



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

Solicitation

NUMBER
LOT502

PAGE
1

ADDRESS CORRESPONDENCE TO ATTENTION OF:
CONNIE OŞWALD 304-558-2157

VENDOR

RFQ COPY
 TYPE NAME/ADDRESS HERE
 Alpha Associates, Incorporated
 209 Prairie Avenue
 Morgantown, WV 26501

SHIP TO

WEST VIRGINIA LOTTERY
 900 PENNSYLVANIA AVE
 CHARLESTON, WV
 25302 304-558-0500

DATE PRINTED
01/29/2013

BID OPENING DATE: 02/27/2013 BID OPENING TIME 1:30PM

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
0001	1	JB		906-00-00-001		
<p>EXPRESSION OF INTEREST (EOI)</p> <p>THE WEST VIRGINIA PURCHASING DIVISION FOR THE AGENCY, THE WV LOTTERY, IS SOLICITING AN EXPRESSION OF INTEREST FOR PROFESSIONAL ARCHITECTURAL ENGINEERING DESIGN SERVICES TO RENOVATE FLOORS 7, 8 & 9 OF THE WV LOTTERY LOCATED AT 900 PENNSYLVANIA AVENUE, CHARLESTON, WV 25302 PER THE ATTACHED BID REQUIREMENTS AND SPECIFICATIONS.</p> <p>ARCHITECT/ENGINEERING SERVICES, PROFESSIONAL</p> <p>FOR RENOVATION OF FLOORS 7, 8 & 9 OF THE WEST VIRGINIA LOTTERY PER THE ATTACHED BID REQUIREMENTS AND SPECIFICATIONS.</p> <p>REFERENCE ATTACHED INSTRUCTIONS TO BIDDERS AND GENERAL TERMS & CONDITIONS.</p> <p>***** THIS IS THE END OF RFQ LOT502 ***** TOTAL:</p> <p>02/27/13 09:44:56 AM West Virginia Purchasing Division</p>						

SIGNATURE 	TELEPHONE 304-296-8216	DATE 2-26-13
TITLE President & COO	FEIN 55-0516286	ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO SOLICITATION, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

RFQ No. LOT502

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

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

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

DEFINITIONS:

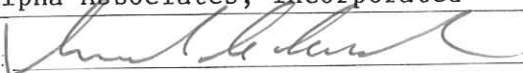
"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due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

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

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

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

WITNESS THE FOLLOWING SIGNATURE:

Vendor's Name: Alpha Associates, Incorporated
Authorized Signature:  Date: 2/26/2013

State of West Virginia

County of Monongalia, to-wit:

Taken, subscribed, and sworn to before me this ___ day of _____, 20__.

My Commission expires _____, 20__.

AFFIX SEAL HERE

NOTARY PUBLIC _____

CERTIFICATION AND SIGNATURE PAGE

By signing below, I certify that I have reviewed this Solicitation in its entirety; understand the requirements, terms and conditions, and other information contained herein; that I am submitting this bid or proposal for review and consideration; that I am authorized by the bidder to execute this bid or any documents related thereto on bidder's behalf; that I am authorized to bind the bidder in a contractual relationship; and that to the best of my knowledge, the bidder has properly registered with any State agency that may require registration.

Alpha Associates, Incorporated

(Company)



(Authorized Signature)

Richard A. Colebank, Pe, PS - President and COO

(Representative Name, Title)

304-296-8216

(Phone Number)

304-296-8216

(Fax Number)

February 26, 2013

(Date)

ADDENDUM ACKNOWLEDGEMENT FORM

SOLICITATION NO.: LOT502

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

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

Addendum Numbers Received:

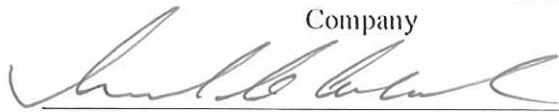
(Check the box next to each addendum received)

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

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

Alpha Associates, Incorporated

Company



Authorized Signature

2/26/2013

Date

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



February 27, 2013

Purchasing Division
2019 Washington Street, East
P.O. Box 50130
Charleston, WV 25305-0130

Attention: Ms. Connie Oswald

**RE: LOT502 – Architectural/Engineering Services
WV Lottery Renovations**

Dear Ms. Oswald,

Alpha Associates, Incorporated is pleased to submit this Expression of Interest for your consideration to provide Architectural and Engineering Design Services for renovations to floors 7, 8 & 9 of the WV Lottery building located at 900 Pennsylvania Avenue in Charleston, West Virginia.

Alpha is a West Virginia owned and operated design firm offering a full range of design services, including architectural design, civil and structural engineering, interior design, landscape design, surveying, and construction administration. The following Expression of Interest outlines Alpha's qualifications, as well as those of our team member, H.F. Lenz Company. Lenz will provide all mechanical, electrical, plumbing and fire safety evaluations and design.

The design staff for your project will be led by talented architects and engineers with recent, relevant experience. For example, Alpha, is currently working on an \$18M project in the Charleston area for the West Virginia Regional Technology Park. Alpha is providing renovation design services for this 125,000 sq. ft. building composed of offices and laboratories.

Another similar project example is a building in Morgantown, called CRRB, built as a silo for the National Energy Technology Laboratory. This building was deeded to the University for Office Space. It is a 7 story office building. Alpha was hired to renovate both the 7th floor and the 5th floor, while the building was fully occupied. In each case we worked successfully with each tenant and designed their "space to suit". No disruption of the other occupied areas was experienced by the existing tenants. Building shut-downs were undertaken, and coordinated between the building owner and the general contractor as specified in the contract documents to minimize disruption to the building occupants.

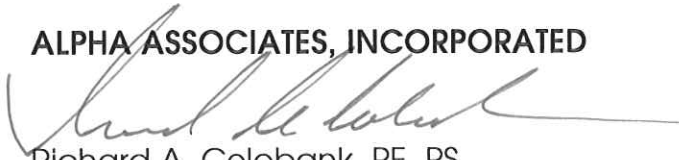
Your project will be designed by the same professional staff members that worked on these projects. They have the knowledge and experience needed to successfully complete the project on-time and within budget.

This project will be managed and produced in Alpha's Charleston Office located on Kanawha Boulevard. Our location will be an added benefit throughout the project. Our staff will be available to be onsite within a matter of minutes instead of hours.

This project is a perfect fit for our team. We have the expertise and ability to handle the evaluation, design and renovation of the WV Lottery building in its entirety. Our quality work, professionalism and dedication are unparalleled among our competitors. We look forward to sharing additional qualifications and ideas with you in an interview.

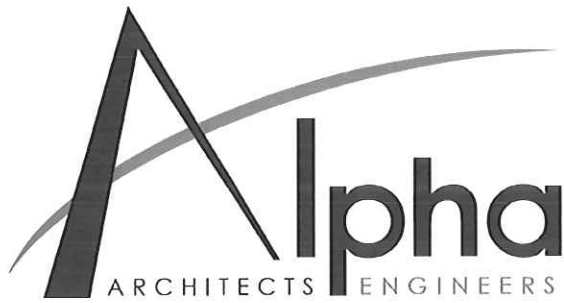
Sincerely,

ALPHA ASSOCIATES, INCORPORATED



Richard A. Colebank, PE, PS
President and COO

rick.colebank@thinkalphafirst.com



FIRM PROFILE

Firm Profile

FIRM NAME

Alpha Associates, Incorporated

OFFICE LOCATIONS:

209 Prairie Avenue
Morgantown, West Virginia 26501

535 West King Street
Martinsburg, West Virginia 25401

2506 Kanawha Blvd. East
Charleston, West Virginia 25311

INCORPORATED

1969; Morgantown, WV

FIRM PRINCIPALS

Richard A. Colebank, PE, PS; President and COO
Richard W. Klein, PE, PS; Chairman and CEO
Charles B. Luttrell, PE; Principal
Steven V. Buchanan, PE, PS; Principal
Matthew S. Breakey, AIA, LEED-AP; Principal
Charles B. Branch, PE; Principal

NUMBER OF EMPLOYEES

33 Employees

SERVICES

Architectural Design
Civil Engineering
Structural Engineering
Surveying
Interior Design
Landscape Architecture
Construction Administration



Alpha Associates, Incorporated was established in 1969 and since that time has completed hundreds of projects throughout Morgantown and the state of West Virginia. Alpha's Corporate Office is located in Morgantown with our Eastern Regional Office located in Martinsburg.



