total construction budget exceeding $70M) in less than a year. Please contact the Cabell County Board of Education to discuss our ability to maintain project schedules and provide construction administrative services.

Mr. Mike O'Dell, Assistant Superintendent of Operations
Cabell County Schools
304.528.5069

Project Budget Control

One stated objective of Sharpe Hospital is the need to ensure that costs (both design and operational) meets the available project funding. The construction market in West Virginia is very unique and varying parts of the State offer significantly different construction markets and challenges. Through nearly fifty (50) years of experience designing facilities throughout the State of West Virginia **ZMM** has an understanding of these various markets, and has repeatedly demonstrated our ability to deliver design solutions that meet our client's budgets, while exceeding their expectations.

While Mental Health Facilities are typically more expensive than other building types due to their unique infrastructure and security requirements, there are several ways that **ZMM** can help to manage the construction budget for Sharpe Hospital. Some methods include:

- Establish a realistic project scope and budget. Clear and honest communication about the anticipated project costs from the planning stage between the owner and architect will help to avert future problems. **ZMM's** recent experience designing Mental Health Facilities in West Virginia will help in establishing a realistic budget.

- Improve the quality of the construction documents. By providing thorough and well coordinated documentation, **ZMM** will help to reduce project costs by eliminating any uncertainty from the bidding process. Our QA/QC process, in addition to our ability to provide comprehensive design services under one roof, will allow us to provide this improved quality.

- Utilize construction methods and products that are familiar to local vendors and contractors. **ZMM** has a demonstrated record of producing award winning designs that meet our client's budgets. We are able to accomplish this by using construction materials and systems that are familiar in the local building industry – but composed in unique and innovative ways. Complicated construction methods and expensive materials are not needed to create an award winning facility; creativity and innovation are the key components.

Once the program and budget have been resolved, **ZMM** will employ the above efforts to provide a design that can be constructed within the project budget. A recent project that demonstrates our ability to control the project budget is the new Erma Byrd Center in Beaver, West Virginia, which was completed for the Higher Education Foundation. After a previous (out of State) architectural firm was unable to resolve the project budget, **ZMM** was selected, and provided expedited design services that produced an award winning (and "on budget") project for the owner. Please contact the Higher Education Foundation to discuss our ability to provide high quality services that meet schedule and budget constraints.

Father Thomas Acker, S.J., Executive Director
The Higher Education Foundation
304.929.2010

Client References

David M. McWatters III, President & CEO
Highland Hospital
1418A MacCorkle Avenue SW
Charleston, WV 25303
304.348.1401

Ben Vincent, Administrator
Braxton County Memorial Hospital
100 Holyman Drive
Gassaway, WV 26624
304.364.5156

M.G. Melvin Burch
Construction and Facilities Management Office
WV Army National Guard
1707 Coonskin Drive
Charleston, WV 25311
304.561.6450

David L. Roach, Superintendent (Retired)
Lincoln County Schools
10 Marland Avenue
Hamlin, WV 25311
304.824.3033

Karen L. Seim, Director Facilities Development
Charleston Area Medical Center
3410 Staunton Avenue
Charleston, WV 25304
304.388.9660

James H. Dissen
Chairman of the Board

Highland Hospital
HIGHLAND CAN HELP

David M. McWatters, III
President & CEO

November 25, 2008

David M. McWatters, III
Highland Hospital
1418A MacCorkle Avenue SW
Charleston, West Virginia 25303

Re: Recommendation for ZMM

To Whom It May Concern:

It is my pleasure to write a letter of recommendation for ZMM, Architects and Engineers. ZMM has provided architectural services to Highland Hospital for several years and we feel their performance has resulted in a very functional and cost efficient design.

We have been pleased with designs of the buildings and response to input from us as a client. They have held weekly project meetings that were informative as to progress of the project. ZMM staff researched and has demonstrated an understanding of the safety needs and functionality of a psychiatric facility. They were instrumental in obtaining feedback and approval from agencies such as OHFLAC and the local zoning authority.

Should you require any additional information, please do not hesitate to contact me at (304) 348-1401.

Sincerely,

David M. McWatters, III
President & Chief Executive Officer

WEST VIRGINIA ARMY NATIONAL GUARD
CONSTRUCTION & FACILITIES MANAGEMENT OFFICE
1707 Coonskin Drive
Charleston, West Virginia 25311-1085
Phone: 304-561-6339 Fax: 304-561-6458 DSN: 623-6339

15 April 2009

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

Dear Mr. Donovan,

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

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

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

MELVIN L. BURCH
Brigadier General
West Virginia Army National Guard
Assistant Adjutant General

The Higher Education Foundation

200 MAIN STREET, BECKLEY, WEST VIRGINIA 25801-4613

TELEPHONE 304 929-2010 FACSIMILE 304 929-2009 forwardswv@earthlink.net

January 22, 2008

Mr. Rod Watkins, Vice-President, AAIA, REFP
ZMM, Inc.
222 Lee Street West
Charleston, WV 25302

Dear Rod,

Last week, January 14, 2008, we began the second semester of use of The Erma Byrd Center at the Public Higher Education Center campus, Beaver, West Virginia. This endeavor has been a significant triumph for our area and is the first of its kind in West Virginia. Seven public colleges/universities have come together in a single center in a spirit of cooperation rather than competition.

