

# **Expressions of Interest for:**

West Virginia Schools for the Deaf and the Blind

Architectural and Engineering Services for Existing Projects EOI: DBS1500000001





ARCHITECTS & ENGINEERS

December 16, 2014



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

#### State of West Virginia Centralized Expression of Interest

-

Proc Folder: 32915

Doc Description: ADDENDUM NO. 1 - A&E EOI for Existing Projects at WV DBS

Proc Type: Central Purchase Order

Date Issued	Solicitation Closes	Solicitat	ion No	Version	
2014-11-20	2014-12-16 13:30:00	CEOI	0403 DBS1500000001	2	

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**BID CLERK** 

**DEPARTMENT OF ADMINISTRATION** 

PURCHASING DIVISION

2019 WASHINGTON ST E

CHARLESTON

WV

25305

US

VENDOR						
Vendor Name, Address and Telephone Number:						

FOR INFORMATION CONTACT THE BUYER

Evelyn Melton (304) 558-7023

evelyn.p.melton@wv.gov

Signature X

FEIN# 55-0676608

DATE 12.15.14

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

Page: 1

FORM ID: WV-PRC-CEOI-001

# ADDENDUM ACKNOWLEDGEMENT FORM SOLICITATION NO.: DBS1500000001

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

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

(Ch	eck th	ne b	ox next to each addendur	n recei	ve	d)	
	[	V	Addendum No. 1		[	]	Addendum No. 6
	]	]	Addendum No. 2		[	]	Addendum No. 7
	[	]	Addendum No. 3		[	]	Addendum No. 8
	[	]	Addendum No. 4		[	1	Addendum No. 9
	[	]	Addendum No. 5		[	]	Addendum No. 10

Addendum Numbers Received:

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

Zmm Architects and Engineers
Company
Authorized Signature
12/15/14
Date

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

### CERTIFICATIONAND SIGNATURE PAGE

By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation in its entirety; understand the requirements, terms and conditions, and other information contained herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

ZMM Architects and Engineers

Authorized Signature) (Representative Name, Title)

304. 342. 0159, 304. 345.844, 12.15.14 (Phone Number) (Fax Number) (Date)

### ADDENDUM ACKNOWLEDGEMENT FORM SOLICITATION NO.: CEOI\_DBS1500000001

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NOTE: This	addendum acknowle	edgement shou	ld be submitted with the bid to expedite

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December 16, 2014

Ms. Evelyn Melton, Buyer State of West Virginia Department of Administration, Purchasing Division 2019 Washington Street, East Charleston, WV 25305

Subject: A&E for Existing Projects at the WV Schools for the Deaf and the Blind

EOI: DBS1500000001

Dear Ms. Melton:

ZMM is pleased to submit the attached qualifications that demonstrate our experience and capability to provide architectural and engineering services. ZMM has joined efforts with Dickinson & Partners, a leader in special needs design. This team combines a trusted local resource, ZMM, with the nation's leading designer for educating facilities for the deaf and the blind.

ZMM is one of few full service A/E Firms in West Virginia, and is noted for design excellence and client focus. ZMM and Dickinson & Partners have completed the current CEFP at the WV Schools for the Deaf and the Blind and have intimate knowledge of the campus and all of their facilities. ZMM has completed over 200 educational facilities throughout the state. Our experience in West Virginia spans five decades, and has been recognized with both statewide and national planning and design awards.

Dickinson & Partners (D&P) offers extensive experience in Programming and design of educational and student housing facilities for the deaf and blind, with the goal of enhancing performance and meeting the needs of owners and users. D&P has been recognized as being among the top firms in the country in areas of special needs, designing various educational centers throughout the states of Virginia, Pennsylvania, New York, and most recently Qatar.

As a full service design firm, ZMM employs all of the disciplines in-house to undertake the maintenance projects outlined in the request for expression of interest. If selected to provide services for the project, ZMM would set up teams under the direction of David E. Ferguson, AIA – Project Principal and John Dickinson, AIA – Project Principal, two professionals with considerable experience and a history of working closely with the West Virginia Schools for the Deaf and the Blind (WVSDB). The teams would include an architectural team led by Hank Walker, AIA to undertake the architectural and roof replacement projects and a mechanical team led by Steve Cook, PE to undertake the mechanical and HVAC projects. This approach will provide the WVSDB with a single, central point of contact for all of the design work, while simultaneously allowing all of the work to progress.

Thank you for taking the time to review the attached information that details our project team and approach, as well as our firm profiles, experience, qualifications, personnel, and references. Additionally, please visit our website <a href="https://www.zmm.com">www.zmm.com</a> to learn more about working with ZMM from a client's perspective. We look forward to presenting our ideas for this project, and appreciate your consideration for this important endeavor.

Respectfully submitted,

ZMM, Inc.

David E. Ferguson, AIA, REFP

Vice President

222 Lee Street, West • Charleston, West Virginia 25302 304.342.0159 office • 304.345.8144 fax www.zmm.com

# West Virginia Schools for the Blind and the Deaf

EOI: DBS1500000001

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### History and Philosophy of ZMM



LOCATION: 222 Lee Street, West Charleston, WV

CONTACT: Phone 304.342.0159 Fax 304.345.8144 www.zmm.com

### **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.

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

#### Pre-Design

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

#### Design

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

#### Post Design

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



### **Award Winning Design**



#### 2014

AIA West Virginia Chapter: Merit Award

Achievement in Architecture in Sustainable Design Huntington East Middle School Huntington, West Virginia

AIA West Virginia Chapter: Merit Award

Achievement in Architecture
Southern West Virginia Community & Technical College
Williamson, West Virginia

AIA West Virginia Chapter: Merit Award

Achievement in Architecture in Interiors/Graphics
Girl Scouts of Black Diamond Council
Charleston, West Virginia

#### 2012

AIA West Virginia Chapter: Honor Award

Excellence in Architecture
West Virginia Housing Development Fund Building
Charleston, West Virginia

#### 2011

AIA West Virginia Chapter: Honor Award

Excellence in Architecture in Historical Preservation
Southside Elementary/Huntington Middle School
Huntington, West Virginia

AIA West Virginia Chapter: Honor Award

Excellence in Architecture

Joint Interagency Training & Education Center
Kingwood, West Virginia

AIA West Virginia Chapter: Merit Award

Excellence in Architecture in Interiors
WV State Office Building #5, 10th Floor Renovation
Charleston, West Virginia









# **Additional Award Winning Design**



#### 2010

AIA West Virginia Chapter: Honor Award

Excellence in Architecture
Hacker Valley PK-8 School
Hacker Valley, West Virginia

#### 2009

AIA West Virginia Chapter: Merit Award

Excellence in Architecture
Construction & Facilities Management Office (CFMO)
Charleston, West Virginia

#### 2008

AIA West Virginia Chapter: Honor Award Excellence in Architecture

Erma Byrd Center Beaver, West Virginia

### 2007

AIA West Virginia Chapter: Honor Award

Excellence in Architecture Lincoln County High School Hamlin, West Virginia

#### 2006

AIA West Virginia Chapter: Merit Award

Excellence in Architecture
Gene Spadaro Juvenile Center
Mt. Hope, West Virginia









### **History of Dickenson & Partners**



**Dickinson & Partners** 

CONTACT: John Dickenson Dickenson & Partners dickenpartners.com

### **History**



Dickenson & Partners offers extensive experience in programming and design of educational and housing facilities for the deaf and the blind, with the goal of enhancing performance and meeting the needs of owners and users. Although substantial guidelines exist for addressing design needs for persons with mobility impairments, little formal literature exists that describes the special programming requirements for deaf and blind populations. In response to this need, Winter & Company established a special consulting studio in 2001 to provide facilities programming for special needs projects and deaf/blind facilities, as well as programming for mobility-impaired users. WCSNS has consulted on projects across the nation and been recognized as one of the top firms in the country in the area of special needs programming and design. Our clients appreciate our ability to meet schedules, honor budgets and solve problems.

The design of innovative living and learning environments has long been cornerstone of Dickenson & Partners Special Needs Studio practice. The profile of designing for today's special needs and blind education facilities is changing. State governments and school agencies are upgrading and expanding programs, facilities and systems to meet new standards, set forth by the Americans With Disabilities Act (ADA) and the Department of Education's "Special Education Facilities 2001" guidelines. In addition, continual advancements in technology and the constant need for adaptive reuse require agencies, architects and planners to be forward-thinking and solution oriented. Plans must provide for new and effective visual and functional communication access for blind students and their staff.

One of the truly measurable, tangible attributes we bring to the West Virginia School for the Deaf and the Blind is our adept ability to listen, comprehend, and communicate closely with you every step of the way. We communicate in a language and a manner that is meaningful and of value to you. We do not bring our own agenda or prescription for the design of your building. Instead, we develop ideas and solutions that are custom-tailored for you, and are derived from the unique participants and circumstances that frame any given design venture. You will have at your fingertips a top team with experience and passion for this project type, all whom are committed to elevating the genre of each component each phase of the way.