Currently in its 67th year, the H.F. Lenz Company is a Pennsylvania-based firm offering a full range of engineering services for building systems, infrastructure, and industry. 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 44 professional engineers are registered in all 50 states and the District of Columbia.



Services offered include:

- Mechanical Engineering
- Electrical Engineering
- Plumbing Engineering
- Life Safety / Fire Protection Engineering
- Communications Engineering
- Energy Management
- Civil Engineering
- Structural Engineering
- Industrial Engineering
- Surveying
- Construction Phase Services
- Commissioning



Two essential prerequisites lay the foundation for every H.F. Lenz Company project. First, we take the time to understand the client's business and how it operates. Second, we proactively involve the client in the development of appropriate solutions. In our role as partner, we help the client understand how well the available alternatives satisfy the project's own unique, prioritized set of objectives.

A remarkable 85 percent of our work consists of repeat commissions from clients who appreciate our responsive, value-added service. We've earned their trust by:

- Designing well-functioning systems that work *with* a building's architecture rather than being constrained by it.
- Achieving the optimal balance of system performance with the client's budget through value engineering.
- Designing system infrastructures—including communications—that accommodate growth and changing technology.
- Phasing installations to avoid disrupting normal and critical operations.
- Keeping construction cost and schedule on track with enhanced construction-phase services.
- Commissioning new systems to assure that they function as intended.



The H.F. Lenz Company employs 175 people in our Johnstown, Pennsylvania headquarters and satellite offices in Pittsburgh, Pennsylvania and Conneaut, Ohio.



PROJECT APPROACH

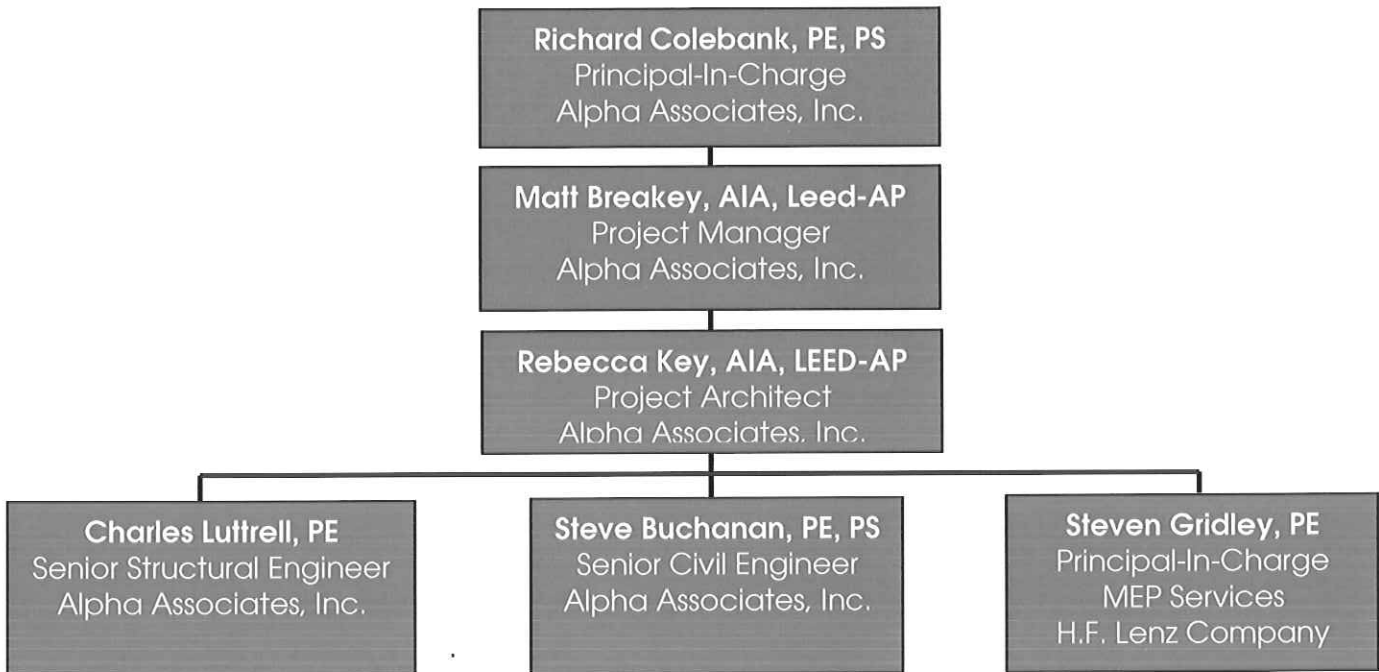
Successful project management depends upon consensus regarding work efforts, milestones and goals. We have found that the development of detailed work plans, which delineate tasks and deliverables for each project phase, in concert with the client and full project team is the most effective means of establishing expectations about efforts required by the respective disciplines. In addition to guiding the efforts of the design team, the work plan sets forth specific time frames and decision points for Owner and user reviews, comments and approvals.

A significant task in managing a project is to develop a schedule for the project. Developing an overall project schedule must take into account many factors: building type, owner's desire for occupancy, scope of work and level of documentation, whether contract(s) is bid or negotiated, available fee, and prior experiences on similar projects. It is also imperative that owner and agency reviews be considered when developing a schedule. Once the Scope of Work is clearly defined, Alpha will provide you with a detailed project schedule that will be followed throughout the project.

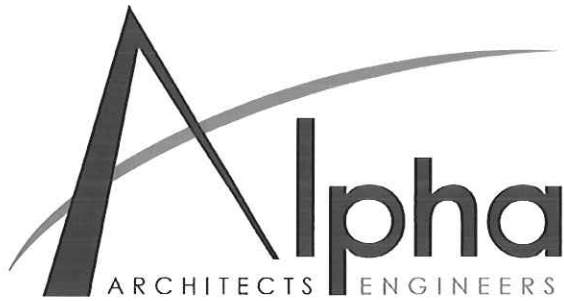
The following is Alpha's anticipated Project Approach for the renovations to floors 7, 8 and 9 of the WV Lottery Building:

- 1) Initial Kick-off meeting at site to review Program and Schedule with Stake Holders/Owner
- 2) Establish Schedule with Dates assigned
- 3) Assessment of building condition
 - a. Physical on-site inspection
 - b. Review of existing documents if any
 - c. Measurements and/or verification of measurements to reflect actual conditions in field.
- 4) Establish conclusions and recommendations based upon observations from inspections of existing conditions.
- 5) Meeting with stakeholders/Owner's to provide Building Assessment Report (Owner's select committee)
- 6) Determine direction of repairs/renovations
 - a. Establish phases if necessary
 - b. Establish probable estimate of costs
- 7) Obtain approval from Stake holders to proceed to Construction Document Phase
- 8) Provide written and graphic documents illustrating extent of replacement, repair and constructions of elements determined from above. Documents shall be of sufficient quality to seek competitive bids for the established Scope of Work.
- 9) Assist Owner in Bidding and Negotiation.
- 10) Provide Construction Administration during term of construction, representing the Stakeholders/Owner's interest.

Key Personnel/Team Organization



Above are the key personnel who will be assigned to your project. Resumes for these individuals are included herein. Additional architects, engineers, surveyors, technicians, and administrative personnel are also available if needed.



ALPHA RESUMES

Richard A. Colebank, PE, PS | President and COO

SUMMARY

Mr. Colebank is President and Chief Operating Officer of Alpha. He has been with Alpha Associates, Incorporated since 1985. He began his career with Alpha as a staff engineer and progressed through the ranks from Project Manager to his current position. Mr. Colebank has worked with diverse clients such as WVU, City of Morgantown, WVDOH, WVU Foundation, and the Morgantown Municipal Airport, as well as numerous other public and private clients. Since 1988, Mr. Colebank has been the Principal-In-Charge of many of the Civil Engineering projects developed at Alpha. In his current capacity, Mr. Colebank provides financial and administrative guidance for the day to day operations of the company while continuing to manage Civil Engineering Projects.



