



Expression of Interest for A/E Services
Robert Shell Juvenile Center
 Security Enhancement Project

RFQ# DJS1600000001

February 11, 2016

02/12/16 10:57:23
 WU Purchasing Division



Original



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

State of West Virginia
 Centralized Expression of Interest
 02 - Architect/Engr

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2016-01-05	2016-02-11 13:30:00	CEOI 0621 DJS1600000001	1

BID RECEIVING LOCATION

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

VENDOR

Vendor Name, Address and Telephone Number:

FOR INFORMATION CONTACT THE BUYER

Crystal Rink
 (304) 558-2402
 crystal.g.rink@wv.gov

Signature X

FEIN # 55-0676608

DATE 11 FEB 2016

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

CERTIFICATION AND SIGNATURE PAGE

By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

ZMM, Inc.

(Company)

ADRK ADM R. KRASON PRINCIPAL

(Authorized Signature) (Representative Name, Title)

304.342.0159 ; 304.345.8144 ; 11-FEB-2016

(Phone Number) (Fax Number) (Date)

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: CEIO DJS1600000001

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

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

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

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

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

ZMM, Inc.
Company

[Signature]
Authorized Signature

11. FEB. 2016
Date

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

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

MANDATE: Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

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

DEFINITIONS:

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

"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

"Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceeds five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (W. Va. Code §61-5-3) that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

WITNESS THE FOLLOWING SIGNATURE:

Vendor's Name: ZMM, Inc.

Authorized Signature: [Signature] Date: 11 FEB 2016

State of West Virginia

County of Kanawha, to-wit:

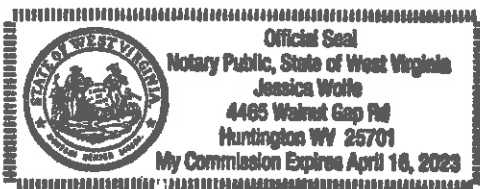
Taken, subscribed, and sworn to before me this 11 day of February, 2016.

My Commission expires April 16, 2023.

AFFIX SEAL HERE

NOTARY PUBLIC

[Signature]
Purchasing Affidavit (Revised 07/01/2012)





February 11, 2016

Ms. Crystal Rink, Senior Buyer
Department of Administration, Purchasing Division
2019 Washington Street, East
P.O. Box 50130
Charleston, West Virginia 25305-0130

**Subject: Expression of Interest – A&E Services for Security Enhancements for Robert Shell
Juvenile Center, Division of Juvenile Services - DJS160000001**

Dear Ms. Rink:

ZMM Architects and Engineers is pleased to submit the attached information to demonstrate our experience and our qualifications to provide professional architectural and engineering services for Security Enhancements to the Robert Shell Juvenile Center. Established in 1959, ZMM is a Charleston based, full service A/E firm, and is noted for design excellence and client focus. ZMM has an extensive portfolio of juvenile center and correctional facility design, and has provided design services for more than twenty (20) facilities throughout the state, with a total construction cost exceeding \$200M. This design experience includes the original design of the Robert Shell Juvenile Center. Additionally, our integrated design approach makes ZMM unique among design firms in West Virginia, and will help to ensure the quality of the services that we will provide.

We are confident that our experience designing multiple juvenile centers for the West Virginia Division of Juvenile Services, including the recent project at the Donald Kuhn Center that implemented a very similar scope, as well as our recent experience providing design and construction administrative services in operational correctional facilities will make ZMM the ideal partner for this project. ZMM is uniquely qualified to provide professional design services for the Security Enhancements for the Robert Shell Juvenile Center for the following reasons:

- **Experience Designing Juvenile Centers.** ZMM has provided design services for the Robert Shell Juvenile Center, the J.M. “Chick” Buckbee Juvenile Center, the James H. “Tiger” Morton Juvenile Center, the Gene Spadaro Juvenile Center, , the Vickie Douglass Juvenile Center, and the Davis Center. Additionally, ZMM Architect and Principal Adam Krason, AIA, participated on the team that designed the renovations and additions to the Lorrie Yeager Juvenile Center and Sam Perdue Juvenile Center. The depth of our experience with the juvenile centers will ensure the quality of the design, and also allow ZMM to expedite the design phase of the projects.
- **Experience Renovating Operational Detention and Correctional Facilities.** ZMM Architects and Engineers has significant experience renovating operational juvenile centers, jails, and correctional facilities. Our proposed team for this project includes Mr. Adam Krason, Mr. Rodney Pauley, Mr. Bob Doeffinger, Mr. Hank Walker, and Mr. Scot Casdorff. This team has worked on previous successful renovation projects to West Virginia Juvenile Centers and the West Virginia Regional Jails.

- **Proximity.** All of the design professionals providing services on this project will be located out of our office in Charleston. Our ability to provide integrated design services, as well as our ability to have regular access the Robert Shell Juvenile Center, will lead to an improved design and construction process for the West Virginia Division of Juvenile Services.

Thank you for taking the time to review the attached expression of interest which includes our recommended project approach, as well as information regarding the history, services, personnel, experience, and qualifications of ZMM Architects and Engineers. Additionally, please visit our website at www.zmm.com to see the full range of projects that we have designed, and to learn about working with ZMM from a client's perspective. We appreciate your consideration for this important assignment, and look forward to continuing our work for the Division of Juvenile Services.

Respectfully submitted,
ZMM, Inc.

A handwritten signature in black ink, appearing to read 'A R K', is written over a horizontal line.

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

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Project Approach and Methodology

Goal/Objective: To enhance the physical security at the Robert Shell Juvenile Center by adding security cell doors and locks, sally ports and fencing upgrades.

ZMM will review with the Division of Juvenile Services all new security requirements that must be met. ZMM will review all existing conditions (based upon the original drawings prepared by ZMM) to determine which doors need to be upgraded to meet the new security requirements. Some new security vestibules or sally ports may need to be created to control access in and out of the secure areas. Some doors will need to be replaced with more substantial or more secure doors. Electric locks will need to be added or upgraded to control access through various areas of the facility. Intercom upgrades or additions will need to be provided along with the security doors. All the new and existing control devices will be compatible with an upgraded security control system with new monitors and controls in the central control room. All the required new wiring will need to be routed as much as possible in concealed areas. ZMM's existing knowledge of the building will be utilized in identifying the most ideal way to route the wiring. Any changes or upgrades of material required to implement the security upgrades will need to be addressed. Exterior areas will also need to be addressed with upgrades to the security fencing system along with appropriate lighting and video surveillance upgrades. A project similar to this has previously been successfully completed for the West Virginia Division of Juvenile Services at the Gene Spadaro Juvenile Center.

Goal/Objective: To determine a plan to be implemented that will minimize the disruption to the daily operation of the facility.

This project can be completed while minimizing disruption to the daily operation of the facility by first establishing what time of the day each portion of the building is least utilized. By dividing the project up into stages, the project can be implemented with pre-determined sequences of construction with work hours identified for each area that cause the least disruption. There will also need to be a daily coordination with the facility staff to minimize conflicts. This sequence and timing of construction will be presented to all the contractors as bidding parameters. This process has been used successfully on numerous projects including the recent improvements to the Gene Spadaro Juvenile Center and numerous renovation projects at West Virginia Regional Jails. Our experience renovating operational juvenile centers and jails will be a direct benefit to the West Virginia Division of Juvenile Services. In addition to the Spadaro Center, this recent experience includes work at the Donald R. Kuhn Juvenile Center and the Sam Perdue Juvenile Center.





LOCATION:
222 Lee Street, West
Charleston, WV

CONTACT:
Phone 304.342.0159
Fax 304.345.8144
www.zmm.com

History of ZMM



ZMM was founded in 1959 in Charleston, West Virginia by Ray Zando, Ken Martin, and Monty Milstead. Since the inception of the firm, ZMM has been dedicated to providing an integrated approach to building design for our clients. ZMM delivers this integrated approach by providing all building related design services, including architecture, engineering (civil, structural, mechanical, and electrical), interior design, and construction administration from our office in Charleston. Our integrated design approach makes ZMM unique among architectural firms in West Virginia, and helps to ensure the quality of our design solutions by providing more thoroughly coordinated construction documents.

Over the last decade, ZMM has become a leader in sustainable or 'green' design in West Virginia. In addition to participating in sustainable design and construction seminars throughout the State (Beckley, Fayette County, Morgantown, Charleston, and Parkersburg), ZMM designed one of the first sustainable educational facilities in West Virginia (Lincoln County High School). ZMM's unique design approach has proven invaluable on projects that employ sustainable design principles, which often require a more integrated approach to building design.

As ZMM enters our second half-century providing professional design services in West Virginia, we remain committed to the ideal of providing high quality, client focused, design solutions that meet budget and schedule requirements. This commitment to quality has been recognized through both State and National design awards, as well as through the long-term client relationships that we have developed.



ZMM has been dedicated to the integrated approach to building design which is unique to architectural firms of our size. Our past successful experience demonstrates that providing multi-disciplined services within one organization results in a fully coordinated project. ZMM has the qualified professionals available to provide services throughout the duration of a project from the initial planning phases through post-occupancy evaluations and beyond.

