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WV PURCHASING
DIVISION



WV GENERAL SERVICES DIVISION BUILDINGS 35 & 31 RENOVATIONS

Vendor Name: Paradigm Architecture, Inc.
Buyer: Melissa Pettrey, Senior Buyer
Solicitation No.: CEOI GSD2400000003
Bid Opening Date: February 22, 2024
Bid Opening Time: 1:30 PM
Fax Number: 304-558-3970



PARADIGM 
ARCHITECTURE

21 February 2024

Mr. Melissa Pettrey, Senior Buyer
Department of Administration, Purchasing Division
2019 Washington Street East
Charleston, WV 25305-3970

Re: WV General Services Division Buildings 35 & 31 Renovations Project
CEOI 0211 GSD2400000003

Dear Ms. Pettrey:

The Renovations of Buildings 35 & 31 present many unusual requirements. Extensive renovation and restoration of a historic building façade, functional restoration of a significant parking garage, multiple bid packages to respond to urgent deficiencies and maintaining undisturbed workspace for the building occupants. Each of these issues present challenges that we have confronted in previous endeavors and that experience has prepared us to help deliver a successful outcome for this project.

Our team of highly qualified professionals are pleased to submit this proposal for the renovations of Buildings 35 & 31. **Paradigm Architecture**, with offices in Morgantown, WV, and Birmingham, AL, will lead the team providing project management, coordination, design, and extensive experience with state agencies such as WVDHHR, WVDNR, WV state colleges and universities and state institutions including West Virginia University, WV School of Osteopathic Medicine, Fairmont State University, and others. We also have an excellent relationship with the WV State Fire Marshal's office. Paradigm will function as prime client contact to facilitate clear communication, project phasing, bid packages, and team coordination.

Paradigm will lead the project with two exceptional supporting companies, WDP & Associates, specializing in building envelope analysis, and Desman, a national firm specializing in parking garage design and renovation. WDP performs more than 100 building envelope façade assessment, peer review, structural investigation, and façade repair projects each year. Most of these projects involve facilities that must remain occupied throughout the investigation and repair process. Desman is a national firm that specializes in parking consulting, design, planning, and restoration. The company has completed over 5,000 parking projects. Barton Associates will provide mechanical, electrical, plumbing, and fire protection engineering and have been in business for more than 55 years. Practical Preservation specializes in the identification, documentation, and evaluation of historic resources, and will be an asset where oversight of historic restoration is required. KDM Consultants of Clarksburg will provide cost estimating services.

Our proposal will detail the impressive qualifications of each team member.

On a personal note, being from Beckley, I fondly remember making trips to Charleston and being amazed at the Diamond Department Store. It was hard to imagine such a special place. My wife told me of riding her first escalator as a twelve-year-old while shopping there. These memories inspire us on a personal level and provide motivation to make this project a landmark.

Thank you for the opportunity.

Best regards,



Paul A. Walker, AIA, President

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Paradigm Corporate Information





Two Waterfront Place

Location/Date

Morgantown, West Virginia – 2002

Incorporated

Birmingham, Alabama - 2000

Board of Directors: N/A

Number of Employees: 10

Size/Location of Field Offices:

Morgantown* Office – 6

Birmingham Office – 4

*The Morgantown office is the principal place of business and place of performance of this contract.

Services

Architectural / Planning / Master Planning

Firm History

Paradigm Architecture was formed in October of 2000 by a group of likeminded individuals who believe that architecture provides the opportunity to practice the career that we love. We as individuals and as team members of a firm have a responsibility to exhibit that passion in the manner in which we live our lives.

We chose the name Paradigm because it means a model that serves as an example.

This represents our highest ideals...

that our architecture would serve as an example
that our client service would serve as an example
that our service to our God would serve as an example.

Originally established in Birmingham, Alabama, Paradigm Architecture expanded in 2002 by opening an office in Morgantown, West Virginia. Our staff of ten includes five registered architects, three architectural technicians, and two administrative assistants.

It is our belief that we should assemble consultants that are uniquely skilled to satisfy the particular requirements of a project. We have close professional relationships with many engineers and specialized consultants and choose those that we feel will best serve the technical specialization, location of the work and sometimes even personality of the client. We choose not to work with firms who do not share our commitment to service and quality.



West Virginia University Mountaineer Station

Morgantown Area Chamber of Commerce
2019 – Small Business of the Year Award
Morgantown, WV

Mylan Park Foundation
2018 – George R. Farmer, Jr. Award
Morgantown, WV

Alabama Masonry Institute
2004 – Top Block Award

Russell Professional Office Building III
Alexander City, AL

Main Street Morgantown
2008 – Best New Construction Award
Marina Tower, Morgantown, WV

2008 – Best New Office Award
Spilman Thomas Battle, Morgantown, WV
Pittsburgh Corning Glass Block

2004 – Circle of Design Excellence Award
Lightning Strikes Family Fun Center
Trussville, AL

West Virginia American Institute of Architects
2010 – Honor Award

Upper Monongahela River Center
Morgantown, WV
2010 – Merit Award

West Virginia University
Transportation Center & Garage

Morgantown, WV
International Parking Institute Awards of Excellence
2011 – Honorable Mention

Mountaineer Station (WVU Transportation Center)
Morgantown, WV

Firm Profile

Paradigm by definition means an example that serves as pattern or model. The goal of Paradigm Architecture is to be an example in client service, design quality, and technical proficiency. We practice architecture. For every project, Paradigm works closely with the unique requirements of the particular client to design a structure that reflects both the appropriate image and proper function to optimize the working or living environment.

EXPERIENCE

Paradigm Architecture has experience in a broad range of project types. This work includes private individual, industrial/commercial, corporate, governmental, master planning, hospitality, food service, educational, and healthcare/institutional clients.

Educational

Higher Educational experience includes administrative office space, **parking facilities**, student housing, libraries, student centers, athletic facilities, classrooms, and research laboratory facilities. We have worked on campuses that include: West Virginia University, Fairmont State University, Davis and Elkins College, The College of West Virginia, Hampden Sydney College, Wake Forest University, Ayers State Technical College, The University of North Carolina at Greensboro, and The University of Alabama at Birmingham. Paradigm's staff has also been involved in educational facilities at the elementary and high school level including new and renovated buildings.

Industrial/Commercial

We have been privileged to design many industrial and commercial facilities. These include one- and two-story structures up to 114,000 square foot pre-engineered buildings. Examples include the U. S. Department of Energy Office of Legacy Management (and Storage Facility); the Mining Controls Facility in Beaver, West Virginia; and the CVS Caremark Mail Order Facility in Birmingham, Alabama.



WVU Honors Dorm

*Excellence in Construction by the
Associated Builders & Contractors, Inc.*

*2020 - The Aquatic & Track Center@ Mylan Park
Morgantown, WV*

*2019 - WVU Center for Hope and Healing
Morgantown, WV*

*2016 - UClub Sunnyside
Morgantown, WV*

*2015 - University Park
Morgantown, WV*

*2014 - WVU College Park
Morgantown, WV*

*2010 - Morgantown Event Center
Morgantown, WV*

*2010 - GSA USDA Office Building
Morgantown, WV*

*2010 - WVU Transportation Center and Garage
2007 - Waterfront Marina
Morgantown, WV*

*2007 - Chestnut Ridge Church
Morgantown, WV*

*2004 - Madden Student Center
Davis & Elkins College
Elkins, WV*

*2004 - Two Waterfront Place Hotel
& Conference Center
Morgantown, WV*

*2003 - The Jackson Kelly Building
Morgantown, WV*

*2001 - Russell Cancer Center
Alexander City, AL*

Master Planning

Paradigm Architecture has successfully completed master planning for the Waterfront Development and Trinity Christian School in Morgantown, Avery Court in Parkersburg, and Glade Springs Resort in Daniels. In addition, we have performed master planning for Asian Plaza in Birmingham, AL, and updated the master plan for Russell Medical Center in Alexander City, AL, as well as the West Virginia School of Osteopathic Medicine in Lewisburg, WV.

Corporate

Paradigm has designed entire office buildings as well as tenant fit-up spaces for clients such as Jackson Kelly PLLC, A.G. Edwards, Acordia, Petroplus & Associates Inc., National Biometric Security Project, Simpson & Osborne, DMJM Harris, and the West Virginia University Foundation. Projects also include banking regional and branch offices.

Governmental

Members of Paradigm have been involved in projects for the Federal Government in Charleston and Clarksburg, West Virginia. These commissions were awarded through design competitions and involved office space for Social Security, the Federal Bureau of Investigation, the Drug Enforcement Agency, the Small Business Administration, and hearing rooms for SSA Hearings and Appeals. Paradigm also provided services for several projects for the GSA in the Morgantown area.

Food Service

We have been privileged to design many food service facilities. These include private restaurants as well as large, full service commercial catering kitchens and banquet facilities. Examples include Two Waterfront Place Hotel and Conference Center, Morgantown Event Center, Regatta Bar and Grille, Boathouse Bistro, Sargasso Restaurant, Trussville Family Center, and Shono's Restaurant.

Hospitality/Multi-Family Housing

Our multi-family housing experience spans a variety of client types including student dormitories, hotel project, elderly housing, and private residential including single family homes, townhouses, and high end condominiums. West Virginia University Downtown Housing, the Condominiums at Two Waterfront Place in Morgantown, WV, as well as the Glade Springs Resort and Conference Center in Daniels, WV, are a few examples

References

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WDP & Associates - Building Envelope





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.

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 around 100 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

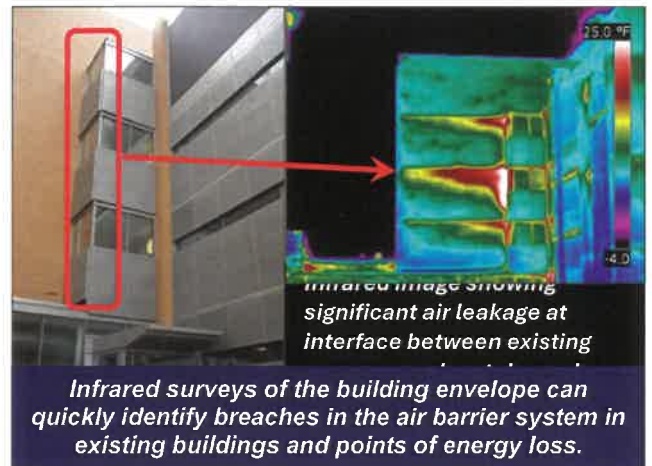


Temporary protection for façade replacement project of occupied building.

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.



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



VCCS Hastings Hall - overview of new roof assembly with elevated MEP

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.



Desman Parking Consultants



DESMAN'S Mission Statement:

Innovation through Collaboration, Success by Design



DESMAN

is a leading firm specializing in the planning, design, and restoration of cost-efficient and aesthetically pleasing parking facilities within the United States and around the world. DESMAN is also one of the nation's premier consulting firm offering restoration services of building envelopes, facades and plazas. Our firm was founded in 1973 as an abbreviation for Design Management with the vision to combine creativity with innovation and sound design principles using reliable technical and organizational practices. Our projects consistently reach a balance of efficiency, durability, and value. Since the firm's inception, DESMAN has served public, private, and institutional clients and owners and has provided services for over 5,000 parking, transportation and building envelope projects. DESMAN is an employee-owned corporation with strong financial stability that employs a staff of over 100 personnel in 9 offices nationwide including an office in McLean, VA.

EXPERIENCE & AFFILIATIONS

The principals of the firm are active members of several parking & mobility, planning and transportation organizations including the American Institute of Certified Planners (AICP), Institute of Transportation Engineers (ITE), National Parking Association (NPA), International Parking & Mobility Institute (IPMI), Urban Land Institute (ULI), American Concrete Institute (ACI) and the Green Parking Council's Parksmart. We have worked for and coordinated with numerous municipalities, public agencies and private development firms in conjunction with the development and repair/

restoration of existing municipal facilities.

PARKING/RESTORATION SERVICES

- Building Facades, Balconies, Plaza decks/roofs
- Restoration Engineering
- Restoration
- Architecture
- Mobility
- Parking Consulting
- Parking Supply + Demand
- Traffic /Transportation Engineering
- Financial Feasibility Analysis
- Revenue Control Consulting
- Functional Design
- Structural Engineering
- Site Evaluation
- Adaptive Reuse
- Master Planning
- Operations Consulting

RESTORATION

Our experts provide initial structural assessment and testing, preparation of restoration drawings for contractor bids, as well as repair management and parking operations procedures during the construction sequence. Each project benefits from the approach we apply to all of our projects: approach each facility without a preconceived notion; draw on the vast knowledge of the firm and its members to diagnose the problem; develop a solution that meets the individual needs of the structure and its owner.

GOING GREEN

Sustainability is not just a checklist; it is a fundamental to good design. Our team members were among the first class of Green Garage Assessors certified by the Green Parking Council which is offered as Parksmart throughout the U.S. Council of Green Buildings.



ABOUT US

DESMAN has served public, private and institutional Clients and Owners throughout the U.S. and abroad. DESMAN is a Minority-owned Business Enterprise (MBE), routinely employing a total staff of approximately 75 people, operating from one of the following principal office locations:

- Washington
- New York
- Chicago
- Ft. Lauderdale
- Cleveland
- Pittsburgh
- Hartford
- Boston
- Denver

The principals and officers of DESMAN have an average of over 30 years of specialized experience in structural restoration engineering and waterproofing of plaza decks, building envelopes and parking structures.

Our firm is set up to encourage the creative process, to share ideas and talents among all of our offices and deliver an exceptional end-product to our clients. DESMAN embraces diversity and is committed to providing excellence in the design, rehabilitation and study programs of existing structures for all market sectors.

DESMAN'S Mission Statement:

Innovation through Collaboration, Success by Design

Internally we strive to enrich the lives of our employees and embrace personal values. We care about servicing our clients and improving the communities in which we work. Our enduring client relationships reflect our ongoing commitment to the principals of collaboration, partnership and hard work.

Over the past 50 years, DESMAN has provided restoration services for over 2,500 buildings, with clients representing schools, hospitals, office buildings, condominiums, hotels, stadiums and museums.

We compare multiple options that thoughtfully balance function, budget and aesthetics so that clients can move forward with confidence. DESMAN's designs meet performance goals while complementing their surroundings.

For structures that have fallen into a state of disrepair or deterioration, DESMAN offers a full range of restorative services. From detecting sources of material failure or water infiltration to reversing the devastating effects of time and weather, DESMAN can develop cost-effective solutions to revitalize your facility.



Project Experience



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.

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 château-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:

1. Correct conditions that may pose an immediate hazard to life safety. Provide temporary protection and phasing to maintain full building occupancy
2. Improve durability by reducing pathways for excess surface penetration 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]

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.

WV DEPARTMENT OF HEALTH & HUMAN RESOURCES (DHHR) GARAGE

Charleston, WV



BUILDING TYPE

Structured Parking Facility
Constructed in 1999

CONSTRUCTION TYPE

Free-standing Precast Concrete
8-levels

CONSTRUCTION COST

N/A

SIZE

1,000 cars

SCOPE OF SERVICES

The WV DHHR garage is a state owned eight-level free standing parking structure constructed of precast concrete double tees. Cast-in-place toppings were placed along the ends of the double tees along the walls and across the inverted tee girders.

A condition assessment of the garage was conducted by others in 2007 and 2012 with miscellaneous repairs completed in 2008/2009. DESMAN was contracted late in 2017 to complete a comprehensive condition assessment of the garage with the assistance of a local engineer, to include field and laboratory testing. Based on our condition evaluation, a 5-year master plan was developed for repair and preventive maintenance of the facility. A detailed description of the program was provided and categorized into extreme, high and medium risk categories. While the majority of the findings were common maintenance repair items, cracks were observed within the interior precast walls along the ramp, which was recommended to be reviewed further.

BENEFIT/VALUE TO CLIENT

DESMAN not only identified typical maintenance repair items, but also noted a condition that required further review for future consideration

RELEVANCE OF PROJECT

Condition Assessments of Parking Facilities
Life Cycle Analysis
Capital Outlay
Programming & Prioritization
Repair and Preventive Maintenance Budgeting

CONTACT

WV DHHR
Terry Wass
Director for Operational Services
One Davis Square
Suite 100W Rm 120
Charleston, WV 25301
300 E. Lombard Street, Suite 1000
P. 304-957-0216
terry.l.wass@wv.gov

TEAM MEMBERS

John Judge, P.E.
Shannon Bentz, P.E.
Vsevolod Yatsevich, P.E.

KANAWHA COUNTY PARKING GARAGE 13
Charleston, WV



Client: N Visions Architects
South Charleston, WV

Features: 472- Cars free standing parking garage consists of five levels; four supported levels and one slab-on-grade level. The slab-on-grade level is an occupied space with no parking areas

Completion

Date: 2007

Cost: \$1,300,000 (Total budget -Ten Year Plan)
\$650,000 (Three-year phased initial program)

Summary:

The Kanawha County Parking Garage #13 is located in Charleston, West Virginia. The garage is bound between Virginia Street, Goshorn Street, Court Street and Quarrier Street. The structure was constructed in 1996.

DESMAN conducted a condition assessment of the above referenced parking garage to determine the present physical condition of the facility and recommend a near term restoration program and also on- going maintenance for a period of 10 years. Per Owner request, due to budget constraints DESMAN provided a repair program that was phased over a three year period. On-going maintenance costs were developed over the seven year period out of the ten year repair/maintenance program. The total budget for the year repair/maintenance plan was estimated at \$1,300,000.

WEST VIRGINIA LOTTERY COMMISSION PARKING GARAGE
Charleston, WV



Client: ZMM
Charleston, WV

Completion
Date: 2014

Cost: \$953,169.00 (Total estimated budget)

Summary:

The WV Lottery Commission Garage is located at 900 Pennsylvania Avenue on the western edge of the Charlestown Central Business District. The structure was constructed in 1980.

DESMAN initially visited the site property to provide an analysis and recommendation for garage repairs to support ZMM's ongoing engineering evaluation of the property. ZMM then requested assistance from DESMAN in the identification of priorities, cost estimating of repairs and review guidance of ZMM's construction documents. Additional services were later implemented whereby DESMAN provided the necessary construction detail drawings and associated technical specifications. Although the work was initially prioritized over two year, the Owner accepted doing the majority of the work in a single construction period.

RICHMOND 300 PARKING STUDY

City of Richmond Office of Planning & Development Review
Richmond, VA



Client: Mark Olinger, Director
Office of Planning & Development Review
900 East Broad Street, Room 511
Richmond, VA 23219
(804) 646 - 6310
Mark.Olinger@richmondgov.com

Features: Supply/Demand Analysis – Alternatives Analysis – Master Plan - Operations/Management Analysis – Transportation Demand Management Programming

Completion Date: June 2019

Project Cost: \$205,000

Summary:

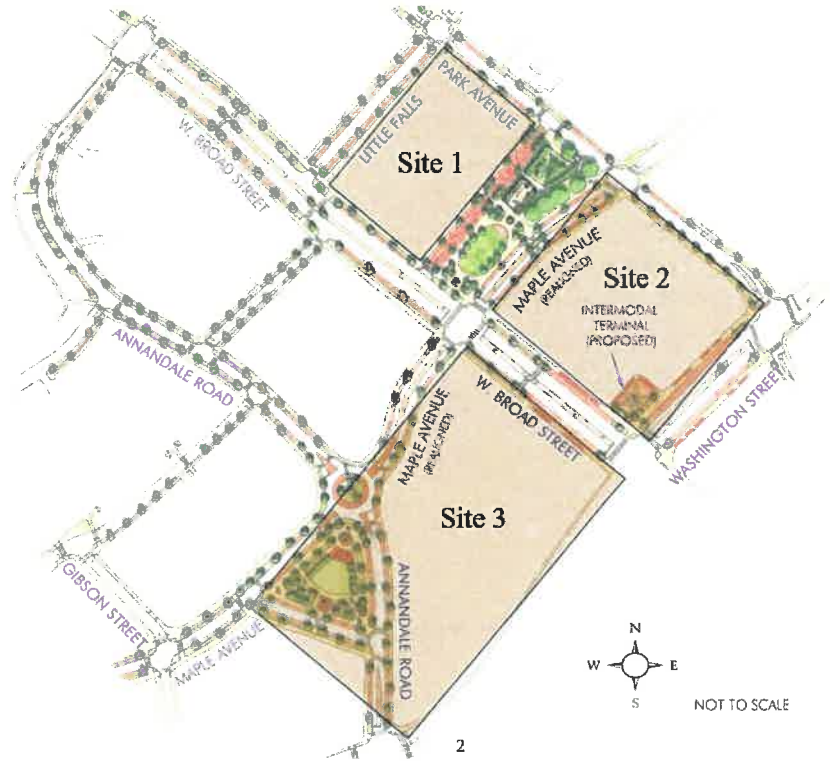
As part of the Richmond 300 Master Plan process, DESMAN was retained to execute a study of existing parking conditions, policies and operations across seven different neighborhoods comprising over 1,000 city blocks, as well as future needs for each neighborhood, based on anticipated growth and development. These neighborhoods included Richmond’s downtown core and adjacent commercial and residential districts; three established and world-renown historical districts; two neighborhoods rapidly evolving from industrial zones to vibrant mixed-use districts; and a one neighborhood entering gentrification.

This effort included meticulous block-by-block inventories of existing parking assets, multiple observations of parking occupancy at different times of the day, week, and year, and over 400 hours of public meetings and workshops. As part of the initial data collection effort, DESMAN teamed with students from Virginia Commonwealth University to perform parking supply inventories and an aerial drone company to execute parking occupancy counts. DESMAN worked closely with city staff from multiple agencies and dozens of constituents from various community organizations, institutions, and businesses to vet findings and recommendations and communicate them to the wider public.

DESMAN’s recommended program, which is nearing completion, will provide with City with a clear path to transitioning from a car-centric culture to a more sustainable practice which embraces multi-modalism to address mobility challenges as the city continues to evolve, while maintaining the city’s current momentum and prosperity.