PROFILE

Broad-based responsibilities in the following areas:

- Project Management
- Business Operations and Financial Management
- Quality Assurance/Quality Control
- Civil Engineering Project Management and Design
- New Business Development
- Expert Testimony and Investigation

PROFESSIONAL HIGHLIGHTS

Project Manager:

- WVU Research Park; Morgantown, WV
- Federal Bureau of Prisons Hazelton Medium Security Prison
- WV Medal of Honor Recipients Plaza; Hazelton, WV
- North Fork Hughes River Recreation Facilities; Ritchie County, WV
- WVDOH I-77 Welcome Center; Williamstown, WV
- Ices Ferry Bridge; Morgantown, WV
- Monongalia General Hospital Expansion; Morgantown, WV
- Monongalia General Hospital Access Road; Morgantown, WV
- Morgantown Municipal Airport Access Road; Morgantown, WV

Indefinite Delivery/Indefinite Quantity Contracts:

- Morgantown Municipal Airport Open End Contract
- West Virginia Division of Highways Open End Contract
- National Energy Technology Laboratories Open End Contract
- West Virginia University Open End Contract
- United States Postal Service Open End Contract



ALPHA RESUMES

Richard A. Colebank, PE, PS | President and COO

EMPLOYMENT HISTORY

1985 – Current	Alpha Associates, Incorporated
1983-1985	Charles Townes and Associates, P.C.
1983	US Army Corps of Engineers

EDUCATION

West Virginia University
 Masters of Business Administration; 1999
 Bachelor - Civil Engineering; 1982

QUALIFICATIONS

- **License:** Professional Engineer: West Virginia, Maryland, Pennsylvania, Virginia
- Professional Surveyor: West Virginia
- Certified Private Pilot

AFFILIATIONS

- Former NSPE/PEPP Governor of WV
- ACEC/WV; Former President and National Director
- University High School Foundation; Charter Member; President
- Morgantown Area Chamber of Commerce; Past Chairman
- Monongalia County MPO Technical Advisory Committee; Member
- Morgantown Area Economic Partnership; Member
- American Red Cross, River Valley Chapter B.O.D.

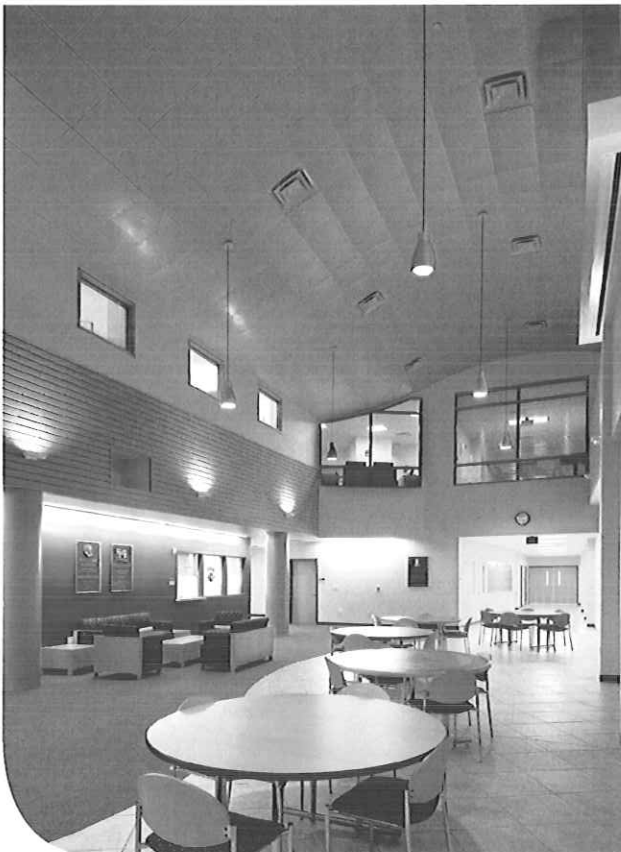


ALPHA RESUMES

Matthew Breakey, AIA, LEED-AP | Principal, Architect

SUMMARY

Mr. Breakey began working at Alpha in 1998, and became a principal of the firm in 2004. Mr. Breakey has gained experience through working as Architect of Record and Project Manager on major capital construction projects throughout West Virginia. Mr. Breakey became a LEED Accredited Professional in 2009.



PROFILE

Broad-based responsibilities in the following areas:

- Architectural Design
- Construction Administration
- Client Development
- New Business Development

PROFESSIONAL HIGHLIGHTS

Higher Educational Facilities

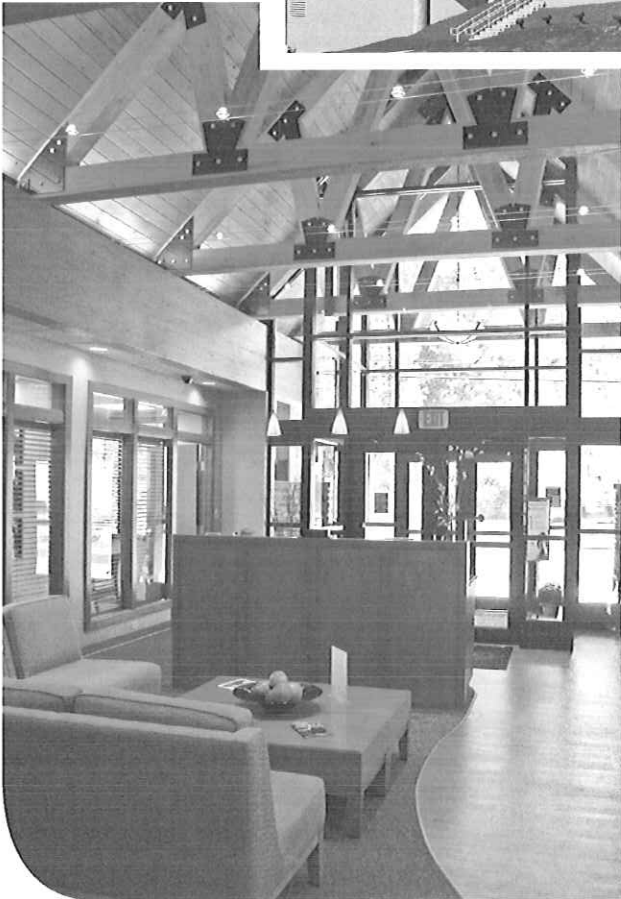
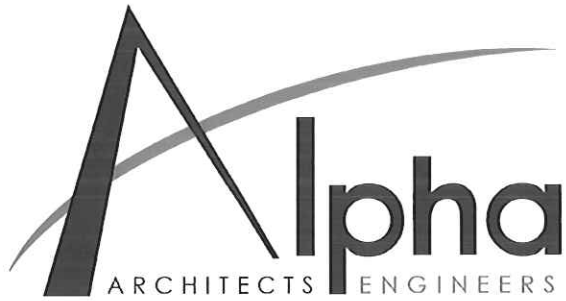
- Potomac State College, ADA Connector Link; Keyser, WV
- Engineering Science Building, East Wing Addition, WVU
- Potomac State College, Library Façade Replacement, Keyser, WV
- Engineering Sciences Building, 10th Floor Renovation, WVU
- Engineering Sciences Building Nan/Microtechnology Lab; WVU
- Alfred F. Galli Laboratory, WVU
- Robert C. Byrd Health Sciences Center SRP Lab; WVU

K-12 Educational Facilities:

- Washington High School; Charles Town, WV
- Mountaineer Middle School Renovation; Morgantown, WV
- Pocahontas County High School Science Wing; Marlinton, WV
- Slanesville Elementary School Addition; Hampshire County, WV
- Petersburg High School Science Lab Renovation; Petersburg, WV
- Buckhannon Upshur Middle School Renovations; Buckhannon, WV

Miscellaneous:

- Fairmont Federal Credit Union; Bridgeport, WV
- Clear Mountain Bank, Reedsville Branch; Reedsville, WV
- BC Bank Renovation/Addition; Phillippi, WV
- Clear Mountain Bank, Oakland Branch; Oakland, MD
- Clear Mountain Bank, Sabraton Branch, Morgantown, WV



ALPHA RESUMES

Matthew Breakey, AIA, LEED-AP | Principal, Architect

EMPLOYMENT HISTORY

- | | |
|----------------|----------------------------------------------------------------------|
| 1998 – Current | Alpha Associates, Incorporated |
| 1994-1998 | West Virginia University Physical Plant Engineering and Construction |
| 1992-1994 | West Virginia University Facilities Planning Management |

EDUCATION

- Pennsylvania State University
Bachelor of Architecture; 1992
- Bachelor of Science; 1991

QUALIFICATIONS

- **License:** Registered Architect: West Virginia, Maryland
- NCARB Certified
- Leadership In Energy and Environmental Design Accredited Professional

AFFILIATIONS

- American Institute of Architects
- West Virginia Society of Architects
- Council of Educational Facility Planners International
- U.S. Green Building Council
- Chestnut Ridge Park Board; Past President
- Main Street Morgantown



ALPHA RESUMES

Rebecca Key, AIA, LEED-AP | Architect, Associate

SUMMARY

Ms. Key has worked in the architectural field for over 34 years. She is Project Architect/Project Manager for numerous architectural designs at Alpha Associates, Incorporated. Ms. Key is involved from the programmatic stages and schematic designs all the way through construction documents to construction administration.