Advantages of an integrated Design Approach:

- The Owner has a Single Point of Design Responsibility
- Improved Design Schedule
- Improved Coordination of Documents
- Improved Construction Phase Services
- Well Coordinated Documents Lead to Better Bids for the Owner

Additionally, ZMM is constantly working to improve the services we offer by addressing emerging and evolving trends that impact the design and construction market. ZMM has seven LEED accredited Professionals on staff to address the needs of our clients who are interested in designing buildings that meet the US Green Building Council's standards. This continues ZMM's active implementation of sustainable design principles on our projects.

Services

Pre-Design

- Educational Facility Planning
- Programming
- Space Planning
- Feasibility Studies
- Existing Building Evaluation
- Site Evaluation and Analysis
- Master Planning
- Construction Cost Estimating

Design

- Architectural Design
- Sustainable Design
- Interior Design
- Landscape Architecture
- Structural Engineering
- Mechanical Engineering
- Electrical Engineering
- Civil Engineering
- Lighting Design
- Energy Consumption Analysis

Post Design

- Construction Administration
- Value Engineering
- Life Cycle Cost Analysis
- Post-Occupancy Evaluation



Award Winning Design



2015

AIA West Virginia Chapter: Honor Award
Achievement in Architecture in Sustainable Design
Edgewood Elementary School
Charleston, West Virginia

AIA West Virginia Chapter: Merit Award
Achievement in Architecture
Kenna Pk-5 School
Kenna, West Virginia

2014

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

AIA West Virginia Chapter: Merit Award
Achievement in Architecture
Southern West Virginia Community & Technical College
Williamson, West Virginia

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

2012

AIA West Virginia Chapter: Honor Award
Excellence in Architecture
West Virginia Housing Development Fund Building
Charleston, West Virginia

2011

AIA West Virginia Chapter: Honor Award
Excellence in Architecture in Historical Preservation
Southside Elementary/Huntington Middle School
Huntington, West Virginia



Additional Award Winning Design



AIA West Virginia Chapter: Honor Award
Excellence in Architecture
Joint Interagency Training & Education Center
Kingwood, West Virginia

AIA West Virginia Chapter: Merit Award
Excellence in Architecture in Interiors
WV State Office Building #5, 10th Floor Renovation
Charleston, West Virginia

2010
AIA West Virginia Chapter: Honor Award
Excellence in Architecture
Hacker Valley PK-8 School
Hacker Valley, West Virginia

2009
AIA West Virginia Chapter: Merit Award
Excellence in Architecture
Construction & Facilities Management Office (CFMO)
Charleston, West Virginia

2008
AIA West Virginia Chapter: Honor Award
Excellence in Architecture
Erma Byrd Center
Beaver, West Virginia

2007
AIA West Virginia Chapter: Honor Award
Excellence in Architecture
Lincoln County High School
Hamlin, West Virginia

2006
AIA West Virginia Chapter: Merit Award
Excellence in Architecture
Gene Spadaro Juvenile Center
Mt. Hope, West Virginia



Adam R. Krason, AIA, NCARB, LEED AP



Role

Principal

Professional Registrations

Registered Architect (WV, OH, KY, VA)

LEED Accredited Professional

NCARB (55,984)

Construction Specifications Institute (CSI)

Construction Documents Technician (CDT)

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

Mr. Krason has been an advocate of sustainable design in West Virginia, participating in a variety of sustainable design seminars throughout the State, and serving on the West Virginia School Building Authority Green Schools Sub-Committee. Recently, Mr. Krason helped coordinate the "Making the Business Case for Sustainability" conference at the University of Charleston that included speakers from Armstrong Industries, American Electric Power, CB Richard Ellis, and Interface Raise. Mr. Krason also assisted Habitat for Humanity Kanawha and Putnam County develop a commercial recycling program to fill a void in the sustainable design infrastructure in West Virginia. Mr. Krason has noted that, "I became a LEED Accredited Professional because I believe that good design has value, and the ability to impact our daily lives. Sustainable design showcases the value of design through demonstrated improvements in the performance of the students and employees who occupy our buildings." In addition to his design and project management responsibilities, Mr. Krason serves on the Board of Directors and is responsible for business development at ZMM.

Project Experience

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

Mr. Krason was responsible for the programming, architectural design, and project management of the office expansion. The project included the renovation and addition to an existing pre-

Education

Bachelor of Architecture, The Catholic University of America, 1998

Bachelor of Civil Engineering, The Catholic University of America, 1997

Employment History

2007 - Present, Principal, ZMM

2007 - Present, Board of Directors, ZMM

2003 - Present, Architect, Project Manager, ZMM

1998 - 2003, Architect, Project Manager, Charleston Area Architectural Firm

Civic Affiliations

- American Institute of Architects, Member
- Habitat for Humanity Kanawha & Putnam County, Board of Directors 2011 - 2014
- WV Qualification Based Selections Council, President, 2012/2013
- Leadership WV 2010 - 2012
- Charleston Rotary
- West Side Main Street, Board of Directors 2008 - 2014
- City of Charleston Land Trust 2008 - 2014

engineered metal building. The design, which was honored with a 2009 AIA Merit Award, focused the client's resources on a new entry and corridor that separated the existing office space from the addition.

Morgantown Readiness Center (WVARNG), Morgantown, WV Mr. Krason was the Project Architect on the new Morgantown Readiness Center. This facility is a unique due to its location on an abandoned airport runway at the Morgantown Municipal Airport. The 54,000 SF Readiness Center occupies a 35 acre tract at the airport. This center supports traditional military functions including the 1-201st Field Artillery. A significant portion of the Morgantown Readiness Center supports the 249th Army Band. The Readiness Center contains a performance hall, pre-function spaces, as well as a variety of training and rehearsal areas.

Charleston Civic Center, Charleston, WV

Mr. Krason is serving as Principal-in-Charge of the expansion and renovation to the Charleston Civic Center. The \$75M, 283,000 SF design-build project is being completed as a collaboration with tvsdesign and BBL Carlton. Mr. Krason is responsible for the overall management of the design team, coordination with the client, and also has input critical project management decisions. The design commenced in the spring of 2015, and construction is scheduled for completion in 2018.

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

Mr. Krason led an architectural and engineering team that completed a detailed assessment of State Office Buildings 5, 6, & 7. Once the assessment was complete, ZMM had the opportunity to implement the proposed improvements on the 10th Floor of State Office Building #5 for the Office of Technology. The renovations, aiming for LEED-CI Certification, re-oriented the layout by drawing all private offices into the building core, providing access to daylight and views for all employees. The design also utilized acoustical ceiling clouds and bulkheads to maximize the acoustical performance, while also increasing the volume of the space.

Joint Interagency Training & Education Center (WVARNG), Kingwood, WV Mr. Krason was responsible for the preliminary programming, and participated in the schematic design of the 180,000 SF addition to the Regional Training Institute at Camp Dawson. Mr. Krason was also responsible for managing the production effort for the billeting (hotel) expansion, which increased the total billeting capacity at the JITEC to 600 rooms. The project received LEED Gold Certification.

Bridgemont Community and Technical College - Davis Hall Renovation, Montgomery, WV

Mr. Krason led an architectural and engineering investigation into the condition of Davis Hall to help Bridgemont Community and Technical College to develop a scope for the current renovation project, as well as a plan to undertake deferred maintenance at the facility. The project scope included remedying several life safety deficiencies, as well as improvements to the building envelope.

Other Firm Experience:

Mr. Krason has participated on the team that designed the renovations and additions to the Lorrie Yeager Juvenile Center and Sam Perdue Juvenile Center.

Participated on the team that won the following awards and acknowledgements:

2015 WV AIA Merit Award *Edgewood Elementary School, Charleston, WV*

2014 WV AIA Merit Award *Girl Scouts of Black Diamond Council, Charleston, WV*

2011 WV AIA Honor Award *Joint Interagency Training and Education Center (JITEC), Kingwood, WV*

2011 AIA Honor Award *State Office Building #5, 10th Floor Renovation, Charleston, WV*

2009 AIA Merit Award *WVARNG Construction and Facilities Management Office, Charleston, WV*

Hank Walker, AIA, LEED AP



Role
Architect

Professional Registrations
Registered Architect (WV)
LEED Accredited Professional

Mr. Walker is responsible for overseeing the planning, design, and construction of a variety of types of building projects to meet the needs of the clients. Mr. Walker works with other in-house engineers and design professionals throughout the building process to provide a thoroughly integrated product. Mr. Walker also coordinates with various consultants, code officials, and government agencies to provide a quality building.

Mr. Walker has broad experience in scopes of both new and renovation projects throughout his years at ZMM.

Project Experience

Vicki V. Douglas Juvenile Center, Martinsburg, WV

Mr. Walker was the project architect responsible for the addition and renovation design of the 23 bed capacity juvenile center. Providing a secure facility with additional capacity meets the growing needs of the area. The original facility was quadrupled in size while leaving the original façade intact on two sides with the new addition wrapping around the remaining two sides.

