

State of West Virginia, Purchasing Division

West Virginia Army National Guard (WVARNG)

Camp Dawson Rappel Tower Support Facilities—CEOI ADJ1900000001



## Statement of Qualifications

### Table of Contents

### Letter of Interest

### Omni Associates—Architects

Firm Profile

Overview of Services

Management & Staffing Capabilities

Staffing Plan

References

Related Past Projects

### H.F. Lenz Company

### Atlantic Engineering Services (AES)

### Attachments

RECEIVED

2018 AUG 28 AM 10: 22

WV PURCHASING  
DIVISION



Omni Associates – Architects, Inc.

207 Jefferson Street

Fairmont, West Virginia 26554

Voice 304.367.1417

Facsimile 304.367.1418

Email: [info@omniassociates.com](mailto:info@omniassociates.com)

[www.omniassociates.com](http://www.omniassociates.com)



August 28, 2018

Stephanie Gale, Senior Buyer  
Department of Administration, Purchasing Division  
2019 Washington Street East  
Charleston, WV 25305-0130

RE: Solicitation No. CEOI ADJ1900000001 (Camp Dawson Rappel Tower Support Facilities)

Dear Ms. Gale:

**Omni Associates-Architects, Inc.** is pleased to submit our Proposal to provide architectural and engineering design services for the Rappel Tower Support Facilities for the West Virginia Army National Guard at Camp Dawson in Kingwood, West Virginia.

Our team includes **H.F. Lenz Company** to provide complete MEP and Civil Engineering and **Atlantic Engineering Services** to provide Structural Engineering services. Our firms are proud of our long and successful history of providing design services for military installations, including projects at Camp Dawson, but each of us also bring an extensive amount of experience in addressing the design elements listed in the EOI for the Rappel Tower Support Facilities.

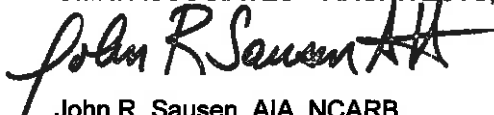
In addition to the projects contained within, Omni is currently completing construction administration for the complete renovation of restroom facilities, which we designed for a secured governmental facility in North Central WV. Currently, we are working with HF Lenz on a project for a private client that entails water penetration, new lighting and new HVAC system work.

Omni Associates will serve as the lead firm and coordinator of architectural and engineering services. As Omni's Principal-in-Charge, I will guide this team through the design process and serve as the point-of-contact to the West Virginia Army National Guard.

Our team brings the knowledge and experience to guide this project from programming to construction administration in an efficient and effective manner.

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

Sincerely,  
OMNI ASSOCIATES - ARCHITECTS, INC.

  
John R. Sausen, AIA, NCARB  
Principal



## 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.

## 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 single 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 successfully achieve this streamlined method of project delivery.

### **Construction Administration**

Omni has worked on projects for the construction 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 performed bank or financing inspections to determine the completion status of the project for periodic applications for payment.



## 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 **6 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 to provide the human resources required for all types of projects, including large and complex projects.

The project team, including the principal-in-charge, 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, owners, 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.



## 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**

##### **JOHN R. SAUSEN, AIA, NCARB, LEED AP**

###### *Principal in Charge*

Mr. Sausen has been Project Architect in charge of design and construction for Omni Associates – Architects since 1984. As a Principal-in-Charge and Project Architect, his primary responsibility is to guide and coordinate the team in the development the overall concept of design by performing technical tasks which include project space programming; schematic layout of functional spaces; aesthetic design and development; and concept and coordination of building systems such as mechanical, electrical, plumbing and fire protection.

##### **DAVID E. SNIDER, AIA, NCARB**

###### *Project Manager*

Mr. Snider has been a valuable member of the Omni team since 1995. He holds a Master of Architecture degree from Virginia Tech as well as a B.S. in Engineering Technology/Architecture from

Fairmont State College. David is one of Omni's most effective project managers with a strong background in K-12 and higher education projects and solid credentials in historic preservation and restoration as well as adaptive reuse. His strong work ethic has provided him with extensive experience with the preparation of construction documents, material specifications, and bidding documents as well as construction administration.

#### **H. F. Lenz Company**

##### **MEP and Civil Engineering**

Currently in its 70th year, the H.F. Lenz Company (HFL) is a nationally ranked multi-discipline engineering firm with a strong commitment to technical excellence and unparalleled customer service. From planning and design through commissioning and operations support, H.F. Lenz is known for working with their clients to find the best solutions that meet current needs while providing the flexibility and scalability to accommodate future growth and new technologies. Today the firm employs 165 individuals working out of our Johnstown-based headquarters and satellite offices in Pittsburgh, Pennsylvania, Conneaut, Ohio, and Middletown, Connecticut.



## Staffing Plan

### Key Personnel

**Thomas F. Deter, P.E., LEED AP**

**Principal-in-Charge of MEP Systems Engineering**

Mr. Deter has over 30 years of experience and is responsible for the engineering design of all trades and the supervision of senior designers. He has extensive experience in the design of building systems for both new buildings and building retrofits. He is experienced in the design of power distribution systems; emergency power systems and monitoring; uninterruptible power supplies; lighting and emergency lighting systems; fire alarm systems; security; sound and telephone systems.

**John C. Stewart, P.E., LEED AP**

**Project Manager—Mechanical Engineer**

Mr. Stewart has 34 years of experience in the design of HVAC, plumbing and fire protection systems. His responsibilities included code compliance verification, schematic layout, equipment selections, coordination, specification writing and cost estimating.

**Steven P. Mulhollen, P.E.**

**Electrical Engineer**

Mr. Mulhollen is experienced in the design of power distribution systems, control systems, emergency power systems, lighting and emergency lighting systems, fire alarms systems, security, sound and telecommunications for correctional, educational, military, governmental, industrial and health care facilities.

**Gregory D. Rummel, CPD**

**Plumbing/Fire Protection Designer**

Mr. Rummel has designed complete plumbing and fire protection systems for colleges, office buildings, military installations, prisons, hospitals, and industrial facilities. He is extremely knowledgeable of NFPA Codes and experience in the design of dry and wet systems.

**Keith A. Gindlesperger P.E.**

**Principal—Civil Engineer**

Mr. Gindlesperger is well versed in site planning for numerous types of industrial, commercial and governmental facilities. His areas of responsibilities include site design, site utilities, parking and traffic circulation, roadway design, stormwater management, erosion and sediment control.

