



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

**State of West Virginia**  
**Centralized Expression of Interest**  
**Architect/Engr**

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 West Virginia Purchasing Division

**VENDOR**

**Vendor Customer Code:**

**Vendor Name :** ZMM Architects and Engineers

**Address :** 222 Lee Street, W.

**Street :**

**City :** Charleston

**State :** WV **Country :** USA **Zip :** 25302

**Principal Contact :** David Ferguson

**Vendor Contact Phone:** 304.342.0159 **Extension:** 239


**FOR INFORMATION CONTACT THE BUYER**  
 Joseph E Hager III  
 (304) 558-2306  
 joseph.e.hageriii@wv.gov

**Vendor Signature X** 

**FEIN#** 550676608 **DATE** 7/11/22

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


**DESIGNATED CONTACT:** Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

(Name, Title)  \_\_\_\_\_  
(Printed Name and Title) David Ferguson, Principal  
(Address) 222 Lee Street, West, Charleston, WV25302  
(Phone Number) / (Fax Number) 304.342.0159 / 304.345.8144  
(email address) ferguson@zmm.com

**CERTIFICATION AND SIGNATURE:** By signing below, or submitting documentation through wvOASIS, I certify that: I have reviewed this Solicitation/Contract in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation/Contract for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated 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.

*By signing below, I further certify that I understand this Contract is subject to the provisions of West Virginia Code § 5A-3-62, which automatically voids certain contract clauses that violate State law; and that pursuant to W. Va. Code 5A-3-63, the entity entering into this contract is prohibited from engaging in a boycott against Israel.*

ZMM Architects and Engineers

(Company)  \_\_\_\_\_  
(Authorized Signature) (Representative Name, Title)  
David Ferguson, Principal 7/8/22  
(Printed Name and Title of Authorized Representative) (Date)  
304.342.0159 / 304.345.8144  
(Phone Number) (Fax Number)  
ferguson@zmm.com  
(Email Address)



# Expression of Interest for: WV School for the Deaf and the Blind

301 E. Main Street, Romney, WV 26757

## General Campus Site Upgrades and Renovations

DBS2200000003

July 11, 2022



**Dickinson + Partners**  
Uniting Education, Special Needs & Architecture  
[www.dickinsonpartners.com](http://www.dickinsonpartners.com)



July 11, 2022

Mr. Joseph Hager III, Buyer  
Department of Administration, Purchasing Division  
2019 Washington Street, East  
Charleston, WV 25305



**Subject: General Campus Site Upgrades and Renovations at the WV School for the Deaf and the Blind (DBS220000002)**

Dear Mr. Hager:

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 several projects together including the 2010-2020 Comprehensive Educational Facility Plan. Our team has conducted a multitude of meetings and extensive field investigations that reviewed all the buildings and building systems on campus. The investigations included field measurements of all buildings and developing floor plans in CAD a part of the CEFP process. Recent renovations include multiple upgrades and renovations to Keller Hall, improvements and renovations to Seaton Hall, and renovations to the Blue and Gold Building.

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. We are currently working with the WV School for Osteopathic Medicine with on-going campus upgrades and renovations, as well as BridgeValley Community and Technical College. Dickinson & Partners offers extensive experience in programming and design 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 and New York

ZMM employs all of the disciplines in-house to undertake the project upgrades outlined in the expression of interest. If selected to provide design services, one of ZMM's office locations is in Martinsburg, WV and would be in close proximity to the project and staff would be readily available to assist WVSD. David 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 will provide the WVSD 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, firm profiles, experience, qualifications, personnel, and references. Additionally, please visit our website [zmm.com](http://zmm.com) 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.

Respectfully submitted,

**ZMM, Inc.**

A handwritten signature in blue ink, appearing to read 'D. Ferguson', is written over the typed name and title.

David E. Ferguson, AIA, REFP  
Principal

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# PROJECT APPROACH AND UNDERSTANDING

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Based upon information provided in the Expression of Interest, ZMM understands that the West Virginia School for the Deaf and the Blind intends to renovate and evaluate the Physical Education Building.

On any renovation/addition project one of the main challenges is clearly identifying a project scope that can be delivered within the proposed budget. To help resolve this issue, ZMM recommends a 2 phase approach for renovation projects. The first step involves ZMM's architectural and engineering staff to commence this process with a review of all available building drawings and will perform a full on-site investigation and evaluation of the existing building conditions.



ZMM will review any documentation including funding applications, plans, specifications, photographs, and any reports that exist. Additionally (if required), ZMM will prepare as built plans of the facilities prior to the on-site investigation by the full A/E team. The investigation is conducted by a team of building design professionals including Architects, Structural, Electrical, and Mechanical Engineers. The team will focus the investigation on the following systems:

- Life Safety and Egress (Coordinated with the State Fire Marshal)
- Plumbing Systems
- Electrical Service and Distribution, Emergency Power
- Lighting
- Mechanical Systems
- Data/IT Infrastructure
- Security Systems

## Project Approach and Understanding (cont.)

Once the investigation effort is complete, the design team prepares an estimate of the probable construction cost. The estimate will then be used to confirm the scope (with the funding application). The result of the investigation will be a report that will serve as the basis for future project and design decisions. This comprehensive approach ensures that all improvements are made in a manner that supports the overall vision of the facility - and is the first step to delivering a project on budget - by clearly defining the scope and project expectations.

**Tracking and Managing Design:** ZMM follows standard SBA guidelines for planning, design, and construction. The design phases consist of Planning, Schematic Design, Design Development and Construction Documents. During the various design phases, ZMM will work collaboratively with all team members

Teamwork is the key to a successful design and construction process, and we commit to working with West Virginia School for the Deaf and the Blind and the contractor to help ensure the success of the project. ZMM's Principal in Charge and Project Architect will be the primary contact on the project and lead the design effort and management throughout the design process.



**Processing Submittals and Shop Drawings:** The contractor will submit product submittals and shop drawings to ZMM. ZMM will require the following from the contractor:

1. A fully executed submittal cover sheet must be attached to each submittal.
2. Formal submission of coordination drawings approved by all subcontractors as required.
3. Contractor to submit a copy of the daily construction reports.
4. Electronic submissions of drawings and product data are acceptable. Actual product samples must be submitted to determine kind, color, pattern, and textures.

**Construction Administrative Responsibilities:** ZMM recently modified the way we provide construction administrative services to improve the service we provide our clients. The ZMM project architect will now serve as the primary representative of ZMM and will attend all construction progress meetings. ZMM also employs an in-house construction administrator (who will assist the project architect) and an administrative assistant who tracks all information (incoming and outgoing) during the construction phase to ensure ZMM is being responsive to project needs.

Typical construction phase services include the following:

1. Attendance at Pre-Construction Meeting
2. Observation of Construction Progress
3. Working Collaboratively with the Team
4. Serve as the Liaison Between the Owner and Contractor
5. Attend Biweekly Site Visits/Construction Progress Meetings
6. Responsible for Attending Pre-Installation Meetings
7. Attends Progress Meetings
8. Certify Applications for Payment by the Contractor
9. Process RFI's, Submittals and Change Orders



## Project Approach and Understanding (cont.)

ZMM has recently updated our front-end documents to ensure we receive all required information from the contractor. This was accomplished by tying the processing of pay applications to the submission of this required information.

At ZMM, we strive to be the best. Our Quality Assurance/Quality Control Program is one step in the process of exceeding our clients' expectations, and includes the following:

- **Selecting the Project Team:** ZMM's diverse staff ensures that each project team is made up of highly qualified members, each dedicated to the project's success. Project team members are selected based upon relevant experience, and ability to help achieve the client's vision. Our proposed team for the project is composed of professionals from ZMM with experience designing schools throughout West Virginia and Virginia.
- **Identifying Project Requirements:** Project team members are fully integrated in each phase of the design process, ensuring a quality project from the beginning, and to take advantage of early sustainable design decision-making. The project requirements are included in a 'Basis of Design' that each member of the project team can access. The 'Basis of Design' helps guide important project decisions.
- **Identifying Client Expectations:** Knowing and understanding our clients' expectations is our goal. This knowledge gives our team a baseline for exceeding expectations. We will commence the design effort with a planning session to help identify your vision for the project.
- **Ongoing Project Reviews:** As part of the ongoing project reviews, we conduct quality assurance evaluations during each stage of the project:
  - › Schematic Design Phase
  - › Design Development Phase
  - › Construction Documents Phase
  - › Construction Administration Phase



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

- **Post Project Review:** At the completion of every project our staff members participate in a learning session to gain insight useful for future projects. These reviews typically include participation from the owner and the contractor.
- **Staff Training, Assessment and Enhancement:** Ongoing staff development and training is very important to ZMM Architects and Engineers. Providing increased opportunities for learning and advancement leads to improved employee performance and more successful projects for our clients.



## **Project Approach and Understanding (cont.)**

### **Project Goals**

The WV Schools for the Deaf and the Blind and the WV Board of Education have established goals and objectives for the projects listed below. ZMM will follow the project approach as outlined above; review design solutions / discuss manufacturer / product preferences with WVDE project representatives, prepare bid documents, manage the bidding process, perform construction administration, and include the following steps for each project:

**Goal / Objective #1:** Design and Construct New Campus Entry and Bus Loop. To achieve this goal and objective, ZMM will document and review existing conditions, ZMM recommends obtaining a topographic survey of the proposed area for the entry and bus loop, ZMM will meet with project stakeholders to discuss memorial / tribute ideas so they are included in the design, even for elements that will be added in the future.

**Goal / Objective #2:** Design and Install Outdoor Classrooms and a Greenhouse / High Tunnel. To achieve this goal and objective, ZMM will document and review existing conditions, review locations for existing site infrastructure / utilities to avoid disturbance, and determine site orientation for best use of natural sunlight and shading.