West Virginia Regional Jail Authority

Mr. Walker has worked on numerous renovation projects of all 10 regional jails facilities across the state. All of these projects have been completed with the facilities remaining in continuous operation.

The Retreat at Glade Springs Resort, Daniels, WV

Mr. Walker was responsible for the design of a variety of townhouses assembled into a multi-unit building that fit into the hilly terrain of the site.

Blackwater Falls and Cacapon WV State Parks, Davis, WV

Mr. Walker was responsible for the design of additions to the existing historical lodge building for the two state parks. Mr. Walker incorporated new meeting rooms, elevator, pool and health spas into the existing lodge building and incorporated various renovations to existing buildings to make the buildings more usable for large groups.

Education

Bachelor of Science Architecture, 1973
The University of Cincinnati

Employment History

1979 - Present, Project Architect, ZMM
1977 - 1979, Designer, ZMM
1977, Designer, Holderby Engineering
1973 - 1976, City Planning, American Peace Corps, Iran

Civic Affiliations

- American Institute of Architects, Member
- West Virginia Society of Architects, Member
- Charleston Salvation Army advisory board 1990 – Present
- Advisory Board Chairman 1997 - 1998

Tackett Family Readiness Center (WVARNG), Charleston, WV Mr. Walker was responsible for the design of a two story building set on a sloped hillside. The new facility will provide a variety of offices and public spaces including a chapel, multi-purpose area, a lobby, and a lounge.

Alderson Federal Prison Camp - New Housing Units Mr. Walker was responsible for the design of two new 500 bed housing units. These units were constructed on the historical site of the first federal prison for women. The prison was in operation during the new construction of both housing units.

WV State Capitol Complex, Charleston, WV

Mr. Walker has worked on several renovation projects on the State Capitol Complex including: roof replacements, culture center gift shop, window replacements to buildings 5, 6, & 7, door and security project, and renovations to building #5, 10th floor - Office of Technology.

Barboursville Middle School, Barboursville, WV Mr. Walker was part of the design team that was responsible for designing a replacement building for the existing middle school. The design required that the new school building be built where the existing building was occupied on the same size. An existing large gymnasium was renovated and incorporated into the next education complex.

Braxton County Memorial Hospital, Gassaway, WV Mr. Walker has worked on a variety of additions and renovations projects at the hospital. The renovations and additions were completed on the emergency room floor, medical surgical, radiology, laboratory, and outpatient areas while the hospitals departments were kept in operation.

Awards and Acknowledgements:

Design Award Received from the Corps of Engineers for: The Stonewall Jackson State Park Facilities.

Mr. Walker received recognition in the *Charleston Gazette* Newspaper for his own home residence, which incorporated "passive solar" and other "Green" Design principals.

Rodney Pauley, AIA



Role

Project Manager

Professional Registrations

Registered Architect (WV)

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

Mr. Pauley began his career in 1992 with an architectural firm in Atlanta, Georgia, and for the next 12 years rose to the Associate level by designing and managing a wide variety of project types including educational, retail, historic renovation, medical, and entertainment, specializing in office and speculative office design.

From 2005 through 2010, he worked at a number of Atlanta firms designing and managing office, high-rise condominium, and hotel projects. In 2010, Mr. Pauley moved back to Charleston, WV, to take a project management position with ZMM where he supervises the design and production of military, correctional and higher education projects.

Project Experience

WV Division of Juvenile Service – Davis Hall (unbuilt)

Mr. Pauley was the project manager on the design team that prepared construction documents for the renovation to an existing juvenile corrections campus for women. The project scope included the demolition of two buildings, the interior renovation of the 6,800 SF education building, and a major reconstruction to the 10,000 SF gymnasium which includes two major additions for dining and living facilities. An entrance and parking area will be reconfigured to provide additional spaces, a sally port and perimeter security fencing.

Morgantown Readiness Center, Morgantown, WV

Mr. Pauley was the project manager for the 58,000 square foot multi-use facility which includes assembly rooms, kitchen and dining facilities, military supply storage as well as locker rooms. The building is also designed to house the 249th Army Band

Education

Bachelor of Architecture, University of Tennessee, 1992

Associate of Science, West Virginia Institute of Technology, 1986

Employment History

2010 - Present, Project Manager, ZMM
2008 - 2010, Project Manager, GA Firm
2006 - 2008, Project Manager, GA Firm
2005 - 2006, Sr. Project Architect, GA Firm
Jan. 2005 - Aug. 2005, Project Architect, VA Firm

Civic Affiliations

- American Institute of Architects, Member

and their associated practice and support spaces. This area is highlighted by a 150-seat auditorium and state-of-the-art main rehearsal stage. This project is aiming for LEED Silver Certification.

Valley Health Systems, Wayne, WV

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

Charleston Civic Center, Charleston, WV

Mr. Pauley is serving as project manager on the expansion and renovation to the Charleston Civic Center. The \$75M, 283,000 SF design-build project is being completed as a collaboration with tvsdesign and BBL Carlton. The design commenced in the spring of 2015, and construction is scheduled for completion in 2018.

Bridgemont Community and Technical College - Master Plan, Montgomery, WV

As part of an effort to provide overall Master Plan services to Bridgemont CTC, ZMM worked with various stakeholders to develop a Master Plan for Bridgemont's current and future facilities at the Tech Park. The Master Plan incorporated the need to develop a consistency between Bridgemont's Montgomery and South Charleston campuses, while also integrating the Bridgemont brand into the Park. The final design included planning for a new classroom and laboratory building adjacent to Building 704, across from the Advanced Technology Center. Signage, site circulation, parking, and campus amenities were also included in this planning process.

WVU Institute of Technology, Montgomery, WV

Mr. Pauley was the Project Manager responsible for owner coordination and construction document production for renovations to the Engineering Classroom Building at the WVU Institute of Technology campus in Montgomery, WV. The main project scope included various minor interior renovations to the existing 44,000 SF building in support of the Owner's replacement of the building's two elevators. Coordination was critical between ZMM, WVU, the owner's elevator supplier & installer and the WV Division of Labor.

WV Lottery Headquarters, Charleston, WV

Mr. Pauley is the Project Manager for a design team that is currently preparing construction documents for renovations to the existing WV Lottery Headquarters complex in Charleston, WV. Renovations to the existing 12-story office building include the demolition and reconstruction of three floors of tenant space and demolition and replacement of the existing roof along with various minor renovations throughout the office tower. The existing 5-story parking deck will undergo an extensive structural renovation, includes: replacing bearing pads, patch & repair of concrete members and the addition of waterproofing protection. The existing warehouse under the parking deck is being enlarged to provide additional storage space.

Beech Fork State Park, Lavalette, WV

Mr. Pauley was the Project Manager for new lodge and conference center at Beech Fork State Park. The facility will include guestrooms and other guest-only facilities in one area and public functions such as the restaurant, lounge, gift shop, and conference rooms in another area. All guestrooms offer a lake view, a 2-story atrium opens up each end of the lobby with curtain-wall glazing, and an indoor pool provides a transparent connection to the outdoors. A high-performance envelope was designed to eliminate thermal bridging and the potential for condensation.

Bridgemont Community and Technical College (Davis Hall, Building 704), Montgomery, WV

Mr. Pauley is the Project Manager for a design team that is currently preparing construction documents for the renovation to an existing 7-story, 77,000 SF educational building. The project scope includes remedying several engineering and life safety deficiencies, as well as architectural improvements to the building envelope.

Robert Doeffinger, PE



Role

Engineering Principal

Professional Registrations

Professional Engineer (WV, VA, PA, OH, TN, KY, NY, NH, ME, NC, SC, FL, NJ, GA)

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

After graduate school in Architectural Engineering, Mr. Doeffinger joined ZMM. He has 38 years design experience in mechanical and electrical systems for buildings. He has a broad range of engineering experience in education, industrial and manufacturing facilities, large retail, correctional and jails, office buildings, and military facilities.

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

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

Project Experience

West Virginia Army National Guard, Joint Interagency Training & Education Center (WVARNG), Kingwood, WV

Mr. Doeffinger was responsible for the mechanical engineering design of the 600 room billeting expansion to the Regional Training Institute at Camp Dawson. The project is aiming for LEED Silver Certification. The project is served by a 4 - pipe hot and chilled water system with an energy recovery ventilation system.

West Virginia Capitol Complex - Buildings #5, 6, & 7, Charleston, WV

Mr. Doeffinger was the Project Engineer for the in-depth analysis of Buildings #5,6,& 7 at the State Capitol Campus. The study included the preparation of as-built plans, as well as

Education

Master of Science Architectural Engineering, Pennsylvania State University, 1976

Bachelor of Science Mechanical Engineering, West Virginia University, 1973

Employment History

2010 - Present, President, ZMM

1976 - 2010, Vice President and Engineering Principal, ZMM

Civic Affiliations

- ASHRAE – Member of the Technical Committee Load Calculations Data and Procedures for 15 years, serving as chairman. Presently Chairman of the Research Subcommittee
- Advisory Board for the Department of Electrical Engineering Technology, Bridgemont Community and Technical College
- City of Pt. Pleasant, WV – 2nd Ward Councilman for 20 years

an analysis of all building systems, including: Life Safety; Vertical Transportation; Mechanical; Electrical; Data; Façade; Structure; and Roofing. The analysis also included a study related to potential hazardous materials in the facility.

