RFQ No. TOR2600000003

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

West Virginia Code §5A-3-10a states: No contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and the debt owed is an amount greater than one thousand dollars in the aggregate.

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

"Debtor" means any individual, corporation, partnership, association, limited liability company or any other form or business association owing a debt to the state or any of its political subdivisions. "Political subdivision" means any county commission; municipality; county board of education; any instrumentality established by a county or municipality; any separate corporation or instrumentality established by one or more counties or municipalities, as permitted by law; or any public body charged by law with the performance of a government function or whose jurisdiction is coextensive with one or more counties or municipalities. "Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

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

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

WITNESS THE FOLLOWING SIGNATURE

Vendor's Name: ZMM Architects and Engineers

Authorized Signature: _____ Date: 12-4-25

State of West Virginia

County of Kanawha, to-wit:

Taken, subscribed, and sworn to before me this 4 day of December, 2025.

My Commission expires May 22, 2028.

AFFIX SEAL HERE

NOTARY PUBLIC _____

Official Seal
Notary Public, State of West Virginia
Jessica Wolfe
501 Washington Street
St. Albans, WV 25177
My Commission Expires May 22, 2028

West Virginia Ethics Commission

Disclosure of Interested Parties to Contracts

(Required by *W. Va. Code* § 6D-1-2)

Name of Contracting Business Entity: ZMM Architects and Engineers **Address:** 222 Lee Street West Charleston, WV 25302

Name of Authorized Agent: Adam Krason **Address:** _____

Contract Number: TOR2600000003 **Contract Description:** Building 9 Culture Center Renovations Project

Governmental agency awarding contract: West Virginia Department of Tourism

☐ **Check here if this is a Supplemental Disclosure**

List the Names of Interested Parties to the contract which are known or reasonably anticipated by the contracting business entity for each category below *(attach additional pages if necessary)*:

1. **Subcontractors or other entities performing work or service under the Contract**
   ☐ Check here if none, otherwise list entity/individual names below.

2. **Any person or entity who owns 25% or more of contracting entity (not applicable to publicly traded entities)**
   ☐ Check here if none, otherwise list entity/individual names below.

3. **Any person or entity that facilitated, or negotiated the terms of, the applicable contract (excluding legal services related to the negotiation or drafting of the applicable contract)**
   ☐ Check here if none, otherwise list entity/individual names below.

Signature: _____ Date Signed: 12-4-25

Notary Verification

State of West Virginia, County of Kanawha:

I, Jessica Wolfe, the authorized agent of the contracting business entity listed above, being duly sworn, acknowledge that the Disclosure herein is being made under oath and under the penalty of perjury.

Taken, sworn to and subscribed before me this 4 day of December, 2025.

_____
Notary Public's Signature

To be completed by State Agency:

Date Received by State Agency: _____

Date submitted to Ethics Commission: _____

Governmental agency submitting Disclosure: _____

Official Seal
Notary Public, State of West Virginia
Jessica Wolfe
501 Washington Street
St. Albans, WV 25177
My Commission Expires May 22, 2028

Revised April 1, 2022

SECTION SIX: ATTACHED FORMS AND DOCUMENTS

ADDENDUM ACKNOWLEDGMENT FORM SOLICITATION #AEOI TOR2600000003

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

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

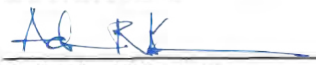
Addendum Numbers Received:
(Check the box next to each addendum received)

- ☐ Addendum No. 1
- ☐ Addendum No. 2
- ☐ Addendum No. 3
- ☐ Addendum No. 4
- ☐ Addendum No. 5

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

ZMM Architects and Engineers
Company

Adam Krason
Authorized Name


Authorized Signature

Principal
Title

December 4, 2025
Date

NOTE: This addendum acknowledgment should be submitted with the bid to expedite document processing.

4. GREEN BUILDINGS MINIMUM ENERGY STANDARDS: In accordance with West Virginia Code § 22-29-4, all new building construction projects of public agencies that have not entered the schematic design phase prior to July 1, 2012, or any building construction project receiving state grant funds and appropriations, including public schools, that have not entered the schematic design phase prior to July I, 2012, shall be designed and constructed complying with the ICC International Energy Conservation Code, adopted by the State Fire Commission, and the ANSI/ASHRAE/IESNA Standard 90.1-2007: Provided, That if any construction project has a commitment of federal funds to pay for a portion of such project, this provision shall only apply to the extent such standards are consistent with the federal standards.

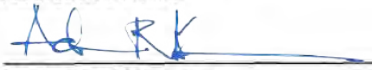
DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

Adam Krason	Principal
Name	*Title*
ark@zmm.com	304.342.0159
Email	*Phone Number*

222 Lee Street West	Charleston	WV	25302
Address	*City*	*State*	*Zip*

CERTIFICATION AND SIGNATURE: By signing below, I certify that: I have reviewed this Solicitation 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 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 W. Va. Code R. §144-3-1 et seq. which automatically voids certain contract clauses that violate State law.

ZMM Architects and Engineers	
Company	
Adam Krason	Principal
Authorized Name	*Title*
	12-4-25
Authorized Signature	*Date*

ZMM
ARCHITECTS
ENGINEERS

REQUEST FOR QUALIFICATIONS

For Architectural and Engineering Services

Building 9 Culture Center Renovations Project

#AEOI TOR2600000003

December 4, 2025

ZMM.COM

December 4, 2025

Hanna Kroeger, Accounting Coordinator
WV Department of Tourism
Building 3
1900 Kanawha Blvd East
Charleston, WV 25305

ZMM
ARCHITECTS
ENGINEERS

Subject: Solicitation #AEOI TOR2600000003 - Building 9 (Culture Center) Renovations Project

Ms. Kroeger:

ZMM Architects and Engineers is pleased to submit the attached information to demonstrate our experience and qualifications to provide professional architectural and engineering services for an assessment to address a variety of concerns at the WV Culture Center (Building 9) located at 1900 Kanawha Boulevard East in Charleston, West Virginia.

Established in 1959, ZMM is a West Virginia-based, full-service, award-winning architectural and engineering design firm noted for design excellence and client focus. Our integrated design approach makes ZMM unique among design firms of our size, and our ability to provide comprehensive design services has made us a trusted resource for renovation and assessment projects throughout West Virginia, most of which are completed while the facilities are occupied and fully operational and many are through a phased construction approach.

To enhance the comprehensive architecture, landscape architecture, engineering (mechanical, electrical, civil, structural, and plumbing), interior design, and construction administration services provided by ZMM, our collaborative team of experts will include professionals from WDP & Associates and Schuler Shook. WDP is a WV SWaM certified consulting engineering firm with a proven history of waterproofing, building envelope and structural related issues as well as designing repairs to remedy those problems. For nearly 40 years, Schuler Shook has created exceptional design solutions in theatre planning, lighting design, and audio-video design.

We are confident that ZMM is the most qualified firm to provide professional design services for the WV Department of Tourism. We have extensive experience working on facilities at the WV State Capitol Complex including the WV Culture Center, WV State Office Buildings 5, 6, and 7, as well as many other state agency facilities in Charleston and across the state. We also have provided roof replacement/assessment support to a variety of organizations and agencies across the state including the WV State Capitol, WV Regional Jails, Cedar Lakes Conference Center, as well as multiple PK-12 and higher education clients throughout the state.

ZMM's successful renovation approach has allowed our firm to be entrusted with designing improvements to some of West Virginia's most prominent buildings including the Charleston Coliseum and Convention Center, the WV Culture Center, the Greenbrier, and the Clay Center. We have extensive knowledge and experience working with local, state, and federal government agencies and are well-versed in their respective protocols, regulations, and guidelines. Our architects, engineers, and designers are highly qualified and have worked together to deliver projects with similar scope and complexity.

Our team of experts are industry leaders involved in developing strategies and best practices for design issues on local and national levels to improve and support facilities in West Virginia and beyond. The team established for your project are the key team members that you and the project(s) committee will be working with from start to finish.

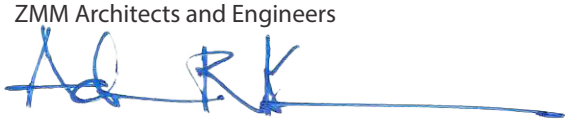
Our past work at the Culture Center includes the Great Hall Lighting Replacement and Gift Shop modernization. Additionally, our experience with the State Office Buildings began decades ago when ZMM Architects and Engineers (Zando, Martin, and Milstead) designed the original West Virginia State Office Buildings 5, 6, and 7. Since then, ZMM Architects and Engineers has played a long-standing role in the ongoing transformation of the West Virginia Capitol Complex, leading a series of phased renovations to State Office Buildings 5 and 6. Beginning with the award-winning redesign of the Tenth Floor for the Office of Technology, ZMM demonstrated how contemporary layouts and thoughtful public spaces could revitalize these mid-century structures. Subsequent work included the renovation of multiple upper floors, bringing them up to modern life safety standards, improving infrastructure, and extending the

buildings' usable life. ZMM's in-house engineering team provided full MEP design, and the firm coordinated closely with the State Fire Marshal and other agencies throughout the process. Additional projects included infrastructure and exterior improvements, all executed while the buildings remained occupied. Similarly, our teaming partner WDP has performed several projects at the West Virginia Capitol Complex, working closely with the General Services Division (GSD) on multiple successful projects. These projects include the State Capitol dome restoration, Capitol Roof Walkway, Supreme Court Law Library, Building 13 Parking Garage, the Diamond Building, Building 37 roof evaluation and roof replacement design, and Building 36 façade repair and replacement project, among others. Most recently, WDP conducted the cursory evaluation of the latest window failure at the Culture Center.

With our team's depth of experience and qualifications, ZMM has become a respected and valued resource in the design community in West Virginia and throughout the region. ZMM's commitment to quality design has been recognized with statewide and national design and planning awards. In fact, ZMM's commitment to design quality has been recognized by the American Institute of Architects (AIA) West Virginia Chapter with 27 design awards since 2005, an achievement that is unrivaled in West Virginia. One of our most recent awards (2025) was for the Stargazing Cabins at Coopers Rock, a collaboration with WV Division of Natural Resources and WV Department of Tourism.

Thank you for taking the time to review the attached statement of qualifications that has been formatted per your request. Also, please visit our websites at zmm.com, wdpa.com, and schulershook.com to see the full range of projects that we have designed and more information about our team. We appreciate your consideration and look forward to the opportunity to continue our work with WV Tourism and the State of West Virginia.

Respectfully submitted,
ZMM Architects and Engineers



Adam Krason, AIA, NCARB, LEED AP, ALEP
Principal

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ZMM
ARCHITECTS
ENGINEERS

1

FIRM OVERVIEW

ABOUT
ZMM ARCHITECTS AND 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 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, WV State Capitol Complex Buildings 5, 6, & 7, and armories for the West Virginia Army National Guard.