PROFILE

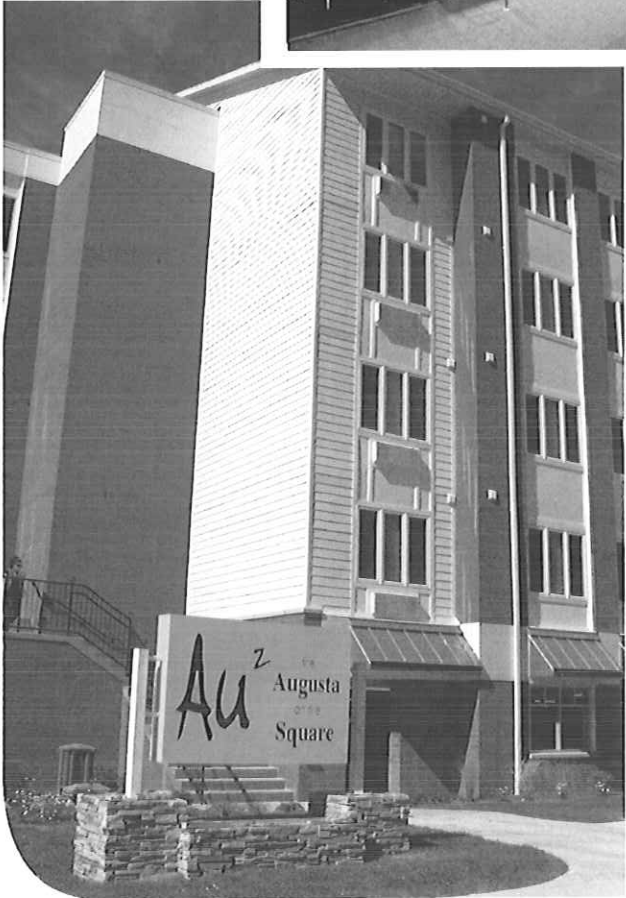
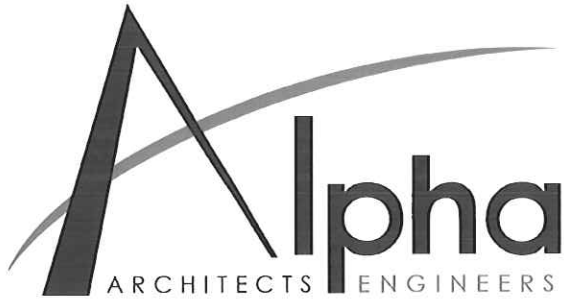
Broad-based responsibilities in the following areas:

- Architectural Design
- Interior Design
- Medical Design
- Interior Space Planning
- Historic Renovation

PROFESSIONAL HIGHLIGHTS

Architectural Design:

- Mon County Family Court Renovation; Morgantown, WV
- Mon County Sheriff's Building; Morgantown, WV
- WVU South Agricultural Sciences Building; Morgantown, WV
- Washington High School; Charles Town, WV
- Prichard Hall Renovation; Fairmont State University; Fairmont, WV
- WVU CRRB Renovation, 5th and 7th Floors; Morgantown, WV
- WVU Boreman Hall, Boreman Bistro; Morgantown, WV
- WVU Hatfields Restaurant; Morgantown, WV
- Hart Field Maintenance Facility; Morgantown, WV
- Norwood Fire Station; Morgantown, WV
- FMW Composites; Bridgeport, WV
- Hart Field Terminal Renovation; Morgantown, WV
- White Hall Municipal Building; White Hall, WV
- WV State Office Building; Clarksburg, WV
- Ruby McQuain Amphitheater Roof; Morgantown, WV
- Augusta Apartment Building; Morgantown, WV
- Cass Scenic Railroad Clubhouse Renovation; Cass, WV
- Berkeley Springs Bath House Renovation; Berkeley Springs, WV



ALPHA RESUMES

Rebecca Key, AIA, LEED-AP | Architect, Associate

EMPLOYMENT HISTORY

2000 – Current Alpha Associates, Incorporated
1983-1999 Alexander Key and Associates
1978-1983 Webster Clothes; Director of Store Planning

EDUCATION

University of Maryland
Bachelor of Architecture; 1977
Maryland Institute College of Art
Coursework in Furniture Design; 1986-1987

QUALIFICATIONS

- **License:** Registered Architect: West Virginia, Maryland, Washington DC, New York, Virginia, Pennsylvania
- NCIDQ Certified
- Leadership In Energy and Environmental Design Accredited Professional

AFFILIATIONS

- American Institute of Architects
- West Virginia Society of Architects
- Fairmont, WV ICC Board of Appeal; Board Member
- U.S. Green Building Council
- AIA Liveable Communities
- Marion County Chamber of Commerce

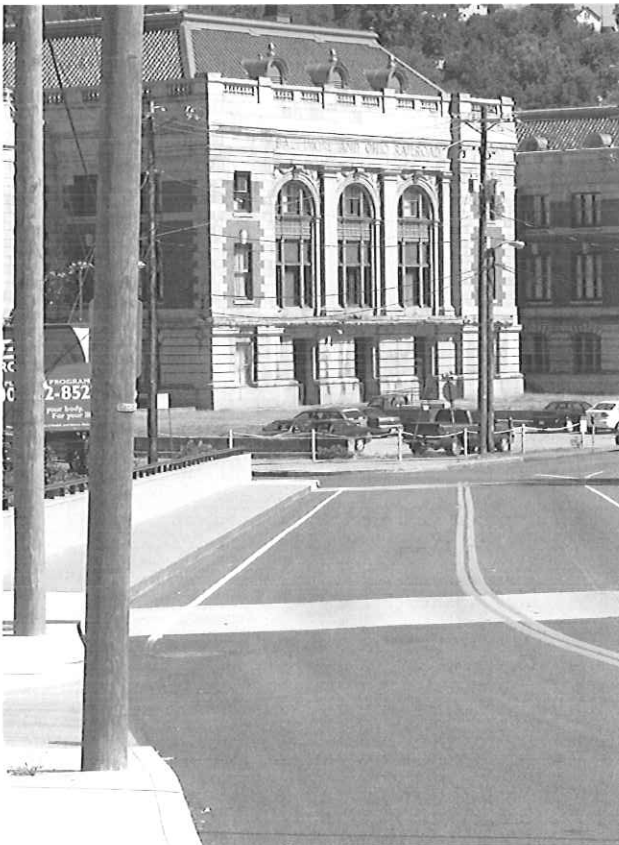


ALPHA RESUMES

Charles B. Luttrell, PE | Principal, Structural Engineer

SUMMARY

Mr. Luttrell has worked with Alpha Associates, Inc. since 1996. He is the chief structural engineer on all projects at Alpha. Before coming to Alpha, Mr. Luttrell's graduate work resulted in several contributions to the cold-formed steel deck industry. His new method of analysis for non-uniform loads on composite concrete and cold formed steel decks has been made a permanent part of the Steel Deck Institute's design manual. Mr. Luttrell also worked on projects that involved pre-stressed timber bridge research with the WVU Constructed Facilities Center. Since coming to Alpha, Mr. Luttrell has had significant involvement in the effort to begin utilizing modern composite materials in practical bridge applications.