*Additional information on personnel involved in the project can be found in their respective resumes following this section.*

## Staffing Plan

### Key Personnel

#### **Atlantic Engineering Services (AES)**

##### **Structural Engineering**

Since 1986, AES has been providing structural engineering services to a variety of clients in the eastern regional United States. AES experience covers a range of building categories including medical, scientific, research and technological, K-12 educational, university and collegiate, corporate and high-rise, retail, distribution, telecommunication, collegiate housing, residential, lodging and resort, assisted living and dementia care, parking, religious, naval facilities, film industry support, and specialized housing, training, carrier support and airfield control facilities for the U.S. Armed Forces.

##### **David L. Webb, PE**

###### **Principal**

Mr. Webb has an impressive list of design-build military projects for the U.S. Navy, the U.S. Army, and the Army Corps of Engineers including barracks, child development centers, battalion headquarters, and administrative facilities. His experience includes design of new structures as well as retrofitting of existing structures to resist progressive collapse. He is knowledgeable in the design of structures, requiring Anti-Terrorism/Force Protection criteria, including design for blast loads. Mr. Webb has managed successful implementation of the LEED Green Building Rating System.

##### **Laney S. Stoddard, PE, LEED AP**

###### **Senior Project Engineer**

Ms. Stoddard joined the team at AES in 2003, and

has since worked on a wide variety of projects in dustries and building types. Her experience encompasses a variety of building materials including concrete, steel, timber, masonry, and post-tensioned concrete. She has been vital to many design-build military projects for the U.S. Navy and Army Corps of Engineers including barracks, child development centers, battalion headquarters, and administrative facilities.

Her structural consultation experience extends beyond new design services, including threshold inspection, renovation, addition, adaptive reuse, retrofitting existing structures to resist progressive collapse, and anti-terrorism/force protection design services.

##### **Gilbert J. Taylor, PE**

###### **President**

Mr. Taylor has served on a wide variety of projects including facility studies, new constructions and renovations, building additions, and structural condition assessments throughout the United States.

His day-to-day duties include attending design and development meetings, supervising the production of construction documents, reviewing shop drawings, issuing revision sketches, attending site visits and construction meetings, and completing site visit and structural assessment reports.

*Additional information on personnel involved in the project can be found in their respective resumes following this section.*



## John R. Sausen AIA, NCARB, LEED AP

**Project Role:** Senior Principal in charge, Design Architect

**Project Responsibilities:** Principal-in-Charge of design and construction for Omni Associates since 1983. Responsible for coordinating and designing all aspects of a project from schematic design through final completion of construction. Specializing in Design-Build. Worked for three months in 1981 for Kraemer, Sieverts & Partners, Braunschweig, West Germany on an office, residential and civil defense complex for the Ministry of Interior, Kingdom of Saudi Arabia. The complex was to be of pre-cast metric. The design was to be flexible enough for construction in six different cities. Interned with architectural firms in Ohio and West Virginia prior to joining Omni.

### Achievements and Awards:

President of American Institute of Architects - West Virginia Chapter in 2000 & 2001. Worked with the Design Awards, Search for Shelter, Architecture for Kids, Livable Communities Committees. Has served on the AIA West Virginia Board of Directors from 1990 to present.

Instructor of Architecture at Fairmont State College, Fairmont, West Virginia - part time to 1990. Responsible for the instruction of design and construction relationships.

Boy Scouts of America, Mountaineer Area Council merit badge counselor, building committee member and Eagle Scout Chairman.

Achieved the rank of Eagle Scout and has been involved with Scouting for over 20 years.

### Years of Experience

Joined Omni in 1983

### Background

Bachelor of Architecture:

University of Cincinnati, 1982 (Magna Cum Laude)

### Select Project Experience

Mylan Pharmaceuticals

Morgantown, WV

North Expansion—500,000 sf

Executive Corporate Offices

Research and Development Lab

Quality Control Lab

CDC/NIOSH

Morgantown, WV / Pittsburgh, PA

Building Renovations

Infrastructure Studies

Safety and Security

Mine Rescue and Escape Lab

West Virginia University

Morgantown, WV

Child Learning Center

Building Renovations

Facility Upgrades

White Hall Lab

Blanchette Rockefeller Neurosciences

Institute Laboratory Fitout

West Virginia University Hospitals

Morgantown, WV

North & Northeast 8 story addition

Cheat Lake Family Medicine Clinic



**David E. Snider AIA, NCARB, ALEP**

**Project Role:** Project Manager, Project Architect

**Experience:** Practice has included diverse project types including primary, secondary, and higher-education education facilities, office buildings, health care facilities, commercial design, multifamily and single-family housing, and manufacturing facilities. Extensive experience with the preparation of construction documents, material specifications, and bidding documents as well as construction administration. **One of Omni's most effective project managers.** Strong background in K-12 and higher education projects. Demonstrated skill and success in such notable projects as Lincoln Middle School, Lumberport Elementary School, Brookhaven Elementary School and West Fairmont Middle School as well numerous projects for Fairmont State University. Mr. Snider has also developed solid credentials in historic restoration and adaptive reuse with Riverview at Clendenin, First Ward School Apartments and Sutton Apartments.

#### **REGISTRATION / PROFESSIONAL AFFILIATIONS**

American Institute of Architects, Member  
 American Institute of Architects—West Virginia, Member  
 Accredited Learning Environment Planner (ALEP)  
 U.S. Green Building Council, Firm Membership  
 Associated Builders and Contractors, Firm Membership  
 Registered in West Virginia

#### **Years of Experience**

Joined Omni in 1995

#### **Background**

Master of Architecture - Virginia Polytechnic Institute, 2001  
 B.S. Engineering Technology (Architecture) - Fairmont State College, 1989  
 Associate of Applied Design (Drafting and Design) - Fairmont State College, 1989

#### **Select Project Experience**

**New Construction**  
 Brookhaven Elementary School  
 Lincoln Middle School  
 Franklin Elementary School  
 Lumberport Elementary School  
 West Fairmont Middle School  
 Fairmont Senior High School Cafeteria  
 Genesis Youth Crisis Center  
 West Virginia High Technology Consortium Foundation (WVHTCF)  
 Mylan Pharmaceuticals

#### **Renovations:**

Brookhaven Elementary School  
 Simpson Elementary School  
 Christ Episcopal Church

#### **Historical Restoration:**

Fairmont Senior High School Auditorium  
 Riverview at Clendenin  
 First Ward Apartments  
 Fairmont State University 1-Room Schoolhouse

#### **Fairmont State University:**

Wallman Hall Renovations  
 Robert C. Byrd Aerospace Center Renovations  
 Colebank Hall Renovations