Education and Residence life on campus must meet students needs and secure their ability to both succeed and develop. Plain and simple. Deaf students need an environment that is conducive to healthy living and learning. They need a sense of safety and security within the student community. They need to learn life skills tailored to their deafness to complement their academic progress and assist them in well-balanced individuals. And, they need opportunities and encouragement to grow.

### David E. Ferguson, AIA, REFP





Role Architect, Principal

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

West Virginia Schools for the Deaf and Blind, Romney, WV Mr. Ferguson is currently working with the WV Board of Education, WV School Building Authority, and the West Virginia Schools for the Deaf and Blind and has undertaken the task of creating a Comprehensive Educational Facility Plan (CEFP). The CEFP defines ultimate goals for the institution and accounts for the facilities required to achieve these goals. The

#### 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, President
- 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 Planner (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

goals are defined then realized, if necessary, through several phases of construction. ZMM understands the WV school Building Authority's policies and the guidelines of the WV Department of Education, along with the having a working knowledge of other state agencies, makes creating this document easier to navigate through the process.

**Southside Elementary and Huntington Middle School, Huntington, WV** Mr. Ferguson led the programming and design effort on this 156,000 SF facility. This project encompasses all phases of construction; demolition, major renovation and new construction. The original historic 26,000 SF 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.

**Huntington East Middle School, Huntington, WV** Mr. Ferguson is currently responsible for the programming, design, and project management for the new 800 student, 94,000 SF 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.

**Lincoln County High School, Hamlin, WV** Mr. Ferguson was responsible for the programming and design effort for this one-of-a-kind facility. This 800 student, 217,000 SF 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.

**Hacker Valley PK-8 School, Hacker Valley, WV** Mr. Ferguson was responsible for the programming and design effort for this facility. This 65 student, 31,000 SF 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.

**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.

**Wayne County Bond Program:** ZMM assisted Wayne County Schools in passing an \$18,000,000. The passage of the bond will create a New Crum PK-8 School, a New Ceredo-Kenova Elementary School and Additions and Renovations to Wayne High School. The overall process involved community meetings, establishing goals and priorities, creating overall budgets and a project scope that the citizens would support. ZMM assisted Wayne County Schools with distributing information, working with the bond committee and Bond Council to establish the actual Bond Call and assisting with public awareness throughout the county. ZMM worked facilitated meetings with the WV School building Authority and Wayne County Schools to create an overall project Budget of \$42,200,000.

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

2014 WV AIA Merit Award Huntington Middle School, Cabell County Schools, Huntington, WV

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.

March 2006 Article, Construction Progress, Lincoln County Comprehensive High School, Lincoln County.

West Virginia Construction News Magazine, West Virginia Contractor's Association

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



### John C. Dickinson, AIA, CEFPI



Role Studio Director

# Professional Registrations Registered Architect (KY, CO, NM, CA)

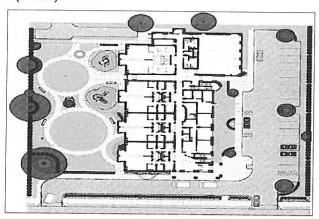
John Dickinson is a notable deaf Architect and project manager with over twenty five years of experience providing a wide range of architectural services for educational, healthcare, banking, telecommunications and commercial facilities. Mr. Dickinson received the AIA Award of Educational Design Excellence for his design of Columbine Senior High School in Littleton, Colorado.

Mr. Dickinson, who has been profoundly deaf since the age of two, has provided architectural services for deaf and blind schools and senior housing all over the U.S. and understands that developing facilities for the deaf and blind populations requires careful consideration of multiple issues. He has the ability to capture the intricacies and nuances of the deaf and blind environment and translate them into an effective setting that encourages performance and growth.

# Project Experience Gallaudet University, Washington DC Sorenson Language & Communication Center Programming

Rhode Island School for the Deaf, Providence, RI Programming and New Facilities Feasibility Study

#### Pennsylvania School for the Deaf, Philadelphia, PA Campus Wide Master Plan and New Early Childhood Center (below)



#### Education

Masters in Business Administration, University of Phoenix, 1998

Bachelor of Architecture, University of Kentucky, 1988

Diploma, E'cole des Architecture, Paris, France

#### Employment History 1999 - Present, Principal, Studio Manager, Dickenson & Partners

#### Civic Associations

- · American Institute of Architects
- Council Educational Facility Planners International
- Colorado Association of the Deaf
- National Association of the Deaf
- National Task Force Deaf Seniors Coalition
- Board of Trustee-Colorado School for the Deaf and the Blind

Middletown Deaf Housing and Apartments. Middletown, CT New Mixed-Use Housing for the Deaf Design and Planning

Colorado School for the Deaf and Blind, Colorado Springs, CO Master Plan and Ritter Hall Programming & Design

Ohio School for the Deaf, Columbus, Ohio New Educational Center and Residence Halls (below)



Governor Baxter School for the Deaf, Portland, ME Master Plan and New K-8 Educational Center

Rocky Mountain Deaf School, Denver, Colorado New K-12 Campus

### Hank Walker, AIA, LEED AP





Role Architect

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

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

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

#### **Project Experience**

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

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

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

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

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

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

The Retreat at Glade Springs Resort, Daniels, WV Mr. Walker was responsible for the design of a variety of townhouses assembled into a multi-unit building that fit into the hilly terrain of the site.

#### Education

Bachelor of Science Architecture; 1973 The University of Cincinnati

#### **Employment History**

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

#### **Civic Affiliations**

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

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

**Blackwater Falls and Cacapon WV State Parks, Davis, WV** Mr. Walker was responsible for the design of additions to the existing historical lodge building for the two state parks. Mr. Walker incorporated new meeting rooms, elevator, pool and health spas into the existing lodge building and incorporated various renovations to existing buildings to make the buildings more usable for large groups.

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

Awards and Acknowledgements:

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

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

### Amanda Cheuvront, AIA, NCARB





Role Architect

#### Professional Registrations Registered Architect (WV)

Amanda is responsible for producing design development and construction documents. As an architect, she coordinates with the other disciplines in order to ensure sound and cohesive projects. Ms. Cheuvront also assists in the schematic and design development process.

Amanda began her architectural studies at Fairmont State University where she received a bachelor's degree in Architectural Engineering. She continued her education at The School of Architecture at UNC Charlotte.

After completing a Master of Architecture degree in 2009, Amanda began her career at ZMM. She has worked on a variety of educational, commercial offices, and healthcare projects.

#### **Project Experience**

West Virginia Schools for the Deaf and Blind, Romney, WV Ms. Cheuvront is currently the Project Architect and is working with the WV Board of Education, WV School Building Authority, and the West Virginia Schools for the Deaf and Blind to assist with creating a Comprehensive Educational Facility Plan (CEFP). The CEFP defines ultimate goals for the institution and accounts for the facilities required to achieve these goals. The goals are defined then realized, if necessary, through several phases of construction. ZMM understands the WV school Building Authority's policies and the guidelines of the WV Department of Education, along with the having a working knowledge of other state agencies, makes creating this document easier to navigate through the process. Ms. Cheuvront attends all project meetings and site visits of the schools.

Huntington East Middle School (Architect)
Explorer Academy (Project Architect)
CAMC Teays Valley ICU Addition (Project Architect)
Valley High School (Project Architect)
Divide Elementary (Architect)
Wayne County High School (Architect)

#### Education

Master of Architecture, The University of North Carolina, Charlotte, NC, 2009

Bachelor of Science Engineering Technology, Fairmont State University, Fairmont, WV, 2006

#### Employment History 2014 - Present, Architect 2009 - 2014, Intern Architect, ZMM

#### Civic Affiliations

- American Institute of Architects, Member
- West Side Elementary School, Volunteer
- CANstruction Design Team 2 Yrs

### Robert Doeffinger, PE





Role
Engineering Principal, Project Manager

#### **Professional Registrations**

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

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

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

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

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

#### **Project Experience**

State Office Buildings #5, 10<sup>th</sup> Floor Charleston, WV Mr. Doeffinger was the Project Engineer for this renovation project The renovation of the tenth floor of State Office Building #5 on the State of West Virginia Capitol Campus was recently completed for the Office of Technology. The renovation was designed to meet the United States Green Building Council's LEED for Commercial Interiors standard. The renovations also include a low profile cable management system which maximizes the flexibility of the space. To commence the project, ZMM conducted a detailed investigation of State Office Buildings 5, 6, & 7, which included recommendations for improvement of the facilities. The renovation of the 10<sup>th</sup> floor of Building #5 was the first major interior renovation project that responded to the recommendations.

#### 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 2<sup>nd</sup> Ward Councilman for 20 years

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

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

West Virginia Army National Guard, Joint Interagency Training & Education 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.

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

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

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

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

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

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





**Role** Senior Mechanical Engineer

# **Professional Registrations**Professional Engineer (WV)

Mr. Cook started his career in 1972 as a designer for an engineering firm in Charleston, West Virginia. He is a Professional Engineer registered in West Virginia and has designed and engineered multiple projects throughout the state.

