

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

Proc Folder:

1417429

Doc Description: EOI: House Chambers Dedicated Outside Air System Project

Reason for Modification:

Proc Type:

Central Contract - Fixed Amt

Date Issued Solicitation Closes		Solicitation No	Version
2024-05-23	2024-06-11 13:30	CEOI 0211 GSD2400000008	1

BIDIRECEIVING LOCATION:

BID CLERK

DEPARTMENT OF ADMINISTRATION

PURCHASING DIVISION

2019 WASHINGTON ST E

CHARLESTON

WV 25305

US

VENDOR

Vendor Customer Code:

Vendor Name:

ZMM Architects & Engineers

Address:

222 Lee Street West

Street:

City:

Charleston

State:

WV

Country:

USA

Zip: 25302

Principal Contact: Adam Krason

Vendor Contact Phone: 304.342.0159

Extension:

234

FOR INFORMATION CONTACT THE BUYER

Melissa Pettrey (304) 558-0094

melissa.k.pettrey@wv.gov

RECEIVED

2024 JUN 1 1 AM 10: 17

Vendor Signature X

FEIN#

550676608

DATE

6/11/24

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

Date Printed: May 23, 2024

Page: 1

FORM ID: WV-PRC-CEOI-002 2020/05

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.

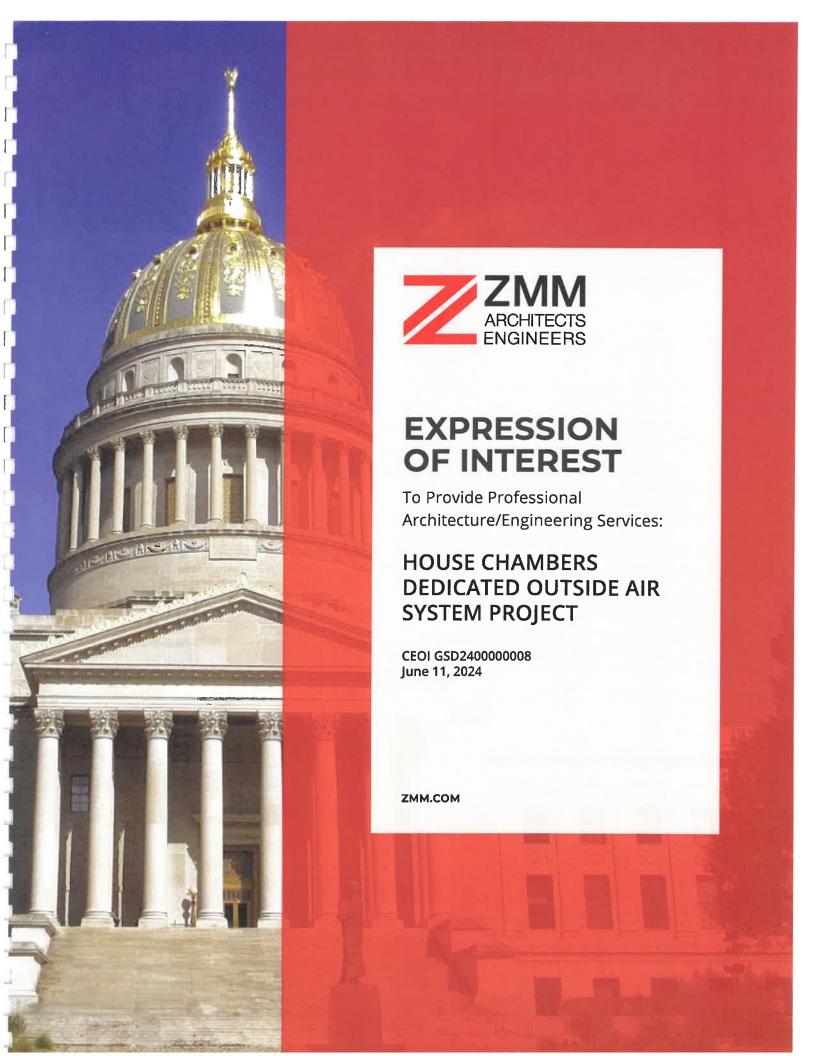
(Printed Name a	nd Title)Adam Krason, Principal	
(Address)	Lee Street West, Charleston, WV 25302	
` /	304.342.0159 / 304.345.8144 (Fax Number)	
(email address)	ark@zmm.com	

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contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation/Contract for that product or service, unless otherwise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 this bid or offer was made without prior understanding, agreement, or connection with any entity submitting a bid or offer for the same material, supplies, equipment or services; that this bid or offer is in all respects fair and without collusion or fraud; that this Contract is accepted or entered into without any prior understanding, agreement, or connection to any other entity that could be considered a violation of law; 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 & Engineers	
(Comp	
(Signature of Authorized Representative)	-
Adam Krason, Principal	_
(Printed Name and Title of Authorized Representative) (Date)	
304.342.0159 / 304.345.8144	
(Phone Number) (Fax Number)	
ark@zmm.com	
(Email Address)	

4.84



June 11, 2024

Ms. Melissa Pettrey, Senior Buyer State of West Virginia Department of Administration, Purchasing Department 2019 Washington Street East Charleston, West Virginia 25305-0130



Subject: Expression of Interest to Provide Architecture, Engineering, and Historic

Preservation Investigative, Design, and Construction Phase Services for House

Chambers Dedicated Outdoor Air System Project – GSD2400000008

Ms. Pettrey:

ZMM Architects and Engineers is pleased to submit the attached information to demonstrate our experience and our qualifications to provide professional design and construction phase services for the (Building 1) House Chambers Dedicated Outside Air System Project. ZMM understands that the intent of the project is to provide architecture, historic preservation, and mechanical and structural engineering services to design a Dedicated Outdoor Air System (DOAS) for the State Capitol House Chambers. The system will include duct modifications and mechanical controls. The current condition of the system is documented in the EOI, which explains that, "The original duct line connecting the return fan to the air handler has been disconnected and a bypass duct has been installed in the basement that is inadequate for the duty regarding size and rated pressure class, causing airflow, noise and humidification issues in the House Chambers."