**Goal / Objective #3:** Design and Construct a Truck Accessible Loading Dock at the Sevigny Building. To achieve this goal and objective, ZMM will document and review existing conditions, review types of deliveries anticipated at the building, review the anticipated size of delivery trucks, review existing drainage conditions, and any required exiting / building egress requirements.

# ABOUT ZMM ARCHITECTS & ENGINEERS

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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 with our in-house team. Our integrated design approach makes ZMM unique among architecture/engineering firms, and helps to ensure the quality of our design solutions by providing more thoroughly coordinated construction documents.



ZMM has maintained a diverse portfolio since the founding of the firm. Early commissions included higher education projects for West Virginia University and Concord College, State Office Buildings 5, 6, & 7 on the State of West Virginia Capitol Campus, and armories for the West Virginia Army National Guard.

Maintaining a diverse practice for over 60 years has provided ZMM with extensive experience in a variety of building types, including educational facilities, governmental facilities (military, justice, correctional), healthcare facilities, recreation facilities, commercial office space, light industrial facilities, and multi-unit residential buildings.

The original partners transferred ownership of the firm to Robert Doeffinger, PE and Steve Branner in 1986. Mr. Doeffinger and Mr. Branner helped guide and expand the firm to its present size of 35 people. Over the past 20 years David Ferguson, AIA, and Adam Krason, AIA, LEED-AP joined in ownership of the firm. In 2020, Randy Jones also joined in ownership of the firm when ZMM acquired Blacksburg-based OWPR Architects & Engineers to create a regional design firm that employs more than 50 highly-skilled professionals.

ZMM has become a leader in sustainable / energy-efficient design, and a trusted resource on complex renovation projects. ZMM's unique renovation project approach and ability to



## About ZMM Architects & Engineers (cont.)

provide comprehensive design services has also led the firm to be selected to improve landmark buildings, including the Charleston Coliseum & Convention Center, the Clay Center for the Arts and Sciences, the State of West Virginia Culture Center, and the West Virginia State Capitol Building. Additional significant projects designed by the firm include the Explorer Academy (Cabell County Schools), the Logan-Mingo Readiness Center, the Manassas Park Community Center and Natatorium, the design of the Fourth High School (Frederick County Public Schools), the new Harrington Waddell Elementary School (Lexington City Schools), CAMC Teays Valley ICU, and Ridgeview Elementary School (Raleigh County Schools). ZMM has also provided design services on more than 300 school projects throughout the region.

ZMM's building-related design services include:

### Pre-Design

Educational Facility Planning  
Existing Building Evaluation  
Space Planning  
Master Planning

Programming  
Feasibility Studies  
Site Evaluation and Analysis  
Construction Cost Estimating

### Design

Architectural Design  
Interior Design  
Lighting Design

Sustainable Design  
Landscape Architecture

### Engineering

Civil Engineering  
Mechanical Engineering  
Energy Consumption Analysis

Structural Engineering  
Electrical Engineering  
Net Zero Buildings

### Post-Design

Construction Administration  
Life Cycle Cost Analysis

Value Engineering  
Post-Occupancy Evaluation

As ZMM looks to the future, we remain committed to the ideal of providing high-quality, client-focused design solutions that meet budget and schedule requirements. We listen, we respond promptly with innovative and efficient solutions, and we deliver quality projects and develop lasting relationships. You see us in YOUR community every day.



# AWARD WINNING DESIGN

## 2020

**AIA West Virginia Chapter: Merit Award**  
*Achievement in Architecture for New Construction*  
Mountain Valley Elementary School  
Bluefield, West Virginia

**AIA West Virginia Chapter: Merit Award**  
*Achievement in Architecture*  
Ridgeview Elementary School  
Crab Orchard, West Virginia

## 2019

**AIA West Virginia Chapter: Honor Award**  
**AIA West Virginia Chapter: Citation Award**  
**AIA West Virginia Chapter: People's Choice Award**  
Charleston Coliseum & Convention Center  
Charleston, West Virginia

## 2018

**AIA West Virginia Chapter: Citation Award**  
*Unbuilt Project*  
Charleston EDGE  
Charleston, West Virginia

## 2017

**AIA West Virginia Chapter: Merit Award**  
*Achievement in Architecture*  
Explorer Academy  
Huntington, West Virginia

**AIA West Virginia Chapter: Merit Award**  
*Achievement in Sustainability*  
Logan - Mingo Readiness Center  
Holden, West Virginia

## 2016

**AIA West Virginia Chapter: Merit Award**  
*Achievement in Architecture in Interior Design*  
Christ Church United Methodist  
Charleston, West Virginia



# AWARD WINNING DESIGN

## **AIA West Virginia Chapter: Merit Award**

### *Achievement in Architecture*

Gauley River Elementary School  
Craigsville, West Virginia



## **2015**

## **AIA West Virginia Chapter: Honor Award**

### *Achievement in Architecture in Sustainable Design*

Edgewood Elementary School  
Charleston, West Virginia



## **AIA West Virginia Chapter: Merit Award**

### *Achievement in Architecture*

Kenna Pk-5 School  
Kenna, West Virginia



## **2014**

## **AIA West Virginia Chapter: Merit Award**

### *Achievement in Architecture in Sustainable Design*

Huntington East Middle School  
Huntington, West Virginia



## **AIA West Virginia Chapter: Merit Award**

### *Achievement in Architecture*

Southern West Virginia Community & Technical College  
Williamson, West Virginia



## **AIA West Virginia Chapter: Merit Award**

### *Achievement in Architecture in Interiors/Graphics*

Girl Scouts of Black Diamond Council  
Charleston, West Virginia

## **2012**

## **AIA West Virginia Chapter: Honor Award**

### *Excellence in Architecture*

West Virginia Housing Development Fund Building  
Charleston, West Virginia

## **2011**

## **AIA West Virginia Chapter: Honor Award**

### *Excellence in Architecture in Historical Preservation*

Southside Elementary/Huntington Middle School  
Huntington, West Virginia



**American School for the Deaf - New Gallaudet-Clerc K-12 Education Center**

## CORE EXPERTISE

Dickinson + Partners (D+P) 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, D+P was founded in 2001 to provide facilities programming and design for special needs projects including facilities deaf, blind, and mobility-impaired users. D+P has consulted on projects all over the world and been recognized as one of the top firms in the world 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 a cornerstone of Dickinson + Partners practice. The profile of designing for today's special needs 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 International Disabled Standard (IDS) 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 special needs students and their staff.

## We Listen, Innovate, and Deliver.

One of the truly measurable, tangible attributes we bring to any project 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.



# RELEVANT EXPERIENCE

## WV Schools for the Deaf and the Blind



## 2022

- Blue & Gold Building Renovations (Currently in Design). The scope of work is to completely renovate the existing Blue & Gold Building to accommodate 2-3 meeting / conference rooms, small kitchenette or café style kitchen, student activity space, toilets and building support space. The existing HVAC systems, plumbing, electrical, interior partitions, ceilings, and finishes will be removed as part of this renovation. All exterior windows and exterior doors will be replaced and a new fire suppression system and fire alarm system will be included in this project. Exterior ADA access to the building and a new water service / fire service entrance will be included in the design documents.



- Keller Hall Re-Roofing (Currently in Design). The scope of work is to re-roof Keller Hall. The project would include replacement of the existing roofing membrane, rigid insulation, metal coping, and perimeter wood nailers. A new roof hatch will be included in the project.
- ZMM Architects & Engineers conducted a study and evaluation of architectural and engineering components of Seaton Hall for the purpose of short-term planning and budgeting. As part of the building assessment, ZMM provided recommendations for renovations and equipment replacement. which generated a list of capital projects. This project list outlines a scope of work along with recommendations on what time of year the work should commence, approximate duration of the construction and if phased construction should be considered. As the projects were developed, consideration was given to concerns of potential major equipment failures which could

not only render the building unusable for a period but could also result in a large, unexpected capital expense.

The evaluation process was to determine the viability of the complex of buildings and determine the cost / benefit to renovate the existing aging facility so it may return to use. Comparisons of building renovation costs / maintenance cost versus complete building replacement were generated. The proposed projects outlined in this study will rehabilitate the existing building and provide the WV Schools for the Deaf and the Blind a long-lasting facility that will not require significant renovations for thirty to forty years.

## 2020

- In 2020 ZMM prepared the floor plans for Keller Hall and started to develop the overall standard for each building plan for the campus books.
- ZMM has developed plan books and campus maps for multiple higher education institutions throughout WV, including:
  - BridgeValley CTC
  - New River CTC
  - Southern WV CTC
  - Mountwest CTC
  - WVSU
  - WVSOM



## 2019

- In 2019 ZMM provided design services for renovations to Seaton Hall. This included a new walk-in freezer, improvements to the loading dock, new power generator, and ADA renovations (exterior



- stairs and ramps). Portions of this work was completed by the U.S. Military. ZMM had to conduct structural assessments on the portion of the old bakery that the U.S. Military demolished.



- ZMM provided design services for the exterior masonry restoration and reroofing for the Blue & Gold Building. This building is on the national historic register and the renovations had to be approved by WVSHPO.
- ZMM provided design services for vehicle gates around Keller Hall.
- ZMM provided design services for demolition of the Arnold House and construction of the new parking lot at IRC. Design included site lighting (which Owner has purchased light poles). Lot is currently graded gravel.
- ZMM provided design services for the demolition of the Arnold House and the partial demolition of the Old Bakery at Seaton Hall. These buildings were on the national historic register and the demolitions/renovations had to be approved by WVSHPO.
- ZMM designed the renovations to Keller Hall. This project was a very short design time to accommodate the 2019 project with the U.S. Military. This renovation included upgrades to the water service, electrical service upgrades, restroom / shower renovations, ADA renovations, new food service kitchen and interior finish renovations.