Mr. Cook has had a full range of engineering design experience including: Plumbing, HVAC, Electrical, Fire Protection and Site Utilities. He has worked on Jails, K-12 Schools, Armories, Hospitals, Office Buildings, Churches, and a variety of other building types.

Other responsibilities include, Serving as a liaison between clients and utility companies, designs of sanitary and gas site utilities, review of plumbing, sprinkler systems, fire pumps and water pumps as well the equipment selection - air handling units, pumps, and boilers, site visits, observation reports and punch lists.

#### **Project Experience**

# West Virginia Regional Technology Park - Building 740, South Charleston, WV

Mr. Cook worked as part of the Design-Build Team to survey the existing building; did preliminary location and layout for the proposed Boiler Building; designed layout and piping for steam boiler system; did electrical design for the proposed Boiler Building. Also did mechanical and electrical design for Buildings 742, 743, and 8736

West Virginia Regional Jails: Mr. Cook was responsible for electrical design on 10 Regional Jails. The design included lighting, power distribution, emergency power systems, fire alarm and security. In 2009 he was project manager for HVAC renovation on four regional jails. This project included replacement of rooftop HVAC units and Building Automation Systems. Mr. Cook has also been responsible for site utility upgrades including sewer augers and on-site sewage treatment plants and lift stations.

Jackson County Armed Forces Reserve Center, Millwood, WV Because of the variety of space types and occupancy patterns, Mr. Cook designed multiple roof mounted air handling

#### Education

Master of Arts in English and Humanity Marshall University Graduate School, 2004

Bachelor of Arts in English and Humanity, West Virginia University, 1972

#### Employment History 1989 - Present, Senior Mechanical Engineer, ZMM Present, Board of Directors, ZMM 1976 -1989, Project Manager, WV Firm 1972 -1976, Designer, WV Firm

#### **Civic Associations**

 American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE), Member units, to take advantage of unoccupied scheduling to save energy. The main shower /toilet area is served by a 100% outside air unit with a plate type heat exchanger for energy conservation. The large Drill Hall, which also serves the community with space for up to 2000 people, is served by two rooftop units. One will run during Drill weekends, the second will run only during public events. There are two high efficiency scroll type chillers with primary/secondary pumps to meet part load conditions. The boilers are 95% efficient stainless steel condensing type with variable speed pumps.

#### Lincoln County High School, Hamlin, WV

Mr. Cook was responsible for HVAC design on this project, which included a 500 ton chilled water system with primary and secondary pumping. The chillers had a heat recovery feature which was used for reheat on VAV air systems. The gas boilers were condensing type with 95% efficiency and variable speed pumps. The school also had vocational shops for which he designed welding fume exhaust and dust collection systems. In addition to this, Mr. Cook was responsible for site utilities including coordination of a water line river crossing and an aerial sewer suspended from the bridge serving the school, which eliminated the requirement for a lift station.

#### Hacker Valley PK-8 School, Hacker Valley, WV

This project, located in rural Webster County adjacent to a trout stream, was built on a small site where municipal water and sewer were not available. Mr. Cook was responsible for designing a new Water treatment System for the existing domestic well, and a variable speed booster pump to deliver water to the school building. An onsite sewage treatment plant with outflow was not acceptable because of the trout stream, so he designed a "Green" peat bed underground injection system for the school's sewage disposal. The school also required fire protection, and Mr. Cook designed a 64,000 gallon storage tank with a diesel fire pump for distribution. He was also responsible for HVAC design.

### Scot Casdorph, PE





Role Electrical Engineer

# **Professional Registrations**Professional Engineer (WV, OH *pending*)

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**

Southside Elementary and Huntington Middle School, Huntington, WV Mr. Casdorph was the electrical engineer on this 156,000 SF facility. This project encompasses all phases of construction; demolition, major renovation and new construction. The original historic 26,000 SF 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.

#### Craigsville Elementary School, Craigsville, WV

Mr. Casdorph was responsible for the electrical design of the new elementary school. The project is consolidating Beaver Elementary School and Craigsville Elementary School into a new 375-student school. The school houses 3 Pre-Kindergartens, 3 Kindergartens, 2 first grade, 12 1<sup>st</sup>-5<sup>th</sup> grade classrooms, activity room, cafeteria, kitchen, media center, and administration spaces.

#### Fort Gay PK-8 School, Fort Gay, WV

Mr. Casdorph was the electrical engineer and was responsible for the electrical power distribution and design. The New Fort

#### 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 Gay PK-8 School replaces the existing facility that has been in disrepair and lacking the spaces and technology delivery system required for 21<sup>st</sup> century learning skills. The total enrollment for the school is 603 Students. The new grade configuration separates the Elementary students from the Middle School students, but still allows use of the common spaces within the building. They share the Dining Room, Gymnasium, Media Center and a Stage.

Joint Interagency Education and Training Center (WVARNG), Kingwood, 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 Armed Forces Reserve Center, (WVARNG), Millwood, 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, (WVARNG), 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 77<sup>th</sup> Brigade Troop Command, the 1863<sup>rd</sup> Transportation Company, and the 150<sup>th</sup> Armored Regiment Company. The MEPS houses their administrative, medical, headquarters, testing and storage functions at the facility. A comprehensive 8,500 SF OMS vehicle maintenance shop provides space for six large service workbays for maintaining the military fleet.

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

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

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

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

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 floor plan utilizing modular under-floor wiring to accommodate any future modifications of the workspace with minimal disruption to the employees. The project is targeted for LEED Silver Certification.

Southern West Virginia Community & Technical College, Williamson, WV Oak Hill Elementary, Fayetteville, WV Valley High School, Smithers, WV Divide Elementary School, Lookout, WV

### Stephen Hedrick, PE





Role Structural Engineer

# Professional Registrations Professional Engineer (WV)

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

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

#### Project Experience

Girl Scouts of Black Diamond Council, Charleston, WV Mr. Hedrick was the structural Engineer on the new Volunteer Resource Center and Girl Zone/Urban Camp in Charleston, WV. The 18,000 SF project will completely renovate an old car dealership into administrative offices, a community gathering space, and a small hotel (Urban Camp) for Girl Scouts visiting the Charleston area. This new main building will bring all the operations of the Girl Scouts of the Black Diamond Council under one roof. Steve was responsible for site visits and examining the exterior structure of the existing building.

#### Wood County Justice Center, Parkersburg, WV

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

#### Education

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

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

#### **Employment History**

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

#### **Civic Affiliations**

 American Institute of Steel Construction, Member Tucker County Courthouse Annex, Parsons, WV

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

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

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

Kenna Elementary School, Kenna, WV

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

Bridgemont Community and Technical College (Davis Hall, Building 704), Montgomery, WV Mr. Hedrick was responsible for the structural design for a design team that is currently preparing construction documents for the renovation to an existing 7-story, 77,215 SF educational building. The project scope includes remedying several engineering and life safety deficiencies, as well as architectural improvements to the building envelope.

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

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

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

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

Other Firm Experience:

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

### West Virginia Schools for the Deaf and Blind

West Virginia Board of Education



LOCATION: Romney, WV

SIZE: 300,000 SF

CONTACT: Dr. Lynn Boyer Superintendent 301 East Main Street Romney, WV 26757 304.822.4800

CONSULTANT: John Dickinson Dickinson & Partners dickensonpartners.com



Per the direction of the WV Board of Education and the WV School Building Authority, the West Virginia Schools for the Deaf and Blind has undertaken the task of creating a *Comprehensive Educational Facility Plan (CEFP)*. ZMM Architects & Engineers combined forces with Dickinson & Partners, an architectural firm specializing in Special Needs Architecture, to have a complete understanding and working knowledge of the requirements and challenges faced when designing for Deaf and Blind student population. ZMM understands the WV school Building Authority's policies and the guidelines of the WV Department of Education, along with the having a working knowledge of other state agencies, makes creating this document easier to navigate through the process.

The purpose of the CEFP is to provide the owner a long range plan that addresses the requirements for new construction and major renovations. Comprehensive planning is a way of identifying the best route to the future through a workable plan for handling priority related and anticipated changes. The CEFP defines ultimate goals for the institution and accounts for the facilities required to achieve these goals. The goals are defined then realized, if necessary, through several phases of construction.

A planning team was established consisting of citizens, teachers, staff, and business owners. Goals and Objectives were developed and data was compiled concerning enrollment and population growth. Along with the educational plan that was developed, the existing facilities were reviewed for compliance with all state and local codes. The buildings and adjacent sites were also reviewed for any physical deficiencies along with educational deficiencies. The owner's insurance reports were also reviewed and any information outstanding will be incorporated into the document. Public meetings were conducted, and the final meeting was a public hearing for concerned citizens. At that meeting the public will be able to voice concerns of the process or the final outcome of the CEFP document.

The ultimate goal is to develop a comprehensive facility plan for the campus, based on local input, that can be implemented by the school.

### **Explorer Academy**

Cabell County Schools



LOCATION: Huntington, WV

SIZE: 60,000 SF

COMPLETION: 2015

COST: \$15M

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

#### A New Learning Model - Cabell County's New Expeditionary School

Soon Students will set foot into a new Expeditionary Learning Incubator School, which will be the first of its kind in West Virginia.

