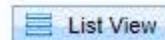




The following documentation is an electronically-submitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at ***wvOASIS.gov***. As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at ***WVPurchasing.gov*** with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.

Header 1

 List View

General Information

Contact

Default Values


Discount

Document Information

Clarification Request

Procurement Folder: 1311383


Procurement Type: Central Contract - Fixed Amt

Vendor ID: VS0000000330 


Legal Name: WDP & ASSOCIATES CONSULTING ENGINEERS INC

Alias/DBA:

Total Bid: \$0.00

Response Date: 02/22/2024 

Response Time: 13:05

Responded By User ID: sabrienWDP 

First Name: Sabrien

Last Name: Abdelrahman

Email: sabdelrahman@wdpa.com

Phone: 5713427814

SO Doc Code: CEOI

SO Dept: 0211

SO Doc ID: GSD2400000003

Published Date: 2/14/24

Close Date: 2/22/24

Close Time: 13:30

Status: Closed

Solicitation Description: EOI: Building 35 (Diamond) Renovations Project

Total of Header Attachments: 1

Total of All Attachments: 1



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

State of West Virginia
Solicitation Response

Proc Folder: 1311383
Solicitation Description: EOI: Building 35 (Diamond) Renovations Project
Proc Type: Central Contract - Fixed Amt

Solicitation Closes	Solicitation Response	Version
2024-02-22 13:30	SR 0211 ESR02222400000004283	1

VENDOR
VS0000000330
WDP & ASSOCIATES CONSULTING ENGINEERS INC

Solicitation Number: CEOI 0211 GSD2400000003
Total Bid: 0
Response Date: 2024-02-22
Response Time: 13:05:42
Comments:

FOR INFORMATION CONTACT THE BUYER
Melissa Pettrey
(304) 558-0094
melissa.k.pettrey@wv.gov

Vendor
Signature X **FEIN#** **DATE**

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

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	EOI: Building 35 (Diamond) Renovations Project				0.00

Comm Code	Manufacturer	Specification	Model #
81101508			

Commodity Line Comments:

Extended Description:

EOI: Building 35 (Diamond) Renovations Project

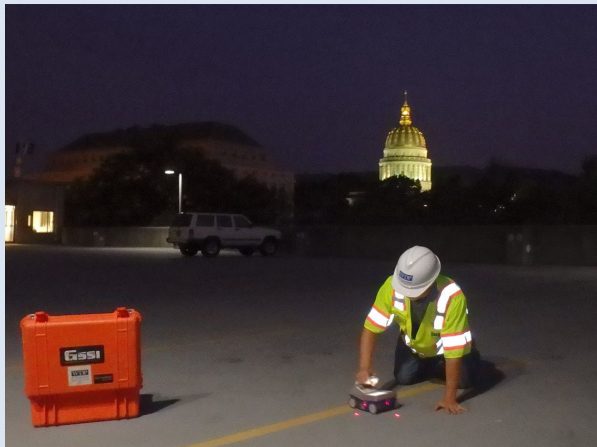


WINFIELD STROCK
Estimator



WDP's Response
to
Expression of Interest
EOI No. GSD2400000003
Building 35 (Diamond) Renovations
Project

Due Date: February 22nd, 2024





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

State of West Virginia
Centralized Expression of Interest
Architect/Engr

Proc Folder: 1311383			Reason for Modification:
Doc Description: EOI: Building 35 (Diamond) Renovations Project			
Proc Type: Central Contract - Fixed Amt			
Date Issued	Solicitation Closes	Solicitation No	Version
2024-02-01	2024-02-22 13:30	CEOI 0211 GSD2400000003	1

BID RECEIVING LOCATION

BID CLERK
DEPARTMENT OF ADMINISTRATION
PURCHASING DIVISION
2019 WASHINGTON ST E
CHARLESTON WV 25305
US

VENDOR

Vendor Customer Code:

Vendor Name : WDP & Associates Consulting Engineers, Inc.

Address : P.O. Box 99

Street : 33 Summers Hospital Road

City : Hinton

State : WV **Country :** United States **Zip :** 25951

Principal Contact : Rex A. Cyphers, P.E.

Vendor Contact Phone: (304) 660-0400 **Extension:**

FOR INFORMATION CONTACT THE BUYER

Melissa Pettrey
(304) 558-0094
melissa.k.pettrey@wv.gov

Vendor
Signature X

FEIN# 54-1763349

DATE 2/20/2024

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

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

(Printed Name and Title) Rex A. Cyphers, P.E. - Vice President, C.O.O.

(Address) P.O. Box 99, Hinton, West Virginia 25951

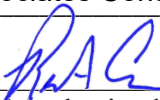
(Phone Number) / (Fax Number) (304) 660-0400 / (571) 292-9842

(email address) RCyphers@wdpa.com

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that: I have reviewed this Solicitation/Contract in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation/Contract for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that this bid or offer was made without prior understanding, agreement, or connection with any entity submitting a bid or offer for the same material, supplies, equipment or services; that this bid or offer is in all respects fair and without collusion or fraud; that this Contract is accepted or entered into without any prior understanding, agreement, or connection to any other entity that could be considered a violation of law; that I am authorized by the Vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on Vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

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

WDP & Associates Consulting Engineers, Inc.

(Company) 

(Signature of Authorized Representative)

Rex A. Cyphers | Vice President, C.O.O. | February 19, 2024

(Printed Name and Title of Authorized Representative) (Date)

(304) 660-0400 / (571) 292-9842

(Phone Number) (Fax Number)

RCyphers@wdpa.com

(Email Address)

February 22, 2024



Department of Administration
Purchasing Division
2019 Washington Street E
Charleston, West Virginia 25305-0130

Attention: Ms. Melissa Pettrey

Reference: EOI: Building 35 (Diamond) Renovations Project

Hinton, WV

Manassas, VA

Charlottesville, VA

Blacksburg, VA

Myrtle Beach, SC

New York, NY

Dear Ms. Pettrey:

WDP & Associates Consulting Engineers, Inc., (WDP) is pleased to submit our expression of interest to provide professional engineering services for the Building 35 (Diamond) and Building 31 (Parking Garage) renovation projects.

WDP's staff has worked closely with the West Virginia General Services Division (GSD) on multiple successful projects since 2015. We have investigated water intrusion issues at the West Virginia State Capitol Dome as well as designed structural repairs for the GSD's Building 13 precast parking garage. Our ongoing projects at the Capitol Complex for the West Virginia General Services Division and our completed project at the Public Service Commission Headquarters building have brought us to Charleston on a weekly basis for the last six years. More recently, we have been engaged in the Municipal Auditorium Assessment, West Virginia Capitol North Stair, Kanawha Church, and Charleston Area Medical Center projects. Our experience in the state began over 19 years ago with a project at West Virginia University in Morgantown, and since then we remain dedicated to serving the needs of our West Virginia clients.

WDP is a WV SWaM certified small business consulting engineering firm with a proven history of investigating existing masonry, concrete, waterproofing and structural related issues as well as designing repairs to remedy those problems. The work required for this project is not just something that we have done, it is at **the core of our business**. Companywide, WDP has completed 400 structural, building envelope and parking garage investigation and repair projects in the past 5 years, and nearly all of our completed façade evaluation projects have been undertaken on occupied buildings.

The WV GSD remains one of our most important clients, and we are committed to providing quality services in a timely manner and in accordance with the State's values, ideals, and goals. We hope that our expertise and commitment come through in the enclosed materials. Should questions arise regarding our qualifications or our experience, please feel free to reach out to us at your convenience.

Sincerely,

WDP & Associates Consulting Engineers, Inc.

A handwritten signature in blue ink, appearing to read "RAC", written over a light blue horizontal line.

Rex A. Cyphers, P.E.
Principal | COO

Section	Page #
----------------	---------------

COVER LETTER**FIRM PROFILE**

Façade and Building Envelope Evaluations.....	1 1
Building Enclosure Consulting.....	1 2
Roof Consulting Services.....	1 3
Façade Evaluation Access.....	1 4
Structural & Forensic Evaluation and Design for Existing Structures.....	1 4
Proposed Subconsultants.....	1 6
Proposed Staffing Plan.....	1 10

GOALS AND OBJECTIVES

Goal #1: Assessments of Historic Buildings & Parking Garages.....	2 1
Goal #2: Developmental Design, Construction Documents, and Bid Phase Services.....	2 5
Goal #3: Phased Construction Projects.....	2 5
Goal #4: Experience on Projects in Occupied Buildings.....	2 6
Goal #5: Construction Approach with WV GSD.....	2 6
References.....	2 8

PROJECT TEAM EXPERIENCE

The Pierre Hotel.....	3 1
Building 37 Window, HVAC, Roof, and Envelope Upgrades.....	3 4
Diamond Building Investigation and Temporary Protection.....	3 5
Garmatz Building Window Study.....	3 6
Edward N. Cahn Federal Building and U.S. Courthouse.....	3 7
Virginia State Capitol.....	3 8
Erie Federal Courthouse Complex.....	3 10
Piedmont Parking Garage Building 13.....	3 12
One Tribe Place Parking Garage.....	3 13
Charleston Coliseum and Convention Center.....	3 15
WV State Office Buildings 5, 6 & 7.....	3 16
WV Lottery Headquarters.....	3 17
BridgeValley CTC Stone & Thomas.....	3 18
WV State Capitol Building.....	3 19
Building 22 State Tax Building.....	3 20
BB&T Bank, 300 Summer Street.....	3 21
West Virginia University - Evansdale.....	3 22
West Virginia Governor's Mansion Phase 1 & 2.....	3 23
Watchcase Tower Redevelopment.....	3 24
Jensen Hughes Projects.....	3 25

STAFF RESUMES

Rex A. Cyphers, P.E., Principal, COO.....	4 1
B.J. Lee, Ph.D., P.E., S.E., Associate.....	4 2
Patrick Dillon, Ph.D., P.E., Senior Engineer.....	4 3

John Grill, P.E., Associate	4 4
Adam Krason, AIA, LEED AP, ALEP, Principal	4 5
Michael M. Phillips, AIA, LEED AP, Project Manager.....	4 6
Carly Chapman, Sr. Interior Designer	4 7
Robert Doeffinger, P.E., Principal.....	4 8
John Pruett, AIA, LEED AP, Senior Mechanical Engineer	4 9
Frankie Kantsios, P.E., Electrical Engineer	4 10
Keith L. Gonzales, Construction Administrator	4 11
Bill Moore, Consultant.....	4 12
Heath Hayes, Vice President	4 13
Spencer Williams, CSI, Regional Manager	4 14
Ryan Krug, BECxP, CxA+BE, National Practice Lead	4 15
Ryan Kohl, RRC, Senior Consultant.....	4 16
Kristopher Lawrence, CFEl, Project Manager/Lead Consultant	4 17
Michael J. Knoras, Jr., P.E., Lead Engineering	4 18
Eric Babcock, P.E., QA/QC.....	4 19
Winfield H. Strock, Construction Management / Estimator	4 20

ATTACHMENTS

Addenda
Licensure
WDP's WV SWaM

I. FIRM OVERVIEW



WDP & Associates Consulting Engineers, Inc., (WDP) is an SBA-certified (1KZR5) and WV SWaM consulting engineering firm specializing in building façade investigations and repair, building envelope consulting and testing, structural engineering, and historic preservation.

At WDP, creating lasting engineering solutions is at the heart of our business.

WDP's staff has worked closely with the West Virginia General Services Division (GSD) on multiple successful projects since 2015. We have investigated water intrusion issues at the West Virginia State Capitol Dome as well as designed structural repairs for the GSD's Building 13 precast parking garage. Our ongoing projects at the Capitol Complex for the West Virginia General Services Division and our completed project at the Public Service Commission Headquarters building have brought us to Charleston on a weekly basis for the last 6 years. Our experience in the state began over 19 years ago with a project at West Virginia University in Morgantown, and we remain dedicated to serving the needs of our West Virginia clients. In the last five years alone, we have worked on 18 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.**

WDP performs over 80 façade assessments, roof, building envelope, 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.

Façade and Building Envelope Evaluations

WDP provides a variety of services related to building facades and enclosure systems, including facade assessments, leakage investigations, peer review of architectural design, development of repair and restoration documents, mockup and field performance testing, enclosure commissioning and construction administration services. Our expertise in the diagnosis and correction of exterior envelope systems includes extensive knowledge of brick and natural stone masonry (both veneer and adhered systems), fenestration systems, roofing, stucco, exterior insulation and finish systems (EIFS), precast concrete wall panels, architectural metal panel systems, concrete, and steel structures. WDP's professional team of envelope specialists are experienced in performing hands-on inspections with particular care given to original construction materials and evaluation of pre-existing repairs. No matter the age of the facility, from historic 18th and 19th century structures to newly constructed buildings experiencing post-occupancy problems, WDP has experience in preservation and improving the value of existing facility assets through tailored engineering solutions. Our investigative strategies and cost-effective design approaches have addressed countless façade issues, such as cracking, facade instability, air and water leakage, mold growth, and aesthetic deficiencies.



Morgantown City Hall – Façade Investigation



West Virginia University – Engineering Sciences Building

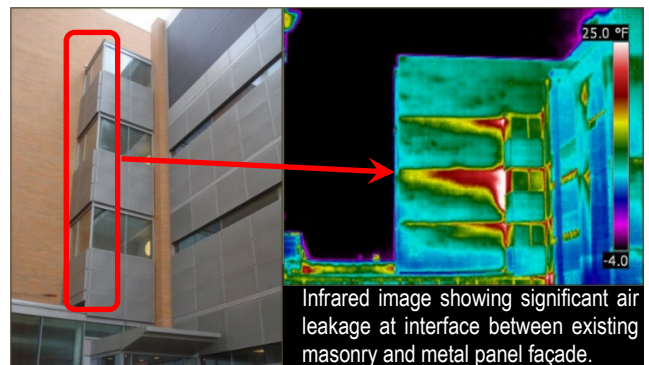


West Virginia Diamond Building – temporary protection for pedestrians while maintaining building occupancy.

In addition to developing designs for numerous window replacement and envelope repair projects each year, WDP has served as the Engineer of Record for the investigation, design, and construction administration of over 16 full façade replacement projects to restore the structural performance and weather resistance of curtainwall, EIFS, stone, concrete, brick masonry, and metal panel facades. We routinely transition from the evaluation of problems into the production of repair and restoration design documents, bid solicitation, bid evaluation, construction administration, and quality assurance inspection. More often than not, our clients must maintain occupancy and use of their building throughout the course of the repair project. WDP has experience developing construction phasing that minimizes disruption and considers egress routes through the building to ensure occupant safety is held paramount through the construction phase of the project.

Building Enclosure Consulting

WDP provides professional building enclosure consulting services, including façade assessment and diagnostic testing as well as field investigations of reported moisture issues in existing buildings; peer review for the architectural design of building enclosures; repair and restoration design and construction administration for building facades; mock-up and field performance testing utilizing standardized testing methods for air and water; enclosure commissioning; and construction monitoring. Our expertise in the diagnosis and correction of exterior envelope systems includes extensive knowledge of brick and natural stone masonry, window/curtain wall systems, roofing, exterior insulation and finish systems (EIFS), wood, stucco, precast concrete wall panels, architectural metal panel systems, concrete, and steel structures. Our flexibility enables us to address a discrete problem or design a comprehensive restoration program for an entire complex. As energy codes evolve and LEED certifications become more commonplace, air barrier systems have become a major item of the building envelope that requires inspection and certification. WDP staff includes field auditors who have been trained and certified under the Air Barrier Association of America's Quality Assurance Program.



Infrared surveys of the building envelope can quickly identify breaches in the air barrier system in existing buildings and points of energy loss.

As building enclosure consultants, WDP engineers have developed in-house nondestructive testing capabilities to provide a seamless interface between field evaluations, engineering evaluation, and maintenance/repair design. We have a broad range of construction investigation experience and materials testing capabilities. Using test specifications developed by the American Society for Testing and Materials (ASTM), American Architectural Manufacturers Association (AAMA), American National Standards Institute (ANSI), and others, our laboratory can offer a wide range of quality control testing for new construction, materials analysis and monitoring, and failure investigations.

Roof Consulting Services

WDP's highly qualified engineering staff performs roof design engineering and roof inspection services. Our most frequently requested services include roofing evaluations, design engineering, roof inspections, construction administration services, and new construction peer review. Roof inspections and evaluations may include review of pertinent plans and documents, field investigations, nondestructive or destructive testing, laboratory analysis and testing, structural analysis, design work for structural repairs or strengthening, contract document and bid document preparation, as well as construction management or quality assurance inspections.



WDP's experience in roof consulting services includes designing, inspecting, and testing a complete range of low slope single ply and built-up roof systems such as EPDM, modified bitumen, TPO, PVC, spray polyurethane foam, and hybrid roof systems. We also have similar levels of expertise with solar photovoltaic panels, garden roof systems, exposed and protected membrane roof systems, steep sloped roof systems including asphalt shingles, slate shingles, and clay tile roofing.

WDP's licensed professionals are not only experienced at the evaluation phase of existing roof systems but also in developing repair recommendations and conducting repair oversight of the project. WDP is qualified to assist in developing contract documents to replace the entire roof system or develop pertinent details to conduct isolated repairs. In addition, WDP performs peer reviews and develops design documents, as well as construction administration services, for new construction.

WDP has extensive experience providing forensic roof and parapet repair/replacement services for buildings nationwide. Some notable examples include:

- **GEORGE MASON UNIVERSITY, COLGAN HALL** – Roof Replacement Investigation, Design, & CA Services
- **MONTGOMERY COLLEGE, MD, ROCKVILLE CAMPUS CENTER** - Roof Replacement Investigation, Design, & CA Services
- **RADFORD UNIVERSITY, DEDMON CENTER** - Roof Replacement Investigation, Design, & CA Services
- **ROANOKE HIGHER EDUCATION CENTER** - Roof Replacement Investigation, Design, & CA Services
- **VIRGINIA COMMUNITY COLLEGE SYSTEMS (VCCS), VIRGINIA PENINSULA COMMUNITY COLLEGE – HASTINGS HALL** – Roof Replacement Investigation, Design, & CA Services
- **VCCS, VIRGINIA PENINSULA COMMUNITY COLLEGE, TEMPLIN HALL COLLAPSE** – Roof Replacement Investigation, Design, & CA Services
- **WALTER REED NATIONAL MILITARY MEDICAL CENTER, ANIMAL RESEARCH FACILITY RENOVATIONS & ADDITION** -Roof Systems Survey & Design Peer Review
- **GEORGE MASON UNIVERSITY, BULL RUN HALL** – Roof Replacement Investigation, Design, & CA Services
- **NATIONAL INSTITUTE OF HEALTH BUILDING, E WING RENOVATION** - Design and CA enclosure consultant for the A/E for repairs to exterior building walls, fenestration replacement and roof system replacement
- **THE GEORGE WASHINGTON UNIVERSITY, CORCORAN SCHOOL OF THE ARTS & DESIGN** - Roof System Investigation and Roof Replacement Design

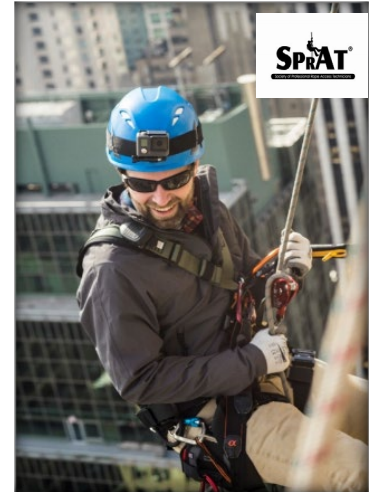


- **VCCS, TIDEWATER COMMUNITY COLLEGE ADVANCED TECH CENTER BUILDING** - Roof Replacement Investigation, Design, & CA Services
- **VIRGINIA TECH, DAVIDSON HALL, LIBERAL ARTS CENTER, AND SANDY HALL** - Building envelope condition assessments and construction observation during renovations
- **WEST VIRGINIA UNIVERSITY, HEALTH SCIENCE CENTER** - Façade and Roofing Investigation & Repair Design

Façade Evaluation Access

To effectively evaluate the building façade, you have to be able to get to it. WDP assists owners and property managers with cost-effective and expeditious ways to perform facade inspection programs for all types of exterior walls and façades. WDP's professional engineers and architects perform close-up inspections and evaluate conditions observed based on technical experience and comprehensive understanding of wall and window systems. Access is typically provided from scaffold, aerial lifts, or suspended platforms, which can take time to assemble and relocate to different portions of the building.