- ZMM did the roof replacement on Blue & Gold, and ZMM has replaced roofs on educational facilities throughout West Virginia.
- At Seaton Hall in 2019, ZMM designed the emergency generator for the building as part of the new freezer installation.
- ZMM has designed full-building generators for educational facilities, healthcare facilities, and military facilities throughout West Virginia.





# HIGHER EDUCATION CAMPUS DEVELOPMENT PLANS

LOCATION | COMPLETION  
WEST VIRGINIA | 2012 - PRESENT

**ZMM Architects & Engineers has created Campus Development Plans (often referred to as Master Plans) for a variety of institutions throughout West Virginia.**

These plans have been developed for:

- West Virginia State University (in association with TERRADON)
- New River Community and Technical College
- Southern West Virginia Community and Technical College
- BridgeValley Community and Technical College

Details of these plans are as follows:

## West Virginia State University

ZMM Architects & Engineers, in conjunction with BSP and TERRADON, were selected to develop a 10-year Campus Development Plan for West Virginia State University's campus in Institute, WV. The project commenced with a review of all existing information available about the campus and targeted facilities. Following the stakeholder meetings, ZMM conducted building assessments of the major academic buildings, as well as the kitchen adjacent to the main dining area. This information was supplemented by a recent campus building inventory that had been conducted. The information gathered through this variety of activities was



## Higher Education Campus Development Plans (cont.)

then synthesized into an overall campus development plan. The plan, which covers a 10-year period, projects the need for new construction, property acquisition, site improvement and building renovation, and includes a phased approach for the implementation of campus improvements. The document is supplemented with a visual master plan that reflects the implemented improvements.

### New River Community and Technical College

ZMM Architects & Engineers worked with New River Community and Technical College to develop a Master Plan that improved the efficiency of space usage across the school's four campuses:

- Raleigh County (including Ghent ATC)
- Lewisburg
- Princeton
- Summersville

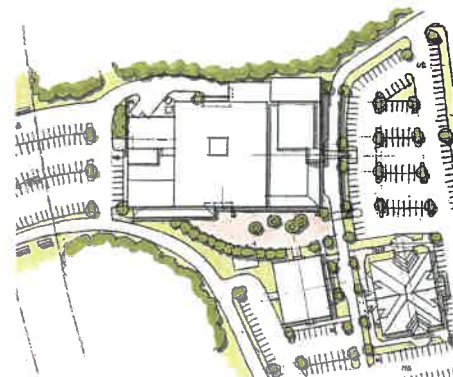
When the plan was completed, New River Community and Technical College had elected to reduce their overall footprint from 14 to 7 facilities. This improved the efficiency of space usage from 262 SF/FTE to 190 SF/FTE. ZMM visited the remaining facilities to develop a plan to address deferred maintenance issues. The plan also anticipated a modest addition to the facility in Summersville to accommodate several programs that are currently housed off-site.

### Southern West Virginia Community and Technical College

ZMM Architects & Engineers commenced the Southern WVCTC master planning process by having a team of architects and engineers visit all of the campuses and sites:

- Logan Campus
- Williamson Campus
- Boone Campus/Lincoln Site
- Wyoming/McDowell Campus

Following these campus visits, ZMM conducted stakeholder meetings at each location. At the meetings stakeholders discussed positive attributes, challenges, and needs for each facility and campus. Following the stakeholder meetings, an Executive Steering Committee was convened to review the outcomes of the stakeholder meetings, and to assist

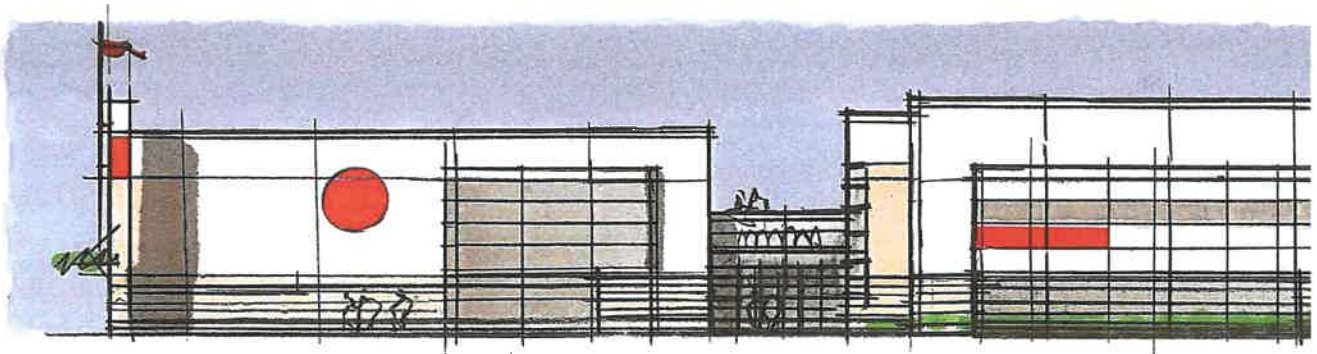
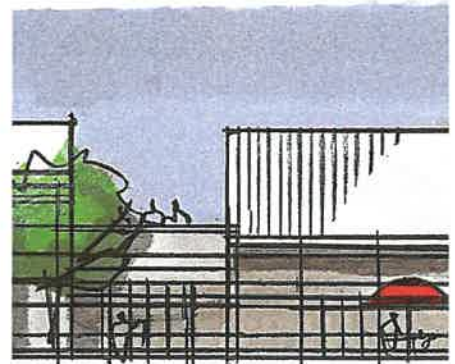
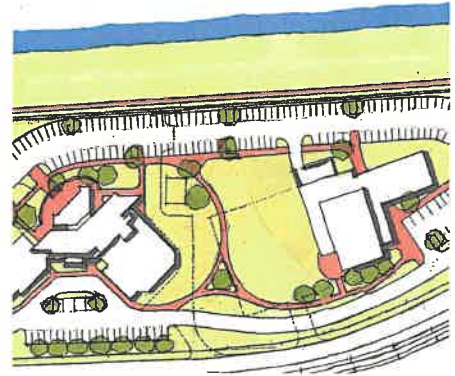
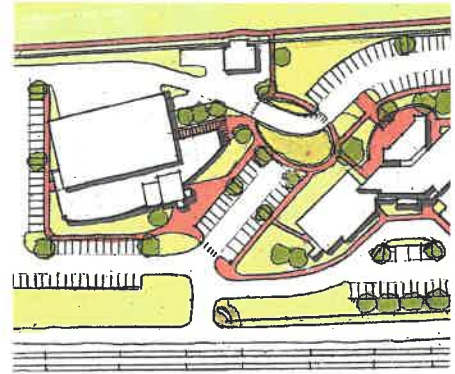


## Higher Education Campus Development Plans (cont.)

in developing an overall strategy and framework for the plan. Based upon these meetings, several themes emerged that helped guide the development of the Master Plan. It was determined that the plan would include standards for signage, lighting, and exterior finishes. Additionally, although a significant expansion of facilities is not envisioned, the Master Plan will include the potential development of a new facility on property that has already been acquired adjacent to US 119. This new facility will replace the Boone County Campus, which is currently located in a shared facility with the Boone County Career and Technical Center. The new facility would serve as a gateway to Southern's other facilities, and the location on US 119 will give the College the opportunity to draw additional students from the greater Charleston area. Due to the scope of the development of this new facility, the Master Plan includes a strategy to address improvements both with and without the new Boone County Campus. Other potential improvements included updating Southern's two largest facilities - Building 'A' on the Logan Campus, and the Main Building on the Williamson Campus, as well as the development of *Student Success Centers* on all campuses (starting in Logan).

### BridgeValley Community and Technical College

ZMM Architects & Engineers has produced several Campus Development Plans for BridgeValley CTC (previously Bridgemont CTC and Kanawha Valley CTC). The master plan includes assessments of existing facility conditions on the Montgomery and South Charleston Campuses, including deferred maintenance, building code issues, and energy efficiency. An analysis was included that identifies current and future space needs, parking requirements, current land use and future property acquisition, infrastructure development, sustainability, landscaping, and pedestrian circulation. The plan also includes project budgeting and a multi-year capital improvement plan. An assessment of the impact of projected enrollment and demographic changes on facilities was provided along with a delineation of how the campuses will interact and support each other and improve efficiency. Recent updates have included additional investigation of existing facilities on the Montgomery Campus and in the historic Elk City neighborhood on Charleston's West Side, as well as the Stone & Thomas Building in downtown Charleston.





**Services:**

- Masterplanning
- Facilities Condition Assessment
- Facility Optimization Solutions
- Special Needs Life and Safety Planning
- Utilities Assessment

**Total Square Footage:** 180,000 GSF

**Project Highlights:**

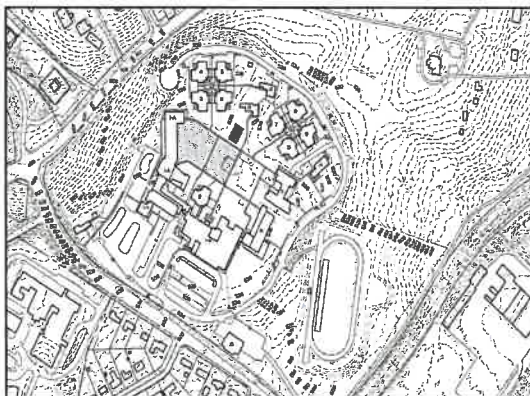
- 120 acres / Expansive Views
- Pedestrian Boulevard
- Separation of Pedestrian and Vehicular Traffic
- Life and Safety Plan for the Blind and VI

Per the direction of the State of Tennessee, the Tennessee School for the Blind has undertaken the task creating Campus-wide Master and Utilization Plan (CMUP).