Cabell County School officials are excited about a new school they hope will set an example for schools around the state. The school will open in the fall of 2015. Cabell County School Board officials hope it is the next step in education. It will be a consolidation of Peyton Elementary and Geneva Kent Elementary in the east end of Huntington. The schools will be combined to form the incubator school, which will be housed in the former Beverly Hills Middle School facility that will be remodeled to fit the mold of the Expeditionary Learning model.

Cabell County School officials describe the school as an incubator school because of the experimental learning environment. They hope what they learn from their experiment leads to other school districts around the state doing their own experiments and developing expeditionary learning environments of their own. Known as EL for short, students will learn about completing projects that will stretch across different subject areas and can sometimes take the entire school year.

The curriculum for the program is very hands on, and is a real-world way of learning. Students will be working a lot with community partners, people who are experts in their fields. The students will be going out and doing field work, which is much different than a field trip. In Expeditionary Learning, students learn by conducting learning

expeditions rather than by sitting in a classroom being taught one subject at a time.



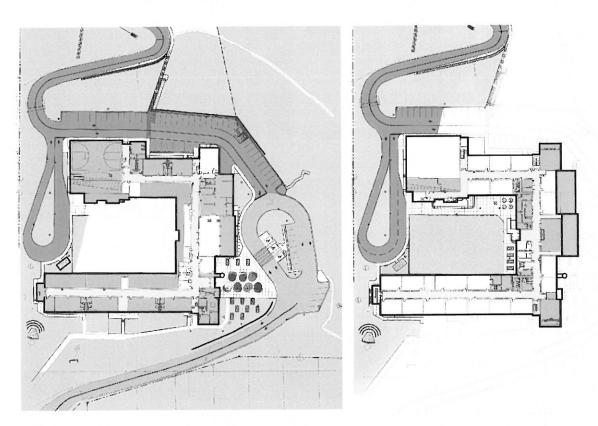
### **Explorer Academy**

Cabell County Schools

The school system has partnered with Marshall University to offer teachers in Cabell County and throughout the state training on the new curriculum.

In addition to creating separate bus and parent loading and unloading areas with additional parking, renovations include an enlarged Dining and Kitchen space to accommodate the student population. The facility will have a new HVAC system and new lighting to replace the original outdated systems and bring the building up to current codes and standards. The Media Center has been renovated to accommodate current technology needs and it overlooks a outdoor rooftop classroom space for all students. Studio spaces are scattered throughout the building for teachers to take students for collaboration on special projects. Student display areas are distributed throughout the building on every space available. This is evident from the front door as you begin your walk through the building. Student art walls are also located throughout the building as well as outside the building so students can create their own atmosphere from day to day. Totally renovated Art and Science Classrooms anchor the second floor space. Old locker rooms were removed and building circulation was improved for students to move freely throughout the building. A new music room was created close to the refinished Gymnasium and performance platform.

Site amenities include a nature trail, new steps to lower portions of the site not accessible before, a walking deck that overlooks the vegetation and puts students into the canopies of certain trees to view and study plant life at a higher level. An amphitheatre, green house, gazebo, pizza oven, artificial turf and the required play areas complete the learning centers outside of the building.



New First Floor Plan

New Second Floor Plan

### **Edgewood Elementary School**

Kanawha County Schools



LOCATION: Charleston, WV

SIZE: 56,000 SF

COMPLETION: 2014

COST: \$22M

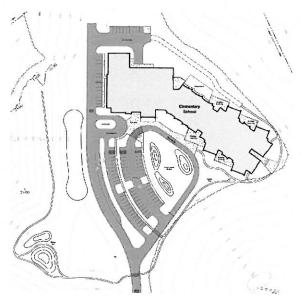
CONTACT:
Dr. Ron Duerring,
Superintendent
Kanawha County Schools
200 Elizabeth Street
Charleston, WV 25311
304.378.7732



The second West Side Elementary School, currently under construction at a site located off of Edgewood Drive, has been designated as a "School of the Future." This designation is not entirely accurate. The reality is that the new school is challenging the traditional model of curriculum delivery – which is typically 25

students in a classroom, with a teacher delivering lessons to the students. The new school provides space for hands-on exploration, technology, small group projects, and still retains space for direct teacher led instruction.

Educational professionals and designers have previously made the observation that while many other building types have changed over the last century, classrooms have remained essentially unchanged. If the focus of curriculum delivery changes to provide students with better access to technology and a greater emphasis on hands-on learning, how will the classroom be modified to support the teachers? In the



case of the new West Side Elementary School, we started by designing the building from the inside-out.

One of the challenges of programming the new facility was that it was difficult to establish the size and budget for the educational spaces, which the project team understood would be unique. To capture this information, the team elected to begin the design process by exploring a new layout for the instructional areas. Kanawha County Schools developed a unique model for these instructional areas. The concept for each central instructional area was to create a space that mimics a museum. As when they enter a museum, students will be engaged in the learning materials throughout the environment as they work on projects. Each instructional area will also have direct access to exterior instructional and recreational spaces.

### **Edgewood Elementary School**

Kanawha County Schools



Each instructional area will house 60-75 students, and will contain space for small group projects, a distributed library/media center, space for art and science projects, and a shared performance area. Four to five teachers will work collaboratively as both instructors and facilitators. The area will also provide three classrooms for direct teacher-led instruction for groups of 16 students in both math and reading.

As these spaces were developed, it became clear that regular, rectilinear spaces did not create the variety of environments, the smaller child sized spaces, or the opportunity for visual separation of tasks. To permit the spaces to be reconfigured based on the needs of the students furniture in the instructional spaces will provide flexibility and adaptability to the space. Overhead and sliding doors as well as moveable partitions are also being included to allow the space to be fully open, or subdivided based on the need. Many of the doors and furniture surface will be writable, functioning as whiteboard space.

In addition to re-examining the traditional classroom layout, the use of technology in the educational environment was considered. In the past the lack of adequate technology hindered efforts to develop student centered instructional environments. As anyone who has seen a young child utilize an Apple iPad, it is clear that the technological barrier has been eliminated. At the new school each student will have access to a personal device, similar to an Apple iPad. The entire school will utilize wireless technology, and the personal device will be used to advise the students on their daily schedule, participate in online learning opportunities, and will also provide the instructors with immediate feedback on progress so that they can adjust their efforts to meet the constantly changing needs of the students.

The new school is also being designed to function as an educational tool. Students will learn about daylighting, captured rainwater, efficient building envelopes (insulation), domestic solar hot water, efficient HVAC systems, and recycling. This information will be relayed to the students through the use of age appropriate signage, as well as a dashboard system that will help monitor the building's energy use. While the type of educational environment being planned for the second West Side Elementary School is unique to West Virginia, it incorporates several features that have been successfully implemented in other areas. By re-evaluating the traditional classroom and methods of curriculum delivery, KCS is looking to develop a more personalized educational experience for the students.

# Southside Elementary & Huntington Middle School

Cabell County Schools



LOCATION: Huntington, WV

SIZE: 158,194 SF

COMPLETION: 2010

COST: \$27M

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.







# Southside Elementary & Huntington Middle School









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.

### **West Side Elementary School**

Kanawha County Schools



LOCATION: Charleston, WV

SIZE: 66,400 SF

COMPLETION: 2011

COST: \$14M

CONTACT: Dr. Ronald Duerring Superintendent 200 Elizabeth Street Charleston, WV 25311 304.348.7732



This new Elementary School is located in the heart of the west side of Charleston and serves 380 students from Pre-Kindergarten through 5<sup>th</sup> grade. The U-shaped floor plan creates a private play area for students to shield them from day to day activities of a busy urban area. Each classroom has large windows for natural light, which studies have shown to increase student achievement and teacher morale and reduce absenteeism in both staff and students. All classrooms have their own restrooms and sink facilities, allowing teachers to have close supervision of the students, and allowing students to spend more time in the classroom.

The new school includes a Dining space with a stage area for student performances, a Multipurpose Room that opens up into the Dining Room to create a large public space for Public Meetings, Performances, and large fund raising dinners. The new facility also has an Art Room and a Music Room which is second to none. The curved wall of glass allows students to experience an abundance of natural light while feeling secure in their new learning environment. The Media Center and Computer Labs along with a full service Kitchen further enhance the already state of the art facility









#### **West Side Elementary School**

Kanawha County Schools









This facility is also designed with "smart building technology". The building has an intergraded building automated system and a building security system. Both systems are constantly monitoring temperatures, co2 levels, energy consumption, along with which doors are open and who is checking in the building.

One of the many unique features of this school is a full service Dental Clinic dedicated to serving not only the students and parents of this school but also the students of other local county schools. This facility also boasts of a full service Health clinic with a full time doctor and nursing staff. It too is open to other schools and the public.

The new school will be a focal point in the community and will provide office space, meeting rooms and a computer classroom for adult education and community activities.