Bridgemont Community and Technical College Davis Hall Renovation, Montgomery, WV Mr.

Doeffinger led an architectural and engineering investigation into the condition of Davis Hall to help Bridgemont Community and Technical College to develop a scope for the current renovation project, as well as a plan to undertake deferred maintenance at the facility. The project scope included remedying several life safety deficiencies, as well as improvements to the building envelope.

West Virginia Research, Education, and Technology – Building 704, South Charleston WV Mr.

Doeffinger is the engineering principal-in-charge of preparing a life safety analysis of the building as well as design services to improve the exterior façade of Building 704 at the WV Research, Education, and Technology Park. Building 704 had previously been utilized as a campus maintenance facility by Union Carbide and DOW Chemical.

West Virginia Regional Technology Park (WVRTP) - Building 740, South Charleston WV

Mr. Doeffinger is the engineering principal-in-charge of the new Steam Plant for Building 740. This project involves designing and constructing the Interim Steam Heating System throughout Building 740.

Building 770 Evaluation, South Charleston, WV

Mr. Doeffinger has worked with MATRIC to conduct a detailed assessment of Building 770 to help establish a budget for required improvements to the facility. ZMM's services included an investigation, assessment of the building condition including the building envelope, life safety issues, and engineering systems, as well as the development of conceptual plans for the lab areas. ZMM's assessment also included a detailed review of the building's current and future energy use. The energy consumption information helped to validate the payback of the proposed improvements.

WVRTP Steam Plant Analysis, South Charleston, WV

Mr. Doeffinger worked collaboratively with WVRTP staff and various consultants to develop an analysis of the efficiency of the Tech Park steam plant. Based upon the results of the analysis, the WVRTP decided to shutter the plant, resulting in a significant yearly savings.

Building 740 Steam Plant, South Charleston, WV

Mr. Doeffinger is working with West Virginia Heating and Plumbing to develop a steam plant for Building 740. The steam plant will include new steam (convertible to hot water) boilers for the facility. The project also includes a new four bay block building to house the steam plant. The system designed by ZMM meets the current needs, and also plans for future improvements to the facility.

The Plaza at King of Prussia, Pittsburgh, PA

One of the largest retail centers in the east. Mr. Doeffinger has performed engineering services for the past 20 years. The project consists of a 5,000 -ton chilled water plant and 1,500,000 cfm variable volume system for tenants and constant volume air system for common areas and an engineered smoke control system. The most recent project is a 2011, 100,000 square foot expansion of tenant spaces, a renovation of the food court, and a 1,250-ton chiller addition to the central chilled water plant.

NGK Oxygen Sensor and Spark Plug Plant, Sissonville, WV

Mr. Doeffinger was in charge of engineering design of the 250,000 SF NGK facility. The most recent 130,000 SF expansion moved NGK's spark plug production for the west coast to West Virginia. For both the oxygen sensor plant and spark plug plant Mr. Doeffinger designed a cycle water system for the manufacturing equipment.

Scot Casdorff, PE



Role

Electrical Engineer

Professional Registrations

Professional Engineer (WV, OH *pending*)

Mr. Casdorff serves as an Electrical Engineer with ZMM providing electrical design services for a vast number of projects consisting of commercial, educational, correctional, institutional, and military facilities.

Mr. Casdorff is responsible for many facets of the project pertaining to electrical design such as interior and exterior lighting, power distribution, data system design, security, fire alarm, low voltage control systems, equipment specifications and performs electrical assessments during construction prior to the project's substantial completion date. Mr. Casdorff has participated on several LEED registered projects using energy conserving methods and utilizing lighting control systems and other means to meet or exceed ASHRAE 90.1, LEED, and energy code requirements.

Project Experience

J.M. Chick Buckbee Juvenile Center, Romney, WV Mr. Casdorff was responsible for the electrical design of the maximum security juvenile detention center. The single story 26,000 SF facility houses intake, medical care, recreation, food service and offers educational programs to help rehabilitate young individuals.

Gene Spadaro Juvenile Center, Mt. Hope, WV Mr. Casdorff was responsible for the electrical design of the minimum security juvenile detention center which offers a softer approach to rehabilitation relying more on the affection from the caregivers than the restraints of lockdown helping young individuals make better life decisions.

Lakin Correctional Facility for Women, Lakin, WV Mr. Casdorff was responsible for the electrical design of a dormitory style expansion on site of an existing correctional facility built exclusively for women. The new 124 bed, 24,000SF dormitory style housing unit provides ample amenities and a culinary arts program for the inmate population. An additional 9,500 SF Correctional Industries building was located near the dormitory and offers a garment, sewing and embroidery factory and manufactures inmate clothing, linens and office chairs.

Education

Bachelor of Science, West Virginia
Institute of Technology, 1995

Employment History

2000 - Present, Electrical Engineer,
ZMM
1995 - 2000 Electrical Controls Systems
Manager, WV Engineering Firm

Jackson County Armed Forces Reserve Center, (WVARNG), Millwood, WV Mr. Casdorff was responsible for the electrical design of the 76,000 SF single story military reserve center which serves both the West Virginia Army National Guard and the United States Army Reserves (USAR) units. The multi-use facility provides educational spaces for classrooms, distance learning, physical training and a weapons simulation center. The project is targeted for LEED Silver Certification.

Glen Jean Armed Forces Reserve Center, (WVARNG), Glen Jean, WV Mr. Casdorff was responsible for the electrical design of the 102,000 SF military training facility which houses the Armed Forces Reserve Center (AFRC), Military Entrance Processing Station (MEPS), and an Organizational Maintenance Shop (OMS). The AFRC contains the administrative and training space for the 77th Brigade Troop Command, the 1863rd Transportation Company, and the 150th Armored Regiment Company. The MEPS houses their administrative, medical, headquarters, testing and storage functions at the facility. A comprehensive 8,500 SF OMS vehicle maintenance shop provides space for six large service workbays for maintaining the military fleet.

Southern WV Community & Technical College, Williamson WV Mr. Casdorff was responsible for the electrical power and lighting distribution design of this 22,000 SF higher education facility. This project is being designed to meet the USGBC LEED Silver.

Joint Interagency Education and Training Center (WVARNG), Kingwood, WV Mr. Casdorff was responsible for the electrical design of the 180,000 SF 3-story billeting/hotel expansion for the Army National Guard campus style facility for training and operational mission support. The expansion more than triples the facility size and increases the total capacity from 189 guest rooms to 600 guest rooms and suites. The project won LEED Gold Certification.

West Virginia Research, Education, and Technology – Building 704, South Charleston, WV Mr. Casdorff is the electrical engineer for building 704 and responsible for electrical power and lighting distribution. Building 704 had previously been utilized as a campus maintenance facility by Union Carbide and DOW Chemical. Bridgemont began utilizing the facilities for instruction in the Spring of 2011.

West Virginia Housing Development Fund Office, Charleston, WV Mr. Casdorff was responsible for the electrical design of the 37,000 SF office building which provides natural daylighting into its interior spaces coupled with an automatic dimming system and motorized shade controls. This 2-story administrative facility houses approximately 95 to 100 employees with a flexible open office floor plan utilizing modular under-floor wiring to accommodate any future modifications of the workspace with minimal disruption to the employees. The project is targeted for LEED Silver Certification.

Southside Elementary and Huntington Middle School, Huntington, WV Mr. Casdorff was the electrical engineer on this 156,000 SF facility. This project encompasses all phases of construction; demolition, major renovation and new construction. The original historic 26,000 SF three story school building was preserved and the remaining less than adequate facility was strategically removed to accommodate the new addition. The existing facility was completely renovated and brought up to new construction standards to blend with the new addition. The project consisted of two distinct school facilities existing on the same piece of property. The new construction blends seamlessly with the older historic structure.

Craigsville Elementary School, Craigsville, WV

Mr. Casdorff was responsible for the electrical design of the new elementary school. The project is consolidating Beaver Elementary School and Craigsville Elementary School into a new 375-student school. The school houses 3 Pre-Kindergartens, 3 Kindergartens, 2 first grade, 12 1st-5th grade classrooms, activity room, cafeteria, kitchen, media center, and administration spaces.

Lincoln County High School, Hamlin, WV Mr. Casdorff was responsible for the electrical power distribution throughout the 216,000 SF facility containing high school classes, vocational education, technical community college classes and a community health clinic. The project was a 2007 AIA Honor Award Winner.