FALLS CHURCH MUNICIPAL COMPLEX AND CENTRAL BUSINESS DISTRICT PARKING STUDY

Falls Church, VA

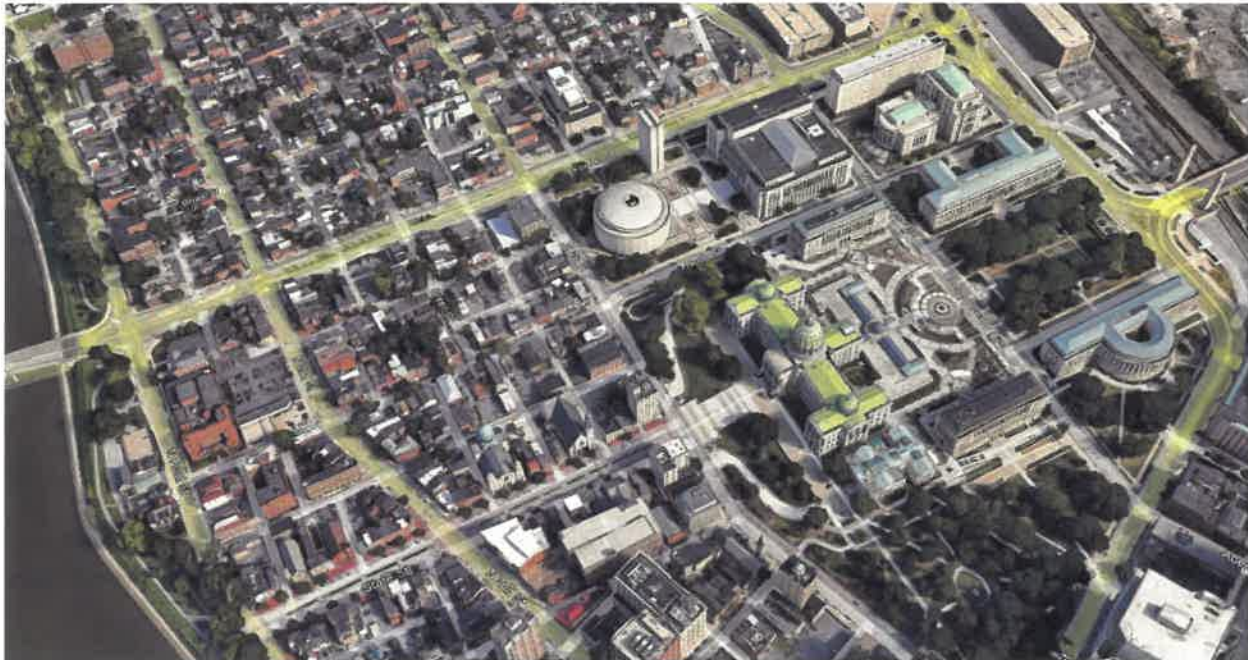


Summary:

DESMAN was asked to study and make recommendations on current and future parking needs for both the City's Government Center and the Central Business District (CBD). In effect, two separate studies were completed and then the results and recommendations were combined into an overall parking program. As a suburban jurisdiction just outside of Washington, D.C., the city wished to control its urban growth while maintaining its unique residential character. New public and private development needed to be integrated into this existing environment and thus be encouraged to share limited parking resources.

The City of Falls Church Office of the City Manager and Recreation and Parks Department selected DESMAN Associates to study and make recommendations on the City's parking needs for the municipal complex containing City Hall, the Community Center, Mary Riley Styles Public Library, Gage House and the Cherry Hill Park. As the study progressed, and as the potential interrelationship between municipal center parking and parking in the central business district (CBD) was identified, DESMAN was asked to expand the study area to include an additional 20 city blocks.

With the exception of mixed-use development, DESMAN does not recommend the construction of stand-alone parking structure at this time. It is recommended that the city act as a parking facilitator to improve the use of existing parking resources through public/private initiatives and joint ventures.



PROJECT DESCRIPTION

Several short and long-range projects were programmed to occur, most without adequate on-site parking. These projects included the Whitaker Center, Forum Place I & II, the Convention Center, expansion of Strawberry Square, the Valet Office Building, and the Keystone State Office Building. The demand for parking by these developments was then modeled and the resulting parking deficit by sector of the downtown was identified. Based on the development information provided, it was anticipated that the downtown has a current deficit of 670 spaces, which would increase to 1,020 in 1 to 3 years, and to over 1,600 spaces in 3 to 5 years.

Four sites within the downtown and a fifth site located on City Island were identified and conceptual drawings and construction cost estimates were provided for each. The relative pros and cons of each site's ability to meet the anticipated future parking shortfall were discussed, including land acquisition, design efficiency, and per space construction costs. DESMAN then ranked each site and created financial proforma statements for each of the recommended facilities. The financial analysis was used by the Authority to recommend to their bond council the issuance of nearly \$26 million for the construction of the City Island parking facility.



Client: West Virginia University
Morgantown, WV

Features: Design/build intermodal center consisting of a 500-space parking structure, 4-bay intra-city bus area, and new parking & transportation department offices

Completion Date: October 2009

Construction Cost: \$ 13,900,000

Summary:

In October 2009, the University formally opened its 500-space parking structure located at the northeast corner of its health sciences campus. Sited for easy access to the University's Personal Rapid Transit system in addition to the major perimeter roadway network, the garage has been designed for an expansion to an eventual capacity of 1,500 spaces. This project was delivered using the design/build method. DESMAN participated in the programming phase developing parking plans that met the needs of the varying project stakeholders such as Athletics, the local bus transportation system, and the local steam utility. The resulting facility included sustainable features to qualify it for LEED designation. Following acceptance of the project program, DESMAN assisted in the preparation in the design build RFP, authoring the structural and parking requirements. Following contractor selection, DESMAN participated in the design review and construction review phase on behalf of the University.

YEAGER AIRPORT RAC GARAGE

Charleston, West Virginia



Client:	West Virginia Airport Authority Charleston, West Virginia	Features:	Two-level, 250-car free-standing consolidated rental car storage parking facility.
Completion Date:	September 2008	Construction Cost:	\$6,500,000

Summary:

The consolidated rental car parking facility is located on the immediate north flank of the Yeager Airport’s John D. Rockefeller IV Terminal building. Immediate connection to the terminal baggage claim area and the rental agencies service counter is provided in concert with the vertical pedestrian elements. Enhanced rental car patron comfort is provided by a roof structure and enhanced lighting.

While serving the owner’s agent as parking consultant and structural engineer, DESMAN’s role included three phases: criteria document preparation and bidding, design phase monitoring, construction phase monitoring. Within these phases, DESMAN first gained the input of the on-airport rental car agencies and visited other consolidated rental car facilities to understand the high level of desired customer service and means to respond to that level of service. Secondly, DESMAN developed structural durability criteria for the garage designed for the climate of Charleston and provided structural and parking criteria provided as part of the design-build Request for Proposals. DESMAN also assisted in the review of proposals, design-builder selection, review of design, and review of construction.



Client: City of Roanoke
Roanoke, Virginia

Features: 350-space, 2-bay parking structure on 4 supported levels

Completion Date: May 2008

Construction Cost: \$5,400,000

Summary:

The opening of this parking facility represented the culmination of a five-year relationship between DESMAN and the City of Roanoke. In 2003, DESMAN was contracted to complete a parking site selection study of the Church Street corridor that resulted in this site being identified as a candidate for parking development. Under the Commonwealth of Virginia's Public-Private Education and Transportation Act, the City decided to procure the garage construction utilizing the design-build method. DESMAN participated on the Donleys-lead design build team as the parking consultant and structural engineer of record. The parking functional design takes advantage of the 20 feet of crossfall between Campbell Avenue and Salem Avenue by creating entry points on two distinct levels of the parking garage. The superstructure framing consists of precast, prestressed concrete was selected for its speed of erection and improved economics. In order to accommodate wide variations in the pinnacled limestone subsurface, DESMAN designed the foundation utilizing grout filled, steel micropiles.



Client: Commonwealth of Virginia
Dept. of General Services
Richmond, Virginia

Features: 1,520-car space, 4-bay wide parking structure on 6 supported levels plus grade.

Completion Date: June 2005

Construction Cost: \$16,500,000

Summary:

This project was developed on a site formerly occupied by the Commonwealth of Virginia's Consolidated Laboratory Building. The existing building was demolished and recycled as on-site fill material with the basement slab and foundations remaining in place. As the project parking consultant and structural engineer of record, DESMAN was responsible for developing a parking system that allowed the facility to be used by the State for permit parkers and the City of Richmond for daily parkers within the same building. A scissors ramp system was designed to speed vehicular circulation, working with a sloping site with a fall of 25 feet. Vehicular access points provide access to Main Street, 14th Street, and 15th Street, with pedestrian access provided to both the nearby State office buildings complex and the adjacent Amtrak Station. Special attention was required to transfer the loads from the seismic-resistant precast frame to the foundations located to avoid conflict with the existing foundations left in place. For its use of recycled materials, the project was cited for numerous awards including recognition from the Virginia Recycling Association and the National Association of State Facilities Administrators.

**THE ROBERT C. BYRD
INTERMODAL TRANSPORTATION CENTER**
Wheeling, West Virginia



Client: Ohio Valley Area Regional
Transit Authority
Wheeling, West Virginia

Features: 850-car space, two-bay wide parking
structure on six supported levels plus
grade, with a pedestrian bridge & National
Park Service Visitor Information Center.

**Completion
Date:** November 1997

**Construction
Cost:** \$11,100,000

Summary:

The Robert C. Byrd Intermodal Transportation Center (ITC), designed for the Ohio Valley Area Regional Transit Authority (OVARTA) is a key component of the *Wheeling National Heritage Plan*, providing parking at the *Gateway to Wheeling's Historic Heritage Port*. The Heritage Plan includes economic development of the Wheeling waterfront on the Ohio River and development of existing historical and cultural resources. The ITC is located adjacent to the Artisan's Center, Wheeling Civic Center, Capital Music Hall and Wheeling Community College.

Constructed on caissons bearing on rock, this pre-stressed, pre-cast concrete open parking structure provides a durable low-maintenance facility. The integral concourse is of steel frame construction and provides space for the National Park Service Visitor Center and OVARTA. The facility provides an intermodal link for a regional bus line, interstate buses, local taxi service and bicycles. Funding sources for the facility included the FTA, National Park Service and local City of Wheeling resources. DESMAN was the Parking Consultant and Structural Engineer of Record.



Program/Goals: Create a center for various modes of transportation and expand the use of the existing campus Personal Rapid Transportation (PRT) mass transit system. Key elements include: parking for 500 vehicles with plans to expand vertically and horizontally to 1,500 spaces, bus stops for community and campus lines, bicycle storage and showers, lobby/lounges for commuter students, retail, and Administration Offices for the WVU Parking Authority. The facility must provide ADA accessible access to the PRT Station by way of stairs, elevators, and pedestrian bridge.

Site: A roughly two-acre hillside site on the Evansdale Campus of West Virginia University. The site is defined by the Personal Rapid Transit (PRT) Station and associated tracks to the east and an irregular boundary established by the campus steamline right-of-way to the west.

Solution: Establish an axis in line with the PRT. This serves as the pedestrian connection from entrance to the PRT Station via monumental stair and elevator. The five-story parking garage is situated in the hillside parallel to the PRT tracks. The remaining program functions are organized in a building which is rotated to align with the angle of the right-of-way boundary. This arrangement provides for the addition of a future parking structure to the north. Building components are further defined by different brick colors. Glass curtainwall tower defines entrance and emphasizes the pedestrian pathway through the facility.

West Virginia University Mountaineer Station

Morgantown, WV

Intermodal Transportation Center and Parking Garage. A State of West Virginia Design-Build Competition featuring a 500-car parking garage, bus drop-off area/lounge and toilets, retail space, and office areas for the West Virginia University Parking Authority. The facility is designed to connect to the Public Rapid Transit Station and can be expanded both vertically and horizontally to accommodate a total of 1,500 vehicles.

Owner: West Virginia University

Completed: Fall 2009

Cost: \$14.5 Million

Size: 12,500 Square Feet (retail space); 160,00 Square Feet (parking deck)
500 Parking Spaces

Delivery Type: Design-Build Competition

Contractor: March-Westin Company, Inc.



Program: Expand the existing parking garage to accommodate an additional 758 parking spaces for WVU Hospital. An additional 4,700 sf of mixed use space is also included on the first floor which WVU Hospital will occupy. The facility will provide ADA accessibility to the PRT Station by way of stairs, elevators, and a pedestrian bridge.

Site: A hillside site on the Evansdale Campus of West Virginia University lying to the north of the existing Mountaineer Station. The site is defined by the Personal Rapid Transit (PRT) Station and associated tracks to the east and an irregular boundary established by the campus streamline right-of-way to the west.

Solution: The addition maintains connection with the axis line defined with the existing building and PRT. The building is comprised of seven stories situated in the hillside to align with the existing building and runs parallel with the PRT tracks. The building uses the same brick colors as the original building. While the colors remain constant, the two types of brick are used to create an opposite appearance to the existing building. Glass curtainwall tower defines entrance and emphasizes the pedestrian pathway through the facility.

West Virginia University Mountaineer Station Expansion/Addition | Morgantown, WV

Paradigm Architecture was involved in the design of the West Virginia University Transportation Center and Garage in 2009. As part of the design build competition for the commission, the program required vertical and horizontal expansion of the facility. The total parking capacity would increase from the original 500 vehicles in Phase I to a total count of 1,258. A new \$280 million addition to the WVU Medical Center and limited available land prompted the completion of the study for expansion of the parking facility. The new garage connects to the common lobby and has full access to the Personal Rapid Transit System and the Medical Center.

Owner: West Virginia University Hospital

Owner's Representative & Phone: James Snider - 304.598.4125

Cost: \$20.5 Million

Size: 5,016 Square Feet (office/retail)

232,291 Square Feet (parking deck); 758 Parking Spaces

Delivery Type: Design-Build

Contractor: March-Westin Company, Inc.



University Place Parking Garage & Retail Morgantown, WV

Program: To create a 500-space parking garage in the Sunnyside area of Morgantown, WV, to accommodate parking for student housing and retail spaces.

Site: A steep hillside site at the corner of University Avenue and Overhill Street. The site is surrounded by multi-story, student housing buildings, and single family homes.

Solution: A solution was needed that addressed the urban limitations of the site, the difficulty in transporting materials to the site, and the physical limits of the site for erection. As a result the six-story building was constructed using a structural steel frame with metal decking and concrete. This allowed components which were easier to transport and erect. In addition to the parking area, the building also includes 14,900sf of mixed-use space. Building components are defined by brick, curtainwall, glazing, and perforated mesh.

University Place Parking Garage is comprised of a 500-space parking facility and 15,000 square feet of retail on the ground floor. Paradigm set goals and aimed to break up the monotony of a typical parking garage by providing modern architectural elements and program at the ground level that will help facilitate activity on a very pedestrian street, University Avenue.

Owner: Downtown Campus Parking Associates, LLC

Owner's Representative & Phone: Andy Dye - 412.670.7490

Completed: Fall 2015

Cost: \$12.2 Million

Size: 15,000 Square Feet (retail)

176,682 Square Feet (parking)

714 parking spaces

Delivery Type: Design-Build

Contractor: March-Westin Company, Inc.



Event Center Parking Garage | Morgantown, WV

The parking garage is located next to the Morgantown Event Center and provides easy access to the Center along the Monongahela River in Morgantown. The garage structure consists of precast concrete framing with precast concrete double tee floors.

Program/Goals – Site – Solution

The parking facility supports the activities at the Morgantown Event Center and the Morgantown Marriott Hotel. Constructed as a precast concrete structure with double tee floors, the facility is nestled into the end of the Event Center. Similar materials and architectural language blend the facility into the overall complex along the Monongahela River. Pedestrian access is provided inside a conditioned corridor from the parking facility to the Event Center and the Hotel. The facility's design achieves the goal of providing multiple parking spaces near the Event Center and Hotel without exposure to the elements when leaving the parking facility.

Owner: Platinum Properties, LLC

Owner's Representative & Phone: Rich Lane - 304.284.5013

Completed: Spring 2010

Cost: \$4.8 Million

Size: 214 Parking Spaces; 74,906 Square Feet

Delivery Type: Design-Build Competition

Contractor: March-Westin Company, Inc.





Program/Goals – Site – Solution

The seven-story One Waterfront Building for the West Virginia University Foundation and Administration was one of the first buildings constructed in the newly created Waterfront District. The four-level precast concrete parking facility provides parking for 750 vehicles to support the One Waterfront Building and surrounding Waterfront District. Architectural design of the parking facility takes cues from the One Waterfront Building with its brick base, precast panels, vertical strip windows, and swooping roofs. Consistent use of materials, design elements, and proportions blend the facility with the adjacent office building. Even though the facility is quite large, its low profile at the street level helps to minimize its visual impact on the neighborhood.

Waterfront Parking Garage | Morgantown, WV

A four-level 750-car precast concrete parking deck developed to support the West Virginia University Foundation and Administrative Services Building, as well as the needs of the surrounding wharf district. Brick base and stairwells, careful detailing in the precast panels, and positioning the building down on the site help this large structure fit into its surrounding context.

Owner: Waterfront Parking Garage, LLC

Owner's Representative & Phone: Laury Waltz - 304.284.5011

Design Architect: Paul A. Walker, AIA

Architect of Record: Evan Terry Associates, PC

Completed: Summer 2001

Cost: \$8.2 Million

Size: 750 Parking Spaces; 250,000 Square Feet

Delivery Type: Design-Build

Contractor: March-Westin Company, Inc.



Program/Goals – Site – Solution

To meet the needs of a growing campus, this new precast concrete parking facility provides 940 parking spaces on the main campus. Unique site conditions--abandoned coal mines and steeply sloping site--required creative solutions. The abandoned coal mines are filled with concrete to provide a solid foundation. Sloping topography requires retaining walls on multiple levels and provides opportunity for connection. Additionally, there was a desire to have a pedestrian connection over an existing campus road to the top level of the facility. The solution is to provide a visually-pleasing arched bridge over the existing road as a connecting element. Because one side of the facility is built into the site, openness on the other three sides is a premium. To that end, the stairwells have glazed walls on the corners and even the elevator has a window which gives views of the campus while travelling vertically.

Fairmont State University Parking Facility | Fairmont, WV

In order to meet the needs of a growing campus, this new parking facility provides 940 parking spaces and a connecting pedestrian bridge to the main campus. Unique site conditions include building over an abandoned coal mine, as well as a steeply sloping site that required retaining walls on multiple levels.

Owner: Fairmont State University

Owner's Representative & Phone: Tom Tucker - 304.367.4139

Completed: Summer 2004

Cost: \$10 Million

Size: 269,000 Square Feet

Delivery Type: Design-Build-Negotiated

Contractor: March-Westin Company, Inc.





Canaan Valley Resort State Park Renovations & Additions Davis, WV

Program/Goals: The lodge facility at Canaan Resort State Park was comprised of five 1970s modular lodging buildings and a Main Lodge structure housing the public amenities. When Paradigm Architecture was hired, several challenges were apparent. At least two old lodging buildings were in conflict with the desired additions and would have to be demolished. Furthermore, it would be impossible to complete new construction work prior to the onset of Canaan Valley's notoriously brutal winter. This meant months of idleness for the project.

Solution: Working closely with the State of West Virginia DNR, we devised a plan to fast track two packages, one for demolition of the two lodging buildings and a foundation and structural steel package. Full construction documents for completion of the project would be bid during the winter months allowing the contractors to begin work in early spring. This decision would result in modest additional costs to the project but speed the opening up by almost a full year. The final facility added 100,000 SF of new construction to 60,000 SF existing Lodge. Canaan Resort represents a highly complex challenge of existing conditions documentation, scheduling, and budget management.

Situated in one of the most scenic and tranquil settings in the Mid-Atlantic, with unlimited recreation and family-focused activities, Canaan Valley Resort is a four-season destination providing the perfect escape from the pressures of daily life. The construction/renovations was administered in phases and included the construction of two brand new guest wings (162 rooms) along with extensive refurbishing of the main lodge (where the front desk, meeting rooms, dining room, and indoor pool are located).

Coordinated with the State Historic Preservation Office Eligible for National Register of Historic Places

Owner: West Virginia Division of Natural Resources
Park & Recreation
324 Fourth Avenue, Room 203
South Charleston, WV 25303-1228

Owner's Representative & Phone: Brad Leslie, PE; (304) 558-2764

Completed: Fall 2013

Size: 102,534 SF (addition); 64,993 SF (renovation)

Cost: \$27.6 Million

Delivery Type: Design-Bid-Build

Contractor: Harbel, Inc.



PROJECT DESCRIPTION

Canaan State Park Lodge & Conference Center, Davis, WV. The lodge facility at Canaan Resort State Park was comprised of five 1970s modular lodging buildings and a Main Lodge structure housing the public amenities. When Paradigm Architecture was hired, several challenges were apparent. At least two old lodging buildings were in conflict with the desired additions and would have to be demolished. Furthermore, it would be impossible to complete new construction work prior to the onset of Canaan Valley's notoriously brutal winter. This meant months of idleness for the project. Working closely with the State of West Virginia DNR, we devised a plan to fast track two packages, one for demolition of the two lodging buildings and a foundation and structural steel package. Full construction documents for completion of the project would be bid during the winter months allowing the contractors to begin work in early spring. This decision would result in modest additional costs to the project but speed the opening up by almost a full year. The final facility added 100,000 SF of new construction to 60,000 SF existing Lodge and a construction cost of \$27,600,000.00. See Project Information Sheet included in this proposal.

Though not Higher Education project, Canaan Resort represents a highly complex challenge of existing conditions documentation, scheduling, and budget management. Our efforts resulted in another similar project at the Cacapon Resort State Park Lodge & Conference Center.