Fort Gay PK-8 School

Wayne County Schools

LOCATION: Fort Gay, WV

SIZE: 94,000 SF

COST: \$18M

COMPLETION: 2013

CONTACT: Ms. Sandra Pertee Superintendent PO Box 70 Wayne, WV 25570 304.272.5116







The New Fort Gay PK-8 School replaces the existing facility that has been in disrepair and lacking the spaces and technology delivery system required for 21<sup>st</sup> century learning skills. The total enrollment for the school is 603 Students. The new grade configuration separates the Elementary students from the Middle School students, but still allows use of the common spaces within the building. They share the Dining Room, Gymnasium, Media Center and a Stage.

The Gymnasium will double as a seating area for the Stage. Both Elementary and Middle Schools will have their own Music and Art Classrooms in each of their grade level environments. The Gymnasium is located for ease of public access but can be divided for simultaneous use by Elementary and Middle School classes.



## **Gauley River Elementary School**

Nicholas County Schools



LOCATION: Craigsville, WV

SIZE: 48,000 SF

COST: \$10M

COMPLETION: 2013

CONTACT: Dr. Keith Butcher Superintendent 400 Old Main Drive Summersville, WV 26651 304.872.3611







Gauley River Elementary School is a new 48,000 SF facility located in Craigsville, West Virginia. The Nicholas County Board of Education consolidated two schools, Craigsville Elementary School and Beaver Elementary School, into one state-of-the-art facility. This new school helped implement the Nicholas County Comprehensive Educational Facilities Plan.

The school houses approximately 375 students in grades pre-kindergarten through five. The new school also includes a music/art room, physical education/cafeteria space, clinic, special needs rooms, a secure entry for students and visitors, and two computer rooms. A media center provides an open window to learning and to the world of the twenty-first century.

The site layout is efficient with a separate bus drop-off area and parent drop-off area. There is a wide open play space for students, as well as a fenced in play yard for Pre-Kindergarten and Kindergarten students.

Stone, wood, and brick adorn the exterior of the school. The natural materials of the building pay homage to the beauty of the area. The corridors of the school are stained concrete, which not only produces a natural and beautiful interior, but also creates a floor that is virtually maintenance free.





## **Kenna Elementary School**

Jackson County Schools

LOCATION: Kenna, WV

SIZE: 48,000 SF

COST: \$10.8M

COMPLETION: 2014

CONTACT: Mr. Blaine Hess Superintendent PO Box 770 Ripley, WV 25271 304.372.7300





The New Kenna Elementary School will serve approximately 375 students in grades Pre-Kindergarten through 5<sup>th</sup> Grade. The new facility will replace the existing school that was falling into disrepair and lacked the essential spaces for a thriving 21<sup>st</sup> Century learning environment. The new school includes a physical education/cafeteria space, state-of-the-art media center, art/science room, music room, full kitchen, and two computer classrooms. The classrooms have large windows that allow for natural light, as well as great views to the surrounding wooded hills.

The entry area includes concrete inlayed into the brick wall that contains images of various state landmarks and features. The entrance also features an inverted gable that adds drama and scale, while the interior finishes were selected to reflect a natural river.

The site includes a separate bus drop-off area and parent drop-off area. There is also a designated Pre-K drop-off. A fenced Pre-K/K play area is provided, as well as a play area for the Grades 1-5. Several playing fields will be located on site as well.

## **Huntington East Middle School**

Cabell County Schools



LOCATION: Huntington, WV

SIZE: 100,500 SF

COMPLETION: 2013

COST: \$23M

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

AWARDS: 2014 AIA Merit Award West Virginia Chapter Achievement in Architecture in Sustainable Design







This state of the art facility combines the existing populations of Enslow Middle School and Beverly Hills Middle School. Located in the heart of both communities the new facility will house approximately 770 students. It's contemporary design is home to a middle school curriculum layout familiar throughout Cabell County Schools. The brick façade is accented with metal panels and highlighted with large amounts of glass that naturally light the classrooms. A curved corridor divides the building while slowly widening and developing into the Art Room. The Art Room showcases a large window introducing natural light into the Art Room and the corridor. The curved façade along the corridor is emphasized with copper finished metal panels.

Cabell County Schools is currently pursuing LEED Gold Certification. The building and curriculum will boast of 6<sup>th</sup>, 7<sup>th</sup>, and 8<sup>th</sup> grade teams that will compete against each other in reducing energy consumption and will be able to track through technology energy usage throughout the year. Through on-line learning and technology systems throughout the facility students will be able to also work with and compete with facilities throughout the world.

The building itself was designed as a teaching tool. A pulper system is used not only to consume kitchen waste but also all paper waste throughout the school. The students are able to take this product and provide compost for the school's vegetable gardens, which also provide additional produce for the "farm-to-table" program at the school. The facility includes a new Gymnasium, Cafeteria with a Stage, Art, Music, Band, Orchestra and Science facilities.

## **Mountaineer Middle School**

Harrison County Schools



LOCATION: Clarksburg, WV

SIZE: 71,238 SF

COMPLETION: 2007

COST: \$11.2M

CONTACT: Dr. Mark Manchin Superintendent Harrison County Schools PO Box 1370 Clarksburg, WV 26302 304.326.7345

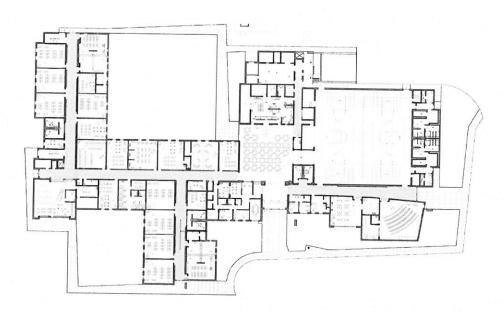






Mountaineer Middle School is designed to accommodate 475 students in grades 6 through 8, and located in Clarksburg, West Virginia. This middle school includes a commons/cafeteria common use space, stage, full size gymnasium, food preparation facilities, science, art, and music classroom spaces, and is designed around a true middle school curriculum.

Each grade level is located in a separate area along a core group of shared classrooms. Each grade level accommodates 2 teaching teams, with a science lab in each area. Shared core classrooms are technical education, consumer homemaking, and a separate science classroom for each grade level.



## **Lincoln County High School**

Lincoln County Schools



LOCATION: Hamlin, WV

SIZE: 217,000 SF

COMPLETION: August 2006

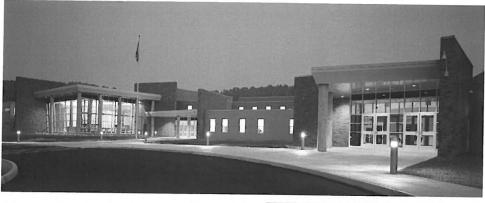
COST: \$32M

OWNER: Patricia Lucas Superintendent 10 Marland Avenue Hamlin, WV 25523 304.824.3033

AWARDS: 2007 AIA Honor Award West Virginia Chapter Excellence in Architecture

Education Design Showcase Product of Distinction

American School & University Outstanding Building Design

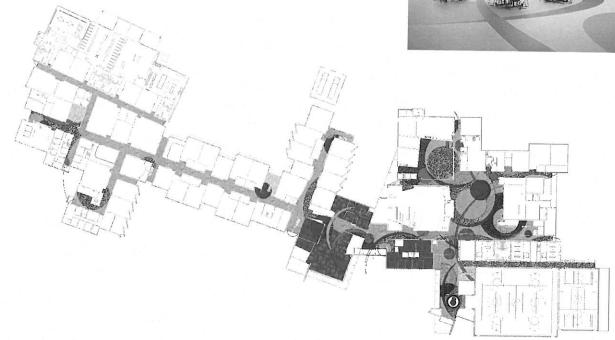


Lincoln County High School combines four existing high schools into one. The facility includes 45,000 SF of both traditional and non traditional vocational space. Students have the opportunity to access vocational classes without leaving the building. Along with the traditional classrooms, some additional programs were added as well. The Health Occupations Lab will operate in conjunction with the Doctor's Office Clinic on site. Students enrolled in that program have the opportunity for "job shadowing." The Clinic operates six days a week, twelve months a year.

The high school is the focal point of the community and a community college wing occupied by Southern West Virginia Community College. The college offers classes during the day and evening. High School Students will have the opportunity to take college classes during the day.

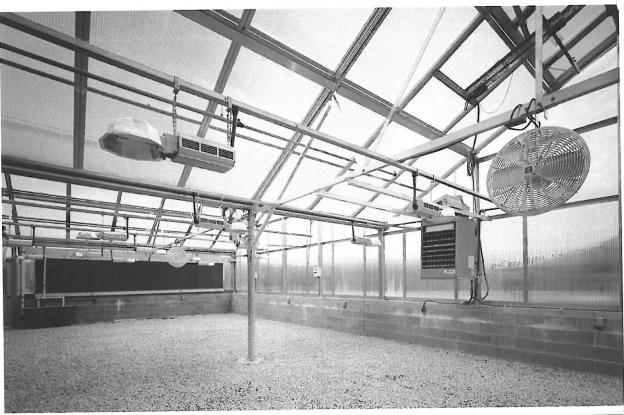






## **Lincoln County High School**

Lincoln County Schools



The community colleges Distance Learning facility and the Science and Computer Lab will be accessible to the high school students for daytime classes.