The purpose of the CMUP is to provide the owner a long range plan that addresses the requirements for new construction, major renovations and utilization issues. Comprehensive master planning is a way of identifying the best route to the future through a workable plan for handling priority related and anticipated changes. The CMUP 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.

Along with Dickinson + Partners team, Stakeholders group was established consisting of locals, teachers, staff and the community. The ultimate goal is to develop a comprehensive facility plan that hinges on close collaboration with students and educators in creating personalized facility metrics in support of the State's mission. An fundamental part of any master plan creates alignment between facilities and educational goals. An Educational Optimization Assessment measures:

- CAPACITY** for students and specific program needs
- BALANCE and COMFORT** of formal, informal and productivity of learning environment
- TECHNOLOGY** alignment to amplify learning for the Blind
- SECURITY** and supervision components





# WV STATE OFFICE BUILDINGS 5, 6, & 7

LOCATION | AWARDS  
CHARLESTON, WV | 2011 AIA WV MERIT AWARD

Nearly 50 years ago, ZMM (as Zando, Martin & Milstead) designed the original West Virginia State Office Buildings 5, 6, and 7.

Over the past decade, ZMM has been assisting the State of West Virginia General Services Division with various improvements to the buildings. The improvements commenced with an overall building assessment that examined the condition of the buildings, as well as cost and phasing options for implementing various upgrades. Improvements that have been undertaken have ranged from substantial renovations to maintenance and repair projects, and include:

**Major Renovations:** ZMM Architects & Engineers 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 and 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 sprinkler service and fire pump into the building, demolition, hazardous material abatement, and FF&E coordination. The project was delivered considerably under the anticipated project budget.



## WV State Office Buildings 5, 6 & 7 (cont.)

The next phase of the renovation involved floors 7, 8, and 9 of Building 5 and floors 7 and 8 of Building 6. All of these floors have been fully renovated, including abatement, demolition, new construction, and updated life safety systems. ZMM has also provided design services for the renovation of the 2nd, 3rd, and 4th Floors of Building 6 for the Department of Education and Division of Personnel.

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

**Electrical Courtyard Improvements:** ZMM Architects & Engineers 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, and 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 and 6, and the second to replace the doors at the entries to Buildings 5, 6, and 7. The window replacement included over 1,200 windows, as well as decorative extruded metal screen. These projects included building envelope and security considerations. The projects were designed and staged to minimize disturbance to the buildings' occupants.

**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, and 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.

**Valve Replacement:** ZMM assisted with a valve replacement project to isolate mechanical risers in Building 5 and 6. This technically intensive mechanical project gave the General Services Division greater control over the system, and helped to isolate various risers in the event of significant system failures in the future.







Construction Cost: \$ 11,000,000  
Size: 35,000 GSF

Year of Completion: 2018

Project Team:

John Dickinson, AIA –Design Architect/Consultant  
Julie Husband, AIA— Project Manager

Client:

State of Minnesota  
Minnesota State Academy for the Deaf  
Supt. Terry Wilding  
615 Olof Hanson Dr.  
Fairbault, MN 55021

This 44 bed residence hall for the Minnesota State Academy for the Deaf (MSAD) in Fairbault, MN consolidates boys and girls together in a single shared facility. Built to replace aging and inefficient existing Frechette Hall, it is the first new residence hall built on campus since the 1960's. Conceived of as a **“Go home Go School concept”** the building is comprised of two main wings connected by a single story entrance lobby. Beyond housing its students, the new dormitory creates an iconic campus space for the MSAD and strengthens the relationship to the existing campus buildings. The two story building steps with the sites topography to reduce its apparent height and allow for seamless and accessible connection between inside and out. Finished with warm materials, comfortable furniture and flooded with daylight, the residence hall employs the principals of Deaf Space to create a homelike environment that is tuned to deaf sensibilities.

Designing spaces for Deaf-Hard of Hearing and Low-vision users were built upon the ADA's guidelines and includes acoustic considerations: ambient, mechanical, and material noise, but also lighting. By designing the spaces to include diffused natural light, minimizing corners and niches, using simple texture and color variations we were able to improve visibility between spaces. These details were combined with legibility of the floor plan to create a highly accessible facility to meet their programmatic needs.

The design team collaborated early to clearly identify strategies to guide team members through design and construction to achieve Minnesota B3 standards. Specific attention was focused on maintaining high indoor environmental quality through creative and intentional control of daylighting, vibrations, thermal comfort, and acoustics for a user demographic sensitive to light, sound, and vibrations.





# JOINT INTERAGENCY TRAINING AND EDUCATION CENTER (JITEC)

LEED  
GOLD

LOCATION KINGWOOD, WV	SIZE 283,000 SF	COMPLETION 2013	COST \$100M	AWARDS 2011 AIA WV HONOR AWARD
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**ZMM Architects and Engineers, in association with AECOM, provided architectural and engineering design services for the Joint Interagency Training and Education Center (JITEC), an Army National Guard campus-style facility for training and operational mission support.**

Sited on 30 acres at the northern end of Camp Dawson between the Cheat River and the foot of Brier Mountain, this 283,000 SF project included the design of a new operations building, expansion of the billeting facility, renovation of the training facility, creation of a new base access control point (ACP) and visitor's center, and design for walkway connectors between all the facilities.

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



## Joint Interagency Training and Education Center (JITEC) (cont.)

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

Security requirements for the command center influenced the design of the attached, copper-clad "black box" that is an homage to the native rock stratification seen throughout the state. The building consists of four distinct areas: the Joint Operations Center, a suite of secure training rooms, base headquarters and JITEC administrative offices, and a 6,000 SF server and telecommunications room.

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

The 180,000 SF billeting (hotel) expansion more than triples the facility size and increases the total capacity from 189 guest rooms to 600 guest rooms and suites. Designed to relate to the existing architecture with similar scale, materials, textures, and massing, the addition also brings in new elements, such as iconic glazed building corner elements, to integrate the design of the operations building. A dedicated lobby with terrazzo tile flooring leads to a monumental stair with terrazzo treads, open risers, and a glass/stainless steel railing for access to the open lounge areas on the second and third floors. The lobby's design provides a hotel atmosphere, underscored by the Liberty Lounge, an upscale bar and restaurant area, with wood finishes salvaged from the gymnasium floor of the former Preston County Armory. The six "executive suites" are designed with the full amenities of corporate hotels.





# BRIDGEVALLEY COMMUNITY & TECHNICAL COLLEGE DAVIS HALL

LOCATION | SIZE | COMPLETION | COST  
MONTGOMERY, WV | 77,215 SF | 2012 | \$4M

**ZMM was selected by BridgeValley CTC and the WV Community and Technical College System to provide architectural and engineering design services for the renovation of Davis Hall.**

Davis Hall is a classroom and laboratory facility constructed in 1970 for WVU-Tech. The exterior consists of architectural pre-cast concrete panels and a curtain wall system. The interior includes an open, two-story atrium, large auditorium, and five levels of office and classroom space that are constructed of demountable partitions. Prior to commencing the design effort, ZMM completed a thorough assessment of the facility. The assessment revealed significant life-safety concerns that were not previously identified, including the use of non-plenum rated plastic insulated wiring throughout the return air plenums, mechanical units located above ceilings in exit stairs, and a lack of adequate fresh air for building occupants. As part of this initial assessment, ZMM assisted in developing a scope of work for the renovation project, as well as a long-range plan for future improvements.

The scope of the renovation included life-safety upgrades (replacing non-plenum rated wiring and fire alarm system), improvements to the building envelope (replacing curtain wall and roofing), hazardous material abatement, mechanical improvements (replacing boiler, chiller, and outdoor air ventilation system), and interior improvements (replacing ceilings and lighting, upgrading furnishings).

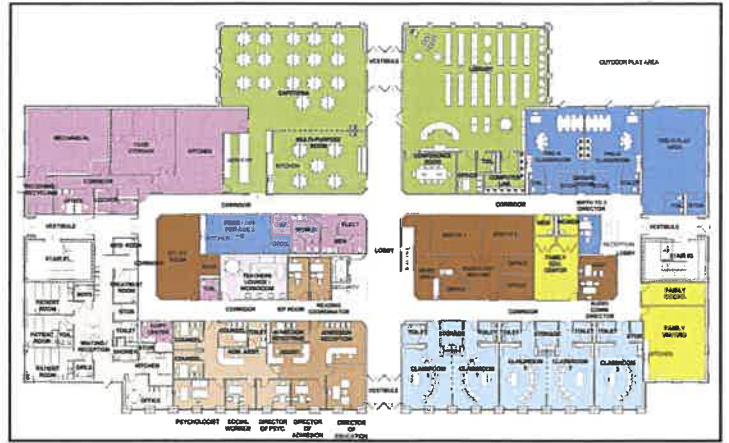


# Dickinson + Partners

Uniting Education, Special Needs & Architecture  
www.dickinsonpartners.com



## New Gallaudet-Cleric K-12 Educational Center American School for the Deaf Hartford, Connecticut



**Completion Date:** October 2013, **Renovation:** Current  
**Square Footage:** 55,000 **Construction Cost:** \$17,000,000

### Dickinson + Partners Project Team:

John Dickinson , AIA—Project Architect/Consultant

### Reference:

American School for the Deaf  
Jeffery Bravin, Executive Director  
Thomas Wood, COO  
139 North Main Street  
West Hartford, CT 06107  
(860) 570-2300

Founded in 1817, American School for the Deaf (ASD) is the first permanent school for the deaf in the United States and is the birthplace of American Sign Language. It is a world renowned leader in providing comprehensive educational programs and services for deaf and hard-of-hearing students.