## 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

Mayor Guy Ward  
Town of White Hall  
3 Timrod Drive  
White Hall, WV 26554  
(304) 367-1687

COL David P. Shafer  
West Virginia Army National Guard  
1705 Coonskin Drive  
Charleston, WV 25311-1085  
304-541-6539

Johan Graham, Director of Development  
AU Associates  
159 Old Georgetown Street  
Lexington, KY 40508  
859-233-2009

Travis Blosser, City Manager  
City of Weirton  
200 Municipal Plaza  
Weirton, WV 26062  
(304) 797-8500

Dale Miller, President  
West Virginia Radio  
260 Spruce Street  
Morgantown, WV 26505  
304-296-0029



## H.F. Lenz Company

H.F. Lenz Company was established 1946 in its present form, under the name H.F. Lenz Company, R.E., and in 1953 the company was incorporated, as a Private Corporation, in Pennsylvania as H.F. Lenz Company. Our projects span the nation, with the heaviest concentration in the Northeast, and exceed \$530 million in MEP, Civil and Structural construction annually. Each market sector—corporate, government, health care, education, and industry—is served by a team of specialists who understand the unique needs of the clients they serve. Our staff consists of 150 individuals, including 50 Licensed Professional Engineers and 19 LEED Accredited Professionals. Our headquarters is in Johnstown, Pennsylvania with branch offices in Pittsburgh, Pennsylvania, Conneaut, Ohio, and Middletown, Connecticut.

### Johnstown Headquarters

1407 Scalp Avenue  
Johnstown, PA 15904  
Phone: 814-269-9300  
Fax: 814-269-9301

### Pittsburgh Office

1051 Brinton Road  
Pittsburgh, PA 15221  
Phone: 412-371-9073

### Ohio Office

322 State Street  
Conneaut, OH 44030  
Phone: 440-599-7800  
Fax: 440-599-7801

### Connecticut Office

101 Centerpoint Drive  
Suite 237  
Middletown, CT 06457  
Phone: 203-314-5523

### DISCIPLINES/SERVICES OFFERED IN-HOUSE INCLUDE:

- › Mechanical Engineering
- › Electrical Engineering
- › Data/Communications Engineering
- › Fire Protection / Life Safety Engineering
- › Structural Engineering
- › Civil Engineering
- › Surveying
- › GIS
- › Construction Phase Services
- › Commissioning and Training
- › 3D CADD with Full Visualization
- › Energy Modeling
- › Sustainable design/LEED Services
- › Building Information Modeling (BIM)

### LEED®

Our firm has been a member of the U.S. Green Building Council since 2000 and we currently have 17 LEED® Accredited Professionals on staff. Our experience includes 80+ projects that have attained various levels of LEED Certification and numerous additional projects designed for various levels of LEED Certification, in total over 15 million sq.ft. of facilities.

### EXPERIENCED PROJECT TEAM

The team that will serve on this contract is comprised of dedicated, multi-discipline individuals that have been working together for over a decade. Together they have taken on the challenges of numerous high profile, complex projects and have derived workable, cost-effective solutions that have met the objectives of the client. H.F. Lenz Company has provided engineering services for \$100 million of construction for the Baltimore Corps of Engineers over the past 20 years including 7 indefinite delivery-type contracts and 11 new reserve centers, several of which were design/build projects. Our experience also includes the renovation of several reserve centers including Morelock and Copely Reserve Centers. We have also held six (6) previous IDTC's for Letterkenny under which we have completed numerous projects requiring a variety of engineering expertise.





## Thomas F. Deter, P.E., LEED AP

*Principal-in-Charge of MEP Systems Engineering*

Mr. Deter has over 30 years of experience and is responsible for the engineering design of all trades, the supervision of senior designers, the preparation of reports to determine optimal systems and/or equipment selections, and the coordination and checking of contract documents for completeness and quality. He has extensive experience in the design of building systems for both new buildings and building retrofits for educational, health care, commercial, government, industrial, residential, and utility related facilities. He is experienced in the design of power distribution systems; emergency power systems and monitoring; uninterruptible power supplies; lighting and emergency lighting systems; fire alarm systems; security; sound; and telephone systems.

### EDUCATION

Bachelor of Science, Electrical Engineering Technology, 1987,  
University of Pittsburgh at Johnstown

### EXPERIENCE

H.F. Lenz Company 1992-Present •  
Parfitt/Ling Consulting Engineers  
1990-1992 • Gary Johnston &  
Assoc., Inc. 1987-1990

### PROFESSIONAL REGISTRATION / CERTIFICATION

Licensed Professional Engineer in  
Pennsylvania, Arkansas, Idaho,  
Illinois, Indiana, Maryland,  
Nebraska, New Jersey, North  
Carolina, Ohio, Oklahoma, Oregon,  
South Dakota, Virginia, and West  
Virginia • LEED Accredited  
Professional

### PROFESSIONAL AFFILIATIONS

NSPE/PSPE • U.S. Green Building  
Council

### PROJECT EXPERIENCE

#### Camp Dawson, U.S. Army National Guard, Kingwood, West Virginia

- › Three new billeting facilities

#### Pennsylvania Army National Guard, Pittsburgh, Pennsylvania

- › Rehabilitation of New Castle Readiness Center
- › Rehabilitation of Crane Readiness Center

#### Letterkenny Army Depot, Chambersburg, Pennsylvania

- › Over 100 projects completed under seven consecutive term contracts
- › Rocket Army Munitions Center (LEMC), AP Rocket Motor Destruction Facility, Phase I
- › Building 1, New SCIF

#### U.S. Army Reserve Aviation Center, Weirton, West Virginia

- › Design/build training building with classrooms, assembly hall, arms vault, armorer, weaponeer room, and Comsec training area, and a 6,300 sq.ft. OMS

#### U.S. Army Reserve Center, Wheeling, West Virginia

- › Design/build training building with classrooms, administrative areas, library, assembly hall, weaponeer room and medical section, and 17,000 sq.ft. OMS/AMSA

#### 911th Airlift Wing, U.S. Air Force Reserve, Greater Pittsburgh International Airport, Coraopolis, Pennsylvania

- › Various renovations and new construction under two term contracts



## John C. Stewart, P.E., LEED AP

*Mechanical Engineer*

Mr. Stewart has 34 years of experience in the design of HVAC, plumbing, and fire protection systems. His responsibilities have included code compliance verification, schematic layout, calculations, equipment selection, control system selection, specification writing, coordination, life cycle cost analyses, and cost estimating. His experience includes the design of mechanical systems for laboratories, hospitals, educational facilities, industrial plants, and military installations. He has also been involved in the design of chiller and boiler plants.