Initial Construction Budget:

Phase I:	\$153,056
Phase II:	\$2,594,966
Phase III:	\$23,974,016

Final Construction Budget:

Phase I:	\$153,056
Phase II:	\$3,286,208
Phase III:	\$24,160,916

Variance

Phase I:	0%
Phase II:	2.1%
Phase III:	-4.6%

A/E Omissions: \$20,062

Owner Omissions Changes: \$166,837

Site Related Geotech Conditions: \$607,720

Fees and Reimbursables: Fee: \$2,154,844 | 8%

Reimbursables: \$50,000

General Contractor:

Phase I: Dan Hill Construction-Robert Dan Hill (304) 632-1600

Phase II: Wiseman Construction-J.C. Linkinoggor (304) 344-1200
JLinkinoggor@wisemanconst.com

Phase III: Harbel, Inc.-Adam Sterne-(301) 729-8900
adam@thebeltgroup.com

*Coordinated with the State Historic Preservation Office
Eligible for National Register of Historic Places



Cacapon Resort State Park Lodge | Berkeley Springs, WV

Located in the eastern panhandle of West Virginia, Cacapon Resort State Park is available for both family vacations and business retreats, offering access to golf, lake, and camping activities. The facility functions as the main lodging and meeting center of the resort and offers a mix of hotel rooms and suites, and a conference center. The new addition provides an additional 79 guest rooms, swimming pools, new dining facilities and commercial kitchen, and a spa and fitness area. Additional renovations to the resort includes existing guest rooms, golf course upgrades, as well as water and wastewater treatment upgrades. Paradigm master planned the entire complex and was able to create an addition that fulfills the functional goals while maintaining the architectural character of the original lodge.

Owner: West Virginia Division of Natural Resources

Owner's Representative: Bradley S. Leslie, PE- (304) 541-9356
(Retired)

Initial/Final Cost: \$28M/\$30 Million

Size: 63,669 square feet

Duration: August 2018- November 2021 (Covid delay)

Coordinated with the State Historic Preservation Office
Eligible for National Register of Historic Places



Fairmont State University Hardway Hall Portico Renovations

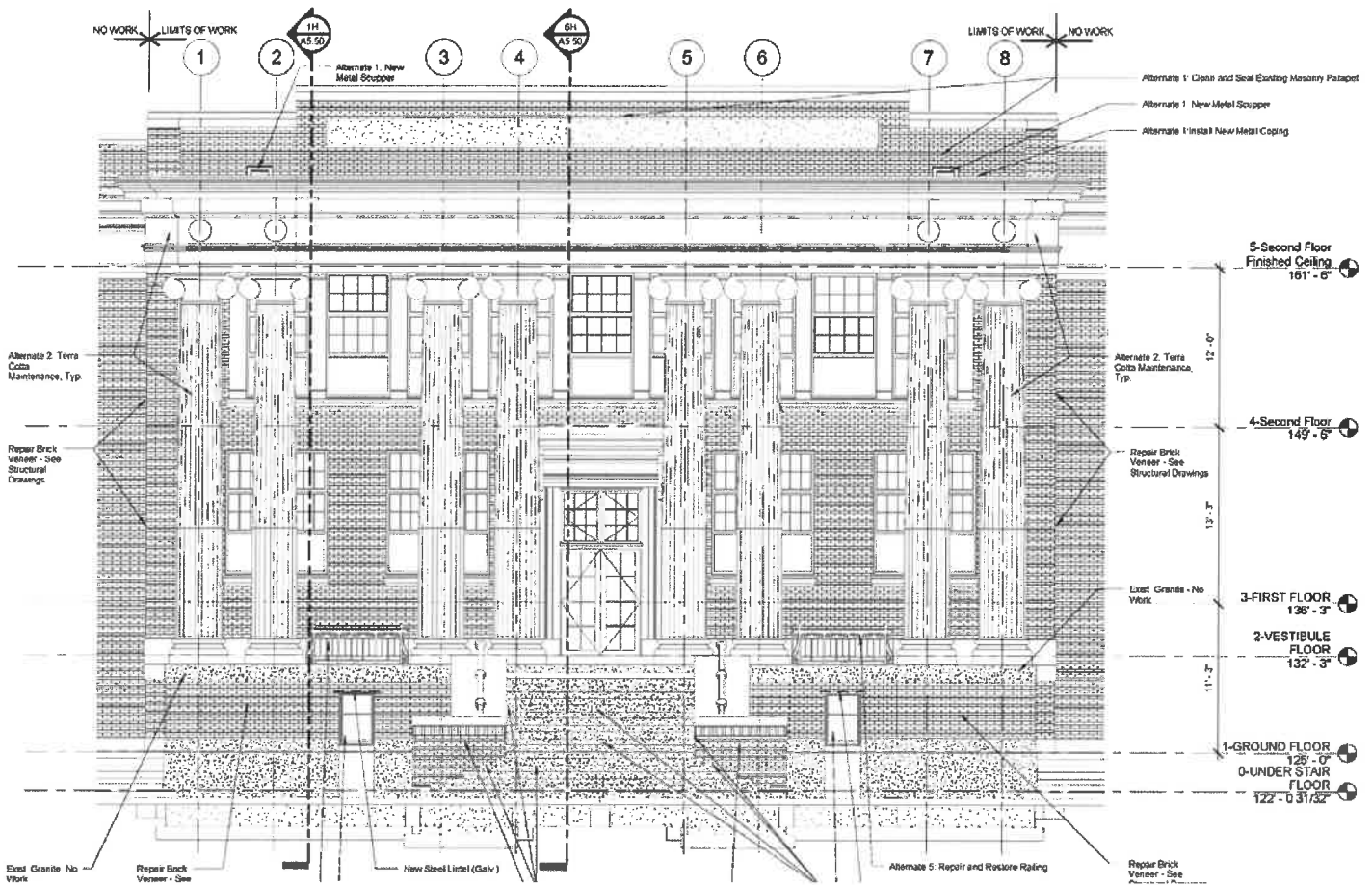
Fairmont, WV

Fairmont State University rehabilitated its administration building known as Hardway Hall. The portico and granite steps on the east (front) elevation were showing signs of structural failure most likely due to water intrusion and/or foundation settlement. In addition, aesthetic repairs were needed to rehabilitate historic elements of the building, such as masonry veneers, wrought iron railings, and terra cotta cornices.

Owner: Fairmont State University
Completed: Fall 2010
Cost: \$333,200
Delivery Type: Design-Bid-Build
Contractor: Lombardi Development
Paul Lombardi II, Owner/President (304) 748-5920

Project Size: 3,000 SF
Key Personnel: Paul Walker, PIC
Steve Konya, CA

Client: Stephanie Slaubaugh
Reference: Construction Project Manager
Fairmont State University
Physical Plant Office
1201 Locust Avenue
Fairmont, WV 26554
(304) 367-4401
sslaubaugh1@fairmontstate.edu



PROJECT DESCRIPTION

Program/Goals: Fairmont State University to rehabilitated its administration building known as Hardway Hall. The portico and granite steps on the east (front) elevation were showing signs of structural failure most likely due to water intrusion and/or foundation settlement. In addition, aesthetic repairs needed to rehabilitate historic elements of the building, such as masonry veneers, wrought iron railings, and terra cotta cornices. All work was carried out in accordance with the Secretary of Interior's Standards for the Rehabilitation of Historic Properties. Paradigm Architecture coordinated with the State Historic Preservation Office throughout the duration of the project.

Site: Hardway Hall (formerly known as the Fairmont Normal School Administration Building) is located on the main campus of Fairmont State University in Fairmont (Marion County), WV. The original building was constructed in 1915 and was listed on the National Register of Historic Places in 1994.

Solution: Due to limited funding, the design team had to assess the current conditions of the building and establish

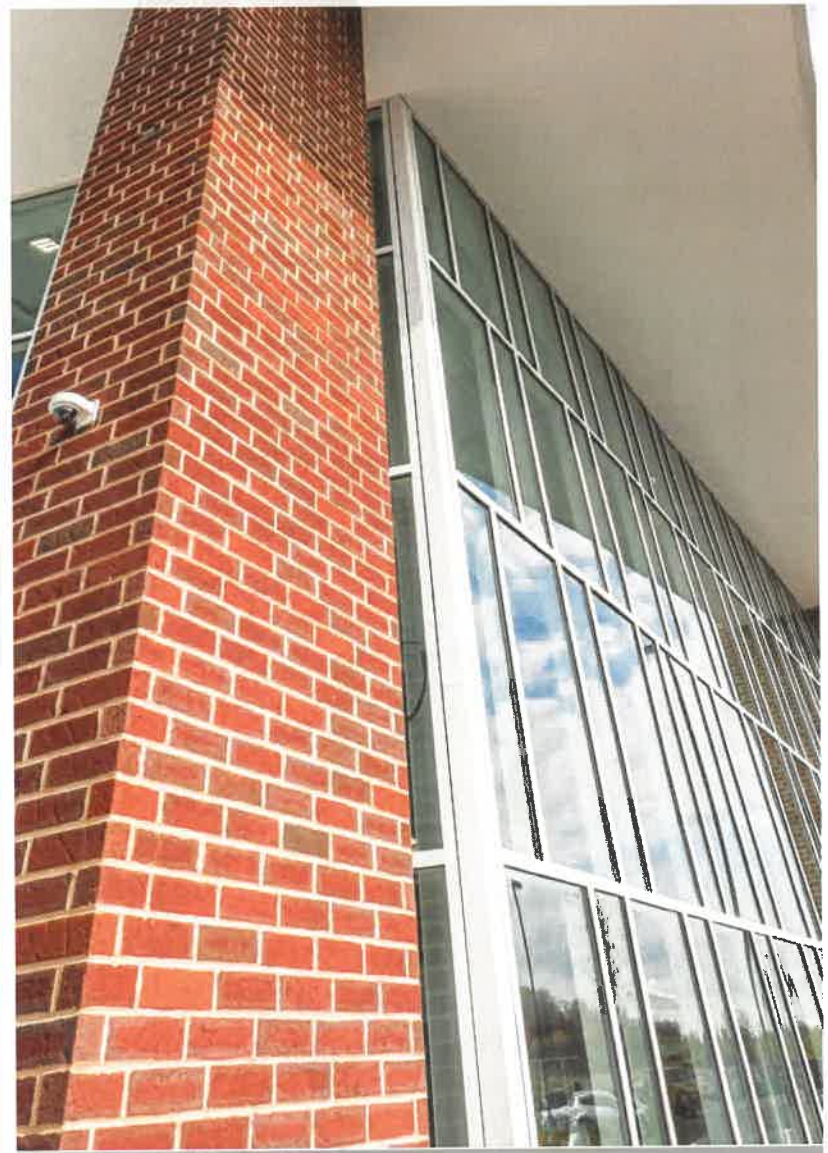
a priority list of solutions. The list in descending order was to repair structural damage, prevent future damage, and rehabilitate deteriorating features. Of utmost importance was correcting potential hazardous conditions by replacing the main portico floor and corroded structural supports of the granite slabs and steps. The Owner had already provided temporary shoring. Although foundation settlement was a possible contributing factor, investigations revealed that the majority of the building damage is due to water intrusion.

Secondly, the design team addressed preventative maintenance issues so that the potential for further damage would be reduced. This involved replacing damaged brick veneer systems, various waterproofing techniques, and providing new drainage systems. Lastly, as budget allows, the design team rehabilitated distinguishing features of the portico and façade. Exterior masonry (granite, brick, stone, and terra cotta) were repaired, cleaned, and sealed (as appropriate for each material). Decorative iron railings were refurbished. Doors were replaced to match original historic character of the building.

*Hardway Hall is listed on the National Register of Historic Places (Coordinated with the State Historic Preservation Office)



Project Team





Paul A. Walker, AIA

Principal-in-Charge | Design Architect

Paul has 41 years of experience as an architect and received his registration in 1986. He became a business owner in October 2000 when he created Paradigm Architecture. Paul's design responsibilities include programming, development of construction documents, project management, and construction administration. Among the variety of projects he has designed and supervised are: medical, commercial, corporate, educational, governmental, industrial, institutional, recreational, religious, and residential. The scope of projects ranges from a few thousand dollars to over 73 million dollars. Paul also has extensive experience with commercial and corporate facilities as well as higher education facilities while working at other firms in WV, NC, and AL.

Experience

West Virginia University Mountaineer Station
(160,000 SF - parking deck; 12,500 SF - retail)
Morgantown, West Virginia

West Virginia University Mountaineer Station Expansion/Addition
(232,291 SF - parking; 5,016 - office/retail)
Morgantown, West Virginia

University Place Parking Garage & Retail
(176,682 SF - parking; 15,000 SF - retail)
Morgantown, West Virginia

Morgantown Event Center & Parking Garage
(159,000 SF - event center; 74,906 - parking)
Morgantown, West Virginia

Fairmont State University Parking Facility (269,000 SF)
Fairmont, West Virginia

Waterfront Parking Garage (250,000 SF)
Morgantown, West Virginia

Two Waterfront Place Hotel & Conference Center | Mixed-Use
(296,000 SF)
Morgantown, West Virginia

Canaan Valley Resort State Park Renovations & Additions
(102,534 SF - addition; 64,993 SF - renovation)
Morgantown, West Virginia

University Park Student Housing & Mixed-Use (434,104 SF)
Morgantown, West Virginia

Cacapon Resort State Park Lodge Expansion (63,669 SF)
Berkeley Springs, West Virginia

Education

*Bachelor of Architecture
University of Tennessee
Knoxville, 1982*

Affiliations

*American Institute of Architects
NCARB #53858*

Registrations

*West Virginia #2626
Alabama #5398
Arizona #54615
Florida #AR95045
Georgia #RA015225
Maryland #17612
Massachusetts #31979
North Carolina #4910
Ohio #ARC.2118431
Oregon #ARF-11346
Pennsylvania #RA405117
South Carolina #8238
Tennessee #104766
Texas #24245
Virginia #401015994*

CALL OR VISIT US AT 800-541-3333 OR VISIT OUR WEBSITE AT www.virginiaregisteredarchitect.com
registration to practice architecture in West Virginia.
You will receive a renewal notice prior to the expiration date indicated.

Certificate No: 2626

STATE OF WEST VIRGINIA
BOARD OF ARCHITECTS

This Certifies that:

PAUL WALKER

Is duly Registered and entitled to
practice as a
REGISTERED ARCHITECT
until and including 06/30/2024



Attest

President

SECRETARY

A handwritten signature in black ink, appearing to read "Paul Walker", written over the word "SECRETARY".



Todd G. Christopher, AIA

Project Manager

Todd's responsibilities have included development of construction documents and drawings, project management, marketing presentations, bidding procedures, and construction administration. He has a combined 21 years of experience in commercial, corporate, hospitality, educational, performing arts, healthcare, continuing care retirement communities, laboratories, industrial, institutional, sports facilities, and multi-family residential. and joined Paradigm Architecture in 2009.

Experience

University Place Parking Garage & Retail
(176,682 SF - parking; 15,000 SF - retail)
Morgantown, West Virginia

West Virginia University Mountaineer Station
(160,000 SF - parking deck; 12,500 SF - retail)
Morgantown, West Virginia

West Virginia University Mountaineer Station Expansion/Addition
(232,291 SF - parking; 5,016 - office/retail)
Morgantown, West Virginia

West Virginia University Greenhouse & Labs (28,250 SF)
Morgantown, West Virginia

Canaan Valley Resort State Park Renovations & Additions
(102,534 SF - addition; 64,993 SF - renovation)
Morgantown, West Virginia

West Virginia University College Park Student Housing (258,000 SF)
Morgantown, West Virginia

U Club Sunnyside Student Housing (210,000 SF)
Morgantown, West Virginia

University Park Student Housing & Mixed-Use (434,104 SF)
Morgantown, West Virginia

United States Department of Agriculture Office Building (36,000 SF)
Morgantown, West Virginia

University of South Carolina Discovery I Biomedical Research Facility*
(110,000 SF)
Columbia, South Carolina

University of North Carolina at Pembroke Sampson Classroom Building* (35,000 SF)
Pembroke, North Carolina

Pillar Innovations Office Building & Manufacturing Facility (19,828 SF)
Morgantown, West Virginia

**Project experience prior to joining Paradigm*

Education

*Master of Architecture
Virginia Polytechnic Institute &
State University
Blacksburg, 2002*

*Bachelor of Science
in Engineering Technology
Fairmont State College
Fairmont, WV, 1999*

Affiliations

*American Institute of Architects
NCARB #104658*

Registrations

*West Virginia #4141
North Carolina #11326*

Architectural License, Civil Service of your jurisdiction
registration to practice architecture in West Virginia.
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Certificate No: 4141

STATE OF WEST VIRGINIA
BOARD OF ARCHITECTS

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TODD CHRISTOPHER

Is duly Registered and entitled to
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REGISTERED ARCHITECT
until and including 06/30/2024



Handwritten signature of the President of the Board of Architects.

President

Attest

SECRETARY

Handwritten signature of the Secretary of the Board of Architects.



David H. Snider, AIA

Quality Control | Specifications

Mr. Snider graduated from Auburn University with a degree in architecture and practiced in North Carolina before returning to his hometown of Birmingham, Alabama. As one of the founding members he has spent the last 24 years of his 40-year career with Paradigm Architecture. His responsibilities with Paradigm Architecture have included project management, construction documents, contract administration, and writing specifications. Project experience includes hospitality, educational, healthcare, churches, libraries, schools, historic office buildings, airports, and commercial facilities. David has extensive experience with healthcare facilities throughout the duration of his entire career and currently manages open-end contracts with Russell Medical and Lanier Memorial Hospital. These project types include cancer centers, medical office buildings, physical therapy, assisted living facilities, and major hospital renovations.

Experience

West Virginia University Mountaineer Station
(160,000 SF - parking deck; 12,500 SF - ret)
Morgantown, West Virginia

University Place Parking Garage & Retail (176,682 SF - parking; 15,000 SF - retail)
Morgantown, West Virginia

Morgantown Event Center & Parking Garage
(159,000 SF - event center; 74,906 - parking)
Morgantown, West Virginia

Fairmont State University Parking Facility (269,000 SF)
Fairmont, West Virginia

Waterfront Parking Garage (250,000 SF)
Morgantown, West Virginia

Canaan Valley Resort State Park Renovations & Additions
(102,534 SF - addition; 64,993 SF - renovation)
Morgantown, West Virginia

West Virginia University College Park Student Housing (258,000 SF)
Morgantown, West Virginia

Two Waterfront Place Hotel & Conference Center | Mixed-Use (296,000 SF)
Morgantown, West Virginia

U Club Sunnyside Student Housing (210,000 SF)
Morgantown, West Virginia

University Park Student Housing & Mixed-Use (434,104 SF)
Morgantown, West Virginia

Fairmont State University Falcon Center Renovations (9,200 SF)
Fairmont, West Virginia

WVU Visitor Resource Center (4,200 SF)
Morgantown, West Virginia

Mountaineer Center & Education Complex - Aquatic/Track Facility (87,500 SF)
Morgantown, West Virginia

West Virginia University Mountaineer Station Expansion/Addition
(232,291 SF - parking; 5,016 - office/retail)
Morgantown, West Virginia

Education

*Bachelor of Architecture
Auburn University
Alabama, 1984*

*Roofing Technology
The Roofing Industry
Educational Institute, 1995*

Affiliations

American Institute of Architects



Tyler B. Etris, AIA

Design Architect | CAD/BIM Production | Interiors

Tyler's responsibilities have included development of schematic design, design development, interior design and construction drawings. Since joining Paradigm in 2007, Tyler has aided in the design of projects, when combined, add up to be over \$200 million. He also provides marketing support for proposals and presentations. Project types have included healthcare, commercial, corporate, educational, hospitality, institutional, multi-family housing and retail.

Experience

West Virginia University Mountaineer Station
(160,000 SF - parking deck; 12,500 SF - retail)
Morgantown, West Virginia

University Place Parking Garage & Retail (176,682 SF - parking;
15,000 SF - retail)
Morgantown, West Virginia

Morgantown Event Center & Parking Garage
(159,000 SF - event center; 74,906 - parking)
Morgantown, West Virginia

Canaan Valley Resort State Park Renovations & Additions
(102,534 SF - addition; 64,993 SF - renovation)
Morgantown, West Virginia

University Park Student Housing & Mixed-Use (434,104 SF)
Morgantown, West Virginia

West Virginia University College Park Student Housing
(258,000 SF)
Morgantown, West Virginia

West Virginia University Mountaineer Station (500 cars)
Morgantown, West Virginia

Mountaineer Center & Education Complex - Aquatic/Track Facility
(87,500 SF)
Morgantown, West Virginia

Mountaineer Station Parking Garage - WVUH Addition
(775 cars)
Morgantown, West Virginia

Cacapon Resort State Park Lodge Expansion (63,669 SF)
Berkeley Springs, West Virginia

Education

*Bachelor of Architecture
College of Architecture
NAAB Accredited Program
University of Tennessee
Knoxville, 2011*

*Krakow Polytechnic University
Krakow, Poland
Spring, 2010*

Affiliations

*American Institute of Architects
First United Advisory Group*

Registrations

West Virginia #4803

Attached to your wallet card, evidence of your current registration to practice architecture in West Virginia. You will receive a renewal notice prior to the expiration date indicated.

Certificate No: 4803

STATE OF WEST VIRGINIA
BOARD OF ARCHITECTS

This Certifies that:

TYLER ETRIS

Is duly Registered and entitled to
practice as a
REGISTERED ARCHITECT
until and including 06/30/2024



Attest

President

SECRETARY

A handwritten signature in black ink, appearing to be "T. Etris", written over the word "SECRETARY".



Steve Konya II

Construction Administration | CAD/Bim Production

Steve's responsibilities have included development of construction drawings and documents, construction administration, project management tasks, marketing, and photography. He has a combined 27 years of experience in commercial architecture and has been with Paradigm Architecture for 18 years. Project types have included commercial, recreational, corporate, educational, hospitality, institutional, and retail.