The concept for the new K-12 Educational Center was to replace the 100,000 square foot 1930's era Gallaudet Hall and to create the social hub of the campus. The site solution for the project resolves several key areas in the heart of the campus, primarily the main campus green.



Old Gallaudet Hall

The new building opened the 2013 school year and is specially designed to address the unique learning style of deaf and hard of hearing children. This includes state-of-the-art amplification equipment, proper levels of lighting, a visual public address system and the latest educational interactive whiteboard technology. The design features 26 classrooms with science and life skills labs, counseling, speech, occupational and physical therapy workspaces as well as a library, Student Health Center, food service and cafeteria.

The new facility will also incorporate specialty birth to three spaces and an audiological suite and a multipurpose room which can be used by the community





# CHARLESTON COLISEUM & CONVENTION CENTER

LEED  
SILVER

LOCATION	SIZE	COMPLETION	COST	AWARDS
CHARLESTON, WV	283,000 SF	2018	\$100M	2019 AIA WV HONOR AWARD, CITATION & PEOPLE'S CHOICE AWARD

**The Charleston Coliseum & Convention Center expansion and renovation was a transformational project for both the city of Charleston and West Virginia.**

Our team built on the strong authentic character of Charleston to remake the Charleston Convention Center into a more efficient, sustainable, dynamic, and iconic best-in-class destination.

The design of the expansion and renovation of the Charleston Convention Center was inspired by the story of West Virginia. Defined by a rugged landscape, the early history of the state was dominated by extractive industries: salt, coal, timber, and trapping. This set the local character. With a foundation rich in resources, manufacturing added value to the raw materials, with crafts like glass-making and industries like chemicals and energy. This attracted a rich diversity of immigrants and a culture of craftsmanship that set the urban character. The economy is shifting from industry and service to information and technology. Again, the landscape and industry that shaped the region gives Charleston real advantages to exploit. The Creative Class, critical for the information and technology age, can live and work anywhere - what they want is access to the outdoors, real places with real character, and continuous education and entertainment.



## Charleston Coliseum & Convention Center (cont.)

Our design started with an organizational concept inspired by this history. The Kanawha River is the social organizing link throughout the region, with settlement zones developing on whatever flat land the river provided, creating nodes of activities among the hills and valleys. The renovated Convention Center is a building that emerges from this iconic landscape, with the architecture and topography working together. The Convention Center also has distinct active nodes to celebrate each activity; arena, convention, and banquet. These nodes are connected like the hills and cut-rock faces that are seen throughout the state, as people work to connect to each other through the landscape.

The first critical design objective was to create separate entries and identities for the arena and convention center. This allowed for simultaneous events and clarity of use. For the Convention Center to thrive, it needed a real ballroom assembly space. Located overlooking the Elk River, the ballroom pre-function space is the most dramatic feature of the center. Together, the three glass-enclosed nodes - arena lobby, convention lobby, and ballroom - define a unique Charleston event campus. As described above, the spaces that connect these nodes are inspired by the hills and cut-rock faces that connect the towns along the Kanawha River. With the building emerging from the landscape and expressed as cut-rock walls, the connecting areas were designed to be expressive and economical backdrops to the glass-boxed nodes.

While the expansion transformed the southeast to the middle of the northern zone of the site, the existing building mass still dominates a portion of the northern and eastern campus. The dominant expression along these existing façades is the landscaped berms. As we imagined the building expression emerging from the landscape, a strategy developed to transform these berms to reflect, at the pedestrian level, the overall design theme. Above the level of the berms, the concourse level windows open up the façade and provide a much needed break in the massing. The upper part of the arena is painted in two tones to match the new building, playing off the different faces. The north, south, east, and west faces painted a lighter shade; and the northeast, southeast, southwest, and northwest faces a darker shade. Dramatic exterior color-changing lighting on the northeast, southeast, southwest, and northwest faces transform the look and feel of the center into a fun and festive landmark.





# SOUTHERN WVCTC APPLIED TECHNOLOGY CENTER

LOCATION	SIZE	COMPLETION	COST	AWARDS
WILLIAMSON, WV	22,000 SF	2013	\$5M	2014 AIA WV MERIT AWARD

**The Applied Technology Center is located on Southern WV Community & Technical College's Williamson Campus.**

The 22,000 SF college houses a virtual welding shop, machine shop, mechatronics shop, a mining support program, administrative and student support spaces, as well as several allied health programs. The space is designed to maximize both flexibility and adaptability, and reflects a modern, "high-tech" aesthetic while also blending into the overall campus.

The large area for lab spaces is enhanced by black brick and surrounded by classrooms and support spaces, highlighted by a curved glass wall with metal panel accents. The entrance is crafted with smooth, metal panels and is adjacent to textured, patterned, black-brick construction to resemble coal. A wood trellis area sits on round concrete columns, shading the glass walls of the administration, and acts as an area for student gatherings. The strong contrast between the metal/glass and the wood trellis works to strengthen the outside space.

The facility is the first step in the progression of a planned campus expansion that will ultimately include expanding the campus into the adjacent property. ZMM worked with the school on a campus master plan, with a focus on creating green space and improving pedestrian and vehicular circulation, which was completed in 2014.







## SOUTHSIDE ELEMENTARY / HUNTINGTON MIDDLE SCHOOL

LOCATION	SIZE	COMPLETION	COST	AWARDS
HUNTINGTON, WV	158,194 SF	2010	\$27M	2011 AIA WV HONOR AWARD

**ZMM designed the facility to maintain the historic character of the façade and auditorium, while replacing the remainder of the school. The community has maintained a landmark, while developing state-of-the-art schools.**

The two schools that previously occupied the site of the Southside Elementary School and Huntington Middle School were Cammack Elementary School and Cammack Middle School. The facility houses a combined 1,014 elementary and middle school students. When the Cabell County Board of Education proposed a \$61 million bond issue in 2006, the Huntington community expressed the importance of saving this neighborhood landmark. The 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 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 school into a modern educational complex.

Although the 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 schools only share a kitchen, which has been located to serve separate dining facilities.





# CHERRY RIVER ELEMENTARY SCHOOL / RICHWOOD MIDDLE & HIGH SCHOOLS

LOCATION | SIZE | COMPLETION | COST  
RICHWOOD, WV | 108,000 SF | EST. 2023 | TBD

**Nicholas County Schools' new facility in Richwood is located adjacent to the Cherry River at the site of the existing elementary school.**

The school will house Cherry River Elementary School, Richwood Middle School, and Richwood High School. The design of the building highlights the area's natural resources with the use of heavy wood timber trusses and stone. The new facility contains flexible classroom configurations, which will allow all three schools to "expand" within the building footprint. Several classrooms have doors accessible from separate corridors, which makes adding classrooms per grade level much easier as enrollment changes occur.

Separate high school, middle school, and elementary school entrances are located on the west, north and east sides, respectively. The activities entrance is located on the river side of the building, which provides access to the dining room, auditorium, band room, and gymnasium without accessing the remainder of the academic portion of the facility. The existing building will be renovated on the interior and exterior to transform the facility and blend into the significant addition that will be constructed on the site. The construction will occur in multiple phases and is projected to commence in March of 2022 and be completed in December of 2023.





# CABELL COUNTY EXPLORER ACADEMY

LOCATION HUNTINGTON, WV	SIZE 60,000 SF	COMPLETION 2016	COST \$15M	AWARDS 2017 AIA WV MERIT AWARD
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**The Explorer Academy is the first of its kind in West Virginia – a school that employs an Expeditionary Learning model.**

Cabell County School officials are hoping the school will set an example for schools around the state and see the school as the next step in education. It is a consolidation of Peyton Elementary and Geneva Kent Elementary in the east end of Huntington. The schools were combined to form the incubator school, which is housed in the former Beverly Hills Middle School facility that was remodeled to fit the mold of the Expeditionary Learning model. Cabell County School officials describe the school as an explorer academy, 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. Students 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 work a lot with community partners, people who are experts in their fields. The students are going out and doing fieldwork, 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.





# MOUNTAIN VALLEY ELEMENTARY SCHOOL

LOCATION BLUEFIELD, WV	SIZE 47,400 SF	COMPLETION 2019	COST \$12.5M	AWARDS 2020 AIA WV MERIT AWARD
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**Mountain Valley Elementary School located in Green Valley, WV will serve approximately 400 students in grades Pre-Kindergarten through 5th Grade.**

The facility will replace the existing Ceres Elementary School as well as house students from Glenwood PK-8 and Brushfork Elementary Schools to help eliminate overcrowding. The school includes a PE room, cafeteria, full commercial kitchen, media center, combined art/music classroom, and a computer classroom. The classrooms are arranged so the Pre-Kindergarten and Kindergarten classrooms are all on one side of the main entrance, segregated from the remainder of the classrooms. Grades 1-5 are on the opposite side of the entrance in a two-story arrangement. The shared spaces, such as the media center, PE room, cafeteria, and administration suite, are all located in the center of the building.

The exterior of the building is designed to reflect a lodge. To accomplish this, all of the classrooms, as well as the main entrance, have sloped metal roofs. The exterior materials are a combination of brick, metal panel, and stone veneer. The school is designed with ICF exterior walls and polished concrete floors throughout. The site includes a separate bus loop and parent loop on the front of the building and an isolated service drive on the backside of the facility. A maintenance drive is also included to allow access to an existing cemetery on site.





# BLUEFIELD PRIMARY SCHOOL

LOCATION BLUEFIELD, WV	SIZE 48,752 SF	COMPLETION 2020	COST \$12.5M
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**Bluefield Primary is a consolidation of two local schools, Whitethorn and Memorial. The county wanted to retain architectural elements from the former schools to preserve some of their history.**

This was accomplished by oval vaulted ceilings and circular windows throughout the building and the use of red brick and tan stone. Bluefield Primary serves approximately 404 students in grades pre-kindergarten through second grade. The school includes a gymnasium, full commercial kitchen with cafeteria, media center, music room, and art room.