Maintaining a diverse practice for more than 65 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 35 staff. David Ferguson, AIA, and Adam Krason, AIA, LEED-AP joined in ownership of the firm 20 years ago. Randy Jones joined the firm in a leadership role when ZMM acquired Blacksburg-based OWPR Architects & Engineers in 2020 to create a regional design firm that employs more than 70 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

ZMM
ARCHITECTS
ENGINEERS

About ZMM Architects and 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 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), the new Ranson Elementary School and Shepherdstown Elementary School (Jefferson County Schools) both include geothermal systems, 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 the following,

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 providing high-quality, client-focused design solutions that meet budget and schedule requirements. We listen, respond promptly with innovative and efficient solutions, and deliver quality projects and develop lasting relationships. Because at ZMM, it's about more than architecture, it's about building your legacy.

AWARD WINNING DESIGN

ZMM's commitment to quality has been recognized through both state and national design awards, as well as through long-term client relationships that we have developed. Our unique approach and integrated design services have led the firm to earn 27 design awards since 2005 – an unrivaled achievement.

2025

AIA Merit Award, West Virginia Chapter
Achievement in Architecture for New Construction
Clendenin Elementary School - Clendenin, WV

AIA Honor Award, West Virginia Chapter
Achievement in Architecture in Residential Design
Coopers Rock State Stargazing Cabins - Bruceton, WV

AIA Honor Award, West Virginia Chapter
Craftsmanship
Coopers Rock State Stargazing Cabins - Bruceton, WV

2020

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

AIA Merit Award, West Virginia Chapter
Achievement in Architecture in Sustainable Design
Ridgeview Elementary School - Sophia, WV

2019

AIA Honor Award, West Virginia Chapter
Excellence in Architecture for New Construction and Renovation
Charleston Coliseum & Convention Center - Charleston, WV

AIA Citation, West Virginia Chapter
Citation for Achievement in Architecture in Interior Renovation
Charleston Coliseum & Convention Center - Charleston, WV

AIA People's Choice Award, West Virginia Chapter
Charleston Coliseum & Convention Center - Charleston, WV

2018

AIA Citation, West Virginia Chapter
Citation for Unbuilt Project
Charleston EDGE - Charleston, WV

ZMM ARCHITECTS ENGINEERS

Award Winning Design (cont.)

2017

AIA Merit Award, West Virginia Chapter
Achievement in Architecture
Cabell County Explorer Academy - Huntington, WV

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

2016

AIA Merit Award, West Virginia Chapter
Achievement in Architecture in Interior Design
Christ Church United Methodist Education Wing - Charleston, WV

AIA Merit Award, West Virginia Chapter
Achievement in Architecture in Interior Design
Christ Church United Methodist Education Wing - Charleston, WV

2015

AIA Honor Award, West Virginia Chapter
Excellence in Architecture in Sustainable Design
Edgewood Elementary School - Charleston, WV

AIA Merit Award, West Virginia Chapter
Achievement in Architecture
Kenna Elementary School - Kenna, WV

2014

AIA Merit Award, West Virginia Chapter
Achievement in Architecture in Sustainable Design
Huntington East Middle School - Huntington, WV

AIA Merit Award, West Virginia Chapter
Achievement in Architecture
Southern WV Community & Technical College
Applied Technology Center - Williamson, WV

AIA Merit Award, West Virginia Chapter
Achievement in Architecture in Interiors/Graphics
Girl Scouts of Black Diamond Council - Charleston, WV

2012

AIA Honor Award, West Virginia Chapter
Excellence in Architecture
West Virginia Housing Development Fund - Charleston, WV

FIRM OVERVIEW

WDP is a West Virginia SWaM certified consulting engineering firm founded in 1995 with offices in West Virginia, Virginia, South Carolina, and New York. For 30 years, WDP has provided professional engineering services for the evaluation and repair of the exterior of buildings and structural assessments, repair design, and building enclosure consulting and commissioning (BECx) projects across the United States.

Creating lasting solutions that extend the service life of buildings or structures is at the heart of our business.

WDP performs around 100 roof, building envelope, and façade assessments, and structural investigation and repair projects every year. **Most of WDP's repair projects involve facilities that must remain occupied and operating "business as usual" throughout the investigation and repair process.** Our investigative strategies and value-based repair designs have addressed countless issues, such as building envelope problems manifested through air/water leakage, occupant comfort issues, structural deficiencies caused by moisture infiltration, differential movement, general deterioration of building materials, biological growth, and aesthetic deficiencies, among others.

Building Envelope Services

WDP provides professional building envelope consulting services for new construction projects including:

- Envelope commissioning
- Peer review of architectural design of building envelope components
- Building science assessments and hygrothermal modeling
- Construction monitoring and support
- Mock-up and field performance testing utilizing standardized testing methods for air and water
- Diagnostic field testing to identify sources of moisture intrusion

WDP's experience with the evaluation of building envelope failures has positioned their firm to provide services that help prevent issues in new construction. They routinely provide building envelope consulting services for a variety of Clients on new construction projects nationally. These services typically include advisory review of submittals, shop drawings, and RFIs; periodic field observation during the installation of building envelope components; and quality assurance testing of building envelope systems.

Standards Development & Committee Memberships

****

Within ASTM, our staff are Task Group Chairs for the development of standards relating to evaluation of existing structures, historic preservation, mockups, and air leakage and ventilation. We also participate on committees relating to masonry, roofing, windows, and thermal insulation.

****

WDP staff are members of ASHRAE Committees that maintain the standard for hygrothermal analysis within the industry (ASHRAE 160), and manage chapters within ASHRAE Handbooks relating to heat, air, and moisture movement in buildings.

****

WDP develops the guiding standards for the evaluation of historic masonry including leading the standards for tuckpointing and evaluation of changes for moisture and thermal improvements.

Forensic Structural Evaluation & Design

WDP provides full-service engineering, development of comprehensive restoration and maintenance programs, and construction management for a wide range of structures. WDP provides professional building consultant services that include assessment of existing buildings, peer reviews of structural designs, repair and restoration design for building facades or primary framing systems, and non-destructive evaluation of the structural component. Our flexibility enables us to address a specific problem or design a comprehensive restoration program for an entire complex.

FIRM OVERVIEW

WDP's structural experience is both broad and deep, encompassing all structure types including masonry, concrete, steel, wood, and combinations thereof. The structural projects in WDP's extensive portfolio include repairs to federal, state, municipal, institutional, commercial, manufacturing, transportation, and residential buildings. Our institutional knowledge developed through extensive term contract experience with education building owners is often incorporated during these discussions to ensure the project approach is tailored to the anticipated use, occupancy conditions, service life, maintenance schedule, and budget constraints.

Structural assessment of concrete and masonry structures

WDP staff receive training and maintain certifications for various types of special access required to perform these investigations, such as fall protection, aerial lifts, scaffolding, suspended scaffolds, and confined space entry.

WDP's use of non-destructive testing (NDT) often helps to reduce the extent of destructive testing and probe openings required, thus reducing the impact on the structure, and saving time and cost to the Owner.

Evaluation of corroded structural steel framing elements

Surface Penetrating Radar to locate embedded reinforcement

Half-cell testing for reinforcing steel corrosion

Local West Virginia Presence

WDP's experience with the State of West Virginia began over 20 years ago with a project at West Virginia University in Morgantown, and we remain dedicated to serving the needs of our West Virginia clients. Over the five years alone, we have worked on more than 20 projects from Charleston to Morgantown to Snowshoe; our services on those projects have included evaluating the structural stability of existing building components, investigating air and water infiltration issues, evaluating the hygrothermal properties of existing wall assemblies, and providing recommendations for repairs.

In 2020, we officially opened an office in Hinton to better serve the needs of our clients throughout the State of West Virginia. We've also worked closely with West Virginia General Services Division (GSD) on multiple successful projects to include investigations for water intrusion issues at the West Virginia State Capitol Dome as well as structural repair design for the GSD's Building 13 precast parking garage and many more included in the list below. All projects include facilities that remained occupied and operating throughout the investigation and repair process.

- **WEST VIRGINIA CAPITOL COMPLEX**

    - Culture Center – Window Project (*Recently Awarded*)
    - Capitol Dome Restoration
    - North Stair Replacement
    - State Capitol Roof Walkway
    - Supreme Court Law Library – Paint failure investigation
    - Interior Clay Tile Stabilization
    - Building 13 Parking Garage - condition assessment
- **WV – Diamond Building (35), Phase I –** Condition Assessment, Roof replacement / Repair Design, Building Enclosure Upgrades, CA Services
- **WV Building 37 –** Roof Evaluation, Roof replacement Design
- **WV Building 36** – Facade repair and replacement project
- **Municipal Auditorium, City of Charleston** – Roof Analysis, Building Envelope Assessment, Cost Benefit Analysis, Structural Evaluation, and Feasibility Study.
- **Public Service Commission –** Façade Replacement
- **IRS Building, Martinsburg** - Existing Conditions Survey of Roofs, Repair Design, CA Services
- **Morgantown City Hall** - field survey of the masonry façade

Museum / Cultural Experience

WDP routinely works in museums and cultural spaces that require a different level of attention to interior climate controls and protection of interior building components. We recognize the importance of preserving artifacts and special collections that have historic significance. A sample of museums, theatres, libraries, and cultural spaces where we have performed building envelope repairs or restoration are listed below. All of these facilities remained occupied throughout our investigation and repair design.

- **Virginia Department of General Services, State Archives Library –** Roof and Canopy, Façade, and Window Design
- **Virginia Museum of Fine Arts**, Water Infiltration Investigation & Roof System Replacement Design (1936)
- **Corcoran School of Arts & Design**, George Washington University - Roof Investigation & Replacement Design, Building Masonry Façade, Roof Investigation & Repair Design (1897)
- **Shannon Library, University of Virginia** – Roof Evaluation, QA Testing Roof Repair Design
- **The Valentine Museum Collections**, Building Envelope Consulting (c/o Glavé & Holmes Architecture) (1898)
- **West Virginia University, Art Museum -** Building Investigation, Roof Replacement
- **Albany Museum of Art**, Building Enclosure Consulting, Albany, GA
- **American Civil War Museum at Tredegar Ironworks**, Washington, DC - Building Enclosure (1837)
- **Center for the Arts,** Virginia Tech, Blacksburg, VA - Building enclosure consultants
- **City Museum**, Lynchburg, VA - Building enclosure investigation (1855)
- **de Laski Performing Arts Building**, George Mason University, Manassas, VA - Building enclosure
- **Greensboro Science Center,** Greensboro, NC - Limited building enclosure peer review
- **Institute of Contemporary Art,** Virginia Commonwealth University (VCU), Richmond, VA - Building enclosure consulting

- **Liberal Arts Center at Davidson Hall,** Virginia Tech, Blacksburg, VA - Building enclosure condition assessments
- **Muscarelle Museum**, The College of William & Mary Williamsburg, VA - Building enclosure consulting
- **Museum and Collections Facility,** Fairfax County Park Authority - Hygrothermal analysis
- **National Museum**, United States Army, Ft Belvoir, VA - Testing & inspection
- **Saint John Paul II National Shrine,** Washington, DC - Renovations and Additions, Building enclosure repair design
- **Solomon R. Guggenheim Museum, NYC** - Steel corrosion investigation - ICRI Project of the Year Award winner (1937)

ABOUT THE FIRM

Valued internationally as creative and insightful design partners, Schuler Shook consistently creates exceptional design solutions in theatre planning, architectural lighting design and audio video design.