Experience

West Virginia University Mountaineer Station
(160,000 SF - parking deck; 12,500 SF - retail)
Morgantown, West Virginia

Morgantown Event Center & Parking Garage
(159,000 SF - event center; 74,906 - parking)
Morgantown, West Virginia

Canaan Valley Resort State Park Renovations & Additions
(102,534 SF - addition; 64,993 SF - renovation)
Morgantown, West Virginia

West Virginia University Greenhouse & Labs (28,250 SF)
Morgantown, West Virginia

U Club Sunnyside Student Housing (210,000 SF)
Morgantown, West Virginia

University Park Student Housing & Mixed-Use (434,104 SF)
Morgantown, West Virginia

West Virginia University College Park Student Housing (258,000 SF)
Morgantown, West Virginia

West Virginia University Honors Hall Student Housing (90,000 SF)
Morgantown, West Virginia

Glade Springs Resort & Conference Center (48,500 SF)
Daniels, West Virginia

Fairmont State University Hardway Hall Portico Renovations (3,000 SF)
Fairmont, West Virginia

Fairmont State University Colebank Hall Renovations (42,200 SF)
Fairmont, West Virginia

Mountaineer Center & Education Complex - Aquatic/Track Facility (87,500 SF)
Morgantown, West Virginia

Cacapon Resort State Park Lodge Expansion (63,669 SF)
Berkeley Springs, West Virginia

Education

*Bachelor of Science
in Engineering Technology
Fairmont State College
Fairmont, West Virginia
1996*

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



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.

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”

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.

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



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.

Education

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

Professional Registrations

Registered 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.

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.

Anton 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 the 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 (Bldg 31)



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.

Education

- Bachelor of Structural Engineering, Civil and Environmental Engineering, University of Pittsburgh, 1997

Professional Registration / Certifications

- 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.*

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.

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.

DGS, West Virginia Capitol Stairs, Charleston, WV. *Sr. Engineer:* The capitol building's north staircase experienced concrete delamination and spalling and needed rejuvenation. Mr. Grill led WDP's effort to evaluate the stair condition and repair strategies. WDP's investigation included a visual and tactile survey, nondestructive testing, as well as material sampling and testing to identify the root cause of the failures and identify appropriate repair strategies. When similar, but unexpected conditions were identified during repair construction, Mr. Grill again led WDP's investigation team to provide further evaluation of previously unseen concrete elements.



JOHN H. JUDGE, P.E.

Vice President

Mr. Judge has extensive experience in the design, inspection, evaluation, and rehabilitation of structures with an emphasis on transportation facilities including parking structures, bridges, retaining walls, tunnel portal buildings, viaducts, wharves, and train station platforms.

Recently, he has combined his parking industry knowledge bases of durability, user acceptance, and sustainability by authoring parking design guides for a number of organizations including

- U.S. Department of Veterans Affairs Office of Construction and Facilities Management
- Maryland Transit Administration

Total Years of Experience

37

Years with DESMAN

29

Education

Syracuse University
Syracuse, NY
B.S. in Civil Engineering

Active Registrations

15 States including West Virginia
NCEES 17-357-49

Affiliations

American Society of Civil Engineers

Precast/Prestressed Concrete Institute

American Concrete Institute

International Code Council

Green Parking Council
Green Garage Assessor

Project Assignment
Principal in Charge

His current responsibilities with DESMAN include oversight of activities in the Washington, providing assistance where needed. During his career with DESMAN, he has been involved in the field investigation, alternatives consideration, design, and implementation of numerous parking solutions including oversight of structure evaluation projects. His current responsibilities with DESMAN include oversight of all technical production in the Virginia office and hands-on project management. Some recent projects include:

Parking Facility Design Projects:

- Alleghany County Sanitary Commission Garage, Pittsburgh, PA
- Penn Rose Parking Deck, Pittsburgh, PA
- Wexford Hospital Parking Garage, Wexford, PA
- Washington Adventist Hospital South Garage, White Oak, MD
- P-116 Parking Garage at Lot H, NSA Bethesda, MD
- Holy Cross Hospital Parking Garage, Germantown, MD
- St Agnes Medical Center Associate & Caton Decks, Baltimore, MD
- John Hopkins Ashland Street Parking Garage, Baltimore, MD
- Johns Hopkins Bayview Medical Center Garage, Baltimore, MD
- St. Joseph's Medical Center Parking Garage 2, Towson, MD
- Terrapin Row Student Housing Parking Garage, College Park, MD
- National Harbor St. George Garage, National Harbor, MD
- Comcast Arena Parking Garage, College Park, MD
- MedImmune Parking Garage C1, Gaithersburg, MD
- Howard Community College 3 Garages, Columbia, MD
- City of Frederick Decks 4 & 5, Frederick, MD
- RPC Tech Park Garage, Baltimore, MD
- Morgan State University CBEIS Parking Garage, Baltimore, MD
- Salisbury University New Parking Garage, Salisbury, MD
- Community of Hope Parking Garage, Washington, DC
- Washington Nationals Stadium Parking Garages, Washington, DC

JOHN H. JUDGE, P.E.

Vice President

- James Madison University West Campus Deck, Harrisonburg, VA
- Riverside Regional Medical Center Deck, Newport News, VA
- Richmond Airport North Parking Expansion, Richmond, VA
- Alexandria Police Department Parking facility, Alexandria, VA
- George Mason University Rappahannock Deck, Fairfax, VA
- Dulles Discovery Garages A & B, Chantilly, VA
- Germanna Community College Deck, Fredericksburg, VA
- Prince George Street Garage, Williamsburg, VA
- Old Dominion University Village North Deck, Norfolk, VA
- Lynnhaven Mall Parking Deck, Virginia Beach, VA
- Campbell Avenue Parking Deck, Roanoke, VA
- Christiana Care Health Garage 2 & Expansion, Wilmington, DE
- Obermyer Street Parking Garage, Greensboro, NC
- Convention Center Parking Deck, North Charleston, SC
- Oak Ridge National Laboratory Enhanced Parking, Oak Ridge, TN
- Superblock Parking Expansion, Akron, OH
- Memorial Hospital Parking Garage, Carbondale, IL

Criteria Document Preparation / Owner's Agent Services Projects:

- John Marshall Drive Parking Facility, Huntington, WV
- Events Center Parking Garage, Morgantown, WV
- West Virginia Univ. Transportation Center, Morgantown, WV
- Yeager Airport Garage 2 & RAC Garage, Charleston, WV
- Loudoun County Silver Line Stations Parking Decks, Ashburn, VA
- Ballston Commons Parking Garage, Arlington, VA
- James Madison Univ. 3 Parking Decks, Harrisonburg, VA
- Town Center Parking Garages, City of Virginia Beach, VA
- Virginia Tech Perry Street Parking Deck, Blacksburg, VA
- Univ. of Mary Washington Alvey Drive Parking Deck, Fredericksburg, VA
- Savage MARC Station Commuter Garage, Annapolis Junction, MD
- Towson Square Parking Garage, Towson, MD
- Owings Mills Station Parking Garage, Owings Mills, MD
- BWI MARC Station Parking Garage, Linthicum, MD
- Midtown Park Garage, Wilmington, DE
- Riverfront Parking Garage, Wilmington, DE
- City Hall Parking Facility, Medina, OH
- Courthouse Parking Facility, Medina, OH

Concrete Structure Restoration Projects:

- Lottery Commission Building Parking Garage, Charleston, WV
- Kanawha County Parking Garage, Charleston, WV
- Structural Assessment of 7 Garages, City of Greenville, SC
- Terminal C Enplane Roadway Deck, Raleigh-Durham Airport, NC
- Structural Assessment of 4 Garages, Univ. of Maryland, College Park, MD
- Structural Assessment & Restoration of 4 Garages, Johns Hopkins Medical Institutes, Baltimore, MD
- Montgomery County Executive Office Building & Courthouse Garage Restoration, Rockville, MD
- Court Street Garage Restoration, City of Frederick, MD
- City-wide Structured Parking Evaluation, City of Virginia Beach
- RiverPark Tower Garage, Newport News, VA
- Structural Assessment & Restoration of 3 Garages, Community Development Authority, Richmond, VA
- Church Street Garage Restoration, City of Frederick, MD
- Structural Assessment & Restoration of 2 Garages, Revenue Authority of Prince George's County, MD
- Wheaton Plaza Garage & Tunnel Restoration, Wheaton, MD
- 26th Street Bridge Rehabilitation, City of Norfolk, VA
- BWI Marc Station Parking Garage, Anne Arundel Co., MD
- Brambleton Avenue Bridge Evaluation, City of Norfolk, VA
- Pavilion on the Park Condo Façade Restoration, Alexandria, VA
- Park Place Condominium Façade Restoration, Alexandria, VA
- Hunters Woods Fellowship House Façade Restoration, Reston, VA
- 2000 L Street Building Façade Evaluation, Washington, DC
- 1900 Gallows Road Façade Evaluation, Tysons Corner, VA
- Pier 45 (Fisherman's Wharf), San Francisco, CA
- San Francisco Public Library, City of San Francisco, CA
- Cow Palace Exposition Arena, Dale City, CA
- Ferry Building, Port of San Francisco, CA

DESMAN



SHANNON R. BENTZ, P.E.

Associate Vice President

Ms. Bentz has more than 20-years of structural engineering experience in design and restoration. She is a practice leader in both public and private sector projects and is highly skilled in the evaluation, financial planning, design and construction management of restoration projects of various construction types. Her expertise has been built by her critical involvement in previous restoration projects for municipal clients.

Since joining DESMAN, her responsibilities have included the field investigation; testing; program development; estimating; development of life cycle analysis, multi-year period maintenance and capital outlay plans; preparation of specifications and contract documents; review of technical submittals; and performance of general construction support for numerous parking facilities. At any one time, Ms. Bentz could be managing and overseeing as many as ten to twelve projects, while still providing a personalized approach to each client. The following is a partial listing of Ms. Bentz's parking facility projects:

Total Years of Experience
22

Years with DESMAN
21

Education
Pennsylvania State University
University Park, PA
B.A.E Structural Engineering

Active Registrations
Virginia
Maryland
District of Columbia
Florida

SmartParking Advisor Certified,
IPMI

Affiliations
International Concrete
Repair Institute

International Parking & Mobility
Institute

Middle Atlantic Parking Association

Project Assignment
Project Manager

- Kanawha County Parking Garage #13, Charleston, WV
- WV DHHR Garage, Charleston, WV
- WV Lottery Commission Parking Garage, Charleston, WV
- Mountainlair Plaza & Garage, Morgantown, WV
- City of Richmond 9-Garages, Richmond, VA
- City of Frederick Garages, Frederick, MD
- Courthouse Parking Garage, City of Alexandria, VA
- Parking Authority of Baltimore City 7-Garages, Baltimore, MD
- Baltimore County Revenue Authority 4-Garages, Towson, MD
- Revenue Authority of Prince Georges County 2-garages, MD
- Town of Bel Air Garage, Bel Air, MD
- Maryland Economic Development Corporation Garages, Baltimore, MD
- University of Virginia 5-Garages, Charlottesville, VA
- Old Dominion University 5-Garages, Norfolk, VA
- Johns Hopkins Medical Institute 7-Garages, Baltimore, MD
- University of Maryland 5-Garages, College Park, MD
- RPAI – Shops at Legacy 3-Garages, Plano, TX
- InterPark – 7 Garages, Philadelphia, PA
- Mosaic District Garage Assessments, Falls Church, VA
- Mission Health System Garages, Asheville, NC
- Raleigh Durham Airport Authority Garages, Raleigh-Durham, NC
- Perimeter Mall Garage, Atlanta, GA
- Decatur Plaza Garage, Atlanta, GA
- 570 Spring Street Garage, Atlanta, GA

DESMAN



VSEVOLOD YATSEVICH, P.E.

Associate I Structural Engineer

Mr. Yatsevich is a structural engineer with extensive experience in design, evaluation, repair, restoration and construction administration of building structures. His practice encompasses design of reinforced concrete, post-tensioned concrete, steel framing, steel connections, post-installed anchors and construction shoring. He has specialized in evaluation and repair of parking garages, building façades, balconies, roofs, plazas, retaining walls and equipment support. His current responsibilities with DESMAN include structural analysis, peer review, due diligence, field investigation, development of repair programs, preparation of construction documents, construction administration and assistance in computer network administration.

Since joining DESMAN, Mr. Yatsevich has conducted 95 condition assessments and developed 96 construction documents for 63 clients at 100 facilities across 9 states. Some recent projects include:

Total Years of Experience
15

Years with DESMAN
15

Education

University of Architecture,
Civil Engineering and Geodesy
- (UACEG)
Master of Civil Engineering,
Minor in Computer
Technologies in Civil
Engineering
Major in Computing
Equipment and Technology

Active Registration

Virginia

Affiliations

Associate Member of
American Society of Civil
Engineers
Associate Member of
Structural Engineering
Institute of ASCE
Design Professional Member
of American Wood Council

Project Assignment
Structural Engineer

Municipal projects

- West Virginia Department of Health and Human Resources (WV DHHR) Garage, Charleston, WV
- City of Richmond 9-Garages, Richmond, VA
- City of Norfolk 15-Garages, Norfolk, VA
- Henrico County Garage, Henrico, VA
- Towson of Blacksburg BMC Building Façade, Blacksburg, VA
- Revenue Authority of Prince George's County 3-Garages, Hyattsville, New Carrollton and Largo, MD
- Baltimore County Revenue Authority 4-Garages, Towson, MD
- Parking Authority of Baltimore City 7-Garages, Baltimore, MD

Parking Facility Restoration Projects:

- 2330 Yorkmont Rd Garage, Charlotte, NC
- Kingstree Façade, Columbia, SC
- Citrus Park Mall Garage, Tampa, FL
- Bayside Marketplace Garage, Miami FL
- Perimeter Mall Garage, Atlanta, GA
- University of Virginia 5 Garages, Charlottesville, VA
- University of Maryland 5-Garages, College Park, MD
- Johns Hopkins Medical Institute 7-Garages, Baltimore, MD
- Maryland Economic Development Corporation Baltimore City 3-Garages, Baltimore, MD
- Towson Town Center 3-Garages, Towson, MD
- Washingtonian Center 3-Garages, Gaithersburg, MD
- Westfield Montgomery 2-Garages, Bethesda, MD
- Westfield Wheaton 2-Garages, Silver Spring, MD
- Westfield Annapolis 4-Garages, Annapolis, MD
- Westfield Citrus Park Mall Garage, Tampa, FL

DESMAN



MARDOCHEE OGU

Project Engineer

Mr. Ogu is a structural engineer with experience in field testing, evaluations and restoration of building structures. His current responsibilities with DESMAN include field investigations, estimating, development of repair programs and preparation of construction documents. In addition, Mr. Ogu assists in the construction administration phase of projects through submittal review and site visit participation.

Total Years of Experience

3

Years with DESMAN

1

Education

Pennsylvania State University,
Harrisburg, PA
B.S. Structural Design and Construction
Engineering Technology

Previous Experience

Hillis Carnes Engineering Associates
Construction Technician

Stevenson Consulting Inc.
Soils Lab Technician

Project Assignment

Project Engineer

The following is a representative list of Mr. Ogu's restoration experience since joining DESMAN:

- Rio Washingtonian Garages, Gaithersburg, MD
- Carroll Creek Garage, Frederick, MD
- Court Street Garage, Frederick, MD
- Towson Town Center Parking Garages, Towson, MD
- 510 Gaither Road Garage, Rockville, MD
- JHMI Rutland Street Garage, Baltimore, MD
- Four Seasons Hotel Garage, Washington, DC
- Watergate of Alexandria Condominium Garage and Plaza, Alexandria VA
- 555 4th Street Garage, Washington, DC
- Old Dominion University, Norfolk, VA
- City of Richmond Expressway Garage, Richmond, VA
- 1227 25th Street Plaza/Garage
- 10320 Little Patuxent Parkway Garage, Columbia, MD
- Mosaic District Garages, Fairfax, VA
- UVA Scott Stadium West Parking Shelf Assessment, Charlottesville, VA
- 1759 Business Center Drive Retaining Wall & Precast Analysis, Reston, VA
- 147 Waterfront Plaza-Leak Assesment, National Harbor, MD



LAWRENCE R. ZDINAK, JR., PE / PROJECT MANAGER

**Director of Operations, Pittsburgh | Professional Engineer in PA, MD, NJ, NY, OH & VA
Pennsylvania State University, Bachelor of Architectural Engineering**

With a career spanning over 28 years in engineering, management, and business development, Larry has an extensive list of experience. As Project Manager, Larry will lead project team meetings and will coordinate schedules and deliverables with the owner and members of the design team to maintain project schedules, deliverables, and budgets. His relevant experience includes:

- Allegheny College, Bentley Hall Renovation
- Butler County, 215 North Duffy Road Renovation
- Pierpont Community & Technical College – Facilities Master Plan
- South Fayette Township, New Administration and Police Building



ANTHONY T. RICKETTS, PE, LEED AP BD + C / LEAD MECHANICAL ENGINEER

**Mechanical Engineer | Professional Engineer in PA, MD, OH and WV
Pennsylvania State University, Bachelor of Mechanical Engineering**

Tony has over 19 years of experience in the industry and has extensive project experience. As Lead Mechanical Engineer, Tony will lead and direct Barton's mechanical engineering staff that will be assisting him on this project. He will attend engineering project team meetings and be an integral team member in the selection and sizing of the mechanical systems. The following is some of his relevant experience:

- Allegheny College, Bentley Hall Renovation
- South Fayette Township, New Administration and Police Building
- Robert Morris University, Washington Hall Suite Ventilation Study
- University of Pittsburgh, Posvar Hall Air Handling Unit Replacement



JOHN M. SUNDY, LC / LEAD ELECTRICAL DESIGNER

**Senior Electrical Designer
Point Park University, Bachelor of Electrical Engineering**

John is an experienced electrical designer that has extensive project experience over his 30 years of service. As Lead Electrical Designer, John will lead and direct Barton's electrical engineering staff that will be assisting him on this project. He will attend engineering project team meetings as well as provide oversight of the assessment of all electrical systems for the project and will be an integral team member in sizing of the electrical infrastructure. The following is some of his relevant experience:

- Allegheny College, Bentley Hall Renovation
- South Fayette Township, New Administration and Police Building
- Butler County, 215 North Duffy Road Renovation
- Sewickley Academy, Campus Wide MEP Assessment



CAITLIN L. PICKERING, PE / LEAD PLUMBING ENGINEER

**Senior Plumbing Engineer | Professional Engineer in PA & MD
Pennsylvania State University, Bachelor of Architectural Engineering**

Caitlin is a plumbing engineer that has extensive project experience over her 14 years of service in the engineering profession. As Lead Plumbing Engineer, Caitlin will lead and direct Barton's plumbing staff that will be assisting her on this project and will attend all required meetings, flow testing and utility coordination meetings. The following is some of her relevant experience:

- Allegheny College, Bentley Hall Renovation
- Butler County, 215 North Duffy Road Renovation
- City of Morgantown, Morgantown Fire Station Replacement and Public Safety Training
- South Fayette Township, New Community Center and Library

GILBERT J. TAYLOR PE

PRINCIPAL



EDUCATION

Bachelor of Architectural Engineering
Pennsylvania State University, 2000
Master of Architectural Engineering
Pennsylvania State University, 2000

PROFESSIONAL REGISTRATIONS

Licensed Professional Engineer in Arizona, Colorado, Florida, Georgia, Kentucky, Maryland, Mississippi, Montana, Nebraska, New York, North Carolina, Ohio, Pennsylvania, Tennessee, and West Virginia

EXPERIENCE

Mr. Taylor has served as the Principal for our West Virginia office since its opening, and has provided his structural expertise for a wide variety of projects including facility studies, new construction and renovations, building additions, and structural condition assessments throughout the United States.

Mr. Taylor's experience includes work for many different project types, including designing entire new structures; rehabilitating historic structures; facility expansions, additions, and department upgrades; and providing structural solutions for equipment including installations and retrofitting.

Recent projects designed by Mr. Taylor have reached construction costs as large as \$280 million. His daily responsibilities include attending design and development meetings, supervising the production of construction documents, reviewing shop drawings, issuing revision sketches, attending site visits and construction meetings, and completing site visit and structural assessment reports.

FEATURED PROJECTS

Oglebay Hall & Ming Hsieh Halls | Morgantown, WV

Home of the Department of Forensic and Investigative Science at West Virginia University, this project added state-of-the-art classrooms, labs, and support spaces as well as the restoration of brick, limestone, and terracotta for the exterior façade. The structure also included the addition of Ming Hsieh Hall, containing two lecture halls and a rooftop parking deck. Additionally, exterior facade restoration was completed for this building that is listed on the National Register of Historic Places.

66,000 SF | \$23.5M Addition & Renovation

WVU Medicine, J.W. Ruby Memorial Hospital | Morgantown, WV

AES's work at Ruby includes two joined, 10-story patient towers known collectively as the Southeast Tower. Other work includes the recently completed Heart and Vascular Institute, the main lobby expansion and infill, the expansion of the Neonatal Intensive Care Unit, and the John Michael Moore Trauma Center. Other projects include a new Children's Emergency Department and a new, connected 8-story Children's Hospital addition.

235,000 SF | \$280M Addition & Expansion

Grant Street Transportation Center | Pittsburgh, PA

This project provides 991 parking spaces in a split two-structure complex of cast-in-place, post-tensioned concrete construction. This system provides a high degree of durability, along with flexibility for the unusual plans of the individual parking structures. This intermodal facility also houses Greyhound's transportation hub for Pittsburgh as well as retail space, a travel center, and parking management facilities.

431,000 SF | \$200M Construction

PERSONAL SUMMARY

Mr. Taylor has a wide range of projects with a major emphasis in medical facilities of all types and sizes, historical buildings, transportation and parking facilities, residence halls and educational buildings at major institutions of higher learning, and commercial facilities. His work includes cast-in-place concrete, post-tensioned concrete, and conventional steel framing systems. Not only does he engage the rest of the design team and the owner to provide creative, economic, and sustainable structural solutions, but he guides his team through a hands-on approach. He is involved in daily project supervision, project scheduling, team and client communications, and design oversight. He routinely conducts progress and coordination meetings on projects in progress, keeping in mind the needs and goals of his clientele.