Keeping the Bluefield Beavers in mind, the school colors are found throughout the design with the addition of complimentary colors to create a colorful learning environment for the students. Creating a flexible space where students can learn, innovate, and collaborate was the driving force behind the design of the media center. The multipurpose space houses areas for reading, STEM activities, and small class gatherings. Soft seating and varying flooring materials divide and define each area. A custom wall mural was developed to reflect the community and also serves as a writable surface for teachers and students. The exterior is clad with brick, limestone trim, and accented with a metal roof. The students wait for bus loading beneath a long canopy that resembles a railroad station, accented with railroad-style lanterns. The site also has a parent pickup area, along with an isolated service drive for deliveries.





# EDGEWOOD ELEMENTARY SCHOOL

LOCATION CHARLESTON, WV	SIZE 56,000 SF	COMPLETION 2013	COST \$18M	AWARDS 2015 AIA WV HONOR AWARD
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**Edgewood Elementary School on Charleston's west side has been designated as the state's first "School of the Future."**

The school is challenging the traditional model of curriculum delivery by providing space for hands-on exploration, technology, and small group projects. Each instructional area contains a distributed library/media center, space for projects, and a shared performance area. The concept was to mimic a museum, where students are engaged in the learning materials throughout the environment. As these spaces were developed, it became clear that regular, rectilinear spaces did not create the variety of environments for visual separation of tasks. To permit the spaces to be reconfigured based on the needs of the students, furniture will provide flexibility and adaptability. Overhead and sliding doors, as well as movable partitions, are included to allow the space to be fully open or subdivided.

In addition to re-examining the traditional classroom layout, the use of technology was considered. Each student will have a personal device and the school is designed to function as an educational tool. Students will learn about daylighting, captured rainwater, efficient building envelopes, solar hot water, efficient HVAC systems, and recycling. This information will be relayed through signage and a dashboard system that will monitor energy use. The design team created a guide to introduce the educators to the sustainable features and help pull these elements into the curriculum.



# David E. Ferguson, AIA, REFP



## Role

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 200 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

### WV Schools for the Deaf and the Blind, Romney, WV

Mr. Ferguson was the principal on multiple projects at the WV SDB. Projects include: 2010-2020 CEFP, Keller and Seaton Hall renovations, exterior restoration and re-roofing at the Blue and Gold building, campus floor plans and a multitude of other design services.

## 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

- A4LE Southeast Region Board of Directors – WV State Governor
- West Virginia Chapter, American Institute of Architects, Past President
- West Virginia Chapter, American Institute of Architects, Board Director
- American Institute of Architects, Member
- Member, Association for Learning Environments(A4LE)
- Recognized Educational Facility Planner (REFP) by the A4LE
- Professional Member, US Green Building Council
- High School Mentoring/Job Shadowing Program for 6 County School Systems
- WV AIA IDP Program Mentor/Advisor

**Marshall University - Smith Hall, Huntington, WV**

ZMM worked closely with Marshall University professors to determine the correct acoustics to meet the accreditation needs for the college. Being an extension of the Fine Arts Department, the Owner also felt that it was necessary to address the overall aesthetics for a creative mind and inspire the students. Taking inspiration from the Thundering Herd, the building was transformed with a mature palette and pops of green selected by the renovation committee.

**Huntington East Middle School, Huntington, WV** Mr. Ferguson was 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.

**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.

**Explorer Academy, Huntington, WV** Mr. Ferguson was the project manager/architect on the this new Expeditionary Learning Incubator School. The new Academy is the consolidation of Peyton Elementary and Geneva Kent Elementary in the east end of Huntington. The schools were combined and housed in the former Beverly Hills Middle School facility that will be remodeled to fit the mold of the Expeditionary Learning model. 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 learn by conducting learning expeditions rather than sitting in a classroom with one subject being taught at a time.

**Nicholas County Schools**

Mr. Ferguson is currently leading the recovery effort for the of \$160 million dollar school system. On June 23, 2016 a flood destroyed three schools. These facilities were left unsafe and un-inhabitable. ZMM has worked with the County Board of education, FEMA, and the State of WV to design and program temporary schools and develop a long range plan to rebuild. ZMM is working on the programming and design for the two new facilities. A community school which will include spaces for the community to access, and a comprehensive High School/Middle School which will include a Career Technical Center. Mr. Ferguson has conducted community Meetings, established goals and priorities, created overall budgets and a project scope all stakeholders will support.

**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.

**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.



# John C. Dickinson, AIA, CEFPI

Principal of Dickinson + Partners

## Curriculum Vitae

### Education:

Masters in Business Administration,  
University of Phoenix, 1998

Bachelor of Architecture,  
University of Kentucky, 1988

Diploma, E'cole des Architecture,  
Paris, France, 1987

### Professional Affiliations

American Institute of Architects (AIA)

Colorado School for the Deaf and  
the Blind, Chair of the Board of Trustee

Council of Educational Facility  
Planners International (CEFPI)

National Association of the Deaf (NAD)

National Autism Association (NAA)

John Dickinson is one of most prominent deaf architects in the world. A recognized expert in his field, John is often invited to speak, write and participate in conferences and lectures. Mr. Dickinson is the founder of Dickinson + Partners, a consulting firm that offers collaborative visioning, programming, design and planning expertise to schools throughout the country. A wide range of rich experiences have deepened John's perspective, allowing for a holistic approach virtually unparalleled in the industry. Creating architecture with some of the most renown educational architecture firms, he collaborates as an educational facility planner with some of the country's most thoughtful clients.

For over 30 years, John has planned and designed meaningful places for learners across the country. Through an exceptionally creative approach, he has designed schools and living spaces with both focused and playful spaces. As you review his portfolio, you will notice the breadth of artistic expression that results from listening to his client's desires. Working with a focus on community, John is a master at bringing together the school community, parents, students, and the larger community to create consensus and engagement.

Prior to founding Dickinson + Partners, John was Principal and Director of Special Needs Studio at Winter & Company an Architectural and Urban planning firm in Boulder, Colorado.

## Professional Experience



AEC New K-12 Deaf School for Girls and Boys  
Campus Master Plan, New K-12 Education Center  
*Doha, Qatar*  
(Photo left)



American School for the Deaf  
New Gallaudet-Clerc K-12 Education Center  
*West Hartford, CT*

Minnesota State Academy for the Deaf for the Deaf  
New Residence Hall  
*Faribault, MN*  
(Photo left)



West Virginia School for the Deaf and the Blind  
CEFP Project  
*Romney, WV*

Tennessee School for the Blind  
Campus Master Planning, and Utilization Plan  
*Nashville, TN*  
(Photo left)



# Chris A. Campbell, AIA, LEED AP



## Role

Project Architect

## Professional Registrations

Registered Architect (WV)  
LEED Accredited Professional  
NCARB [REDACTED]

Mr. Campbell joined ZMM in November of 2017. Prior employment experience includes serving in the capacity of Architect and Project Manager for a variety of projects. This experience includes Educational (K-12 and Higher Education), Commercial Offices, Automotive Dealerships, Justice (Homeland Security and Department of Justice Offices), and religious spaces. Mr. Campbell's responsibilities include programming, design, documentation, coordination of the architectural and engineering team, and construction administration. Project responsibilities comprised all duties from project inception to completion. Mr. Campbell began his career in 1996 and until 2006 was primarily working on K-12 educational projects throughout West Virginia. From 2006 until present the majority of his projects were Higher Education.

## Project Experience

**WV School for the Deaf and the Blind, Romney, WV**  
**BridgeValley CTC Master Plan Update, Montgomery, WV**  
**Williamstown Elementary School, Williamstown, WV**  
**Wood County Technical Center, Parkersburg, WV**  
**Nicholas County High School, Summersville, WV**  
**Multiple Fayette County Schools – Fayetteville, WV**  
**Staats Building Assessment, Charleston, WV**

## Stone and Thomas Build-Out for BridgeValley CTC

Mr. Campbell is the Project manager on the BridgeValley Community & Technical College renovation project. This project consists of renovating the existing Stone & Thomas building in downtown Charleston and relocating their headquarters here. Renovations include creating a student union and life spaces on the basement level. The street level will contain student life spaces, digital learning commons, 100-person classroom, and lecture stair to access the mezzanine level. The mezzanine will contain student services spaces. The second and third floors will contain classrooms, administrative and faculty offices. The fourth floor is comprised of allied health programs, with a simulated hospital floor for an enhanced education experience. The fifth floor contains multi-function laboratory spaces.

## Education

Bachelor of Architecture, University of Tennessee, 1996

## Employment History

2020 - Present, Board of Directors, ZMM  
2017 - Present, Architect, ZMM  
2006 - 2017, Architect, Project Manager, Charleston Area Architectural Firm  
1996 - 2006, Architect, Project Manager, Charleston Area Architectural Firm

## Civic Affiliations

- WV American Institute of Architects, President, 2006-2007
- WV American Institute of Architects, Executive Committee, 2001-2009
- WV American Institute of Architects, Intern Development Coordinator, 2000-2005
- University of Charleston, Interior Design Advisory Board (2014 - 2016)

### **Previous Work Experience**

#### **Arthur Weisberg Applied Engineering Complex, Marshall University, Huntington, WV**

Mr. Campbell was the project architect on the new Applied Engineering Complex. The \$52M, 145,000 SF five-story facility houses six academic and research programs. The facility was designed to promote collaboration and communication between departments, programs, faculty and students. Mr. Campbell was responsible for the overall management of the design team, construction documentation and construction administration. This project was awarded LEED Gold certification which was the first LEED certified building on Marshall University's campus. The sustainable design features include stormwater management which is also utilized as an educational tool. A green roof was utilized over the advanced materials testing laboratory. Stormwater is collected from the green roof and samples can be collected in a lower level laboratory allowing opportunities to study ecological effects of various plantings.