The building provides a unique learning opportunity for students. Day-lighting and 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. A fully integrated technology distribution system is provided throughout the building. Students and faculty have access to these computers throughout the facility.





## St. Albans High School

Kanawha County Schools



LOCATION: St. Albans, WV

SIZE: 216,500 SF

COMPLETION: 2003

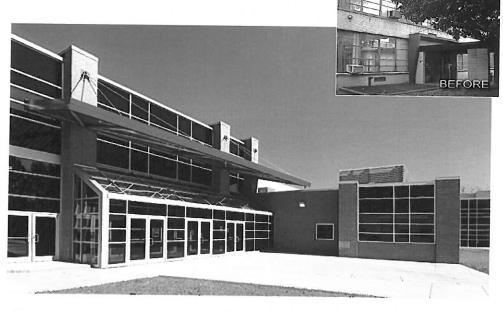
COST: \$24M

CONTACT: Dr. Ron Duerring Superintendent 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



One outstanding feature of the completed renovation of St. Albans High School is its unique, inviting physical entryway and the aesthetically pleasing and functional commons/cafeteria area. The commons is a visual focal point of the school creating a natural flow from the front entrance, through the commons to the outside assembly/instructional area, it also serves as a connecting hub between the academic spaces and the physical education and auditorium areas.

Significant green space was retained and enhanced which providing an inviting and safe approach to the high school building. An outside amphitheater, located adjacent to the music and theater departments, provides ample space for music and drama productions as well as a gathering space for students. In response to the students need for more "outside living space" the rear dining plaza was created. It has a visual impact on the interior and provides a flexible learning environment for the students and educators.

The addition of an auxiliary gym, renovations to the auditorium complex, a new media center and other additions and improvements allow spaces for more extensive use by the community. Renovations to the auditorium resulted in a space that is educationally functional and is a source of pride for the students and the entire community.







#### St. Albans High School



Instructional spaces have been designed to be flexible, adaptable and accommodating for the more active, student oriented instructional programs and methods of the district. Classroom and other spaces are bright and welcoming for students and staff and appropriate space and equipment are provided to allow for the efficient and effective delivery of program objectives.

Responding to concerns from students, staff and the community, and due to the condition of existing science facilities, science wing was completely replaced with modern, functional and flexible space and equipment.

Provisions for new and emerging technologies were greatly enhanced throughout the building. The new media center is the central hub for technology and with the inclusion of an appropriate infrastructure, providing flexibility needed for the technology of the future. St. Albans High School was completed during the summer of 2003 and was occupied by the student body at the beginning of the 2003-2004 school year.







## **Roof Replacement Projects**



#### State Office Buildings 5,6, & 7 - Roof Replacement

WV Capital Complex Charleston, WV

Replacement of existing roofing system with new fully adhered tapered insulation and new modified bitumen roofing system. The project involved major renovations to the cooling tower screens and installing a reflecting coating on the roofs surface. The project was a standard design, bid and build project of 57,560 square feet for \$1,560,000.00 and completed in 2011.



Greg Melton Ph# 304-558-0256 General Services Division 1900 Kanawha Blvd. East Room MB-60 Charleston, WV 25305



# Cedar Lakes Conference Center - Reroofing Project Ripley, WV

Installing new standing seam metal roofs and making miscellaneous repairs to 11 buildings. Project was a standard design, bid and build project of a total of 53,810 square feet for \$550,000.00 completed in 2006.

Contact:

Ron Grimes Ph# 304-372-7860 Cedar lakes Conference Center 82 FFA Drive Ripley, WV 25271



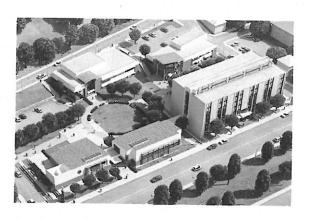
# **Bridgemont Community & Technical College (Davis Hall)**Montgomery, WV

This project was a multi-scoped renovation project, with a portion of the work involved replacing a 6000 square foot portion of the roof with new fully adhered EPDM roof membrane and making repairs to an additional 18,00 square feet of roof membrane.

The total project cost was \$3,400,000.00 and completed in 2012.

Contact:

Richard Donovan, Senior Dir. of Facilities Ph# 304-558-0281 WV Higher Education Policy Commission 1018 Kanawha Boulevard. East, Suite 700 Charleston, WV 25301



## **Roof Replacement Projects**



#### Central Regional Jail HVAC and Roof Replacement

Sutton, WV

Replacement of ballasted EPDM roofing, metal roofing system, walk pad system, flashing systems and HVAC equipment. Project was a standard design, bid and build project of 100,000 square foot facility with a bid price of \$900,000.00 was completed in 2007.

#### Contact:

Diana Johnson Ph # 304-558-2110 WV Regional Jail and Correctional Facility Authority 1325 Virginia Street East Charleston, WV 25301



#### Southern Regional Jail HVAC and Roof Replacement

Beaver, WV

Replacement of ballasted EPDM roofing, walk pad system, flashing systems and HVAC equipment.

Project was a standard design, bid and build project of 133,000 square foot facility and a bid price of \$1,300,000.00 was completed in 2008.

#### Contact:

Diana Johnson Ph # 304-558-2110
WV Regional Jail and Correctional Facility Authority
1325 Virginia Street East
Charleston, WV 25301



## South Central Regional Jail HVAC and Roof Replacement

Charleston, WV

Replacement of ballasted EPDM roofing, metal roofing system, walk pad system, flashing systems and HVAC equipment.

Project was a standard design, bid and build project of 140,000 square foot facility and a bid price of \$1,400,000.00 completed in 2009.

#### Contact:

Diana Johnson Ph # 304-558-2110 WV Regional Jail and Correctional Facility Authority 1325 Virginia Street East Charleston, WV 25301



## **Roof Replacement Projects**



#### Reroofing for Greenbrier County Board of Education

Smoot Junior High School Gymnasium
Rupert Elementary School, High Roof
Greenbrier West High School – Building 'C'
Replacement of existing membrane roof with mechanically
fastened EPDM roof membrane. This project also included
repairs to various Fascia, soffit and canopy conditions. The
project was a standard design, bid and build project of 40,000
square feet for \$450,000.00 and completed in 2006.

Contact:
Sallie Dalton, Superintendent Ph# 304-647-6477
PO Box 987
Lewisburg, WV 24901



#### Reroofing for Greenbrier West High School

Charmco, WV

Replacement of existing membrane roof with mechanically fastened EPDM roof membrane. This project also included repairs to various Fascia, soffit and canopy conditions. The project was a standard design, bid and build project of 35,000 square feet for \$400,000.00 and completed in 2006.

Contact:

Sallie Dalton, Superintendent Ph No. 304-647-6477 Greenbrier County Schools PO Box 987 Lewisburg, WV 24901

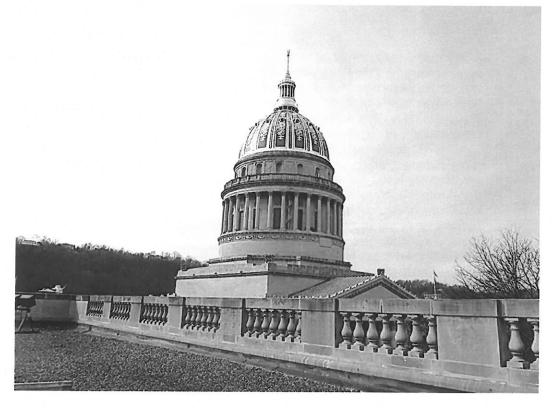


## **WV State Capitol Roof Replacement**



LOCATION: Charleston, WV

CONTACT:
Bob Krause
Acting Manager
State of West Virginia
Department of Admin
1900 Kanawha Blvd., E.
Charleston, WV 25305
304.558,4331



The West Virginia State Capitol Building was constructed in 1924-1932 and is listed on the National Register. The scope of work includes replacement of the roof on connectors and roofs above as well as the base of the dome. This project started with an in-depth study of existing drawings and site conditions and a site visit to the Capitol to ascertain the actions necessary to provide the new roof system.

The investigation included:

- Review all Roofing Components for Integrity/Ability to Control Moisture Collection/ Removal
- Conduct Destructive Testing (Multiple Roofing/Flashing Systems?)
- Hazardous Material Testing of Components (Paint, Mastic, Insulation, Caulking)
- Review all Points of Roof Access: Walkways, Walkway Pads, Stairs
- Work with GSD to Develop Recommendations for the Roofing System
- Consider Building Envelope Performance/Insulation Requirements





## **WV State Capitol Roof Replacement**

All the roof system components will need to be reviewed for their integrity and ability to control moisture collection and removal from the building's roof. The components that are to be reviewed will include parapet walls, railings, wall conditions, colonnades, roof penetrations, roof drains, roof equipment, and walking surfaces. Investigative holes will need to be cut into the existing membrane to identify conditions of insulation, roof deck and any remains of former roofing materials and flashing systems. Test of roofing materials will need to be made for any possible hazardous materials. Our ability to provide comprehensive design solutions will be advantageous as it relates to mechanical equipment curbs and structural supports.