For difficult access conditions, WDP routinely utilizes industrial rope access for façade evaluations with our SPRAT-certified and professionally licensed personnel thus limiting the time and impact of using a traditional scaffolding system. Rope access allows our staff to evaluate multiple areas of a building façade with relatively little setup time or costs. WDP also has capabilities to perform diagnostic testing and non-destructive testing from rope access when more than just visual observations are required.



Structural & Forensic Evaluation and Design for Existing Structures

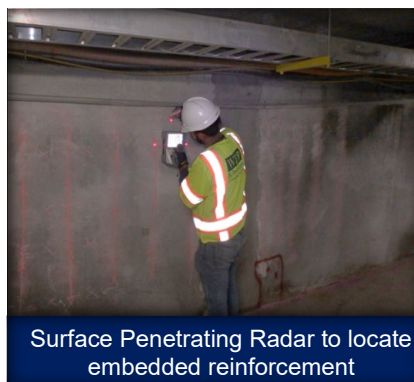
Field Investigation of Existing Structures

WDP's experience with performing field investigations of existing structures and parking garages is at the heart of our success and a key component of our project approach. Field investigations are performed to assess and quantify existing structure conditions or feasibility for alterations, to evaluate the cause of deterioration or structural failures, or to verify the original design or capacities of given as-built conditions.

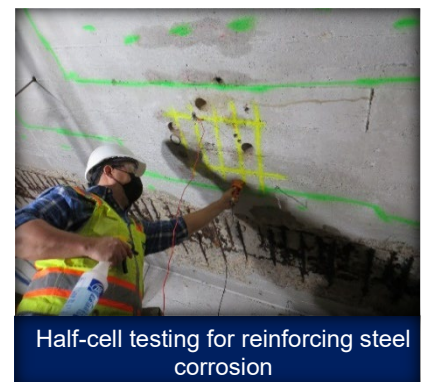
WDP's investigative methods include visual observations, non-destructive testing, structural monitoring, in-situ testing, and material sampling and testing. WDP's professionals are experienced at interpreting and analyzing the results of the evaluation components and develop conclusions and recommendations based on the facts obtained.



Evaluation of corroded structural steel framing elements



Surface Penetrating Radar to locate embedded reinforcement



Half-cell testing for reinforcing steel corrosion

WDP engineers are nationally recognized experts in **non-destructive testing (NDT)** and evaluation of existing structures. WDP regularly employs a variety of NDT methods, all performed by WDP personnel, to examine

existing structures. These test methods can be invaluable in identifying existing conditions, developing the proper diagnosis, and subsequently, most effective recommendations for a given structure.

WDP's use of non-destructive testing 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. Results from non-destructive testing are used to determine the extent and severity of damage and can be incorporated into structural analysis models to predict the impact of measured damage on the performance of a structure.

In the case of distressed structures, historical restoration projects, and renovations and upgrades to existing buildings, it is often beneficial to obtain an understanding of how the structure is behaving in order to develop better recommendations. WDP has experience with a wide range of visual and electronic **instrumentation for field data monitoring and collection** to record the behavior of existing structures. Whether measurements need to be made inside or outside, statically, or dynamically, accessibly, or remotely, WDP can develop and deploy a data monitoring and collection scheme to complement a project's unique objectives.

Non-Destructive Testing:

- Sounding
- Pachometer
- Surface-Penetrating Radar
- Impact-Echo
- Ultrasonic Pulse Velocity
- Half-Cell Potential
- Infrared Thermography

Instrumentation used for field data monitoring and collection:

- LVDTs
- LVITs
- Strain gauges
- Load cells
- String potentiometers
- Accelerometers
- Seismographs

WDP staff are able to analyze and interpret the data relative to the actual construction to understand how the structure is behaving. We are able to incorporate these results into our advanced structural models and improve the accuracy of our structural analyses and develop representative design recommendations. WDP's field investigations and structural analyses are supported by our WACEL and AASHTO-certified **in-house laboratory**. Based on the needs of a specific project, WDP has the unique capabilities of performing highly specialized field sampling for testing in accordance with specifications developed by the American Society for Testing and Materials (ASTM), American Concrete Institute (ACI), and others.

Our broad and diverse experience performing field investigations of existing structures gives WDP staff an extensive understanding of how structures are constructed, how building construction has changed over time, and common deterioration mechanisms. WDP has extensive first-hand experience with the long-term effects from different designs and construction modes on building performance through our investigations of post-occupancy failures. WDP's failure investigations typically combined a detailed study of available construction documents, on-site field investigation, material testing, and structural analysis to determine the cause of the problems and develop remediations to correct them.

WDP's knowledge of building construction practices and performance provides uncommon insights into project feasibility for repairs or alterations to existing buildings and informs our design process to improve the constructability and performance of our projects. Through our many years of successful investigations, our expertise in determining the causes, effects, and remedies for structural problems has resulted in unique insights preventing those same problems in new construction.

Proposed Subconsultants



ZMM ARCHITECTS & ENGINEERS

ZMM was founded in 1959 in Charleston, West Virginia by Ray Zando, Ken Martin, and Monty Milstead. Since the inception of the firm, ZMM has been dedicated to providing an integrated approach to building design for our clients.

ZMM delivers this integrated approach by providing all building related design services, including architecture, engineering (civil, structural, mechanical, and electrical), interior design, and construction administration with an in-house team. This integrated design approach makes ZMM unique among architecture/engineering firms, and helps to ensure the quality of design solutions by providing more thoroughly coordinated construction documents.

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

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 provide comprehensive design services has also led the firm to be selected to improve landmark buildings, including the Charleston Coliseum & Convention Center, the Clay Center for the Arts and Sciences, the State of West Virginia Culture Center, and the West Virginia State Capitol Building.



WINFIELD STROCK

The team for this project will include Winfield Strock, a former contractor that regularly provides independent estimates to ZMM Architects and Engineers.

Mr. Winfield Strock has been providing cost estimating and budget services for a multitude of years. His experience has allowed the team to develop a thorough understanding of the various construction markets and associated bidding regions that exist throughout West Virginia. Strock and ZMM have recently successfully collaborated on the following projects:

- Coopers Rock State Forest 'A' Frame Cabins
- Claudia Workman Fish and Wildlife Education Center
- Beech Fork Lodge
- Coonskin Park Maintenance Building
- Clendenin Elementary School
- Williamstown Elementary School
- Edgewood Elementary School
- Jackson County Armed Forces Reserve Center
- Logan-Mingo Readiness Center
- Morgantown Readiness Center
- State Police Information Services Center
- State Office Building 5 & 6 – Various Projects



Founded in 1947 as the nation's first elevator consulting firm, Lerch Bates' technical knowledge and resume of project experience is unmatched. Their 75-year legacy as a trusted resource to clients continues today as they provide innovative, sustainable solutions to the ever-evolving demands of today's built environment. With Lerch Bates Building Insight, you gain more than a technical consultant – you gain a global network of multidisciplinary experts to your project team.



Consultants who approach projects as partnerships invest in being responsive partners. Lerch Bates thinks proactively about what you need and provide innovative solutions to achieve your goals.



Firm Overview

YOUR GLOBAL PARTNER IN LIFE SAFETY, SECURITY + RISK ENGINEERING, CONSULTING AND TECHNOLOGY

Worldwide, Jensen Hughes is recognized most widely for their leadership in fire protection engineering, a legacy of responsibility advanced with honor and pride since 1939.

Today, Jensen Hughes' expertise extends broadly across closely related risk management fields — from accessibility consulting, risk and hazard analysis, process safety and forensic investigations to security risk consulting, emergency management and digital innovation.

Their 1,500+ engineers, consultants, analysts and strategists provide a range of services across all markets — from government, healthcare, science and technology to energy, mission critical and transportation.

What Sets Jensen Hughes Apart

Jensen Hughes' passion for setting and advancing the world's highest standards in engineering, consulting and technology services that make our world safe, secure and resilient is what sets them apart.

For more than 80 years, Jensen Hughes' experts developed and refined complex safety, security, and resilience solutions that impact the lives of millions worldwide. These solutions help to ensure safe workplaces, secure facilities, and resilient infrastructure, not just for today but for generations.

30+ combined firms, 80+ years of innovation

- + 330+ NFPA Committee Positions Held
- + ENR Top 500 Design Firms
- + ENR Top 100 Pure Designers
- + ENR Top 40 Designers in International Markets

Our Expertise

- + FIRE AND BUILDING SAFETY
- + RISK AND HAZARDS
- + EMERGENCY MANAGEMENT
- + SECURITY RISK CONSULTING
- + FORENSICS

Our Global Reach



HISTORIC PRESERVATION + ADAPTIVE REUSE

Renovation, modernization, and adaptive reuse of historic structures present some of the most difficult challenges to the architectural and engineering community. Designers are faced with the task of applying modern building codes and construction standards while maintaining a building's historic fabric. While prescriptive code requirements provide limited guidance on how to tackle the challenge, particularly with respect to life safety, the property-protection issues are often unique and not adequately addressed through the narrow lens of a standard building code.

Jensen Hughes has successfully balanced the safety and security objectives of today's current codes and standards while maintaining the cultural sensitivity and historic features of countless projects. They regularly apply knowledge of fire protection, life safety and security principles to preserve history and make practical use of landmarks that might otherwise be lost to time or neglect. Offering performance-based design alternatives, fire hazard modeling and people movement and evacuation analyses, Jensen Hughes' supports your vision to adapt what was into what can be.

Your End-To-End Partner

Jensen Hughes' team has partnered with building owners, developers, property managers and architects for nearly 80 years to help navigate fire and life safety code compliance and mitigate safety concerns from pre-

construction to potential retrofit. They help manage everything from site acquisition to third-party review to commissioning to negotiation with the authorities having jurisdiction.

Service Offerings

- + Building and Fire Code Consulting
- + Accessibility
- + Alternative Methods and AHJ Negotiation
- + Fire Performance-Based Design (PBD) and Egress Modeling
- + Life Safety System Design
- + Fire Suppression System Design
- + Commissioning
- + Construction Support Services
- + Fire and Life Safety Due Diligence
- + Mechanical, Electrical and Structural (MES) Compliance
- + Emergency Management
- + Security Risk Management
- + Security Consulting and Design

Proposed Staffing Plan

The following chart illustrates the roles and experience of the key personnel who will be assigned to this project:

 **REX CYPHERS, P.E. – PRINCIPAL | COO**
PROJECT ROLE: **PRINCIPAL-IN-CHARGE**

Rex's project role will include:

- Providing expertise and guidance for the project team during the evaluation, design, and construction phases.
- Coordination between Building 31 and Building 35 teams.
- Maintaining client communication and satisfaction
- Ensuring compliance with project delivery dates and milestones

Professional Registration

PE: WV, VA, WA, PA, TN, LA

 **B.J. LEE PH.D., P.E., S.E. – SR. ENGINEER**
PROJECT ROLE: **QA/QC MANAGER**

BJ's project role will include:

- In-house independent peer review of design documents
- Monitoring and management of internal quality control processes

Professional Registration

PE: VA, DC, MD, WV

SE: HI

 **PATRICK DILLON, PH.D., P.E. – SR. ENGINEER**
PROJECT ROLE: **PROJECT MANAGER (BUILDING 35)**

Patrick's project role will include:

- Coordinating work of the Building 35 team, including coordination and communications with the GSD.
- Developing and maintaining project plan for the Building 35 team in coordination with the State's parameters and project goals
- Leading the field investigation at Building 35
- Monitoring and management of repair recommendations development
- Monitoring, management, and review of repair design and construction document development
- Providing on-site construction phase services

Professional Registration

PE: WV, VA, NJ

 **JOHN M. GRILL, P.E. – HQ DIVISION MANAGER**
PROJECT ROLE: **PROJECT MANAGER (BUILDING 31)**

John's project role will include:

- Coordinating work of the Building 31 team, including coordination and communications with the GSD.
- Developing and maintaining project plan for the Building 31 team in coordination with the State's parameters and project goals
- Leading the field investigation at Building 31
- Monitoring and management of repair recommendations development
- Monitoring, management, and review of repair design and construction document development

- Providing on-site construction phase services

Professional Registration

PE: VA, DC, MD



Akshay's project role will include:

- Providing support during field investigation at Building 31
- Structural analysis and review
- Development of repair recommendations
- Schematic design, design development, and preparation of construction documents
- Construction administration support

Professional Registration

VA, WA



Serena's project role will include:

- Providing support during field investigation at Building 31
- Structural analysis and development of repair recommendations
- Schematic design, design development, and preparation of construction documents
- Construction administration support

Professional Registration

Engineer-in-Training: NC



Natalie's project role will include:

- Providing support during field investigation at Building 35
- Evaluation of repair options in accordance with recognized preservation standards
- Development of repair recommendations
- Schematic design, design development, and preparation of construction documents
- Construction administration support

Professional Registration

Assoc. AIA



Chris' project role will include:

- Providing support during field investigation at Building 35
- Structural analysis
- Development of repair recommendations
- Schematic design, design development, and preparation of construction documents
- Construction administration support

Professional Registration

Engineer-in-Training: VA



ADAM KRASON, AIA, NCARB, LEED AP – PRINCIPAL
PROJECT ROLE: ZMM PRINCIPAL

Adam's project role will include:

- Principal for Interior Improvements
- Coordinate ZMM Team
- Responsible for QA/QC of ZMM Work Product

Professional Registration

RA: WV, VA, OH, KY, MD, NJ



MICHAL PHILLIPS, AIA, NCARB, LEED AP – ARCHITECT
PROJECT ROLE: ZMM PROJECT MANAGER

Michael's project role will include:

- Work with Team on Project Design and Planning
- Day-to-Day Coordination of ZMM Team
- Oversee Operations of Project from Conception to Completion

Professional Registration

PE: WV, VA



ROBERT DOEFFINGER, P.E. – MECHANICAL ENGINEER
PROJECT ROLE: ENGINEERING PRINCIPAL

Bob's project role will include:

- Responsible for Coordination of Mechanical and Electrical Engineers
- HVAC System Design and Recommendations
- Heating and Cooling Load Calculations

Professional Registration

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



CARLY CHAPMAN – SR. INTERIOR DESIGNER
PROJECT ROLE: SR. INTERIOR DESIGNER

Carly's project role will include:

- All Aspects of Interior Design: Casework, Materials and Color Selections
- Design Concepts, Proposals and Presentations
- Renderings and Marketing Materials

Professional Registration

N/A



FRANKIE KANTSIOS, P.E. – ELECTRICAL ENGINEER
PROJECT ROLE: ELECTRICAL ENGINEER

Frankie's project role will include:

- Electrical Engineering and Design
- Electrical Trouble Shooting of Existing Issues
- Interior Lighting and Power Distribution

Professional Registration

PE: VA, WV



KEITH GONZALES – CONSTRUCTION ADMINISTRATOR
PROJECT ROLE: CONSTRUCTION ADMINISTRATOR

Keith's project role will include:

- Documentation and Tracking of Information During Construction Phase
- Observation of Construction Progress
- Contact with Contractors on a Daily Basis

Professional Registration

N/A



HEATH HAYES – VICE PRESIDENT
PROJECT ROLE: VERTICAL TRANSPORTATION SME

Heath's project role will include:

- Responsible for client engagement, contract administration, quality management, and project vertical transportation subject matter expert.

Professional Registration

N/A



SPENCER WILLIAMS – REGIONAL MANAGER
PROJECT ROLE: VERTICAL TRANSPORTATION SME

Spencer's project role will include:

- Responsible for client engagement, contract administration, quality management, and will support the project as a vertical transportation subject matter expert.

Professional Registration

N/A



BILL MOORE – CONSULTANT
PROJECT ROLE: VERTICAL TRANSPORTATION TECHNICAL EXPERT

Bill's project role will include:

- Responsible for being lead consultant of field services, technical expert resource and provide support throughout the project.

Professional Registration

N/A



RYAN KRUG – NATIONAL PRACTICE LEAD
PROJECT ROLE: 3RD PARTY BUILDING ENVELOPE CONSULTING SME

Ryan's project role will include:

- Responsible for quality management and supporting the project as a building envelope subject matter expert.

Professional Registration

N/A



RYAN KOHL – SENIOR CONSULTANT
PROJECT ROLE: LEAD ENVELOPE CONSULTANT

Ryan's project role will include:

- Responsible for participating in design phase meetings, consultation and document review, quality management, and supporting the project as a building envelope subject matter expert.

Professional Registration

N/A

**KRISTOPHER LAWRENCE, CFEI –PROJECT MANAGER/ LEAD CONSULTANT**
PROJECT ROLE: JENSEN HUGHES PM**Kristopher's project role will include:**

- Providing fire protection and fire alarm design
- Assisting in the resolution of design problems, including field investigations or inspections, detailed design work, and detailed checking of design computations done by others
- Providing building code analyses, egress analyses, fire detection and alarm systems reviews, smoke control systems reviews, and sprinkler and water supply systems reviews, including hydraulic calculations

Professional Registration

Certified Fire and Explosive Investigator (CFEI)

**MICHAEL J. KNORAS JR., P.E. – ELECTRICAL ENGINEERING**
PROJECT ROLE: LEAD ENGINEERING**Michael's project role will include:**

- Responsible for consulting and project management of projects involving code analysis, design, and construction administration services

Professional Registration

PE: CA, FL, GA, HI, KY, NC, WV

**ERIC BABCOCK, P.E. – QA/QC**
PROJECT ROLE: QA/QC MANAGER**Eric's project role will include:**

- Design, review, and inspection of fire protection systems and construction, including fire sprinklers, fire alarms and life safety systems
- Developing complete building code analyses

Professional Registration

PE: CA, KY, MD, NC, NY, VA

**WINFIELD STROCK – PRESIDENT**
PROJECT ROLE: COST ESTIMATOR**Winfield's project role will include:**

- Responsible for providing cost estimating and budget services

Professional Registration

Licensed Contractor: WV

II. GOALS & OBJECTIVES

Project Approach

WDP Team's project approach has been developed to suit the project needs based on our collective experience in assessment, analyses, and repair design for existing and historic structures for government clients. Our project approach is divided into four principal components: project identification, assessment, design, and construction administration. All four components are centered around the mission and goals of the GSD, who is the most important member of the project team.

Project Team

WDP has teamed with several other specialty consultants experienced in the building systems and conditions necessary for Buildings 31 and 35. To better respond to the GSD's goals and timetable, WDP will provide two teams of staff. WDP's first team will focus primarily on Building 35 and WDP's second team will focus primarily on the structural assessment of Building 31.