Established in 1959, ZMM is a Charleston based, full-service A/E firm, and is noted for design excellence and client focus. With over sixty-five employees ZMM provides an integrated design approach by delivering all building related design services including architecture, engineering, interior design, and construction administration in-house. ZMM's engineering team will be led by Bob Doeffinger, PE. Mr. Doeffinger, ZMM's principal responsible for engineering management, brings more than 5 years of mechanical design experience to the project. The engineering team will also include James Lowry, PE and John Pruett, PE to lead the mechanical engineering effort.

Our architects and engineers are highly qualified and have worked together to deliver projects with similar scope and complexity. Additionally, ZMM's mechanical engineers are industry leaders that are involved in helping to develop strategies and best practices for HVAC related design issues on both the local and national level. Their experience includes designing mechanical systems in some of West Virginia's most prominent buildings including the State Capitol, the Clay Center for the Arts and Sciences, the Keith Albee Performing Arts Center in Huntington, and the Charleston Coliseum and Convention Center. Recent DOAS system design includes improvements to The Greenbrier Hotel (Windsor Wing), as well as projects for Kanawha, Mercer, Mineral, and Wood County Schools.

ZMM Architects and Engineers has extensive experience providing design services at the Main Capitol Building. This experience includes providing engineering services for the Capitol Food Court as well as various interior improvements and roofing (except for the Capitol Dome). Most recently ZMM assisted with a project that mapped all the mechanical equipment in the building to assist with ongoing maintenance and improvements. We are confident that our experience with the mechanical systems in the building will help lead to the successful implementation of the project for the State of West Virginia General Services Division.

ZMM has significant experience providing design services on historical structures. Our team for this engagement will include Mike Gioulis, Historic Preservation Consultant. Mr. Gioulis has been active in Historic Preservation in West Virginia since 1977. He previously served as Historical Architect for the West Virginia Division of Culture and History and as Assistant Director of the Historic Preservation Unit. ZMM and Mike Gioulis have partnered on a variety of recent restoration and rehabilitation projects including the rehabilitation of the historic Houston Company Store for the McDowell County EDA and the replacement of roofing and copper gutters on the State Capitol Building. Our previous work on the State Capitol Building, exterior improvements to State Office Buildings 5, 6, & 7, as well as the relighting of the Grand Hall at the Culture Center and the recent Guard Shack Replacement project all required the approval of the Capitol Building Commission (CBC).

ZMM and Mr. Gioulis are also currently collaborating on the restoration of the Historic Keith Albee Theater in Huntington and the Coal Heritage Discovery Center in Mount Hope, WV.

Thank you for taking the time to review the attached expression of interest that includes a project understanding and approaches to meet the Goals and Objectives outlined in the EOI, as well as ZMM's qualifications, and our relevant project experience. Additionally, please visit our website at zmm.com to see the full range of renovation projects that we have designed. We appreciate your consideration for this important endeavor and look forward to the opportunity to assist the General Services Division with the House Chambers Dedicated Outdoor Air System Project.

Respectfully submitted, ZMM Architects and Engineers

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

ZMM

TABLE OF CONTENTS

COVER LETTER

STATEMENT OF QUALIFICATIONS

- ABOUT ZMM

 History and Services

 Award Winning Design
- PROJECT UNDERSTANDING
 Project Understanding
 Goals and Objectives
- RELEVANT PROJECT EXPERIENCE
- TEAM QUALIFICATIONS

 Key Resumes
- 5 CLIENT REFERENCES





1

ABOUT ZMM

ABOUT ZMM ARCHITECTS & ENGINEERS

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 inhouse 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 60 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

<u>2018</u>

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















2

PROJECT APPROACH

PROJECT UNDERSTANDING / GOALS AND OBJECTIVES

Project Understanding

As it states in the EOI, "The House of Delegates Chambers in the Main Capitol (Building 1) are heated and cooled by the central station air handler in the basement (Room MB-7) and accompanied with an inline return fan located across the hallway in the basement (Room MB-13), utilizing the campus steam and chilled water plants. Duct routing extends to the roof and utilizes exhaust hoods and air intakes to introduce fresh air to the system. The original duct line connecting the return fan to the air handler has been disconnected and a bypass duct has been installed in the basement that is inadequate for the duty regarding size and rated pressure class, causing airflow, noise and humidification issues in the House Chambers."



The objective of the solicitation is to select an architecture and engineering firm to provide mechanical and structural engineering design services to design a Dedicated Outdoor Air System (DOAS) for the State Capitol House Chambers. The system will also include duct modifications and mechanical controls. The services will require the development of bidding and construction documents for the project, as well as construction phase services during the implementation of the project.

ZMM Architects and Engineers has extensive experience providing design services at the Main Capitol Building. Our experience has included providing engineering services for the Capitol Food Court as well as various interior improvements and roofing (except for the Capitol Dome). Most recently ZMM assisted with a project that mapped all the mechanical equipment in the building to assist with ongoing maintenance and improvements. We are confident that our experience with the mechanical systems in the building will help lead to the successful implementation of the project for the State of West Virginia General Services Division.

The EOI contains the following goals and objectives:

Goal/Objective 1: The Agency is requesting a response from parties in schematic design, design development, and construction documents as well as procurement phase and contract administration to replace the duct line and incorporate a Dedicated Outside Air System for dehumidification of the House Chambers. The system will be used



Project Understanding and Goals (cont.)

year-round for dehumidification control, regardless of the seasonal operation of steam. The House Chambers are also only fully utilized primarily in Winter months. Within their proposal, Vendors should demonstrate their experience in designing and administering construction projects in which Dedicated Outside Air Systems have been installed. Vendors should provide a brief explanation of how control strategies would apply to this project, in which different seasons and load conditions exist.

Response: To meet this goal, ZMM would commence the project with an investigation. The investigation would include performing engineering calculations to determine ventilation rate and air flow rate and discharge dew point to provide dehumidification. ZMM would also verify the condition of the House of Delegates Chamber air handling unit and ductwork sizes. Additionally, ZMM would perform a TAB on the unit to determine capacity of fan, capacity of the chilled water coil, chilled water flow.