Stephen Hedrick, PE



Role

Structural Engineer

Professional Registrations

Professional Engineer (WV)

Mr. Hedrick is responsible for overseeing the design of the Structural systems, ensuring that the structural systems not only meet the building code requirements, but meet the long-term needs of the owner. He performs the analysis and design of the structural components to resist the loads from lateral and gravity forces. He coordinates with the other disciplines in order to integrate the Structural system into the building, working with the architects to determine the most economical way to construct the components of the building. Mr. Hedrick has participated on several LEED registered projects. Mr. Hedrick also oversees the work of other engineers and coordinates the office structural standards.

Mr. Hedrick began his career in structural engineering by designing large scale residential and light commercial structures for hurricane force winds. He has a broad range of experience in masonry, concrete, steel and timber design. In 2007, Mr. Hedrick moved back to Charleston, WV, to take a structural engineering position with ZMM where he supervises the design and production of the structural engineering projects, as well as serving on the Board of Directors.

Project Experience

Jackson County Armed Forces Reserve Center, (WVARNG) Millwood, WV Mr. Hedrick was responsible for the overall structural design of the single story armory type structure. The project included the design of light weight metal trusses and long-span steel joists in the drill hall.

Charleston Civic Center, Charleston, WV

Mr. Hedrick is currently the structural engineer on the Charleston Civic Center expansion and renovation project. The \$75M, 283,000 SF design-build project is being completed as a collaboration with tvsdesign and BBL Carlton. The design commenced in the spring of 2015, and construction is scheduled for completion in 2018.

Wood County Justice Center, Parkersburg, WV

Mr. Hedrick was responsible for the structural design for this adaptive reuse project in Parkersburg WV. The existing 32,000 SF building will create a new Magistrate Court and a Sheriff's Department. The project received LEED Silver Certification.

Education

Master of Science, Civil Engineering,
University of Tennessee, 2003

Bachelor of Civil Engineering,
West Virginia Institute of Technology,
2001

Employment History

2013 - Present, Board of Directors, ZMM

2007 - Present, Structural Engineer,
ZMM

2003 - 2007, Structural Engineer, McCall
Engineering, Inc

Civic Affiliations

- American Institute of Steel
Construction, Member

Tucker County Courthouse Annex, Parsons, WV

Mr. Hedrick was responsible for the structural design for the courthouse annex addition in Parsons, WV. The Annex is a 4-story, 21,000 Square Foot building that is adjacent to the Tucker County Courthouse. The annex will house spaces for the Circuit Court, Circuit Clerk, Family Court, Magistrate Court, Prosecuting Attorney, County Commission, County Clerk, Community Corrections, and Probation Office.

Joint Interagency Training and Education Center (WVARNG) Kingwood, WV Mr. Hedrick was responsible for the overall structural design of the three story billeting addition. The project met the requirements of the building code along with the additional requirements of the Department of Defense for blast and progressive collapse resistance. This project won LEED Gold Certification.

Edgewood Elementary School, Charleston, WV Mr. Hedrick was involved with the structural design on the new Kanawha County Elementary School on Charleston's West Side. The school is being designed as a 21st Century Learning Environment, with a focus on integrating technology into the delivery of the curriculum. Instructional areas will be located off of an open 'exploratorium' that is being designed to function like a children's museum, providing a variety of learning opportunities, and flexible educational spaces. The school will also visibly integrate sustainable design principles to serve as a teaching tool for the students.

Huntington East Middle School, Huntington, WV Mr. Hedrick was responsible for the overall structural design of the single story school building. The design included masonry wall, metal panel walls and storefront glazing in order to allow additional light for the LEED designed project.

Kenna Elementary School, Kenna, WV

Mr. Hedrick was responsible for the structural design for the new Kenna Elementary School. The new school will serve approximately 375 students in grades Pre-Kindergarten through 5th Grade. The new facility replaces the existing school that was falling into disrepair and lacked the essential spaces for a thriving 21st Century learning environment. The site includes a separate bus drop-off area and parent drop-off area. There is also a designated Pre-K drop-off. A fenced Pre-K play area is provided, as well as a play area for the Grades 1-5. Several playing fields will be located on site as well.

West Virginia Housing Development Fund Building, Charleston, WV Mr. Hedrick was responsible for the overall structural design of the two story steel frame and masonry building. The structure consisted of a composite concrete floor slab supported by steel beams and columns supported on a deep pile foundation.

Bridgemont Community and Technical College (Davis Hall, Building 704), Montgomery, WV

Mr. Hedrick was responsible for the structural design for a design team that is currently preparing construction documents for the renovation to an existing 7-story, 77,215 SF educational building. The project scope includes remedying several engineering and life safety deficiencies, as well as architectural improvements to the building envelope.

Southern West Virginia Community and Technical College, Williamson, WV Mr. Hedrick was responsible for the structural design of the new 22,000 SF Applied Technology Center. The building featured large, flexible teaching areas that can adapt as the curriculum changes for each program. The project is targeting LEED Silver Certification.

Other Firm Experience:

Mr. Hedrick has researched and developed design criteria for structural insulated panels, prepared designs for earthquake and wind on FRP tanks. His role has also included supervising the work of design engineers in preparation of construction documents.

Mary Jo Cleland, PE



Role

Civil Engineer

Professional Registrations

Professional Engineer (WV)

Ms. Cleland is responsible for the site design for ZMM projects. She coordinates with the project architects and mechanical and electrical engineers to integrate the site layout with the building requirements. Ms. Cleland works with the client and the architect to plan the site circulation, parking, and green space. She is responsible for storm water management and utility layout. For sites with environmental concerns, Ms. Cleland coordinates with the appropriate agencies and assists in permit applications.

Ms. Cleland began her career as a 2nd Lieutenant in the US Air Force as a project engineer for aerospace projects. After serving four years in the Air Force, she moved back to West Virginia and began her career in civil engineering. She began assisting lead engineers at an environmental and engineering consultant firm with air quality permitting, utility extension projects, and site development projects. After gaining experience at the consultant firm, Ms. Cleland joined ZMM as the civil engineer for the firm. She has experience with urban and rural site, storm water management system, and site design.

Project Experience

Tackett Family Readiness Center, Charleston, WV

Ms. Cleland was responsible for site design for a two story building located on a hillside. Due to the existing slopes, several analyses to determine the optimal finished floor elevations of the building. The building was set into the hillside to allow for on-grade access to both entrances. The access road was design with handicap parking at both entrances. The client wanted the building to have the least impact as practical for the site development. A large segmental block wall was utilized to limit disturbance of cut slopes.

General Services Division – Surplus Property, Dunbar, WV

Ms. Cleland is currently the Civil Engineer on the Surplus Property. This property consists of a new 20,000 SF metal building storage facility inclusive of 5,000 SF of new administrative offices. The new building will replace the existing structures currently located in the floodplain, and will address several site issues including proper drainage, traffic flow, and correct floor elevations in regard to current floodplain

Education

Bachelor of Science in Education,
West Virginia State University, 2001

Bachelor of Science in Aerospace
Engineering, United States Naval
Academy, 1993

Employment History

2016 - Present, Board Member, ZMM
2009 - Present, Civil Engineer, ZMM
2002 - 2009, Project Engineer, Potesta &
Associates, Inc
1993 - 1997, Aerospace Engineer,
United States Air Force

Civic Affiliations

- National Society of Professional Engineers
- West Virginia Society of Professional Engineers

requirements. The demolition of the existing structures along with the new construction will be phased to maintain continuous operation of the facility.

Bridgemont (BrideValley) Community and Technical College - Master Plan, Montgomery, WV

Ms. Cleland is the Civil Engineer on the overall Master Plan services to Bridgemont CTC, ZMM worked with various stakeholders to develop a Master Plan for Bridgemont's current and future facilities at the Tech Park. The Master Plan incorporated the need to develop a consistency between Bridgemont's Montgomery and South Charleston campuses, while also integrating the Bridgemont brand into the Park. The final design included planning for a new classroom and laboratory building adjacent to Building 704, across from the Advanced Technology Center. Signage, site circulation, parking, and campus amenities were also included in this planning process.

Girl Scouts of Black Diamond Council, Charleston, WV

Ms. Cleland was the Civil Engineer on the new Volunteer Resource Center and Girl Zone/Urban Camp in Charleston, WV. The 18,000 SF project will completely renovate an old car dealership into administrative offices, a community gathering space, and a small hotel (Urban Camp) for Girl Scouts visiting the Charleston area. This new main building will bring all the operations of the Girl Scouts of the Black Diamond Council under one roof.

West Side Elementary School, Charleston, WV

Ms. Cleland was responsible for the site design and stormwater management for this site located within a city block. The site utilities were readily available and minimal grading was required for this site. The challenge was the stormwater management requirements. The pre-construction site conditions were a small school building and a large play field took up most of the site. The post- construction site conditions were the opposite creating a significant increase in stormwater runoff rate. A stormwater retention system was designed to infiltrate the majority of the stormwater and recharge the groundwater.