We design for today and for the future. With over 39 years of experience, we are fully engaged in understanding and elevating the project vision.

Great projects are the result of great teams – teams of users, planners, designers, engineers, builders. When all of the team members are listening and engaged, innovative ideas can become practical reality.

We gladly step up to address project challenges with an innovative spirit that is grounded in practical experience.

Client partners appreciate our process, built on a genuine openness and curiosity about every project and each stakeholder. We believe in happy clients and spaces that make a difference.

THEATRE PLANNING

Theatre planning and technology design require a great depth of experience balanced with a clear vision for the future of the performing arts. Performance spaces must engage their audiences and support the artists in their practice.

We lead the team in exploring options for theatre shapes and forms, and we carefully evaluate the positive relationships that can be created between audiences and performers.

Theatre technical systems are evolving rapidly, in the format of the technologies and in the infrastructure required to support them. We excel at imagination and innovation that truly answer the needs of the performing arts.

We create performance spaces that work, for audiences and for artists.

LIGHTING DESIGN

Architecture and lighting are inseparable. We strive to understand the architect's vision for every project element; it is that vision that engages and propels us forward. We explore unanticipated options in order to push beyond what is expected to that which is extraordinary.

We are expert communicators through rendering and visualization of lighting concepts. We are leading the profession in the fields of daylighting and lighting for human health. We are continually finding solutions that allow our projects to reach ever higher levels of sustainability.

Architectural lighting is an art and a science, and nobody is better prepared than we are to creatively solve the challenges of integrating light with the built environment.

AUDIO VIDEO

Audio-visual systems have become an important aspect of almost every modern building from theatres to public assembly to entertainment spaces. Our approach focuses on functional integration with the architecture and other building systems, to help ensure the architecture is enhanced, not diminished, by the technology.

AV Equipment Design Services

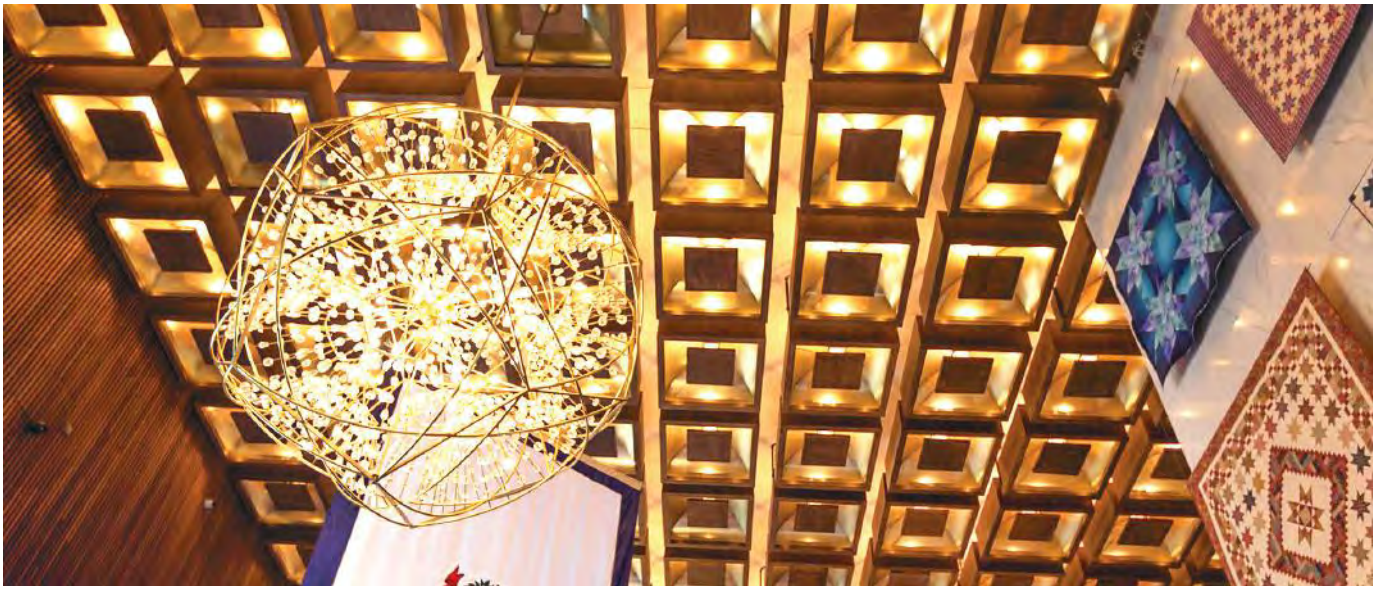
- Video Recording and Streaming (Enterprise Video)
- Hearing Augmentation
- Theatre Communications and Stage Manager Control
- Production and Public Address Sound Systems
- Sound and Paging Systems
- Standard and Interactive Presentation Systems
- Videoconferencing
- Discrete and Networked Video
- AV Displays, Projection and Projection Screens, Digital Signage, and Video Walls
- AV Infrastructure
- Touch Screens, Tables and Walls
- Interactive Kiosks

Production Audio Services

- Production Sound Systems
- Recording Studios

2

PROJECT EXPERIENCE



WV CULTURE CENTER
GREAT HALL LIGHTING & MUSEUM SHOP

LOCATION	SIZE	COMPLETION	COST
CHARLESTON, WV	12,000 SF	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.

CLAY CENTER FOR THE ARTS & SCIENCES OF WV

LOCATION
CHARLESTON, WV

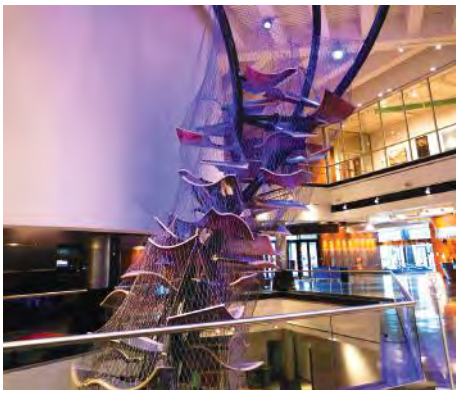
COMPLETION
2020

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.



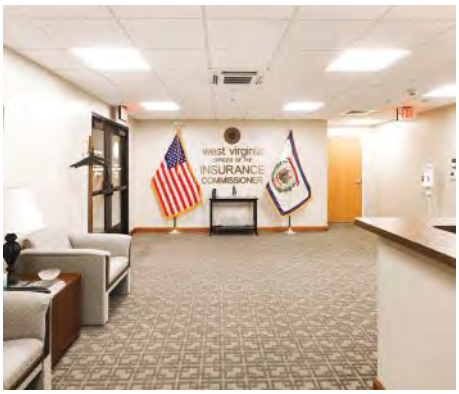
WEST VIRGINIA LOTTERY HEADQUARTERS

LOCATION	SIZE	COMPLETION	COST
CHARLESTON, WV	42,082 SF	2016	$7.5M

This project is an extensive renovation of an existing 13-story office building and 7-story parking garage in downtown Charleston, WV.

Renovations within the office building consist of three existing tenant floors, relocation of the fitness center, and replacement of the roof. The WV Division of Insurance is being relocated to floors 7, 8, and 9. Off the renovated elevator lobbies on each floor is a reception area which leads to an interior space of enclosed offices. A tenant space on the sixth floor is being renovated into the new fitness center. Construction on the roof includes the replacement of insulation and membrane and the installation of new roof davits and stainless-steel guardrail.

The parking deck will be undergoing renovation, including structural repairs, electrical upgrades, and an addition to the storage warehouse. It was determined that bearing pads need to be replaced under the framing members, concrete structure and topping slabs needed repair, and spandrel panels required epoxy injection to repair cracking. Driving surfaces are receiving new waterproofing, sealant joint replacement, and restriping. The circulation connector required partial reconstruction of the steel deck and floor slabs. Electrical improvements will consist of new LED lighting and additional pole fixtures on the top level. The storage warehouse is being increased by 1,800 SF and will consist of masonry walls clad in EIFS with a sloped steel-framed roof and single-ply membrane system.



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. 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.

CLAUDIA L. WORKMAN FISH & WILDLIFE EDUCATION CENTER

LOCATION	SIZE	COMPLETION	COST
ALUM CREEK, WV	7,000 SF	2021	$5M

ZMM provided design services for the Education Center, which includes exhibits about West Virginia's native wildlife, including conservation, game management, forestry, stream restoration, and how to identify native plants and animals.

The center is located on 102 acres of land, along with the WVDNR District 5 Headquarters. ZMM's services included the development of the site and facility, as well as coordination with civil/environmental, exhibit design, and marketing team members. The facility, nestled in the beautiful landscape, concentrates on visitor and user experience, while creating a dynamic space to celebrate West Virginia's greatest natural treasures. One of the key concepts is to represent our wild and wonderful state by incorporating natural materials such as stone, a variety of woods, and natural finishes.

A central axis frames an inspiring view and sets the tone for the visitor with heavy timber, vaulted ceilings, and natural light. The northwest quadrant is dedicated to administration and classroom functions, while the southwest quadrant is composed of utilitarian spaces. The eastern half of the building is devoted to exhibit space. The angled walls and exterior glass create a vibrant exhibit space, as the outdoors become part of the exhibit, as a large, elevated deck spans across the landscape, creating the ultimate viewing platform for the breathtaking views of the Forks of Coal State Natural Area.

COOPERS ROCK STARGAZING CABINS

LOCATION	SIZE	COMPLETION	AWARDS
BRUCETON MILLS, WV	800 SF EACH	2025	2025 AIA WV HONOR AND CRAFTSMANSHIP AWARD

Coopers Rock State Forest's stargazing cabins offer a unique blend of modern comfort and immersive celestial experiences, featuring A-frame architecture, telescopes, retractable skylights, and a prime location in one of the darkest sky regions on the East Coast, further positioning West Virginia as a premier destination for outdoor adventure and astrophotography.

Coopers Rock State Forest is revolutionizing outdoor lodging with West Virginia's first stargazing cabins, designed to provide an immersive celestial experience in one of the darkest sky regions on the East Coast. Strategically located along the main ridge between Raven Rock and the park's renowned overlook, these five A-frame cabins merge rustic charm with modern comfort, offering guests unparalleled views of the night sky. A direct result of the state's $200 million investment in state park improvements, this project aligns with West Virginia's broader commitment to enhancing outdoor tourism, preserving natural landscapes, and supporting the state's growing reputation as a premier stargazing destination.