REFERENCES

Apostolos (Paul) T. Nacopoulos

Senior Program Manager
Allegheny Health Network
814.452.7398

apostolos.nacopoulos@AHN.org

Brian V. Iavarone

Director of Facilities and Construction
UPMC Hamot
814.877.6318

ivaronebv@upmc.edu

Wayne Tennant

VP, Support Services
Mercy Health
330.480.2366

Wayne_Tennant@mercy.com

EVAN A. ROWLES PE PRINCIPAL



Evan has developed a specialty in concrete design, rehabilitation, and repair, providing creative solutions for a variety of projects. His efforts with on-site structural evaluations, load surveys, condition surveys, building inspections, feasibility studies, and construction observation have contributed to his expertise. He has been an expert witness in numerous forensic investigations regarding building deficiencies.

EDUCATION

Bachelor of Architectural Engineering
Pennsylvania State University, 1984

PROFESSIONAL REGISTRATIONS

Licensed Professional Engineer in Alabama, Massachusetts, Michigan, New York, Ohio, Pennsylvania, Virginia, and West Virginia

PROFESSIONAL MEMBERSHIPS

American Institute of Steel Construction
International Concrete Repair Institute
Founding Member & Board Member

FEATURED PROJECTS

Mercedes Benz of Pittsburgh | Pittsburgh, PA

This new 3-level, 100,000-square-foot parking garage was constructed of precast concrete on top of deep foundations. Two levels are elevated with one that is on grade. The precast concrete superstructure was a delegated design component, and the foundation system is comprised of caissons supporting columns, grade beams, and precast concrete walls.

\$23.5M Construction

Mountainlair Plaza | Morgantown, WV

This project replaced the expansion joints and repaired existing drainage systems, providing a new waterproof membrane over the concrete deck. Repairs to the garage included partial depth slab reconstruction, soffit and wall repairs, entry stair reconstruction, crack and joint repairs, and traffic bearing sealant replacement. A stairway was added to improve pedestrian access and egress.

\$2M Renovation & Reconstruction

BRADLEY S. FREDERICK PE PROJECT ENGINEER



Brad has developed a unique role at AES, having been here for more than 8 years now. The work he has supported for his clients has given him a truly dynamic approach, providing structural solutions for minimal surveys and to large, multi-million dollar construction projects with newly introduced structural systems and elements. His relentless optimism and desire to provide the best solutions for his clients also gives him an edge with nurturing client relationships.

EDUCATION

Bachelor of Architectural Engineering
Pennsylvania State University, 2014
Master of Architectural Engineering
Pennsylvania State University, 2014

PROFESSIONAL REGISTRATIONS

Licensed Professional Engineer in Pennsylvania

PROFESSIONAL MEMBERSHIPS

American Institute of Steel Construction

RELEVANT PROJECTS

St. Elizabeth Hospital's ED Bridge Repairs | Youngstown, OH

After an initial review of the structure, this design-build project's repairs included expansion joint replacement, vertical concrete repairs and cove sealant replacement, repairs to the underside of the bridge, concrete beam repairs, sealant replacement at the parking area, brick and sealant replacement at the loading dock door, and sidewalk and top surface concrete repairs.

Construction Cost Not Available

St. Elizabeth Hospital Park Ave Garage Phase 7 | Youngstown, OH

This design-build project's final repair scope was developed quickly with the project's contractor to successfully fall within the limited repair budget and a contingency for unforeseen existing conditions was established by the Hospital. This project is currently ongoing.

\$600K Repairs (Projected)

Daniel L. Moore, Lifetime LCPE

Project Estimator/Owner | KDM Consultants, LLC – www.kdmconsults.com



Brief Overview: After one year in college, Dan has spent all of his time in the construction industry on a full-time basis for the past 40+ years. He worked in the field for about five years before being promoted to Assistant Project Mgr./Estimator and later Vice President of Huffman Corp. During his 21 years working as Chief Estimator for BBL Carlton, LLC (a wholly owned subsidiary of BBL Construction Services – Albany NY) he also ran a satellite office for them for 19 years in Clarksburg, WV. Dan received both his original Certification in 1992 as a Certified Professional Estimator and later his Lifetime Certification in 2008 from the American Society of Professional Estimators – Nashville, TN. He spent a year researching and writing the test for Unit Masonry Assemblies for ASPE.

Assignment/Role: Owner – KDM Consultants, LLC

Experience: Dan has had experience in all levels of estimating including Design-Bid Build, Design Build, SD (Schematic Design), DD (Design Development) and CD (Contract Definitive) estimating. He has been the Chief Estimator/Risk Manager on projects in excess of 100 million dollars. He has estimated and project managed projects up in the 20+ million dollar range. He also has CM experience on numerous projects including the new West Virginia Power Single A Baseball Stadium in Charleston, WV. He was in business with and trained under a professional engineer as well as a fourth-generation general contractor who held a B.S. degree in Architecture from the University of Cincinnati and who also served in the Officer's Corp. of the Seabees.

Office Location: Clarksburg, WV

Education: Graduate South Harrison High School – Lost Creek, WV – Completed one year at Fairmont State College – Lifetime Certified Professional Estimator by the American Society of Professional Estimators

Experience:

Total - 05 Years with Huffman Construction Co
Total – 02 Years with McCanallen Corp.
Total – 02 Years with Huffman Corp. - VP
Total – 21 Years with BBL Carlton/Carlton, Inc.
Total – 13 Years as KDM Consultants, LLC

Affiliated Organizations

American Society of Professional Estimators

WV Chapter of AIA

Construction Employers Association of North Central WV, Inc.

Harrison County Chamber of Commerce



PRACTICAL
PRESERVATION

Sandra Scaffidi is the owner and principal architectural historian of Practical Preservation. Sandra has over 20 years experience working with engineering and architectural studios, non-profits and municipal governments and provides a comprehensive approach to historic preservation. With experience working with Section 106 Surveys, National Register Nominations, Historic Tax Credits and Historic Resource Reports, Sandra is passionate about using historic preservation to revitalize small towns and communities. See selected past projects (some completed while employed at other firms):

NATIONAL REGISTER NOMINATIONS

Wright-Hunter Cemetery, Beckley, WV. Nominated under Criterion A: Social History & Ethnic Heritage (Black) for its association with African American burial practices during segregation.

Mount Zion Baptist Church, Fairmont, WV. Researched and composed a comprehensive history of the Mount Zion Baptist Church, the first church in Fairmont established for Black Baptists in 1904. The church was redesigned in 1928 by Carl E. Barnett, the third Black architect registered in West Virginia. Nominated under Criterion A: Ethnic and Social History and Criterion C: Architecture for its Neo-Gothic Revival design.

Valley Furnace, Barbour County, WV. Conducted archival research and documented ca. 1855 iron furnace. Nominated under Criterion D: Non-Aboriginal Archaeology.

Waiteville School, Monroe County, WV. Conducted archival research and documented ca. 1950 school building in rural Monroe County. Nominated under Criterion A for its association with the development of Post War educational facilities in West Virginia.

ARCHITECTURAL SURVEY (SELECTED)

Greensburg Downtown District, Greensburg, PA. Documented approximately 100 resources in two municipal parks and evaluated their integrity for inclusion for listing in the NRHP.

Three-County Survey, Mineral, Morgan and Hardy Counties, WV. Practical Preservation. Responsibilities included surveying each county to identify historic properties that retain integrity as well as compose a short historic context for each county. Includes approximately 450 historic resources.

Historic Survey, Paw Paw, Morgan County, WV. Practical Preservation. Responsibilities included the documentation of five historic properties.

Architectural Survey, Bellevue Borough, Allegheny County, PA. Practical Preservation. Responsibilities included the composition of a historic context, documenting approximately 2,000 resources using a GIS based system, evaluating each resource for NRHP Eligibility and the delineation of NRHP districts.

National Register District Update, Philippi, Barbour County, WV. Practical Preservation. Responsibilities included the documentation of historic properties within the existing historic district as well as North Philippi and coordinating the original addresses with the updated 911 addresses.

Historic Resources Report for the Proposed 303-642 Route 2 Road Waste Site Along Coon Run, Marshall County, WV. Practical Preservation for Apogee. Completed architectural documentation and provided an eligibility recommendations and documentation for 25 resources.

Viewshed Analysis of the Workman Branch Mine, Boone County, WV. Practical Preservation for Apogee. Completed architectural documentation, composed narrative and provided an eligibility recommendation on a mid-20th century residential community.

Historic Resources Report for the Proposed Bump Bridge Replacement Project Along Proctor Creek Road, Wetzel County, WV. Practical Preservation for Apogee. Completed architectural documentation and provided an eligibility recommendations and documentation for 3 resources.

Documentation of the Removal of a Decommissioned Radio Tower on Grey's Reef Light Station, Lake Michigan, MI. Practical Preservation. Responsibilities included photographically documenting the removal of the antenna according to a Memorandum of Understanding between the Advisory Council on Historic Preservation and the US Coast Guard.

Cacapon Resort State Park. Practical Preservation. Responsibilities included surveying the historic resort, photographically documenting the resource, evaluating its significance and complying with the Memorandum of Understanding to create a pictorial display of the historical transformation of the park.

Canaan Valley State Park. Practical Preservation. Responsibilities included surveying the historic resort, photographically documenting the resource and evaluating its significance .

SECTION 106 COMPLIANCE

Hampshire Memorial Hospital Determination of Eligibility and Effect Report, Romney, WV. Practical Preservation. Completed survey, documentation and evaluation of post-war hospital. Provided eligibility recommendations and an effect analysis as well as a Memorandum of Agreement.

Historic Documentation of the Lodge at Cacapon Resort State Park, Morgan County, WV. Paradigm Architecture. Responsibilities included researching the history of the lodge, documenting the structure on a WV Historic Property Identification Form, assessing the eligibility of the structure and the effect of the project on the resource.

HISTORIC STRUCTURE REPORTS

Judge Joseph Barker House, Washington County, OH. Practical Preservation. Documented ca. 1828 Federal style dwelling and developed a treatment plan.

HISTORIC TAX CREDIT APPLICATION

Former Fairmont YMCA Tax Credit Application, Marion County, WV. Practical Preservation. Conducted architectural and archival investigation to document historic YMCA/ Fraternal Lodge. Project included applying for Part I and Part II for the Rehabilitation Tax Credit.

MUNICIPAL PROJECTS/GRANT WRITING

WV SHPO Development Grant Application, Mullens Community Development Corporation, Mullens, WV. Successfully applied for \$40,000 grant to rehabilitate the former historic Wyoming Hotel .

WV SHPO Development Grant Application, Mount Zion Baptist Church, Fairmont, WV. Applied for \$40,000 grant to rehabilitate the Mount Zion Baptist Church.



PRACTICAL
PRESERVATION

John Pitman is a Preservation Assistant and designer with Practical Preservation. John has over twenty years of civil engineering experience in addition to his passion for historic preservation. Bringing an engineer's meticulous focus to every project, John is responsible for the graphic design, GIS mapping and assisting with data collection. He has provided his expertise on numerous projects for engineering firms, architectural design studios, non-profits and municipal governments. John appreciates the history and craftsmanship of historic properties.

John earned a BA degree in engineering from West Virginia University.

NATIONAL REGISTER NOMINATIONS

Wright-Hunter Cemetery, Raleigh County, WV. Prepared National Register Nomination form for historically black cemetery. Work included historic research, documentation, and GIS mapping (in progress).

Mount Zion Baptist Church, Marion County, WV. Assisted in the documentation of the resource including developing mapping as well as conducting historic research (in progress).

Waiteville Community Center, Monroe County, WV. Assisted in the documentation of the resource including taking measured drawings, photographs, developing mapping as well as conducting historic research.

Old Iron Furnace, Barbour County, WV. Assisted in the documentation of the resource including developing mapping as well as conducting historic research.

ARCHITECTURAL SURVEY

Tri-County Survey, (Mineral, Morgan and Hardy Counties), WV. State Historic Preservation Office. Responsibilities included documenting 450 resources, composing a historic context and evaluating resources for the National Register of Historic Places.

Historic Survey, Paw Paw, Morgan County, WV. Practical Preservation. Responsibilities included the graphic design to be included in five historic property inventory forms.

Architectural Survey, Bellevue Borough, Allegheny County, PA. Practical Preservation. Responsibilities included documenting approximately 2000 resources using a GIS based system, evaluating each resource for NRHP Eligibility and the delineation of NRHP districts.

National Register District Update, Philippi, Barbour County, WV. Practical Preservation. Responsibilities included the documentation and graphic design of approximately 400 historic properties within the existing historic district as well as North Philippi and coordinating the original addresses with the updated 911 addresses.

HISTORIC STRUCTURE/ EFFECT REPORTS

Historic Structure Report, Newport Township, Washington County, OH. Practical Preservation. Responsibilities included documenting ca. 1828 Federal style dwelling and developing a rehabilitation plan.

Hampshire Memorial Hospital Determination of Eligibility and Effect Report, Romney, WV. Completed survey, documentation and evaluation of post-war hospital. Provided eligibility recommendations and an effect analysis.



Goals/Objectives



2.1 Goal/Objective 1: *The successful design team will perform an assessment of the Agency-specified systems within both buildings and prepare comprehensive reports which make recommendations for repair and provide budgetary estimates for multiple, tiered cost-effective solutions addressing those recommendations.*

Within their proposal, Vendors should provide documentation regarding their experience with performing such assessments on buildings of the type and character expressed herein. Experience with assessments of historic buildings and parking garages should be exemplified.

Response:

Our team, Paradigm Architecture, WDP & Associates, and Desman was assembled specifically because of our experience in evaluating repair/renovation requirements and assisting at arriving at the proper solution to provide the requirements of this unique project. As the leader of the process, Paradigm would organize the efforts of each member, assist with field investigation, and facilitate the final reports and meetings. We held this responsibility for the development of the West Virginia School of Osteopathic Medicine Ten Year Master Plan. This encompassed the evaluation, staff interviews, programming, documentation, and cost estimating for 17 existing structures. Being the former Greenbriar Military Academy, a number of the facilities were historic buildings. Though smaller in scale, the restoration at Fairmont State University Hardway Hall was an extensive restoration of a façade on the State Historic Register. Practical Preservation worked closely with us to restore this beautiful façade.

WDP & Associates is a business fully devoted to assessments of building envelope conditions and repair/renovations. 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. Their expertise in the diagnosis and correction of exterior envelope systems includes extensive knowledge of brick and natural stone masonry. Their approach to historic preservation starts with respect for the hierarchy of maintenance over repair and repair over replacement. However, when severe deterioration necessitates deeper repairs and replacement, the new component must provide an acceptable match in material, color, profile, and texture. Some historic projects include:

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 US still standing.*
THE PIERRE HOTEL (1930) NY - Exterior Masonry Façade Evaluation and Repair
ERIE FEDERAL COURTHOUSE COMPLEX (1938) PA - Masonry Façade Evaluation and Repair Design

Desman is one of the nation's premier consulting firms specializing in parking garage restoration. Staff experts provide initial structural assessments and testing drawing from vast experience to diagnose the specific project problem and recommend proper options to correct the issues. Please Section 4 which highlights project experience.

Finally, we would work closely with our cost estimators, KDM Consultants, to price various approaches to provide options to achieve the highest valued solution.

MAP LEGEND

1. NOT SHOWN: EXISTING HOUSES AND BUILDINGS; PROPOSED TERRACING AND HOPPING CIRCULATION
2. PROPOSED PARKING LOT
3. EXISTING SIDEWALKS
4. PROPOSED SIDEWALKS
5. NEW SIDEWALKS AND DRIVEWAY CONNECTIONS
6. EXISTING DRIVEWAYS
7. EXISTING DRIVEWAYS
8. EXISTING DRIVEWAYS - CONCRETE SPECIAL FINISH
9. EXISTING DRIVEWAYS - CONCRETE SPECIAL FINISH
10. EXISTING DRIVEWAYS - CONCRETE SPECIAL FINISH
11. EXISTING DRIVEWAYS - CONCRETE SPECIAL FINISH
12. EXISTING DRIVEWAYS - CONCRETE SPECIAL FINISH
13. EXISTING DRIVEWAYS - CONCRETE SPECIAL FINISH
14. EXISTING DRIVEWAYS - CONCRETE SPECIAL FINISH
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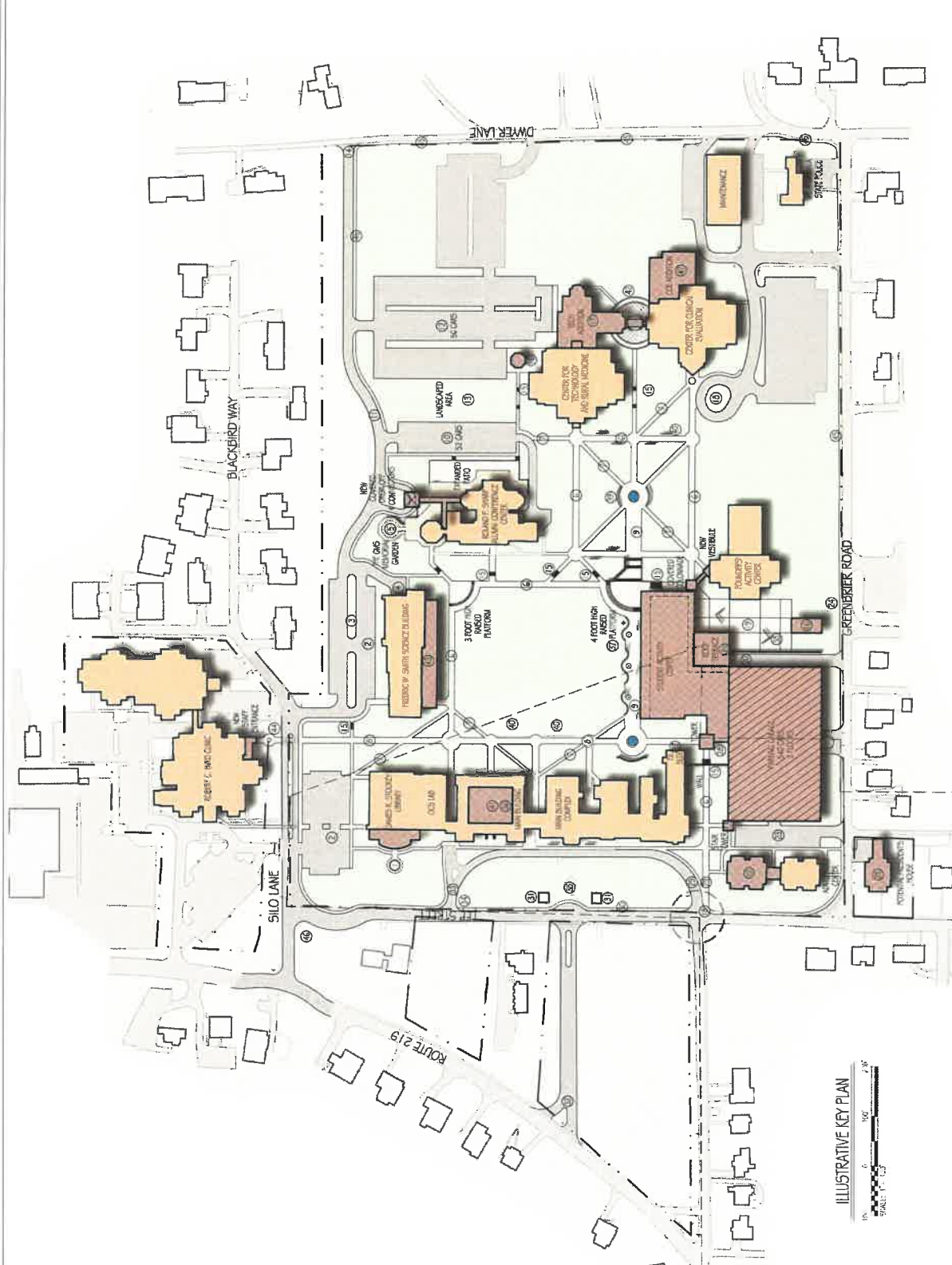
LEGEND

- PROPOSED BUILDINGS / VARIATIONS
- PROPOSED PARKING STRUCTURES
- PROPOSED SIDEWALKS, DRIVEWAYS
- PROPOSED SIDEWALKS WITH WEAR SURFACES
- FOUNDATIONS
- HISTORIC PROPERTY BOUNDARY

**WEST VIRGINIA
SCHOOL OF OSTEOPATHIC MEDICINE**
LEWISBURG, WEST VIRGINIA

PREPARED BY:
KCI TECHNOLOGIES, INC
PARADIGM ARCHITECTURE

MAY 31, 2011



CAMPUS MASTER PLAN

Buildings with Keynotes

West Virginia School of Osteopathic Medicine

History and Primary Function

Part of the Historic Main Building complex along Lee Street, this facility was once part of the Greenbrier Military School. It was originally constructed in 1925 and has had numerous renovations over the years, with the last major one occurring in 2001. The facility is three stories tall and is approximately 60,376 SF. It is a Business Occupancy with 990 occupants. The facility is currently being used for administrative offices, classrooms, instructional lab space, study, and bookstore. Upon completion of the Master Plan some spaces will be relocated to other facilities, however Building B will primarily continue to house administrative functions.



Main Building "B" — Front Entrance

Exterior

The exterior building envelope consists of brick and stone. The openings are aluminum windows and hollow metal doors. Overall, the envelope is in fair condition, and an exterior restoration project is needed, including, but not limited to, repointing, patching, cleaning, and sealing.

The roofing system is a single-ply roof membrane and needs to be replaced. Exact date of installation is unknown.

Interior

Many recent renovations have resulted in a variety of interior finishes throughout Building B. Some are in very good condition. Others are beyond their useful life and should be replaced. It is recommended that a major interior renovation be undertaken throughout the entire Main Building Complex to not only bring these interiors up-to-date, but also for consistency. In addition, a signage way finding system should be established.