Edgewood Elementary School, Charleston, WV

Ms. Cleland was the Civil Engineer on the new Edgewood Elementary School. Ms. Cleland was responsible for the site development including utility extensions and relocations, stormwater drainage design, site pedestrian and traffic circulation, and parking area layout. The school was designed as a 21st Century Learning Environment, with a focus on integrating technology into the delivery of the curriculum. Instructional areas will be located off of an open 'exploratorium' that is being designed to function like a children's museum, providing a variety of learning opportunities, and flexible educational spaces. The school integrates sustainable design principles to serve as a teaching tool for the students.

Harts PK-8 School, Harts, WV

Ms. Cleland was responsible for site design and permitting. The site was constrained by the Guyandotte River, State Route 10, and an unmarked cemetery in the middle of the site. The site was laid out to avoid disturbance of the cemetery and create a building pad and access roads to satisfy the client, State Fire Marshall, and vehicular circulation. The site preparation package included building pad grading, rough site grading, and storm water management. Ms. Cleland coordinated with the local utility agencies, WV Department of Transportation, the United States Army Corps of Engineers, the local floodplain manager, and the WV Department of Environmental Protection.

Project Experience with Other Firms: Ms. Cleland assisted with site development projects, utility extensions, pump station design, outlet structure design, and wastewater treatment plant design prior to coming to ZMM. In the eastern panhandle of West Virginia, Ms. Cleland designed the site layout and utilities for a planned hill side community with phased development plans. She assisted on the site utilities and sanitary sewer extension project for a two schools in Southern West Virginia.

Ms. Cleland also has experience with environmental investigations and air quality permitting. She assisted industrial clients with preparation and assembly of air permit application to the West Virginia Department of Environmental Protection. Ms. Cleland coordinated with the agencies through to permit issuance.

Gene Spadaro Juvenile Center

West Virginia Division of Juvenile Services



LOCATION:
Mount Hope, WV

COST:
\$4.8M

COMPLETION:
2004

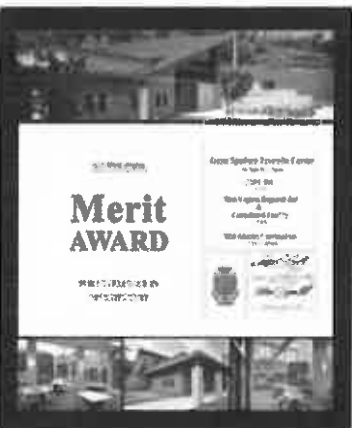
CONTACT:
Denny Dodson
Deputy Director
WV - Division of Juvenile
Services
304.558.9800



The **Gene Spadaro Juvenile Center**, located in Mount Hope, Fayette County, proved that the prototype concept can be flexible enough to accommodate a dramatic variation in programming. The "softer" approach to this minimum-security facility anticipates program funding through federal IV-E regulations, and relies on staff involvement for security rather than bars and hardware. Innovative color schemes were used to simulating variety in the spaces.

Completed in 2004, the building is constructed of load-bearing masonry walls with brick and natural stone veneer. Lighting was carefully designed to supplement natural sunlight and ensure comfortable lighting levels. Staff-secured programming required even greater levels of observation, communication, and control. Sleeping quarters resemble a more institutional feel, educating the youth to look at their future and to stay away from delinquency and crime.

This juvenile facility won the 2005 Merit Award for *Achievement in Architecture* for American Institute of Architects, West Virginia Chapter.



Vicki V. Douglas Juvenile Center

West Virginia Division of Juvenile Services



LOCATION:
Martinsburg, WV

COST:
\$4.7M

COMPLETION:
July 2006

Contact:
Denny Dodson
Deputy Director
WV - Division of Juvenile
Services
304.558.9800



The Vicki V. Douglas Juvenile Center is a 23 bed co-ed, staff secure, juvenile detention center located in Martinsburg, West Virginia. The original Juvenile Center was enlarged and completely renovated by ZMM to provide a secure facility with addition capacity and services to meet the growing needs of the area. The original Juvenile Facility was quadrupled in size while leaving the original façade intact on two sides with the new addition wrapping around the remaining two sides.

ZMM provided multiple class rooms, recreation and common areas for educational, behavioral, training, counseling and life skills activities in the enlarged facility. These activities are able to be observed and monitored by staff from a central control area. The construction of the new addition and renovation of the existing was phased to provide minimal interruptions with operation of the original facility.



Additional West Virginia Juvenile Centers



Contact:
Denny Dodson
Deputy Director
WV - Division of Juvenile
Services
304.558.9800



Following a very successful program of regional jail construction based on ZMM/CRA's prototype design, the West Virginia Regional Jail & Correctional Facility Authority awarded ZMM a contract to design a new prototype for juvenile detention facilities.

The original prototype has undergone several transformations, including a 2-story design and a prototypical staff-secured design. All of the versions of ZMM's juvenile center prototype are designed to allow safe and effective operation with a small staff.

The **Robert L. Shell Juvenile Center** will be constructed on a site just below the new **Western Regional Jail** in Barboursville, Cabell County, West Virginia. Nearly identical to the Gene Spadaro Juvenile Center, this new center will also use federal IV-E funding and houses minimum-security youth. This facility opened in late 2004.

The **J. M. "Chick" Buckbee Juvenile Center**, located near Romney, Hampshire County, was the first juvenile center bid under the new program of prototype facilities. This Juvenile Center opened in fall 2003, this single-story, 26,500 square foot building houses a complete program of intake, medical care, education, recreation, food service and administration.

The **James H. "Tiger" Morton Juvenile Center** was designed on the site of the old Kanawha Home for Youth in Dunbar, Kanawha County, West Virginia. Site constraints led to a 2-story variation of the prototype, housing 24 beds in a total building area of 29,000 square feet. This facility, the second of the prototype structures, and opened in late 2003.

Correctional Facilities

West Virginia Regional Jails



CONTACT:
Diana Johnson
WV Regional Jails
1325 Virginia Street, East
Charleston, WV 25301
304.558.2110



In 1990, the West Virginia Regional Jail and Correctional Facility Authority awarded the joint-venture team of ZMM/CRA a contract to design a prototype detention facility with the flexibility to meet the long range needs of 10 geographical regions in the State of West Virginia. The prototype building was designed as a 200 bed, 300 bed and 400 bed facility with the ability to add a 100 bed housing pod to each. All services required by the building were designed to accommodate the maximum population.

Unique to the design of the prototype jail is the ability of the staff to fully monitor all inmate movement within the corridor system of the building from a single central control location. The following systems were designed and installed: integrated security and PA system, closed circuit television, fire alarm system, door access control integrated with security system, cable television and perimeter security system.

The Southwestern Regional Jail - HVAC and Roof Replacement

Replacement of ballasted EPDM roofing, metal roofing system, walk pad system, flashing systems and HVAC equipment. Project was a standard design, bid and build project of 140,000 square foot facility and a bid price of \$1,498,000.00 to be completed in 2013

The **Central Regional Jail** in Flatwoods, Braxton County, WV, was the first of the prototype jails to be completed. It is a 200 bed medium/maximum security facility of approximately 100,000 SF

The **South Central Regional Jail**, second of 10 regional jails to be completed, is a 300 bed facility of 140,000 square feet located in the Southridge Business Park, Charleston, West Virginia.

Correctional Facilities *West Virginia Regional Jails*



The **Southern Regional Jail** is a 300 bed regional jail of approximately 133,000 SF. The jail has facilities for 96 maximum security inmates with the remaining housing units designed for medium security. This facility is located in Beckley, WV.

The **Northern Regional Jail and Correctional Facility** is a 400 bed combined regional jail and correctional facility of approximately 164,000 SF consisting of 200 beds used by the regional jail and 200 beds used by the West Virginia Department of Corrections. The regional jail section has facilities for 48 maximum security inmates with the remaining housing units designed for medium security. All housing units occupied by the Department of Corrections are medium security.

Located in Doddridge County, WV, the **North Central Regional Jail** is a 400 bed facility and was completed in 2001.

The **Western Regional Jail**, located in Cabell County, is a 400 bed facility and is scheduled for completion in 2003.

A 300 bed facility, the **Eastern Regional Jail**, is located in Martinsburg, WV and was completed in 1999.

Completed in 2000, the **Potomac Highlands Regional Jail**, is located in Augusta, Hampshire County, WV and is a 200 bed facility.

Correctional Facilities



CONTACT:
Steve Canterbury,
Administrative Director

Courts of West Virginia
Supreme Court of Appeals
Building 1, RM E-100
Charleston, WV 25305
304.558.0145



Prison Industries Facility - Northern Regional Jail and Correctional Facility - This 25,000 SF building is located at the Northern Regional Jail and Correctional Facility to serve the prison industries vocational education requirements of the Correctional Facility Division.

The building provides space for a mattress shop, print shop, vinyl notebook shop, and Braille shop in the industries area. Within the vocational education area, space is provided for automobile repair and woodworking. The building was completed on schedule and within the Owner's budget.

Denmar Correctional Facility - This project consisted of renovations to an existing 4-story hospital's toilet/shower system to accommodate a medium security facility for the West Virginia Department of Corrections.

Huttonsville Correctional Facility/100 Bed Dormitory - The 15,000 SF dormitory was designed as a minimum/medium security facility and was completed on schedule and within the Owner's budget.

