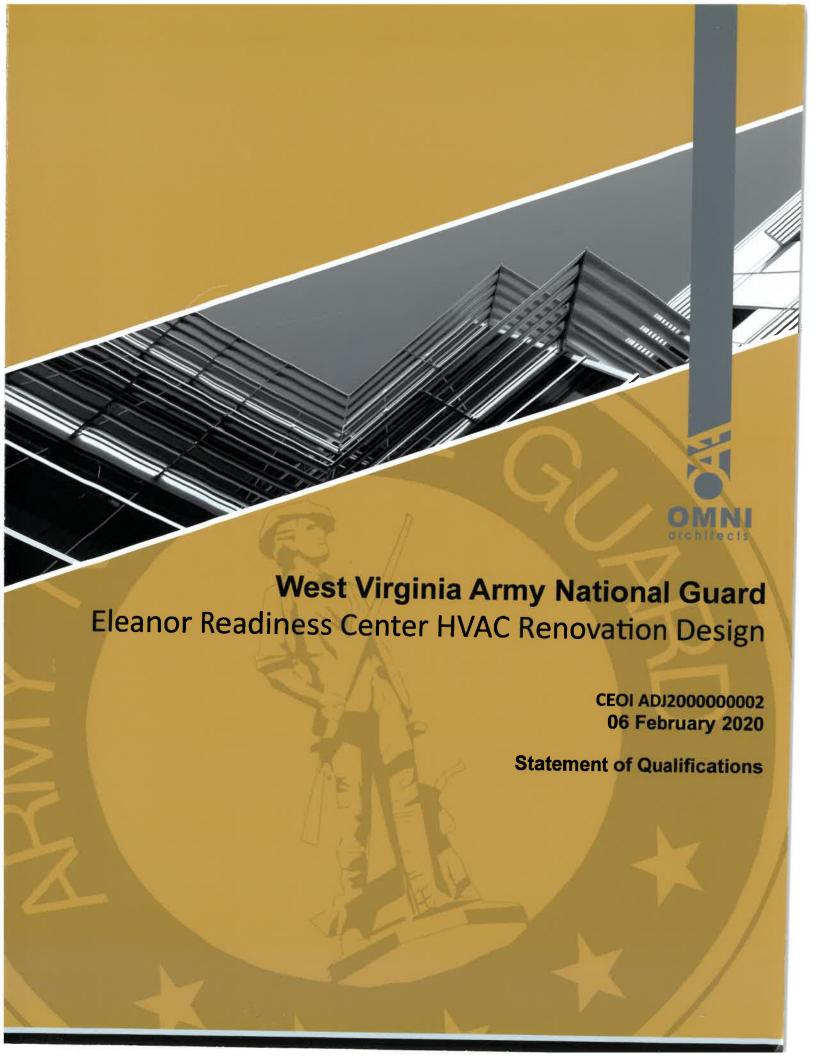


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Tara Lyle, Buye	r Supervisor			DIVISION
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# Expression of Interest Architectural/Engineering Services West Virginia Army National Guard Eleanor Readiness Center HVAC Design CEOI ADJ2000000002

February 6, 2020

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Omni Associates - Architects

207 Jefferson Street: Fairmont, WV: 26554



February 6, 2020

Tara Lyle, Buyer Supervisor
Department of Administration, Purchasing Division
2019 Washington Street East
Charleston, WV 25305-0130

RE: Solicitation No. CEOI ADJ2000000002 (Eleanor RC HVAC Renovation Design)

Dear Ms. Lyle:

**Omni Associates-Architects, Inc.** is pleased to submit our Proposal to provide architectural and engineering design services for the renovation of the HVAC system for the West Virginia Army National Guard's Readiness Center in Eleanor, West Virginia.

Having served as the Architect of Record for the original design and construction of the Eleanor Readiness Center in 2008, Omni is uniquely positioned to lead this project. Additionally, as the Principal in Charge who recently retired with over 35 years of military experience myself, both on active duty and active Reserves, allows me to be an **extension of the staff with no learning curve** when it comes to understanding the project's needs and requirements. In addition to the readiness Center at Eleanor, Omni has also provided full architectural and engineering services for the **Fairmont Armed Forces Reserve Center** and **the Buckhannon Readiness Center**.

Omni has chosen **Tower Engineering** to serve as the MEP member of the team. We have a long and successful history of teaming together on several renovation and re-adaptive use projects as well as working together on the Fairmont AFRC. Tower brings extensive Mechanical, Electrical, Plumbing and Fire Protection engineering experience to the team with a great deal of it involving Department of Defense and WVARNG projects. Together we possess the dedication, knowledge, and technical expertise to ensure the success of your project.

As a **West Virginia firm** located in Fairmont, Omni understands that our success is based on our commitment to being responsive. We provide clients with the results they value most: innovative designs consistent with the building program, cost effective designs that **meet the budget**, and efficient management to provide **on-time** deliverables and completion.

Thank you for allowing us to present our credentials. We look forward to the opportunity to work with the WVARNG again.

Singerely,

OMNI ASSOCIATES - ARCHITECTS, INC.

Richard Forren AIA, NCARB

Senior Principal

## NY OMN

207 Jefferson Street: Fairmont, WV: 26554

### Firm Profile

**OMNI ASSOCIATES - ARCHITECTS** is an award-winning architectural firm located in Fairmont, West Virginia. Our approach to design has allowed us to avoid the confines of specialization and afforded us the opportunity to create a diverse body of work.

Since the beginning in 1980, Omni has earned recognition for the programming, planning, and design of a variety of structures; which includes corporate office and governmental buildings, health care facilities and medical campuses, academic and educational buildings, recreational, religious, military and multipurpose facilities.

Our reputation and superior work product are the result of efficient and effective communication with our clients and consultants.

Each project is a unique undertaking that begins with analyzing the needs and desires of the client, and interpreting them into a distinctive design that exceeds expectations.

Omni has a successful history of designing intimately with each client and creating collaborative solutions that meet the project goals, resulting in an impressive record of customer satisfaction. These qualities that draw our clients back, resulting in lasting relationships.

Omni Associates provides clients with the results they value most: Innovative designs consistent with the building program, cost effective designs which meet the budget, and efficient project management to provide on-time deliverables.

We're proud of our reputation and expertise, and our clients are confident that they will receive superior services.

## W OMNI

### **Overview of Services**

**OMNI** provides comprehensive, in-depth professional architectural services for new construction, renovation, addition, and adaptive reuse utilizing a variety of delivery methods to best serve our clients' needs.