The A-frame architectural design harmonizes with the surrounding forest, featuring large, floor-to-ceiling windows and retractable skylights for an uninterrupted view of the cosmos. Each cabin is equipped with

ZMM ARCHITECTS ENGINEERS

Coopers Rock Stargazing Cabins (cont.)

high-powered telescopes, spa-like amenities, and an energy-efficient design that ensures both comfort and sustainability. The strategic location of these cabins minimizes light pollution, enhancing visibility and tying into the state's larger "Dark Sky" initiative. The Coopers Rock Stargazing Cabins redefine outdoor adventure by blending modern innovation with nature's breathtaking beauty.

We are sure that guests will be excited to snap photos during their relaxing stay to share with friends, who undoubtedly will wish that they joined you on the trip!

PIPESTEM STATE PARK
MCKEEVER LODGE INTERIOR RENOVATIONS

LOCATION	SIZE	COMPLETION	COST
PIPESTEM, WV	VARIOUS	2021	$100M

Pipestem State Park received interior renovations and upgrades to guestrooms and public spaces. The lobby and other spaces have a fresh new upgraded look with modern finishes and new carpet.

Renovations included improvements to 88 guestrooms on first floor, bathroom expansions on the 7th floor, renovations to the dining area with a bar addition, renovations to all conference rooms, and finish renovations in the lobby. The lodge also received a new day spa area.

ZMM will be replacing the ceilings and lightings in all public spaces and guestroom corridors in the main McKeever lodge building. Mountain creek lodge that sits below McKeever Lodge will receive a new roofing on the guestroom buildings and restroom will be renovated in the main tram building.

ZMM ARCHITECTS ENGINEERS

BEECH FORK STATE PARK LODGE

LOCATION
LAVALETTE, WV

COMPLETION
TBD

COST
$28.49M

The goal of the lodge study was to help determine the feasibility for a new lodge at Beech Fork.

This objective was achieved through the development of a concept for a 75-room lodge, located on the banks of Beech Fork Lake in Wayne County, WV, which is designed to benefit a variety of visitors. The form of the building was influenced by the site configuration, as well as the functions contained within it.

The floor plan is arranged in a way to separate the guestrooms and other guest-only facilities from the more public functions of the building, such as the restaurant, pub, gift shop, and meeting room. This allows visitors who may not be staying at the lodge to use these areas, without encroaching on the privacy of lodge guests. All of the guestrooms are arranged to have access to views of the lake. Those views are also shared by the restaurant, meeting room, and the recreation areas.

The exterior of the building is designed to simulate the craftsman style to evoke a more relaxed, comfortable, and informal feel for guests and visitors. The brick, stone, siding, and roof materials are common to the area and offer low-maintenance and durability to provide a long-lasting, attractive structure.

WEST VIRGINIA STATE CAPITOL

LOCATION
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

LOCATION
CHARLESTON, WV

AWARDS
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.

BUILDING 37 WINDOW, HVAC, ROOF AND ENVELOPE UPGRADES

LOCATION
CHARLESTON, WV

SIZE
151,000 SF

COMPLETION
TBD

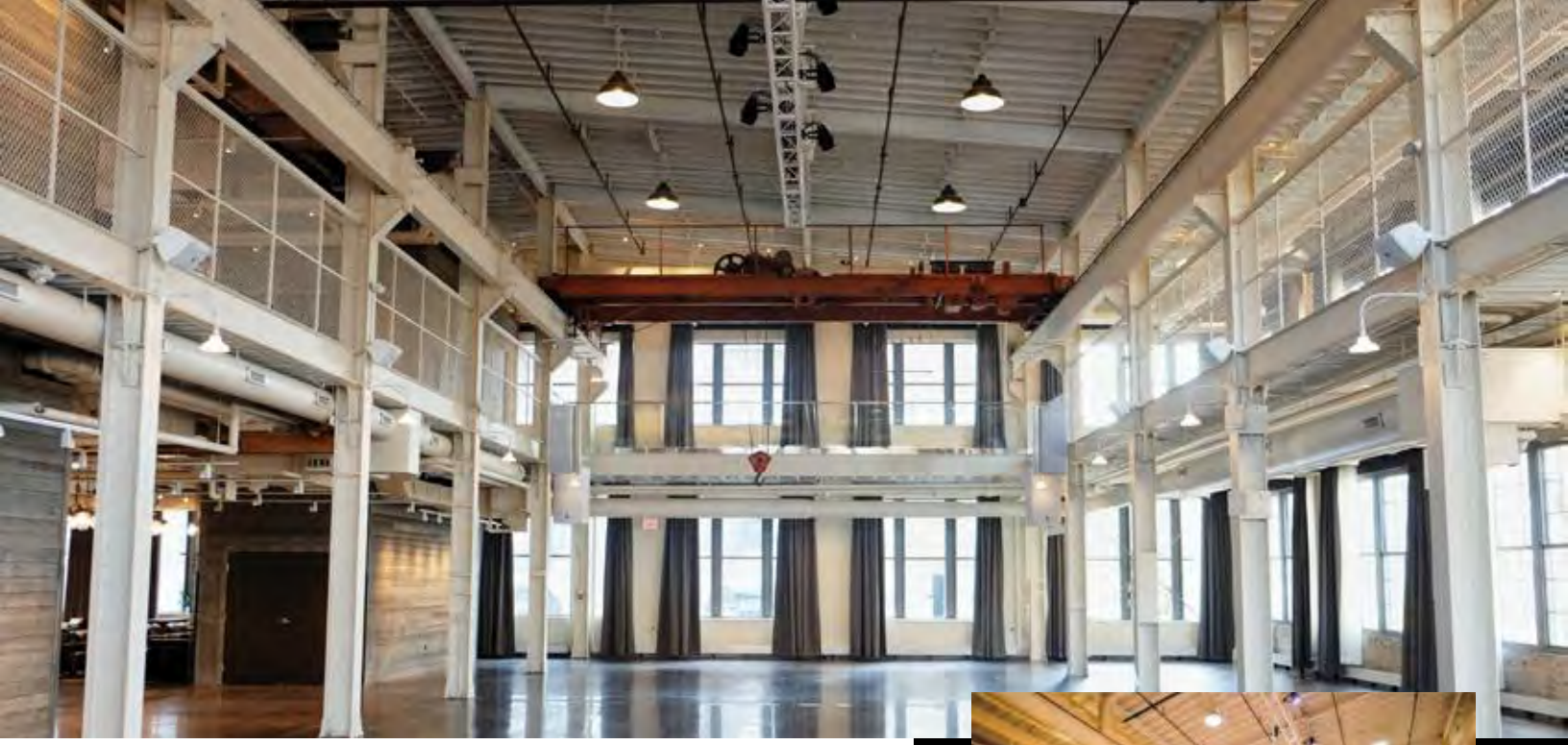
ZMM and WDP partnered to support upgrades at Building 37, also known as the Department of Environmental Protection.

Building 37 was constructed in 2003 and is a three-story building featuring ribbon windows and concrete masonry veneer with a large entrance curtain wall. Water infiltration around the windows was an ongoing issue with the building, leading to isolated repairs undertaken in 2011. However, these repairs did not address the underlying issues and further evaluation was required. WDP teamed with ZMM to perform an evaluation of the building that incorporated both building envelope components and HVAC systems.

WDP performed a field investigation and performed diagnostic water testing and exploratory openings to identify the root cause of the water infiltration. It was found that a water resistive barrier was not incorporated into the exterior wall and joints in the sill flashing permitted a significant amount of water to drain down into the wall cavity. Without a mechanism to properly drain this water out of the wall cavity, it is directed towards the interior of the building at the windows. This led to deterioration of the wood sill supports below the windows as well as corrosion of structural steel elements

ZMM ARCHITECTS ENGINEERS

WDP & Associates



MACHINE SHOP
MINNEAPOLIS, MN

This 19,000 square foot event center in an historic building was once Pillsbury A-Mill's machine shop, used to produce and repair milling equipment. The building's careful restoration kept the 1916 architectural details in tact and provides a unique location for weddings, musical performances, and events.

Schuler Shook provided architectural lighting design and theatre planning services to enable the building to serve a variety of needs. The event systems includes rigging, production infrastructure, and specialty lighting.

A center motorized truss was installed to allow easy and quick access for lighting, audio, and video. The truss can also accommodate event "string lights," lighting fixtures, and fabric swags to easily modify the space for different functions.

SCOPE OF WORK: Interior and exterior lighting design and theatre planning for the renovation of the event hall, lounge, and public areas of a historic venue.