WDP has teamed with ZMM, a local Charleston A/E firm heavily experienced with GSD projects in the local market, to lead a third team primarily focused on the interior systems at both buildings. The third team will provide consulting services to WDP's project leadership teams for both buildings. ZMM will provide overall leadership for the building interiors team and will focus on the mechanical systems as well as any architectural or aesthetic scope related to the work at the building interiors. ZMM will retain the services of Lerch Bates, a firm experience with several elevator modernization projects in the Charleston area, and Jensen Hughes, a firm experienced with the assessment and design of fire protection systems.

WDP will engage the services of Lerch Bates, a national building envelope consulting firm, to provide third-party review of the building envelope assessment work at Building 35 and to assist with the building envelope repair design. The intent of this partnership is to reduce the overall magnitude of the future building envelope assessment by incorporating WDP's prior experience and documentation of Building 35 while providing independent verification and vetting of the repair recommendations. We feel this approach will provide the best value to the state by providing an independent assessment of the Building 35 envelope while reducing the overall cost to the state and reducing the assessment timetable. Winfield Strock will be providing independent cost estimating services for both Buildings 31 and 35. As a way to save costs, a new estimate will be developed for Building 31, but he will perform an initial review of the previous estimate for Building 35 and develop updates to the estimate that more reflect that actual work to be undertaken and based on his extensive experience in the local Charleston construction market.

Goal #1: Assessments of Historic Buildings & Parking Garages

The WDP team has performed assessments and repair design for buildings throughout the region, including many landmark buildings. Some of these include the West Virginia State Capitol, the Culture Center, the Charleston Coliseum and Convention Center, Building 37, Piedmont Parking Garage, the Diamond Building, the BridgeValley Community & Technical College, the Greenbrier, and the Clay Center. In addition to our renovation experience, the team has provided services on multiple commercial office space projects that had a similar intent of providing flexible, modern office space. Recent projects include renovations to various floors in State Office Buildings 5, 6, & 7, the West Virginia Housing Development Fund office in Kanawha City, and Floors 7, 8, and 9 at the Lottery Building.

A sample list of WDP's representative parking garage experience:

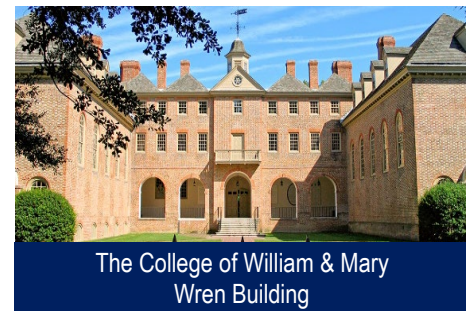
- West Virginia DGS, Building 13 Parking Garage, Charleston, WV
- West Virginia University Suncrest Parking Garage, Morgantown, WV
- West Virginia University, Mountainlair Plaza and Parking Garage, Morgantown, WV
- West Virginia Public Safety Commission, Garage Assessment
- George Mason University, Evaluation of 5 Parking Garages

II. GOALS & OBJECTIVES

- George Mason University, Shenandoah Parking Garage – Stairwell Repairs
- The College of William & Mary, One Tribe Place Parking Garage, Williamsburg, VA
- The George Washington University, City Hall Garage, Washington, DC
- University of Virginia, McLeod Parking Structure
- University of Virginia, Hospital South Parking Structure, Evaluation, Repair, and CA Services
- VCCS, Northern Virginia Community College Parking Structure
- Virginia Tech, Perry Street Parking Garage, Stone Failure Assessment
- Arlington Courthouse Parking Structure, Arlington, VA
- Montebello Condominium Garages, Fairfax, VA
- Fair Oaks Plaza Parking Structure, Fairfax, VA
- Bethesda Metro Center, Washington Area Metropolitan Transit Authority, Bethesda, MD
- Ballston Public Parking Structure, Arlington, VA
- Champion Parking Garage, Stamford, CT
- Houston Hobby Airport Parking Structure, Houston, TX
- Loudoun County Metro, Evaluation of Parking Garages
- TKE Elevator Corporation, Wells Fargo Building Parking Garage – Structural Analysis and consulting
- Vienna North, Washington Area Metropolitan Transit Authority, Fairfax, VA
- Washington Area Metropolitan Transit Authority, Huntington South Parking Structure, Fairfax, VA

A sample list of our historic preservation and masonry façade repair projects is shown below:

- **Wren Building at The College Of William & Mary (1699)**
Williamsburg, Va - Mass Masonry Water Infiltration Investigation And Condensation Analysis, Building Repair Restoration - *The Oldest College Building In The United States Still Standing*
- **Thomas Jefferson-Designed Virginia State Capitol (1788)**
Department of General Services (DGS) - Investigation and Design Repairs
- **City Of Lynchburg Museum (1815)** - Building Envelope Investigation
- **Cyrus McCormick Farm (1822)** Raphine, Va - Structural Evaluation and Preservation of Masonry and Wood Structures
- **Civil War Museum at Tredegar Iron Works (1837)** Richmond, Va - Masonry Façade Evaluation and Repair Design
- **Historic Parish Building at The George Washington University (1846)** Washington, D.C. - Masonry Condition Assessment, Structural Analysis, and Repair
- **Chapel Bell Tower at The University Of Virginia (1889)** Charlottesville, Va - Structural Evaluation & Preservation Of Masonry Façade
- **St. Francis of Assisi Catholic Church (C. 1895)** Staunton, Va - Structural Evaluation & Historic Stone Cladding Replacement
- **Corcoran School Of the Arts and Design at The George Washington University (1897)** Washington, D.C. - Masonry Façade Restoration And Retrofit Design
- **University Of Richmond North Court Housing (1914)** - Masonry Façade Evaluation & Preservation



- **Whitt Hall At Radford University (1928)** Radford, Va - Exterior Masonry Façade Evaluation
- **The Pierre Hotel (1930)** Ny - Exterior Masonry Façade Evaluation and Repair
- **Roanoke Higher Education Center (C. 1930)** Va - Masonry Façade Renovation
- **West Virginia Capitol Dome (1932)** Wv General Services Division - Structural Evaluation & Designer of Record for Moisture Intrusion Repairs (Currently On-Going)
- **Solomon R. Guggenheim Museum (1937)** Ny - Corrosion Evaluation and Mitigation
- **Erie Federal Courthouse Complex (1938)** Pa - Masonry Façade Evaluation and Repair Design

Reconnaissance Site Visit

The initial stage of our team's project approach will be to develop a plan for executing the project based on the GSD's project goals. The project team leadership will perform a reconnaissance site visit with the GSD's staff on site to discuss the GSD's systems and goals and to clearly define the project parameters that will inform the building assessment and subsequent repair design. These discussions will be complemented by our institutional knowledge developed through extensive experience working with building owners. The site visit will also provide the opportunity for WDP's Consultants to perform initial reconnaissance of the site conditions and available documentation for purposes of identifying special project needs and formulating plans for the on-site investigations.

The WDP Team will use the parameters and formation from initial site visit and meetings with the GSD to refine and tailor the project approach to the anticipated use, occupancy types, external conditions, service life, maintenance schedule, and budget constraints. The WDP Team will strive to provide project-specific services to address information provided by the GSD, including the following:

- Unique site layout or building geometries
- Existing damaged conditions
- Structural loading and service conditions
- Access limitations, ADA requirements, and continued occupancy
- Impacts to operations and scheduled events
- Potential hazardous materials or confined spaces
- Schedules and budgets

These initial parameters set the foundation for a proposal submittal that identifies scope of work, project schedule, and corresponding fees.

Document Review

The WDP Team will work with the GSD to obtain copies of the existing project documentation, including drawings, specifications, submittals, or prior investigation reports, if available, for review prior to the field investigation. Relevant documents in paper format will be digitized to facilitate information sharing between the WDP Team members, the creation of survey sheets for use during the field work, and development of base drawings for the design phase. The WDP Team members will review the relevant documents from the GSD to understand the design and service history of the building and generate lists of equipment, systems, and conditions to verify in the field.

Project Plan

Following on the parameters and project information gathered from the GSD, from our Reconnaissance Site Visit, and from our Document Review, the WDP Team will develop a Project Plan tailored to the unique project conditions and the GSD's goals. WDP will review the elements of the Project Plan with the GSD to obtain the GSD's feedback and to coordinate between the GSD, the building occupants, and the WDP Team for execution of the field evaluation. WDP will maintain and adjust the Project Plan throughout the project as new information becomes available.

Project Plan Elements

- Project description
- Summary of GSD requirements and project parameters
- Statement of deliverables
- Field evaluation plans
- Team organization and staffing
- Responsibility matrix
- Preliminary project schedule
- Project directory

Field Evaluation

The WDP Team will mobilize to the project sites to perform specific evaluation tasks outlined in the Project Plan. The evaluation will include documentation of in-situ conditions, field verification of the GSD-indicated systems, verification of the provided documentation, and comparison between current conditions and previous observations to document the progression of damage and deficiencies. The WDP Team has an extensive tool set of investigation methods that may be utilized during the field evaluations to suit the unique project conditions and goals. When applicable, we will perform investigations in accordance with ASTM standards and guidelines. WDP will immediately notify the GSD of any immediate structural or life-safety issues that are identified during the field work. WDP will coordinate between the GSD and WDP's subconsultants and subcontractors during the field evaluation to assist with providing access to the necessary evaluation areas and systems, including exploratory openings as needed, to ensure all aspects of the project scope are addressed.

Analysis

Following the on-site evaluations, the WDP Team will compile and review the field documentation based on the team member's specialized experience with existing and historical structures. The team will evaluate and categorize the observed conditions and systems according to level of severity, impact to building function, and relevance to the GSD's project goals and parameters. The categorized information will be used to develop multiple, tiered options for repairs and upgrades to the building and building systems. It is anticipated that the repair options for each condition or system will include short- and long-term solutions and the upgrade options for each system will include alternative performance levels. The repair and upgrade options will be evaluated based on the GSD's project goals and parameters. The team will perform preliminary computations and evaluations of the potential repair alternatives to analyze the feasibility of each option from budget, constructability, and maintenance standpoints. The Team will consider the recommendations provided in previous reports provided by the GSD but will ultimately provide an independent list of recommended repair and upgrade options based on the field evaluations and specialized expertise of each of the WDP Team subconsultants.

WDP Investigative Methods:

- Visual and tactile surveys
- Diagnostic water testing
- Infrared thermography
- Air leakage testing
- Endoscopy of concealed conditions
- Ferromagnetic pachometer surveys
- Electronic leak detection for roof membranes
- Surface-penetrating radar
- Impact-echo testing
- Vibration monitoring
- Hygrothermal condition monitoring
- Material sampling and testing
- Other specialty methods as required

The WDP Team leadership will meet regularly with the GSD throughout the Analysis and Report phases. The intent of these meetings will be to maintain an ongoing dialogue with the GSD to facilitate information sharing between the WDP Team and the GSD as the repair options are evaluated and recommendations are finalized.

Report

Subsequent to the analysis tasks, the WDP will develop a comprehensive report summarizing the findings of the field evaluation and provide recommendations for repairs to the buildings and building systems. The report will discuss the field observations, including their level of severity, impact to building function, and relevance to the GSD's project goals and parameters. Multiple tiers of repair options will be presented for each repair condition. The report will discuss the alternative design options, including advantages and disadvantages of each with respect to constructability, potential repair sequencing, and maintenance. Detailed estimates of construction cost will be prepared for the alternative design options to permit the GSD to evaluate and prioritize the repair scope based on the relative cost, advantages, and disadvantages of each option.

It is anticipated that prior to finalizing the report, WDP will provide a draft of the report to the GSD for review and comment. The WDP Team leadership will meet with the GSD to discuss the GSD's comments and answer any questions. Following the meeting, the team will incorporate the GSD's comments into revised recommendations and budgetary estimate and will provide a final report.

Goal #2: Developmental Design, Construction Documents, and Bid Phase Services

WDP will assist the GSD in dividing and establishing the scope of work for each of the separate repair and upgrade projects based on the GSD's priorities and budget. WDP will discuss the GSD's priorities and project parameters for each project to understand the project-specific information that will be considered in the development of the designs. Based on these discussions, WDP will prepare a scope narrative for each project which will establish the basis for that project's design and management efforts. WDP will submit the scope narrative for each project to the GSD for approval prior to beginning schematic design. WDP will update the Project Plan to reflect the new project information and incorporate the approved scope narratives and will provide an updated copy of the plan to the GSD.

Following approval of each scope narrative, the WDP Team will begin design for the project and advance the project through schematic design, design development, and construction document phases. As the projects progress through the design phases, the estimate of construction cost for each project will be updated to reflect the most current scope and level of detail. At the end of each design phase, the design documents will be sent through WDP's internal QA/QC program, revised as necessary, and be provided to the GSD along with the updated cost estimate for review, comment, and approval prior to proceeding to the next design phase.

Through the design phases, the WDP Team will develop the approved scope narrative into repair and upgrade designs using its experience with precedent designs on previous projects, understanding of building science and engineering principles, and experience with post-occupancy repairs on existing and historic structures. The construction documents will include clear delineation of work items versus items to remain and include details specifically focused on demonstrating proper sequencing of repairs where they are necessary for the proper performance of the repairs.

WDP will regularly meet with the GSD through all design phases to inform the GSD of design progress and coordinate important design requirements.

WDP will assist the GSD during the bidding phase by coordinating the construction documents with the bid requirements, submitting documents for fire marshal review, uploading construction documents to plan rooms, developing and leading pre-bid meetings, answering technical questions, and assisting with the development of addenda. WDP will provide assistance to the GSD during bid evaluation and contractor negotiations.

Goal #3: Phased Construction Projects

Restoration and repair projects frequently impose constraints based on funding availability, the need to accommodate occupant needs, risk from uncertain conditions, and other limitations which necessitate a phased project approach. The WDP Team has extensive experience developing multiple bid packages to meet our clients' unique project needs.

Recent examples of these services include the Erie U.S. Federal Courthouse Complex. The project was split into multiple bid packages to prioritize critical repairs without sacrificing construction efficiency and to **minimize disruption to building occupants**. Examples of other phased projects of occupied buildings include the façade replacement and structural repairs to the Judge Advocate Generals School at UVA, South Agricultural Sciences Façade Replacement at WVU and the restoration and stone replacement of St. Francis Assisi Catholic Church in Staunton, VA.

Goal #4: Experience on Projects in Occupied Buildings

The most relevant project to the current proposed project is State Office Buildings 5, 6, & 7. The improvements commenced with an overall building assessment that examined the condition of the buildings, as well as cost and phasing options for implementing various upgrades. Once the assessment was completed, a variety of phased improvements were implemented while the building remained occupied. These improvements commenced with the renovation of the 10th Floor of Building 5 – which required the construction of the infrastructure that is being used to install a sprinkler system on each additional renovation. The next phase of the renovation involved floors 7, 8, and 9 of Building 5 and floors 7 and 8 of Building 6. All these floors have been fully renovated, including abatement, demolition, new construction, and updated life safety systems. ZMM has also provided design services for the renovation of the 2nd, 3rd, and 4th Floors of Building 6 for the Department of Education and Division of Personnel. Additional improvements have included:

- Roof Replacement
- Electrical Courtyard Improvements
- Door and Window Replacement
- Exterior Cleaning and Caulk Replacement
- Valve Replacement

Based on the work being performed on occupied buildings, the construction documents will also include specialized phasing requirements of the work to minimize disruptions to building occupants and for temporary protection requirements for building occupants and the public. WDP will develop these special requirements specifically tailored to the unique needs of the GSD and the building tenants based on WDP's experience with occupied buildings.

Another project that remained occupied during a significant renovation was the Expansion of the Charleston Civic Center into the Charleston Coliseum and Convention Center. The \$100M expansion project, which included the replacement of the central plant, and upgrades to all mechanical, electrical, and plumbing systems, has been 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 October of 2018, and the Charleston Coliseum and Convention Center maintained operation throughout the process.

A final example includes the School of Nursing Expansion for Bridge Valley Community and Technical College at the West Virginia Regional Technology Park. Requiring gut remodels of one floor of Building 2000, this project received late notification of approval of federal grant funds through the West Virginia Higher Education Policy Commission, which required completion prior to August 26, 2022. ZMM's contract was signed, and the design process began January 20, 2022; on August 26, the owner occupied the new space and classes began. The project's duration of seven months included design, preparation and public bidding of construction documents, demo, and construction — all during the height of the COVID pandemic in a fully occupied building.

Recently, lead times for major equipment that are mission-critical for the construction schedule – most notably, electrical gear, but also air handling units, elevators, and even lab casework – have wrought havoc in the industry. While these lead times are currently showing signs of improvement, it will remain critically important that these are monitored, and if issues are identified, we adapt. Our team brings both local and national market insights that enable us to stay abreast of changes and impacts from forces now impacting construction. And we have a track record of agility – being able to pivot quickly to realign the design.

Goal #5: Construction Approach with WV GSD

Construction Administration

The WDP Team will continue its services during construction to assist the GSD with administration of the construction contract. Based on our experience with previous repair and upgrade projects, it is anticipated that WDP will be more involved during the construction phase than what would be typical for new construction to address unique, unforeseen, or concealed conditions that are more common in projects in existing buildings. WDP's services will include developing a pre-construction meeting agenda, attendance at the preconstruction

II. GOALS & OBJECTIVES



meeting, submittal and shop drawing reviews, on-site progress meetings, addressing RFIs, reviewing change order applications, construction observation, and record drawing production.

During the construction phase WDP will provide additional resources to help manage a timely flow of information between all parties (Owner, Subconsultants, and Contractor). The WDP project managers will continue to serve as the primary representatives of our team for each of the repair projects and will attend all construction progress meetings. Our project managers are experienced with construction administration and construction phase staff assist in tracking information (incoming and outgoing) during the construction phase to ensure that the design team is being responsive to project needs.

During project construction the design team will continue to be engaged in assuring that the materials and systems being provided, and installed, comply with the design intent. Standard construction phase services include:

- Attend regularly construction progress meetings.
- Review and respond to shop drawings and submittals.
- Respond to RFI's generated during construction.
- Review and respond to change orders as needed.
- Participate as needed in weekly progress update conference with Owner.
- Make site visits to review construction progress and generate an inspection report for each visit.
- Assist with developing a punch-list of remaining work.
- Complete a substantial and final completion inspection.
- Assist as needed in the startup and project closeout process.

WDP 's references follow.

References

Taj Hotel, The Pierre Hotel

Façade Investigation & Repair

New York, NY

Contact: Thomas Trudo – Director of Engineering, (212) 838-8000 / Thomas.trudo@tajhotels.com

Team Members: Rex Cyphers, P.E., Gerald A. Dalrymple, P.E., Benjamin Townsend, P.E.

West Virginia Department of Administration, General Services Division

Building 37 Window, HVAC, Roof, and Envelope Upgrades

Allentown, PA

Contact: Kari Dean – Construction Project Manager, (304) 352-5492 / Kari.j.dean@wv.gov

Team Members: Rex Cyphers, P.E., Jodi Knorowski, P.E., Kaitlyn Franczek, E.I.T.

West Virginia Department of Health and Human Services

Diamond Building Investigation and Temporary Protection

Charleston, WV

Contact: Bryan Rosen – Executive Director of Operations, (304) 558-0953 / Bryan.d.rosen@wv.gov

Team Members: Rex Cyphers, P.E., Gerald A. Dalrymple, P.E., Patrick Dillon, Ph.D., P.E., Abigail Cowser, E.I.T.