### **Design-Bid-Build Delivery Method**

Omni has performed private and public projects of every building type using this traditional method of project delivery. We organize the entire project in advance of bidding and work extensively with our clients to achieve alternates to program goals. Construction documents are prepared and bid to multiple general contractors to achieve competitive pricing. Our advanced preparation and communication with the owner and contractor has been a proven approach to limiting change orders and allows us to deliver projects on-time and on-budget.

### Fast Track and Multiple Prime Delivery Method

To achieve an accelerated building construction time schedule, Omni has experience with both fast-track and multiple-prime contract projects. As a variation of the traditional design-bid-build delivery, the negotiated select team approach allows for selection of a contractor early in the design process. We prepare construction drawings in stages and bid these "parts" of the total building program so construction can be ongoing as the next phase is programmed and designed. We have worked with General Contractors, Construction Managers and multiple prime subcontractors to successfully complete this type of project delivery.

### **Design-Build Delivery Method**

Owners and developers are currently seeking a simpler delivery style with a sing le point of responsibility for both design and construction. Under design-build, a consolidated entity provides both design and construction services to the owner. A single contract is established between the owner and the architect—contractor or design-builder. Omni has experience with both scenarios as well as contracting with owners and general contractors to succ essfully achieve this streamlined method of project delivery.

### **Construction Administration**

Omni has worked on projects for the cons truction phase of the total building life. This would include projects designed by another firm who needs local supervision or a pre-designed project from a national restaurant or store - which requires local Implementation. Omni has also per formed bank or financing inspections to determine the completion status of the project for periodic applications for payment.

Omni Associates - Architects

207 Jefferson Street: Fairmont, WV: 26554

## AKO OMNI

### **Technical Expertise**

Upgrading existing technology and utilizing the latest design tools available is a key component of our business model. Technology facilitates innovative design, results in economic benefits for our clients, and enhances communication with clients and consultants.

BIM: Building Information Modeling

In 2006, Omni Associates began the transition from traditional CAD software to Autodesk® Revit® Building Information Modeling (BIM). We immediately recognized the basic benefits to both designers and owners: more efficient, costeffective project delivery, and an accurate building model that can later assist in both energy analysis and building management.

Omni implemented the use of BIM as our primary software platform for all projects in 2006. In utilizing BIM, we discovered the real depth of its value.

With a virtual model of the building, clients can clearly see the design intent as the project progresses and design options can be explored with greater ease than ever before.

Sharing the model among all disciplines as the design progresses allows early input from all of the design professionals involved, resulting in efficient designs.

Creating a building in the virtual world before constructing it in the real world allows the design team to anticipate conflicts and objections before they arise, eliminating many issues which could result in project change orders or Requests For Information from the contractor.

Omni is proud to show that we do not just use Revit software, but we are adept at utilizing it, and can provide skilled support as needed. Omni Project Manager, Reuben Losh is now an Autodesk Revit Architecture 2011 Certified Associate. Mr. Losh plans to test soon for the next level of certification, Autodesk Revit Architecture 2011 Certified Professional.



### **Management & Staffing Capabilities**

We firmly believe that the best gauge in determining our performance and abilities is the quality of the personnel of which we are comprised. Omni's greatest resource is our professional staff of dedicated, experienced, and creative individuals.

Our skilled team includes 5 registered architects, intern architects, computer-aided design specialists, an interior designer, and knowledgeable administrative support staff. Their quality, expertise, and dedication integrate to produce the solid foundation upon which Omni has built its reputation.

OMNI organizes its staff into several teams or "studios." A specific project team is established for each commission. Studio resources are combined for larger projects. Younger staff members bring a fresh perspective and gain valuable knowledge under the guidance of more experienced staff. Utilizing this approach, we are able provide the human resources required for all types of projects, including large and complex projects.

The project team, including the principal-incharge, actively participates in the project from start to finish. The same professionals who develop an understanding of your needs in programming generate design alternatives, oversee the production of construction documents, and implement the concepts during construction. The consistency afforded by this approach is a benefit to OMNI and you.

In reality, the OMNI project team goes beyond

our in-house staff. It includes consultants, client representatives, own ers, and a construction manager, as required. It is the mutual respect of each team member's skills and perspectives that enables the design process to conclude with a successful project of which we all can be proud.

### **Specialized Team Members**

Throughout our years of experience, we have worked with a variety of consultants specializing in structural engineering, civil engineering, mechanical and electrical engineering, and other disciplines as each project dictated. You can be assured that the consultants we select for your project are selected for their particular and relevant expertise as well as their superior work ethic.

In short, we carefully staff the design team, including in-house professionals and outside consultants, with the type of personnel we would want working for us to work for you.

Omni Associates - Architects

207 Jefferson Street: Fairmont, WV: 26554



### Staffing Plan Key Personnel

Omni Associates – Architects carefully selects its project team based on each member's ability to add directly-related experience, ensuring our ability to meet the specific challenges and goals of each client

Throughout our years of experience, we have worked with a variety of consultants specializing in structural engineering, civil engineering, mechanical and electrical engineering, and other disciplines as each project dictated. You can be assured that the consultants we select for your project are selected for their particular and relevant experience as well as their superior work ethic.

In short, for each project we undertake at Omni, we carefully staff our teams, including in-house professionals and outside consultants, with the type of personnel we would want working for us, to work for you.

#### Omni Associates—Architects

### RICHARD T. FORREN, AIA, NCARB

#### Principal In Charge

Mr. Forren has been Project Architect in charge of design and construction for Omni Associates - Architects since 1984. As a Principal-in-Charge and Project Architect, Mr. Forren's primary responsibility is to develop the overall concept of design by performing technical tasks which include: Project space programming; Schematic layout of functional spaces; Aesthetic design and development; Concept and coordination of building systems such as mechanical, electrical, plumbing and fire protection; Preparation of bidding documents and material specifications; Project management and Construction administration. These tasks are performed for a wide range of for your project. commercial projects that include master planning, land development, building construction and tenant build-out

### JASON M. MILLER, AIA, NCARB

### Project Architect

Mr. Miller has extensive experience with the preparation of construction documents, bidding documents, and material specifications as well as construction administration. He has demonstrated his skill and success in such notable projects as the West Virginia Army National Guard Readiness Center in Buckhannon and the Charleston Professional Building, a federal GSA building.

#### **Tower Engineering**

#### **MEP Engineering**

Tower Engineering has been providing inno vative mechanical, electrical, plumbing, and fire protection solutions since 1931.