Based upon the investigative information, ZMM would evaluate DOAS alternatives with the GSD. One alternative (that may be less expensive) is to correct the unit ductwork, RA fan situation, and to provide control dampers for minimum ventilation air and economizer air. For this alternative, ZMM would also provide a hot water reheat coil and maintain building humidity with the cooling coil continuously operation and providing reheat with hot water coil. Presently, the heating medium is not available in summer months, which is needed for reheating. ZMM would recommend the installation of a small hot water condensing boiler that can be replaced if hot water is provided in the future. This is the recommended approach as the energy code (and ASHRAE) discourages the use of prime heating energy for air conditioning reheat.

If a DOAS is used, ZMM will investigate different approaches, including:

- DOAs with or without heat recovery.
- Rooftop DOAS using chilled water or D with or without heat recovery with electric, hot water, or natural gas reheat.
- Indoor DOAS with or without heat recovery with electric, hot water, or natural gas reheat.

Dehumidification is typically required only during months when cooling is required. After September the ambient air is sufficiently dry that ventilation air maintains relative humidity below 65. Dehumidification can still be required if there is a moisture production source within the building such as a large group of people. Engineering calculations considering outdoor air conditions and internal moisture production will reveal when dehumidification is required. The introduction of conditioned outside air directly into the chamber will also be investigated.

A source of warm weather heat needs to be determined. If a DOAS with heat recovery is provided, the amount of heat can be reduced or possibly eliminated. Introducing economizer air through the existing AHU will help in reducing energy utilization.

ZMM has substantial and ongoing experience with design and construction administration of dedicated outdoor air systems. Some of our more recent projects include:

- · The Greenbrier Resort Windsor Wing
- Keyser Middle School (Mineral County Schools)
- Wood County Career and Technical Center
- Bluewell Elementary (Mercer County Schools)
- Clendenin Elementary School (Kanawha County Schools)





Project Understanding and Goals (cont.)

Goal/Objective 2: This project will require coordination with the State Historic Preservation Office and the Capitol Building Commission and the Department of Administration GSD Architecture and Engineering Section. The intent is to retain the original look of the 1930's era and upgrade to a technologically advanced dehumidification system that can modulate with the outdoor temperatures.

Within their proposal, Vendors should provide documentation of projects that required presenting design documents to the State Historic Preservation Office, the Capitol Building Commission, or otherwise for buildings on the National Historic Register.

Response: ZMM has extensive experience working throughout the State of West Virginia Capitol Campus on projects that required the approval of the State Historic Preservation Office (SHPO) and the Capitol Building Commission (CBC). That work has included a variety of improvements to State Office Buildings 5, 6, & 7, including the addition of an electrical enclosure. ZMM has also assisted with the reroofing of the Main Capitol Building and provided engineering services for the implementation of the Capitol Cafeteria. Both projects, notably the copper gutter replacement, required approval of the CBC.

Additional projects including approval of the CBC included the relighting of the Culture Center Grand Hall and design of the Gift Shop, as well as the recently constructed Guard Shack, which is located at the Capitol Campus entrance near the Governor's Mansion.





ZMM will utilize Mike Gioulis as a Historic Preservation Consultant on the project to ensure that the design solution respects the historic integrity of the House Chambers. ZMM and Mr. Gioulis have previously collaborated on a variety of projects including the roofing replacement on Building 1, the restoration of the historic Houston (Koppers) Coal Company Store in Welch and plans for the adaptive reuse of the former State & Thomas Building in Charleston for BridgeValley Community and Technical College. ZMM and Mr. Gioulis are also currently engaged with the restoration of the Historic Keith Albee Theater in Huntington and the Coal Heritage Discovery Center in Mount Hope, WV.

We are confident that Mr. Gioulis deep background in historic preservation in the State of West Virginia will be an added benefit that will help ensure the success of the project.

Goal/Objective 3: Building Automation Controls should be accessible to our technicians and should reside on the Trane Ensemble operator station. The space should incorporate several relative humidity sensors as well as demand-controlled ventilation carbon dioxide sensors as the occupancy varies greatly.

Within their proposals, specifically the projects documenting meeting Goal/Objective 1, vendors should indicate their experience with projects in which humidity and carbon dioxide control have been included in the project scopes. Vendors should also document projects in which Trane Ensemble controls were the owner's building automation system.



Project Approach and Goals (cont.)

Response: Building automation controls are to be provided by Trane. ZMM will specify the products and sequence of operations. Controls will include room temperature, humidity and CO2 sensors, damper operators, automatic control valves, and all other control components. The sequences of operation specified will control volume and condition of the ventilation based on input from room and unit sensors to maintain relative humidity below 60 RH.

ZMM has designed and controls the building specified control sequences using humidity and CO2 sensors to control room humidity and provide proper ventilation. The recent replacement of roof top air conditioners on regional jail projects uses hot gas reheat to control humidity. All the K-12 schools we have produced in recent years (20 to 30) use CO2, humidity, and occupancy sensors to control variable ventilation air quantities.

ZMM has a long history of working with Trane Controls on complex projects. Over the last 12 years we have renovated a large portion of WV Buildings 5, 6, and 7. Recently we completed a project to rebuild the central station air handling units on these buildings working closely with Trane Controls. ZMM is presently working with the GSD on Building 37 replacing the major air conditioning components and retrofitting 500 variable volume terminal units working with Trane Ensemble. Our recent experience collaborating with the GSD on these projects demonstrates our knowledge of the system and willingness to implement Trane Ensemble controls.

Why is ZMM the right team to assist the State of West Virginia General Services Division on the House Chambers Dedicated Outdoor Air Systems Project?

We are confident that ZMM possesses the right combination of investigative and design experience at the west Virginia State Capitol Building, Dedicated Outdoor Air System Design, and experience providing complex design solution on historic buildings to successfully deliver this project. Additionally, we are confident that the approach to meeting GSD's goals and objectives outlined above demonstrates the technical competence and skill that we will bring to the project. Perhaps most importantly, ZMM has worked collaboratively with the General Services Division to successfully deliver similar projects. We are hopeful that you have observed our commitment to design quality, budget and schedule control, and client service demonstrated on these projects.





3

RELEVANT EXPERIENCE



HVAC RENOVATION EXPERIENCE

Charleston Coliseum & Convention Center (2015) – Replace entire MEP infrastructure three 1,000 ton chillers and cooling towers, three 8,000 mbh gas condensing boilers, approximately ten VAV AHU's, approximately 10 large single zone VAV AHU's.