Lakin Correctional Center for Women

The center opened in early 2003 as the first comprehensive state correctional facility for women. Located in Lakin, Mason County, this 225-bed facility houses medium and maximum-security female inmates in a building complex of over 153,000 square feet. The project included renovation of an existing building for education and indoor recreation. ZMM will also complete designs for a separate 124-bed dormitory for minimum security, as well as a correctional industries building, on the campus at Lakin.

Alderson Federal Prison Camp, Alderson, WV - ZMM provided architectural and engineering services for a major renovation of this women's federal correctional facility located in the Greenbrier River valley. This project includes extensive renovation of eighteen 1938 vintage buildings to current federal prison standards and increases the capacity to 1,269 inmates.

Construction & Facilities Management Office

WVARNG



LOCATION:
Charleston, WV

SIZE:
19,935 SF

COST:
\$3.5M

COMPLETION:
2008

CONTACT:
MAJ Dan Clevenger
WVARNG
1707 Coonskin Drive
Charleston, WV 25311
304.561.6539

AWARD:
2009 AIA Merit Award,
West Virginia Chapter,
Achievement in Architecture



The Construction and Facilities Management Office (CFMO) Expansion project will bring all of the operations of the CFMO together under one roof. The branches that will occupy this facility include: Director of Engineering, Environmental, Planning and Programming, Facility Operations & Maintenance, Business Management, Resource Management, and Design and Construction. This new facility is located slightly to the front, and adjacent to the existing facility, lending prominence to the new construction, and providing a new aesthetic to the entire complex.



This transitional space was designed to connect the two structures, while maintaining a connection to the outside through use of natural light, direct visual connections to the exterior, large volumes, irregular geometries, and the use of natural materials.

The entry design was coordinated with the Recruiting and Retention building to create an outdoor courtyard, along with new sidewalks, stairs and signage. The entry roof is sloped to provide a greater massing, while a lower canopy provides scale and protection from the elements. Large gathering and work spaces were located on the north elevation to take advantage of large expanses of glazing located to capture indirect light and views of Coonskin Park.



Wood County Justice Center



LOCATION:
Parkersburg, WV

SIZE:
32,000 SF

COMPLETION:
2011

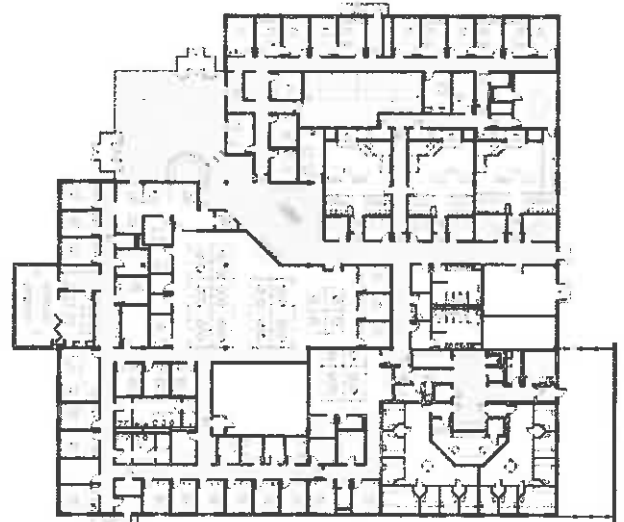
PROJECT COST:
\$5M

CONTACT:
Mr. Blair Couch
Commissioner
No. 1 Court Square
Suite 205
Parkersburg WV 26101
304.424.1978



This project was an extensive renovation of a 15 year old, 32,000 square foot, single story office building located in downtown Parkersburg, West Virginia. The building was purchased by the Wood County commission with the purpose of bringing together 3 government functions that had outgrown the 3 separate buildings that they occupied.

The renovated building consists of offices and 3 Courtrooms for the County's Magistrate Court system, public service windows for document pick-up and payment of fines, offices for the Sheriff's Department and Home Confinement and a 12-hour Inmate Holding Center.



Due to the building's new use, the interior was completely demolished leaving only the shell. The building's main entrance was relocated and redesigned to provide a new, more prominent identity to the building and to align with the new parking area created by the demolition of the adjacent existing magistrate court building. The old HVAC system was removed and replaced with a more energy efficient system and new, energy efficient lighting was installed. The project was designed around the U.S. Green Building Council's New Construction and Major Renovation Guidelines and is LEED Silver Certified.

Morgantown Readiness Center

WVARNG



LOCATION:
Morgantown, WV

SIZE:
54,000 SF

COMPLETION:
2013

COST:
\$18.5M

CONTACT:
MAJ Dan Clevenger
WVARNG
1707 Coonskin Drive
Charleston, WV 25311
304.561.6539



The Morgantown Readiness Center is a unique military facility for several reasons. While the Readiness Center supports traditional military functions including the 1-201st Field Artillery, a significant portion of the Morgantown Readiness Center supports the 249th Army Band. To support the band, the Readiness Center contains a performance hall, pre-function spaces, as well as a variety of training and rehearsal areas.

To efficiently create the stage and performance area the design team utilized a variety of dual function spaces. The stage is actually a large rehearsal space with an adjacent elevated recording area. Two large operable partitions are used – one to separate the rehearsal area from the remainder of the stage and the auditorium – while the other separates the auditorium from the Drill Hall. This configuration allowed the design team to maximize the West Virginia Army National Guard's investment by utilizing federally authorized space to also function as a large performance area. Acoustically, this challenge was met by creating a Drill Hall with an irregular shape that was contained within a rectilinear sloped barrel arch form. The geometry was complimented by acoustically engineered interior surfaces and finishes to create a vibrant and rich auditorium.

The facility is also unique due to its location on an abandoned airport runway at the Morgantown Municipal Airport. The 54,000 SF Readiness Center occupies a 35 acre tract at the airport. Additionally, the Readiness Center is located approximately twenty (20) miles from Camp Dawson, a large State and Federal training campus. As troops will often be travelling to Camp Dawson through the Morgantown Readiness Center, the facility needed to function as a 'gateway.'

Morgantown Readiness Center

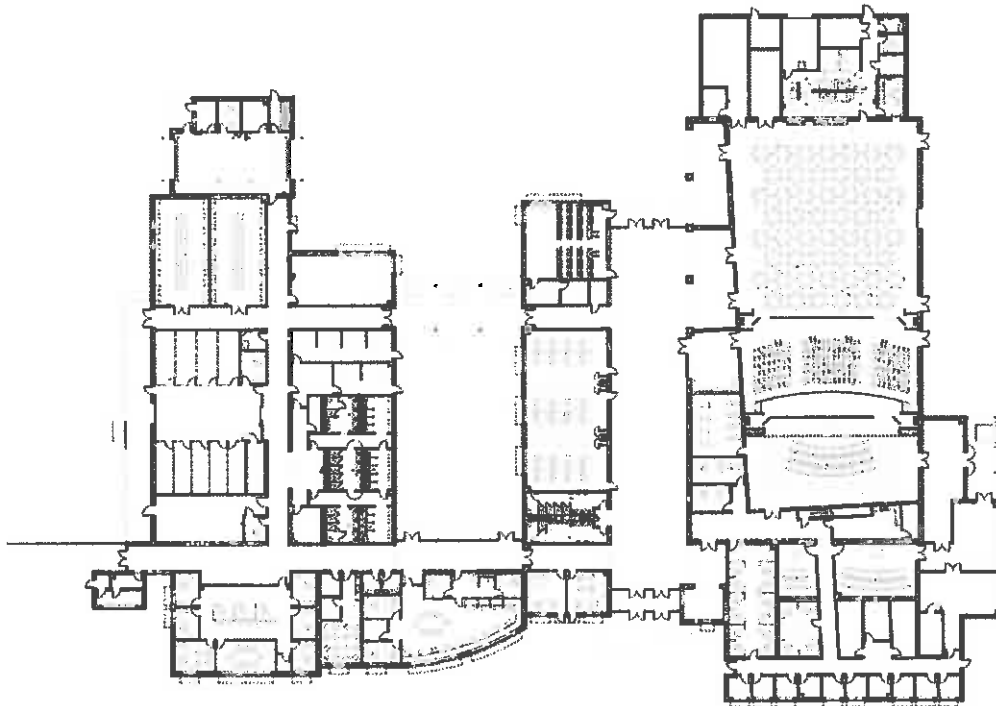
WVARNG



The creation of a 'gateway' facility was accomplished through exterior material choices (compatible with Camp Dawson), as well as the decision to utilize a tower-like feature to mark entry – a very prominent feature of the Regional Training Institute (RTI) at Camp Dawson. Where the RTI utilized a large cylindrical mass, the tower at the Morgantown Readiness Center respects the context of the former runway by reflecting the aesthetic of an airport control tower.

The Morgantown Readiness Center is also a sustainable building, and is in the process of pursuing LEED Certification from the USGBC. The 'U' shaped layout of the facility improves access to daylighting and views, while also limiting public access to the Guard's administrative and storage areas. Additional sustainable features include a reflective roof, the use of regional materials, and efficient lighting and HVAC systems.