Structural System

By all indications, the existing foundations are shallow concrete footings. The ground floor level consists of a concrete slab-on-grade. The review of areas inside the building did not reveal any significant foundation problems. Review of areas outside the building revealed several minor problem areas. Retaining walls around window wells have cracked in several areas. These window wells are on the back of the building. The general slope of the ground directs drainage toward these window wells. There is abundant evidence that this water is not being disposed of properly. This has led to clogged drains, persistent damp conditions, and concrete failure.

Existing structural drawings were not available. Evaluation of the existing architectural drawings show the structure consists of various systems. Of the floor systems that could be observed above ceilings, there appears to be cast-in-place flat concrete slabs. Other areas showed a cast-in-place concrete joist system. The columns appear to be cast-in-place concrete.

MEP Systems

The building has a partial sprinkler system. In addition, it has a fire pump and fire hose cabinets. The building is protected with a fire alarm system.

The building has a mix of older and newer fixtures. There are ADA deficiencies throughout the building, including the newer fixtures. The gas water heater is in fair condition.

There are significant HVAC issues throughout the building. However, an HVAC renovation project is currently in progress.

MEP Systems (continued)

The building's electrical service consist of two 3-phase services — 480V & 208V. All branch panelboards have limited spare capacity. The 480V electrical service is newer and primarily for HVAC equipment. The 208V electrical service is older.

Deferred Maintenance (per Owner)

- Repoint brick in select areas.
- Roof replacement
- Electrical Upgrade
- HVAC replacement
- Remodel men's and women's restrooms on 2nd floor

Immediate Needs

- HVAC renovations.
- Reroofing.
- Repair leak in tower roof.
- Fire pump — check seal and provide 2-hour, fire-rated enclosure. Provide sprinklers and ventilation.
- Repair loose/cracked brick at chimney/tower/light wells.
- Correct exterior ground drainage problems and repair deteriorated masonry/concrete.

Long-Term Needs

- Regular, preventative maintenance
- Exterior restoration.
- Additional branch panelboards.
- Interior renovations
- Interior finish upgrades
- ADA compliant plumbing fixtures.
- Signage / way finding system
- Provide safety cage for ladder to tower — does NOT violate current OSHA requirements.
- Replace railings at light wells.
- Update bicycle facility.

Recommendations

- Due to its historic significance and in conjunction with the Master Plan and Strategic Plan, we recommend Main Building "B" remain in use. Restoration and maintenance is needed. Once completed, and with continued preventive maintenance, it is expected that the building will remain in good functional use for many years.

History and Primary Function

Part of the Historic Main Building complex along Lee Street, this facility was once part of the Greenbrier Military School. It was originally constructed in 1925 and has had numerous renovations over the years, with the last major one occurring in 1977. The facility is three stories tall and is approximately 22,166 SF. It is a Business Occupancy with 222 occupants. The facility is currently being used for both Administrative Offices. As part of the Colleges Strategic Plan, the recently vacated clinical space on the ground floor will be converted to flexible multifunction space for administrative use.



Main Building "C"— Front Entrance

Exterior

The exterior building envelope consists of brick and stone. The openings are aluminum windows and hollow metal doors. Overall, the envelope is in fair condition, and an exterior restoration project is needed, including, but not limited to, repointing, patching, cleaning, and sealing.

The roofing system is a single-ply roof membrane and needs to be replaced. Exact date of installation is unknown. There are also four roof canopies of varying materials. These all need to either be reroofed or replaced.

Interior

Most of Building C's interior finishes are beyond their useful life. An interior renovation is recommended to remedy this and correct code deficiencies. In addition, there is not a good way finding system.

Structural System

The foundations in Building C appear to be concrete shallow footings. The condition of the exterior walls indicates no significant problems with the foundations. There are problems with ancillary areas such as window wells and retaining walls. Water damage has accelerated deterioration of the concrete. These areas are also subject to the slope of the ground leading to these areas. The debris on the floors of the stairwells and areaways show the inability of the drains to handle the surface runoff.

Some of the floors consist of steel bar joists and wire mesh-supported concrete slabs. Other areas used concrete joists with pre-cast concrete slabs. There were no problems observed with any of these major systems. The window sills are not caulked at the joints. Water is, therefore, allowed to enter the walls below the sills.

MEP Systems

There is no sprinkler system in the building. Fire hose cabinets are located within the building. There is a fire alarm system in the building tied into Main Building B's system.

Existing plumbing fixtures are in fair condition and there are significant ADA deficiencies. Unable to locate a separate water heater or hot water recirculating pump for this building.

There are significant HVAC issues throughout the building. However, an HVAC renovation project is currently in progress.

Building C shares an electrical service entrance with Building B. Additional branch panelboards are needed. Receptacles and wall switches are older and in unsatisfactory condition. Telephone systems and computer cables are old, missing, and in unsatisfactory condition. Camera system on first floor is in good condition.

Deferred Maintenance (per Owner)

- Repoint brick in select areas.
- Electrical upgrade
- HVAC replacement
- Entry roof replacement

Immediate Needs

- HVAC renovations
- Reroofing
- Reroof/replace canopies
- Adjust height of fire department connection

Long-Term Needs

- Regular, preventative maintenance
- Exterior restoration
- Additional slope and drainage gutters at back of building
- Additional branch panelboards
- Interior renovation
- Interior finish upgrades
- ADA Compliant plumbing fixtures
- Signage / way finding system

Recommendations

- Due to its historic significance and in conjunction with the Master Plan and Strategic Plan, we recommend Main Building "C" remain in use as an office building for administrative use. Restoration and maintenance is needed. Once completed and with continued preventive maintenance, it is expected that the building will remain in good functional use for many years.

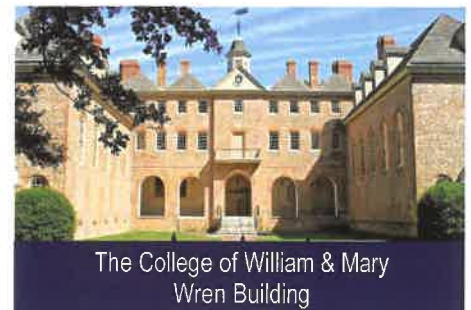
In our 25+ year history, WDP has served over 1,700 clients representing state/federal governments, higher education institutions, healthcare facilities, public/private school systems, contractors, engineers, architects, developers, property management firms, condo associations, insurance companies, municipalities, and churches.

Historic Preservation and Masonry Services

Our approach to historic preservation starts with the Secretary of the Interior's *Standards for Rehabilitation* and *Guidelines for Rehabilitating Historic Buildings*. We always respect the hierarchy of maintenance over repair and repair over replacement. However, when severe deterioration necessitates deeper repairs and replacement, we are fastidious about ensuring that the new component provides an acceptable match in material, color, profile, and texture. We regularly go above and beyond to verify compatibility of newer materials with adjacent original materials to limit the risk of accelerated deterioration of other original components. As an example, when restoring masonry facades, we regularly perform ASTM C1324 analysis on existing mortar to determine its composition. Only by matching this composition can a suitable match be provided in terms of aesthetics as well as compressive strength and vapor permeability. Providing mortar that is too hard or too impermeable introduces risks of damaging existing original masonry cladding units.

Our understanding of historic preservation and masonry façade repair has been demonstrated on the following projects:

- **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) VA** - 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



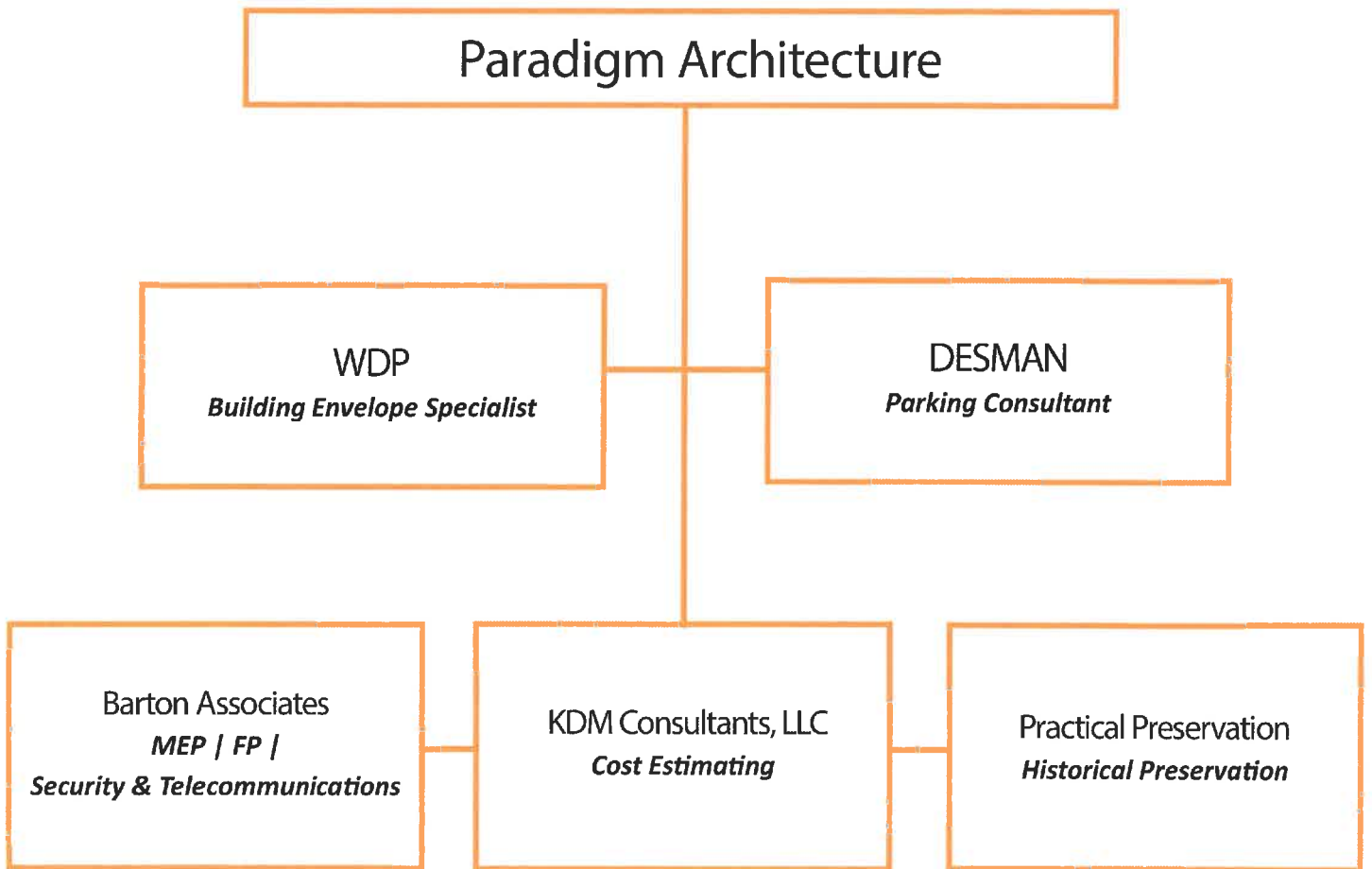
2.2 Goal/Objective 2: *The Agency anticipates that the Vendor will, if necessary, propose a design team which includes specialty subconsultants for the various building systems. The successful team will provide schematic and developmental design, construction documents, and bid phase services in support of the projects the Agency undertakes in response to the initial assessments.*

Within their proposal, Vendors should provide documentation to demonstrate their qualifications and experience in providing such design services and indicate how their team is composed and will work to address these activities. Exemplary projects should be those in which building envelope, window system, HVAC, roofing and roof drainage system, elevator, fire protection system, and parking structure issues have been addressed. Experience with design of repairs to historic buildings and parking garages should be exemplified.

Response:

We have provided an organizational chart that demonstrates how our team is comprised in order to provide the design services necessary for these projects. Most of our projects involve the issues mentioned above. We have highlighted a few following this page.

Organization Chart





Cacapon Resort State Park Lodge | Berkeley Springs, WV

Located in the eastern panhandle of West Virginia, Cacapon Resort State Park is available for both family vacations and business retreats, offering access to golf, lake, and camping activities. The facility functions as the main lodging and meeting center of the resort and offers a mix of hotel rooms and suites, and a conference center. The new addition provides an additional 79 guest rooms, swimming pools, new dining facilities and commercial kitchen, and a spa and fitness area. Additional renovations to the resort includes existing guest rooms, golf course upgrades, as well as water and wastewater treatment upgrades. Paradigm master planned the entire complex and was able to create an addition that fulfills the functional goals while maintaining the architectural character of the original lodge.

Owner: West Virginia Division of Natural Resources

Owner's Representative: Bradley S. Leslie, PE- (304) 541-9356
(Retired)

Initial/Final Cost: \$28M/\$30 Million

Size: 63,669 square feet

Duration: August 2018- November 2021 (Covid delay)

Coordinated with the [State Historic Preservation Office](#)
Eligible for [National Register of Historic Places](#)



Fairmont State University Reroofing

Fairmont, WV

Education Building

The Education Building originally constructed in 1994 and the roof area includes approximately 20,000 square feet. In addition to reroofing, the stone coping and masonry joints were cleaned, repaired, and caulked. Interior finishes were also selected that had been damaged by water infiltration. Miscellaneous exterior improvements were also completed such as column repairs, exterior stain removal, and window recaulking.

Hardway Hall

Fairmont State University rehabilitated its administration building known as Hardway Hall. The portico and granite steps on the east (front) elevation were showing signs of structural failure most likely due to water intrusion and/or foundation settlement. In addition, aesthetic repairs were needed to rehabilitate historic elements of the building, such as masonry veneers, wrought iron railings, and terra cotta cornices.

Colebank Hall

Removal and replacement of existing roofing system that was beyond its warranty and leaking. New roof system included rigid insulation to comply with energy code, membrane roofing, coping, flashings and replacement of existing expansion joint between Colebank Hall and adjoining facility.

Ruth Ann Musick Library

Approximately 8,100 square feet of roof replacement on the original 1950s building. Removed existing EPDM and insulation and installed new. New metal coping was installed on parapets. New pipe boots, walk pads, mechanical curbs, gravity vents, and flashing were installed.

Paradigm Architecture also provided roof evaluations for the following: Byrd Center, Jaynes Hall, & Education and Health Careers Building.

Owner: Fairmont State University

Contact: Stephanie DeGroot, Construction Manager

(304) 367-4401; Stephanie.DeGroot@fairmontstate.edu



2.3 Goal/Objective 3: *It is anticipated that the project may require multiple competitive bid packages in order to phase construction, for both budgetary control and to accommodate occupancy. It is anticipated that the required roof repairs to the Diamond Building will need to be expeditiously designed, bid, and completed as a separate, first project. It is also anticipated that repairs to the Parking Garage will be performed separately than any repairs to the Diamond Building.*

Within their proposal, Vendor should provide documentation of past projects in which they have designed and administered multiple, phased construction projects.

Response:

Using one specific project as an example, we would describe the work on the Canaan Resort for the WV DNR. It was a renovation and addition to the existing facility. The building was considered a historic structure that required review with the State Historic Preservation Agency. Bid phasing of the project was dictated by several unusual factors. First, existing structures had to be removed along with limited grading activity. Next, due to harsh weather in the Canaan Valley, a second package was developed to allow for final site grading and construction of the foundations, structural steel framing, and floor slabs. Finally, the general construction package to complete the new additions and renovations to the existing building. Without this phased approach, the project would have taken another year to complete. This was not foreseen prior to starting the design of the project but was identified through planning, scheduling, and motivation to achieve the best solution.

Other examples are included in our Projects section.



Canaan Valley Resort State Park Renovations & Additions Davis, WV

Program/Goals: The lodge facility at Canaan Resort State Park was comprised of five 1970s modular lodging buildings and a Main Lodge structure housing the public amenities. When Paradigm Architecture was hired, several challenges were apparent. At least two old lodging buildings were in conflict with the desired additions and would have to be demolished. Furthermore, it would be impossible to complete new construction work prior to the onset of Canaan Valley's notoriously brutal winter. This meant months of idleness for the project.

Solution: Working closely with the State of West Virginia DNR, we devised a plan to fast track two packages, one for demolition of the two lodging buildings and a foundation and structural steel package. Full construction documents for completion of the project would be bid during the winter months allowing the contractors to begin work in early spring. This decision would result in modest additional costs to the project but speed the opening up by almost a full year. The final facility added 100,000 SF of new construction to 60,000 SF existing Lodge. Canaan Resort represents a highly complex challenge of existing conditions documentation, scheduling, and budget management.

Situated in one of the most scenic and tranquil settings in the Mid-Atlantic, with unlimited recreation and family-focused activities, Canaan Valley Resort is a four-season destination providing the perfect escape from the pressures of daily life. The construction/renovations was administered in phases and included the construction of two brand new guest wings (162 rooms) along with extensive refurbishing of the main lodge (where the front desk, meeting rooms, dining room, and indoor pool are located).

Coordinated with the State Historic Preservation Office Eligible for National Register of Historic Places

Owner: West Virginia Division of Natural Resources
Park & Recreation
324 Fourth Avenue, Room 203
South Charleston, WV 25303-1228

Owner's Representative & Phone: Brad Leslie, PE; (304) 558-2764

Completed: Fall 2013

Size: 102,534 SF (addition); 64,993 SF (renovation)

Cost: \$27.6 Million

Delivery Type: Design-Bid-Build

Contractor: Harbel, Inc.



PROJECT DESCRIPTION

Canaan State Park Lodge & Conference Center, Davis, WV. The lodge facility at Canaan Resort State Park was comprised of five 1970s modular lodging buildings and a Main Lodge structure housing the public amenities. When Paradigm Architecture was hired, several challenges were apparent. At least two old lodging buildings were in conflict with the desired additions and would have to be demolished. Furthermore, it would be impossible to complete new construction work prior to the onset of Canaan Valley's notoriously brutal winter. This meant months of idleness for the project. Working closely with the State of West Virginia DNR, we devised a plan to fast track two packages, one for demolition of the two lodging buildings and a foundation and structural steel package. Full construction documents for completion of the project would be bid during the winter months allowing the contractors to begin work in early spring. This decision would result in modest additional costs to the project but speed the opening up by almost a full year. The final facility added 100,000 SF of new construction to 60,000 SF existing Lodge and a construction cost of \$27,600,000.00. See Project Information Sheet included in this proposal.

Though not Higher Education project, Canaan Resort represents a highly complex challenge of existing conditions documentation, scheduling, and budget management. Our efforts resulted in another similar project at the Cacapon Resort State Park Lodge & Conference Center.

Initial Construction Budget:

Phase I:	\$153,056
Phase II:	\$2,594,966
Phase III:	\$23,974,016

Final Construction Budget:

Phase I:	\$153,056
Phase II:	\$3,286,208
Phase III:	\$24,160,916

Variance

Phase I:	0%
Phase II:	2.1%
Phase III:	-4.6%

A/E Omissions: \$20,062

Owner Omissions Changes: \$166,837

Site Related Geotech Conditions: \$607,720

Fees and Reimbursables: Fee: \$2,154,844 | 8%

Reimbursables: \$50,000

General Contractor:

Phase I: Dan Hill Construction-Robert Dan Hill (304) 632-1600

Phase II: Wiseman Construction-J.C. Linkinoggor (304) 344-1200
JLinkinoggor@wisemanconst.com

Phase III: Harbel, Inc.-Adam Sterne-(301) 729-8900
adam@thebeltgroup.com

*Coordinated with the State Historic Preservation Office
Eligible for National Register of Historic Places



J.W. Ruby Memorial Hospital Renovations Morgantown, WV

Renovations of second, third, and fourth floors of the existing 1980s Physician Office Center at West Virginia University Healthcare System. Project was phased for renovations to occur one floor per year to reduce inconvenience for patients and staff. Additional phasing was necessary for each floor. Design goals included:

- Eliminate separate waiting and check-in/out function into one centralized waiting room and include separate patient computer check in capabilities.
- Develop cross circulation pathways for patient and staff between the original separate suites. Doctors are assigned exam rooms based on needs for each day. The cross-circulation pathways made it easier to maximize usage of all available exam rooms.
- Develop standard size exam room for doctors practicing different disciplines. Exam rooms include the following features:
 - Standard size and layout with base/wall cabinets
 - Introduce larger exam doors to corridors to move equipment.
 - Add computer terminals in each exam room for easy patient record access and documentation.
- All engineering systems such as sprinklers, plumbing, mechanical, electrical and data to receive required updates.

The Behavioral Medicine Build-Out at POC Level 6 is roughly 30,000 square feet and the program requires 24,000 square feet of space. The scope of the project includes schematic design, design development, construction documents, bidding, and construction administration. Paradigm has worked closely with the client to produce a program and plan that exactly fits the needs of the patient and staff. Since behavioral medicine encompasses a wide variety of needs, it was critical to work together with the owner to understand needs, desires, and specific adjacencies of use in order to create the most efficient plan possible.

Owner: WVU Hospitals, Inc.

Owner's Representative: Alan Neptune (304) 598-4125

Completed: Summer 2019

Size: 71,932 Square Feet

- 2.4 Goal/Objective 4:** *The intent is for any and all repairs and/or upgrades to the Diamond Building to take place during an occupied renovation whereas the building occupants will not relocate during any type of investigation/construction activities. Vendor will be asked to submit an acceptable design so as to not inconvenience the building occupants.*

Within their proposal, Vendor should provide documentation to demonstrate their experience on projects in occupied buildings.

Response: Paradigm has completed more than 160 projects which involve renovations and additions to existing buildings. Significant projects include the renovation of physician’s offices at WVU Ruby Medical Office Building, One Waterfront Place Administrative Services Space Planning & Reconfiguration, Canaan Valley Resort State Park Lodge Renovations & Additions. In each case, the facilities had to maintain continuous operation during construction requiring careful planning to achieve this goal. Solutions included the use of “swing space,” temporary or modular units, and phased additions with relocation/renovation helped to achieve continuous operation.