#### **New Headquarters Building, Blue Ridge Community and Technical College, Martinsburg, WV**

Mr. Campbell was the project architect for the new headquarters building for one of West Virginia's fastest growing Colleges. The \$16M, 45,000 SF facility relocated several of the College's programs from an existing campus which could no longer support the growing student population. The three-story facility is comprised of classrooms, faculty offices, administration, science laboratories, allied health laboratories, and associated student support spaces. Mr. Campbell was responsible for the overall management of the design team, construction documentation and construction administration. In 2016, this project received a Merit Award from AIA West Virginia for the exterior massing of elements and the design intent to incorporate the historic buildings and factories/mills located in Martinsburg. A couple years after the completion of this project, Mr. Campbell presented the College's ten-year master plan to the State Council for the Community and Technical College System of West Virginia. Mr. Campbell was responsible for conducting on-site facility evaluations for all 3 campuses, conducted steering and vision meetings with the College's stakeholders, reported analysis, and prepared the final report.

#### **Virginia Thomas Law Center for the Performing Arts, West Virginia Wesleyan College, Buckhannon, WV**

Mr. Campbell was the project architect for the new \$7M performing arts center. The design of the facility reflected the historic administration building while providing a vision for the future. The facility consists of a 374-seat performance hall, gathering spaces, dressing rooms, and building support spaces. The performing arts center was designed to be utilized by the and Theatre and Dance Department as well as offering a public facility for events and conferences. Mr. Campbell's project duties included facility programming, schematic design, overall management of the design team, construction documentation, and construction administration.

#### **University High School, Monongalia County Schools, Morgantown, WV**

Mr. Campbell was the project architect for the new 217,000 SF high school. The design of the \$29M, 1,500 student facility was a throwback to the traditional school buildings with a large frontage presence consisting of classrooms. Mr. Campbell's project duties included facility programming, schematic design, overall management of the design team and construction documentation.

#### **Ram Stadium, Shepherd University, Shepherdstown, WV**

Mr. Campbell was the project manager for the new 2,100 seat home side bleachers and press box/concessions building. The design of stadium and facility complimented the historic Shepherdstown and campus architecture. Mr. Campbell's project duties included, programming, overall management of the design team and construction documentation. In 2002, this project received a Merit Award from AIA West Virginia for the exterior massing of elements and the design intent to incorporate the historic buildings and factories/mills located in Martinsburg.

# Carly Chapman



## Role

Interior Designer

Mrs. Chapman serves as the Interior Designer at ZMM. Mrs. Chapman takes pride in her work's originality and always strives to help the client's vision and intent come alive in the design process. Her experience at ZMM includes Education, Municipal, Residential, Healthcare, and Hospitality projects. In her past position she focused on both Corporate and Healthcare design. Mrs. Chapman's responsibilities include conducting design proposals and presentations, as well as producing design documents and specifications relating to all aspects of interior design.

Mrs. Chapman has served as the interior designer for a variety of projects. Projects range from renovations to new construction and is comprised of every industry. Her responsibilities include design concept, presentation, documentation, specification writing, and architectural drafting.

## Project Experience

**Southern West Virginia Community & Technical College, Williamson, WV** Mrs. Chapman was the Interior Designer for the new Applied Technology Center. The 22,000SF building featured large, flexible teaching areas that can adapt as the curriculum changes for each program. The facility is the first step in the progression of a planned campus expansion that will ultimately include the adjacent Readiness Center. ZMM is also providing a new campus master plan, with a focus on creating green space and improving pedestrian and vehicular circulation. This project was designed to meet the USGBC LEED Silver standards.

### **Marshall University - Smith Hall, Huntington, WV**

ZMM worked closely with Marshall University professors to determine the correct acoustics to meet the accreditation needs for the college. The Owner felt that it was necessary to address the overall aesthetics for a creative mind and inspire the students. Taking inspiration from the Thundering Herd, the interiors of the building were transformed with a mature palette and pops of green selected by the renovation committee.

### **WVSOM Tech Building Expansion (Testing Center), Lewisburg, WV**

Mrs. Chapman is currently the Interior Designer on the design of the new testing center at WVSOM. The new testing center was designed to connect to the Tech Building to the CEC and will accommodate 220 students. The Testing Center does not

## Education

Bachelor of Interior Design, University of Charleston, 2012

## Employment History

2016 - Present, Interior Designer, ZMM  
2012 - 2016, Project Manager/Interior Designer, Contemporary Galleries, Inc.  
2010 - 2012, Interior Design Intern, ZMM

have exterior windows, features from both buildings including masonry banding and natural stone elements were used to provide human scale, while natural lighting is introduced in the concourse and pre-function space.

#### **Bluefield Primary School, Bluefield, WV**

The new school is the result of a consolidation of two local schools in the Bluefield area. The county wanted to bring in architectural elements from both of the former schools. This was accomplished by oval vaulted ceilings and circular windows throughout the building. The school will house Pre-k-2<sup>nd</sup> grade students. Keeping the Bluefield Beavers in mind, the school colors are found throughout the design with the addition of complimentary colors to create a colorful learning environment for the students. No school can be designed without a little fun in mind... A large dry erase mural spans the length of the media center allowing students to express their imaginations.

#### **Mountain Valley Elementary School, Green Valley, WV**

Mountain Valley opened its doors in the fall of 2019. The concept for the school was simple – fundamentals. Primary colors and geometric shapes create a fun and easy way to keep the students engaged and ready to learn, while sticking to the basics. A large wall in the media center allows for quiet areas to study or play with built in casework depicting the word “READ” allowing for shelving and seating within the oversized letters. The scheme continues throughout the school seen in the polished concrete floor pattern and 3D shapes protruding above the main entrance for a guaranteed jaw dropping design.

#### **Williamstown Elementary School, Williamstown, WV**

When designing a new school built on tradition, the initial thought of school colors and clean lines comes to mind. This was not the case with the new Williamstown Elementary School. Using the school colors as our basis of design, the county was open to adding complimentary colors to entice the students for a bright and exciting learning environment. Colorful floor pattern adorns the corridors, using the tile for wayfinding and structure for students. In the media center you will find a custom designed tree, dripping in lights mimicking fireflies and a perfect campfire setting for storytelling. The tradition is kept alive with the pops of Maroon and Gold throughout the cafeteria and gym.

#### **Ravenswood Middle School, Ravenswood, WV**

Ravenswood Middle School is an addition to Ravenswood Highschool. The project allows for both schools to share one cafeteria and improve the exterior of the existing high school with the new entrance of the middle school. The interiors were clean and pattern filled using the school colors, insuring an easy transition from one school to the other.

#### **New River Primary/Oak Hill Middle School, Oak Hill, WV**

These schools were designed as separate schools sharing the same site and are connected by a mechanical wing. This building called for a challenging design concept. The schools each had their own unique design theme, but were delicately connected in small aspects of color or architectural techniques, allowing the interiors to flow seamlessly. The PK-2 is community driven in the design. House facades and custom glass adorn the halls drawing the eye to the exposed structure above. The ceilings reflect the sky and are divided by clouds. Collins Middle also was design with the environment in mind. Using biophilic design, wood planked feature walls are found in the entrance corridor and expand to the open structure above.

#### **Valley Park Community Center, Hurricane, WV**

The new community center replaced an existing structure that was recently demolished earlier this year. The new building houses a commercial kitchen, administration wing, ballroom, and a locker room complex with administration quarters for the attached Wave Pool.

#### **Pipestem Resort State Park Lodge, Pipestem, WV**

Mrs. Chapman is currently the interior designer on the renovations to 88 guestrooms on first floor, bathroom expansions on the 7<sup>th</sup> floor, renovations to the dining area with a bar addition, renovations to all conference rooms, finish selections and renovations in the lobby. ZMM will be replacing the ceilings and lightings in all public spaces and guestroom corridors in the main McKeever lodge building. Mountain creek lodge will receive new roofing on the guestroom and restrooms in the tram building.

# Robert Doeffinger, PE



## Role

Engineering Principal

## 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 over 45 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.

## Selective Project Experience

### Charleston Coliseum & Convention Center, Charleston, WV

Mr. Doeffinger was the mechanical project engineer on the expansion and renovation to the Charleston Civic Center project. The \$100M, 300,000 SF design-build project was a collaboration with tvsdesign and BBL Carlton. The design commenced in the spring of 2015, and construction was completed in October 2018. The mechanical design is expected to reduce the energy requirements defined by ASHRAE 90.1-2013 by an estimated 25% and extensive water savings will be shown. The project includes a new chilled and hot water central plant with extensive replacement and upgrades to the facilities existing mechanical systems. Multiple phases of construction will allow the Civic Center to remain operational throughout the construction progress.

## Education

Master of Science Architectural Engineering, The Pennsylvania State University, 1976

Thesis: Air Change Measurements using a Tracer Gas Technique

Bachelor of Science Mechanical Engineering, West Virginia University, 1973

## Employment History

2005 - Present, President, ZMM

1983 - 2005, Vice President and Engineering Principal, ZMM

1976 - 1983, Mechanical Engineer

## Civic Affiliations

- 2019 Marshall University Honorary Alumni Award of Distinction College of Engineering
- 2021 Industrial and Professional Advisory Council – College of Engineering at The Pennsylvania State University
- ASHRAE – Member of the Technical Committee Load Calculations Data and Procedures for 25 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

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

**Huntington East Middle School, Huntington, WV** Mr. Pruett was responsible for the HVAC systems design. This school features numerous sustainable features, including an air monitoring system for verifiable indoor air quality, variable refrigerant flow (VRF) systems for portions of the school that will operate year-round, preheating of the domestic hot water with the heating hot water return. Mr. Pruett also conducted an extensive energy analysis of the building and all of its systems to maximize the effect of each component, resulting in a projected reduction in energy consumption of 32% compared to a baseline analysis.