### PROJECT EXPERIENCE

**Camp Dawson, U.S. Army National Guard, Kingwood, West Virginia**

- › Three new billeting facilities

**Pennsylvania Army National Guard, Pittsburgh, Pennsylvania**

- › Rehabilitation of New Castle Readiness Center
- › Rehabilitation of Crane Readiness Center

**Letterkenny Army Depot, Chambersburg, Pennsylvania**

- › Over 100 projects completed under seven consecutive term contracts
- › Building 1, New SCIF

**911th Airlift Wing, U.S. Air Force Reserve, Greater Pittsburgh International Airport, Coraopolis, Pennsylvania**

- › Various renovations and new construction under two term contracts

**Walter Reed Army Medical Center**

- › Renovation and upgrade to Building 12, Provost Marshal's Facility
- › Repair and upgrade of the main steam distribution system from the Garrison's Steam Plant, Building 15, to the Main Hospital building, Building 2

**Pennsylvania National Guard, Johnstown, Pennsylvania**

- › New Regional Maintenance Facility with 23,560 sq.ft. maintenance shop. The project included flammable storage, general storage areas, and an on-site fuel dispensing station

**Ohio National Guard, Akron-Canton Regional Airport, Akron, Ohio**

- › New 26,400 sq.ft. aircraft storage facility and partial demolition, expansion, and renovations to the existing hangar. The project included the design of a new fire suppression system

### EDUCATION

Master of Science, Mechanical Engineering, 1995, University of Pittsburgh

Graduate Courses in Facilities Engineering, 1984-1987, Air Force Institute of Technology

Bachelor of Science, Mechanical Engineering, 1984, University of Pittsburgh

### EXPERIENCE

H.F. Lenz Company 1995 – Present / Peter F. Loftus Division, Eichleay Engineers, Inc. 1989 – 1996 / Newport News Shipbuilding 1988 – 1989 / U.S. Air Force 1984 – 1988

### PROFESSIONAL REGISTRATION / CERTIFICATION

Licensed Professional Engineer in Pennsylvania; LEED Accredited Professional

### PROFESSIONAL AFFILIATIONS

American Society of Heating, Refrigerating, and Air-Conditioning Engineers; APPA; U.S. Green Buildings Council



## Steven P. Mulhollen, P.E.

*Electrical Engineer*

Mr. Mulhollen is experienced in the design of power distribution systems, control systems, emergency power systems, lighting and emergency lighting systems, fire alarm systems, security, sound, and telecommunication systems for correctional, educational, institutional, industrial, health care, and commercial facilities.

### PROJECT EXPERIENCE

#### Camp Dawson, U.S. Army National Guard, Kingwood, West Virginia

- › Three new billeting facilities

#### Pennsylvania Army National Guard, Pittsburgh, Pennsylvania

- › Rehabilitation of New Castle Readiness Center
- › Rehabilitation of Crane Readiness Center

#### Letterkenny Army Depot, Chambersburg, Pennsylvania

- › Over 100 projects completed under seven consecutive term contracts
- › Rocket Army Munitions Center (LEMC), AP Rocket Motor Destruction Facility, Phase I
- › Building 1, New SCIF

#### Pennsylvania National Guard, Johnstown, Pennsylvania

- › New Regional Maintenance Facility with 23,560 sq.ft. maintenance shop. The project included flammable storage, general storage areas, and an on-site fuel dispensing station

#### Ohio National Guard, Akron-Canton Regional Airport, Akron, Ohio

- › New 26,400 sq.ft. aircraft storage facility and partial demolition, expansion, and renovations to the existing hangar. The project included the design of a new fire suppression system

#### 911th Airlift Wing, U.S. Air Force Reserve, Greater Pittsburgh International Airport, Coraopolis, Pennsylvania

- › Various renovations and new construction under two term contracts
- › Primary underground site investigation, mechanical, plumbing, electrical, land survey and utility location consulting for 4160V electrical relocation

#### Pennsylvania State Capitol Complex, Harrisburg, Pennsylvania

- › Mail Facility Renovations

### EDUCATION

Bachelor of Science, Electrical Engineering, 1988, The Pennsylvania State University

### EXPERIENCE

H.F. Lenz Company 1999 – Present  
• L. Robert Kimball & Associates  
1996 – 1999 • Leach Wallace  
Associates, Inc. 1990 – 1996 • E.A.  
Mueller, Inc. 1988 - 1990

### PROFESSIONAL REGISTRATION / CERTIFICATION

Licensed Professional Engineer in  
Pennsylvania, Alabama, California,  
Florida, Iowa, Kansas, Kentucky,  
Louisiana, Massachusetts, Maryland,  
Missouri, Nebraska, Nevada, New  
Jersey, New Mexico, New York,  
North Carolina, Ohio, Rhode Island,  
Tennessee, West Virginia, DC

### PROFESSIONAL AFFILIATIONS

Institute of Electrical and Electronics  
Engineers, Inc.



## Gregory D. Rummel, CPD

*Plumbing/Fire Protection Designer*

Mr. Rummel has designed complete plumbing and fire protection systems for colleges, schools, office buildings, hospitals, prisons, laboratories, industrial facilities, and military installations. He is fully knowledgeable of NFPA codes and is experienced in the design of wet, dry, preaction, FM200, and deluge fire protection systems. He is responsible for plumbing and sprinkler system design, layout, and calculations; selection and sizing of equipment; cost estimates; and site survey work. Mr. Rummel supervises drafting personnel; coordinates the plumbing design with utility companies, with other trades, and with the Project Engineer and Project Architect; and is responsible for assembling complete and accurate plumbing bid documents which meet H.F. Lenz Company standards.