GSA, Garmatz Building Window Study

Baltimore, MD

Contact: Sung Lee - Project Manager, (215)-446-5713 / Sung.lee@gsa.gov

Team Members: Rex Cyphers, P.E., Adam D'Alessandro, P.E., Andrew Wagner, P.E., Jodi Knorowski, P.E.

GSA, Edward N. Cahn Federal Building and U.S. Courthouse

Roof Replacement

Allentown, PA

Contact: Gabrielle Trout, P.E. – Sr. Project Manager, (215) 446-4807 / Gabrielle.trout@gsa.gov

Team Members: Rex Cyphers, P.E., Jodi Knorowski, P.E., Andrew Wagner, P.E., Shannon Scolforo E.I.T.

VA DGS, Virginia State Capitol

Replacement Design & Investigation

Richmond, VA

Contact: Mary Ann Petry – Project Manager, (804) 370-7912 / Maryann.petry@dgs.virginia.gov

Team Members: Rex Cyphers, P.E., Patrick Dillon, Ph.D., P.E., Carly Wagner, P.E., Shannon Scolforo, E.I.T.

GSA, Erie Federal Courthouse Complex

Façade Investigation and Repair

Erie, PA

Contact: Donna Andrews – GSA Regional Historic Preservation Officer, (215) 446-4570 /

Donna.andrews@gsa.gov

Team Members: Rex Cyphers, P.E., John Civitillo, P.E.

West Virginia General Services Division

Piedmont Parking Garage Building 13 Condition Assessment

Charleston, WV

Contact: Raymond Jordan – Building Project Management Specialist, (304) 957-7141 /

Raymond.e.jordan@wv.gov

Team Members: Rex Cyphers, P.E., Patrick Dillon, Ph.D., P.E., John Grill, P.E., B.J. Lee, Ph.D., P.E., S.E.

III. & IV. QUALIFICATIONS

PRIME PROJECT EXPERIENCE – WDP & ASSOCIATES CONSULTING ENGINEERS

The Pierre Hotel

New York, New York

Owner / Client

Taj Hotel
New York

Project Manager Contact Information

Thomas Trudo
Director of Engineering
(212) 838.8000 /
Thomas.Trudo@tajhotels.com

Project Type

Façade Assessment & Repair

Size

515,755 ft²

WDP's Scope of Services

- Façade Inspection and reporting
- Repair Scope Development
- Historic Façade Preservation
- Designer of Record for Repairs
- Masonry & Structural Steel Repairs
- Construction Phase Services



Built in 1930 and housing elite private residences and a luxurious five-star hotel, The Pierre graces the southeastern corner of Central Park with 45-stories featuring a beautiful French chateau-style façade featuring ornamental terracotta, limestone, brick, copper cladding and ornamental detailing, with a prominent copper mansard roof and several setback terraces with balusters. The Pierre is a designated New York City Landmark structure and has appeared and been mentioned in numerous films and television series.

WDP was engaged to perform an assessment of the historic facades of **The Pierre**. At several locations, particularly at corners of the building, cracking in terra cotta is prevalent. Hammer sounding of the terra cotta identified that some masonry elements were no longer fully engaged, classifying the building as Unsafe. In addition, WDP performed exploratory probe openings to observe and quantify steel column section loss using a combination of calipers and ultrasonic thickness measurements to measure the remaining section properties of the exposed steel.

Subsequently, WDP developed façade repair documents to address cracked and spalling terra cotta and other masonry elements, corroded steel members, and localized repointing and crack repairs to mitigate excessive surface penetration that has the potential to lead to accelerated deterioration of the façade. WDP's understanding of the important differences between various systems, including their material properties and intended functions, enabled WDP to design repairs with sensitivity to the subtleties required for each system. The Pierre Hotel façade is a mass masonry façade, consisting of a large number of glazed terracotta elements, which are most susceptible to deterioration resulting from weathering, freeze-thaw cycling, and rust-jacking of embedded structural steel due to prolonged moisture exposure.

Project Goals:

- Correct conditions that may pose an immediate hazard to life safety.
- Provide temporary protection and phasing to maintain full occupancy
- Improve durability by reducing pathways for excess surface penetration of water that can lead to accelerated deterioration.

Based on WDP's in-house structural engineering expertise, this was used to calculate the remaining section capacity and compare it against the original section's reserve capacity. For the steel locations requiring strengthening or replacement, WDP developed creative connection details to replace original riveted connections without altering the capacity or structural behavior of the overall system. Weldability analysis was performed on the original steel to verify that the chemical composition of the Carnegie steel sections will lend itself to modern steel sections and welding electrodes.

As the initial assessment could only reasonably cover a representative portion of the façade, the **repair design implemented a phased approach**, using a series of unit price repair details to allow for scaling the application of the typical repairs to portions of the façade that were not carefully examined. WDP worked closely with the NYC Landmarks Preservation Commission to gain approval for the repair approach and specific submitted products to preserve the historic fabric of the façade.

WDP has been providing phased façade condition surveys throughout the construction process. When a new scaffolding drop is rigged, WDP performs an initial drop survey with the contractor to identify and mark out unit price repairs as required to correct unsafe conditions.



Masonry Repair Material Trial Installation for Historic Preservation



Ultrasonic Pulse Velocity Measurement of Corroded Structural Steel to Evaluate Reduced Capacity [left] and Structural Member Replacement [right]

Building 37 Window, HVAC, Roof, and Envelope Upgrades

Charleston, WV

Owner / Client

West Virginia Department of
Administration, General
Services Division /
ZMM Architects

Project Manager Contact Information

Kari Dean
Construction Project Manager
304-352-5492
Kari.j.dean@wv.gov

Project Type

Field Investigation, Design, and
Construction Administration
Services

Size

151,000 SF

WDP's Scope of Services

- Field Investigation
- Visual survey of roof assemblies
- Report of findings with tiered recommendations for repairs
- Will develop design for building envelope component repairs and provide construction administration services

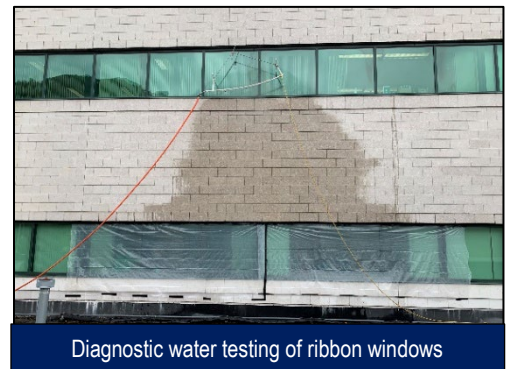
Project Goals & Objectives

- Evaluate root cause of water infiltration associated with windows
- Replace the existing roof assemblies
- Execute remedial repairs to address water infiltration
- Upgrade existing HVAC system



Building 37, also known as the Department of Environmental Protection, was constructed in 2003 and is a 3-story building featuring ribbon windows and concrete masonry veneer with a large entrance curtain wall. Water infiltration around the windows has been an ongoing issue with the building, leading to isolated repairs undertaken in 2011. These repairs did not address the underlying issues, and further evaluation was required. WDP teamed with ZMM Architects 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 has led to deterioration of the wood sill supports below the windows as well as corrosion of structural steel elements.

WDP developed a report focusing on the issues with the building envelope and presented tiers of repair recommendations ranging from maintenance level repairs to comprehensive repairs. These repair strategies were coordinated with ZMM's evaluation of the existing mechanical systems to understand how improvements in the building envelope would impact the performance of the mechanical system. WDP and ZMM will develop repair drawings and provide construction administration services once further direction is provided from the GSD regarding the desired repair approach.



Diagnostic water testing of ribbon windows

Diamond Building Investigation and Temporary Protection

Charleston, WV

Owner / Client

West Virginia Department of
Health and Human Services

Project Manager Contact Information

Bryan Rosen
Executive Director of Operations
(304)558-0953
bryan.d.rosen@wv.gov

Project Type

Condition Assessment

Size

227,000 SF

WDP's Scope of Services

- Condition assessment
- Temporary protection design, procurement assistance, and construction administration

Project Goals & Objectives

- Condition assessment
- Evaluation of findings
- Repair summary
- Estimated repair budget



The Diamond Building (Building 35) in Charleston, West Virginia, has been experiencing progressive deterioration of the building façade for several years, leading to water infiltration and damage at several interior areas of the building and cracking and spalling of the masonry façade. WDP was engaged in 2022 by the WV Department of Health and Human Services to perform a condition assessment of the building exterior. The condition assessment included surveys of representative areas of the building envelope from interior and exterior sides to verify the typical assemblies and document deficiencies, exploratory openings to observe concealed conditions, measurement of member section loss from corrosion, locating of embedded masonry ties, and sounding to verify extents of surface delamination's in the masonry. WDP developed a comprehensive report summarizing the deficiencies, providing repair recommendations, and including an estimated cost of the repair work.

During this evaluation, WDP notified the DHHR of several conditions that posed an immediate life safety risk to the building occupants and pedestrians walking along the perimeter of the building. WDP recommended that immediate steps be taken to stabilize critical areas and protect the building occupants and public on the sidewalk from potential falling debris. At the request of the DHHR, WDP developed construction drawings for emergency protection measures at the building exterior. The measures included overhead protection over the sidewalks, temporary pinning of the parapets, installation of debris netting at the building corners, and installation of stitching ties at the parapet and above the seventh-floor windows. WDP provided bidding phase services and is currently providing construction administration services during the emergency protection work.

Garmatz Building Window Study

Baltimore, MD

Owner / Client
General Services
Administration

Contact Information
Sung Lee
Project Manager
Phone: 215-446-5713
Email: sung.lee@gsa.gov

Project Type
Window study

WDP's Scope of Services

- Window condition assessment
- Field testing
- Recommendations for repair

Project Goals & Objectives

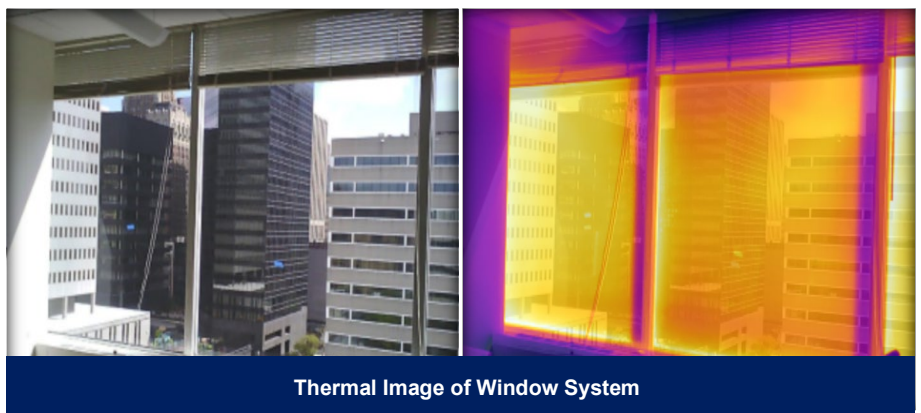
- Evaluate existing windows for performance
- Repair recommendations



The Edward A. Garmatz Building is a federal courthouse located in Baltimore, Maryland that was constructed in 1976. Maintained by the GSA, the courthouse had reported various issues relating to their original window systems. Issues included “daylighting control failures, possible degradation of window seals, leaking air and water from the gaskets, and unwanted transfer of cold or heat.” WDP & Associates were hired to investigate these window systems, and to provide recommendations for repair.

A thorough condition assessment of the existing window systems was performed, which included a visual survey, thermal imaging, thermal data collection, and field performance testing. The results from performance testing were compared to industry-accepted standards to quantify the performance of the existing systems. Technical analysis was subsequently completed to further define the performance of the existing systems, and to compare retrofit options. Collected thermal data was analyzed using computer applications, including “THERM”, “COMFEN”, and “Window”. The analysis results were used to define both the environmental impact of the existing systems, and the potential energy savings of window retrofits. The collected data was used to develop a report and to provide recommendations for remediation.

Analysis results were used in conjunction with collected visual observations and test results to compile five retrofit options. Options included the installation of a thermal film, a baseline window replacement, a quad-pane window replacement, a smart-glazing window replacement, and daylighting controls. Each option reported typical considerations, such as cost, effectiveness, and feasibility. Other criteria was investigated specific to the client, such as blast resistance, embodied carbon, and environmental affect to present a thorough list of recommendations to the client.



Edward N. Cahn Federal Building and U.S. Courthouse

Allentown, PA

Owner / Client

General Services Administration

Project Manager Contact Information

Gabrielle Trout, P.E.
Sr. Project Manager
Mid-Atlantic Region
(215) 446-4807
gabrielle.trout@gsa.gov

Project Type

Roof Replacement

Size

18,575 SF

WDP's Scope of Services

- Condition Assessment
- Roof Design
- CA Services

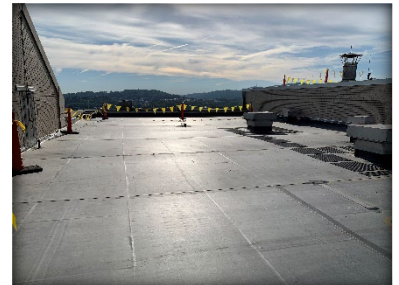


(IDIQ) Contract for Roofing, Façade, and Building Envelope Engineering and Design Services

WDP performed a pre-design existing conditions survey to document the main and two small entrance roofs for replacement. During the survey, test cuts were made in the existing roofing system to confirm existing materials and slopes, and hazardous material testing was performed to check for asbestos, lead, and PCBs. Findings from the investigation were presented to the GSA to help the Owner evaluate options for the repair scope of work. The new design includes replacing the exiting ballasted EPDM roof membrane with a mechanically fastened cover sheet over the existing lightweight insulated concrete roof deck, fully adhered cover board, and fully adhered EPDM membrane.

In addition to the roof replacement, the design includes replacing two roof drains, correcting issues with flashing, mortar and sealants at parapets, repair of control joints in brick masonry, addressing existing ponding, updating lightning protection equipment, and installing a new fall protection system. The new roof system was designed to obtain a 20-year warranty at the completion of construction.

WDP provided construction administration services during the construction phase of the project.



Virginia State Capitol

Richmond, VA

Owner / Client

Virginia Department of General
Services
Glave & Holmes Architecture

Project Manager Contact Information

Mary Ann Petry - Project
Manager
(804)-370-7912/
maryann.petry@dgs.virginia.gov

Project Type

Replacement Design &
Investigation

Size

26,880 SF

WDP's Scope of Services

- Diagnostic Water Testing
- Periodic Condition Assessments
- Repair Design
- Construction Administration



Designed by Thomas Jefferson and built in 1788, the Virginia State Capitol is a National Historic Landmark which accommodates the Virginia General Assembly, the oldest legislative body in the Western Hemisphere. An underground addition to the Virginia Capitol building was completed in 2007 to add a visitors' center and additional meeting space. After completion, the underground addition began experiencing water leakage through the south terrace skylight and failed waterproofing on the plaza and the monumental south stair. WDP was retained to evaluate the water infiltration, conduct a condition survey, and perform diagnostic testing to determine the underlying cause of acute failures after previously attempted exterior surface repairs were not successful. Based upon the findings, WDP provided conceptual repair alternatives consisting of temporary repairs, a repair-in-place option to address the waterproofing issues only, structural repairs to the skylight, and an option for the complete rebuild of the skylight. While the state gathered funds and considered what the best solution would be, WDP continued to provide periodic condition assessments of the skylight as well as additional diagnostic water testing as water infiltration became increasingly pervasive from 2008 through 2012.

Ultimately, after considering WDP's findings and recommendations, the Virginia Department of General Services decided to remove the skylight, infill the opening with a new structural slab, install new waterproofing over the plaza, install new plaza pavers to match the existing skylight pattern, and install a new simulated skylight luminaire beneath the slab. WDP was engaged to design the new structural concrete infill slab, waterproofing and insulation assembly, structural topping slab, and paver assembly. During this design, WDP discovered that the original structural design was not sufficient for the fire lane loading that the structure was intended to handle. The concentrated wheel loads from firefighting vehicles on the plaza required upgrades to select structural connections and welds. Additionally, the historic columns are mass masonry that extend down into the below grade portions of the building. As such, reconstituting the specialty silicate coating and historic stucco at the full height of the columns was part of the comprehensive repairs.

During construction to repair the waterproofing at the terrace, WDP performed periodic site visits and meetings to coordinate directly with the project team. Existing conditions exposed during construction differed significantly than what was anticipated. The cheek wall weeps located at the south side of the terrace were discovered as being partially infilled and the fluted insulation which was intended to provide some drainage was fused to the waterproofing membrane. Further, WDP had designed a temporary waterproofing tie-in to the existing waterproofing system, but the existing system was revealed to be completely deteriorated and incapable of accommodating a new edge interface. WDP quickly responded with a recommendation and mobilized staff to provide information to the contractor to avoid halting construction.

WDP was able to provide added value to the State of Virginia through our quick responses to existing conditions and our experience and specialty in designing similar repairs. Our design limited the scope of the repairs to only those elements that truly need to be addressed, which greatly limited the overall cost of the project. WDP was able to quickly detail repairs that allowed the Contractor to proceed in a seamless manner with no impacts to the Construction Schedule that could have otherwise added significant time and cost to the State.

Project Goals:

- Diagnose and repair active water infiltration through the glass block and precast skylight while maintaining the existing historical materials and aesthetic.
- Structural upgrades to support fire lane concentrated loading.

We achieved this by:

- Series of diagnostic water testing as various leaks presented over various locations over the years.
- Periodic assessments of the failed skylight until project was funded and scoped.
- Cataloging all historic solid granite stair treads and pavers prior to removal.
- Removal of existing precast and glass block skylight.
- Structural reinforced cast in place concrete infill of structural slab at skylight opening.
- Removal of existing failed waterproofing and insulation and overly thickened mortar setting bed at entire terrace and monumental south stair.
- Installation of new hot fluid applied waterproofing system with drainage composite across entire structural slab of terrace and stair and up faced of cheek walls.
- Installation of new insulation and structural light weight concrete topping slab.
- Re-installation of existing pavers and historic treads.
- Install new bronze seal and custom compass design to mimic look of skylight.
- Install simulated light on interior beneath original skylight location.