Charleston Kanawha Health Department (2015) – Replace entire mechanical system to include air cooled chiller, gas fired make-up unit and zone fan coils with electric reheat, approximately 45,000 SF new DDC controls.

United Bank Building – Cooling Tower Replacement (2010) – Two 400 ton centrifugal chillers, rebuild two large VAV AHU's, installed free cooling plate frame heat exchangers (2015).

Kanawha County Public Library (2015) – Replaced two gas-fired boilers with new gas condensing boilers ...

Building 5 Capital Complex (2008) – Replaced 10th floor office space air condition, replaced perimeter induction units with new steam chilled water air handling units, distributed VAV terminal units with modification to architectural fit out approximately 22,000 Sf. Installed new sprinkler service entrance for Buildings 5, 6, and 7.

Capitol Complex Building 5, 7th, 8th, & 9th Floors – Rebuild perimeter induction system and interior multi-zone distribution in addition to total architectural fit up, approximately 70,000 SF.

Capitol Complex Building 6, 3rd, 4th, & 5th Floors - Rebuild perimeter induction system and interior multi-zone distribution in addition to total architectural fit up, approximately 70,000 SF.

WV Lottery Headquarters Building (2014 - 2015) – Installed 40,000 SF of new variable refrigerant system, new make-up air system, comprehensive architectural services.









WEST VIRGINIA STATE CAPITOL

CHARLESTON, WV

COMPLETION 2007-2021

ZMM Architects & Engineers has completed a variety of improvement project to the State of West Virginia Capitol Building.

The improvements included a renovation to the lower-level food court, a roofing replacement, toilet renovations, and various HVAC improvements – including a project to increase safety during the Covid-19 pandemic. The food court renovations included a full-service kitchen, self-serve area, and seating for 300 people. ZMM worked with a kitchen consultant and provided demolition drawings, base architectural, mechanical, and electrical drawings. The project also included the design of the first phase of a wet pipe sprinkler system. In addition, ZMM also provided the documents to replace the Capitol medium-voltage transformers. ZMM met a stringent timeline for a critical construction completion date.

ZMM replaced the roof of the Capitol Building, which included the main buildings, connectors, and base of the dome. All roof system components were reviewed for integrity and ability to control moisture collection and removal. The components included in the project were parapet walls, railings, wall conditions, colonnades, roof penetrations, roof drains, roof equipment, and walking surfaces. Additional projects included improvements to the Senate toilets, a report that mapped all of the mechanical equipment in Capitol Building, and various mechanical improvements to make portions of the Capitol more safe for occupants during the pandemic.









WV STATE OFFICE BUILDINGS 5, 6, & 7

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 assisted the State of West Virginia General Services Division with various improvements to the buildings, which commenced with an assessment that examined the condition of the buildings, as well as cost and phasing options for various upgrades. Improvements undertaken have ranged from substantial renovations to maintenance and repair projects. ZMM provided design services for the renovation of the 10th Floor of Building 5 for the Office of Technology, which focused on demonstrating the potential for renovating the floors 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 was delivered considerably under the anticipated budget.

The next phase of renovation involved abatement, demolition, new construction, and updated life safety systems. ZMM assisted with roof replacement for all three buildings, utilizing white EPDM roofing material, with consideration being given to sustainability. ZMM also assisted with expanding the electrical courtyard, improving the electrical service entry, replacing windows and entry doors, providing design services to replace the caulk between the exterior limestone and precast panels, and a valve replacement project to isolate mechanical risers.









WV CULTURE CENTER GREAT HALL LIGHTING & MUSEUM SHOP

LOCATION CHARLESTON, WV

SIZË 12.000 SE COMPLETION 2011

COST \$2M

ZMM provided design services to various improvements including the Great Hall lighting wiring system and the Museum Shop at the WV Culture Center, located at the WV State Capitol Complex.

The existing wiring and conduit system for the Great Hall lighting was approximately 35 years old and in need of drastic improvements. The existing conditions that were observed included the conduit and outlet boxes mounted on the underside of the existing grating above the ceiling, the dimming circuits shared a common neutral, and bad fixture connections and cables. ZMM performed a complete survey and drawings of the existing conduit, wiring, and dimming systems. The circuiting requirements were confirmed and ZMM proposed correction methods with a dimming equipment manufacturer. The project included: dimmer circuits, conduit, wiring, new twist lock receptacles, and cleaning of the fixtures.

In addition to the improvements to the Great Hall lighting, ZMM examined a variety of options to add both a café and Museum Shop to the facility. The West Virginia Division of Culture and History ultimately decided to repurpose an underutilized space adjacent to the Great Hall as a Museum Shop. The shop is currently operated by Tamarack.









WV CULTURE CENTER GREAT HALL LIGHTING & MUSEUM SHOP

LOCATION
CHARLESTON, WV

12,000 SF

COMPLETION 2011 \$2M

ZMM provided design services to various improvements including the Great Hall lighting wiring system and the Museum Shop at the WV Culture Center, located at the WV State Capitol Complex.

The existing wiring and conduit system for the Great Hall lighting was approximately 35 years old and in need of drastic improvements. The existing conditions that were observed included the conduit and outlet boxes mounted on the underside of the existing grating above the ceiling, the dimming circuits shared a common neutral, and bad fixture connections and cables. ZMM performed a complete survey and drawings of the existing conduit, wiring, and dimming systems. The circuiting requirements were confirmed and ZMM proposed correction methods with a dimming equipment manufacturer. The project included: dimmer circuits, conduit, wiring, new twist lock receptacles, and cleaning of the fixtures.

In addition to the improvements to the Great Hall lighting, ZMM examined a variety of options to add both a café and Museum Shop to the facility. The West Virginia Division of Culture and History ultimately decided to repurpose an underutilized space adjacent to the Great Hall as a Museum Shop. The shop is currently operated by Tamarack.