This is a note to thank you and the ZMM family for the critical role with excellence that you played in this project. Initially, we had worked with another architect in Pittsburgh, but unfortunately a series of events made continuance with them impossible. We were then met with crucial deadlines for reformulating an entire building with a very constricted timeline and an equally restricted budget. We turned to ZMM.

Our contract with you began in December, 2005. We had to complete architectural plans, bid the building, secure a contractor, and begin construction by July, 2006, in order to meet an opening date of August, 2007. ZMM was the perfect partner with us as we forged a new building on a yet raw campus and made it work.

The building designed by ZMM was elegant, yet simple. The budget parameters were met, including a striking view from I-64. The building design impresses all.

Radford & Radford was chosen as the builder, and ZMM worked with them expeditiously and effectively. The architectural plans were exceptionally clean, and the few change orders were almost entirely initiated by the owner as some afterthoughts developed. The project was completed on time, and the first semester was excellent. Over 131 classes were taught engaging 1,990 students.

I simply wanted to send you this note of thanks for accepting a very daunting task, completing it with excellence, maintaining the very restricted budget, and making this whole project successful. We are now looking forward to a second building, and while we probably need by state law to seek architectural services through an RFP, I hope that ZMM will engage in the process. It would be to our benefit if ZMM were the winning architects. You have my highest recommendation and most sincere thanks.

Cordially,

Tom Acker

Thomas S. Acker, S. J.
Executive Director

TSA:llm

Lincoln County Schools

David L. Roach
SUPERINTENDENT

Jeff Huffman
ASSISTANT SUPERINTENDENT

January 22, 2008

To Whom It May Concern:

As the previous superintendent of Cabell County Schools and present superintendent of Lincoln County Schools, I am in the unique position to comment on the services of ZMM, Inc., Architects and Engineers. They provided professional services in both of these counties and I found their services in both counties to be of the highest quality.

I have found, through my experiences with ZMM, that their services are equivalent to having additional employees of the school system. I base this statement on the fact that their representatives consistently monitor budget expenditures in order to stay within the project budget. Change orders are minimal and always justified. ZMM is present and accessible before, during and after project completion to assure the interests of the school system are being met. I particularly appreciate their support in dealing with contractors who may have remaining obligations or product deficiencies that need to be resolved following project completion.

Simply stated, ZMM works to assure that the interests of the client are met and refuses to bow to contractors by accepting less than quality work. I believe this is a rare quality and makes ZMM an elite company.

Sincerely,

David L. Roach

David L. Roach
Superintendent of Schools

10 Marland Avenue, Hamlin, WV 25523 • (304)824-3033 • Fax (304)824-7947

Sustainable Design

ZMM

"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"

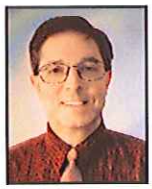
- John A. Pruett, PE, LEED AP

"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

ZMM

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:
<u>State of West Virginia Office Buildings #5, 6 and 7</u>
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

Sustainable Design

ZMM

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 measure- Heat 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

ZMM

West Virginia Army National Guard Ripley Armed Forces Reserve Center, Jackson County

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

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	PAGE
WSH12067	2

ADDRESS CORRESPONDENCE TO ATTENTION OF:
ROBERTA WAGNER
304-558-0067

VENDOR
*709055254 304-342-0159
ZMM INC
222 LEE STREET W

CHARLESTON WV 25302

SHIP TO
HEALTH AND HUMAN RESOURCES
OFFICE OF PROPERTY MANAGEMENT
VARIOUS LOCALES AS INDICATED

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
10/13/2011				

BID OPENING DATE: 10/27/2011 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT

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.

AQ RK
SIGNATURE

ZMM, Inc.
COMPANY

27-OCT-2011
DATE

NOTE: THIS ADDENDUM ACKNOWLEDGEMENT SHOULD BE SUBMITTED WITH THE BID.

REV. 09/21/2009

END OF ADDENDUM NO. 1

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE	TELEPHONE	DATE
AQ RK	304.342.0159	27-OCT-2011

TITLE	FEIN	ADDRESS CHANGES TO BE NOTED ABOVE
PRINCIPAL	55-0676608	

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.htm** 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).

RFQ No. WSH12067

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 owed 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 exceed 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 SIGNATURE

Vendor's Name: ZMM, Inc.

Authorized Signature: _____ Date: 27. October. 2011

State of West Virginia

County of Kanawha, to-wit:

Taken, subscribed, and sworn to before me this 27th day of October, 2011.

My Commission expires October 6, 2018.

AFFIX SEAL HERE

NOTARY PUBLIC Lisa E. Bowles

OFFICIAL SEAL
STATE OF WEST VIRGINIA
NOTARY PUBLIC
Lisa E. Bowles
ZMM, Inc.
222 Lee St., W.
Charleston, WV 25302
My Commission Expires October 6, 2018