PROFILE

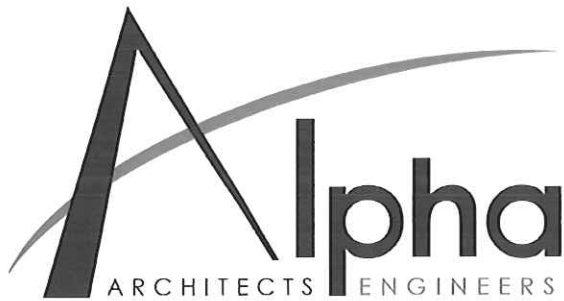
Broad-based responsibilities in the following areas:

- Bridge Structural Design and Analysis
- Innovative Bridge Materials Applications
- Building Structural Design and Analysis
- Historical Restoration and Evaluations

PROFESSIONAL HIGHLIGHTS

Structural Engineer:

- Alumni Center Structural Framing and Foundation; WVU
- Engineering Science Building, East Wing Addition, WVU
- Hazel Ruby McQuain Amphitheater Roof; Morgantown, WV
- West Buckeye Bridge; Core, WV
- Washington High School; Charles Town, WV
- WVU Coliseum Structural Inspection; Morgantown, WV
- WVU Coliseum Scoreboard Hoist Project; Morgantown, WV
- Alderson Broaddus College, Rex Pyles Arena Deck; Philippi, WV
- Mountaineer Middle School Renovation; Morgantown, WV
- Salem International Building Inspections; Salem, WV
- Monongalia County Sheriff's Building; Morgantown, WV
- South High Street Bridge, Morgantown, WV
- Ices Ferry Bridge, Morgantown, WV



ALPHA RESUMES

Charles B. Luttrell, PE | Principal, Structural Engineer

EMPLOYMENT HISTORY

1996 – Current	Alpha Associates, Incorporated
1995-1996	Larry D. Luttrell, PE, Ph D
1991-1994	West Virginia University
1990-1991	WVU Constructed Facilities Center

EDUCATION

West Virginia University
 Masters - Structural Engineering; 1995
 Bachelor - Civil Engineering; 1993

QUALIFICATIONS

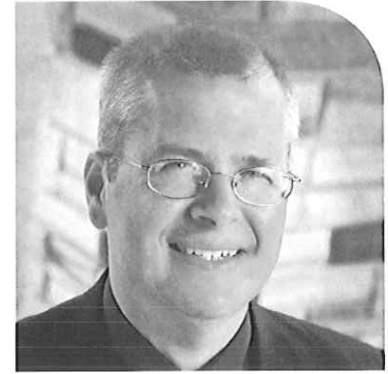
- **License:** Professional Engineer: West Virginia, Maryland, Pennsylvania

AFFILIATIONS

- WV Society of Professional Engineers
- National Society of Professional Engineers
- Chi Epsilon; Member
- American Concrete Institute; Member

Research Experience

- Cold Formed Steel Deck Research
 - ✓ Fastener Failures
 - ✓ Edge conditions/failures
 - ✓ Buttoned overlap sheer failures
- Composite Cold Formed Steel and Concrete Deck Research
 - ✓ Line load behavior/failures
 - ✓ Concentrated load behavior/failures
 - ✓ Web crippling
 - ✓ Punch failures



ALPHA RESUMES

Steven V. Buchanan, PE, PS | Principal, Civil Engineer

SUMMARY

Mr. Buchanan is a Civil Engineer and Principal at Alpha Associates, Incorporated. He has more than 28 years experience working in municipal engineering, storm water management, site planning, hydrologic and hydraulic analysis, wastewater collection systems design, water distribution systems, highway engineering, and traffic engineering.



PROFILE

Broad-based responsibilities in the following areas:

- Highway Design
- Municipal Engineering
- Wastewater Collection
- Storm Sewer System Design
- Passive Acid Mine Drainage Treatment
- Site Engineering
- Project Management

PROFESSIONAL HIGHLIGHTS

Civil Engineer/Project Manager:

- Borough of Point Marion Engineer; Point Marion, PA
- Mon County BOE Sewage Treatment Plants; Morgantown, WV
- Willowdale Road Sidewalk; Morgantown, WV
- North Fork Hughes River Recreation Facilities; Ritchie County, WV
- WVDOH Rest Areas Sewage Treatment Plants; WV
- WVU Law School Parking Lot; Morgantown, WV
- Uvilla-Shepherdstown Road Project; Jefferson County, WV
- Wheatland Road Widening and Utility Relocation; Berkeley County
- Clay-Battelle High School Sewer Line Extension; Morgantown, WV
- Grade Road Design Study; Berkeley County, WV
- WVDOH I-77 Welcome Center; Williamstown, WV
- WV Medal of Honor Recipients Plaza; Hazelton, WV
- Forks of the Cheat Multiple Projects
- Guardians of the West Fork - Two Projects
 - West Buckeye Acrow Bridge; Mon County, WV
 - Elkins Bypass; Randolph County, WV



ALPHA RESUMES

Steven Buchanan, PE, PS | Principal, Civil Engineer

EMPLOYMENT HISTORY

1998 – Current	Alpha Associates, Incorporated
1989-1998	Widmer Engineering, Incorporated
1986-1989	Wiley and Wilson, P.C.
1984-1986	Greiner Engineering Sciences, Incorporated
Summer-1983	WV Department of Transportation

EDUCATION

West Virginia University
Bachelor of Science in Civil Engineering; 1984

QUALIFICATIONS

- **License:**
 - Professional Engineer: West Virginia, Pennsylvania, Maryland, Ohio
 - Professional Surveyor: West Virginia



Mr. Deter 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 is responsible for coordination with the client, the architect, regulatory agencies, and the engineering staff; project scheduling; and other project management functions. Mr. Deter is experienced 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; nurse call; security; sound; and telephone systems. His project experience includes:

U.S. Courthouse
Wheeling, West Virginia
Renovation and 90,000 sq.ft. addition and courtroom expansion of historic building totaling \$12 million

Federal Office Building
Martinsburg, West Virginia
Building-wide HVAC renovation study and design/build construction document package

Federal Office Building
Huntington, West Virginia
Complete electrical system replacement within occupied building including new 4.16 kV service

Kee Federal Office Building and Courthouse
Bluefield, West Virginia
Building-wide HVAC and courtroom renovations

Pennsylvania Turnpike Commission
Harrisburg, Pennsylvania
New three-story addition and renovation to the Central Administration Building; LEED™ Certified Building

Social Security Administration
Woodlawn, Maryland
Renovations to a 1.2 million sq.ft. operations building totaling \$125 million; LEED Certified

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 Certification

Licensed Professional Engineer in Pennsylvania, Illinois, Maryland, New Jersey, Ohio, Virginia, and West Virginia; LEED™ Accredited Professional

Professional Affiliations

Professional Engineers in Private Practice; NSPE/PSPE; APPA; U.S. Green Building Council

National Drug Intelligence Center
Johnstown, Pennsylvania
Tenant fit-up of 87,500 sq.ft. of secure office and data center space for a government agency

Erie Federal Building and Courthouse
Erie, Pennsylvania
New 50,000 sq.ft. addition and renovation of two historic buildings

SEPTA Headquarters
Philadelphia, Pennsylvania
Base building mechanical/electrical retrofit for a 20-story corporate office building

Social Security Administration
Johnstown, Pennsylvania
New 40,000 sq.ft., design/build three-story building with a ground-level parking area

Fairmont State College
Fairmont, West Virginia
– *Study and evaluation of 13.8 kV distribution system serving 14 campus buildings*
– *Hunt Haught Hall- Electrical distribution system upgrade*
– *Jaynes Hall, Colebank Hall - Replaced 500 KVA electric service and replaced existing 7.5 KW genset with 100 KW genset*



Mr. Mack has several years 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, cost estimating. His experience includes the design of mechanical systems for office buildings, educational facilities, industrial plants, and military installations. He has also been involved in the design of chiller and boiler plants. His project experience includes:

Fifth Third Center
Charleston, West Virginia
New 66,000 sq.ft. multi-tenant office building

U.S. Courthouse
Wheeling, West Virginia
Renovation and 90,000 sq.ft. addition and courtroom expansion of historic building totaling \$12 million