A report will be prepared and presented showing findings and recommendations from the investigation of all the roof conditions. The report will include recommended option for the roof membrane material, discussion of repairs to roof components, as well as any required repairs to the roof deck. Also included in the report will be a preliminary cost estimate including cost differences for each proposed option. ZMM will provide construction observation services and will work with the owner's representative during the construction process. We will be responsible for reviewing all shop drawings and questions that occur during the project. ZMM will also participate in all progress meetings and make site visits on a regular basis. ZMM will remain available to assist the state throughout the warranty phase of the project.

## State Office Buildings 5,6, & 7



LOCATION: Charleston, WV

COMPLETION: On-Going

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







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

#### Roof Replacement

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

#### **Electrical Courtyard Improvements**

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

#### Door and Window Replacement

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

## State Office Buildings 5,6, & 7

Major Renovations

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

Caulk Replacement

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

Valve Replacement

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



#### **HVAC PROJECTS**

Huntington, WV YMCA - Replacement of Two Steam Boilers, Convertible to Hot Water

Building 2000 - HVAC Renovation/Boiler Replacement

Walker Machinery - Dual Fired Steam Boilers for Rita, WV, Maintenance, Rebuild and Office Facility

Walker Machinery - HVAC Renovations to the Main Office

State of West Virginia Building 5 Renovation - New Steam, Chilled Water, Air Handling Units/Ventilation Units

State of West Virginia - HVAC System at Governors Mansion Corrective Study

**CAMC Clinical Teaching Center** 

Camp Dawson - Regional Training Institute - HVAC Improvements

West Virginia Regional Jails - HVAC and Roof Replacements

King of Prussia, PA - Multiple Projects and HVAC Design

Robert C. Byrd Federal Building - HVAC Renovation

Mt. Hope Federal Building - HVAC Renovation

Bluefield Federal Building - HVAC Renovation

Huntington Federal Building - Boiler Replacement

Cabell County Courthouse - Boiler Replacement

Huntington Department of Transportation - HVAC Renovation

University of Charleston Dormitories

Lincoln County High School

New River Elementary School

Valley Elementary - HVAC Renovations

Sophia High School - HVAC Renovation

Independence High School - HVAC Renovation

Tolsia High School, Wayne County Schools - HVAC

Cabell County Schools - Multiple HVAC Projects

Huntington Herald Dispatch - HVAC Study

Hamlin High School - HVAC Replacement Wall Repair

Kanawha Valley Senior Services - HVAC Building Documents

Frankfort, Greenbrier County Schools - HVAC Renovations

Wayne County Schools - New HVAC System Projects

Greenbrier County Schools - New HVAC System Projects

Union Carbide Corporation - Various Office, Laboratory and Process Building with Steam Heat

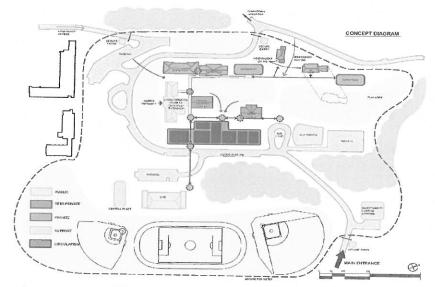


**Dickinson & Partners** 

LOCATION: Scranton, VA

COMPLETION: Construction starts 2010

## Virginia School for the Deaf and the Blind



The rural campus on which the schools are located is heavily regulated due to its civil war era history. This posed a huge challenge for the State of Virginia to maintain various programs and different special needs identities, while modernizing and expanding new educational programs. Winter & Company Special Needs Studio, along with BCWH of Richmond, Virginia, were selected to work with these constraints and create a new program, and design and build new facilities. Construction is scheduled to begin in 2010.

## Pennsylvania School for the Deaf

New Campus Master Planning

LOCATION: Philadelphia, PA

COMPLETION: TBD

Winter & Company Special Needs Studio and Winter & Company Urban Planning recently completed an update of the existing master plan to reflect the changing needs of the student population while creating a more integrated learning environment.



The master plan

update evaluated the current and projected educational needs of the school, identified academic program needs, key campus historic resources, institutional goals and recommended a framework for capital improvement decisions.



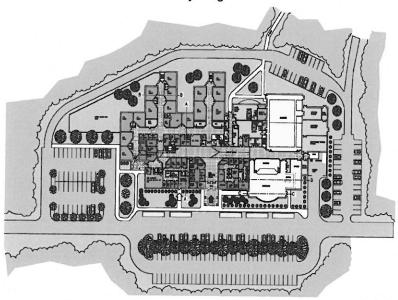
**Dickinson & Partners** 

LOCATION: Providence, RI

#### Rhode Island School for the Deaf

A building fit for a kid...

The Rhode Island School for the Deaf has extremely high expectations for their first new campus facility, commissioned by the State of Rhode Island. Drawn to the natural beauty of the site, Winter & Company Special Needs Studio, along with Design Partnership of Cambridge, worked to accomplish the project's main goal of creating a building that is sensitive to the size of students with special needs. Everything within the building from the stage in the "cafetorium" to the desks in the classrooms will be scaled for young children.



## Southbridge School

Winter & Company Special Needs Studio completed the design of a new 25,000 SF addition including a one-story classroom building and distance-learning center for the Soundbridge School. The school will provide method distance learning classrooms to be utilized by the community and special education at the school. The new building includes a direct, level-to-level connection with its existing floors to provide maximum utility and to improve the accessibility of the original building.



LOCATION: South Hartford, CT

SIZE: 25,000 SF

COMPLETION: October 2009 Philadelphia, PA



#### **Dickinson & Partners**

LOCATION: Philadelphia, PA

SIZE: 21,530 SF

COMPLETION: 2005

## Pennsylvania School for the Deaf



Winter & Company Special Needs Studio was hired by the school to work with the local architect on the programming and design to ensure that it accommodated the needs of the deaf and hard-of-hearing. The objectives were to create a functional deaf-friendly and economical facility that encourages activity and interaction and promotes excitement about learning. The new 21,530 SF building is organized along straightforward corridor arrangements. The project was completed in 2005.

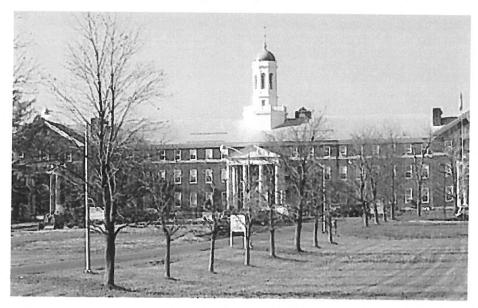
#### LOCATION: West Hartford, CT

SIZE: 110,000 SF

COST: \$27M

#### American School for the Deaf

The American School for the Deaf was the first deaf school in the United States. Winter & Company Special Needs Studio, along with EYP-Boston, was honored to be selected to provide architectural and engineering services for comprehensive renovations to an 110,000 SF historic 1820s education building. The scope of work includes a complete renovation to the interior and exterior of the building. Project budget was \$27 million.





#### **Dickinson & Partners**

LOCATION: Washington, DC

SIZE: 21,530 SF

COMPLETION: 2005

LOCATION: Danville, KY

## **Gallaudet University Clerc Residence Hall**

An aging college residence hall hindered, rather than enhanced, the student life experience, and most of the halls had not been updated to accommodate advances in deaf resident's life and safety needs. Winter & Company Special Needs Studio along with ASG Architects and Deaf Space Group worked together to develop a concept



design to provide new student apartments and a multimedia visual theater. The architectural language for the renovated hall was carefully developed to relate to the historic campus context and visual technology that are found around the campus. The drawings are completed but construction is on hold due to funding.

## Kentucky School for the Deaf

Kerr Hall Renovation



The Kentucky School for the Deaf, located in Danville, Kentucky, serves over 200 deaf and special needs students from all over the state. Winter & Company Special Needs Studio was retained by the State of Kentucky in 2004 with the goal to open the school for fall semester of 2006. The building has been completely renovated to include 25 classrooms, library/media center, offices, visual arts technology lab and full science labs. Construction took less than 12 months to complete.

#### **Girl Scouts of Black Diamond Council**

Volunteer Resource Center and Girl Zone/Urban Camp



LOCATION: Charleston, WV

SIZE: 27,928 SF

COST: \$5M

COMPLETION: Fall 2013

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

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







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

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

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









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

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

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

#### **Wood County Justice Center**



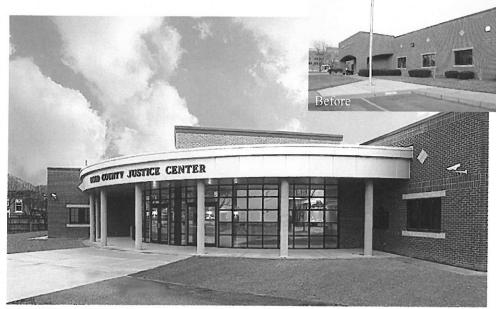
LOCATION: Parkersburg, WV

SIZE: 32,000 SF

COMPLETION: 2011

PROJECT COST: \$5M

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



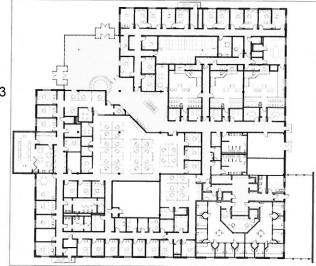




This project was an extensive renovation of a 15 year old, 32,000 square foot,

single story office building located in downtown Parkersburg, West Virginia. The building was purchased by the Wood County commission with the purpose of bringing together 3 government functions that had outgrown the 3 separate buildings that they occupied.