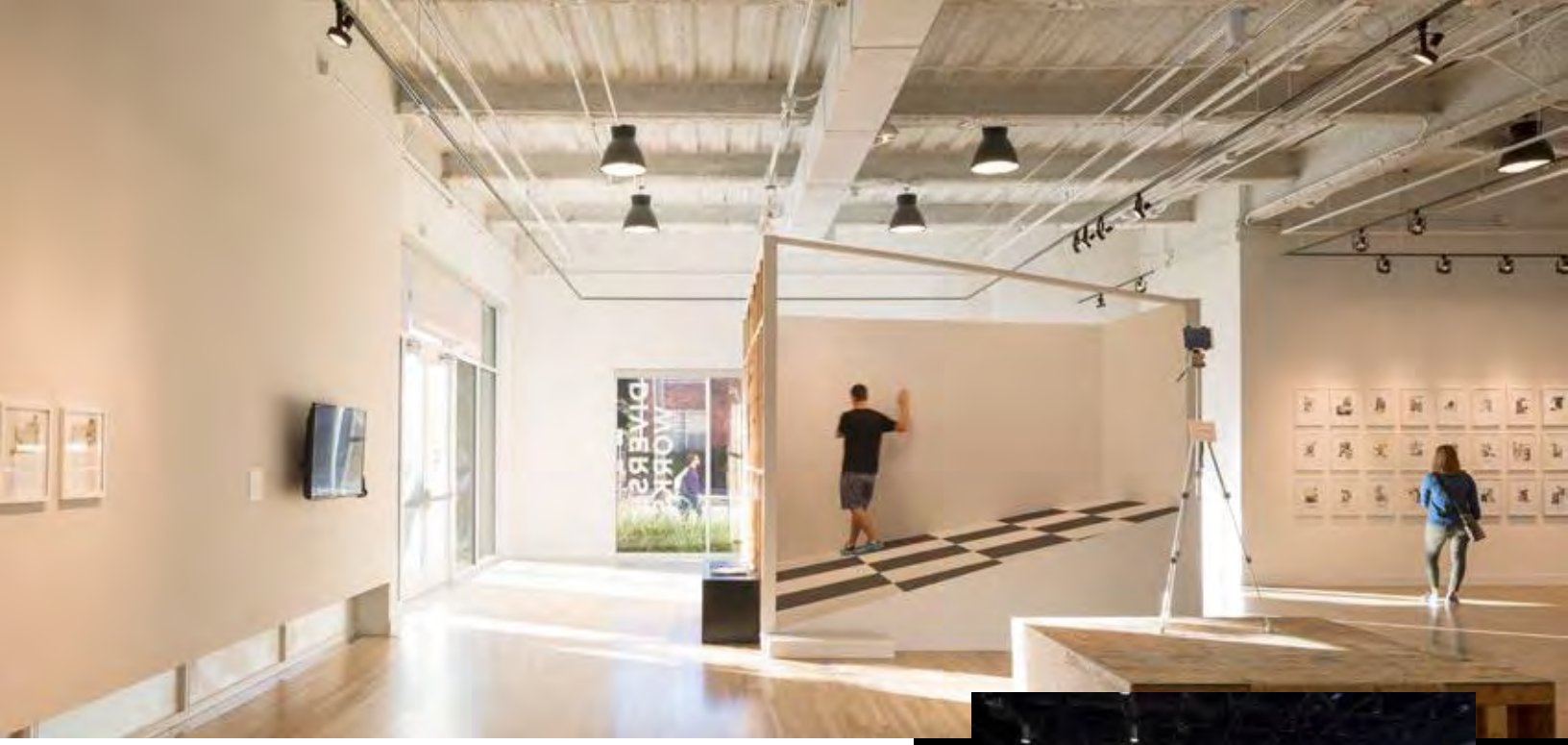
COST: $6.5 million

OWNER: Machine Shop, LLC

ARCHITECT: Cuningham Group

COMPLETED: 2016

Schuler Shook
LIGHTING DESIGN / THEATRE PLANNING / AUDIO VIDEO DESIGN



MIDTOWN ARTS & THEATER CENTER HOUSTON (MATCH)
HOUSTON, TX

The Midtown Arts and Theater Center Houston (MATCH) is a nonprofit group formed expressly to create new space where artists can come together to collaborate and present their work. The resulting structure contains four performance venues referred to as MATCH boxes located in two buildings connected by a sweeping breezeway to the plaza. MATCH supports dance, music, theatre, visual art, film, performance art, and others in the new facility.

Schuler Shook provided theatre consulting and architectural lighting design. Lighting scope included schemes for the MATCH boxes, lobbies, the breezeway, offices, gallery, and rehearsal spaces. A simple palette of fixture types was used throughout to blend with and emphasize the architecture.

All four performance spaces include curtain and track, and Schuler Shook developed the initial portable platform package. Box 4 includes a system of tension wire catwalks over the stage to allow easy access to these components while maintaining flexibility.

Schuler Shook
LIGHTING DESIGN / THEATRE PLANNING / AUDIO VIDEO DESIGN

SCOPE OF WORK: Theatre planning and equipment systems design; architectural lighting design.

COST: $25 million (estimated)

OWNER: Midtown Arts & Theater Center

ARCHITECT: Lake Flato / Studio Red

COMPLETED: 2017

MACALESTER COLLEGE, PHASE 3: THEATRE & DANCE
ST. PAUL, MN

The third phase of the Art Center's renovation features an innovative 200-seat flexible performance space, a small black box, two large dance studios with sprung floors, a state of the art design lab, scene shop, and costume shop. The thoughtful design of this project resulted in a 2021 USITT Merit Award.

The flexibility of the larger space allows for many room configurations, as dictated by the needs of the performance. Configurations vary from a traditional wing and border end stage to a unique two level structure. The combination of hinged seating galleries, tension wire grid, rigging and motorized winch system allow for multiple seating and stage configurations with minimal effort. State of the art rigging, lighting, platform systems, and full trap area provide unique staging opportunities for a theatre and department of this size.

The architectural lighting included the theatre spaces, classrooms, offices, corridors, adjacent parking lots and pathways, and the exterior feature wall. Schuler Shook also specified the lighting control system for the public spaces, classrooms, and offices.

Schuler Shook
LIGHTING DESIGN / THEATRE PLANNING / AUDIO VIDEO DESIGN

SCOPE OF WORK: Theatre planning for a 200-seat flexible theatre, black box, dance studios, design lab, classrooms, scene shop, and costume shop. Architectural lighting for all the theatrical spaces, back of house spaces, ten classrooms, faculty office suite, exterior pathways and adjacent parking lots, and exterior feature wall.

COST: $22 million

OWNER: Macalester College

ARCHITECT: HGA Architects and Engineers

COMPLETED: 2019

WOODY GUTHRIE CENTER
TULSA, OK

The Woody Guthrie Center, located in Tulsa's Brady Arts District, highlights Woody's life and houses his personal archives. The educational facility also includes rehearsal rooms for the Tulsa symphony and theatrical groups, as well as space for other arts groups.

To preserve the valuable and delicate objects on exhibit, Schuler Shook's lighting designers created lighting schemes that use only non-UV, low wattage, LED lighting. Discrete architectural accents help illuminate the space while not casting unwanted light on the displays. Tracks at the ceiling level allow for flexibility and blend into the ceiling. The glass pendants and glass downlights in the lobby create an inviting space to draw pedestrians in.

The gently illuminated entry auditorium plays a show every half hour about Woody's life and work. All is governed by a sophisticated control system that allows for a variety of settings and runs each room individually.

SCOPE OF WORK: Interior museum and exhibit lighting design.

COST: N/A

OWNER: George Kaiser Family Foundation
City of Tulsa

ARCHITECT: Kinslow, Keith & Todd

COMPLETED: 2013

Schuler Shook
LIGHTING DESIGN / THEATRE PLANNING / AUDIO VIDEO DESIGN

GREEN LINE PERFORMING ARTS CENTER
CHICAGO, IL

Washington Park boasts a new, storefront-style theatre as part of the Arts Block on Garfield Boulevard. While the structure re-uses elements of the four buildings that occupied the site, the theatre and rehearsal spaces are outfitted to provide high production values for theatre companies, musicians and entertainers.

The 6,600 SF arts center includes a 99-seat black box theatre, a purpose-built rehearsal and performance space, green room, lobby and exterior courtyard for film screenings. All spaces support the center's offerings of professional training in technical theatre including lighting, sound and scenic design as well as house management with a goal of theatre arts employment for residents of Washington Park and the South Side.

Schuler Shook worked with the architect and Arts + Public Life to create a center that will support artists, technicians and students of the arts. Backstage facilities were designed to Actor's Equity standards, and theatre lighting and rigging systems are state-of-the-art.

Schuler Shook
LIGHTING DESIGN / THEATRE PLANNING / AUDIO VIDEO DESIGN

SCOPE OF WORK: Theatre planning and design of theatre lighting and rigging systems.

COST: $5.5 million

OWNER: Arts + Public Life
Jacqueline Stewart, Director
773-702-9724

ARCHITECT: Morris Architects/Planners
John Morris, Architect, 312-942-0500

COMPLETED: 2018

HARRY S TRUMAN LIBRARY AND MUSEUM
INDEPENDENCE, MO

This renovation is the library's largest project since opening the museum in 1957. The new 3,000-square foot addition includes a new entrance and lobby, and completely new and reimagined museum exhibits.

Schuler Shook specified both the fixed architectural lighting and the exhibit lighting, including lighting integral to the exhibits. Working with the architects, the exhibit designer, and the owner, the lighting highlights artifacts, text panels, and exhibit furnishings while adhering to the stringent National Archives and Records Administration (NARA) standards for the protection of artifacts. LED fixtures on dimmers controlled by occupancy sensors ensure precious artifacts are not exposed to any unnecessary light and that strict foot candle limits are maintained. Special consideration was paid to wayfinding, readability of texts, and access for all patrons. In addition to the light fixtures and light fixture layout, Schuler Shook designed a control system that integrates with the A/V system to both support interactive features and areas that contain theatrical lighting and video shows.

Schuler Shook
LIGHTING DESIGN / THEATRE PLANNING / AUDIO VIDEO DESIGN

SCOPE OF WORK: Interior and exterior museum and exhibit lighting design for the renovation of existing spaces and the design of the new addition.

COST: $30 million

OWNER: National Archives and Records Administration, US Government

ARCHITECT: Gallagher & Associates

COMPLETED: 2021

LUMINARY ARTS CENTER
MINNEAPOLIS, MN

Built in the 1980's as the Guthrie Theatre's second performance space, it operated as a rental venue for local dance and theatre groups for the last 15 years. The Opera Center purchased this space in 2019 to expand their offerings of new operas and smaller chamber operas, while maintaining the current rental revenue.

The extensive renovation reoriented the theatre to improve performer stage access and increase backstage space and storage. The lobby was reorganized with a new concessions area, gender neutral and ADA restrooms, and more space for queuing and hosting events. With a stage level below grade, a freight elevator was added to improve load in time and safety. A tension wire grid replaced the pipe grid to improve access. Acoustic curtains were added to amplify performances. A new seating platform system provides code compliant seating. A redesigned lighting system provides additional power, new infrastructure and LED fixtures to expand capabilities and increase energy efficiency. Architectural lighting was replaced throughout the facility. Decorative fixtures and linear accents provide a new identity for the lobby.

Schuler Shook
LIGHTING DESIGN / THEATRE PLANNING / AUDIO VIDEO DESIGN

SCOPE OF WORK: Theatre planning and lighting design services including a feasibility study prior to Minnesota Opera's purchase of the building.

COST: $6 million

OWNER: Minnesota Opera

ARCHITECT: Shelter Architecture

COMPLETED: 2022

CENTER OF CREATIVE ARTS
ST. LOUIS, MO

A pre-professional school and community center, the Center of Creative Arts (COCA) is a significant component of its community that was outgrowing its landmarked space. COCA's vision of serving youth and adults through dance, theatre, and visual arts training required significant modernization and addition while retaining its status on the National Register of Historic Places. Schuler Shook's work for COCA began with a programming and feasibility study.

A phased approach was selected, and Phase 1 involved the renovation of an adaptive re-use of a historically-listed synagogue into a flexible performance/rehearsal space and additional studio/teaching space. Phase 2 comprised the addition of a 450-seat theatre, studios, shops, a large lobby atrium, and support spaces.

Schuler Shook worked on the performance space, all studio spaces, and overall building planning. The end result is a dynamic home for the fourth largest multidisciplinary community arts center in the US.

SCOPE OF WORK: Feasibility study, theatre consulting, seating layout, technical systems design.