Mechanical design and analysis services include energy economic analysis, thermal storage analysis, heating and cooling load calculations, refrigerant piping design, water system designs, along with BIM modeling. Sustainability principles are considered at every design point, and firm principals personally lead every project. The firm has 26 employees, including eight (10) Registered Professional Engineers and eight (8) LEED Approved Professionals

Omni Associates - Architects 207 Jefferson Street : Fairmont, WV: 26554



### Staffing Plan Key Personnel (cont'd)

### THOMAS R. VALERIO, PE, CEM, LEED AP Project Manager, Mechanical Engineering Department

Tom Valerio manages and provides design and construction administration services for approximately \$10 million of HVAC construction annually. His primary responsibilities include the design and analysis of HVAC systems for schools, universities, commercial and light industrial facilities, laboratories, health & science buildings, retail and municipal facilities. Tom draws from over 30 years of construction engineering experience to lead teams that provide cost effective, energy efficient solutions.

As a Certified Energy Manager, Tom improves facility energy performance by analyzing energy consumption, developing energy conservation measures, determining their probable construction cost, and calculating their return on investment.

### T. STEFFANIE BAKO, PE, LEED AP Principal, Electrical Engineering Department

Mrs. Bako has provided engineering services for the design of office buildings, educational facilities, municipal buildings, community/recreational buildings and commercial facilities. Her primary responsibility is for the preparation of electrical opinions of cost, technical specifications, engineering drawings, field observation, and coordination with architectural and other engineering disciplines.

Steffanie's design responsibilities include lighting layout and fixture selection, including calculations and system coordination studies and calculations; computer rooms and associated support facilities; fire alarm and detection systems; emergency power, public address, audio-visual, security and closed circuit television systems. Additional responsibilities include client contact, field observation, and project management.

### MICHAEL S. PLUMMER, PE, CPD, LEED AP Principal, Plumbing and Fire Protection

Mr. Plummer is primarily responsible for the design of plumbing and fire protection systems and their components for educational, govern mental, and commercial buildings. His plumb ing duties include the design and layout of all domestic hot and cold water, sanitary drainage and storm water management systems. He is also responsible for the natural gas piping sys tems along with specialty systems involving I aboratory or hospital gases. Mike's fire protec tion responsibilities include the design of wa ter supply and pumping systems involving fire mains and sizing of fire pumps, the layout of standpipe and sprinkler zone locations, sprin kler head placements and reviewing hydraulic calculations for contractor designed sprinkler systems. He is a LEED Accredited Professional and designs all his projects with sustainability in mind.

Mike's duties include preparation of project specifications, cost estimates, project manage ment, and coordination with architectural and other engineering disciplines. He also per forms construction administration duties in cluding review of submittals, preparation of punch lists, and field problem solving, as well as supervising the engineering efforts of the Plumbing and Fire Protection Department.

Omni Associates - Architects

207 Jefferson Street: Fairmont, WV: 26554



### Richard T. Forren, AIA, NCARB Principal Owner

### **GENERAL EXPERIENCE**

As the Senior Principal-in-Charge, Mr. Forren's responsibilities include the development of client relationships and guiding the management of the overall firm. As the Senior Architect he is responsible for the development of concept designs by performing technical tasks which include: Project space programming; Aesthetic design development; Schematic layout of functional spaces; Concept and coordination of building systems such as mechanical, electrical, and plumbing. He oversees the preparation of bidding documents, material specifications; and construction management and administration. His experience spans a wide range of commercial projects that include health care, business, recreational, educational, religious, municipal and military construction (MILCON) with single project construction budgets in excess of \$65 million.

### **EDUCATION**

Master of Architecture : Virginia Polytechnic Institute. 1983

BS, Civil Engineering Technology: Fairmont State College, 1980

#### REGISTRATION

American Institute of Architects, Member

American Institute of Architects—West Virginia, Member

NCARB: National Council of Architectural Registration Boards

U.S. Green Building Council, Firm Membership

Associated Builders and Contractors Inc., Firm Membership

International Association of Emergency Managers, Member

International Council of Shopping Centers, Member

Association for Learning Environments, Member

Registered in West Virginia, Pennsylvania, Ohio, Kentucky, Florida, Michigan, New Jersey and Virginia

### RELEVANT EXPERIENCE

Buckhannon, Armed Forces Readiness Center

Fairmont, Armed Forces Readiness Center

**Eleanor Armed Forces Readiness Center** 

**Eleanor Maintenance Facility** 

Eleanor Access Road & Guard House

West Virginia State Office Complex (Fairmont)

Mon Power Regional Headquarters

West Virginia High Technology Consortium

5000 NASA Boulevard

Allan B. Mollohan Innovation & Incubator Center

**WVHTCF Training Center** 

Fairmont State University

Wallman Hall Renovations

**Engineering Tech Addition and Renovations** 

Library Addition & Renovation

Feaster Center Addition & Renovation

Colebank Hall Renovation

Omni Associates - Architects

207 Jefferson Street: Fairmont, WV: 26554



### Jason M. Miller, AIA, NCARB Principal

#### **GENERAL EXPERIENCE**

Joined Omni Associates in 2007.

Became a Principal Architect in 2015

Seven years' experience as an intern architect with comprehensive knowledge of project management from programming through construction administration.

Architectural practice has included diverse project types including educational facilities, government and military facilities, office buildings, health care facilities, commercial design, multifamily and single-family housing, and custom fabrication.

### **EDUCATION**

Master of Architecture: Virginia Polytechnic Institute, 2004

#### REGISTRATION

American Institute of Architects, Member

American Institute of Architects—West Virginia, Member

National Council Architectural Registration Board

U.S. Green Building Council, Firm Membership

Associated Builders and Contractors Inc., Firm Membership

Registered in West Virginia and Pennsylvania

#### RELEVANT EXPERIENCE

Buckhannon, Armed Forces Readiness Center

**Charleston Federal GSA Building** 

West Virginia University Blanchette Rockefeller

**Neurosciences Institute** 

West Virginia University Child Development Center

**Morgantown Utility Board Renovations** 

West Virginia High Technology Consortium

NASA and National White Collar Crime Fit Outs

University Health Associates MRI Addition

**Sundale Palliative Care Center Addition** 

Atlas Chiropractic Center

**Timberbrook Townhomes** 

Starbucks / Chipotle @ University Town Center

**Grant Avenue Apartments** 

Pro Performance at University Place

Assisted Living at White Oaks

WVU Agriculture Science Meat Processing Lab

Omni Associates - Architects

207 Jefferson Street : Fairmont, WV: 26554

### Tower Engineering, Inc. Overview and Services

Tower Engineering has been providing innovative mechanical, electrical, plumbing, and fire protection solutions since 1931. While Tower is a generalist firm, it primarily serves the higher education and K-12, healthcare, senior living, hospitality and recreation sectors in both renovations and new construction. The firm's highly-trained staff of project managers, designers, and technical support personnel is capable of providing consulting services for every type of project - from a small, single-family residence to a high tech research facility incorporating redundant mechanical and electrical systems, DDC energy management and thermal storage. We have worked with the University of Pittsburgh since the mid 1990's, doing over 60 projects on their campus. We have also worked with Cannon Design since 2016, doing three projects with them, two of them being at the Westmoreland County Community College.