### EDUCATION

Bachelor of Science, Mechanical Engineering Technology, 2000, Point Park College

Associate in Specialized Technology 1984, Architectural Drafting and Construction with CAD Technology, Triangle Institute of Technology

### EXPERIENCE

H.F. Lenz Company 1989- Present •  
Newport News Ship Building 1984-1989

### PROFESSIONAL REGISTRATION / CERTIFICATION

Certified in Plumbing Design, ASPE

### PROJECT EXPERIENCE

Camp Dawson, U.S. Army National Guard, Kingwood, West Virginia

- › Three new billeting facilities

Pennsylvania Army National Guard, Pittsburgh, Pennsylvania

- › Rehabilitation of New Castle Readiness Center
- › Rehabilitation of Crane Readiness Center

Letterkenny Army Depot, Chambersburg, Pennsylvania

- › Over 100 projects completed under seven consecutive term contracts

U.S. Army Reserve Aviation Center, Weirton, West Virginia

- › Design/build training building with classrooms, assembly hall, arms vault, armorer, weaponeer room, and Comsec training area, and a 6,300 sq.ft. OMS

U.S. Army Reserve Center, Wheeling, West Virginia

- › Design/build training building with classrooms, administrative areas, library, assembly hall, weaponeer room and medical section, and 17,000 sq.ft. OMS/AMSA

911th Airlift Wing, U.S. Air Force Reserve, Greater Pittsburgh International Airport, Coraopolis, Pennsylvania

- › Various renovations and new construction under two term contracts

Pennsylvania National Guard, Johnstown, Pennsylvania

- › New Regional Maintenance Facility with 23,560 sq.ft. maintenance shop. The project included flammable storage, general storage areas, and an on-site fuel dispensing station



## Keith A. Gindlesperger, P.E.

*Principal/Civil Engineer*

Mr. Gindlesperger holds a bachelor's degree in Civil Engineering Technology with experience in site planning and design for numerous types of industrial, commercial, and government facilities. His responsibilities in these areas include site design, site utilities, parking and traffic circulation, roadway design, stormwater management, and erosion and sedimentation control. He also has experience working with local municipalities enforcing local planning and zoning codes. He has completed continuing education in stormwater management.

### EDUCATION

Bachelor of Science, Civil Engineering Technology, 1998, University of Pittsburgh at Johnstown

### EXPERIENCE

H.F. Lenz Company 1998 – Present

### PROFESSIONAL REGISTRATION / CERTIFICATION

Licensed Professional Engineer in Pennsylvania, Maryland, Oregon, Virginia and West Virginia

### PROJECT EXPERIENCE

#### Letterkenny Army Depot, Chambersburg, Pennsylvania

- Over 100 projects completed under seven consecutive term contracts
- Civil Engineer for the design and permitting for long-term staging / storage sites for 1000 Mine Resistant Ambush Protected (MRAP) vehicles and associated parts and equipment

#### Walter Reed Army Medical Center, Washington, DC

- Civil Engineer for the renovation and upgrade to Building 12, Provost Marshal's Facility. This building is a three-story historic structure consisting of 15,000 gsf of interior floor space. The project was completed under an IDC with the Baltimore Corps of Engineers

#### United Parcel Service, Master Paving & Concrete Rehabilitation Programs – Various Pennsylvania & West Virginia Locations

- Evaluation of existing asphalt and concrete pavement at multiple UPS facilities throughout the Laurel Mountain District
- Recommended a pavement management and rehabilitation program to repair/replace existing pavement or preserve the existing where possible

#### West Virginia University – Morgantown, West Virginia

- Site design for the new Ag Sciences Building II; included site utilities, grading and drainage plan, stormwater management plan, erosion and sedimentation control plan, WV DEP Permitting, Morgantown Utility Board Approvals.

#### 911th Airlift Wing, U.S. Air Force Reserve, Greater Pittsburgh International Airport, Coraopolis, Pennsylvania

- Various renovations and new construction under two term contracts

## Department of Defense Facilities

### U.S. ARMY CORPS OF ENGINEERS, BALTIMORE

#### ARMY RESERVE AVIATION FACILITY *Johnstown, Pennsylvania*

- › New 120,000 sq.ft. multi-building complex including an armed forces reserve center and an aviation maintenance shop

#### ARMY RESERVE CENTER *Beckley, West Virginia*

- › New 300-member reserve center with training building and maintenance shop

#### ARMY RESERVE CENTER *Morgantown, West Virginia*

- › New 300-member reserve center with training building and maintenance shop

#### ARMY RESERVE CENTER *Wheeling, West Virginia*

- › New 284-member reserve center with training building and maintenance shop

#### ARMY RESERVE CENTER *Rainelle, West Virginia*

- › New 200-member reserve center with training building and maintenance shop

#### ARMY RESERVE CENTER *Weirton, West Virginia*

- › New 200-member reserve center with training building and maintenance shop

#### ARMY RESERVE CENTER *Brownsville, Pennsylvania*

- › New 200-member reserve center with training building and maintenance shop

#### ARMY RESERVE CENTER *Johnstown, Pennsylvania*

- › New 200-member reserve center with training building and maintenance shop

#### ARMY RESERVE CENTER *Kingwood, West Virginia*

- › Maintenance shop

#### ARMY RESERVE CENTER *Grantsville, West Virginia*

- › New 100-member reserve center with training building and maintenance shop

#### ARMY RESERVE CENTER *Elkins, West Virginia*

- › New 60-member reserve centers with training building and maintenance shop





**MORLOCK ARMY RESERVE CENTER** *Pittsburgh, Pennsylvania*

- › HVAC modifications

**COPELY ARMY RESERVE CENTER** *Oil City, Pennsylvania*

- › Boiler addition

**STEELE ARMY RESERVE CENTER** *Pittsburgh, Pennsylvania*

- › Complete HVAC system replacement

**CAMP DAWSON** *Kingwood, West Virginia*

- › Three new billeting facilities

**LETTERKENNY ARMY DEPOT** *Chambersburg, Pennsylvania*

- › Seven indefinite-delivery contracts for mechanical, electrical, civil, and structural engineering and surveying services

**FORT RICHIE** *Fort Ritchie, Maryland*

- › Two indefinite-delivery contracts for mechanical, electrical, civil, and structural engineering and surveying services

**AMMUNITION PLANT** *Scranton, Pennsylvania*

- › Upgrade lighting system in production shop

**911 AIRLIFT GROUP, GREATER PITTSBURGH INTERNATIONAL AIRPORT** *Pittsburgh, Pennsylvania*

- › Study and design of new Base Civil Engineer Facility
- › Indefinite delivery contract for architectural and engineering services

**U.S. ARMY CORPS OF ENGINEERS, NORFOLK**

**WALTER REED ARMY MEDICAL CENTER** *Washington, D.C.*

- › Energy engineering analysis program, main hospital building

**U.S. ARMY CORPS OF ENGINEERS, PHILADELPHIA**

**PHILADELPHIA, PENNSYLVANIA**

- › Tenant fit-up

**PA DEPARTMENT OF MILITARY AFFAIRS**

**FORD CITY ARMORY** *Ford City, Pennsylvania*

- › New 24,400 sq.ft. training center with classrooms and kitchen/dining facilities