Federal Courthouse Complex

Erie, PA

Owner / Client

United States General Services
Administration (GSA)

Project Manager Contact Information

Donna Andrews
GSA Regional Historic
Preservation Officer
(215) 446-4570 /
donna.andrews@gsa.gov

Project Type

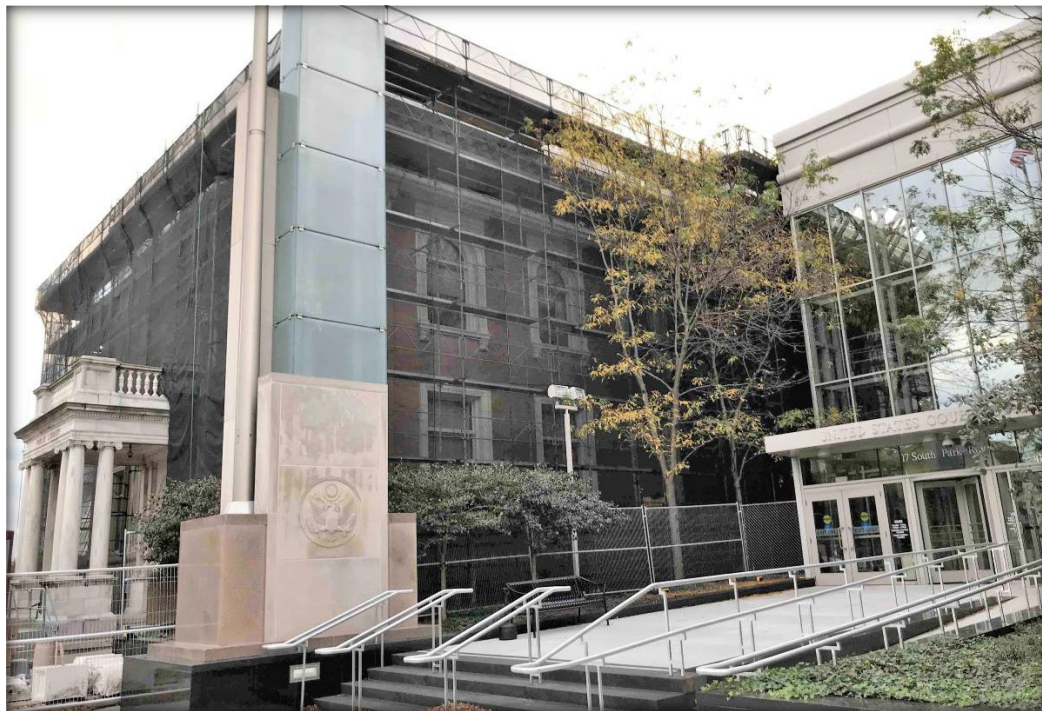
Façade Investigation and Repair

Size

Approximately 168,000 SF

WDP's Scope of Services

- Comprehensive Investigation & Repair Scope Development
- Historic Façade Preservation
- Hazardous Materials Analysis
- Designer of Record for Repairs
- Historic Window Replication
- Waterproofing
- Concrete & Masonry Repairs
- Construction Administration



Project Description

WDP's performed a comprehensive on-site assessment and field investigation at the GSA Federal Complex in Erie, Pennsylvania, to assess existing conditions and known façade and building enclosure issues with three of the four buildings at the complex, each of which are listed on or eligible for the National Register for Historic Places. WDP developed full contract documents and provided Construction Administration Services to oversee the repairs to the Courthouse and Federal Building. The designs for the other buildings in the complex have been completed, but construction has been deferred until funding is available.

Project Goals:

- Diagnose and correct ongoing infiltration
- Repair and stabilize loose stones in the façade
- Replace large, historic windows to improve energy efficiency and improve occupant comfort
- Implement repairs in accordance with historic preservation standards
- Maintain building occupancy and minimize disruption to operations

A diagnostic field investigation included water testing to diagnose interior infiltration at the historic library basement, exploratory probe openings to investigate underlying construction, materials sampling and laboratory testing, and other methods, such as infrared thermography and the installation of interstitial temperature and relative humidity dataloggers at various depths through select exterior walls. Due to the historic nature of the buildings, a hazardous materials assessment was conducted with the support of a subconsultant to sample suspect materials at all locations of anticipated work.

III. PROJECT TEAM EXPERIENCE

Materials containing both lead and asbestos were located, and specifications were developed for the repair design programs to regulate work near hazardous materials and abatement, if required.

Based on the results of the investigation, WDP worked closely alongside the GSA to develop a scope of work and cost estimates for the repairs to address problematic conditions. Having identified additional deterioration to be addressed by this program, flexibility was necessary in the design process to create a phasing program to design to the funding available. **WDP and the GSA split the repair project into multiple bid packages** and each bid package into sub-phases to prioritize critical repairs without sacrificing construction efficiency and **to minimize disruption to building occupants**. Construction bid drawings and extensive project-specific technical specifications were developed for the repair design packages.

Repairs to deteriorated masonry facades and parapets included limestone patching and crack repair, brick crack repair, lintel replacement, bluestone parapet coping replacement, soapstone spandrel repair, slate sill replacement, glass block reconstruction, and complete repointing for limestone and brick facades.

A **complete window replacement program** was designed to upgrade existing steel window systems including iconic multi-story fenestrations with thermally broken aluminum systems and insulated glazing. Because of the historic nature of the facilities, it was necessary to replicate the intricate decorative elements of the existing windows. Typically, replication of a window system with this level of detail requires a very costly, fully-custom window system. WDP was able to work closely with the window manufacturer to save cost by identifying a stock hung window system that could be adapted with the use of custom panning, simulated muntins, and unique jamb inserts to substantially replicate the critical features of the historic windows. As an important component of the repair program, extensive prototyping and preconstruction testing was performed to verify the concept and to ensure the thermal performance of the window systems was sufficient to provide the required level of improvement for the extreme cold weather experienced in this climate zone.

WDP remained engaged through the construction of the repairs to the courthouse building, providing construction administration (CA) services and anticipates providing CA services for the repairs at the remainder of the complex. Through our extensive experience performing building retrofits, we understand that providing CA services for complex repairs requires responsiveness and creativity in addressing unavoidable, unforeseen conditions. During the initial demolition of the parapet cladding on the courthouse building, it was discovered that much of the masonry backup was deteriorating and that the limestone cladding was inconsistently anchored to the backup. Having an in-depth knowledge of the building construction and history, WDP was able to provide direction for **reconstitution of the parapet masonry backup** and reanchoring of the loose limestone panels, in addition to **reconstruction of the parapet masonry flashings, copings, and interior cladding**.



3D-printed window prototype used to verify complex historic window replica profiles



Piedmont Parking Garage Building 13

Charleston, WV

Owner / Client

West Virginia General Services
Division

Project Manager Contact Information

Raymond Jordan
Building Project Management
Specialist
(304) 957-7141 /
Raymond.E.Jordan@wv.gov

Project Type

Condition Assessment

Size

250,000 SF

WDP's Scope of Services

- Condition Assessment
- Repair Design
- Bidding Phase Services
- Construction Support Services



Full-depth Slab Repair



Failure of previous patch material

The Piedmont Parking Garage was experiencing significant deterioration in the form of coating failures, excessive water infiltration, corrosion staining, cracking, and concrete delamination and spalling throughout. WDP performed condition assessments in both 2017 and 2018 of the 4-level, 250,000 SF parking garage located at the West Virginia State Capitol Complex in Charleston. The condition assessment included visual inspection, sounding of concrete surfaces, and material sampling and testing in order to identify and document deterioration, determine the cause of deterioration, and develop a repair program and associated cost estimates.

Following the 2018 condition assessment, WDP provided repair design services based on the recommendations described in the assessment report and discussions with the Owner. Complete bid documents were developed to include repair drawings and project specifications. The drawings also provided a phasing plan, allowing for the Owner's continued use of the garage during the performance of repairs.

WDP provided bidding phase services and construction support services in the form of submittal and RFI review, bi-weekly site visits, review of contractor pay applications, and closeout during construction between April and December of 2019. In July of 2020, WDP evaluated and addressed the performance of the 2019 repairs which completed this term contract.

Project Goals:

1. Identify and correct conditions that may pose an immediate hazard to life safety.
2. Develop a comprehensive repair plan to include both structural concrete restoration, replacement of traffic coatings, and aesthetic improvements to the garage.
3. Act as a representative of the Owner during construction phase to ensure restorations were properly carried out.

One Tribe Place Parking Garage

Williamsburg, VA

Owner / Client

The College of William and Mary

Project Manager Contact Information

Adam Witkowski
Project Manager
(757) 221-1584
awitkowski@wm.edu

Project Type

Condition Assessment

Size

28,300 SF (garage only)

WDP's Scope of Services

- Condition assessment
- Repair Design
- Bidding Phase Services
- Construction Support Services



Project Description

The College of William and Mary purchased an existing hotel that was constructed in the 1970's to convert into a student housing complex. The facility was constructed in the 1970's with two later additions. The garage serving the original structure is two stories below grade with one elevated post-tensioned concrete structural slab. During renovations of the building, several failed post-tensioning tendons were noted.

The identification of post-tensioning problems in the garage was brought to the College's attention during the first phase of a major renovation to the facility required to accommodate incoming students. WDP was tasked with investigating and analyzing the condition of the post-tensioned garage structure on an accelerated schedule so that the College could determine if the garage was usable without major structural repairs and if repairs were required to define the scope for potential inclusion with the renovation.

No post-tensioning shop drawings were available for the garage; therefore, WDP developed an as-built post-tensioning tendon lay-out plan by use of surface penetrating radar (SPR) survey to locate tendon groups. The Green Level garage post-tensioned slab is approximately 28,300 sq. ft. and contained approximately 162 tendon



Corrosion damage on reinforced concrete column at basement wall

groups which represent approximately 408 individual tendons. Approximately 108 exploratory openings were made to assess the condition of the tendons. Through these openings, approximately 54 tendons were identified as de-tensioned.

WDP worked closely with the Construction Manager responsible for the renovation and completed the field investigative phase over a two-week period. Based on the results, WDP performed structural analyses to assess the prestress loss due to de-tensioned tendons and developed repair and strengthening recommendations for the garage. WDP also assisted the College in developing load limits for the garage structural slab which permitted the College to use the space for a staging area during the second phase of renovations to the property. WDP prepared design documents to address repair of the post-tensioning system including anchorage replacements, tendon replacements and provisions for strengthening the slab using carbon fiber reinforcing. We also provided a safe load rating for the slab which permitted the College to use the area pending the issue of funds to complete the repairs. The analysis and development of a repair design was completed within approximately 45 days of completion of the field investigation which permitted the College to obtain cost data through the Construction Manager and make decisions related to the timing of repair to the garage structure.

WDP also provided construction support services to the University throughout the renovations, including regular site visits. WDP's engagement with the Owner and Contractors throughout the repair process resulted in quick reaction to unknowns and the ability to maintain the project schedule. These renovations were completed in 2020.

Project Goals:

- Evaluate parking garage structural evaluation and develop a load rating
- Nondestructively locate post-tensioning tendons using Surface Penetrating Radar
- Produce as-built post-tensioning tendon lay-out drawings
- Develop a repair design to repair steel tendons

2022 SEA-MW Award

WDP won the "Outstanding Award in Structural Renovation under \$25M" from the Structural Engineers Association of Metropolitan Washington (SEA-MW) for their work on One Tribe Place, Post-Tensioned Concrete Parking Garage Slab Repair at The College of William & Mary.



SUBCONSULTANT STAFF – ZMM ARCHITECTS & ENGINEERS

Charleston Coliseum and Convention Center

Charleston, WV

Owner / Client
City of Charleston

Project Manager Contact Information:
David Molgaard
Former City Manager
304.389.2011 cell

Project Type
Renovation/Expansion

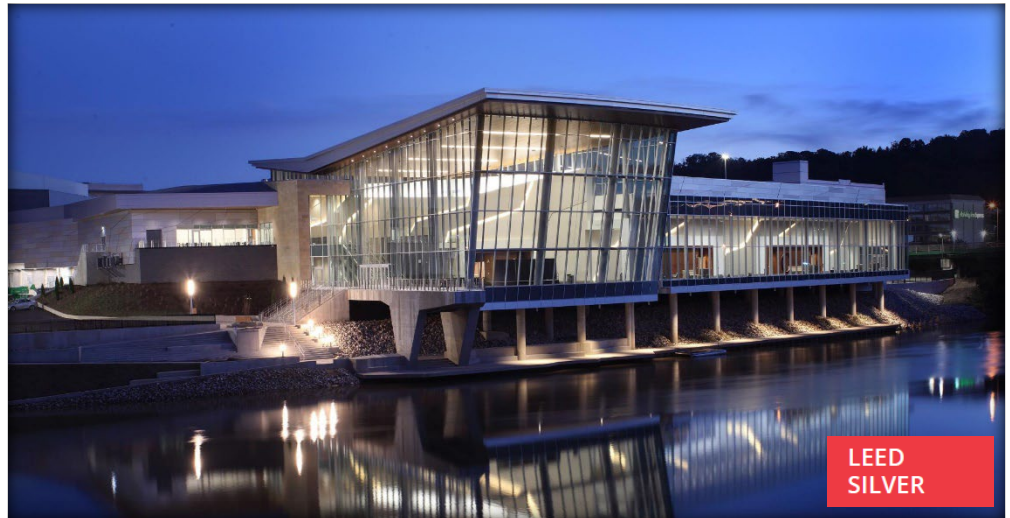
Size
283,000 SF

Scope of Services

- Renovation
- Expansion

Award
2019 AIA WV Honor Award
Citation and People's Choice Award

LEED Silver Building Certified



The Charleston Coliseum and 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.

WV State Office Buildings 5, 6 & 7

Charleston, WV

Owner / Client
General Services Division

Project Manager Contact Information:
Greg Melton
Former Director
304.965.1219 cell

Project Type
Renovation

Size
Various

Scope of Services

- Assessment
- Renovation/Repairs
- Roof Replacement

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 & 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.

Winfield Strock provided cost estimating services on the project.

WV Lottery Headquarters

Charleston, WV

Owner / Client
WV Lottery

Project Manager Contact Information:
John Myers
Director
304.558.0500
jmyers@wvlottery.com

Project Type
Renovation

Size
42,082 SF

Scope of Services

- Renovation to 3 Floors
- 7-Story Parking Garage
- Roof Replacement
- Elevator Lobby



This project was an extensive renovation of an existing 13-story office building and a 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.

Winfield Strock provided cost estimating services on the project.

BridgeValley CTC Stone & Thomas

Charleston, WV

Owner / Client
BridgeValley CTC

Project Manager Contact Information:
Casey Sacks Ph.D.
President
304.205.6600
Casey.sacks@bridgevalley.edu

Project Type
Adaptive Reuse

Size
128,021 SF

Scope of Services

- Renovation



BridgeValley Community & Technical College plans to renovate the existing Stone & Thomas building in downtown Charleston and relocate their headquarters to this location.

The Stone & Thomas building is five stories with a full basement and mezzanine level. Originally a department store, it consists of an open floor plan and a two-story main floor. ZMM, in association with Michael Gioulis, who is assisting in the design and development. The existing building has several elements that will be restored in an effort to obtain historic tax credits. The exterior of the building will be maintained in its current configuration, except for adding windows and mechanical louvers on the alley elevations. The street elevations will be restored, including glass-framed entrances, marble-clad façades, and the iconic building signage. New contemporary elements will complement the historic features.

The renovations include creating a student union and life spaces on the basement level. The street level will contain student life spaces, digital learning commons, 100-person classroom, and lecture stairs to access the mezzanine level. The mezzanine will contain student services spaces. The second and third floors will contain classrooms, as well as administrative and faculty offices. The fourth floor is comprised of allied health programs, with a simulated hospital floor for an enhanced education experience. The fifth floor contains multi-function laboratory spaces.

Winfield Strock provided cost estimating services on the project.

WV State Capitol Building

Charleston, WV

Owner / Client
General Services Division

Project Manager Contact Information:
Greg Melton
Former Director
304.965.1219 cell

Project Type
Renovation

Size
Various

Scope of Services

- Renovation
- HVAC Improvements
- Roof Replacement
- Various Improvements



ZMM Architects & Engineers has completed a variety of improvement projects 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 out all of the mechanical equipment in Capitol Building, and various mechanical improvements to make portions of the Capitol safer for occupants during the pandemic.

Winfield Strock provided cost estimating services on the project.

SUBCONSULTANT PROJECTS – LERCH BATES

Building 22 State Tax Building

Charleston, WV

Owner / Client

Pickering Associates

Project Manager Contact Information:

Bill Moore

Senior Consultant

614.507.8442

bill.moore@LerchBates.com

Project Type

Modernization Services

Scope of Services

- 3 Geared Traction Elevators



For this project, our client was provided with consulting services for two (2) passenger elevators and one (1) service elevator located in the Charleston WV State Tax Building (Building 22).

Our goals were to survey and report our findings with regard to the existing elevators and prepare Construction Documents, where needed. To meet these objectives, Lerch Bates virtually met with the Client to discuss the report recommendations. We prepared a detailed, performance-based equipment specification for the appropriate Lerch Bates standards, reviewed the Elevator Contractor's submittal for compliance with Construction Documents and Design Information (as provided by Lerch Bates) and ensured all of their needs were met, within scope, throughout our time working together.

BB&T Bank, 300 Summer Street

Charleston, WV

Owner / Client

CB Richard Ellis (CBRE)

Project Manager Contact

Information:

Bill Moore

Senior Consultant

614.507.8442

bill.moore@LerchBates.com

Project Type

Modernization Services

Scope of Services

- 8 Geared Traction Elevators
- 2 Hydraulic Elevators



For this project, our client was provided with consulting services for eight (8) geared and two (2) hydraulic elevators located in the BB&T Bank Office Building, located at 300 Summers Street.

Our goals were to Review Design, prepare Construction Documents, where needed and conduct Construction Administration. To meet these objectives, Lerch Bates reviewed and communicated recommended updates to the Construction Documents and Specification previously supplied by Lerch Bates for bidding in 2017. Revised any approved changes to the Construction Documents and Specifications. We performed a Bid Proposal Review and reviewed the Elevator Contractor's submittal for compliance with Construction Documents & Design Information provided by Lerch Bates. and ensured all of their needs were met, within scope, throughout our time working together.

West Virginia University - Evansdale

Morgantown, WV

Owner / Client

Solomon Cordwell Buenz
& Assoc

Project Manager Contact Information:

Bill Moore
Senior Consultant
614.507.8442
bill.moore@LerchBates.com

Project Type

Modernization Services

Scope of Services

- 13 Geared Traction Elevators



For this project, our client was provided with consulting services for thirteen units located at the Evansdale Residential Complex of West Virginia University.

Our goals were to survey and report our findings about the existing elevators and prepare Construction Documents, where needed. To meet these objectives, Lerch Bates investigated the building requirements for equipment service and analyzed the needs of the present and projected tenants. We prepared a detailed, performance-based equipment specification for the appropriate Lerch Bates standards, assisted our client through the bidding process and ensured all their needs were met, within scope, throughout our time working together.

West Virginia Governor's Mansion Phase 1 & 2

Charleston, WV

Owner / Client

Siling Architects

Project Manager Contact Information:

Bill Moore

Senior Consultant

614.507.8442

bill.moore@LerchBates.com

Project Type

Modernization Services

Scope of Services

- 1 Elevator



For this project, our client was provided with consulting services for one elevator at the West Virginia Governor's Mansion.

Our goals were to prepare Construction Documents, and conduct Construction Administration. To meet these objectives, Lerch Bates Prepared a detailed, performance-based equipment specification for the appropriate Lerch Bates standards, configured construction documents to encourage competitive bidding, conducted one final installation review for equipment and performance in accordance with the Construction Documents and Design Information (as provided by Lerch Bates) and the approved submittals and ensured all of their needs were met, within scope, throughout our time working together.

Watchcase Tower Redevelopment

Riverside, NJ

Owner / Client

Coscia Moos Architects

Project Manager Contact

Information:

Ryan Kohl, RRC
Senior Consultant
763-301-9578
Ryan.kohl@LerchBates.com

Project Type

VT Modernization
Services

3rd Party Building
Envelope Consulting
Services

Scope of Services

- One Elevator
- Building Envelope design reviews, shop drawing & submittal reviews, design & CA phase consultation and charrette meetings



The project consists of redevelopment of the existing 6-to 7-story masonry Watchcase Tower building with new residential apartment units and amenity spaces, along with a new clubhouse building. LB understands the owner is pursuing enhanced sustainability and energy performance of the existing structure.