Our engineers utilize state-of-the-art software programs for the design of lighting, electrical power and mechanical systems. Lighting analysis includes point-by-point calculations, ESI analysis, exterior lighting analysis, and life cycle cost comparisons. Electrical power analysis includes fault current and load flow analysis.

Mechanical design and analysis services include energy economic analysis, thermal storage analysis, heating and cooling load calculations, refrigerant piping design, water system designs, along with BIM modeling. Our professional staff utilizes computer selection of air handling units, coils, pumps, terminal devices, fans, cooling towers, chillers, heat exchangers, kitchen hoods, hydronic and steam specialties, humidification equipment and heat recovery equipment.

Sustainability principles are considered at every design point, and firm principals personally lead every project. The firm has 26 employees, including eight (10) Registered Professional Engineers and eight (8) LEED Approved Professionals

### HVAC

- Heating and cooling system design
- Ventilation system design
- Building automation systems
- Control systems and energy monitoring
- Geothermal system analysis and design
- Heat recovery systems
- Kitchen and laboratory exhaust systems
- Smoke evacuation systems
- Computer room environmental control systems
- Building commissioning services

### ELECTRICAL

- Interior and exterior lighting design and studies
- Lighting controls
- Primary and secondary voltage power distribution systems
- Fire detection and alarm systems
- Computer data and power systems
- Uninterruptible power supply systems
- Reinforced and masking sound systems
- Lightning protection systems
- Fault current studies
- System over-current protection coordination
- Security systems

### TECHNOLOGY

- Voice communication systems
- Data network systems

### PLUMBING

- Water resource efficiency analysis
- Sanitary drainage systems
- Storm water management
- Domestic water systems
- Waste water treatment systems
- Hospital and laboratory piping systems
- Fuel oil piping systems
- Irrigation systems

### FIRE PROTECTION

- Standpipe and sprinkler systems
- Fire protection systems

### Commissioning

- New Construction Commissioning
- Renovation Commissioning
- Retro-commissioning
- Recommissioning
- Value Recommissioning





#### EDUCATION

BS, Mechanical Engineering University of Pittsburgh 1982

### REGISTRATION

Pennsylvania

West Virginia

### AFFILIATIONS

LEED Accredited Professional 2008

US Green Building Council 2008

Certified Energy Manager (CEM) 2008





### THOMAS R. VALERIO, PE, CEM, LEED AP

### PROJECT MANAGER MECHANICAL ENGINEERING DEPARTMENT

Tom Valerio manages and provides design and construction administration services for approximately \$10 million of HVAC construction annually. His primary responsibilities include the design and analysis of HVAC systems for schools, universities, commercial and light industrial facilities, laboratories, health & science buildings, retail and municipal facilities. Tom draws from over 30 years of construction engineering experience to lead teams that provide cost effective, energy efficient solutions.

As a Certified Energy Manager, Tom improves facility energy performance by analyzing energy consumption, developing energy conservation measures, determining their probable construction cost, and calculating their return on investment.

### REPRESENTATIVE EXPERIENCE

Aerotech Industries - Pittsburgh, PA 60,000 SF Light Industrial Addition

St. Camillus Parish - New Castle, PA Renovations

Peters Township Municipal Building - McMurray, PA New HVAC System

Borough of Mt. Lebanon - Mt. Lebanon, PA New Aquatic Center

Citizens Library – Washington, PA Masterplan and HVAC Renovation

West Liberty University: Campbell Hall - West Liberty, WV New 68,000 SF Health Science Building

West Virginia University - Morgantown, WV
College of Law Energy Study
College of Law - 140,000 SF Addition and Renovation
University Park - New Apartment and Dormitory Complex
Mountainlair AHU Replacement

University of Pittsburgh - Pittsburgh, PA
Posvar Hall Parking Garage Ventilation
Ruskin Hall Dormitory Renovations
Trees Hall Renovations





#### EDUCATION

BS Electrical Engineering Case Western Reserve University 1997

#### REGISTRATION

Professional Engineer

PA -OH -WV

LEED Accredited Professional, 2009

### AFFILIATION

Illuminating Engineering Society of North America (IES): Treasurer Pittsburgh Section

#### AWARD

IES Design Award of Merit 2003, Ross Twp. Municipal Complex Pittsburgh, Pennsylvania





### T. STEFFANIE BAKO, PE, LEED AP

### PRINCIPAL, DEPARTMENT HEAD ELECTRICAL ENGINEERING DEPARTMENT

Mrs. Bako has provided engineering services for the design of office buildings, educational facilities, municipal buildings, community/recreational buildings and commercial facilities. Her primary responsibility is for the preparation of electrical opinions of cost, technical specifications, engineering drawings, field observation, and coordination with architectural and other engineering disciplines.

Steffanie's design responsibilities include lighting layout and fixture selection, including calculations and system coordination studies and calculations; computer rooms and associated support facilities; fire alarm and detection systems; emergency power, public address, audio-visual, security and closed circuit television systems. Additional responsibilities include client contact, field observation, and project management.

### REPRESENTATIVE EXPERIENCE

### Station Square East - Pittsburgh, Pennsylvania

New six-story building with 335,000 SF apartments, 4,400 SF retail and 112,000 SF of parking.