**NAVAL FACILITIES ENGINEERING COMMAND (NAVFAC),  
NORTHERN DIVISION**

**NAVAL AIR STATION** *Lakehurst, New Jersey*

- › Air conditioning tune-up study

**NAVAL SHIP PARTS CONTROL CENTER** *Mechanicsburg, Pennsylvania*

- › Administrative facility improvements

**NAVAL FACILITIES ENGINEERING COMMAND (NAVFAC),  
CHESAPEAKE & ATLANTIC DIVISION**

**NAVAL RESEARCH LABORATORY** *Washington, D.C.*

- › Three indefinite delivery contracts for mechanical, electrical, and structural engineering services (Chesapeake Division)

**OCEANA NAVAL STATION** *Virginia Beach, Virginia*

- › Energy monitoring and control system
- › Boiler plant modifications (Atlantic Division)



**NAVAL FACILITIES ENGINEERING COMMAND (NAVFAC),  
SOUTHEAST DIVISION**

**P-8A INTEGRATED SIMULATION/TRAINING CENTER** *Jacksonville, Florida*

- › New \$42.5 million, 165,000 sq.ft. operational training facility for a new Multi-Mission Maritime Aircraft (MMA)/P8-A located at the Naval Air Station; Project goal is LEED Gold



**DEPARTMENT OF GENERAL SERVICES**

**PENNSYLVANIA NATIONAL GUARD** *Johnstown, Pennsylvania*

- › New 23,560 sq.ft. Regional Maintenance Facility

**PENNSYLVANIA ARMY NATIONAL GUARD, 128TH BRIGADE SUPPORT BATTALION**

- › Renovation of the 26,700 sq.ft. Crane Readiness Center which houses 250 soldiers

**PENNSYLVANIA ARMY NATIONAL GUARD, 107TH FIELD ARTILLERY BATTALION**

- › Rehabilitation of 23,000 sq.ft. New Castle Readiness Center which houses approximately 120 soldiers



**ATLANTIC ENGINEERING SERVICES (AES)** provides structural engineering consulting services to the eastern regional United States. Established in 1986, the firm is widely respected for its expertise and services. With professionals located in several offices from Pennsylvania to Florida, our clients benefit from proactive, skilled engineers engaging other disciplines and sharing regional experience.

Synergy, creativity, and timeliness are the principles that drive our firm's philosophy, exemplified in more than 15,000 completed projects with gross construction value over \$17 billion. Completed projects have been as high as 30 stories with construction costs reaching \$450 million. Specialized technology increases the firm's ability to creatively provide structural solutions and enables enriched collaboration between architectural firms, construction companies, fabrication facilities and other consultants for any project regardless of complexity or difficulty.

AES experience covers a range of building categories including medical, scientific, research and technological, K-12 educational, university and collegiate, corporate and high-rise, retail, distribution, telecommunication, collegiate housing, residential, lodging and resort, assisted living and dementia care, parking, religious, naval facilities, film industry support, and specialized housing, training, carrier support and airfield control facilities for the U.S. Armed Forces. Structural services encompass adaptive reuse, building information modeling (BIM), building rehabilitation, concrete restoration, construction support services, design-build, facade restoration, forensics, historic restoration and preservation, LEED certified projects, military facilities, post-tension, transportation, and wooden structures. Our projects often involve LEED criteria and several of our employees are LEED Accredited.

Our project list includes restorations of numerous historic structures, many of which are on the National Register. AES' specialized approach to building preservation and restoration breathes new life into old structures. This approach also extends to non-historic structures where the mark of excellence at maintaining and renovating existing facilities is often economy and simplicity of execution.

But more important than anything else, our professionals listen. When we are involved in the design of a facility, AES digests input from owners and directors, users, facilities managers, the goals of the rest of the design team, and guidance from other vital sources to develop the best solutions possible. We become advocates of your goals, crafting our design around the visions and needs provided to us.

Significant evidence of AES client confidence and satisfaction is the high rate of repeat work and repeat clients. We are proud at AES to say that hundreds of clients have not just hired us for repeat work, but have retained us for 10 or more projects. We have 25 clients for whom we have worked on more than 100 projects, 8 clients for over 200 projects, and one client for whom we've provided services on more than 500 separate projects.

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

*"Bringing Architectural Visions to Life"*



## David L. Webb, PE Principal

### EDUCATION

Bachelor of Science, Civil Engineering  
*Southern Polytechnic State University, 1984*  
Master of Science, Engineering  
*University of Central Florida, 1993*

### PROFESSIONAL REGISTRATIONS

Licensed Professional Engineer in Florida, Georgia, and North Dakota

### PROFESSIONAL MEMBERSHIPS

American Society of Civil Engineers  
National Council of Examiners for Engineering and Surveying  
Florida Structural Engineers Association  
Society of American Military Engineers  
American Council of Engineering Companies  
American Institute of Steel Construction

### EXPERIENCE

Mr. Webb has developed experience with a variety of building materials including concrete, steel, timber, masonry and post-tensioned concrete. Since joining the profession in 1984, he has been involved in the design of a variety of structures and has a long list of projects which include education facilities, condominiums, rehabilitation, office buildings, hospitals and parking garages.

In addition, Mr. Webb has an impressive list of design-build military projects for the U.S. Navy, the U.S. Army, and the Army Corps of Engineers including barracks, child development centers, battalion headquarters, and administrative facilities. His experience includes design of new structures as well as retrofitting of existing structures to resist progressive collapse. He is knowledgeable in the design of structures, requiring Anti-Terrorism/Force Protection criteria, including design for blast loads. Mr. Webb has managed successful implementation of the LEED Green Building Rating System.

In reference to the respective proposal, Mr. Webb has proved vital to the success of these related projects and more not listed:

- 82nd Airborne Division Headquarters; Fort Bragg, NC
- Passenger Processing Facility; Ft. Benning, GA
- Departure/Arrival Airfield Control Group Facility; Hunter Army Airfield, GA
- Mobility Center/Base Supply Warehouse; Air Force Base, Charleston, SC
- National Guard Armory, Renovations to Building 1822; Jacksonville, FL
- James B. Callaway Armed Forces Reserve Center Renovations; West Palm Beach, FL
- Fleet Readiness Center Southeast, Building 794 - Vapor Degreaser Relocation; Jacksonville, FL
- Repair Eagles Landing B3705, Seymour Johnson Air Force Base; Goldsboro, NC



bringing architectural  
visions to life



## Laney S. Stoddard, PE, LEED AP

### Senior Project Engineer

#### EDUCATION

Bachelor of Science in Engineering  
*Duke University, 2002*

Master of Science in Civil Engineering  
*Georgia Institute of Technology, 2003*

#### PROFESSIONAL REGISTRATIONS

Licensed Professional Engineer in Florida

#### PROFESSIONAL MEMBERSHIPS

American Institute of Steel Construction

#### EXPERIENCE

Ms. Stoddard joined the team at AES in 2003, and has since worked on a wide variety of projects industries and building types. Her experience encompasses a variety of building materials including concrete, steel, timber, masonry, and post-tensioned concrete. She has also been involved in the design of many structures including educational facilities, libraries, condominiums, commercial buildings, post-tensioned concrete structures, and has been vital to many design-build military projects for the U.S. Navy and Army Corps of Engineers including barracks, child development centers, battalion headquarters, and administrative facilities.