ZMM / MIKE GIOULIS TEAM EXPERIENCE

WV Children's Home - Elkins, WV

Coal Heritage Discovery Center - Mt. Hope, WV

Houston Company Store - McDowell County, WV

West Virginia State Capitol Roof/Gutters - Charleston, WV

Keith Albee Performing arts Center Restoration - Huntington, WV

Staats Building Study for Educational Adaptive Reuse - Charleston, WV

Pocahontas County Courthouse - Pocahontas County, WV

Tucker County Courthouse Annex - Parsons, WV

Charleston EDGE - Charleston, WV

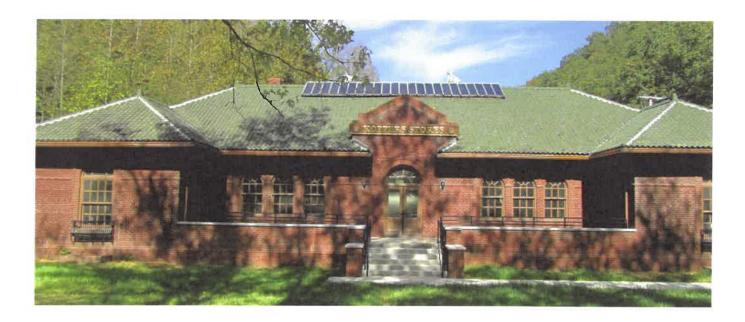












THE HOUSTON COAL COMPANY STORE

LOCATION KIMBALL, WV

SIZE

COMPLETION 2015

\$1.8M

ZMM Architects and Engineers, in association with Mike Gioulis, Historic Preservation Specialist, have been assisting the McDowell County Economic Development Authority with the restoration of the Houston Coal Company Store. The Company Store, located in Kimball, WV, is at the intersection of Route 52 and Carswell Hollow Road. It was constructed in 1923 and served as a coal company store until the 1940's. The building has since served as a dairy company, office and storage facility for a construction company, and currently sits vacant.

The 7,100 square foot facility includes a full basement, storage sheds, and a loading dock. The main portion of the building is 5,750 square feet, excluding the storage sheds and loading dock. The project team began by investigating all available historical documentation for the original facility. ZMM and Mr. Gioulis also visited the building site several times to assess the conditions of the architecture, structure, building systems, and surrounding cultural landscape

To ensure the accuracy of the proposed improvements, a building information model (BIM) was created for analysis and documentation. The model was created based upon measurements and documentation performed on-site by the project team. Once the documentation was complete, a proposed floor plan was developed that included office space for the McDowell County Economic Development Authority staff, display areas for coal heritage artifacts, public restrooms, a gift shop, and a coffee shop. There are also plans to convert the outdoor storage sheds into an artisan's row.









CLAY CENTER FOR THE ARTS & SCIENCES OF WV

LOCATION

CHARLESTON, WV

2020

COST \$2.1M

The Clay Center in Charleston is a 240,000 SF facility that is dedicated to promoting performing arts, visual arts, and the sciences.

The rear of the Clay Center contained a brick plaza with little connection to the interior. When the *Waterworks* exhibit was developed, new windows were added. Once the visual connection was made to the plaza, improvements were needed to maximize its potential. ZMM provided planning and design services for a complete overhaul. The plan provided three outdoor "rooms" which create the opportunity to listen, reflect, and interact. The design team developed an event space covered with a tensile fabric canopy and enhanced a landscape area with a reflecting pool and fountain that includes a feature sculpture at the center. Finally, a paved area was enhanced with new seating, lighting, and landscape materials.

ZMM has also been assisting with a variety of updates and new exhibits, such as providing structural design services for a *Luckey Climber*, a 52-foot climber made of wood and metal, in the main atrium space. Other improvements included serving as architect and engineer of record for the *My Town* and *Waterworks* exhibits, designed by Argyle Design. ZMM provided code compliance reviews, as well as architectural, mechanical, electrical, plumbing design, and standard construction phase services. As part of the *Waterworks* exhibit, ZMM provided architectural and structural design services to create two new large curtainwall windows.









CHARLESTON COLISEUM& CONVENTION CENTER

LEED SILVER

LOCATION CHARLESTON, WV

283,000 SF

COMPLETION

COST \$100M AWARDS

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. Our design started with an organizational concept inspired by this history. The Convention Center 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.









4

TEAM QUALIFICATIONS



Bachelor of Architecture
The Catholic University of America, 1998

Bachelor of Civil Engineering The Catholic University of America, 1997

LICENSURE

Virginia, West Virginia, Ohio, Kentucky, Maryland & New Jersey

AFFILIATIONS

Association for Learning Environments

WV Board of Architects, President

American Institute of Architects, Stategic Council

Charleston Area Alliance, Board Chair

Goodwill Industries of Kanawha Valley, Past Board Chair

Clay Center, Board of Directors

WV Symphony Orchestra, Board of Directors

Charleston Main Streets, Board of Directors

Charleston Municipal Planning Commission

Charleston Historic Landmarks Commission

ADAM KRASON

AIA, LEED AP, ALEP

Principal

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

Mr. Krason has been an advocate of sustainable design and energy efficiency and has participated and presented at sustainable design seminars throughout the region. Mr. Krason also serves on the Board of Directors and is responsible for firm management, business development, and corporate philanthropy at ZMM. In addition to his role at ZMM, Mr. Krason is actively engaged in his community, serving on a variety of statewide and local civic and non-profit boards.

PROJECT EXPERIENCE

Charleston Coliseum and Convention Center - Charleston, WV

Capital Sports Center - Charleston, WV

The Clay Center for the Arts and Science (Multiple Projects) - Charleston, WV

Charleston EDGE - Charleston, WV

State Office Building #5, 10th Floor Renovation (Office of Technology) - Charleston, WV

Girl Scouts of Black Diamond Council - Charleston, WV

Goodwill Prosperity Center - Charleston, WV

Joint Interagency Training and Education Center (WVARNG) - Kingwood, WV

Claudia L. Workman Fish and Wildlife Education Center - $\mathsf{Alum}\ \mathsf{Creek},\ \mathsf{WV}$

Construction and Facilities Management Office (WVARNG) - Charleston, WV

Wood County Justice Center - Parkersburg, WV

Wood County Resiliency Center - Parkersburg, WV

Jackson County AFRC - Millwood, WV

Morgantown Readiness Center - Morgantown, WV





Bachelor of Science in Architecture; Bachelor of Science University of New York, City College

Continuing Education
On-going workshops, conferences, and
training related to advancements in historic
preservation and tax incentives for historic
rehabilitation

LICENSURE

Certified Architectural Historian

AFFILIATIONS

West Virginia Preservation Alliance

PUBLICATIONS

Articles and/or Contributions

Wonderful West Virginia Goldenseal WV Encyclopedia and E-Encyclopedia

Author/Co-Author

Historic Resource Surveys in WV Tax Credits for Historic Properties Courthouses of WV Documentary Home Grown Video Downtown Property Owner's Maintenance Manual

MIKE GIOULIS

Historic Preservation Consultant

Mike started his own consulting practice in 1984 and works on a wide range of historic preservation projects for many types of clients. He is fully versant in interpreting standards for the rehabilitation of existing and historic buildings, and meets the Secretary of the Interior's professional qualifications for Architectural Historian as outlined in 36 CRF 61 through the West Virginia Division of Culture and History, State Historic Preservation Office. This certification assures that the Gioulis firm is qualified and has a background in the performance of historic preservation in accordance with specified standards.