University Park Apartments - Morgantown, West Virginia
Apartments, Dormitories, Retail, \$80 million new construction

West Liberty University - West Liberty, West Virginia
New Health Science Building, \$22 million, 71,200 SF building

### Indiana University of Pennsylvania

Student Union food service and dining area renovation

### Glenville State College

Student Union food service and dining area renovation

Bethel Park School District - Bethel Park, Pennsylvania
New High School with full service kitchen and dining facilities

### Verizon Cranberry, Commercial Kitchen

Full service kitchen and dining facility for employees

Regional Learning Alliance, Cranberry Township, Pennsylvania Commercial kitchen with dining facility

Moon Area High School - Moon Township, Pennsylvania New school with large commercial kitchen and dining areas





#### EDUCATION

BS. Mechanical Engineering Penn State University 1997

#### REGISTRATION

Professional Engineer, PA 2003

Certified in Plumbing
Design (CPD), 1998 and 2015

LEED Accredited Professional 2009



### MICHAEL S. PLUMMER, PE, CPD, LEED AP

### PRINCIPAL, DEPARTMENT HEAD PLUMBING AND FIRE PROTECTION DEPARTMENT

Mr. Plummer is primarily responsible for the design of plumbing and fire protection systems and their components for educational, governmental, and commercial buildings. His plumbing duties include the design and layout of all domestic hot and cold water, sanitary drainage and storm water management systems. He is also responsible for the natural gas piping systems along with specialty systems involving laboratory or hospital gases. Mike's fire protection responsibilities include the design of water supply and pumping systems involving fire mains and sizing of fire pumps, the layout of standpipe and sprinkler zone locations, sprinkler head placements and reviewing hydraulic calculations for contractor designed sprinkler systems. He is a LEED Accredited Professional and designs all of his projects with sustainability in mind.

Mike's duties include preparation of project specifications, cost estimates, project management, and coordination with architectural and other engineering disciplines. He also performs construction administration duties including review of submittals, preparation of punch lists, and field problem solving, as well as supervising the engineering efforts of the Plumbing and Fire Protection Department.

### REPRESENTATIVE EXPERIENCE

The Children's Home and Lemieux Family Center - Pittsburgh, PA West Wing Addition, transitional care medical facility

### Dick's Sporting Goods,- Moon Township, PA

New Building L MEP Design, offices and restaurant Phase 1 MEP design, offices and food service Existing building expansion, offices and food service

### Smithfield and Oliver Development - Pittsburgh, PA

Adaptive reuse of retail building to offices, commercial, restaurant and underground parking.

### Crunch Fitness, Pittsburgh, PA

Homestead and Monroeville Fitness Centers, complete fitout of existing buildings, MEP design

WVARNG Fairmont, Armed Forces Reserve Center - Fairmont, WV New administration and maintenance facility

Fairmont State University - Fairmont, WV

Engineering Technology Building, new Hardaway Hall renovation



## WVARNG FAIRMONT ARMED FORCES RESERVE CENTER

FAIRMONT, WV

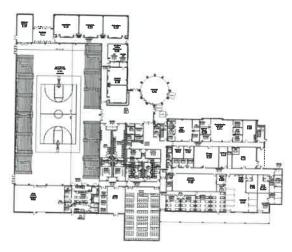
YEAR COMPLETED
2013
SQUARE FOOTAGE
91,500
TOTAL CONSTRUCTION COST



Tower Engineering provided mechanical and electrical engineering services for the new WVARNG Fairmont Armed Forces Reserve Center in Fairmont, West Virginia.

The building's Mechanical, Electrical and Fire Proofing Systems include many high efficiency features/systems as follows:

- Variable Air Volume HVAC System
- High Efficiency Heating Plant
- Variable Speed Pumping
- Carbon Dioxide Sensors for monitoring and control of ventilation air
- Heat Recovery for free preheat/precool of ventilation air
- Daylight Harvesting





## US ARMY RESERVE CENTERS JANE LEW, WEST VIRGINIA CLARKSBURG, WEST VIRGINIA

YEAR COMPLETED: 2008
SOLUME FOOTAGE 33 688
TOTAL CONSTRUCTION COST



Tower Engineering provided engineering services for the U.S. Army Reserve Training Center in Jane Lew, West Virginia. The Center provides a suitable facility for weekend and other intermittent training exercises of the Army Reserve.

At 7,400 SF, the facility includes offices, a large Assembly area, a full service Kitchen, Arms Storage, and supporting storage and mechanical areas.

A separate Organizational Maintenance Shop Building (OMS) provides an enclosed garage area for maintenance operations on the various vehicles, an office, and tools and parts storage.

Tower Engineering also provided mechanical and electrical consulting engineering services for the construction of an 16,120 SF Training Building and 10,168 SF Organizational Maintenance Shop at the U.S. Army Reserve Center in Clarksburg, West Virginia.

These facilities, as well as the buildings at Jane Lew, West Virginia, were designed in accordance with the U.S. Army Corps of Engineers' "Architectural and Engineering Instructions, Design Criteria."







### STRYKER BRIGADE COMBAT TEAM READINESS CENTER & OMS

ARMY NATIONAL GUARD, CAMBRIDGE SPRINGS, PA

YEAR COMPLETED:
2008
SQUARE FOOTAGE
89,700
TOTAL CONSTRUCTION COST

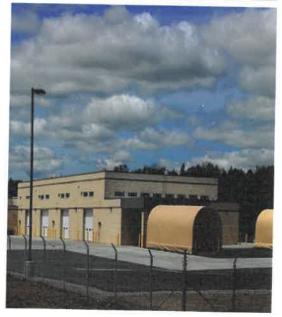


Tower Engineering provided engineering services for the design/build of a new 69,900 SF Readiness Center and 19,800 SF Organizational Maintenance Shop (OMS) for the Stryker Brigade Combat Team. These facilities provide spaces for training and housing of troops, as well as storage and maintenance of military vehicles and equipment. The center was constructed to replace outdated armories in Erie, Corry and Meadville.

Sustainable design features were included in the design and construction of these facilitie which earned a Gold SPIRIT rating. Design requirements included Anti-Terrorism/Force Protection(AT/FP).









### PENNSYLVANIA NATIONAL GUARD READINESS CENTER

CONNELLSVILLE, PA

YEAR COMPLETED: 2005 SOLURE FOOTAGE

Total Construction Cost \$4.1 million / MEP \$1.1 million



Tower Engineering provided mechanical/electrical engineering services for construction of a new 23,017 square foot armory at the Pennsylvania National Guard Readiness Center in Connellsville, Pennsylvania. This specially designed facility of permanent masonry type construction is constructed of brick and concrete block units with concrete floors, and a metal standing seamroof, including a one-story structure with mechanical and electrical equipment. The building contains offices, drill hall, classrooms, locker rooms, kitchen, toilets, storage, arms vault, Abrams Full-Crew Interactive Simulation Training ALIST Simulation Room, and maintenance training work-bays. Cost effective energy conserving features were incorporated into the design, including energy management control systems and high efficiency motors, lighting, and HVAC systems.