While many features are addressed in the design of the Morgantown Readiness Center, the final result is a harmonious composition that reflects both its function and the environment, while deferring to its location on an abandoned runway.



West Virginia Capitol Complex

Buildings# 5, 6, & 7



LOCATION:
Charleston, WV

SIZE:
500,000 SF

COMPLETION:
TBA

CONTACT:
Greg Melton
Director of General Services
Capitol Complex Building
Building 1, Room MB-60
1900 Kanawha Blvd., E.
Charleston, WV 25305
304.558.2317



ZMM completed an in-depth analysis of Buildings 5, 6, and 7 on the Capitol Campus. The study included the preparation of as-built plans, as well as an analysis of all building systems, including: Life Safety; Vertical Transportation; Mechanical; Electrical; Data; Façade; Structure; and Roofing. The analysis also included a study related to potential hazardous materials in the facility.

Once the initial analysis is complete, ZMM will develop several options related to the rehabilitation of the existing facility. Prototypical floor plans are being designed currently as well as major infrastructure and utility upgrades. ZMM is also determining sustainable design principles that will be applicable as the renovations are undertaken.

ZMM also completed the following:

- Installation/Electrical Services for the Electrical Courtyard Installation
- Window Replacements and an Assessment for the State Office Buildings
- Complete Renovations to Building #5, 10th floor - Office of Technology.
- Renovation of State Office Building #6, 8th Floor
- Door/Security Project
- WV Culture Center gift shop renovation
- Roof Replacements
- Window Replacements

Jackson County Sheriff's Office



LOCATION:
Ripley, WV

COST:
Est. \$1.6M

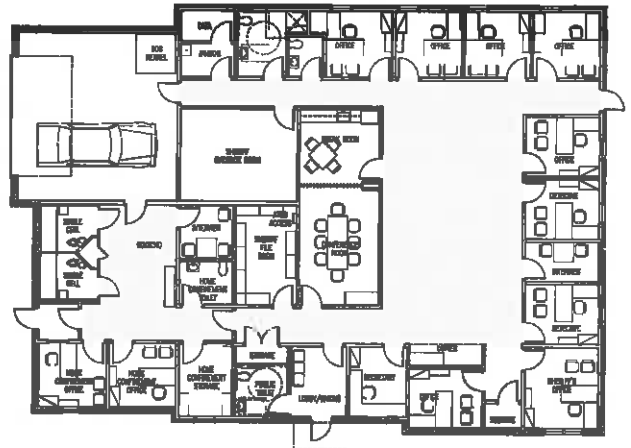
SIZE:
5,400 SF

CONTACT:
Sandy Garrett
Administrative Assistant
Jackson County Commission
Ripley, WV 25271
304.561.6539



The Jackson County Sheriff's Office was outgrowing their current facility, so a vacant lot was acquired adjacent to their existing building, which is located on the courthouse square in Ripley, WV. The one story sheriff's office will be approximately 5,500 sq ft. The cost is estimated to be \$1.5 million. The building will function as a full sheriff's office, as well as contain all home confinement reporting necessities for the county.

An improved booking area will contain two holding cells, sally port garage space, interview room, and all crucial processing equipment. The sheriff's office will include a conference room, advanced evidence storage, a work area for the deputies with room to grow, and personal offices for the sheriff, chief, captain, lieutenants, sergeants, and detectives. The public will enter through secured vestibules while staff will have key card access at entryways. The new state-of-the-art building will help the Jackson County Sheriff's Department serve the public more efficiently and effectively.



West Virginia State Police

Information Services Center



LOCATION:
So. Charleston, WV

SIZE:
14,000 SF Renovation
4,000 SF New Construction

CONTACT:
Major Gary Tincher
Chief of Staff Services
West Virginia State Police
725 Jefferson Road
So. Charleston, WV 25309
304.746.2115
Gary.r.tincher@wvup.gov



The West Virginia State Police is currently renovating a structure that previously served as the State Medical Examiner's Office, and prior to that, an elementary school. The building is located adjacent to the State Police's main campus in South Charleston, WV. The building is currently undergoing extensive renovation, with the intent of transforming it into an Information Services Center. The divisions are currently housed in the main state police headquarters building.



The scope of the work includes a complete renovation to the 14,000 SF, two-story main building with a new 4,000 SF, one-story addition on the back. The old exterior masonry façade will be enveloped with a thin-brick veneer facing Jefferson Road and an exterior insulation and finish system in rear of the facility. New aluminum windows, high-performance glazing and new single-ply roof membrane complete the exterior. The interior will be converted into professional office space on both floors housing their Communications Division, Criminal Records Division and Traffic Records Division. The space was maximized by utilizing the wide corridors as office space, and creating new, appropriately scale corridors in a loop pattern through the existing classrooms



Davis Center Renovation

Division of Juvenile Services



LOCATION:
Davis, WV

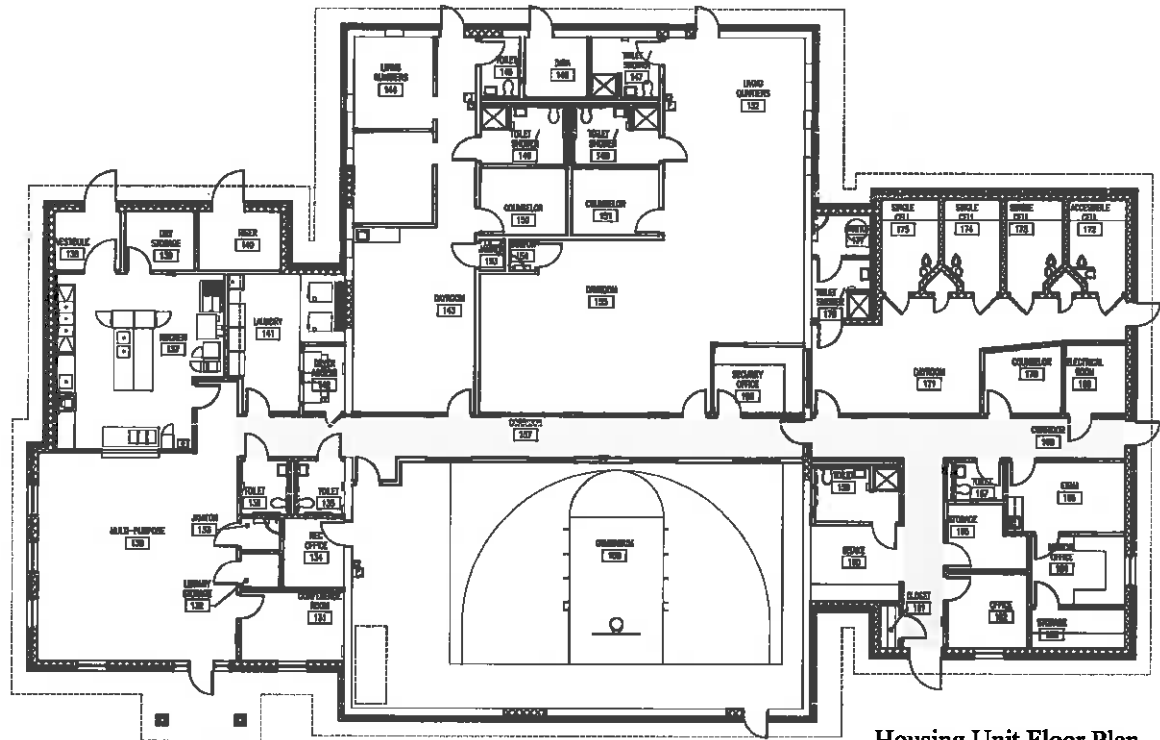
SIZE:
10,000 SF Housing Unit
6,800 SF Educational Building

CONTACT:
Jim Goddard
Assistant Director of Operations
WV Division of Juvenile Services
1200 Quarrier Street, 2nd Floor
Charleston, WV 25301
304.558.9800

The Davis Center Renovation project involves the transformation of a facility that previously housed young men into a minimum/medium security center for female youth. The campus is located near Blackwater Falls State Park in Davis, WV. The project scope included a complete modification of the project site, and involved demolishing older sections of existing buildings and retaining major structural portions for renovation. Outdated living, kitchen and dining facilities were removed from the old 10,000 SF Housing Unit making way for a new kitchen and dining facility along with maximum security cells and new medical unit.

The proposed improvements will keep a portion of the existing gym for exercise, renovating the rear portion into minimum security and transitional areas. The 6,800 SF Educational Building will preserve the majority of the interior spaces for new administrative and educational space with updated finishes. The exterior of both buildings will be renovated with a combination of durable exterior materials including brick, concrete plank siding, insulated aluminum windows and standing seam metal roofing. An existing entrance and parking area will be reconfigured to provide additional parking spaces, a sally port and perimeter security fencing.

The exterior improvements and additions to this project have been completed prior to the project being placed on hold in 2013.



Housing Unit Floor Plan

References

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Gene Spadaro Juvenile Detention Center

First Floor Plan