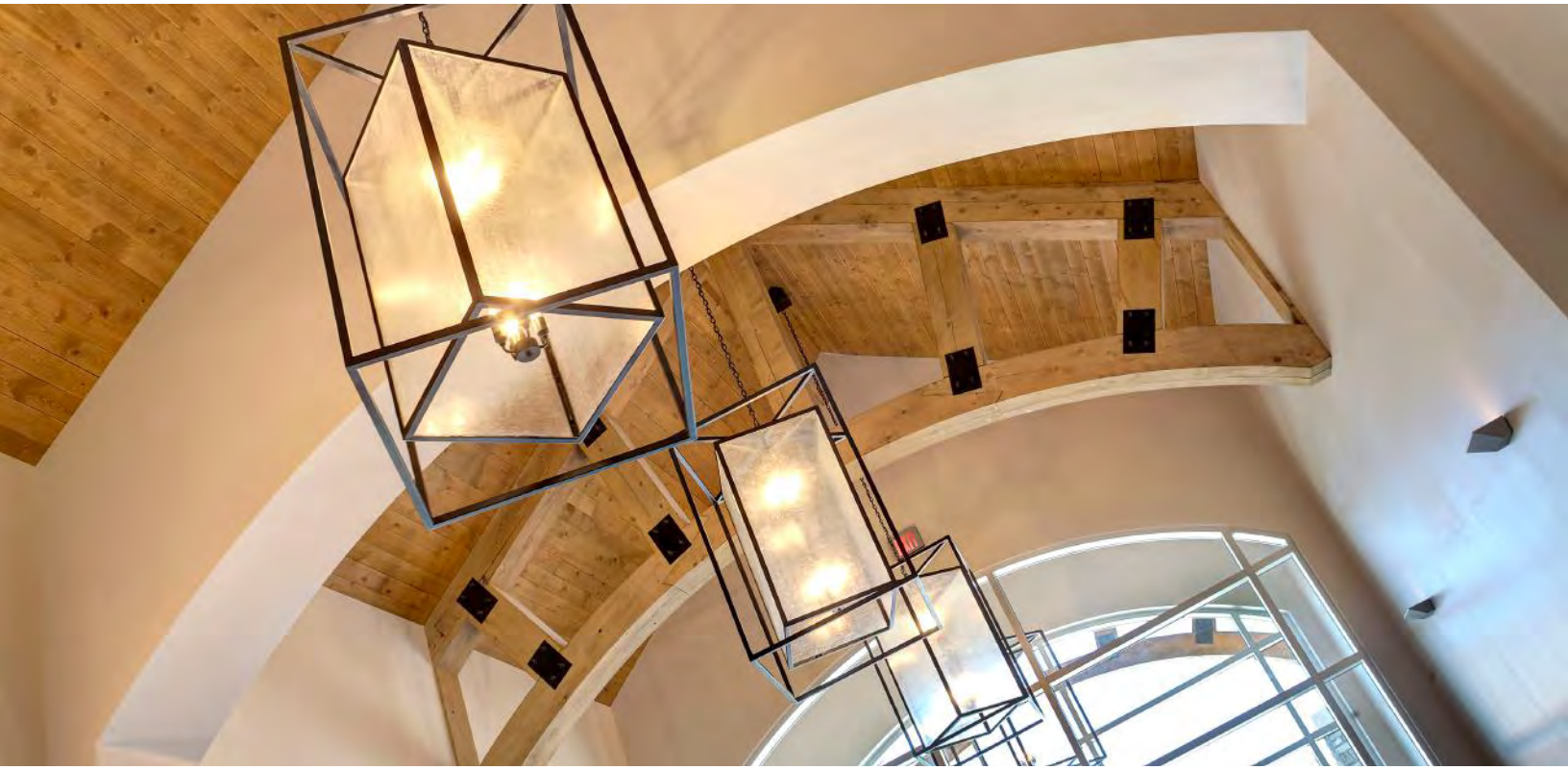
COST: $37 million

OWNER: Center for Creative Arts

ARCHITECT: Christner Architects

COMPLETED: 2020

Schuler Shook
LIGHTING DESIGN / THEATRE PLANNING / AUDIO VIDEO DESIGN



3

TEAM QUALIFICATIONS

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 as President/CEO and 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 the community, serving on a variety of statewide and local civic and non-profit boards.

EDUCATION

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, North Carolina, Louisiana

AFFILIATIONS

Association for Learning Environments

WV Board of Architects, President (2019 - Current)

American Institute of Architects, Stategic Council (2033/23)

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 Urban Works, Board of Directors

Charleston Municipal Planning Commission

Charleston Historic Landmarks Commission

Education Alliance, Board Chair (2022/23)

PROJECT EXPERIENCE

WV State Laboratory - So. Charleston, WV

WV Department of Agriculture Laboratory Evaluations - Guthrie, WV

Capital Sports Center - Charleston, WV

Shawnee Sports Complex - Institute, WV

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

State Office Building #5, 10th Floor Renovation - Charleston, WV

Charleston Coliseum and Convention Center - Charleston, WV

Claudia L. Workman Fish and Wildlife Education Center - Alum Creek, WV

Wood County Justice Center - Parkersburg, WV

Wood County Resiliency Center - Parkersburg, WV

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

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

Girl Scouts of Black Diamond Council - Charleston, WV

Goodwill Prosperity Center - Charleston, WV

ADAM KRASON

Name:	KRASON ADAM
Credential ID:	3498
Expiration Status:	Not Expired
Expiration date:	2026-06-30
Renewal Date:	2025-06-30
Disciplinary Action:	N/A

Rex Cyphers, PE

Principal-in-Charge

Rex is WDP's Vice President and Chief Operating Officer with 23 years of experience. He specializes in the design and repair of masonry structures, historic preservation, and nondestructive testing. He performs forensic field, façade, roofing, waterproofing, and building envelope investigations; structural inspection /analysis and design; architectural retrofit and repair; and develops design documents and repair recommendations.

EDUCATION

- West Virginia University / Civil Engineering / MS – 2003; BS – 2002
- West Virginia University / Graduate Certificate / Cultural Resource Management / 2003

PROFESSIONAL REGISTRATION

Professional Engineer: WV, CT, IL, LA, PA, TN, VA

PROFESSIONAL MEMBERSHIPS / COMMITTEES

- ASTM Subcommittee E06.24 Preservation and Rehabilitation Technology
  - ASTM E2260 – Task Chair, "Standard Guide for Repointing (Tuckpointing) Historic Masonry"
  - ASTM E3069 Task Chair, "Standard Guide for Evaluation and Rehabilitation of Mass Masonry Walls for Changes to Thermal & Moisture Properties of the Wall"
  - ASTM E3258 Task Chair, "Standard Guide for Evaluation of Changes to the Thermal, Moisture, and Ventilation Performance of Existing Roof Enclosures"

REPRESENTATIVE EXPERIENCE

WV GSD State Capitol, Dome Leakage Investigation & Restoration, Charleston, WV / PIC & Historic Masonry Consultant

As Designer of Record, WDP investigated the cause of chronic water infiltration and structural issues and designed repairs for significant life safety risks, including interior clay tile damage which posed a fall hazard for building occupants; reinforcement corrosion of the monumental north stair; and damaged interior finishes at the upper rotunda of the dome along with structural and masonry repairs to inner and outer domes. WDP provided evaluation, analysis, and coordination for repairs as well as CA services. Rex oversaw the project and consulted for historic masonry.

West Virginia GSD, Building 37 (c/o ZMM), Window, HVAC, Roof and Envelope Investigation & Upgrades, Charleston, WV / PIC

Water infiltration around the windows has been an issue with Building 37, leading to isolated repairs undertaken in 2011 – which did not address the underlying issues. WDP performed an evaluation of the building that incorporated both building envelope components and HVAC systems. We performed a field investigation, diagnostic water testing, and exploratory openings to identify the root cause of water infiltration. A water resistive barrier was not incorporated into the exterior wall and joints in the sill flashing permitted a significant amount of water to drain down into the wall cavity. WDP developed a report of building envelope issues and presented tiered repair recommendations ranging from maintenance to comprehensive.

Acumen Development, New Roc City, Water Leakage Investigation and Repair, New Rochelle, NY / Senior Engineer

WDP performed a condition assessment, designed repairs, and provided construction support for the plaza and underground loading dock of a mixed-use complex to address water infiltration and structural steel corrosion. The repair involved removal and reconstruction of a plaza and underlying waterproofing membrane system and extensive repair and structural reinforcement.

TED OHL

PRINCIPAL THEATRE CONSULTANT

Ted Ohl joined Schuler Shook in 2019 to open the firm's New York office, expanding his extensive career in the theatre industry. Prior work included theater equipment construction and renovation projects at many prestigious venues across North America.

Ted brings a collaborative approach to performing arts and public assembly facility design and construction, built upon his years of experience growing businesses and developing products that serve the entertainment industry. This practice is combined with over fifteen years devoted to mounting productions on every variety of stage.

SIGNIFICANT PROJECTS

Loew's Jersey Theater, Jersey City, NJ
National Tennis Center, Queens, NY
South Padre Island Convention Center, South Padre Island, TX
Fairborn Theatre, Fairborn, OH
Thunder Valley Casino Resort, Lincoln, CA
Washington University, St. Louis, MO

SIGNIFICANT PROJECTS - PRIOR TO SCHULER SHOOK

Baltimore Lyric Opera, Baltimore, MD
Alice Tully Hall - Lincoln Center, New York, NY
Carnegie Hall - Zankel Hall, New York, NY
The Juilliard School, New York, NY
Manhattan School of Music, New York, NY
Santa Fe Opera, Santa Fe, NM
New Victory Theater, New York, NY
Baryshnikov Arts Center, New York, NY
Radio City Music Hall, New York, NY
Biltmore Theater Renovation, New York, NY
Fox Theatre, Atlanta, GA
Philadelphia Academy of Music, Philadelphia, PA
Brooklyn Academy of Music, New York, NY

EDUCATION

MFA – Yale School of Drama
BA – University of the Pacific

ORGANIZATIONS

International Society for the Performing Arts
International Association of Venue Managers
League of Historic American Theatres

RODNEY PAULEY
AIA

Senior Architect, Project Manager

Rodney Pauley has been employed at ZMM since 2010, working on a wide variety of projects, including military facilities, educational (PK-12 and higher education) campuses, medical office buildings, laboratory facilities, and various projects with the State of West Virginia and other governmental agencies.Rodney is a registered architect in the State of West Virginia and a member of the American Institute of Architects. Multiple projects that he has worked on have been recognized with awards from the West Virginia Chapter of the American Institute of Architects.

Before moving back to West Virginia, Rodney spent almost two decades in Atlanta, Georgia, where he worked for several large architectural and interior design firms, offering project architect and project management services on a variety of projects, including historic renovation, retail, athletic facilities, parking structures, high-rise condominiums, hotels, and convention centers. The primary focus of his past work included medical, corporate, and spec high-rise office buildings for several national developers.

EDUCATION

Bachelor of Architecture
University of Tennessee, 1992

Associate of Science
West Virginia Institute of Technology, 1986

LICENSURE

West Virginia

AFFILIATIONS

West Virginia AIA Member

PROJECT EXPERIENCE

WV State Laboratory Testing Facilities Assessment - WV

Charleston Coliseum and Convention Center - Charleston, WV

State Office Buildings 5, 6, and 7 Renovations - Charleston, WV

WV State Capitol Senate Bathroom Renovations - Charleston, WV

Capitol Guard House - Charleston, WV

WV Lottery Headquarters - Charleston, WV

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

INTUIT Prospeity Hub - Bluefield, WV

WV School of Osteopathic Medicine Multiple Projects - Lewisburg, WV

WV Regional Technology Park - Charleston, WV
- Building 754 National Weather Service Center (NOAA)

Wood County Resiliency Center - Parkersburg, WV

WVDNR Pipestem State Park Lodge Renovations - Pipsetem, WV

WVU Institute of Technology Renovations - Montgomery, WV

BridgeValley Community and Technical College Master Plan - Montgomery, WV

Valley Health Clinics - Multiple Locations WV

ZMM ARCHITECTS ENGINEERS

RODNEY PAULEY

Name:	PAULEY RODNEY
Credential ID:	4302
Expiration Status:	Not Expired
Expiration date:	2026-06-30
Renewal Date:	2025-06-24
Disciplinary Action:	N/A

JOSEPH KOVALICK

PRINCIPAL

Jody Kovalick looks forward to bringing his wide ranging theatrical production experience to his theatre consulting projects. His diverse production background includes technical design and direction, lighting, sound, and scenic design. He has worked in design and technical capacities at facilities ranging from high school and community theatres to profession LORT and touring house theatres. Jody uses this base of experience to develop functional performance spaces that serve the needs of the production as well as those of the audience.