Our goals were to prepare Construction Documents, and conduct Construction Administration. To meet these vertical transportation objectives, Lerch Bates Prepared a detailed, performance-based equipment specification for the appropriate Lerch Bates standards, configured construction documents to encourage competitive bidding, conducted one final installation review for equipment and performance in accordance with the Construction Documents and Design Information (as provided by Lerch Bates) and the approved submittals and ensured all of their needs were met, within scope, throughout our time working together.

Lerch Bates' also provided 3rd party building envelope consulting services which included design phase charrette meetings, formal milestone design reviews as it relates to the buildings air, thermal, vapor and waterproofing assemblies and conducted shop drawing & submittal reviews to help ensure a successful redevelopment of a historic structure.

III. PROJECT TEAM EXPERIENCE

SUBCONSULTANT PROJECTS – JENSEN HUGHES

3600 Rivers Building Assessment Charleston, SC	<i>Facility Condition Assessment</i> Provided a conditions assessment was conducted on a NAVY high-rise hospital that had been closed for fire protection assessment during the seismic safety phase I of an ongoing renovation project at the hospital.
Virginia School For the Deaf and Blind Staunton, VA	<i>Fire Protection Engineering and Building Code Consulting Services</i> The Virginia School for the Deaf and the Blind represents one of the earliest examples of a specialized educational institution in the United States. We collaborated with the architect to provide professional architectural and engineering services for a comprehensive Renovation and Restoration of Main Hall which encompassed sustainable design in compliance with the Virginia High-Performance Buildings Act. Consulting services included a fire protection and life safety assessment of the building including documentation of the project’s fire protection/life safety and historic preservation goals and objectives. Design services included drawings and specifications for the retrofit installation of automatic sprinkler and standpipe systems.
Architect of the Capitol, Cannon House Office Building Washington, DC	<i>Fire Protection Engineering Design and Code Consulting Services</i> The Cannon House Office Building is the oldest Congressional office building outside of the Capitol Building. We provided fire protection design, fire alarm design and life safety consulting services for the ongoing restoration and modernization of the Cannon House Office Building. This is a five-phase construction project over 10 years to allow for the relocation and continued operation of the building while areas are taken offline for renovation.
Virginia State Capitol Richmond, VA	<i>Fire and Lifey Safety, Code Consulting; Accessibiity Consulting Services</i> The Virginia State Capitol Building is a four-story structure consisting of 91,000 square feet of floor area with the construction of a new two-story below-grade visitor’s center. We worked closely with the multi-discipline team of nationally recognized experts in all areas of historic preservation. We were the fire protection engineer and building code consultant on the project team providing fire/life safety consultation and analysis, building code and accessibility consultation, and fire suppression system design services for the approximately \$105.1 million restoration and expansion of this historic structure.

III. PROJECT TEAM EXPERIENCE

<p>Duke Ellington School of the Arts Renovation + Modernization</p> <p>Washington, DC</p>	<p><i>Fire Protection, Life Safety and Building Code Consulting Services</i></p> <p>Originally built in 1898 and added to the National Register of Historic Places in 2003, Duke Ellington School of the Arts has now been transformed into a world-class, 600-student facility. The renovation / modernization encompassed state-of-the-art performance spaces for both the visual and performing arts and increased the square footage of the building from 176,000 square feet to 249,900 square feet. The renovated building also features a 4-story atrium space between the ground floor and the third floor, surrounding the new 850-seat theatre space in the center of the building.</p> <p>We served as the project’s fire protection, life safety and building code consultant for the renovation and modernization of this historic school. In addition, we conducted a smoke control system rational analysis to identify an appropriate type and method of smoke control system for protection of the 4-story atrium.</p>
<p>Philadelphia Museum of Art Renovation + Expansion</p> <p>Philadelphia, PA</p> <p>2009 Preservation Achievement Grand Jury Award for the Philadelphia Museum of Art Exterior Renovation Project</p>	<p><i>Fire Risk Assessment, Life Safety Consulting and Fire Protection System Design Services</i></p> <p>In addition to being one of the city’s most iconic buildings, the Philadelphia Museum of Art (PMA) is one of the largest art museums in the world based on gallery space. The renovation and addition in 2009 added a total of 90,000 square feet to the museum, including 67,000 square feet of new public space, 11,500 square feet of gallery space for the museum’s American Art collection, and another 11,500 square feet of contemporary art display space.</p> <p>We provided fire risk assessment, life safety code consulting, and fire protection system design services for this \$196 million renovation and addition. Challenges included infrastructure upgrades and phasing infill areas of this historic partially sprinklered building.</p>

III. PROJECT TEAM EXPERIENCE

Smithsonian Institution: *Performance-Based Fire Protection Analysis*

Arts + Industries

Building

Washington, DC

Due in part to a previous analysis conducted by the Smithsonian, the client determined the Arts and Industries Building (AIB), the 2nd oldest Smithsonian Museum on the National Mall, did not comply with applicable fire and life safety code requirements. Until the building was brought up to code, they weren't allowed to fully occupy the building because the existing means of egress did not comply with the prescriptive code requirements. The AIB is one of approximately 2,500 "National Historic Landmarks" in the United States, and compliance with the prescriptive requirements of the Life Safety Code was not possible without permanently damaging the building's historic features. Our team conducted a performance-based fire analysis of the AIB in accordance with the Life Safety Code. Using fire and smoke modeling, this performance-based fire protection analysis demonstrated that the ground floor of the AIB could be safely occupied without any building modifications. Our analysis safeguarded the historic fabric of this 130+ year old building while providing the Smithsonian Institution with the information they needed to transition the AIB back into a functioning branch.



West Virginia General Services



Cost Estimating Services

Winfield Strock
Cost Estimator

Rex A. Cyphers, P.E.
Principal in Charge

B.J. Lee, Ph.D., P.E., S.E.
QA/QC Manager

Building 35 Team

Building 31 Team

Building Envelope Services

Patrick Dillon, Ph.D, P.E.
Project Manager

Structural Services

John Grill, P.E. - Associate
Project Manager

Chris Lehman, E.I.T.
Staff Engineer

Natalie Bavari
Staff Architect &
Architectural Historian

Akshay Beniwal, P.E.
Project Engineer

Serena Sauers, E.I.T.
Staff Engineer



3rd Party Building Envelope Consultant

Ryan Krug, BECxP, CxA+BE
National Practice Lead & SME

Ryan Kohl, RRC
Sr. Consultant & SME



Building Interiors Team

Architecture

Adam Krason, AIA, NCARB, LEED-AP
Principal

Michael Phillips, AIA
Project Manager

Carly Chapman
Sr. Interior Designer

Engineering

Bob Doeffinger, PE
Engineering Principal

John Pruett, PE, LEED AP
Sr. Mechanical Engineer

Frankie Kantsios, PE
Electrical Engineer

Keith Gonzales
Construction Administrator



Vertical Transportation Consultant

Heath Hayes
VP, Central Area & SME

Bill Moore
Sr. Consultant & SME

Spencer Williams
Regional Managing Director & SME



Fire Protection Systems Consultant

Kristopher Lawrence, CFEI
Project Manager / Lead Consultant

Michael J. Knoras Jr, P.E.
Lead Engineering

Eric Babcock, P.E.
QA/QC Manager

Rex Cyphers., P.E. | Principal-in-Charge

**Education**

- M.S. / Civil Engineering / West Virginia University / 2003
- Graduate Certificate / Cultural Resource Management / West Virginia University / 2003
- B.S. / Civil Engineering, West Virginia University / 2002

Professional Registrations

- Professional Engineer – VA, WV, WA, PA, TN

Professional Memberships / Committees

- ASTM Committee E06 Performance of Buildings – Subcommittees:
 - E06.24 Preservation and Rehabilitation Technology Task Chair, ASTM E3069 –19 “Standard Guide for Evaluation and Rehabilitation of Mass Masonry Walls for Changes to Thermal and Moisture Properties of the Wall”
 - Task Chair, Revisions to ASTM E2260 –19 “Standard Guide for Repointing (Tuckpointing) Historic Masonry”

Mr. Rex Cyphers, P.E., is a Principal and Chief Operating Officer with WDP & Associates and has over 20 years of experience. He works primarily out of the Hinton, West Virginia, and Charlottesville, Virginia, offices and is responsible for overseeing the work of all WDP divisions, WDP's hiring process, staff development, and company operational decisions. Rex specializes in the design and repair of masonry structures, historic preservation, and nondestructive testing. He performs forensic field and laboratory investigations, façade and building envelope investigations, structural inspection/analysis and design, architectural retrofit and repair, roofing and waterproofing investigations, and development of design documents and repair recommendations. Rex regularly presents and co-authors for various technical publications.

Relevant Experience**Department of General Services, VA State Capitol Repairs, Richmond, VA.**

Principal-in-Charge: Designed by Thomas Jefferson and built in 1788, the Virginia State Capitol is a National Historic Landmark which accommodates the Virginia General Assembly, the oldest legislative body in the Western Hemisphere. An underground addition to the Virginia Capitol building was completed in 2007. After completion, the underground addition began experiencing leaks through the south terrace skylight and failed waterproofing on the plaza. Leakage was also occurring through the original Thomas Jefferson portion of the building. WDP conducted an investigation and developed full contract documents to address the leakage into the original building and also structural repairs to the skylight and plaza slab.

The College of William & Mary, Wren Building, Williamsburg, VA. Historic

Principal-in-Charge: The Sir Christopher Wren Building is **the oldest college building still standing in the United States** and the oldest of the restored public buildings in Williamsburg. It was constructed between 1695 and 1700, before Williamsburg was founded. Performed an assessment to evaluate the causes of interior damage from water infiltration and crypto-efflorescence and document the condition of the building exterior. Designed repairs to historic materials damaged by leakage of the internal rain gutter and conductor system and crypto-efflorescence resulting from salt-laden rising damp. Developed a restoration program to preserve and protect the existing building materials from ongoing deterioration or eminent damage. Design included evaluation and layout of new subsurface drainage system, repairs to existing rainwater collector system, and restoration of building enclosure system. Construction administration services are pending award of construction contract.

The Pierre Hotel, Façade Investigation and Repairs, New York, NY.

Principal-in-Charge: WDP was engaged to perform a LL11 critical examination and FISP report for the circa 1930s property that is a NYC Landmark building and subsequently to develop full contract documents to repair the facade. The 45-story building features ornamental terracotta, limestone, brick, copper cladding and ornamental detailing, with a prominent copper mansard roof and several setback terraces with balusters. The repair documents were developed to address severely corroded structural steel members, cracked and spalling terra cotta and other masonry elements. As a part of this effort, temporary stabilization measures were developed to address unstable masonry while the contractor mobilized to undertake the full repairs.

Byoung-Jun (BJ) Lee, Ph.D., P.E. | QA/QC Manager



Mr. Lee joined WDP in 2006 and has 19 years of professional experience. He specializes in architectural engineering and structural engineering services including failure investigations, analysis, and repair design. He has expertise in structural analysis and repair, evaluation of existing structures, and nondestructive testing of concrete structures. He is involved in forensic field and laboratory investigations, condition assessments, façade and building envelope investigations, development of design documents, and repair recommendations in reinforced concrete, steel, composite, masonry, wood, and cold form steel constructions. He has also written more than 15 technical papers in technical journals and proceedings.

Education

- PhD / Civil and Environmental Engineering / Lehigh University / 2003
- M.S. / Architectural Engineering / Kangwon National University, Korea / 1996
- B.S. / Architectural Engineering / Kangwon National University, Korea / 1994

Professional Registrations

- Professional Engineer – VA, DC, MD, WV
- Structural Engineer – HI

Professional Memberships / Committees

- Member, American Concrete Institute (ACI)
- ACI 216: Fire Resistance and Fire Protection of Structures – Joint ACI-TMS
- ACI 546: Guide to Concrete Repair
- Member, American Institute of Steel Construction (AISC)
- Member, Post Tensioning Institute (PTI)

Relevant Experience**West Virginia University, South Agricultural Sciences Building,**

Morgantown, WV. Structural Engineer: Developed contract documents to replace the existing metal panel façade of the building. Numerous structural and moisture related problems were present in the building that had to be overcome in the design. Exterior wall stabilization due to lateral loads, cold form steel repair, supplemental framing design, and anchorage design. The design allowed for the existing lab and research spaces to remain in operation while the exterior of the building was removed and replaced.

West Virginia University, Health Sciences Building, Building Envelope Replacement Study and Design, Charleston, WV. Sr. Structural

Engineer: WDP teamed with Paradigm Architects to design the façade replacement for the upper three floors of the Health Sciences Center. The project will modernize the exterior of the building while addressing structural deficiencies, improve energy performance, and integrate seamlessly into the façade of the remaining first floor as well as the rest of the Charleston Area Medical Center Campus.

West Virginia DGS, Building 13 Parking Garage, Charleston, WV. Sr. Structural Engineer: WDP performed a condition assessment of a 4-level, 250,000 SF parking garage and developed repair recommendations for the observed deteriorations and water infiltration. The condition assessment included visual inspection, sounding concrete for deteriorations, and material sampling and testing. Bid documents and repair drawings were developed to address the Deficiencies, and a cost estimate was prepared based on the recommended repairs.

Virginia Tech, Lane Stadium Exterior Facade Repairs, Blacksburg, VA. Sr. Structural Engineer: WDP Performed peer review and structural evaluation of the stone façade replacement. The work included a structural review of the existing exterior wall framing system at the repair areas, rough opening loose lintels, stone façade shelf angle support, and their anchorage details to the structural members

Patrick B. Dillon, Ph.D., P.E. | Project Manager (Building 35)

**Education**

- Ph.D. / Civil Engineering / Brigham Young University / 2015
- B.S. / Civil Engineering / Brigham Young University / 2010

Professional Registrations

- Professional Engineer – WV (#026207), VA, NJ

Professional Memberships / Committees

- Member, American Institute of Steel Construction (AISC)
- Member, The Masonry Society (TMS)
 - TMS 402/602 Building Code requirements and Specifications for Masonry Structures
 - Existing Masonry Committee
- Member, American Concrete Institute (ACI)
 - ACI/TMS 122 Guide to Thermal Properties of Concrete and Masonry Systems

Publications

Dillon, P.B., Cowser, A.J., Chavez, N., "Review of Historic Standards for Masonry Design and Construction." *Proc. 14th North American Masonry Conference*, Omaha, Nebraska, June 11–14, 2023.

With over 12 years of combined research and field work experience, Patrick conducts evaluations and assessments of structural and building envelope systems for WDP. He regularly performs diagnostic field investigations to determine the root cause of post-occupancy failures of existing buildings and develops repair recommendations to solve the problems. Patrick is also involved with a variety of other architectural and structural engineering disciplines, including development of specifications and drawings, peer review of design documents, and construction management and administration. Patrick has also authored or co-authored four articles at industry conferences in the last 6 years.

Relevant Experience

Department of General Services, West Virginia Capitol Stairs, Charleston, WV. *Project Manager:* The capitol building's north staircase had fallen into disrepair and needed rejuvenation. After WDP's visual and tactile survey, as well as material sampling and testing to identify the root cause of the failures, it was determined that the original concrete stair structure would be removed and replaced. As the prime designer, Patrick designed repairs to address the damaged concrete and replace the failing water-proofing system above the concrete and developed detailed treatment requirements for the cataloging, salvage, reinstallation, and repair of the historic stone treads. Patrick provided bid phase and construction administration services for the duration of the project.

Alton Lennon Federal Building and Courthouse, Wilmington, NC. *Lead Investigator:* Dr. Dillon organized and led a team to perform a detailed assessment to evaluate the paths of water infiltration, document the damage sustained by the building envelope and interior elements, analyze the building enclosure assembly, and develop a comprehensive program of recommended and prioritized repairs to restore the building to operational condition.

Diamond Building EPO, Charleston, WV. *Project Manager:* During a condition assessment of the building envelope, several conditions were observed that posed an immediate life safety risk to the public on the building exterior. Patrick developed construction drawings for emergency protection measures at the building exterior to stabilize critical areas and protect the building occupants and public on the sidewalk from potential falling debris. The measures included overhead protection over the sidewalks, temporary pinning of the parapets, installation of debris netting at the building corners, and installation of stitching ties at the parapet and above the seventh-floor windows. Patrick provided bidding phase services and is currently providing construction administration services during emergency protection work.

Virginia Capitol Building Repairs, Phase I, Richmond, VA. *Engineer of Record:* 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. The designs were complicated by existing assembly thickness constraints that could not be increased, continuous insulation that needed to be incorporated into the new assembly, and requirements for supporting loading from fire-fighting vehicles. Performed structural analysis that evaluated multiple potential vehicle placements to determine greatest loading effects on the slabs.

John M. Grill, P.E., Associate | Project Manager (Building 31)



Education

- B.S. / Civil and Environmental Engineering / University of Pittsburgh / 1997

Professional Registrations

- Professional Engineer – VA, DC, MD

Professional Memberships / Committees

- Chairman of WDP Safety Committee
- American Concrete Institute (ACI)
- International Concrete Repair Institute (ICRI)
- Member of Committee 210 – Evaluation

Awards

2022 SEA-MW AWARD
WDP won the Outstanding Award in Structural Renovation under \$25M" from the Structural Engineers Association of Metropolitan Washington (SEA-MW) for their work on One Tribe Place, Post-Tensioned Concrete Parking Garage Slab Repair at The College of William & Mary. – John was the NDT specialist on the project.

Mr. John Grill, P.E., is an Associate Engineer with WDP & Associates Consulting Engineers, Inc., where he specializes in nondestructive testing and repair and rehabilitation of reinforced concrete structures. John joined the firm in 1998 and has since participated in and conducted a wide variety of forensic field and laboratory investigations, structural condition assessments, façade and building envelope investigations, development of design documents, and repair recommendations. He has performed investigations on numerous projects utilizing surface penetrating radar, impact-echo testing, and corrosion evaluation techniques. John is currently a member of the International Concrete Repair Institute and American Concrete Institute.

Relevant Experience

Department of General Services, Piedmont Parking Garage - Building 13, Assessment & Rehabilitation, WV. *Project Manager:* WDP performed multiple condition assessments of the 4-level, 250,000 SF parking garage including visual inspection, sounding of concrete surfaces, and material sampling and testing in order to identify and document extents and causes of deterioration and develop a repair program with associated cost estimates. WDP provided bid documents to include repair drawings and project specifications. The repair program included a phasing plan, allowing for continued use of the garage during repairs. WDP provided bid phase and CA services including submittal and RFI review, bi-weekly site visits, and review of contractor pay applications. In July of 2020, WDP evaluated and addressed the performance of the 2019 repairs which completed this term contract.

West Virginia Public Service Commission Parking Garage, Charleston, WV. *Project Manager:* John led a visual and tactile survey of the precast garage including double tee decks, soffits, walls, columns, stairways, and pedestrian bridge to identify areas of visible damage. Based on the survey data, John developed repair documents and provided construction support services during the performance of repairs in 2022.

West Virginia University, Suncrest Parking Garage, Morgantown, WV. *Project Manager:* A 56,000 square foot precast parking garage was experiencing significant cracking and damage in spite of previous efforts to repair it. WDP was retained to review previous repair documents, conduct a visual survey, and provide recommendations for repair. WDP identified restrained movement as the most likely cause of the damage, a fact overlooked by previous reports from other surveys, and recommended that a more in-depth investigation and analysis be performed to provide a more thorough understanding of the structure's movement.