Federal Office Building
Martinsburg, West Virginia
Building-wide HVAC renovation study and design/build construction document package

Kee Federal Office Building and Courthouse
Bluefield, West Virginia
– *Courtroom and office renovations*
– *Boiler and chiller replacement*

Pennsylvania Turnpike Commission
Harrisburg, Pennsylvania
New three-story addition and renovation to the Central Administration Building; LEED™ Certified

Drug Enforcement Administration
Pittsburgh, Pennsylvania
New two-story, design/build, 50,000 sq.ft. building; LEED™ Certified

DRS Laurel Technologies
Johnstown, Pennsylvania
New 136,000 sq.ft., design/build office and manufacturing facility

Erie Federal Building and Courthouse
Erie, Pennsylvania
New 50,000 sq.ft. addition and renovation of two historic buildings

William J. Nealon Federal Building and Courthouse, Scranton, Pennsylvania
New four-story, 120,000 sq.ft. courthouse annex connected to the existing 150,000 sq.ft. building by a new four-story atrium

Pennsylvania Department of Conservation and Natural Resources - Penn Nursery
Potts Mills, Pennsylvania
New 8,000 sq.ft. office building to house nursery and forestry personnel from throughout the state, the building contains conference areas and meeting spaces; LEED™ Gold

Research and Economic Development Center, Penn State University, Behrend Campus
Erie, Pennsylvania
New, 179,640 sq.ft. "smart" academic building, which was designed to be a state-of-the-art instructional and research facility housing classrooms, flexible modern research and instruction labs, computing facilities, faculty offices, seminar/conference areas, a lounge, cybercafe and food court, general/special purpose classrooms, and support spaces.

West Virginia State Capitol Complex
Charleston, West Virginia
4,800-ton chilled water plant and acoustical analysis

Education

Bachelor of Architectural Engineering, 1995, Pennsylvania State University

Experience

H.F. Lenz Company 1995 - Present

Professional Registration / Certification

Licensed Professional Engineer in Pennsylvania and Delaware; LEED Accredited Professional

Professional Affiliations

ASHRAE – Johnstown, PA Chapter, member of the Board of Governors



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. Mr. Mulhollen's project experience includes (*indicates prior experience):

Fifth Third Center
Charleston, West Virginia
New 66,000 sq.ft. multi-tenant office building

Lincoln County
Hamlin, West Virginia
Electrical design for new 911 center with 500 kW Generator 277/480 volts

West Virginia Army National Guard
Kingwood, West Virginia
Project management and electrical design for Camp Dawson billeting facility

Anthony Juvenile Correctional Center*
Neola, West Virginia
Electrical design of correctional facility

Pennsylvania Turnpike Commission
Harrisburg, Pennsylvania
New three-story addition and renovation to the Central Administration Building; LEED™ Certified Building

U.S. Drug Enforcement Administration
Pittsburgh, Pennsylvania
New two-story, 50,000 sq.ft. building; LEED™ Certified

Research and Economic Development Center,
Penn State University, Behrend Campus
Erie, Pennsylvania
New, 179,640 sq.ft. "smart" academic building, which was designed to be a state-of-the-art

instructional and research facility housing classrooms, flexible modern research and instruction labs, computing facilities, faculty offices, seminar/conference areas, a lounge, cybercafe and food court, general/special purpose classrooms, and support spaces.

Erie Federal Building and Courthouse
Erie, Pennsylvania
New 50,000 sq.ft. addition and renovation of two historic buildings

Department of Treasury*
Trenton, New Jersey
– New 265,000 sq.ft. Department of Revenue facility totaling \$25 million
– New 90,000 sq.ft. Troop "C" headquarters totaling \$12 million

University of Charleston
Charleston, West Virginia
Electrical design for Brotherton Hall, a new dormitory building

Fairmont State College
Fairmont, West Virginia
– Study and evaluation of 13.8 kV distribution system serving 14 campus buildings
– Hunt Haught Hall- Electrical distribution system upgrade
– Jaynes Hall, Colebank Hall - Replaced 500 KVA electric service and replaced existing 7.5 KW genset with 100 KW genset

Education

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

Experience

H.F. Lenz Company 1999
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 • Maryland • Missouri • New Jersey • Nevada • New Mexico • North Carolina • Ohio • Tennessee

Professional Affiliations

Institute of Electrical and Electronics Engineers, Inc.



Mr. Rummel has designed complete plumbing and sprinkler systems for numerous federal and corporate office buildings. He is responsible for plumbing and sprinkler system design, layout, and calculations; selection and sizing of equipment; cost estimates; and site survey work. He is knowledgeable of all applicable plumbing and fire protection codes. He 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. Mr. Rummel has been involved in the plumbing and fire protection/life safety design of the following projects:

Fifth Third Center
Charleston, West Virginia
New 66,000 sq.ft. multi-tenant office building

U.S. Courthouse
Wheeling, West Virginia
Renovation and 90,000 sq.ft. addition and courtroom expansion of historic building totaling \$12 million

Federal Office Building
Martinsburg, West Virginia
Building-wide HVAC renovation study and design/build construction document package

Federal Office Building
Huntington, West Virginia
Complete electrical system replacement within occupied building including new 4.16 kV service

Kee Federal Office Building and Courthouse
Bluefield, West Virginia
Building-wide HVAC and courtroom renovations

Pennsylvania Turnpike Commission
Central Administration Building
Harrisburg, Pennsylvania
New three-story addition and renovation to the Central Administration Building: LEED™ Certified

Education

B.S. in 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, American Society of Plumbing Engineers

Professional Affiliation

American Society of Plumbing Engineers • Society of Fire Protection Engineers

Erie Federal Building and Courthouse
Erie, Pennsylvania
New 50,000 sq.ft. addition and renovation of two historic buildings. The project received a GSA Design Award Citation in the preservation category.

Social Security Administration
Woodlawn, Maryland
– Renovations to a 1.2 million sq.ft. operations building Phase 2 project totaling \$125 million
– New 33,000 sq.ft. Child Care Center; LEED™ Certified Building

Social Security Administration
Johnstown, Pennsylvania
New 40,000 sq.ft., three-story building with a ground-level parking area

DRS Laurel Technologies
Johnstown, Pennsylvania
New 136,000 sq.ft. office and manufacturing facility on a 20-acre site

U.S. Army Reserve Aviation Facility
Johnstown, Pennsylvania
Fire protection system design for a new 120,000 sq.ft. multi-building reserve center with assembly hall, classrooms, administrative areas, dining facilities, and arms vault



ALPHA EXPERIENCE

Mountaineer Middle School | 2009

Educational Case Study

Mountaineer Middle School
Morgantown, WV

This renovation project included the transformation of a high school into a middle school for Mon County Schools. The renovation included new interior finishes, new HVAC and sprinkler systems, new roof, new entryway, and the paving and redesign of parking lots and access road to comply with ADA regulations.

The project consisted of the demolition of the 80 year old boiler heating system, removing existing wall partitions and floor coverings, and the abatement of asbestos containing materials.