EDUCATION

MFA – Yale School of Drama
BFA – Pennsylvania State University

ORGANIZATIONS

American Society of Theatre Consultants
U. S. Institute for Theater Technology

SIGNIFICANT PROJECTS

Ocean Reef Cultural Center, Key Largo, FL
Crest Theatre, Delray Beach, FL
Des Moines Playhouse, Des Moines, IA
American Players Theatre, Touchstone Theatre, Spring Green, WI
American Players Theatre, Hill Theatre, Spring Green, WI
CAA Theatre, Toronto, Ontario
University of Wisconsin - Stout, Harvey Hall, Menomonie, WI
University of Wisconsin - Madison, Memorial Union, Madison, WI
Trueblood Performing Arts Center, Washington Island, WI
Perpich Center for Arts Education, Minneapolis, MN
The American International School of Muscat, Muscat, Oman
University of Wisconsin - Fox Valley, Menasha, WI
University of Wisconsin - Stevens Point, Stevens Point, WI
University of Virginia at Wise, Wise, VA
Longwood University, Farmville, VA
University of Mary Washington, Fredericksburg, VA
Ohio University – Memorial Hall, Athens, OH
Northern State University, Johnson Fine Arts Center, Aberdeen, SD
Plaza Theatre, El Paso, TX
Ritz Theatre, Corpus Christi, TX
Wayne Theatre, Waynesboro, VA
Byrd Theatre, Richmond, VA
Boston Opera House, Boston, MA
Pritzker Pavilion, Chicago, IL

Adam D'Alessandro, PE

Senior Engineer

Adam has 17 years of industry experience working on a wide variety of building envelope and structural engineering projects. Over 13 years at WDP, he performed condition assessments, failure investigations, rehabilitation of existing structures, development of repair designs and specifications, field testing, and construction administration services.

EDUCATION

- Clemson University / Civil Engineering / MS / 2007
- Clemson University / Civil Engineering / BS / 2005

PROFESSIONAL REGISTRATION

Professional Engineer: VA

REPRESENTATIVE EXPERIENCE

General Services Administration, Albert V. Bryan Sr. US Courthouse, Baltimore, MD / Project Manager

Bryan courthouse had been experiencing water infiltration issues since its construction in 1995, through its raised 30,000 square foot courtyard and entering the parking garage and stairwells below. Additionally, the repair design posed a unique challenge due to the "interstitial space," a confined space found between the plaza deck and the roof of the parking garage. To waterproof this area, special considerations were made to ensure a safe and effective installation. The repair design included the installation of a new hot applied waterproofing system at the plaza deck. Adam led WDP's structural repairs to address the resulting damage and waterproofing solution design that integrated seamlessly with the surrounding plaza.

Roanoke Higher Education Center, Water Leakage Investigation, Roanoke, VA / Project Engineer

Water leakage investigation on a building constructed in 1931 in the Modern Art Deco fashion and featuring complex ornamental brick, yellow precast pediments and weatherings, and cast aluminum accents and ornamental features. During the leakage investigation, significant damage was observed to the steel support systems, exterior masonry façade, and ornate masonry/precast parapets. WDP designed veneer stabilization repairs, weatherization improvements, and window replacement alternatives. WDP provided construction administration services for the duration of the project while the building remained occupied.

Virginia Department of General Services, State Capitol, Repair Replacement Project, Richmond, VA / Senior Engineer

As part of the waterproofing repairs, WDP designed a new structural concrete slab to infill an existing grade-level skylight opening over subterranean occupied space and a new overlying structural topping slab to support a new granite paver system. Adam assisted with condition assessments and repair design to address cracking in the stucco finishes at the main entrance to the Capitol. WDP also provided construction services and quality assurance testing.

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.

EDUCATION

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

LICENSURE

West Virginia, Virginia, Indiana, Maryland, Louisiana

LEED Accredited Professsional

AFFILIATIONS

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

United States Marine Corps – 14 Years

PROJECT EXPERIENCE

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 Development 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

WV Army National Guard

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

MIKE LIBBY, LC

SENIOR LIGHTING DESIGNER

Prior to joining Schuler Shook's Minneapolis office, Mike was Director of Lighting Design at a prominent architecture/ engineering firm in Madison, WI. His electrical engineering background brings a technical understanding of lighting and controls and how lighting integrates with other electrical and architectural elements while his work as a photographer and videographer fostered an appreciation for the ways light helps us interpret and understand the world around us.

SIGNIFICANT PROJECTS

Ocean Reef Cultural Center, Key Largo, FL
Minnesota Masterpiece Hall, Winona, MN
Alberta Bair Theatre, Billings, MT
Roseville High School Auditorium, Roseville, MN
St Louis Park Middles School Auditorium, St. Louis Park, MN
Seeger Memorial Junior/Senior Theater, Lebanon, IN
Ames Community School District High School Theatre, Ames, IA
Brainerd High School North Campus Theatre, Brainerd, MN
Northwood Public School Theatre Addition, Northwood, ND
Greene County High School Theatre Addition, Jefferson, IA
North Loop Green, Minneapolis, MN
Eleven On The River, Minneapolis, MN
Rand Tower Renovation, Minneapolis, MN
Hennepin Avenue Renovation, Minneapolis, MN
OK POP, Tulsa, OK
Southeast Library, Minneapolis, MN
Minneapolis Building Commission, 4th Street Lighting, Minneapolis, MN
Basilica of Saint Mary, Minneapolis, MN
Spokane International Airport Terminal Renovation and Expansion, Spokane, WA
City of Minneapolis, Energy Efficient Upgrade, Minneapolis MN
Minneapolis St. Paul Airport Baggage Claim and Valet, St. Paul, MN
Louisville International Airport, Louisville, KY

Prior to joining Schuler Shook - Projects with Strang
University of Wisconsin - Madison, Hamel Music Center, Madison, WI
Pablo Center at the Confluence, Eau Claire, WI
Northern Sky Theatre, Fish Creek, WI
The Sylvee, Madison, WI

EDUCATION

BSEE – Milwaukee School of Engineering

ORGANIZATIONS

National Council on Qualifications for the Lighting Professions - LC Lighting Certified since 2015

Illuminating Engineering Society of North America

Schuler Shook
LIGHTING DESIGN / THEATRE PLANNING / AUDIO VIDEO DESIGN

JAMES LOWRY

PE, BCxA

Mechanical Engineer

James has been a member of the ZMM team since 2018. He has extensive experience in all phases of design and project management in a wide range of building types including industrial, educational, commercial, and health care.

James received his Bachelor of Science in Mechanical Engineering from West Virginia University Institute of Technology. He is a professional engineer licensed in West Virginia, Pennsylvania, Ohio, and Maryland. He is American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Building Commissioning BCxP certified.

James has been volunteering with ASHRAE. At a local level, he has provided leadership as the president of the local chapter WV ASHRAE. On the national level, he advises on Technical Committees (TC) 9.7 Educational Facilities and 4.1 Load Calculations, and is the current programs chair for TC 4.1.

EDUCATION

Bachelor of Science in Mechanical Engineering, West Virginia University Institute of Technology, 2004

LICENSURE

West Virginia, Pennsylvania, Ohio, and Maryland

ASHRAE Building Commissioning BCxP Certified

AFFILIATIONS

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

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

STEN SEVERSON CTS

AUDIO VIDEO CONSULTANT

Sten Severson joins Schuler Shook with an extensive resume as a theatrical sound designer. His work has been heard throughout Broadway, Off-Broadway, Touring, Regional, and International theaters both as a solo designer and as a partner in Acme Sound Partners. Sten has taught at New York University's Tisch School for the Arts and at the Yale School of Drama training the next generation of sound designers.

Sten leverages this practical experience into collaborative solutions to audio visual challenges in a wide array of venues. Seamless integration of all the performance elements in any venue maximizes the impact of the human story being told.

Prior to joining Schuler Shook, Sten was the Sound Director for the Children's Theatre Company (CTC) in Minneapolis. He was involved in many productions at CTC including Annie, Three Little Birds, Matilda The Musical, and Diary of a Wimpy Kid.

SIGNIFICANT PROJECTS

Hudson Forum, Hudson, NY
Walker West Music Academy, Saint Paul, MN
Century College, White Bear Lake, MN
Fond du Lac Tribal and Community College Cloquet, MN
Lafayette Theatre, Lafayette IN
Tulsa Performing Arts Center, Tulsa OK
San Diego Airport, Terminal 1 Stages, San Diego, CA
NOW Schools, Ontario, WI
Augusta Area Schools, V.W. & J.M Bethke Performing Arts Center, Augusta, WI
Waterloo High School, Waterloo IA
Buffalo HS, Buffalo MN
Apollo High School, St. Cloud, MN
Richland Events and Performing Arts Center, Colfax, ND

EDUCATION

BA – Gustavus Adolphus College

ORGANIZATIONS

Audiovisual and Integrated Experience Association
AVIXA Certified Technology Specialist
United Scenic Artists Local 829
Theatrical Sound Designers & Composers Association

FRANKIE KANTSIOS

PE

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. This provides 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.

EDUCATION

Bachelor of Science
Old Dominion University, 2019

Associate of Applied Science
New River Community College, 2016

LICENSURE

West Virginia, Virginia

PROJECT EXPERIENCE

Carilion New River Valley Medical Center - VA
- 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 - VA
- New Pharmacy Building*

New Triumph Baptist Church - VA

Frederick County Sunny Side Voter Registrar's Office- VA
- A.S. Rhodes Elementary School Renovations

New River Community College - VA
- ADA Accessibility Improvements

City of Covington City Hall Renovations - VA*

Pulaski County Administration Building Renovation - VA*

**Previous Employer Experience*

ZMM ARCHITECTS ENGINEERS

4

PROJECT APPROACH

PROJECT APPROACH

Project Understanding
It is our understanding that the WV Department of Tourism is soliciting expressions of interest from qualified firms to provide architectural/engineering services to perform a multi-system assessment of the building, producing a report with recommended repair options, to then be followed by design and construction administration of various repairs to Building 9, "the Culture Center," in Charleston, West Virginia.