### GOVERNMENT OWNED FACILITIES

Tower Engineering has provided mechanical and electrical consulting engineering services for numerous government-owned facilities. With eight decades of experience, our firm knows the importance of meeting the client's needs without exceeding the project's budget. Thoroughly familiar with current government and military standards, our firm has provided engineering services for the following government-owned facilities:







### FEDERAL GOVERNMENT

- William S. Moorhead Federal Office Building, PA
- Department of Labor Job Corps Center, PA
- Butler VA Hospital, PA
- Department of Labor Job CorpsMedical Center, PA.
- Army Corps of Engineers Lab, PA
- Army Corps of Engineers Neville Island, PA
- National Guard Readiness Center Connellsville, PA
- National Guard Stryker Center Cambridge Springs, PA
- National Guard Fairmont Readiness Center, WV
- Army Reserve Center Jane Lew, WV
- Army Reserve Center Clarksburg, WV
- IRS Liberty Center Tenant Fitup, PA
- INS Application Support Center, PA
- VA Medical Center Pittsburgh, PA (multiple)
- Department of Energy Records Storage, WV
- Department of Agriculture Lab, PA
- National Geospace Agency St. Louis, MO

#### STATE GOVERNMENT

- State Police Building, PA
- Capitol Building Welcome Center, PA
- Tygart Lake State Park Lodge Addition, WV
- Twin Falls Resort State Park Addition, WV
- DER Regional Offices, PA
- DER Lab Renovation, PA
- Ebensburg Center HVAC Renovation, PA
- Buckingman Protection Custody Facility, PA
- HRS Computer Room, PA
- Capitol Science & Cultural Center, WV
- Scotland School for Veterans Children, PA

### UNITED STATES POSTAL SERVICE

- McKnight Road, Pittsburgh, PA
- Clairton, PA
- Monongahela, PA
- Northside, Pittsburgh, PA
- Grant Street, Pittsburgh, PA
- Rochester, PA
- Bulk Mail Handling Facility, Pittsburgh, PA
- Open Ended Services Agreement, PA and WV



### GOVERNMENT OWNED FACILITIES CONTINUED









### LOCAL GOVERNMENT

- Allegheny County Housing Authority, PA
- Beaver County Courthouse & Annex, PA
- Beaver County Ice Arena Renovations, PA
- Bellevue Borough Building Study, PA
- Bethel Park Community Center, PA
- Cambridge Springs Library, PA
- Cambridge Water Treatment Plant, OH
- City County Building Pittsburgh, PA
- City Hall Pittsburgh PA
- City of Pittsburgh Swimming Pools, PA
- City of Pittsburgh EOC 911, PA
- City of Pittsburgh Warehouse, PA
- Public Auditorium Authority Civic Arena, PA
- Cranberry Township Municipal Complex, PA
- Dormont Pool Complex Feasibility Study, PA
- Eighth Avenue Streetscape Phase IV, PA
- Erie Senior Citizen's Center, PA
- Erie Veteran's Stadium Renovation, PA
- Fairmont Parking Garage, WV
- rainione raining darage, wv
- Fairmont Public Safety Building, WV
- Field Avenue Recreation Park, PA
- Franklin Park Municipal Building, PA
- Franklin Township Sanitation Authority, PA
- Freeport Borough Building, PA
- Greater Pittsburgh International Airport, PA
- Green Tree Municipal Building, PA
- Greensburg County Building, PA
- Hampton Township Master Planning, PA
- Housing Authority of the City of Pittsburgh, PA
- Kennedy Township Park, PA
- Louis J. Tullio Convention Center Erie, PA
- McCandless Municipal Building, PA
- Monroeville Municipal Building, PA
- Moon Township Water Authority, PA
- Mt. Lebanon Parking Garage, PA
- New Stanton Water Treatment, PA
- Penn Hills Recreation Center, PA
- Penn Township Civic Center, PA
- Penn Township Municipal Complex, PA
- Pittsburgh Parking Authority, PA
- Ross Township Municipal Complex, PA
- South Park Municipal Buildings, PA
- South Strabane Township Municipal Building, PA
- Stowe Senior Citizens' Center, PA
- Three Rivers Stadium Renovations, PA
- Vanport Municipal Authority, PA
- Western Ave. Streetscape Improvements, PA
- Westmoreland County Housing Authority, PA





### Design Approach & Methodology

Omni and Tower have a long history of working together and have developed a strong methodology for design and construction administration. Several unique approaches are implemented to manage the progress of the design, coordinate the major building systems and provide continuity in building information.

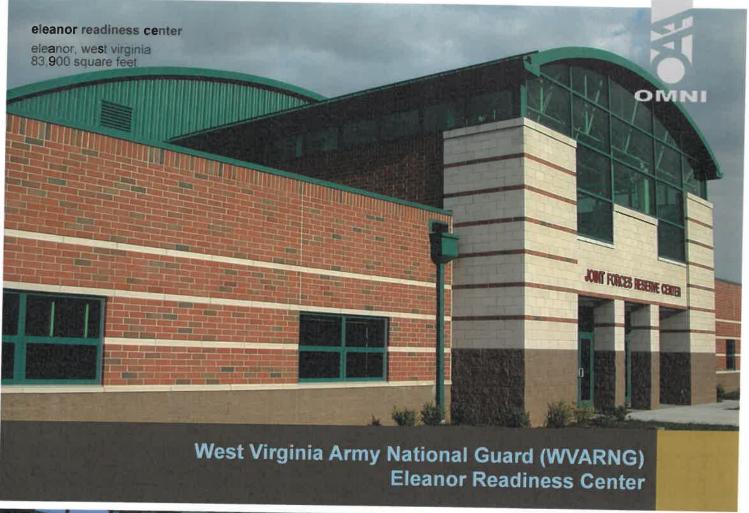
Omni and Tower share the professional management style of maintaining the project team together from the initial concepts to final completion of the project—and this includes the respective Principal—in—Charge of each discipline. This style makes for a great dynamic connection of all design professionals with the Owner and Contracting team members and limits the loss of decision making that is created along the entire project life cycle.

As the architect of record for the original construction of the Readiness Center, the Omni and Tower team will be able to move quickly. We not only have the existing drawings, but also the a 3D model of the building in REVIT. Having these items allows our team to jump straight into understanding the issues related to the existing HVAC system and affords Tower the opportunity to perform a comparative analysis of the current building systems and newer more efficient systems. The REVIT Model will be constantly updated through the project by all disciplines, which allows us to explore primary routes for the renovation work to the HVAC, Data, Sprinkler, Electrical and Plumbing components. We use the model to eliminate conflicts between the trades during design to avoid delays and change orders during construction.

Another approach we would like to explore with this project is one which our team completed during the WVU North Tower Expansion and the WVU BRNI Research renovation. For both of those projects, we created not only Construction Documents, but also Logistics Drawings for the Construction Team, Owner and

Design Professionals to coordinate and sequence renovation of the building to minimize conflicts with surrounding campus, utility and infrastructure upgrades as well as connections and sequencing of the construction issues for access, storage and staging.