Mike's expertise includes rehabilitation projects, master plans, building analyses, design guidelines, tax credit applications, Section 106 proceedings, National Register nominations, historic surveys, and grant applications and management. He has been the Design Consultant to the Main Street West Virginia Program since 1988. His Main Street services relating to design assistance programs for downtown structures have resulted in over 1,200 individual design projects, as well as numerous workshops, committee trainings, resource team visits and technical assistance responses. Multiple entities and individuals consult with Mike for his professional expertise in all phases of historic rehabilitation.

PROJECT EXPERIENCE

TAX CERTIFICATIONS Advise, review and prepare tax credit applications for multiple property types including large commercial buildings, schools, private residences, apartment buildings, hotels and individual commercial buildings.

GENERAL CONSULTING Additional consulting on rehabilitation efforts, historic preservation, adaptive reuse plans, storefront restorations, sensible but sensitive additions and renovations, streetscapes, downtown building revitalizations, paint analyses, street and building signage, design guidelines, retrofitting for ADA compliance and grant applications and oversight.

NATIONAL REGISTER NOMINATIONS Research, document, prepare and submit nominations for downtown historic districts, residential historic districts and individual commercial and residential properties.

HISTORIC RESOURCE SURVEYS Reconnaissance and intensive surveys to document existing resources in cities, towns, and counties; New Deal Era resources in Monongalia County; and CCC resources in selected WV state parks and forests.

SECTION 106 REPORTS Review and documentation for projects including federal, state, and municipal buildings; housing projects; commercial buildings; flood mitigation areas; mine sites; schools; refuse piles; railroad depots; coal company stores; and individual properties.

NATIONAL REGISTER NOMINATIONS Research, document, prepare and submit nominations for downtown historic districts, residential historic districts and individual commercial and residential properties.

FEDERAL PROJECT EXPERIENCE
MULTIPLE COURTHOUSE PROJECTS
RAILROAD DEPOTS





Bachelor of Architecture University of Tennessee - 1992

Associate of Science West Virginia Institute of Technology, 1986

LICENSURE

West Virginia

AFFILIATIONS

West Virginia AIA Member

RODNEY PAULEY

Project Manager

Mr. Pauley oversees the daily design and production of the building, working in conjunction with in-house architectural and engineering staff to ensure the building not only meets the program requirements and budget, but meet the long-term needs of the owner. He also works directly with project principals to manage contracts, staffing and project deliverables. Mr. Pauley has a broad knowledge of building materials and services, building codes, construction techniques, and architectural detailing.

Mr. Pauley began his career in 1992 with a firm in Atlanta, Georgia, and for the next 12 years rose to the Associate level by designing and managing a wide variety of project types including educational, retail, historic renovation, medical, and entertainment, specializing in office and speculative office design. In 2010, Mr. Pauley moved back to Charleston, WV, as Project Manager for ZMM supervising design and production.

PROJECT EXPERIENCE

State Office Building #5 and #6 Renovations - Charleston, WV

WV State Capitol Senate Bathroom Renovations - Charleston, WV

Capitol Guard House - Charleston, WV

WV Lottery Headquarters - Charleston, WV

Charleston Coliseum and Convention Center - Charleston, WV

KRT Laidley Street Transportation Center and Ticket Office - Charleston, WV

INTUIT Prosperity Hub - Bluefield, WV

WV School of Osteopathic Medicine Multiple Projects - Lewisburg, WV

Wood County Resiliency Center - Parkerburg, WV

National Weather Center Building - So. Charleston, WV

Pipestem State Park Lodge Renovations - Piepsetem, WV

WVU Institute of Technology Renovations - Montgomery, WV

BridgeValley CTC Master Plan - Montgomery, WV

Previous Employment Experience:

Printpack Headquarters Office Building, Atlanta, GA
Gwinnett Professional Center II, Lawrenceville, GA
Central Square Government Complex – Albany, GA
McGinnis Park Office Building 100 and 200, Suwanee, GA
One Federal Place – Birmingham, AL
Department of Juvenile Justice
30 Allan Plaza – Southern Company H (Lobby and Corner Tower), Atlanta, GA





Master of Science The Pennsylvania State University, 1976

Bachelor of Science West Virginia University, 1973

LICENSURE

WV, VA, PA, OH, TN, KY, NY, NH, ME, NC, SC, FL, NJ, GA

AFFILIATIONS

ASHRAE - Member of the Technical Committee Load Calculations Data and Procedures for 25 years, serving as chairman. Presently Chairman of the Research Subcommittee

2021 Industrial and Professional Advisory Council – College of Engineering at The Pennsylvania State University

2019 Marshall University Honorary Alumni Award of Distinction College of Engineering

Advisory Board for the Department of Electrical Engineering Technology, Bridgemont Community and Technical College

City of Pt. Pleasant, WV – 2nd Ward Councilman for 20 years

Robert Doeffinger

Principal

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.