One Waterfront Place was an extreme example. The original design included 100,000 SF of space for the Administrative Services Division featuring University Visitors Center, TV/Production Services, Human Resources, Finance, Purchasing, Information Technology, and the Main Data Center. Over the years, there has been growth and reduction in departments. New groups were added, and some eliminated. Ultimately, the building needed to be reprogrammed and appropriate space planning modifications incorporated while maintaining full operation. This was achieved by establishing a flexible “swing space” where departments could temporarily locate during renovation of their area. While the process required detailed planning, clear communication, extra construction time, and some inconvenience to staff, it achieved the intended outcome and allowed the activities to continue.

Please see the following Occupied – Phased Projects sheet.



One Waterfront Place | Morgantown, WV

Paul Walker, President of Paradigm Architecture, was the original architect for the building. Paradigm was then commissioned to provide programming services and reconfiguration of all the divisions within West Virginia University's Administration Services building, which included Finance, Information Technology, Human Resources, WVU Parents' Club, and Internal Audit. The challenge was to create "swing space" for each department while their existing space was being renovated.

Programming Information Forms were distributed for documentation of base data including personnel, position, type of work space, size of work space, degree of confidentiality, functional relationships, equipment, and furniture. Interviews were then conducted to review the information on these forms and understand the nature and operation of each group. This data was compiled, analyzed, and summarized in a document which served as a basis for design. The Programming process yielded a 300+ page document that was used to plan for expansion, relocation, and reconfiguration of virtually every department located in the building.

Owner: Platinum Properties, LLC

Completed: 2009

Cost: \$3 Million

Size: 100,000 Square Feet

Delivery Type: Design-Build

Occupied - Phased Projects

Paradigm has completed more than 160 projects which involve renovations and additions to existing buildings. Significant projects include the renovation of physician's offices at WVU Ruby Medical Office Building, One Waterfront Place Administrative Services Space Planning & Reconfiguration, Canaan Valley Resort State Park Lodge Renovations & Additions. In each case, the facilities had to maintain continuous operation during construction requiring careful planning to achieve this goal. Solutions included the use of "swing space," temporary or modular units, and phased additions with relocation/renovation helped to achieve continuous operation.

West Virginia University - Morgantown, WV

- Visitors' Resource Center Renovation
- Oglebay Hall Forensics Facilities Renovations
- Mountaineer Station Expansion
- Marina Tower—2nd & 4th Floor Upfits
- Administrative Offices Build-Out, Jackson Kelly Building
- Aquatics Lab Renovation
- Milan Puskar Stadium Touchdown Terrace Addition
- Milan Puskar Stadium Concession Stand Addition
- Coliseum Renovations/Additions
 - Team Shop & Phys Ed Dept.
 - Upper Concourse & HVAC Upgrades
 - Phys Ed Offices & Floor Concession
- Jackson Kelly Building—3rd Floor Upfit
- Stewart Hall General Counsel Renovations
- Stewart Hall Presidential Suite Renovations Study
- Data Center Relocation Study
- Creative Arts Center – Construction Administration
- Creative Arts Center Rehearsal Room Renovation
- College of Creative Arts Additions/Renovations
- One Waterfront Place Space Planning and Reconfiguration

West Virginia University - Parkersburg

- New Science Wing - Lab Classrooms

West Virginia University - Potomac State

- Catamount Place Renovations

Davis & Elkins College

- Madden Student Center
- The McDonnell Center for Health,
 - Physical Education and Athletics – Phase II

University of Montevallo - Montevallo, AL

- Peterson House Renovations
- Barnes & Noble Campus Bookstore Renovation

West Virginia School of Osteopathic Medicine -

- Lewisburg, WV

- Master Plan

Fairmont State University - Fairmont, WV

- Data Center Expansion
- Colebank Hall Renovations
- Falcon Conference Center & Classroom Fitup
- Hunt Haught Hall Entrance Stairway Renovations
- Hardway Hall Portico Renovations
- Education Building Renovations
- Hunt Haught Hall Greenhouse Renovations
- Hunt Haught Hall Window Replacement Renovation

Russell Medical Center - Alexander City, AL

- Master Plan
- Emergency Department Renovation
- Multiple Doctors' Offices (13+)
- Wound Care Center
- Physicians' Office Building #3
- Information Technology Suite
- MRI & Open MRI Addition
- Lab Addition & Renovation
- Additions & Alterations
- Pre-Admit Testing
- Nurse Station Renovations
- ER Canopy
- Pharmacy Renovations
- Physical Therapy
- Sleep Lab
- Women's Center
- Satellite Lab
- Dialysis Suite
- Orthopedic Surgery
- Parking Expansion
- Eye Surgery
- Doctors' Parking
- Hospice House
- PET Scanner

WV Department of Health & Human Services

- Electrical System Upgrade, John Manchin Sr. Health Care Facility
- Mechanical & Electrical Systems Upgrade, Hopemont Hospital
- HVAC Renovations, William R. Sharpe Jr. Hospital, Weston
- Capitol Improvements, Lakin Hospital, West Columbia
- HVAC Renovations, Mildred Mitchell-Bateman Hospital, Huntington
- Mechanical Systems Upgrade, Jackie Withrow Hospital, Beckley
- HVAC & Electrical Systems Upgrade, Welch Community Hospital

Mon Health Medical Center - Morgantown, WV

- Microlab Renovation
- CT Surgery Renovation
- Birthing Center
- North Tower West AHU

West Virginia Division of Natural Resources

- Cacapon Resort State Park Lodge Expansion & Park Improvements - Berkeley Springs, WV
- Canaan Valley Resort/Conference Center Renovations - Davis, WV
- Blackwater Falls State Park - Davis, WV

2.5 Goal/Objective 5: *The Vendor will be required to produce construction documents and administer construction in compliance with State of West Virginia purchasing regulations. The Agency's procurements are generally governed by the WV State Purchasing Division, incorporate American Institute of Architects (AIA) general conditions, supplementally amended by the State to bring them into compliance with WV State Code.*

Within their proposal, Vendors should provide documentation of past projects in which they have adhered to standards such as these and explain their approach to administering the construction of the project with the Agency.

Response:

Upon approval of design, we produce construction documents using Revit. Revit is a Building Information Modeling software program which continues the three-dimensional documentation in a highly technical manner. Our consultants use the same program which aides in the overall accuracy of the work. The finished result incorporates architectural, mechanical, electrical, and plumbing content into a coordinated model. At the appropriate time, Paradigm will review the project with the WV State Fire Marshal and incorporate any required changes. A thorough review of all project documents with the client including Specifications will be conducted. Following any resulting adjustments and final cost estimate, the Project is ready to Bid.

The Bid Process will begin with Paradigm's assistance in advertising to Bidders, conducting the Pre-Bid Conference, issuing the Addenda, receiving Bid Proposals and evaluation of Bids. Our Team will participate in the activities in support of these efforts and respond to any Bidder questions and required drawing or specification clarifications. We also assist in any evaluation of Bids. The AIA contract is awarded to the lowest responsible Contractor, Agreements executed, and Notice to Proceed issued.

The Construction Phase requires many tasks which ultimately determine the quality of the finished product. These include efforts such as: product submission reviews, shop drawing processing, project inspections, and quality review. Regular project meetings with schedule and progress activity are critical. Paradigm's Morgantown location allows us to respond promptly to any conflicting field conditions which require inspection and response. This is especially important in renovation projects.

As the project approaches conclusion, our Team conducts Final Inspections, receives Closeout Documents, and assists the client in the transition to occupancy. Finally, we participate in the one-year Warranty review to assure that all outstanding issues are resolved prior to the end of this period.

We value the indication of the quality of our services by clients that continue to use Paradigm for design and construction administration. Please see the following list of Repeat Clients.

Repeat Clients

West Virginia University, Morgantown, WV

Puskar Stadium Renovations
Puskar Stadium Scoreboard Addition
Puskar Stadium Press Box Suites Renovation
Wrestling Locker Room Renovation
School of Pharmacy Lab Renovation
College Park Housing Community
University Park Housing Community
Ag Sciences Greenhouse & Labs
Vandalia Hall Stair Addition
Connector Building & Site Plan Study
Visitors' Resource Center Renovation
Oglebay Hall Forensics Facilities Renovations
Evansdale Campus Animation
Honor's Hall Residence Hall
Mountaineer Station Intermodal Garage
Mountaineer Station Expansion
Marina Tower—2nd & 4th Floor Upfits
Administrative Offices Build-Out, Jackson Kelly Building
Aquatics Lab Renovation
Mountainlair Student Union Renovation
Milan Puskar Stadium Touchdown Terrace Addition
Milan Puskar Stadium Concession Stand Addition
Coliseum Visitors Center Addition
Coliseum Renovations/Additions—Team Shop & Phys Ed Dept.
Coliseum Renovations—Upper Concourse & HVAC Upgrades
Coliseum Renovations—Phys Ed Offices & Floor Concession
Jackson Kelly Building—3rd Floor Upfit
Stewart Hall General Counsel Renovations
Stewart Hall Presidential Suite Renovations Study
Data Center Relocation Study
Creative Arts Center – Construction Administration
Creative Arts Center Rehearsal Room Renovation
College of Creative Arts Additions/Renovations
Alumni Center Screen Wall
One Waterfront Place Space Planning and Reconfiguration
General Open End Contract
Satellite Campus Open End Contract
Research Corporation Open End Contract
Athletic Department Open End Contract
Professional Architectural Services Open End Contract

West Virginia University Medicine, Morgantown, WV

Physician Office Center, 2nd, 3rd, 4th Floor Renovations
Physician Office Center Space Planning
Physician Office Center First Floor ENT MRI Renovation
Ruby Office Complex - Information Technology Renovations
Anesthesia Renovation
Cheat Lake Addiction Rehab Clinic
School of Pharmacy Lab Renovation

Glenmark Holding, LLC, Morgantown, WV

MainStay Suites - Carlisle, PA
Cheat Lake Retail Development
Glenmark Office Building
U. S. Department of Agriculture Office Building
CVS Health Institutional Pharmacy
University Park Mixed-Use Student Housing
453 Oakland Street Shell Building

Cellular Sales (Verizon Wireless), Alexander City, AL

25+ Retail Stores in Alabama and Florida

West Virginia Division of Natural Resources

Canaan Valley Resort State Park Renovations & Additions, Davis
Cacapon Resort State Park Lodge Expansion, Berkeley Springs
Blackwater Falls State Park Lodge Renovations, Davis

The Mylan Park Foundation, Morgantown, WV

Mountaineer Wellness & Education Complex (Aquatic/Track)
West Virginia University Medicine Residential Treatment Facility
PACE Housing Study
Monongalia County Public Services Building
Ruby Center Addition
Outdoor Performance Venue Study

InterMountain Renovation Consultants

Courtyard Blackstone Renovation, Ft. Worth, TX
Courtyard Clackamas, Clackamas, OR
Courtyard Tucson, Tucson, AZ

Russell Medical Center, Alexander City, AL

Additions & Alterations | X-Ray Renovation
Cafeteria Renovations | Women's Center
Cancer Center Renovations | Cath Lab Renovation
CT Renovations | Dialysis Suite | Doctors' Parking
Education Department | Emergency Room Canopy
Emergency Department Renovation | Goodwater
Exam Rooms Renovation | Eye Surgery
Hospice House | Information Technology Suite
Lab Addition & Renovation | Master Plan
Linear Accelerator Addition | Parking Expansion
Modified Lab Renovations | PET Scanner
MRI & Open MRI Addition | Wound Care Center
Multiple Doctors' Offices (13+) | Sleep Lab
Nurse Station Renovations | Orthopedic Surgery
Pharmacy Renovations | Physical Therapy
Physicians' Office Building #3 | Satellite Lab
Physicians' Office Building #4 Master Plan
Physicians' Office Building #4 | Pre-Admit Testing
Surgery Soiled Workroom Renovation

American Red Cross

West Park Drive Conference Room Fitup, Birmingham, AL
Blood Donor Center Fitup, Myrtle Beach, SC
Blood Donor Center Renovation, Madison, WI
Chicago Blood Services Distribution Center &
Chapter Services Renovation, Chicago, IL
Regional Blood Donor Center, Distribution
& Bio-Med Tenant Fitup, San Diego, CA
Relocation of Testing Support, Charlotte, NC
Biomedical Lab Interior Renovations, Rio Pedras Facility, San Juan, PR
Relocation of Chapter Services & Biomed Blood Services, Springfield, MA
Interior Office Renovations, St. Vardell Lane Facility, Charlotte, NC
Blood Donor Center Renovation, Virginia Beach, VA
Alt Operations Site (Disaster Services), Richmond, VA
IRL Renovation, Houston, TX

Monongalia General Hospital, Morgantown, WV

Microlab Renovation
Cardiothoracic Suite Renovation
Birthing Center
North Tower West AHU
Complete Hospital Lab Renovation

West Virginia University Experience



General Open End Contract
Satellite Campus Open End Contract
Athletic Department Open End Contract

Administrative Offices Build-Out, Jackson Kelly Building
Ag Sciences Greenhouse & Labs
Alumni Center Screen Wall
Aquatics Lab Renovation
Athletic Press Box Suites Renovation
B&E School Start Up Accelerator Space @ University Place Garage
Baseball Practice Facility
Cary Gym Renovations
Coaches' Locker Room Renovation
Coliseum Renovations - Phys Ed Offices & Floor Concession
Coliseum Renovations - Upper Concourse & HVAC Upgrades
Coliseum Renovations/Additions - Team Shop & Phys Ed Dept.
Coliseum Visitor's Center Addition
College of Creative Arts Additions/Renovations
College Park Housing Community
Connector Building & Site Plan Study
Creative Arts Center - Construction Administration
Creative Arts Center Rehearsal Room Renovation
Data Center Relocation Study
Engineering Sciences Building Innovation Lab
Evansdale Campus Animation
Health Sciences Center - Third Floor - North Wing Renovation
Health Sciences Center Museum
Health Sciences Center Physical Therapy-Occupational Therapy
Clinic
Honor's Hall Residence Hall
Health Sciences Center Inhalation Lab Expansion
Health Sciences Center Pathology RDL Lab Renovation
Health Sciences Center Pathology Shell Space
Health Sciences Center Surgical Simulation Room
Health Sciences Center/Sodexo Jazzman's @ Cavanaugh's
Jackson Kelly Building—3rd Floor Upfit
Marina Tower—2nd & 4th Floor Upfits
Master Planning Support Services
Milan Puskar Stadium Concession Stand Addition
Milan Puskar Stadium Touchdown Terrace Addition
Mountaineer Station Expansion
Mountaineer Station Intermodal Garage
Mountainlair Student Union Renovation
Oglebay Hall Forensics Facilities Renovations
One Waterfront Place Space Planning and Reconfiguration
Puskar Stadium Press Box Suites Renovation
Puskar Stadium Renovations

West Virginia University Experience



- Puskar Stadium Scoreboard Addition
- Puskar Stadium Wind Study
- School of Dentistry Urgent Care Clinic Renovation
- School of Pharmacy Lab Renovation
- Screen Wall
- Shell Building Addition
- Shell Building Addition Study
- Shell Building Renovation Study
- Stewart Hall General Counsel Renovations
- Stewart Hall Presidential Suite Renovations Study
- Student Housing Initiative
- Training Table
- University Park 453 Oakland Street
- University Park Housing Community
- University Park Parking Garage
- University Place Market & Starbucks
- University Place Parking Garage
- University Place Townhomes
- Vandalia Hall Stair Addition
- Visitors' Resource Center Renovation
- Wrestling Locker Room Renovation
- Engineering Sciences Bits & Bytes
- WVU Medicine Communication & Health Disorders Program
- WVU Medicine Gold Parking Garage
- WVU Medicine Outpatient Behavioral Medicine Freestanding Facility Study
- WVU Medicine Behavioral Medicine Build-Out @ POC Level 6
- WVU Medicine Ramada Inn Renovation
- WVU Medicine OSC Exterior Work - Prete Building
- WVU Medicine ROC Human Resources
- WVUH Anesthesia Renovation
- WVUH Heart & Vascular Institute Revolving Door
- WVUH Pedestrian Bridge
- WVUH Physician Office Center - 2nd/3rd/4th Floors
- WVUH Physician Office Center First Floor ENT MRI Renovation
- WVUH Physician Office Center Space Planning
- WVUH Rehabilitation Center
- WVUH Ruby Office IT Center

West Virginia University—Beckley

Barnes & Noble Store Renovation @ WVU Beckley Library

West Virginia University - Charleston

Medical Office Building Renovations

West Virginia University—Parkersburg

New Science Wing—Lab Classrooms

West Virginia University—Potomac State

Catamount Place Renovations



Barton Associates - MEP/FP



ABOUT US

Barton Associates approaches each project holistically and systematically to strike the right balance between performance, sustainability, energy efficiency and cost as well as engage project stakeholders to gain valuable insights. We believe our considerable expertise in MEP design and planning, and the combination of our team's working knowledge and experience gives us the unparalleled opportunity to offer you the combination of design innovation you are seeking for this project. Barton is a team of talented members that work together with one shared goal in mind—providing the best possible customer care. Through effective communication, we work as one entity to deliver the highest quality of work to our clients. We have been making buildings work for more than 55 years. We apply focus, dedication, practicality, precision and longevity to each project we deliver and live by these principles to help us achieve our mission—**We Make Buildings Work.**

Barton Associates, an employee-owned company, provides quality engineering solutions for clients throughout the Mid-Atlantic Region with office locations in York, State College, Pittsburgh, Raleigh, and Cherry Hill. Our team of registered professional engineers, designers, technicians and support staff do more than just design MEP and architectural lighting systems. We offer a holistic approach to any new construction, addition or renovation project ranging from energy studies and facility master planning to systems design and sustainability. Barton considers ways to minimize energy consumption, conserve resources and enhance indoor environmental quality for every project we complete. Energy Conservation is a priority in every design and our staff of professionals are trained, licensed and/or certified to design MEP systems and evaluate the performance of these systems. We also utilize building information modeling for greater team collaboration.



Whether we are serving as the prime professional or as a sub consultant to an architectural, engineering, contracting, construction management or other professional firm, Barton provides an extensive list of services:

SERVICES

- Feasibility Studies, Facility Assessments & Master Planning
- Energy Modeling, Life Cycle Costs & Payback Analysis
- Construction Cost Estimating
- Construction Drawings & Specifications Preparation
- Construction Contract Administration
- Peer Review Services
- Trouble-shooting existing Systems and Components

MECHANICAL SYSTEM DESIGN

- Heating, Ventilation, and Air Conditioning (HVAC) Design
- Central Plant Design
- Cogeneration Systems
- Building Automation System Design
- Energy Analysis
- Mechanical System Troubleshooting

ELECTRICAL SYSTEM DESIGN

- Lighting and Lighting Controls
- Power Distribution Systems and Studies
- Information Technology Design
- Fire alarm and Security System Design
- Nurse Call System Design

PLUMBING SYSTEM DESIGN

- Domestic (potable) Water Systems
- Sanitary and Storm System Design
- Medical Gas Systems
- Laboratory Plumbing Systems
- Fire Protection System
- Fuel Gas Systems

ARCHITECTURAL LIGHTING DESIGN

ENERGY SERVICES & SUSTAINABLE DESIGN

PERSONNEL

102	Total
38	Registered Engineers
35	Designers
5	CADD/BIM Technicians
6	Construction Services
10	Administrative
8	Interns



New Administration and Police Building

South Fayette Township

Morgan, PA

PROJECT DETAILS

Project Area
36,500 sq. ft.

Construction Cost
\$14 Million

Completion Date
August 2023

OWNER

South Fayette Township
412-221-8700

PROJECT MANAGER

Lawrence R. Zdinak Jr., PE
Barton Associates, Inc.
412-472-0145
lrz@ba-inc.com



Barton Associates is providing mechanical, electrical & plumbing engineering design & construction services for a new 2-story, approximately 36,500 SF municipal office building and police station in the Township. With the building cut into a hillside, the upper level has public access for the municipal functions that include public meeting chambers, administrative offices, and records storage. The lower level houses the police station, which includes secured access, detainee processing and confinement, training rooms, fitness area, locker rooms, evidence processing and storage, and offices. The facility was designed with full sprinkler system that includes a pre-action system in file storage areas, as well as a clean agent system for the evidence and storage rooms. HVAC systems include a variable refrigerant flow (VRF) system for general heating and cooling along with a dedicated outdoor-air system (DOAS) for energy recovery and ventilation and a high-efficiency gas-fired boiler serving radiant flooring at the upper level, high-bay spaces, as well as unit heater and baseboard heating. Electrical systems include high efficiency LED lighting fixtures with occupancy and daylight controls systems, technology and audio-visual infrastructure, secured access, monitoring and fire detection and alarm, and emergency stand-by power systems backing up the entire police station level, server rooms, and selected functions of the administration level. Infrastructure was also provided for a future photovoltaic panel array that the Township will look to eventually incorporate into the building's functionality.

West Campus Parking Structure

The Pennsylvania State University

University Park, PA

PROJECT DETAILS

Project Area
48,000 sq. ft. (Building)
10 Acres (Site)

Construction Cost
\$56.7 million

Completion Date
May 2021

OWNER

Kurt. H. Coduti, PE
Penn State University
814-863-4960

PROJECT MANAGER

Richard I. Koval, PE, LEED AP
Barton Associates, Inc.
814-237-2180
rik@ba-inc.com



Barton provided mechanical, electrical, plumbing and architectural lighting services to construct a new parking structure supporting Penn State's expansion of West Campus. The new parking structure accommodates approximately 1,670 parking spots and supports nearly 80,000 square feet of future photovoltaic panels to generate electricity for the campus. The project also included extensive modifications to the existing White Course Drive which has been extended to connect the new parking structure to Atherton Street, a main transportation artery for both the campus and town. In addition, seven new crosswalks, multiple pedestrian walkways, a bus loop, and drop-off loop are planned for the site. Lighting played an important role in the success of these site amenities. Campus standard LED site lighting fixtures were employed to anchor the aesthetics to the heart of campus while careful consideration was given to the lighting levels in areas of high vehicular-pedestrian interaction. Minimization of light trespass on adjacent properties and elimination of glare sources for both motorists and pedestrians were also two high priority goals for the overall site lighting design.