For this project, our team will be comprised of ZMM Architects and Engineers, WDP & Associates, and Schuler Shook. ZMM is a West Virginia-based, full-service, award-winning architectural and engineering design firm noted for design excellence. WDP is a local WV SWaM-certified consulting engineering firm specializing in building façade investigations and repair, building envelope consulting and testing, structural engineering, and historic preservation. Grounded in practical experience in theatres and museums, Schuler Shook designs for today and for the future. We are fully engaged in understanding and elevating the project vision. For more information on our team and consultants for this important project, please see the details below in 2.2.

Approach
2.1 Goal/Objective 1
Renovation projects require unique expertise, and ZMM has that as well as extensive experience providing design services for renovation projects. We specialize in projects that need to maintain operation throughout the process and require a phased approach.

The first phase in a successful renovation project involves conducting a thorough examination of the existing facilities. Our team will continue investigating the existing site and facility with a team of architects and engineers. In this case, our team would focus on improvements and renovations related to the Agency-specified systems within the building and the impact the improvements will have on other building and life safety systems. We would prepare comprehensive reports which would provide insight and recommendations for repairs and upgrades. It would include budgetary estimates for multiple, tiered, cost-effective solutions to address those recommendations. Our deep understanding and experience performing similar assessments of similar size and scope for a variety of clients including state government and historic facilities as well as our familiarity with the Culture Center will help expedite this effort.

As part of the assessment, we will examine the existing condition and serviceability of the existing theatre production, lighting control, and audio video systems and the supporting building infrastructure, specifically structure and electrical power, to inform the narrative describing work required to upgrade to current standards.

ZMM ARCHITECTS ENGINEERS

2.2 Goal/Objective 2

To enhance the comprehensive architecture, landscape architecture, engineering (mechanical, electrical, civil, structural, and plumbing), interior design, and construction administration services provided by ZMM, our project team will include WDP & Associates and Schuler Shook as key collaborators. WDP specializes in the diagnosis and repair design of building envelope and structural failures often brought on by air/water infiltration, leading to moisture-related damage and material deterioration. Theatre technical systems are evolving rapidly. Schuler Shook excels at imagination and innovation that answer the needs of the performing arts. For elevator/escalator assessments, we will utilize Lerch Bates and their expertise as we have for a variety of projects, including recent/current work at WV State University and the West Virginia International Yeager Airport. If hazardous materials are identified during the assessment, we will source a vendor best to address those specific concerns as we do regularly for a variety of clients. Below, we outline our collaboration with Win Strock for independent cost estimating.

2.3 Goal/Objective 3

ZMM Architects and Engineers has played a long-standing role in the ongoing transformation of the multiple facilities at the West Virginia Capitol Complex, including leading a series of phased renovations to State Office Buildings 5 and 6, and many other facilities for General Services Division throughout the region. Our past work at the Culture Center includes the Great Hall Lighting Replacement and Gift Shop modernization. Through the award-winning redesign of the Tenth Floor for the Office of Technology, ZMM demonstrated how contemporary layouts and thoughtful public spaces could revitalize these mid-century structures. Subsequent work included the renovation of multiple upper floors, bringing them up to modern life safety standards, improving infrastructure, and extending the buildings' usable life. ZMM's in-house engineering team provided full MEP design, and the firm coordinated closely with the State Fire Marshal and other agencies throughout the process. Additional projects included infrastructure and exterior improvements, all executed while the buildings remained occupied.

ZMM has renovated buildings throughout the region and has a history of providing services on improvement projects to many landmark buildings, including the West Virginia State Capitol, the Culture Center, the Charleston Civic Center, the Greenbrier, and the Clay Center. We have also supported projects at the West Virginia Housing Development Fund office in Kanawha City, and Floors 7, 8, and 9 at the WV Lottery Building.

WDP has worked closely with West Virginia General Services Division on multiple projects at the West Virginia Capitol Complex to include investigations for water intrusion issues at the State Capitol Dome, evaluation and repair design for the North Stair and North Stair Replacement, as well as structural repair design for the GSD's Building 13 precast parking garage. WDP provided an evaluation of moisture related issues for the Facade Replacement and Restoration of Building 36 – One Davis Square. The scope of services included full repair design documents for a new, higher performing curtain wall and below-grade repairs. WDP also provided construction administration services through project completion in summer 2025. Additionally, WDP teamed with ZMM Architects and Engineers to perform an evaluation that incorporated both building envelope components and HVAC systems for Building 37 – Department of Environmental Protection. WDP developed the design for building envelope component repairs and provided construction administration services. Both projects included the development of detailed phasing plans that were coordinated with the building occupants to limit disruptions and displacement from their offices and workspaces.

Schuler Shook's history includes numerous projects, particularly in the K-12 sector, where an auditorium renovation is occurring during the school year. Through these experiences, we have developed processes for maintaining control of construction administration in our trades while the building is occupied.

Develop Construction Phasing Plan
We anticipate the building will be in use during construction. ZMM will develop a staged construction plan with the owner to maintain building function with the least amount of disruption during construction. We have extensive experience in completing projects while the facilities are in use. In renovating the Charleston Coliseum and Convention Center, the building was occupied throughout all phases of construction.

Construction Phases
- Typical construction phase services include the following.
- Participation in Pre-Construction Meeting
- Coordination Construction Phase Testing
- Observation of Construction Progress
- Working Collaboratively with the Owner and Construction Team
- Serve as the Liaison Between the Owner and Contractor
- Participate in Regular Site Visits/Construction Progress Meetings
- Participate in Pre-installation Meetings
- Certify Applications for Payment by the Contractor
- Process RFI's, Submittals, and Change Orders
- Conduct Above Ceiling Engineering Inspections
- Conduct Punch-List and Final Inspections
- Coordinate Testing and Balancing or Commissioning
- Issue Certificate of Substantial Completion
- Schedule/Coordinate 11-Month Warranty Inspection

Project Management Plan
ZMM Architects and Engineers proposes providing services on the project with a team of design professionals that have worked together on a variety of State of West Virginia facilities, including several projects that included replacements and updates to building systems. ZMM's team has successfully collaborated on multiple projects for state agencies, and each team member is familiar with the standards, requirements, and processes that are utilized by the State of West Virginia.

ZMM Quality Control Plan
Quality control during the design phase begins with the selection of team members with experience working on projects that are like the current effort. Our team possesses the renovation design experience to ensure the success of the project. Quality control during the design phase will occur through regular, documented, project meetings between the design team and the PSC. In addition to the regular design phase meetings more formal QA/QC will occur at the end of each design phase. A more detailed description of the design phase quality control plan is noted below.

1. Selecting the Project Team
The diverse staff from ZMM, WDP, and Schuler Shook 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, working collaboratively.

ZMM ARCHITECTS ENGINEERS

2. Identifying Project Requirements
Project team members are fully integrated in each phase of the design process, ensuring a quality project from the commencement. The project requirements are included in a 'Basis of Design' that each member of the project team can access. The 'Basis of Design' helps guide important project decisions.

3. Identifying Client Expectations
Knowing and understanding our clients' expectations is our goal. This knowledge gives ZMM a baseline for exceeding expectations. We will commence the design effort with a planning session to help identify your vision for the project.

4. Ongoing Project Reviews
As part of the ongoing project reviews, we conduct quality assurance evaluations during each stage of the project:
- Schematic Design Phase (35%)
- Design Development Phase (65%)
- Construction Documents Phase (95%/100%)
- Construction Administration Phase

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

5. Post Project Review
At the completion of every project, our team members participate in a learning session to gain insight useful for future projects.

6. Staff Training, Assessment, and Enhancement
Ongoing staff development and training is very important and providing increased opportunities for learning and advancement leads to improved employee performance and more successful projects for our clients.

ZMM Cost Control Plan
As part of our effort to ensure our ability to meet your budget, we rely on independent estimates to verify the project budget. For this project, ZMM would utilize Win Strock to provide an independent estimate. ZMM and Mr. Strock have successfully collaborated on multiple projects, including Buildings 5, 6, & 7, various Readiness Centers for the WV Army National Guard, the West Virginia State Police Information Services Center, and a renovation at the West Virginia State Lottery Headquarters, among others.

2.4 Goal/Objective 4
Renovation efforts on State Office Buildings 5, 6, & 7 were implemented in an occupied building utilizing a phased renovation approach. Another relevant project that remained occupied during a significant renovation was the expansion of the Charleston Civic Center. The $100M project, which included the replacement of the central plant, and upgrades to all mechanical, electrical, and plumbing systems, was implemented utilizing a phased approach. One of the project constraints was that this critical public facility remains operational throughout the construction process. The project was completed in 2018, and the Charleston Civic Center has been able to maintain operations throughout the process.

As a consulting engineering firm specializing in the evaluation of building envelope failures, most of our work occurs in occupied, fully operational facilities. We understand the importance of thoughtful planning, clear communication, and coordinated phasing with the Owner, building occupants, the A/E team, and the contractor to minimize disruption. By engaging all stakeholders early and consistently, we help ensure the investigation and repair process proceeds smoothly and safely.

Our ability to provide comprehensive design (A/E) services makes our team uniquely qualified to perform on complex renovation projects, while our experience investigating, assessing, and providing design services for similar projects will prove beneficial as we work to complete the proposed design effort. The lessons that our team has learned during other significant renovations will be utilized to continue to improve the planning, design, and construction process. We are confident that our team has the right combination of renovation and phased construction experience to successfully deliver this project. Perhaps most importantly, our team has worked collaboratively with multiple governmental agencies to deliver similar projects on time and under budget.

2.5 Goal/Objective 5

The team, led by Adam Krason (Principal) and Rodney Pauley (Project Manager and Architect), have directed ZMM's efforts on a variety of projects for the State of West Virginia. ZMM's team has successfully collaborated on multiple projects for state agencies, and each team member is familiar with the standards, requirements, and processes that are utilized on projects for the State of West Virginia and its agencies as well as the American Institute of Architects (AIA) general conditions. Our team of professionals have extensive experience and insight that they would bring to this project and are well-versed in industry standards and best practices.

ZMM specification writer, Mark Epling, AIA, is familiar with state purchasing guidelines, and authored the specifications for previous projects at the Culture Center including the Great Hall Lighting Replacement and Gift Shop modernization. Our previous experience providing design services at the Culture Center will help ensure the success of the project for the Department of Tourism.

5

CLIENT REFERENCES

CLIENT REFERENCES

Robert Kilpatrick, Deputy Director
General Services Division of WV
103 Michigan Ave
Charleston, WV 25311
304.352.5491

Mayor Amy Goodwin
City of Charleston
501 Virginia Street, E.
Charleston, WV 25301
304.348.8174

Dan Owen, President
Goodwill Industries of Kanawha Valley
209 Virginia Street
Charleston, WV 25302
304.346.0811

Gregory C. Perry
Director of Facilities and Construction
400 Lee Street, North
Lewisburg, WV 24901
304.793.6854

Thank You

FOR REVIEWING THIS MATERIAL.

BLACKSBURG
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CHARLESTON
WEST VIRGINIA

MARTINSBURG
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MARIETTA
OHIO

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