PROJECT EXPERIENCE

Charleston Coliseum & Convention Center - Charleston, WV

State Office Buildings #5, 10th Floor - Charleston, WV

WV Capitol Complex Buildings #5, #6, and #7 - Charleston, WV

Marshall University (Multiple Projects) - Huntington, WV

West Virginia Regional Technology Park - S. Charleston, WV

- Building 704
- Building 740
- Building 770

Joint Interagency Training and Education Center (JITEC) - ${\sf Kingwood}, {\sf WV}$

West Virginia Regional Jails

West Virginia Army National Guard Projects

BridgeValley Community and Technical College - Montgomery, WV

Appalachian Regional Hospital (Multiple Projects) - Beckley, WV

The Plaza at the King of Prussia - Philadelphia, PA





Bachelor of Science in Mechanical Engineering, West Virginia State University Institute of Technology, 200

LICENSURE

West Virginia, Pennsylvania, Ohio & Maryland

ASHRAE Building Commissioning BCxP Certified

AFFILIATIONS

American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)

JAMES LOWRY

PE

Mechanical Engineer

Mr. Lowry is a registered Professional Engineer with design experience in:

Industrial:

Bayer Material Science, West Virginia Higher Education Policy Commission, Kuraray America, Armstrong Flooring, Covestro Laboratories.

Educational:

Renovations, evaluations and additions at Marshall University, West Virginia University Institute of Technology, Mercer County Schools and various other Schools and Universities statewide.

Commercial:

West Virginia Capitol Complex, West Virginia Parkways Authority

Heath Care:

Renovations, evaluations and additions at Cabell Huntington Hospital, Charleston Area Medical Center, Charleston Surgical Center, West Virginia Department of Health & Human Resources, Huntington VA Hospital and other various healthcare facilities statewide.

PROJECT EXPERIENCE

WVARNG - WV

- Mountaineer Challenge Academy South Renovations
- Kenova SCIF
- Camp Dawson Building 202
- STF Building B

WV State Capitol Building #6 - Charleston, WV

Capitol Guard House - Charleston, WV

Charleston Fire Department Fitness Center Assessment - Charleston, WV

GSD ASHRAE Building Assessment - Charleston, WV

GSD Consulting Survey-Elect Media - HVAC - Charleston, WV

The Greenbrier Chiller and HVAC Projects - White Sulphur Springs, WV

Marshall University - Huntington, WV

- Drinko Library Mechanical and Electrical Study
- Replacement Multizone HVAC
- Prichard Hall Chiller Replacement
- Drinko/Science Building
- Smith Hall Cooling Tower Replacment

Charleston Area Medical Center (Memorial) 6th Floor Fit-out, Boilers, Laboratory Renovations - Charleston, WV

Charleston Area Medical Center (General) Chiller Plant One-Line, and Chiller Replacement - Charleston, WV





Bachelor of Science Purdue University, West Lafayette, IN, 1993

LICENSURE

West Virginia, Virginia, Indiania

LEED AccreditedProfesssional

AFFILIATIONS

American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), Member

United States Marine Corps - 14 Years

JOHN PRUETT PE, LEED AP

Senior Mechanical Engineer

Mr. Pruett is responsible for overseeing the design of the HVAC systems, ensuring that the HVAC systems meet the program requirements, and long-term needs of the owner. He performs heating and cooling load calculations and recommends the type of systems to be incorporated into the building. Mr. Pruett coordinates with other disciplines ito integrate the HVAC systems into the building. Mr. Pruett has participated on several LEED registered projects; one of his key contributions to these projects is conducting energy analyses and recommending energy use reduction alternatives. Mr. Pruett began his engineering career with a manufacturing company in 1994. In 1998, he made a career change and joined an engineering consulting firm. He has a broad range of experience in HVAC systems design, including: government, education, office buildings, hotels, restaurants, a convention center and several natatoriums. Having served in the Marines for 14 years, Mr. Pruett also led a design team for a "virtual memorial" for the birthplace of the U.S. Marine Corps

PROJECT EXPERIENCE

WV Army National Guard - WV

- Camp Dawson Building 106
- Camp Dawson Building 245
- Camp Dawson Building 246
- Camp Dawson Building 301
- Camp Dawson Mail Facility
- Marshall County Readiness
- Camp Dawson Job Challenge Academy

WVDNR District 5 Headquarters - Alum Creek, WV

WV State Police Headquarters - So. Charleston, WV

Wood County Resiliency Center - Parkersburg, WV

WV State Capitol Renovations - Charleston, WV

General Services Division Surplus Property - Dunbar, WV

WV Housing Developemnt Fund Office Building - Charleston, WV

Tucker County Courthouse Renovations - Parsons, WV

Gilmer County Courthouse Renovations - Glenville, WV

St. Margaret's Judicial Center 3rd Floor Renovations - Martinsburg, WV

Jackson County Maintenance and Transportation - Ripley, WV

Jackson County EMS Building - Ripley, WV





Bachelor of Interior Design University of Chalreston - 2012

AFFILIATIONS

Association for Learning Environments

CARLY CHAPMAN

Director of Interior Design

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

Wood County 911 Call Center - Parkersburg, WV

Intuit Prosperity Hub - Bluefield, WV

Goodwill Industries - Parkersburg, WV

WV State Capitol Senate Bathroom Renovations - Charleston, WV

State Office Building #6 Renovations - Charleston, WV

Charleston Coliseum and Convention Center - Charleston, WV

Capital Sports Center - Charleston, WV

Charleston EDGE - Charleston, WV

Valley Park Community Center - Hurricane, WV

Pipestem Resort State Park Lodge Interior Renovations - Pipestem, WV

Cabell County Career and Technical Center - Huntington, WV

WV School of Osteopathic Medicine Multiple Projects - Lewisburg, WV

Wood County Schools - Wood County, WV

- Williamson Elementary School
- Wood County Tech Center

Nicholas County Schools - Nicholas County, WV

- Nicholas County High School / Summersville Middle School / NCCTC
- Cherry River Elementary / Richwood Middle School





Bachelor of Science Old Dominion University, 2019

Associate of Applied Science New River Community College, 2016

LICENSURE

West Virginia Virginia

FRANKIE KANTSIOS

Electrical Engineer

As an electrical engineer, Mr. Kantsios is consistently motivated to adapt to the team's needs in assessing and finalizing the project on time. He is an experienced professional with a proven record of managing projects from concept to completion while staying versatile to the specific project at hand. By carrying out engineering and design services for a diverse field of projects since 2013, Mr. Kantsios has expanded his knowledge and understanding of the industry; providing him with the means to meet the clients' needs for each individual program. He has been actively involved in the design of a wide array of new structures and renovations to include K-12 educational buildings, higher education buildings, healthcare facilities, office buildings, banks, restaurants, hotels, automotive dealerships and service centers, apartment complexes and dorms, industrial facilities and warehouses, and athletic facilities. Whether working independently or in conjunction with other architects, engineers, and contractors, Mr. Kantsios excels at creating effective solutions and developing opportunities that further establish organizational goals.