Her structural consultation experience extends beyond new design services, including threshold inspection, renovation, addition, adaptive reuse, retrofitting existing structures to resist progressive collapse, and anti-terrorism/force protection design services.

Ms. Stoddard is a LEED Accredited Professional and has managed and implemented the Leadership in Energy and Environmental Design (LEED) Green Building Rating System. Her duties include day-to-day project supervision, project scheduling, project design, construction observation, and coordination with other consultants.



bringing architectural  
visions to life



## Gilbert J. Taylor, PE President

### EDUCATION

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

### PROFESSIONAL REGISTRATIONS

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

### PROFESSIONAL MEMBERSHIPS

American Institute of Steel Construction  
American Society of Civil Engineers

### EXPERIENCE

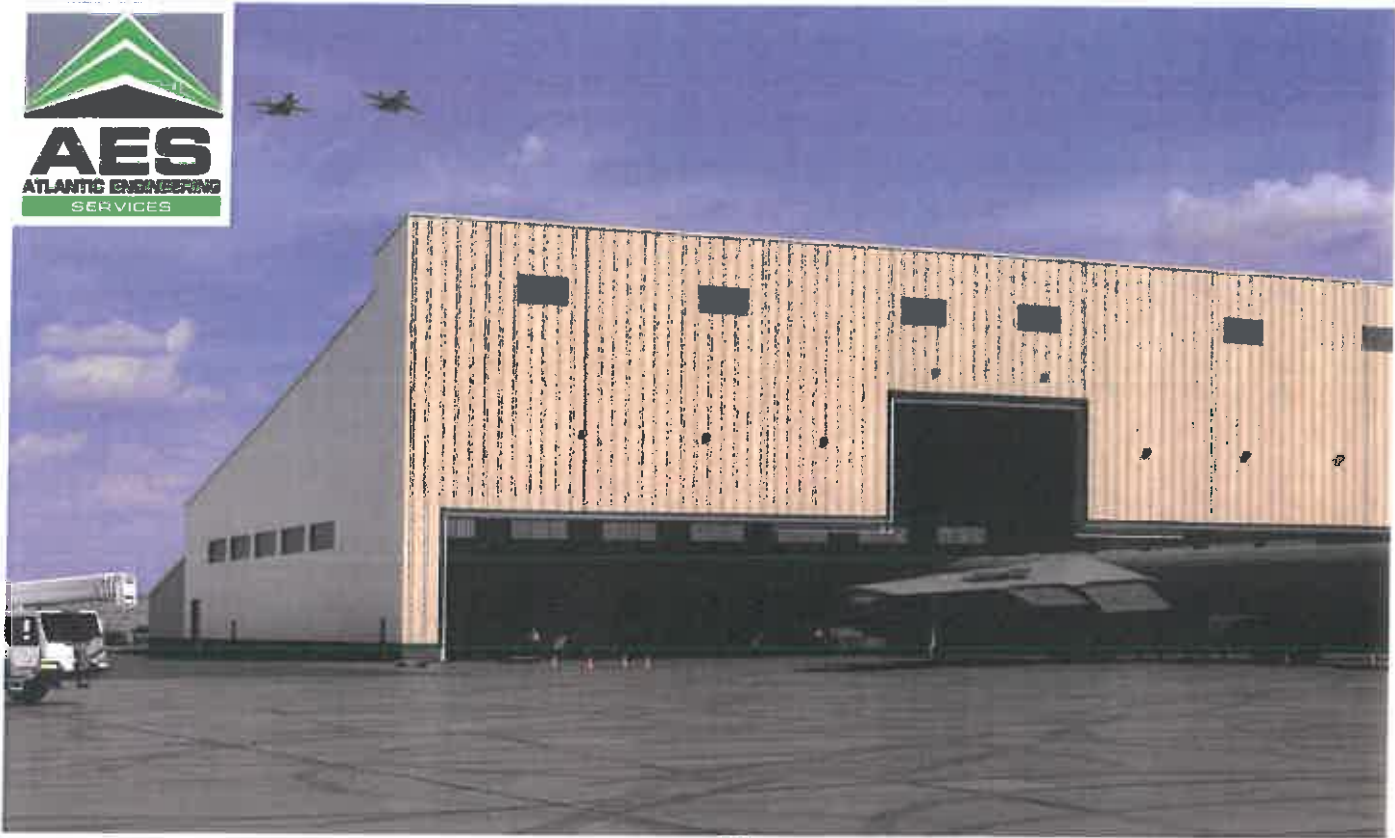
Mr. Taylor has served on a wide variety of projects including facility studies, new constructions and renovations, building additions, and structural condition assessments throughout the United States.

Mr. Taylor's experience includes the design of many complex structures such as Marconi Building #5 located in Cranberry, Pennsylvania; Presque Isle Downs in Erie, Pennsylvania; Lancaster General Hospital Orthopedic Center in Lancaster, Pennsylvania; several projects for UPMC Hamot Medical Center, including the recently opened Women's Hospital addition in Erie, Pennsylvania; St. Clair Hospital in Pittsburgh, Pennsylvania; St. Elizabeth Medical Center in Boardman, Ohio; and LeNature's beverage facility in Latrobe, Pennsylvania. Mr. Taylor has also designed the new Kellogg House Dormitory for the University of Virginia - a LEED Silver project - and the Stever House, a first-year residence hall for Carnegie Mellon University. One of his largest, most recently completed projects was the 10-story, Southeast Tower at Ruby Memorial Hospital for WVU Medicine located in Morgantown, West Virginia.

Recent projects designed by Mr. Taylor have reached \$280 million in construction value. His day-to-day duties include attending design and development meetings, supervising the production of construction documents, reviewing shop drawings, issuing revision sketches, attending site visits and construction meetings, and completing site visit and structural assessment reports.



bringing architectural  
visions to life



bringing architectural  
visions to life



## Weapon Load Crew Training Facility Hangar \$15 Million Construction

425 LINDBERGH AVENUE, BARKSDALE AFB, LA 71110

This project entailed the design and construction of a new 50,839 square foot, single-bay hangar space. The facility houses a B-52 aircraft and contains a Wash Rack and Utility Control Room used for weapons loading training functions and storage. The hangar also houses administrative support offices, a 135 seat auditorium to be used by the 2nd Bomb Wing, and a shop area.