New Parking Garage

Penn State Health Milton S. Hershey Medical Center

Hershey, PA

PROJECT DETAILS

Project Area
400,000 sq. ft.

Construction Cost
\$35 million

Completion Date
February 2020

OWNER

Keith Sunderman
Penn State Commonwealth
Services
814-865-1331

PROJECT MANAGER

Eric P. Sellers, PE, CPD
Barton Associates, Inc.
717-845-7654
eps@ba-inc.com



Barton provided mechanical, electrical and plumbing design services for a new 1,200 space 400,000 square-foot parking garage on the Penn State Health Milton S. Hershey Medical Center campus. The new parking structure provides for planned growth and replaces parking lost to building expansion and construction and is built on an existing ground-level parking lot adjacent to the University Fitness Center. A new loop road provides convenient access to that garage, as well as the west side of campus and the planned Penn State College of Medicine Innovation Pavilion. The unenclosed garage includes a dry standpipe fire protection system, hose stations for deck wash down, and heating/ventilation for the stair towers and elevator lobbies. An emergency generator provides back-up power to the life safety systems, lighting, and elevators.





Atlantic Engineering Services MEP/FP





STRUCTURAL FIRM OVERVIEW

Atlantic Engineering Services (AES) provides structural engineering consulting services throughout the United States. Established in 1986, AES is widely respected for its expertise and services, and is located in Pennsylvania, West Virginia, and Florida. Our clients benefit from proactive, skilled engineers engaging other disciplines and sharing regional experience.

Synergy, creativity, and timeliness are the principles that drive our firm. Continuous interaction between designers and field observers ensures that your design's intent can be accurately translated and properly executed, and specialized BIM technology enriches collaboration between A/E/C firms, fabrication facilities, and other consultants for any type of project, regardless of its complexity or difficulty.

For our clientele, every project has required more than efficient structural support. Depending on the client and their surrounding community, we have helped facilities remain operational during construction, expedited steel design and fabrication services for fast-tracked projects, and implemented droning services to improve visual access.

Most importantly, our professionals listen. For every project our engineers digest everything that is most important to the owners, the goals of the design team, and input from other vital sources to develop structural options that fit your design's framework. We become invested in your goals, crafting ours around the visions and needs provided to us.

Professionals at our firm enjoy what they do and so they do it well, dedicated to producing lasting structures where people can live, work, play, learn, heal, worship, and more. At AES, we take great pride in **bringing architectural visions to life.**

650 aggregate years of structural design experience **\$17** billion in total construction costs **30,000+** total projects

this many clients have returned for this many projects 100s / 10 25 / 100 8 / 200 1 / 500

INDUSTRIES

assisted living civic clubhouse commercial federal + municipal film industry healthcare
higher education historic preservation hospitality industrial + energy
k-12 education marina multi-family museum + library
parking + transportation residential retail

adaptive reuse constructability reviews BIM
cold-formed steel concrete delegated design design-build
elements & connections facade & cornice forensic engineering
historic restoration military facility design specialized medical equipment steel designs
surveys + inspections sustainability tilt-up unmanned aerial services wood framing + design

SERVICES

TESTIMONIAL

Michael J. Cain, Project Executive @ MASCARO CONSTRUCTION COMPANY

"AES performed all of the structural engineering and structural detailing for the project and performed these services in an exemplary fashion. Mascaro has worked with AES on many signature projects since the early 1990's in every instance... AES proved to be extremely professional, cooperative and a true pleasure to work with. I certainly would not hesitate to use AES's professional design services on any project and I look forward to working with them again soon."

bringing architectural visions to life // aesps.com

412.321.4901; mjcain@mascaroconstruction.com



RENOVATIONS & PARKING

RELEVANT EXPERIENCE

Atlantic Engineering Services (AES) has provided structural engineering services for a long list of renovation projects across the United States since 1986. Below is a sample listing of related projects:

- 21c Museum Hotel Cincinnati / Cincinnati, OH
- Ace Hotel / Pittsburgh, PA
- Allegheny County Family Courts (Formerly County Jail) / Pittsburgh, PA
- August Wilson House / Pittsburgh, PA
- Barnett National Bank Building / Jacksonville, FL
- C. H. Campbell Elementary School / Canfield, OH
- Carnegie Museums, Dinosaurs in Their Time / Pittsburgh, PA
- Casa Monica / St. Augustine, FL
- Cowford Chophouse / Jacksonville, FL
- Dickson Tavern / Erie, PA
- Drury Plaza Hotel, Pittsburgh Downtown / Pittsburgh, PA
- Energy Innovation Center / Pittsburgh, PA
- Heinz Lofts / Pittsburgh, PA
- Market Square Place / Pittsburgh, PA
- MuseumLab / Pittsburgh, PA
- Senator John Heinz History Center / Pittsburgh, PA
- Schenley Apartments / Pittsburgh, PA
- Uber Advanced Technology Center / Pittsburgh, PA
- Union Trust Building / Pittsburgh, PA
- West Virginia University, Oglebay & Ming Hsieh Halls / Morgantown, WV

Our firm additionally has long list of completed parking facility projects across the United States. Below is a sample listing of related projects:

- Allegheny Center Mall, Parking Garage / Pittsburgh, PA
- University of North Florida, Parking Deck Foundations / Jacksonville, FL
- USX Tower, Parking Garage / Pittsburgh, PA
- Gateway Center, Garage Renovations / Pittsburgh, PA
- 3rd Avenue Garage, Expansion / Pittsburgh, PA
- Jeannette District Memorial Hospital, Parking Garage / Jeannette, PA
- First Union Bank, Parking Deck Expansion / Jacksonville, FL
- Ohio Valley Hospital, Parking Garage Rehabilitation / Steubenville, OH
- Barnett Regency Tower Bank, Parking Garage Rehabilitation / Jacksonville, FL
- Allegheny General Hospital, James Street Garage - Rehabilitation / Pittsburgh, PA
- Trinity Medical Center, East Parking Garage / Steubenville, OH
- Smithfield-Liberty Garage, Helix Ramp Rehabilitation / Pittsburgh, PA
- Harmarville Rehabilitation Center, Parking Garage / Pittsburgh, PA
- West Newton Parking Garage / West Newton, MA

bringing architectural visions to life // aespi.com





KDM Cost Consultants



Daniel L. Moore, Lifetime LCPE

Project Estimator/Owner | KDM Consultants, LLC – www.kdmconsults.com



Brief Overview: After one year in college, Dan has spent all of his time in the construction industry on a full-time basis for the past 40+ years. He worked in the field for about five years before being promoted to Assistant Project Mgr./Estimator and later Vice President of Huffman Corp. During his 21 years working as Chief Estimator for BBL Carlton, LLC (a wholly owned subsidiary of BBL Construction Services – Albany NY) he also ran a satellite office for them for 19 years in Clarksburg, WV. Dan received both his original Certification in 1992 as a Certified Professional Estimator and later his Lifetime Certification in 2008 from the American Society of Professional Estimators – Nashville, TN. He spent a year researching and writing the test for Unit Masonry Assemblies for ASPE.

Assignment/Role: Owner – KDM Consultants, LLC

Experience: Dan has had experience in all levels of estimating including Design-Bid Build, Design Build, SD (Schematic Design), DD (Design Development) and CD (Contract Definitive) estimating. He has been the Chief Estimator/Risk Manager on projects in excess of 100 million dollars. He has estimated and project managed projects up in the 20+ million dollar range. He also has CM experience on numerous projects including the new West Virginia Power Single A Baseball Stadium in Charleston, WV. He was in business with and trained under a professional engineer as well as a fourth-generation general contractor who held a B.S. degree in Architecture from the University of Cincinnati and who also served in the Officer's Corp. of the Seabees.

Office Location: Clarksburg, WV

Education: Graduate South Harrison High School – Lost Creek, WV – Completed one year at Fairmont State College – Lifetime Certified Professional Estimator by the American Society of Professional Estimators

Experience:

Total - 05 Years with Huffman Construction Co
Total – 02 Years with McCanallen Corp.
Total – 02 Years with Huffman Corp. - VP
Total – 21 Years with BBL Carlton/Carlton, Inc.
Total – 13 Years as KDM Consultants, LLC

Affiliated Organizations

American Society of Professional Estimators

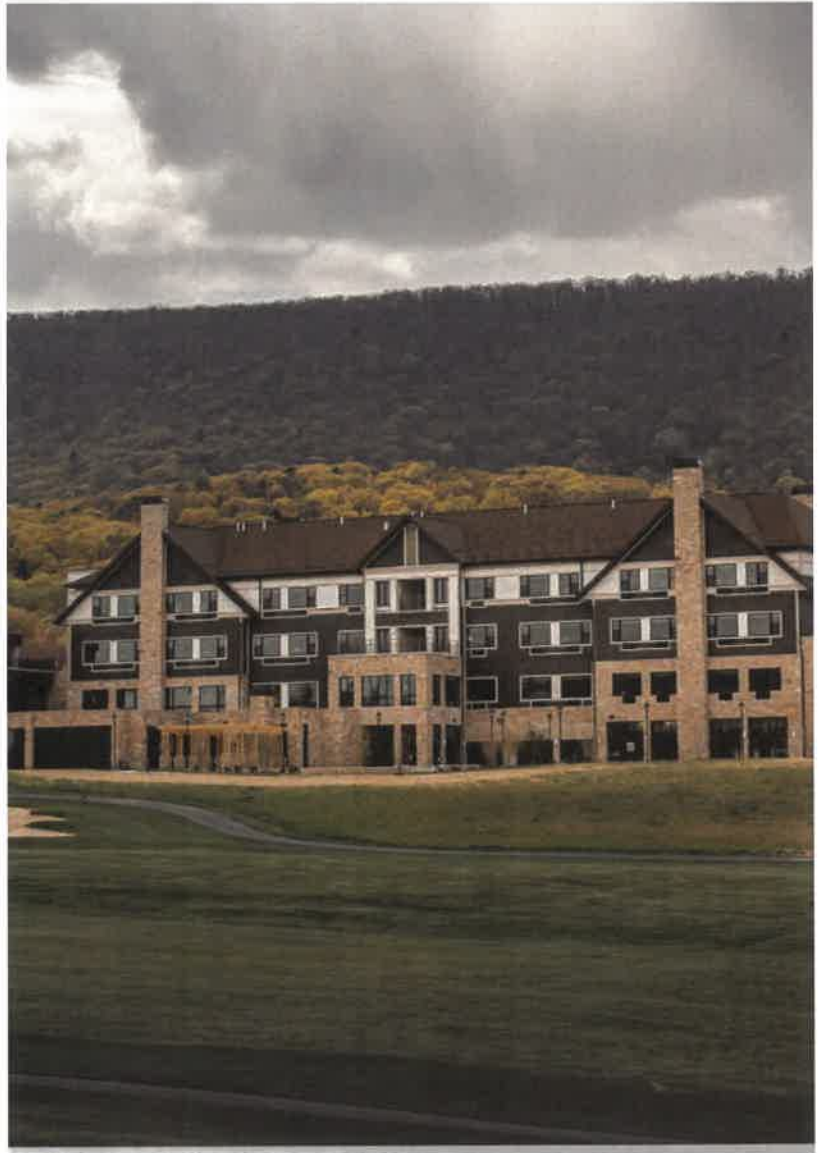
WV Chapter of AIA

Construction Employers Association of North Central WV, Inc.

Harrison County Chamber of Commerce



Practical Preservation Historic Preservation





PRACTICAL
PRESERVATION

AN INTRODUCTION

Practical Preservation specializes in the identification, documentation and evaluation of historic resources. Our staff has vast experience in Section 106 reviews, National Register Nominations, architectural surveys, historic tax credit evaluations, historic structure reports, grant writing and management as well as downtown revitalization.

Practical Preservation is a small, woman-owned business dedicated to documenting and preserving historic structures. Located in North Central West Virginia, Practical Preservation provides historic preservation consulting services throughout the United States. The team consists of the married duo of Sandra Scaffidi and John Pitman.

Practical Preservation remains a strong advocate for community revitalization and as such, donates 10% of profits each year to historic preservation efforts throughout the United States.

304-314-3773

www.Practical-Preservation.com



The Westmoreland County Redevelopment Authority and Land Bank received a grant from the Pennsylvania State Historic Preservation Office to conduct a reconnaissance survey of properties 50 years and older throughout downtown Greensburg to assess whether the original National Register Historic District could be expanded to incorporate additional buildings which were left out of the original survey due to their age. The survey included documenting each building within the district using the PASHPO's Surveyor App, then researching and proposing an expanded National Register Historic District boundary with additional documentation. Additionally, the grant required the drafting of Downtown Design Guidelines to help provide a roadmap to protect historic buildings.

This work aims to help guide future development and preservation efforts as is necessary to help revitalize the community. This survey identified basic information such as resource location, approximate date of construction, materials, function and details on the setting and significance. The team evaluated the resources using the NRHP Criteria of Evaluation.

The Practical Preservation team researched the history of the City, composed a historic context and conducted a reconnaissance survey to document and evaluate over 200 resources. Additionally, the team composed a National Register nomination for an expanded historic district and composed Design Guidelines for the downtown.

Project: National Register Nomination and Design Guidelines

Location: Westmoreland County, Pennsylvania

Contact: Westmoreland County Redevelopment Authority and Land Bank

Phone or Email: blawrenc@co.westmoreland.pa.us

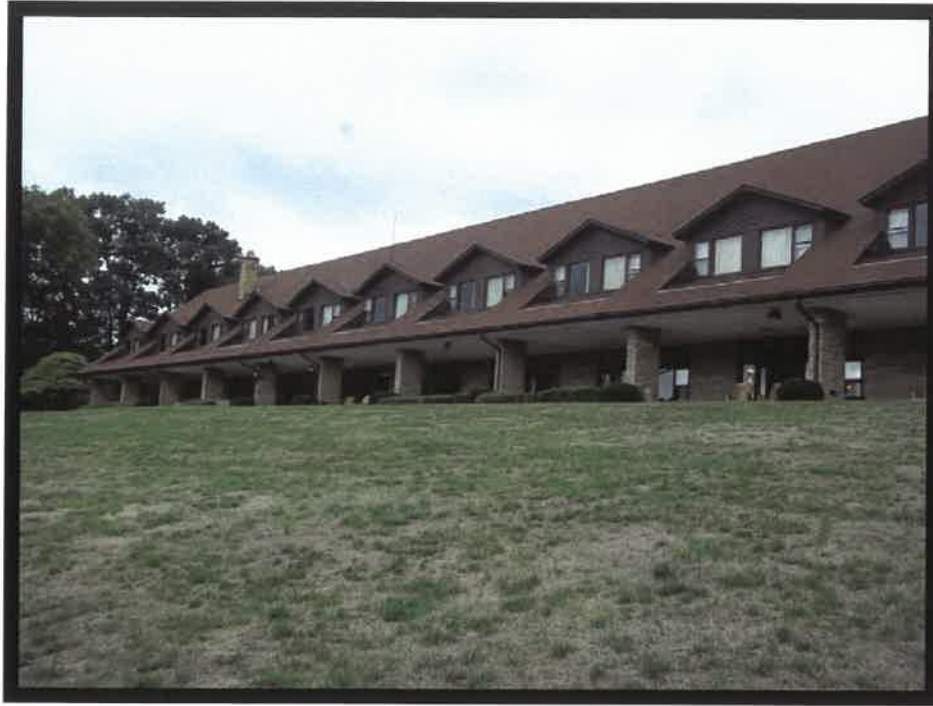


Bonafide Bellevue received a grant from the Pennsylvania State Historic Preservation Office to conduct a reconnaissance survey of properties 50 years and older throughout the Borough of Bellevue, Pennsylvania. The goal of the project was to identify and document historic resources within the region which may be eligible for listing on the National Register of Historic Places (NRHP).

This survey will help guide future master planning efforts as is necessary to ensure the continued preservation and revitalization of the community. This survey identified basic information such as resource location, approximate date of construction, materials, function and details on the setting and significance. This information was gathered using a GIS-based survey app then placed on a Pennsylvania Historic Resource Survey (PHRS) Form. The team evaluated the resources using the NRHP Criteria of Evaluation.

Practical Preservation also researched the history of the borough, composed a historic context and conducted a reconnaissance survey to document and evaluate over 2,300 resources. The resources were documented using the Pennsylvania State Historic Preservation Office Survey 123 program.

Project: Borough of Bellevue Historic Survey
Location: Allegheny County, Pennsylvania
Contact: Bona Fide Bellevue Board of Directors
Phone or Email: info@bonafidebellevue.org



Practical Preservation evaluated Cacapon Resort State Park for listing on the National Register of Historic Places. Once determined eligible, Practical Preservation staff assessed the potential effect of the WV Department of Natural Resources' proposal to construct an addition to the Lodge at Cacapon Resort State Park in Morgan County, WV.

The resulting document followed the guidelines set forth in the Code of Federal Regulations (CFR) in "Section 106 Regulations, Protection of Historic Properties" (36 CFR 800) as well as those set forth in the Code of State Regulations (82 CSR 2) for assessing the effects the proposed undertaking may have on National Register of Historic Places (NRHP) listed or NRHP eligible properties identified within the Area of Potential Effect (APE).

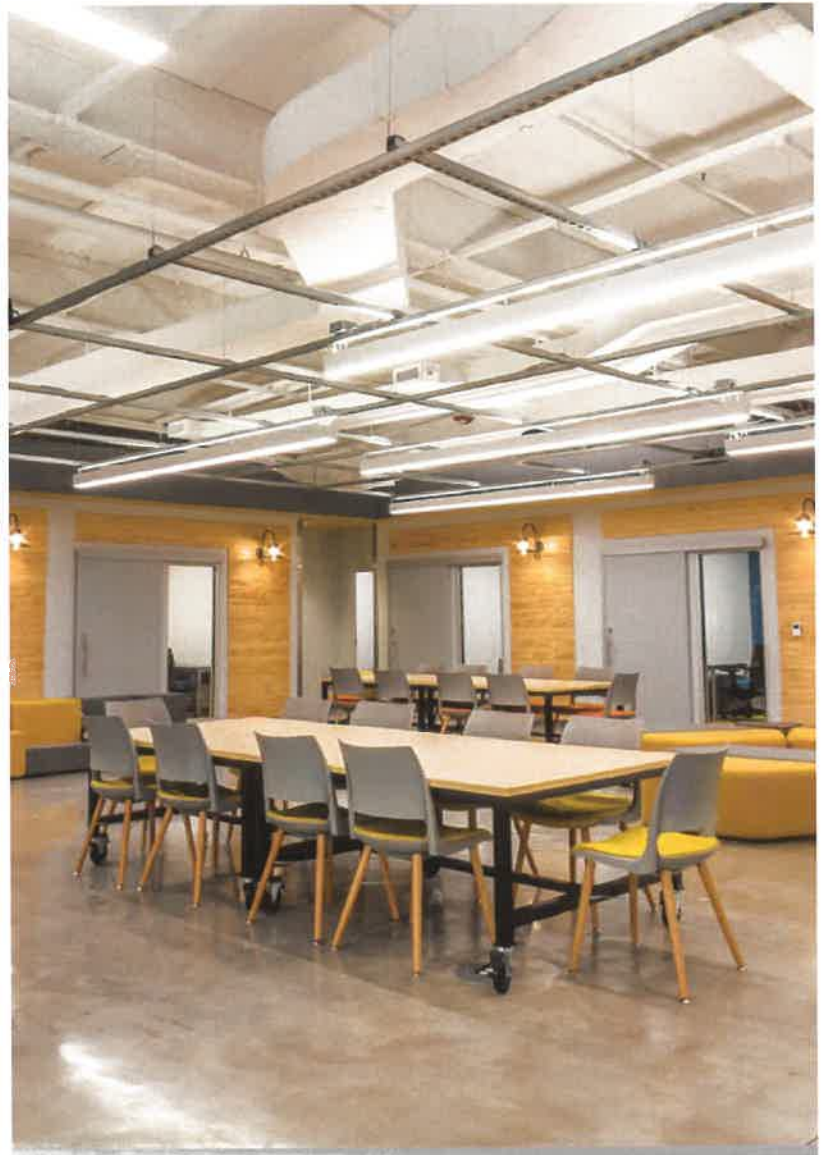
Potential project effects to the NRHP-eligible property within the APE were evaluated using the Criteria of Adverse Effect as outlined in 36 CFR 800.5. These criteria established that an adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that would qualify the property for inclusion in the NRHP in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling and association.

The proposed project was found to have an Adverse Effect on the Cacapon Resort State Park Lodge. Recommendations were made to mitigate the effect.

Project: Cacapon Resort State Park
 Location: Morgan County, West Virginia
 Client: Paradigm Architecture
 Contact: 304-284-5015



Executed Documents





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
 MS

VENDOR

Vendor Customer Code: 220792

Vendor Name : Paradigm Architecture, Inc.

Address : 2223 Cheat Road, Suite 300

Street :

City : Morgantown

State : WV **Country :** USA **Zip :** 26508

Principal Contact : Paul A. Walker, AIA

Vendor Contact Phone: (304) 284-5015 **Extension:** 1

FOR INFORMATION CONTACT THE BUYER

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

Vendor Signature X  **FEIN#** 63-1263568 **DATE** 21 February 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) Paul A. Walker, AIA, President

(Address) Paradigm Architecture, Inc., 2223 Cheat Road, Suite 300, Morgantown, WV 26508

(Phone Number) / (Fax Number) (304) 284-5015 / (304) 284-5014

(email address) pwalker@paradigm-arch.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.

Paradigm Architecture, Inc.

(Company)

(Signature of Authorized Representative)

Paul A. Walker, AIA, President - 21 February 2024

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

(304) 284-5015 / (304) 284-5014

(Phone Number) (Fax Number)

pwalker@paradigm-arch.com

(Email Address)