Capital Power Plant Tunnels Assessment, Washinton, D.C. *Project Manager:* Since 2005, John has led engineering services for the AOC through annual or biennial condition assessments of approximately 3-½ miles of the Plant's reinforced concrete utility tunnels, as well as various other structures on the grounds of the Capitol Power Plant. These assessments typically include material sampling and testing, non-destructive evaluation, repair design documents, and construction support services. Mr. Grill has successfully completed over 40 successful task orders during multiple term contracts.

SUBCONSULTANT STAFF – ZMM ARCHITECTS & ENGINEERS

**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

AFFILIATIONS

- Association for Learning Environments
- WV Board of Architects, President
- American Institute of Architects, Strategic Council
- Charleston Area Alliance, Board Chair
- Goodwill Industries of Kanawha Valley, Past Board Chair
- Clay Center, Advisory Board
- WV Symphony Orchestra, Board of Directors
- Charleston Main Streets, Board of Directors
- Charleston Municipal Planning Commission
- Charleston Historic Landmarks Commission
- Education Alliance, Board Chair

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

PROJECT EXPERIENCE

- **Capital Sports Center Conceptual Design** – Charleston, WV
- **The Clay Center for the Arts and Science (Multiple Projects)** – Charleston, WV
- **State Office Building #5, 10th Floor Renovation (Office of Technology)** – Charleston, WV
- **Charleston Coliseum and Convention Center** – Charleston, WV
- **Girl Scouts of Black Diamond Council** – Charleston, WV
- **Goodwill Prosperity 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
- **Shawnee Sports Center** – Institute, WV
- **Joint Interagency Training and Education Center (WVARNG)** – Kingwood, WV
- **Christ Church United Methodist** – Charleston, WV



MICHAEL M. PHILLIPS

AIA, LEED AP

Project Manager

Mr. Phillips has served in the capacity of Architect, Project Manager and Senior Project Architect on a variety of project types throughout his career. This experience includes Healthcare, Educational (PK-12), Higher Educational), Corporate Office, Retail, Military, Hospitality and Correctional.

Mr. Phillips' responsibilities include Programming, Design, Documentation, and Construction Administration. Mr. Phillips began his career in West Virginia and continued to work throughout his career on a broad range of projects in Pennsylvania, Virginia, Florida, and Tennessee.

EDUCATION

- Bachelor of Architecture
University of Tennessee - School of Architecture

LICENSURE

- Virginia, West Virginia
- LEED Accredited Professional

AFFILIATIONS

- WV Chapter, American Institute of Architects, Member

PROJECT EXPERIENCE

- **WV Department of Agriculture Laboratory Evaluations** – Guthrie, WV
- **WV State Laboratory Testing Facilities Assessment** – WV
- **Charleston Area Medical Center (Multiple Locations)**
 - Cardiac Diagnostic Lab, Hybrid Operating Suite, Angio-CT, Aii Isolation Rooms General Hospital – Charleston, WV
 - Cardiac Diagnostic Lab, Nuclear Imaging Suite, Aii-Isolation Rooms, Pre/Post OP – Teays Valley, WV
 - 48 Bed Critical Care Unit Memorial Hospital – Charleston, WV
 - Urology Clinic and Lab – Hurricane, WV
- **Appalachian Regional Healthcare (Multiple Locations)**
 - USP 797/800 Hazardous Compounding Pharmacy, Chemotherapy Infusion Suite, Central Sterile – Beckley, WV
 - Pharmacy Renovations – Hinton, WV
 - Lab Replacement, Pharmacy Renovations, MRI – Whitesburg, WV
- **Mineral County Health Airborn Infection Isolation and Response Facility** – Keyser, WV
- **Hampshire County Health Airborn Infection Isolation and Response Facility** – Augusta, WV
- **WVDNR District IV Headquarters and Necropsy Lab** – Beckley, WV
- **WVU Medicine Jackson General Hospital** – Ripley, WV
- **New River Health Clinic and LabCorp** – Oak Hill, WV
- **Asthma and Allergy Center** – Charleston, WV
- **Mountain State Oral Surgery** – Charleston, WV
- **State of WV Children's Crisis Center** – Elkins, WV
- **WVDNR Tomblin Facilities with Necropsy Lab** – Holden, WV
- **Highland Hospital Secure Intake** – Charleston, WV
- **Rainelle Medical Center** – Rainelle, WV



EDUCATION

- Bachelor of Interior Design
University of Charleston – 2012

AFFILIATIONS

- Association for Learning
Environments

CARLY CHAPMAN

Sr. Interior Designer

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

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

PROJECT EXPERIENCE

- **Wood County 911 Call Center** – Parkersburg, WV
- **Intuit Prosperity Hub** – Bluefield, WV
- **Goodwill Industries** – Parkersburg, WV
- **WV State Capitol Senate Bathroom Renovations** – Charleston, WV
- **State Office Building #6 Renovations** – Charleston, WV
- **Charleston Coliseum and Convention Center** – Charleston, WV
- **Capital Sports Center** – Charleston, WV
- **Charleston EDGE** – Charleston, WV
- **Valley Park Community Center** – Hurricane, WV
- **Pipestem Resort State Park Lodge Interior Renovations** – Pipestem, WV
- **Cabell County Career and Technical Center** – Huntington, WV
- **WV School of Osteopathic Medicine Multiple Projects** – Lewisburg, WV
- **Wood County Schools** – Wood County, WV
 - **Williamson Elementary School**
 - **Wood County Tech Center**
- **Nicholas County Schools** – Nicholas County, WV
 - **Nicholas County High School / Summersville Middle School / NCCTC**
 - **Cherry River Elementary / Richwood Middle School**



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

AFFILIATIONS

- ASHRAE - Member of the Technical Committee Load Calculations Data and Procedures for 25 years, serving as chairman. Presently Chairman of the Research Subcommittee
- 2021 Industrial and Professional Advisory Council – College of Engineering at The Pennsylvania State University
- 2019 Marshall University Honorary Alumni Award of Distinction College of Engineering
- Advisory Board for the Department of Electrical Engineering Technology, Bridgemont Community and Technical College
- City of Pt. Pleasant, WV – 2nd Ward Councilman for 20 years

ROBERT DOEFFINGER

PE

Principal

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

After completing graduate school in Architectural Engineering, Mr. Doeffinger joined ZMM. He has over 45 years design experience in mechanical and electrical systems for buildings. He has a broad range of engineering experience in education, industrial and manufacturing facilities, large retail, correctional and jails, office buildings, and military facilities.

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

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

PROJECT EXPERIENCE

- **First Presbyterian Church Assessment** – Charleston, WV
- **Charleston Coliseum and Convention Center** – Charleston, WV
- **State Office Buildings #5, 10th Floor** – Charleston, WV
- **WV Capitol Complex Buildings #5, #6, and #7** – Charleston, WV
- **Marshall University (Multiple Projects)** – Huntington, WV
- **West Virginia Regional Technology Park** – S. Charleston, WV
 - Building 704
 - Building 740
 - Building 770
- **Joint Interagency Training and Education Center (JITEC)** – Kingwood, WV
- **West Virginia Regional Jails**
- **West Virginia Army National Guard Projects**
- **BridgeValley Community and Technical College** – Montgomery, WV
- **Appalachian Regional Hospital (Multiple Projects)** – Beckley, WV
- **The Plaza at the King of Prussia** – Philadelphia, PA



EDUCATION

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

LICENSURE

- West Virginia, Virginia, Indiana
- LEED Accredited Professional

AFFILIATIONS

- American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), Member
- United States Marine Corps – 14 Years

JOHN PRUETT

AIA, 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 to integrate the HVAC systems into the building. Mr. Pruett has participated in several LEED registered projects; one of his key contributions to these projects is conducting energy analyses and recommending energy use reduction alternatives. Mr. Pruett began his engineering career with a manufacturing company in 1994. In 1998, he made a career change and joined an engineering consulting firm. He has a broad range of experience in HVAC systems design, including: government, education, office buildings, hotels, restaurants, a convention center and several natatoriums. Having served in the Marines for 14 years, Mr. Pruett also led a design team for a “virtual memorial” for the birthplace of the U.S. Marine Corps.

PROJECT EXPERIENCE

- **WV Army National Guard – WV**
 - Camp Dawson Building 106
 - Camp Dawson Building 245
 - Camp Dawson Building 246
 - Camp Dawson Building 301
 - Camp Dawson Mail Facility
 - Marshall County Readiness
 - Camp Dawson Job Challenge Academy
- **WVDNR District 5 Headquarters – Alum Creek, WV**
- **WV State Police Headquarters – So. Charleston, WV**
- **Wood County Resiliency Center – Parkersburg, WV**
- **WV State Capitol Renovations – Charleston, WV**
- **General Services Division Surplus Property – Dunbar, WV**
- **WV Housing 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**



EDUCATION

- Bachelor of Science
Old Dominion University, 2019
- Associate of Applied Science
New River Community College,
2016

LICENSURE

Virginia, West Virginia

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; providing him with the means to meet the clients' needs for each individual program. He has been actively involved in the design of a wide array of new structures and renovations to include K-12 educational buildings, higher education buildings, healthcare facilities, office buildings, banks, restaurants, hotels, automotive dealerships and service centers, apartment complexes and dorms, industrial facilities and warehouses, and athletic facilities. Whether working independently or in conjunction with other architects, engineers, and contractors, Mr. Kantsios excels at creating effective solutions and developing opportunities that further establish organizational goals.

PROJECT EXPERIENCE

- **Carilion New River Valley Medical Center** – Christiansburg, VA
 - Cardiology Expansion
 - Infusion Clinic Alterations
- **HCA Healthcare**
 - **LewisGale Hospital Montgomery, 3rd Floor Graduate Medical Education Center** – Blacksburg, VA
- **InnovAge PACE**
 - **New Richmond Facility** – Richmond, VA
 - **New Roanoke Valley Facility** – Salem, VA
 - **Roanoke Valley Facility Study** – Salem, VA
- **Bath Community Hospital New Pharmacy Building** – Hot Springs, VA*
- **New Triumph Baptist Church** – Vint Hill Farms, VA
- **Frederick County Sunny Side Voter Registrar's Office** – Winchester, VA
- **A.S. Rhodes Elementary School Renovations** – Front Royal, VA
- **New River Community College, ADA Accessibility Improvements** – Dublin, VA
- **City of Covington City Hall Renovations** – Covington, VA*
- **Pulaski County Administration Building Renovation** – Pulaski, VA*

**Previous Employer Experience*



EDUCATION

- Associate Degree, Mechanical Engineering
Pittsburgh Technical Institute – 1978

KEITH L. GONZALES

Construction Administrator

Mr. Gonzales describes his role with ZMM as Construction Administrator as an exciting and challenging opportunity with new experiences every day. From varying jobsite conditions to the differing professionals, he works with daily, Mr. Gonzales approaches construction administration with over 40 years' experience in the construction industry and the desire to help provide the best outcomes possible for each project.

Mr. Gonzales prior to coming on board with ZMM oversaw the CAD/ BIM coordination and design of major projects in the Columbus area. Mr. Gonzales project variety includes Educational (K-12 and University), Commercial, Military, Office, Justice (Courthouses, Justice Centers), Healthcare (Health Departments), Roof replacement projects.

PROJECT EXPERIENCE

- **Wood County Resiliency Center** – Parkersburg, WV
- **Wood County Courthouse - Bell Tower Renovation** – Parkersburg, WV
- **WV State Office Buildings 5, 6, & 7** – Charleston, WV
- **Charleston Coliseum and Convention Center** – Charleston, WV
- **Girl Scouts of Black Diamond Renovation** – Charleston, WV
- **Christ Church United Methodist** – Charleston, WV
- **National Weather Center Building (NOAA)** – So. Charleston, WV
- **WVDNR - Pipestem State Park Resort Renovations** – Pipestem, WV
- **WVDNR - Claudia Workman Fish and Wildlife Education Center** – Alum Creek, WV
- **BOYD CAT** – Nitro and Belle Locations, WV
- **YMCA Sojourners Shelter** – Charleston, WV
- **BridgeValley CTC Nursing Wing Renovation** – So. Charleston, WV
- **New River Health Medical Center Renovation** – Oak Hill, WV
- **Valley Health Systems** – Huntington, WV

SUBCONSULTANT STAFF – LERCH BATES

Bill Moore | Consultant – Ohio Region



Bill Moore began working for Lerch Bates in 2016 and has over 6 years' experience in the Vertical Transportation Industry. He is currently working in the Lerch Bates Columbus Ohio office, participating in the conceptual planning, design, construction administration, audits, surveys, inspections, and modernization projects for vertical transportation systems (elevators, escalators, moving walkways, freight lifts, platforms, dumb-waiters, etc.). His responsibilities include overseeing project organization, scheduling, coordination, deliverables, billing and collections. In addition, Bill manages assigned projects to assure completion for multiple deadlines, and that milestones are met on time and in a professional manner, while meeting constantly changing priorities. Previously, Bill worked for Oracle elevator as a General Manager in Ohio.

AREAS OF EXPERTISE

- **Perform all aspects of client projects for which assigned** which include but are not limited to Site and equipment surveys, Maintenance audits, Maintenance management services, Inspection of equipment, controllers, machine rooms, pits, shafts, etc., Modernization of existing equipment/facilities to include analysis and specifications and New building analysis and design services (CD, DD, SD, CA, etc.)
- **Monitor and control project** resources and provide direction of LB personnel to ensure projects are completed on schedule, meet quality standards, and are within budget. Meet or exceed financial goals set by management.

RELATED EXPERIENCE

- Downtown YMCA – Columbus, OH
- Mt. Vernon Towers – Columbus, OH
- Ohio Department of Public Safety – Columbus, OH
- St. Luke's Hospital – Maumee, OH
- Burlington Coat Factory - Multiple Locations
- Department of Admin. Services - Columbus, OH
- Columbus School District – Columbus, OH
- Euclid Beach Properties – Cleveland, OH
- PNC Towers – Ft. Wayne, IN
- Springhill Suites – Cincinnati, OH
- Ohio State University – Columbus, OH
- Worthington Education Center – Columbus, OH
- Department of Education – Columbus, OH
- Summit One – Cleveland, OH
- AT&T – Multiple Locations
- 11 Buttrick Ave – Columbus, OH
- Promedica – Toledo, OH
- Pictoria Towers – Cincinnati, OH
- Lexington Hilton Downtown – Lexington, KY
- Jaycee Arms Apartments – Columbus, OH

EDUCATION

- Certified Product Manager/Marketing Manager
- Navy. A-School
- AIPMM

Heath Hayes | Vice President – Central Area



Heath Hayes is the area leader of the Central Region for Lerch Bates participating in the conceptual planning, design, construction administration, audits, surveys, inspections, new construction and modernization projects for vertical transportation systems (elevators, escalators, moving walkways, freight lifts, platforms, dumb-waiters, etc.), his responsibilities include overseeing profit and loss, project organization, scheduling, coordination, deliverables, billing and collections. In addition, managing assigned projects to assure completion for multiple deadlines, and milestones are provided on time, in a professional manner, while meeting constantly changing priorities. Heath has over 13-years' experience in the Vertical Transportation Industry. Prior to joining Lerch Bates, Heath worked for ThyssenKrupp Elevator as Modernization Representative and Account Manager in Westerville, Ohio, and H2 Home Improvements as the Owner/Operator in West Jefferson, Ohio.

AREAS OF EXPERTISE

- **Perform all aspects of client projects for which assigned** which include but are not limited to Site and equipment surveys, Maintenance audits, Maintenance management services, Inspection of equipment, controllers, machine rooms, pits, shafts, etc., Modernization of existing equipment/facilities to include analysis and specifications and New building analysis and design services (SD, DD, CD, CA, etc.)
- **Monitor and control projects** resources and provide direction of LB personnel to ensure projects are completed on schedule, meet quality standards, and are within budget. Meet or exceed financial goals set by management.

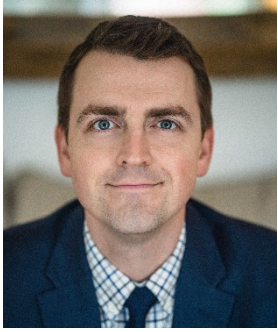
RELATED EXPERIENCE

- OSU Medical Center Doan Hall
- OSU Northwest Parking Garage
- OSU Kottman Hall
- OSU Dreese, Math, Hitchcock, Scott
- OSU Bradley Hall
- OSU East Tower 1, 2, 3, 10 & 11
- OSU Elevator Repair and Replacement Ph 1 & 2
- Churchill Downs- Louisville, KY
- Columbus Municipal Court- Columbus, OH
- University of Pittsburgh, Cathedral of Learning
- DTE- Multiple Locations, Michigan
- ProMedica Healthcare Systems- Toledo, OH
- Port Columbus International Airport- Columbus, OH
- BGSU- Multiple Projects, Bowling Green, OH
- American Electric Power- Escalator Modernization
- Franklin County Call of Justice
- Nationwide Insurance Plaza I & IV
- Atrium One- Cincinnati, OH
- Vern Riffe Center- Columbus, OH
- Hilton Cleveland Convention Center- Cleveland, OH
- Youngstown State University, Multiple Projects

EDUCATION

- Bachelor of Science in Business Administration, Franklin University, Specialization in Business with a minor in Accounting.

Spencer Williams CSI | Regional Manager – Ohio Region



Spencer Williams is one of the consultants of the Ohio Region for Lerch Bates participating in the conceptual planning, design, construction administration, audits, surveys, new construction and modernization projects for vertical transportation systems (elevators, escalators, moving walkways, freight lifts, platforms, dumb-waiters, etc.). His responsibilities include overseeing project organization, scheduling, coordination, deliverables, billing and collections. In addition, managing assigned projects to assure completion for multiple deadlines, and milestones are provided on time, in a professional manner, while meeting constantly changing priorities. Spencer has over 9 years' experience in the Vertical Transportation Industry. Prior to joining Lerch Bates, Spencer worked for KONE Elevator & Escalator as New Equipment Sales Executive and ThyssenKrupp Elevator as an Account Manager in both Service Sales and New Construction Sales.

AREAS OF EXPERTISE

- **Perform all aspects of client projects for which assigned** which include but are not limited to site and equipment surveys, maintenance audits, maintenance management services, survey of equipment: controllers, machine rooms, pits, shafts, etc., modernization of existing equipment/facilities to include analysis and specifications and new building analysis and design services (CD, DD, SD, CA, etc.)
- **Monitor and control projects** resources and provide direction of LB personnel to ensure projects are completed on schedule, meet quality standards, and are within budget. Meet or exceed financial goals set by management.

RELATED EXPERIENCE

- 80 On The Commons- Columbus, OH
- Crown Plaza and Loft Hotel- Columbus, OH
- Parks Edge Condominiums- Columbus, OH
- Lau Quinta Inn and Suites- Cincinnati, OH
- Moreland Courts- Cleveland, OH
- UK Healthy Kentucky Research Building- Lexington, KY
- Mount Carmel Grove City Hospital- Grove City, OH
- Department of Administrative Services- Columbus, OH
- Nationwide Children's Hospital- Columbus, OH
- Nationwide Corporate Real Estate- Various Locations
- Port Columbus International Airport- Columbus, OH
- Mount Carmel East Hospital- Reynoldsburg, OH

EDUCATION

- Bachelor of Science in Business Administration, The Ohio State University, Specialization in Finance and Accounting.