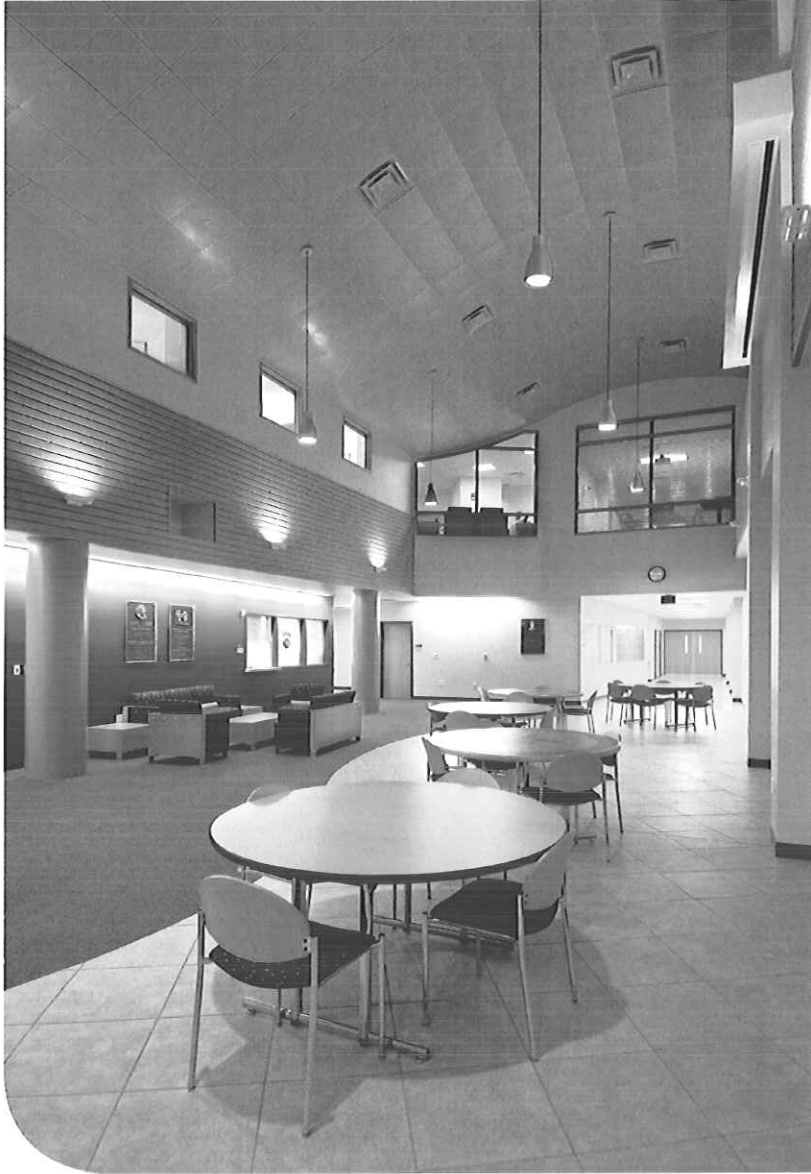
The renovation also included relocating the administrative offices adjacent to the buildings primary entrance.

Project Contact:
Ed McCabe
13 South High Street
Morgantown, WV 26505
304-291-9210

At a Glance

CLIENT: Mon County Schools
LOCATION: Morgantown, WV
COMPLETION DATE: 2009
SIZE: 115,780 Sq. Ft.
CONSTRUCTION COST: \$8.4 Million





ALPHA EXPERIENCE

ESB East Wing Addition | Reno/Add 2008

Educational Case Study

WVU ESB - East Wing Addition
Morgantown, WV

The first phase of this project was a feasibility study that evaluated the building to determine the nature and scope of the addition.

The West Virginia University Engineering Science Building East Wing Addition/Renovation project was conceived to create a new primary entrance to the existing 228,000 SF building. It consists of a 4-story addition as well as the conversion of an abandoned 3 1/2 story boiler room into usable program space. This 3 1/2 story boiler space was subdivided into 3 floors supporting chemical-research labs and a tiered lecture hall.

Project Contact:
Kevin Kilinsky
Po Box 6572
Morgantown, WV 26506
304-293-4841

At a Glance

CLIENT: West Virginia University
LOCATION: Morgantown, WV
COMPLETION DATE: 2008
SIZE: 32,600 add, 6,500 reno.
CONSTRUCTION COST: \$11 Million
FEE: \$858,838.00

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ALPHA EXPERIENCE

CRRB 7th Floor Renovation | 2005

Architectural Case Study

Chestnut Ridge Research Building 7th Floor Renovation

Morgantown, WV

This project involved the build-out of office spaces on the seventh floor of the Chestnut Ridge Research Building. Alpha's design staff transformed an unoccupied "shell" space into an open office area along with private offices and conference rooms. The open office space took advantage of the nearly 18' floor to floor height and kept the ceiling open to expose the structural and mechanical duct work.

Project Contact:

Robert Merow

979 Rawley Lane

Morgantown, WV 26506

304-293-2875

At a Glance

CLIENT: West Virginia University

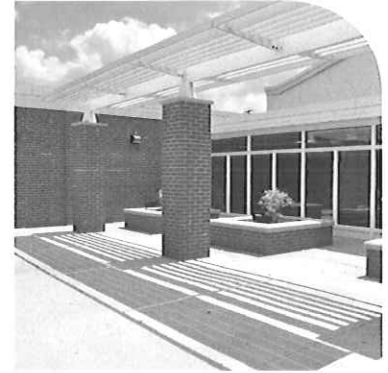
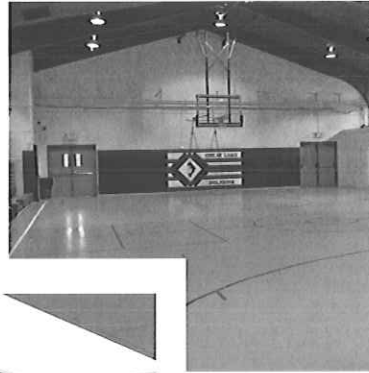
LOCATION: Morgantown, WV

COMPLETION DATE: 2005

SIZE: 5,700 sq. ft.

CONSTRUCTION COST: \$407,000

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ALPHA EXPERIENCE



Cheat Lake Elementary

2010

Educational Case Study

Cheat Lake Elementary School
Morgantown, WV

Alpha provided professional design services for the renovations at Cheat Lake Elementary School and the former Cheat Lake Middle School.

The project consisted of combining the elementary school and the middle school into one elementary facility. Alpha's work involved significant interior remodeling, complete re-roofing, asbestos abatement, MEP upgrades, and the design of a connecting skywalk between the schools. Work also included revising parking and traffic flow for the combined school.

In addition to the skywalk, other renovations and additions include a new computer lab, retooled classrooms for fourth and fifth grades and a stage for the gym.

Project Contact:
Ed McCabe
13 South High Street
Morgantown, WV 26505
304-291-9210

At a Glance

CLIENT: Mon County Schools
LOCATION: Morgantown, WV
COMPLETION DATE: 2010
SIZE: 42,000 Sq. Ft.
CONSTRUCTION COST: \$4.4 Million

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ALPHA EXPERIENCE

State Office Building | est. 2014

Architectural Case Study

West Virginia State Office Building
Clarksburg, WV

Alpha Associates, Incorporated provided architectural design, civil and structural engineering and surveying services for a new State Office Building in Clarksburg, WV. The building is designed as a 68,481 square foot; four story offices building that will hold State agencies.

The project incorporates certain security features that are designed to protect sensitive documents and occupants from various security threats.

The project will be applying for Silver Certification under LEED standards.

This project is scheduled for bidding in June 2013.

Project Contact:

David Hildreth
1409 Greenbrier Street
Charleston, WV 25311
304-558-0510

At a Glance

CLIENT: State of West Virginia
LOCATION: Clarksburg, WV
COMPLETION DATE: Est. 2014
SIZE: 68,481 sq. ft.
CONSTRUCTION COST: TBD





ALPHA EXPERIENCE

Sheriff's Building | 2011

Architectural Case Study

Monongalia County Sheriff's Building
Morgantown, WV

Alpha Associates, Incorporated provided architectural design, civil and structural engineering and surveying services for this new building that houses offices for the Monongalia County Sheriff's Department and other County agencies.

Site constraints and adjacent overhead structures made the development and construction of the project very challenging.

The ground floor includes the sheriff's department, evidence room and several bailiff rooms. The remaining floors are designed to house flexible office space.

Restricted access, combined with a high level of security, both passive and active systems were part of the design program.