**Edgewood Elementary School, Charleston, WV** Mr. Pruett was the mechanical engineer on the new Kanawha County Elementary School on Charleston's West Side and responsible for the HVAC systems design. 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.

#### **Cabell County Schools**

Barboursville Middle School - Additions and Renovations  
Huntington East Middle School  
Huntington High School - Controls system replacement for Explorer Academy  
Cabell County Bus Garage  
Southside Elementary/Huntington Middle School  
Huntington High School – Cooling tower replacement  
Cabell Midland High School - Cooling tower replacement  
Martha Elementary School- Addition  
Salt Rock Elementary Renovations  
Cabell County Career & Technical Center – HVAC Replacement  
Huntington High School Wrestling Room Addition  
Milton PK - Additions and Renovations

#### **Fayette County Schools**

New River Primary / Oak Hill Middle School  
Valley High School - Gym addition  
Oak Hill High School – Renovations  
Fayetteville PK-8 - Renovations  
Midland Trail High School - Renovations  
Valley PK-8 - Renovations  
Meadow Bridge Elementary - Renovations  
Divide Elementary - Additions and Renovations

#### **Putnam County Schools**

Hurricane High School - Renovations  
Putnam Career & Technical Center – Welding Shop

#### **Valley Health Systems, Wayne, WV**

Mr. Pruett was the mechanical engineer on the new health clinic in Wayne, WV. ZMM prepared construction documents for a new, one-story medical building operated by Valley Health Systems of Huntington, WV. The building is 15,580SF on a 2-acre site including approximately 100 parking spaces. Valley Health Systems provides primary and preventative care to the medically underserved population of southern West Virginia. The new building will replace an existing undersized facility.

## Grant H. White, PE



### **Role**

Electrical Engineer

### **Professional Registrations**

Professional Engineer (WV)

Mr. White brings more than 14 years' experience and serves as the Electrical Engineer at ZMM. Mr. White provides electrical design services for a vast number of projects consisting of commercial, educational, correctional, institutional, and military facilities.

Mr. White 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.

### **Project Experience**

Valley Health Systems, Huntington, WV  
Keith Albee Theater - Renovations, Huntington, WV  
WV School of Osteopathic Medicine, Lewisburg, WV  
Braxton County Cooler Freezer  
Jefferson County Schools – Transportation Technology Center  
Jefferson County Schools – Ranson Elementary School  
Jefferson County Schools – Sheperdstown Elementary School  
Jefferson County Schools – Washington High School Aux Gym  
Woodrow Wilson High School Renovations/Additions  
Braxton County Middle School Renovations  
WVDNR Tomblin Wildlife Management  
Frederick County Public Schools -Old Aylor Middle School – HVAC Renovations  
Frederick County Public Schools Board Office – Corridor and Restroom Renovations

### **Education**

Marshall University Graduate College,  
South Charleston, WV – Completed  
Project Management and Engineering  
Law classes in the Engineering  
Management Program, 2007 - 2008

Bachelor of Science in Electrical  
Engineering, West Virginia University  
Institute of Technology, 2007

### **Employment History**

2021 - Present, Electrical Engineer, ZMM  
2018 – 2021, Electrical Engineer, CDI  
Engineering  
2017 – 2018, Controls Engineering  
Specialist, Trane  
2014 – 2017, Electrical Engineer, CDI  
Engineering



# Ronnie L. Burdette, PE



## Role

Structural Engineer

## Professional Registrations

Professional Engineer (WV)

Mr. Burdette serves as a Structural Engineer at ZMM. His experience he has gained while at ZMM includes Educational (Additions/Renovation) to existing structures and Construction of new structures), Municipal (Community Centers), and Residential projects. Mr. Burdette's responsibilities include design and analysis of structural systems and documentation of design results.

## Project Experience

Mr. Burdette has served as Structural Engineer on a variety of projects. His responsibilities included analysis and design of multiple building materials (Steel, Timber, & Concrete) and production of structural drawing sets.

**Capitol Guard House, Charleston, WV**  
**WVDOH Webster County HQ, Webster Springs, WV**  
**Tomblin Wildlife Viewing Tower, HQ, and Visitor's Center, Logan, WV**  
**Valley Health Clinic, Milton, WV**

## **New River Primary / Oak Hill Middle School, Oak Hill, WV**

This project included two separate projects located on the same site. Both buildings were designed to be ICF and steel construction.

## **Valley Park Community Center, Hurricane, WV**

This new community center replaced an existing one at the Valley Park Wave Pool. It was designed to be constructed from masonry, steel, and timber. The exterior design concept plays off the existing Commons Building which incorporates stone accents, wood siding and multi-sloped roofing around a floor plan that emphasizes the internal components. The Community Center entrance is highlighted by a large, exposed wood truss bearing on tall, battered stone columns. These wood beams are featured at all entrances and carry into the meeting room prefuction to provide a fully-exposed, open wood structure.

## **Charleston EDGE, Charleston, WV**

The Charleston Edge renovation project included many different structural materials. The existing building is brick and

## Education

Bachelor of Science in Civil Engineering, West Virginia University, 2015

Master of Business Administration, University of Charleston (WV), 2016

## Employment History

January 2017 – Present, Structural Engineer, ZMM  
May 2016 – Dec 2016, Civil/Structural EIT, Jacobs Engineering  
May 2015 – Dec 2015, Civil/Structural EIT, CDI Corporation

masonry construction. Construction plans included the design of a new roof-top addition that was supported by structural steel.

**Multiple Residential Renovations and Additions**

The majority of residential work in the area consists of timber and masonry construction. Mr. Burdette has been involved in residential projects that range from analysis of a 3-story wooden deck to the design of a new addition to an existing timber and masonry house.

# Benjamin S. McMillan, PE, LEED AP



**Role**  
Civil Engineer

**Professional Registrations**  
Professional Engineer (WV, VA, KY)  
LEED Accredited Professional

Mr. McMillan has 13 years experience and knowledge in land development throughout Virginia. Mr. McMillan has experience in creating site plans and producing reports and specifications for institutional, commercial, residential, utility-scale solar, and one utility-scale wind project. Site plan preparations included layout, utility plans, grading, drainage, stormwater management, and erosion and sediment control.

Mr. McMillan also attends meetings, interacts with clients and contractors, performs various construction administration duties, and visits projects throughout the design and construction phases. Additional experience includes:

- Experienced in land development for institutional, multi-family residential, commercial, industrial, and utility-scale solar projects.
- Knowledgeable of all phases of land development from schematic design through project close-out.
- Complied with and obtained approval from many different municipal and state agencies in multiple states.
- Proficient in AutoCAD Civil 3D and familiar with other engineering design programs such as Autodesk Storm & Sanitary Analysis, HydraFLOW, HydroCAD, Flowmaster, and PondPack.
- Coordinated site designs with other design disciplines including Architects, Landscape Architects, Mechanical Engineers, Electrical Engineers, Structural Engineers, and Geotechnical Engineers.

## **Project Experience**

Jackson General Hospital Expansion, Ripley, WV  
New River Medical Mall, Fayetteville, WV  
Health Right Medical Clinic, Charleston, WV  
WV Department of Agriculture Lab Building, Charleston, WV  
Salvation Army, Beckley, WV

## **Education**

Bachelor of Science in Civil Engineering, Minor in Public and Urban Affairs, Virginia Polytechnic Institute and State University, Blacksburg, VA, 2007

## **Employment History**

2020 - Present, Civil Engineer, ZMM  
2013 - 2020, Senior Project Engineer, Timmons Group, Richmond, VA  
2008 - 2013, Civil Engineer, OWPR, Blacksburg, VA  
2007 - 2008, Project Engineer, Anderson & Associates, Blacksburg, VA

# CLIENT REFERENCES



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BridgeValley CTC  
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304.205.6600



Dr. David Geeslin, Superintendent/CEO  
Indiana School for the Deaf  
1200 East 42<sup>nd</sup> Street  
Indianapolis, IN 46205  
317.550.4807



Greg Melton, Director of General Services (Retired)  
Capitol Complex Building  
Building 1, Room MB-60  
1900 Kanawha Blvd., E.  
Charleston, WV 25305  
304.965.1219 (cell)



David Molgaard, Former City Manager  
Charleston Coliseum & Convention Center  
200 Civic Center Drive  
Charleston, WV 25301  
304.389.2011 (cell)



Ryan Saxe, Superintendent  
Cabell County Schools  
PO Box 446  
Huntington, WV 25709  
304.528.5000



May 4, 2022

I am writing this letter to acknowledge the excellent work provided by Adam Krason and ZMM Architects in designing and presenting the BridgeValley Campus Development Plan. After assessing the building inventory and square footage available on our campuses, they formulated and recommended a student to square foot ratio appropriate for the school's programs, enrollment, and resources. The Plan maximizes student opportunities for success and matches the college's long-term goals while maximizing efficiency.

While working with ZMM, we found their representatives took time and listened to the needs of all BridgeValley constituents. From the start of the project to completion, our experience working with ZMM has been nothing but positive. BridgeValley strongly feels that the quality of work, the timeliness of submissions, and attention to detail were exceptional and made ZMM a great group to work with. We look forward to the possibility of working with ZMM again in the future.

Sincerely,

*casey sacks*

Casey K. Sacks, Ph.D.  
President  
BridgeValley Community and Technical College