PROJECT EXPERIENCE

Carilion New River Valley Medical Center - $\lor \land$

- Cardiology Expansion
- Infusion Clinic Alterations

HCA Healthcare - VA

- LewisGale Hospital Montgomery - 3rd Floor Graduate Medical Education Center

InnovAge PACE - VA

- New Richmond Facility
- New Roanoke Facility
- Roanoke Facility Study

Bath Community Hospital - $\lor A$

- New Pharmacy Building*

New Triumph Baptist Church - VA

Frederick County Sunny Side Voter Registrar's Office- $\lor \land$ - A.S. Rhodes Elementary School Renovations

New River Community College - VA

- ADA Accessibility Improvements

City of Covington City Hall Renovations - $\vee A^*$

Pulaski County Administration Building Renovation - \lor A *



^{*}Previous Employer Experience



Bachelor of Science Virginia Polytechnic Institute & State University, 1992

LICENSURE

West Virginia, Virginia, North Carolina, and Tennessee

WILLIAM SHELTON

PE

Civil Engineer

As a Civil Engineer, it is Mr. Shelton's responsibility to oversee the design of all aspects of a project site in order to provide our clients with a facility that is safe, functional, efficient, and maintainable. Mr. Shelton's design and oversight responsibilities include site master planning and layout, roadway design, grading and earthworks, water and sewer system design, storm drainage, and stormwater management design and calculations, as well as erosion control design and calculations. Mr. Shelton also assists clients in pre-design site evaluation and feasibility studies, leading our clients through the site selection process. Helping clients develop master plans of their facilities is another way that can help them more effectively utilize what they have now and assess their needs for the future.

Mr. Shelton's goal is to provide excellent client service, to exceed individual project needs, and to add value through creative engineering solutions.

PROJECT EXPERIENCE

New Ridgeview Elementary School - Dickenson County, VA

Frederick County Public Schools - Frederick County, VA

- Transportation Facility
- Sherando High School Competition Softball Field and Facilities
- Sherando High School Tennis Courts
- James Wood High School Softball Field Improvements
- Various Site Studies

Waynesboro High School Addition and Renovation - Waynesboro, VA

Raleigh County Schools - Raleigh County, WV

- Woodrow Wilson High School Water Line Replacement
- Shady Spring Elementary School Access Road
- Transportation Facility Fuel Tanks

Jefferson County Schools - Jefferson County, WV

- South Jefferson Elementary School Septic System Evaluation
- Ranson Elementary School
- Shepherdstown Elementary School

Wythe County Public Schools - Wythe County, VA

- George Wythe High School Addition and Renovation

Montgomery County Public Schools- Montgomery County, VA

- Old Christiansburg Middle School Bus Garage Conversion

Mineral County Schools - Mineral County, WV

- New Frankfort PK-4 School Site Design





Bachelor of Science Virginia Polytechnic Institute & State University, 1987

LICENSURE

Virginia, West Virginia, North Carolina, Ohio

TODD POFF, PE

Structural Engineer

Mr. Poff started as a Civil Engineer. After working in that department for several years, he began moving over to the Structural Engineering Department; where his true interest, and most of his training lies.

As a Structural Engineer, it is Mr. Poff's responsibility to insure the safety of the structure's design, as well as any occupants inside those structures. As a member of the design team, Mr. Poff understands that the structural system of a building needs to have the least amount of impact possible on the architectural design and on the way clients use the buildings. It is that kind of teamwork, with all major design disciplines in-house, that allows ZMM to say with confidence we provide our clients with a building design that will not only meet their needs but will be a place they can enjoy for many years to come.

PROJECT EXPERIENCE

Roanoke County Public Libraries - VA - Glenvar, Vinton & South County

Rappahannock Electric Maintenance Facility - Front Royal, VA

InnovAge Roanoke - VA

Kollmorgan Structural Analysis - Radford, VA

Truck Manufacturing Plant - Dublin, VA

- Multiple Crane Analysis/Relocation Projects
- Cab Trim Assembly Building

Collins UTC Aerospace Plant Structural Analysis - WV





Associate in Mechanical Drafting and Design; 1990, Ben Franklin Career and Technical Center

Associate in Electronics Technology 1987, Putnam Career and Technical Center

Associate of Science 1988, West Virginia State University

Completed Dale Carnegie course in Effective Communications and Human Relations and Skills for Success

MIKE FLOWERS

Plumbing Designer / Mechanical Technician

Mr. Flowers is responsible for the design of Plumbing systems, ensuring that the systems are designed to meet the needs of the owner and utilize the latest plumbing technologies to provide the most energy efficient design possible. Mr. Flowers has participated on several LEED registered projects one of his key contributions to these projects is selecting plumbing fixtures and accessories in his design that require less utility consumption, so significant utility savings are passed on to the owner and the environment as well.

Mr. Flowers has had extensive experience in the field of construction where he frequently visits ZMM's current projects under construction and thoroughly checks the contractors work to ensure compliance with project specifications and construction documents.

PROJECT EXPERIENCE

WVARNG - WV

- Morgantown Readiness Center
- Logan-Mingo Readiness Center
- Jackson County AFRC
- Mountaineer Challenge Academy
- Buckhannon Readiness Center
- Buildings 202, 246, and 301
- Camp Dawson Mail facility

WV State Capitol Senate Bathroom Renovations - Charleston, WV

Tucker County Courthouse - Annex - Parsons, WV

Wood County Justice Center - Parkersburg, WV

WV State Police Headquarters Building Renovation - So. Charleston, WV

Goodwill Industries - Parkersburg, WV





5

CLIENT REFERENCES

CLIENT REFERENCES

Robert Kirkpatrick, Deputy Director

General Services Division of WV 103 Michigan Ave Charleston, WV 25311 304.352.5491

Todd Reynolds, Deputy Branch Chief

WVARNG 1707 Coonskin Drive Charleston, WV 25311 304.380.7226 cell

John Myers, Facility Manager

West Virginia Lottery 900 Pennsylvania Avenue 304.558.0500 x 22