The renovated building consists of offices and 3 Courtrooms for the County's Magistrate Court system, public service windows for document pick-up and payment of fines, offices for the Sheriff's Department and



Home Confinement and a 12-hour Inmate Holding Center.

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

# **Construction & Facilities Management Office**

WVARNG



LOCATION: Charleston, WV

SIZE: 19,935 SF

COST: \$3.5M

COMPLETION: 2008

CONTACT: COL David Shafer WVARNG 1707 Coonskin Drive Charleston, WV 25311 304.561.6539

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



The Construction and Facilities Management Office (CFMO) Expansion project will bring all of the operations of the CFMO together under one roof. The branches that will occupy this facility include: Director of Engineering, Environmental, Planning and Programming, Facility Operations & Maintenance, Business Management, Resource



Management, and Design and Construction. This new facility is located slightly to the front, and adjacent to the existing facility, lending prominence to the new construction, and providing a new aesthetic to the entire complex.

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

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



## Goals/Objectives



#### 4.1 Goal/Objective 1

To provide a detailed approach and methodology on how to design and estimate cost/timeline for the project is going to be met.

ZMM has extensive knowledge of the existing facilities of The WV Schools for the Deaf and the Blind, having recently completed the Comprehensive Educational Facilities Plan (CEFP) for the entire campus. ZMM conducted a multitude of meetings and extensive field investigations and reviews of all buildings and building systems on the campus, as a part of the CEFP process.

ZMM Architects and Engineers have a full understanding of the campus and their needs. The project includes ongoing maintenance type projects at two facilities, The Elementary School for the Deaf and School for the Deaf/ Secondary. The project is being undertaken for the purposes of maintaining the infrastructure, architectural, structural, mechanical, plumbing, and life safety of the buildings. Specifically, the work will include a roof replacement at Elementary School for the Deaf along with the repair of parapet walls, re-pointing of the brick, hidden gutter and fascia replacement for more than three fourths of the building, the installation of the remaining sprinklers, and replacing aged and failing heat pumps/HVAC. For the School for the Deaf/Secondary it includes a new roof membrane system and new roof drains, new parapet flashing and the replacement of an aged and failing 20 ton split system which includes a 20 ton roof top evaporator and a new air handler with electric backup heat located inside the building's mechanical room.

As a full service design firm, ZMM employs all of the disciplines in-house to undertake the maintenance projects outlined in the request for expression of interest. If selected to provide services for the project, ZMM would set up teams under the direction of David E. Ferguson, AIA – Project Principal and John Dickinson, AIA – Project Principal, two professionals with considerable experience and a history of working closely with the West Virginia Schools for the Deaf and the Blind (WVSDB). The teams would include an architectural team led by Hank Walker, AIA to undertake the architectural and roof replacement projects and a mechanical team led by Steve Cook, PE to undertake the mechanical and HVAC projects. This approach will provide the WVSDB with a single, central point of contact for all of the design work, while simultaneously allowing all of the work to progress on time and within budget.

#### 4.2 Goal/Objective 2

To be able to describe in detail how to work with and facilitate the coordination of meeting regulatory requirements among stake holders.

Renovation projects require a unique approach. The most significant challenge with a complex renovation project is clearly identifying all of the required needs, including code related items, and then verifying that the scope can be completed within the available budget. ZMM will ensure that this scope identification occurs by conducting a detailed investigation of the existing facility with a team of architects and engineers. ZMM would commence the project by meeting with your representatives of the WV Schools of the Deaf and the Blind and their team to discuss the building condition, scope, and vision for the project. The team would also review any historic documentation and existing drawings that exist of each facility.

Following the kick-off meeting, ZMM would conduct the detailed investigation of The Elementary School for the Deaf and School for the Deaf/Secondary facilities with our team that would include (at a minimum) an architect, structural engineer, electrical engineer and mechanical engineer. The investigation would include (but not be limited to) an investigation of:

- Life Safety and Egress (Coordinated with the State Fire Marshal)
- Building Structural Systems

#### Goals/Objectives



- Building Roofing and Envelope
- Plumbing/Drainage Systems
- Electrical Service and Distribution
- Mechanical Systems

Based upon our extensive renovation experience, ZMM Architects and Engineers has developed a comprehensive assessment tool for building renovation projects, and we would employ our knowledge developed on other recent renovation projects to your benefit. ZMM also understands that the following issues specific to The Elementary School for the Deaf and School for the Deaf/Secondary need to be investigated to help fully develop/reconcile the scope and budget for the project:

- Roof Replacement
- Parapet Repair
- Gutter and Fascia Replacement
- Installation of required Sprinklers
- Replace aged and failing Heat Pumps/HVAC
- Replace Parapet Flashing
- Replace 20 ton Split System, 20 Ton Roof Top Evaporator and a new Air Handler

Based upon the field investigation, ZMM will develop recommended solutions with a focus on durability and maintainability. Itemized cost estimates will also be developed for various options. The recommendations and estimates will then be reviewed with the WV Schools for the Deaf and the Blind along with the WV school Building Authority (funding agency) to develop a strategy to implement the required scope of work. The result is an assessment that has been reviewed by all project stakeholders and all review agencies, ensuring that the scope of work and budget have been resolved prior to proceeding into the construction document and bidding phase.

#### 4.3 Goal/Objective 3

To provide guidance regarding the reasonableness and feasibility of construction bids.

Once the strategy is developed and agreed upon, ZMM will coordinate the plan with the authority having jurisdiction (WV State Fire Marshall's Office) regarding egress while the improvements are being made. Documentation of this coordination would be recorded to avoid any issues during the construction phase. ZMM would then commence with developing contract documents (bidding and construction documents) for the improvements.

ZMM commits to delivering both the initial assessment and final bid documents within the time frame set forth by the WV School Building Authority. Our ability to provide all services in-house allows us optimum control of the design schedule, and has led to a history of successful performance on projects with challenging schedules. ZMM will continue to provide services with the same team during the bidding phase. Our team will attend the pre-bid meeting, and assist in answering all bid questions.

## Goals/Objectives



#### 4.4 Goal/Objective 4

To provide a detailed account on how to assist the Agency in the Construction Management as needed.

The efforts of ZMM's architects and engineers will continue through the construction phase until the final completion of the project. ZMM continues to focus on quality throughout the construction phase by utilizing a dedicated Construction Administrator to coordinate the design team's effort throughout the construction process. The Architects and Engineers on the design team will also provide construction phase services including observation, responding to contractor questions, review of project submittals, attend progress meetings, make interim site visits, and provide substantial and final completion inspections. ZMM will exceed the 8 hours per month required by the WV School Building Authority. This approach will improve the communication and coordination between ZMM, the WV Schools for the Deaf and the Blind, WV School Building Authority, the contractor, and will ultimately lead to an improved construction phase. ZMM also recommends an 11 month inspection to ensure the integrity of the completed improvements.

#### 4.5 Goal/Objective 5

To provide a detailed proposal on how to complete As-Built Drawing Plans or documentation after completion of projects/construction.

ZMM has extensive knowledge of the existing facilities of The WV Schools for the Deaf and the Blind, having recently completed the Comprehensive Educational Facilities Plan (CEFP) for the entire facility. ZMM conducted meetings and extensive field investigations and reviews of all buildings and building systems on the campus, as a part of the CEFP process. ZMM field measured all buildings and has all current floor plans in CAD and CEFP records on file.

ZMM will keep accurate records during construction and also require the contractor to note any changes during the daily construction process. After the construction is complete ZMM will meet with the Contractor to review any final modifications and then complete any changes into a final set of documents for the Owner to keep as well as requiring the Contractor to furnish the Owner a set of Operational manuals with contacts and warranty information.

#### STATE OF WEST VIRGINIA Purchasing Division

## **PURCHASING AFFIDAVIT**

MANDATE: Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

**EXCEPTION:** The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

#### **DEFINITIONS:**

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

"Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

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

# Vendor's Name: ZMM Architects and Engineers Authorized Signature: Date: December 15, 2014 State of West Virginia County of Kanawha, to-wit: Taken, subscribed, and sworn to before me this 15 day of December, 2014. My Commission expires April 16, 2023. AFFIX SEIAUHEREPHINAMIAN NOTARY PUBLIC Purchasing Affidavit (Revised 07/01/2012)

Huntington WV 25701 My Commission Expires April 16, 2023