The structural system consist of reinforced concrete foundations, steel columns and trusses, insulated metal exterior siding and a standing seam metal roof.





bringing architectural  
visions to life



## Joint Combat Aquatic Diver Training Facility \$13 Million Construction

CONFIDENTIAL, PANAMA CITY, FL

This project scope encompassed design and construction of a new 40' -0" deep dive tank/pool, elevated deck area, new walkway connecting the new dive tank to the existing Diver Training Facility (Building 351), a support structure for a 60-ton gantry crane and a new training building (Applied Instruction Building). The scope also included the demolition of the existing stairs to Building 351 and construction of new replacement stairs which provide access for diver emergencies and escape. Concrete bleachers and observation platforms accommodate students and instructors.

The new 2-story, 2,900 square foot Applied Instruction Building houses a classroom, training support space, storage, maintenance areas and mechanical equipment space for the pool. The structural system consists of exterior precast panels, steel beams supporting a concrete slab at the second floor, steel joists and steel beams supporting a metal deck at the roof level. The first floor slab is on-grade. Due to the proximity of the pool, the building structure stands on deep foundations. This project received the "American Concrete Institute" (ACI) "Significant Concrete Structure" award for 2008.





bringing architectural  
visions to life



## Littoral Warfare Systems Facility

**\$13.5 Million Construction**

NAVAL SURFACE WARFARE CENTER, PANAMA CITY FL

The Naval Support Activity in Panama City started around 1945 when the facility, equipment and personnel were transferred from Solomons, MD to Panama City, FL. The base was first established as the U.S. Navy Mine Countermeasures Station on July 20, 1945. It wasn't until the early 2000s that the base was given its most recent name, the Naval Surface Warfare Center, Panama City.

The Littoral Warfare Systems Facility is a 2-story building, enclosing almost 44,400 square feet, including a high bay installation/outfitting area, with an external, roof-mounted antenna tower. The installation/ outfitting area houses a 15-ton overhead crane. The building superstructure consists of a structural steel frame with a perimeter wall of brick-clad concrete tilt-up wall panels. The roof structure utilizes a galvanized metal deck that is supported by steel beams and K-series joists. The building provides laboratory and support space for Littoral Combat systems research, testing and evaluation, acquisition support, command and control, systems integration, and fleet service life cycle sustenance for the removable mission's packages associated with the new Littoral Combat ship. This project was designed according to LEED standards.





bringing architectural  
visions to life



## 82nd Airborne Division Headquarters

**\$35.7 Million Construction**

2843 NORMANDY DRIVE, FT. BRAGG NC 28310

The new headquarters for the 82nd Airborne Division at Ft. Bragg provides facilities for command and administrative operations. The three-story front wing provides conventional office environments, an operations center, storage and other specialized functions requiring tall spaces in the rear.

The structural system for the headquarters is an exercise in the accelerated design of steel framing and precast concrete wall panels. The construction features composite steel framing, all supported on steel columns (with no load bearing masonry) for optimal flexibility and to address anti-terrorism measures. Progressive collapse has been addressed with continuous beam and column moment frames around the tall building perimeter.

For AES, the project is also an exercise in Revit, a BIM software that has allowed the design team to understand and coordinate the structural systems with the mechanical building systems before the start of construction. Structural systems have been modeled to provide opportunities for clash detection with mechanical components.





bringing architectural  
visions to life



## FBI Field Office

\$14 Million Construction

3311 EAST CARSON STREET, PITTSBURGH PA 15203

Foundations for this 4-story federal building were required to be drilled through the remnants of the former LTV steel mill in Pittsburgh. Hidden vaults and equipment pads were strewn throughout the site with no credible drawings to locate them. A foundation system was designed to accommodate this uncertainty without effecting the project budget and schedule. This was accomplished using auger-cast piles with some spontaneous field visits to relocate and redesign foundation elements.

The frame of the structure consists of steel and diagonal bracing is utilized for the lateral load resisting system. Composite floor slabs provided capacity for heavy filing areas as well as the office and corridor spaces. A precast façade was used with the panels spanning column-to-column. The roof level was framed flat with composite beams and slabs to accommodate a potential future fifth floor. All foundations, columns and lateral bracing were designed to accept the future floor. A narrow bay running the length of the building down the centerline allowed shallower floor framing at each level to accommodate the large trunk ductwork at each floor. This enabled the floor-to-floor height to be optimized.





bringing architectural  
visions to life



## Joint Reserve Base | 470 Bachelor Quarters \$21 Million Construction

301 RUSSELL DRIVE, BELLE CHASSE LA 70037

The new 88,739 square foot Bachelors Quarters apartment building has been designed to accommodate the enlisted personnel at Naval Air Station (NAS) Joint Reserve Base (JRB) New Orleans. The intent was to provide a "Market Style" building that would blend with the surrounding facilities. The building features 61 two-bedroom, two-bathroom units.

The structure is comprised of a structural steel frame with light gage infill and a standing seam metal roof on light gage metal trusses. Blast-resistant design was achieved through the light gage wall framing. Entries feature barrel vaulted brick soffits supported by structural steel framing and concealed lintel systems. The building is founded on deep foundations including a structured first floor post tensioned slab.





bringing architectural  
visions to life



## Fort Meade Military Housing \$440 Million Construction

8700 91st DIVISION BOULEVARD, FORT MEADE MD 20755

Fort Meade became an active Army installation in 1917. Authorized by an Act of Congress in May 1917, it was one of 16 camps built for troops drafted for the war with the Central Powers in Europe.

Development of new housing for an entire military base with thousands of residents is a project at an unusual scale. The privatization of military housing requires the design and construction of large numbers of housing units, typically distributed into various well defined and highly systematized types and sizes.

AES brings to this work several important advantages. First, the size of the firm allows "multi-tasking", with different teams focusing on different elements of the campus design to speed up delivery of Construction Documents. Second, our diverse background helps us to streamline and systematize the design for the builder's advantage, going out of the box to find opportunities for increase efficiency and reduced cost. And our broad geographic coverage increases the design sensitivity to regional costs and issues.

At Fort Meade outside Baltimore, AES has helped to deliver new construction at a rate of 600 units per year for the Army. The total construction value represents the multi-phase and multi-year project.

[www.aespi.com](http://www.aespi.com)

© 2018 Atlantic Engineering Services