REGISTRATIONS & CERTIFICATES

- Construction Specifiers Institute, Columbus Chapter – New Membership Chairperson

Ryan Krug, BECxP, CxA+BE | National Practice Lead – Enclosure Design & Consulting



Ryan provides building enclosure consulting and commissioning (BECx) for clients in both the private and government across all market sectors. His primary responsibilities include collaborating with teams during early in design to develop enclosure systems, align performance targets, meet sustainability goals, and develop testing protocols to verify performance of enclosure systems. Additionally, during preconstruction, Ryan performs construction document and submittal peer reviews. During construction Ryan is involved with bid evaluations, kickoff meetings, reviews of first work in place/mockup evaluation, coordination meetings, sequencing/compatibility analysis, and quality assurance field observations related to exterior enclosure systems.

As National Practice Leader for Enclosure Design & Consulting, Ryan is responsible for ensuring consistency in technical excellence, work product quality, and exceptional service delivery for this service line. Through these responsibilities, Ryan is exposed to many of the most challenging and complex projects delivered through Lerch Bates and works closely with our national team of consultants providing training and guidance to ensure client satisfaction.

Prior to joining the Lerch Bates team, Ryan gained valuable building enclosure experience as a project manager with curtain wall and architectural metal panel firms on projects such as the Panamá Puente de Vida Bio Museo project in Panamá City, Panamá.

Outside of work, Ryan enjoys traveling to learn about other's cultures/customs and giving back to his community through volunteering and mission trips. Ryan has spearheaded Lerch Bates' relationship with Common Hope, where he leads a Lerch Bates team on an annual trip to build houses for Guatemalan families in need.

AREAS OF EXPERTISE

- Curtain Wall & Storefronts
- Structural Glass Walls
- Panel Systems – ACM/MCM, GFRP, FRP, and Plate
- Low/Steep-Slope Roofing Systems
- Above-Grade Waterproofing Systems
- Below-Grade Waterproofing Systems
- Insulated Metal Panels
- Masonry Veneer
- Air, Thermal, Water & Vapor Barriers
- Sealants, Coatings & Repellents
- Thermal Modeling

RELATED EXPERIENCE

- Vesterheim Norwegian-American Museum – Decorah, IA
- The Antique Emporium – Eau Claire, WI

EDUCATION

- Iowa State University
- B.S. Mechanical Engineering, 2005

REGISTRATIONS & CERTIFICATIONS

- BECxP - Building Enclosure Commissioning Process Provider
- CxA+BE - Commissioning Authority + Building Enclosure
- Level-1 Infrascpection Institute Certified Infrared Thermographer

Ryan Kohl, RRC | Senior Consultant – Enclosures, Structures & Forensics



Ryan Kohl, RRC, Senior Project Manager, is a firm believer in the value of early project engagement in the development of constructable, resilient, and easily maintained structures. Through his extensive design, investigative, and construction experience, Ryan helps guide architects and contractors with product selections, development of exterior enclosure assemblies, and identifies and provides solutions to difficult details and assembly transitions.

Though technical expertise is vital to his role, Ryan excels in the personal aspects of building enclosure consulting, such as workshopping with designers to achieve aesthetic goals while being able to develop clear, concise, and accurate bidding documents. During construction, Ryan works with architects, contractors, and installers to help reconcile cross-trade detailing sequencing, mitigate unforeseen detailing conflicts, identify material incompatibilities, and provide on-site observations and testing.

Prior to joining Lerch Bates, Ryan worked as a Building Science and Quality Control Project Manager for a design/build developer for two years, and for 14 years prior to that, as an enclosure consultant.

AREAS OF EXPERTISE

- Construction Document Peer Review
- Detailing and Design Consulting
- Below and Above Grade Waterproofing
- Air/Water/Vapor & Thermal Barriers
- Exterior Cladding Systems
- Low and Steep Slope Roofing
- Construction Quality Observation
- Constructability & Transitions
- Condition Assessments

RELATED EXPERIENCE

- Essentia Hospital – Duluth, MN
- Discovery Square, Medical Facility - Rochester, MN
- Augustana Res Hall, Modular - Sioux Falls, SD
- UIC CDRLC, Higher Ed – Chicago, IL
- Phillips Library Addition – Eau Claire, WI
- TUV SUD, Research Building – New Brighton, MN
- Spartanburg Middle School – Greer, SC
- Vesterheim Norwegian-American Museum – Decorah, IA
- The Antique Emporium – Eau Claire, WI

EDUCATION

- University of Minnesota, Minneapolis, MN, Bachelor of Science in Architecture, 2003

REGISTRATIONS & CERTIFICATIONS

- Registered Roof Consultant (RRC), IIBEC
- Certified Thermographer (Level 1), Infrared Training Center
- Certified EIFS Inspector - AWC

SUBCONSULTANT STAFF – JENSEN HUGHES



KRISTOPHER LAWRENCE CFEI

PROJECT ROLE: PROJECT MANAGER/LEAD CONSULTANT

Experience – 15 years | Joined Jensen Hughes – 2017

Education

BS, Fire Protection and Safety
Engineering Technology, Eastern
Kentucky University, 2017

Certifications

Certified Fire and Explosive
Investigator (CFEI)

Associations

Member, Society of Fire
Protection Engineers (SFPE)

Member, Society of American
Military Engineers (SAME)

Contact

+1 919 421 8434
klawrence@jensenhughes.com

Bio

Kristopher has 15 years of experience in fire protection. He provides fire protection and fire alarm design and assists in the resolution of design problems, including field investigations or inspections, detailed design work, and detailed checking of design computations done by others. He also provides building code analyses, egress analyses, fire detection and alarm systems reviews, smoke control systems reviews, and sprinkler and water supply systems reviews, including hydraulic calculations. He has worked on numerous higher education projects.

Project Highlights

TOWN OF MOUNT PLEASANT, MOUNT PLEASANT, SC

Project Manager. Provided a facility condition assessment for the Town of Mount Pleasant. Sprinklers, standpipes, fire protection specialties, and life safety systems were assessed for their general condition and code compliance. The town included 61 separate structures on 35 separate sites.

3600 RIVERS BUILDING ASSESSMENT, CHARLESTON, SC

Consultant. Provided a conditions assessment was conducted on a NAVY high-rise hospital that had been closed for fire protection assessment during the seismic safety phase I of an ongoing renovation project at the hospital.

PROJECT BIRDIE PROPERTY CONDITION ASSESSMENT, CONFIDENTIAL

Project Manager. Provided a property condition assessment related to the property at the associated buildings encompassing over 3 million square feet. We assessed the properties fire, and life safety systems regarding current condition and code compliance.

PROJECT ORANGE PROPERTY CONDITION ASSESSMENT, CONFIDENTIAL

Project Manager. Provided a property condition assessment related to the property at the associated buildings encompassing over 500 thousand square feet. We assessed the properties fire, and life safety systems regarding current condition and code compliance.


MICHAEL J. KNORAS, JR. PE

PROJECT ROLE: LEAD ENGINEERING

Experience – 30 years | Joined Jensen Hughes – 2005
Education

 MS, Fire Protection
Engineering, Worcester
Polytechnic Institute, 2010

 MS, Electrical Engineering,
University of South Florida,
1990

 BS, Electrical Engineering,
Worcester Polytechnic Institute,
1988

Registrations

PE: CA, FL, GA, HI, KY, NC, WV

Associations

 Member, Society of Fire
Protection Engineers (SFPE)

 Member, National Fire
Protection Association (NFPA)

Contact

+1 678 940 4370

mknoras@jensenhughes.com
Bio

Michael is an Electrical Engineer, who is also a professionally licensed Fire Protection Engineer. As a dual-licensed engineer, he has spent the majority of his career working with life safety systems, particularly building fire alarm and mass notification systems, and large fire alarm networks. He is responsible for consulting and project management of projects involving code analysis, design, and construction administration services. His unique engineering background allows him to design systems from an installation perspective as well as conceptual. He has particularly extensive experience in the building and fire codes as they relate to fire alarm and fire suppression systems in governmental (municipal, State, Department of Defense (DOD), and General Services Administration (GSA) facilities.

Project Highlights
HARTSFIELD-JACKSON ATLANTA INTERNATIONAL AIRPORT, ATLANTA, GA

Fire Protection Engineer. Provided design assist of a new mass notification system to include use of existing visual signage and fire alarm system speakers at the airport as part of the Life Safety Assessment project.

LOCKHEED MARTIN BUILDING B-1 EMERGENCY NOTIFICATION SYSTEM RETROFIT, MARIETTA, GA

Fire Protection Engineer. Provide code consulting, design, and construction administration services in accordance with DOD requirements for fire protection for a new fire alarm/mass notification system in a 2.8 million SF manufacturing facility.

ROOSEVELT WARM SPRINGS INSTITUTE FOR REHABILITATION, WARM SPRINGS, GA

Fire Protection Engineer. Fire alarm and protection systems upgrades in 17 buildings on this historic campus. Field investigation of the existing fire alarm/sprinkler systems in each of these buildings and an assessment of their compliance with present codes, preparation of bid documents, bid review, and construction administration.

**ERIC BABCOCK** PE

PROJECT ROLE: QA/QC

*Experience – 24 years | Joined Jensen Hughes – 2001***Education**BS, Fire Protection Engineering,
University of Maryland, 2000**Registrations**

PE: CA, KY, MD, NC, NY, VA

CertificationsNational Council of Examiners for
Engineering and Surveying
(NCEES), No. 16-88372**Associations**Member, National Fire Protection
Association (NFPA)Associate Member, Society of Fire
Protection Engineers (SFPE)Member, Salamander Honorary
Fire Protection Engineering
Society**Contact**

+1 914 708 7913

ebabcock@jensenhughes.com**Bio**

Eric's expertise is in the design, review, inspection, and commissioning of fire protection systems and construction, including fire sprinklers, fire alarms and life safety systems. He is well-versed in developing complete building code analyses for all engineering disciplines, including architects and interior designers. His project experience includes educational facilities, hospitals and medical centers, dormitories, air traffic control towers, governmental offices, laboratories and research facilities, computer rooms, and commercial and historic buildings.

Project Highlights**RALEIGH CIVIC CENTER OFFICE TOWER ONE, RALEIGH, NC**

Project Manager. Provided code consulting services for the new office tower as part of the Phase I scope of work with the City of Raleigh Civic Campus. The project is a 20-story tower with 420,000 gross square feet. The new building will champion centralized municipal facilities including new departmental office space and conference facilities for approximately 1,400 staff, public facing functions and Council Chambers, as well as potential ground floor retail, and parking.

EAST SOUTH CROSSING, CHARLOTTE, NC

Project Manager. Providing fire/life safety code consulting and accessibility compliance review for the new construction of East South Crossing in Charlotte, NC. The project is a new 24-story high-rise, commercial office building.

CONFIDENTIAL HEADQUARTERS PROJECT, CHARLOTTE, NC

Project Consultant. Provided code consulting services for the tenant fit-out of ten floors and approximately 250,000 square feet.

FORSYTH COUNTY COURTHOUSE, WINSTON-SALEM, NC

Project Manager. Providing fire protection and life safety consulting services for the design of the new \$128.9 million, 250,679-square-foot Forsyth County Courthouse and Office Building. The building will be of mixed-use, consisting of 16 courtrooms and offices.

IV. STAFF RESUMES

SUBCONSULTANT STAFF – WINFIELD STROCK

EMPLOYMENT HISTORY

- **Winfield Strock** –
Principal & Construction Manager
1995 - Present
- **Kenhill Construction Company**
– Owner & President
1978 - 1995
- **Messer Construction** –
Project Manager, Field Engineer,
Estimator
1965 - 1978

LICENSURE

Licensed Contractor (WV 000010)

CIVIC AFFILIATIONS

- Associated General Contractors of America - Past Director
- Contractors Association of West Virginia - Past President/Director
- Kanawha Valley Builders Association - Past President

WINFIELD H. STROCK

Construction Management / Estimator

Mr. Strock is a licensed contractor in West Virginia. When the West Virginia Contractor Licensing Act was passed in 1990, Mr. Strock was selected as Chairman of the Contractor Licensing Board and served in that capacity until his resignation in 1995. Mr. Strock has served as Chief Estimator, Field Engineer, and Project Manager on multiple jobs. He has also been the Principal/ Owner of his construction company for 17 years.

PROJECT EXPERIENCE

- District V Headquarters, Burlington, WV
- Camp Dawson Building 202 Improvements, Kingwood, WV
- Marshall County Readiness Center, Moundsville, WV
- Logan-Mingo Readiness Center, Omar WV
- Parkersburg Readiness Center, WV
- West Virginia State Office Building 5, 6, & 7 Improvements, Charleston
- West Virginia State Police Information Services Center, Morgantown
- West Virginia State Lottery Headquarters Renovation, Charleston
- WV RTP Building 740 Improvements, South Charleston
- Charleston Area Medical Center, WV
 - Robert C. Byrd Clinical Teaching Center – \$70M
 - CAMC Cancer Center – \$40M
 - CAMC Memorial 48 Bed Addition – \$30M
- West Virginia K-12 Schools
 - McDowell County Schools Relocation Program – \$50M
 - Putnam County Schools Bond Program – \$65M
 - Greenbrier West High School – \$21M
 - Mingo County High School – \$27M
 - Pikeview Middle School – \$16M
 - Spring Mills Primary School – \$13M
 - Edgewood Elementary School – \$16M
- West Virginia Applied Technology Centers
 - Williamson, WV – \$6M
 - Marion County, WV – \$14M
- West Virginia Army National Guard Readiness Centers
 - Elkins, WV – \$22M
 - Ripley, WV – \$11M
 - Logan/Mingo Counties, WV – \$13M
- New River Community College
 - Lewisburg, WV – \$6M
 - Beckley, WV – \$17M

Addenda

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: GSD2400000003

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:

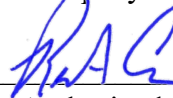
(Check the box next to each addendum received)

<input checked="" type="checkbox"/> Addendum No. 1	<input type="checkbox"/> Addendum No. 6
<input type="checkbox"/> Addendum No. 2	<input type="checkbox"/> Addendum No. 7
<input type="checkbox"/> Addendum No. 3	<input type="checkbox"/> Addendum No. 8
<input type="checkbox"/> Addendum No. 4	<input type="checkbox"/> Addendum No. 9
<input type="checkbox"/> Addendum No. 5	<input type="checkbox"/> Addendum No. 10

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that 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.

WDP & Associates Consulting Engineers, Inc.

Company



Authorized Signature

February 15, 2024

Date

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

Licensure



**West Virginia State Board of Registration
for Professional Engineers**

REX A. CYPHERS
WV PE #019214

This is to certify that the above named PROFESSIONAL ENGINEER has met the requirements of the law, is duly registered and is entitled to practice engineering in the State of West Virginia.

EXPIRES December 31, 2024



**West Virginia State Board of Registration
for Professional Engineers**

BYOUNG-JUN LEE
WV PE #022499

This is to certify that the above named PROFESSIONAL ENGINEER has met the requirements of the law, is duly registered and is entitled to practice engineering in the State of West Virginia.

EXPIRES December 31, 2024

Search: Details

Name:	PATRICK BARTHOLOMEW DILLON
WV Professional Engineer:	PE License Number: 026207
	PE License Status: Active
	PE Issue Date: 10/24/2023
	PE Expiration Date: 12/31/2024
Continuing Education Claim:	Qualifying Hours from Last Renewal or Reinstatement:
	Carryover Hours for Next Renewal:
	Last Renewal or Reinstatement Date*:
WV Engineer Intern:	EI Certification Number:
	EI Issue Date:
Primary Address of Record:	335 GREENBRIER DRIVE SUITE 205 CHARLOTTESVILLE, VA 22901
Primary Employer of Record:	WDP & ASSOCIATES CONSULTING ENGINEERS, INC.
	<div><div>*</div><div>This date reflects the most recent license renewal (or reinstatement) date for this licensee. Continuing education hours earned prior to this date may not be used for future renewals.</div></div>

This data was retrieved on 11/21/2023.



ADAM KRASON

Name:	KRASON ADAM
Credential ID:	3498
Expiration Status:	Not Expired
Renewal Date:	2023-05-30
Expiration date:	2024-06-30



MICHAEL PHILLIPS

Name:	PHILLIPS MICHAEL
Credential ID:	2502
Expiration Status:	Not Expired
Renewal Date:	2023-06-21
Expiration date:	2024-06-30

Search: Details

Name:	MICHAEL JOSEPH KNORAS, JR
WV Professional Engineer:	PE License Number: 023540
	PE License Status: Active
	PE Issue Date: 04/01/2019
	PE Expiration Date: 12/31/2024
Continuing Education Claim:	Qualifying Hours from Last Renewal or Reinstatement: 89.00
	Carryover Hours for Next Renewal: 15.00
	Last Renewal or Reinstatement Date*: 12/1/2022
WV Engineer Intern:	EI Certification Number:
	EI Issue Date:
Primary Address of Record:	4775 WEXFORD DRIVE CUMMING, GA 30040
Primary Employer of Record:	JENSEN HUGHES, INC.
	<p>* This date reflects the most recent license renewal (or reinstatement) date for this licensee. Continuing education hours earned prior to this date may not be used for future renewals.</p>

License Details

Name	BABCOCK, ERIC JAMES
License Number	0402041615
License Description	Professional Engineer License
Rank	Professional Engineer
Address	HOLLY SPRINGS, NC 27540
Initial Certification Date	2005-09-16
Expiration Date	2025-09-30

National Association of Fire Investigators

Shopping Cart
Member Login

About NAFI ▾ Learn ▾ Get Certified ▾ Members ▾ Store Forms Blog Join Now



Name		City	State	Country
Lawrence, Kristopher Matthew	CFEI	Berea	KY	United States

Try a New Search

WDP's WV SWaM



MARK D. SCOTT
CABINET SECRETARY

STATE OF WEST VIRGINIA
DEPARTMENT OF ADMINISTRATION
PURCHASING DIVISION

W. MICHAEL SHEETS
DIRECTOR

March 23, 2023

WDP & ASSOCIATES CONSULTING ENGINEERS INC
33 Summers Hospital Road
P.O. Box 99
Hinton, West Virginia
25951

Rex Cyphers:



Department of Administration
Purchasing Division

VENDOR REGISTRATION

Email: Purchasing.VendorRegistration@wv.gov
Website: www.state.wv.us/admin/purchase/VendorReg.html

State Capitol Complex
2019 Washington Street, East
Charleston, WV 25305

Phone: (304) 558-2311
Fax: (304) 558-3507
WVPurchasing.gov

This is to notify you that your Small, Women-, and Minority-Owned Businesses (SWAM) Certification Application has been approved based on your representations that the vendor named above meets the definition of a Small, Women-, and Minority-Owned Businesses as set forth in the **West Virginia Code of State Rules** 148-22-1 et seq. This certification becomes effective:

03/23/2023

And shall automatically expire without notice two years after the effective date unless revoked by the Purchasing Director or upon expiration pursuant to the **West Virginia Code of State Rules** 148-22-8. The type(s) of Small, Women-, and Minority-Owned Businesses (SWAM) Certification approved for your entity:

{Small Business}

At the end of your two-year certification period, if you wish to reapply, please complete a WV-1a form or apply for re-certification through the Vendor Self-Service portal at wvOASIS.gov. Complete renewal instructions, application forms, and a list of all SWAM-Certified entities are available online at www.state.wv.us/admin/purchase/VendorReg.html.

If you have questions, please contact the West Virginia Purchasing Division at 304-558-2306.

Sincerely,

Tanner Perdue
Acting Vendor Registration Coordinator
(304) 558-2311

WDP & Associates Consulting Engineers, Inc.

33 Summers Hospital Road
Hinton, West Virginia 25951
(304) 660-0400 | www.wdpa.com