Omni Associates - Architects 207 Jefferson Street : Fairmont, WV: 26554



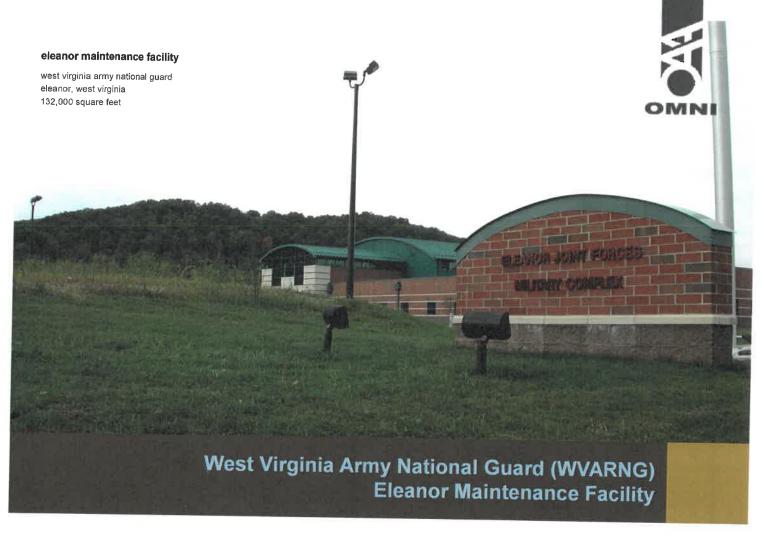


The Armory facility in Eleanor, West Virginia is a single-story, brick masonry and steel structure located adjacent to the Maintenance Facility. The orientation of the building takes advantage of views of the wetland area and the Kanawha River. The Armory houses units of the state Army National Guard and one unit of the Navy.

The plan configuration is a result of meetings with each of the units and commanders, and consolidates areas under the responsibility of individual units to minimize travel. The separation of public versus unit specific spaces is dictated by the need for logical and efficient circulation as well as the direct relationship of spaces within those areas.

The location of the Assembly Hall is central to all spaces and adjacent to the main entrance due to its use for public and military functions. The hall is utilized by the military for drill training and dining, and by the public for gatherings such as banquets and dances. The Kitchen is located adjacent to the Assembly Hall to expedite meals to both civilians and the military. The Maintenance Work Bays and AFIST bay are located at the rear of the building for accessibility of military vehicles, as well as shielding the function of the areas from the entrance and the public. The AFIST bay is located adjacent to the Assembly Hall for the purpose of large group instruction within the hall and individual instruction within the bay area.







The Eleanor Maintenance Complex in Eleanor, WV is a 132,000 square foot state-of-the-art repair and maintenance facility for the West Virginia Army National Guard (WVARNG). This specially designed Army "Combined Logistic Support Facility" houses the Combined Support Maintenance Shop (CSMS), an Organizational Maintenance Shop (OMS) and United States Property and Fiscal Office (USPFO) parts storage warehouse.

The design of the facility is based upon the functional concept of a straightforward flow in and around the facility. This focuses on a logical and efficient flow of work for the maintenance and repair of vehicles as well as the progression of compo-

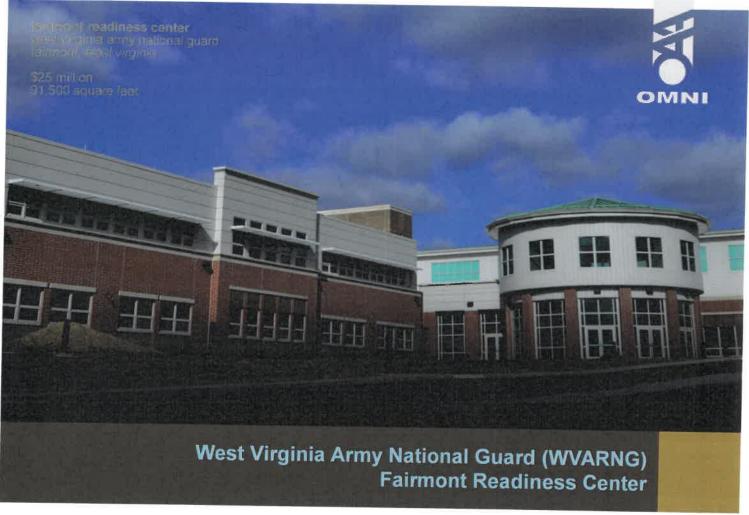
nents parts from delivery to installation. This flow also required controlling the movement of vehicles themselves as all vehicles arriving and leaving the complex are required to undergo pre and post inspections

The facility provides a full range of maintenance support for all WVARNG military vehicles throughout the state. It includes 28 maintenance work bays with overhead bridge cranes, an engine rebuild shop, a body shop with blast and paint booths, a carpentry shop, a machine shop, a canvas shop, a small arms repair shop and an electrical / communications repair shop. The facility also has specialized testing capabilities in the form of an engine and transmission dynamometer.

These capabilities truly make the Eleanor Maintenance Complex a state-of-the-art facility for the West Virginia Army National Guard

visualization.realization

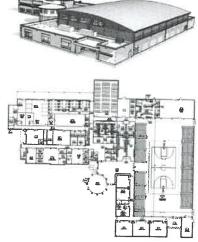
omni associates—architects



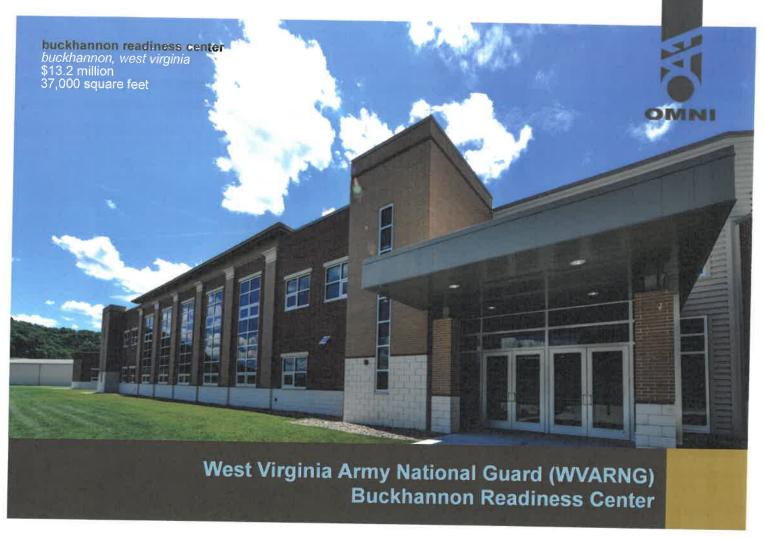
The specially designed AFRC is permanent masonry type construction with standing seam roof, concrete floors, and mechanical and electrical equipments with emergency power generator backup. This 150 member training facility includes administrative, educational, assembly, library, learning center, vault, weapons simulator and physical fitness areas for one each WVARNG and USAR units. The maintenance shop provides work bays and maintenance administrative support. The project provided for adequate parking space for all military and privately owned vehicles.

This project has been coordinated with the installation physical security plan, and all physical security measures are included. All required antiterrorism protection measures are included. Sustainable principles will be integrated into the design, development, and construction of the project in accordance with Executive Order 13123.

Supporting facilities include weapons cleaning, maintenance, issue, turn-in sheds, access roads, security fencing and dark motor pool lighting, vehicle wash system and pump house, fuel storage and dispensing systems, loading ramp, flammable materials storage building, controlled waste handling facility, and sidewalks. Extension of gas, electric, sewer, water and communication utilities to the building site is included. Physical security measures include maximum feasible standoff distance from roads, parking areas, and vehicle unloading areas, beams, heavy landscaping and bollards to prevent access when standoff distance cannot be maintained. Cost effective energy conserving features are incorporated into design.



Contact: COL David Shaffer, CFMO 1707 Coonskin Drive Charleston, WV 25311 304-541-6539

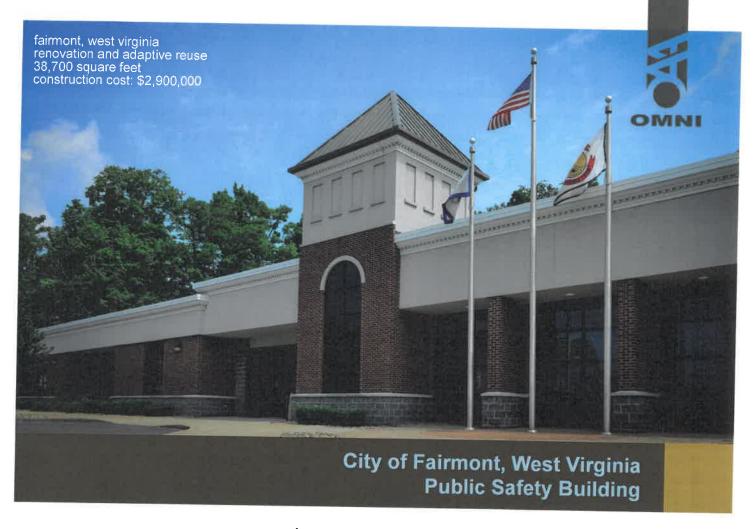


The Buckhannon Army National Guard Readiness Center is a dual-use building funded by a combination of Federal, State, and local money. The 37,000 sf facility houses three units of the West Virginia Army National Guard (WVARNG) and serves the public sector of Upshur County with a multi-purpose conference center. These dual purposes are reflected in the basic design.

The two functional areas are located in separate wings spanning east and west from the main lobby entrance with clear distinctions between public and private spaces. The west wing is a public conference center, which, through the use of operable partitions, can be configured any number of ways to allow for educational, business, community, and private events. The two-story east wing houses the WVARNG units: 601st Horizontal Engineer Company, 1935th Contingency Contracting Team and the 229th Engineer Survey and Design Team. It includes office space, a class-room, storage, sleeping rooms, fitness room, and locker rooms.

The building structure is steel with the exterior consisting mainly of brick veneer with some upper story metal panels and storefront glazing. A 3,200 sf unheated pre-manufactured metal storage building was erected adjacent to the main building. Outside supporting facilities include military and privately-owned vehicle parking, fencing, sidewalks, exterior fire protection, outside lighting, access roads, detached facility sign, wash platforms, fuel storage and dispensing systems and flagpoles. Physical security measurements include maximum feasible standoff distance from roads, parking areas, and vehicle unloading areas, berms, heavy landscaping, and bollards to prevent access when standoff distance cannot be maintained. This project was designed and constructed to achieve LEED® Silver certification. Cost effective energy conserving features include energy management control systems and high efficiency motors, lighting, and HVAC systems.





main street west virginia 2007 best exterior renovation project



After nearly a decade of effort trying to modernize its 100-year-old public safety buildings, The City of Fairmont selected Omni Associates - Architects to help realize its goals.

Design services performed by Omni included the development of a building program and a site analysis study to determine the feasibility of utilizing an existing structure versus constructing a new structure on various sites recommended by Omni. Ultimately, the design team, including the Owner, decided to utilize an existing structure located at 500 Quincy Street in Downtown Fairmont. The building originally housed a department store, but had long since been vacant.

Development of the Building Program involved in-depth functional and spatial studies of all component spaces This required extensive discussion with the Police Chief, Fire Chief, and department heads as well as various police officers and firefighters. Many considerations were investigated and prioritized including design flexibility, public image, impact on downtown, maneuverability of fire apparatus, public zones, secure zones, and the image and morale of the officers and firemen. These considerations along with budget cost controls, construction materials and schedule combined to complete the total building design.

The 38,700 square foot renovated facility appropriately stands on a hill overlooking the entire Downtown Fairmont area. It houses the Fire Administration and Central Station of the Fairmont Fire Department, the entire Fairmont Police Department, and the Municipal Court as well as several administrative offices.

## WO OMNI

### References

**OMNI ASSOCIATES - ARCHITECTS** realizes that our relationships with our clients is a vital component in the success of realizing their goals and needs. We encourage you to contact any of the following references in assisting you with your selection of a professional architectural firm.

Bob Krause, Architecture & Engineering

State of West Virginia

1900 Kanawha Blvd. East

Bldg. 1, Room MB-60

Charleston, WV 25305

304-957-7143

David Biafora

Biafora Holdings, LLC

6200 Mid-Atlantic Drive

Morgantown, WV 26508

304-292-0900

Dale Miller, President

West Virginia Radio

260 Spruce Street

Morgantown, WV 26505

304-296-0029

Robert Adcock, President & CEO

Fairmont Regional Medical Center

1325 Locust Avenue

Fairmont, WV 26554

304-367-7100

Johan Graham, Director of Development

**AU Associates** 

Lexington, KY 40508

859-233-2009

159 Old Georgetown Street

Omni Associates - Architects

207 Jefferson Street : Fairmont, WV: 26554