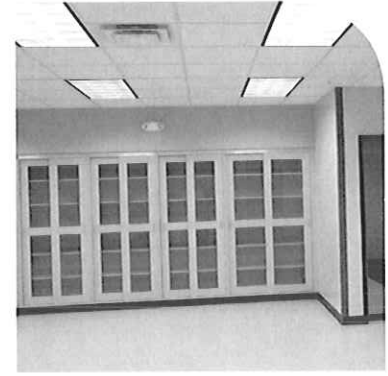
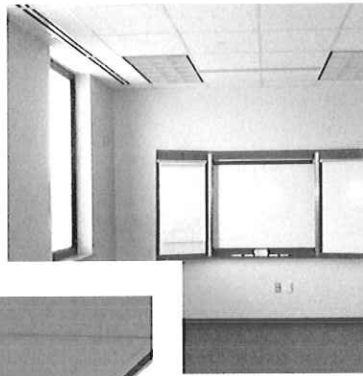
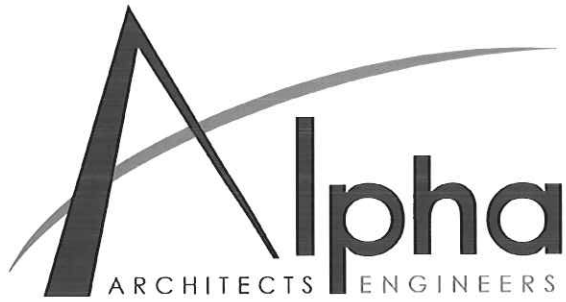
Project Contacts:

Sheriff Al Kisner or Robert Doyle
116 Walnut St. 243 High St.
Morgantown, WV Morgantown, WV
304-291-7290 304-291-7268

At a Glance

CLIENT: Mon County Commission
LOCATION: Morgantown, WV
COMPLETION DATE: 2011
SIZE: 31,655 sq. ft.
CONSTRUCTION COST: \$7.9 Million





ALPHA EXPERIENCE

Pharmacy Build-Out | 2010

Educational Case Study

WVU Robert C. Byrd Health Sciences Center Eastern Division Pharmacy Build - Out
Martinsburg, WV

Alpha Associates, Inc. provided architectural design for the interior build-out of existing shell space for the West Virginia University Robert C. Byrd Health Sciences Center Eastern Division. The space is to be used by the WVU School of Pharmacy to expand their program to the Eastern Panhandle. The space includes a teaching lab with storage area, office space, conference room, administrative area and support facilities

Project Contact:
Leonard Lewis
Po Box 9004
Morgantown, WV 26506
304-293-6924

At a Glance

CLIENT: West Virginia University
LOCATION: Martinsburg, WV
COMPLETION DATE: 2010
SIZE: 2,500 Sq. Ft.
CONSTRUCTION COST: \$384,000
FEE: \$36,000

think  Alpha first.com



H.F. LENZ
COMPANY

*U.S. Department of Agriculture
Morgantown, West Virginia*

TENANT FIT-OUT

Through a Design-Build Competition sponsored by the General Services Administration, H.F. Lenz Company provided the mechanical, electrical, plumbing, and fire protection engineering services for the tenant-fit out of approximately 40,000 sq.ft. of a GSA-leased building to be utilized by the U.S. Department of Agriculture. The facility houses five agencies of the USDA including: the Credit Union, Rural Development, Farm Services Administration, Natural Resource Conservation services, and the USDA Information Technology Services. The fit-out space consists mainly of offices, conference areas, lobbies, mailroom, credit union, computer center, storage space and a loading dock.



The project included the design of:

- A central HVAC system with main and branch lines, VAV boxes, dampers, flex ducts, and diffusers for the office layout and commons areas. Separate HVAC units for the mail room and lobby spaces were provided in order to prevent contamination of other areas of the building in the event of a security threat. A separate computer room air-conditioning unit was also provided for the central computer center.
- New 277/480 V and 120/208 V, 3 phase, 5-wire electrical distribution system serving panelboards located on each floor of the complex. Receptacles supplying power to sensitive equipment were provided with an isolated ground system to prevent unwanted noise from being passed through the electrical distribution system.
- Energy Efficient Lighting with occupancy sensors for automatic control of the lighting fixtures.
- Low flow plumbing fixtures and Irrigation systems which uses only captured rainwater resulted in a 39.7% reduction in potable water use

The project incorporated several sustainable concepts and was designed to attain LEED™ Certification. Construction was completed in 2009.



H.F. LENZ
COMPANY

National Drug Intelligence Center Johnstown, Pennsylvania

TENANT FIT-OUT

The National Drug Intelligence Center (NDIC) is a joint operation of the Justice Department, the Drug Enforcement Agency, and the Federal Bureau of Investigation. It includes executive offices, operational areas, a SCIF, and a fitness center. The facility was developed under a turnkey arrangement and as designed to meet GSA standards.

The H.F. Lenz Company provided the multi-discipline engineering services for the following:

- Extensive modifications to the base building and tenant space HVAC systems to meet the demands of high density office space
- Modifications to the central fan station including fan vibration isolation, variable frequency drives, and controls
- Design of a SCIF with isolated UPS power, raised floor, and dedicated and redundant 24-hour air conditioning
- Electrical system modifications including an uninterruptible power supply system, isolation transformers, and on-site back-up generators
- Structural capacity/floor load survey and structural modifications to support high density storage areas and various mechanical and electrical equipment
- Feasibility study and cost estimate for reinforcing the existing roof structure to support a rooftop helipad
- Extensive indoor air quality corrections
- Architectural design for the third floor expansion



The NDIC occupies two and a half stories of a 1920s-era, multistory former department store which had been converted to office space.





RENOVATIONS

H.F. Lenz Company has provided engineering evaluation and design services for numerous mechanical/electrical projects for One Mellon Center since 1984, including energy conservation projects, plumbing studies, HVAC modifications, renovations to the cafeteria and Carnegie Library, and correction of parking garage ventilation problems. One project involved the incorporation of a mini-data center into the facility as part of the OneNet fiber optic telecommunications project linking key Mellon facilities in Pittsburgh and Philadelphia.

Additional Projects have included:

- Communications systems
- Fire alarm system
- Cooling tower replacement
- Domestic water pump system
- Video conferencing center
- Electrical revisions (fourth floor)
- Chilled water plant evaluation
- Elevator machine rooms
- Back-up power study
- Numerous tenant fit-outs
- Trading floor HVAC improvements
- Relocation of Reprographics Department
- Carlton Restaurant improvements



One Mellon Center is part of a four-building complex housing Mellon's Pittsburgh headquarters.

In 2008, H.F. Lenz Company, in cooperation with the owner's operation staff, provided the engineering, evaluation, and compilation of data which enabled the building to receive an **Energy Star® Building Label**.

H.F. Lenz Company also recently completed engineering services for the renovation of 41,000 sq.ft. of office space, divided between the 30th and 31st floors of the building. The core strategies of the renovation included reducing CO2 emissions, increasing water and energy efficiency, improving indoor environmental quality, and stewardship of resources. To accomplish these goals, 75% of the construction waste was diverted from landfills through recycling and over 40% of the salvageable materials were reused on-site. More than 70% of the materials and products used were manufactured regionally. To improve the indoor environmental quality of the space, materials such as paints, carpets and furniture with low VOCs (Volatile Organic Compounds) were selected, and additional air quality testing was conducted to confirm a reduction in air pollutants. Aggressive water and energy reduction strategies were implemented that will reduce water usage by an estimated 40% and energy use by an estimated 30% of that of a typical office building. A daylight responsive lighting control system was installed to further reduce lighting energy usage when possible, and energy metering equipment was installed to optimize and validate the energy savings. In July 2009, the project attained a **LEED® Gold certification**.





H.F. LENZ
COMPANY

Metropolitan Life Insurance Company
Johnstown, Pennsylvania

**JOHNSTOWN ADMINISTRATIVE FACILITY RENOVATIONS
UNDER A CONTINUING SERVICES AGREEMENT**

The H.F. Lenz Company has been providing HVAC, electrical, plumbing, fire protection/life safety and construction administration services for MetLife's Johnstown Administrative office. The building, built in 1977, is a 200,000 sq.ft. office building containing a cafeteria, call center and a data center.



In February 2010, H.F. Lenz Company provided the engineering services required for the building to receive an **ENERGY STAR® Building Label**. Currently the building rating is a 96.

Building projects have included:

ENERGY STAR® Label

- Provided ENERGY STAR Label evaluation and application for 2009, 2010, and 2011

LEED-EB O&M

- Provided ASHRAE Level I and II auditing and energy efficiency best management practices documentation to achieve LEED-EB O&M 2009 pre-requisite and credits
- Provided existing commissioning services to evaluate system operation and obtain LEED-EB O&M 2009 Energy and Atmosphere Credit 2.2 and Credit 2.3

ENERGY RELATED SERVICE

Chilled Water Plant

- Condenser water system "free cooling" analysis
- Design and specification of the replacement of two 200-ton centrifugal chillers with two 250-ton centrifugal chillers
- New chiller plant automatic temperature control system
- Implementation of ASHRAE Standard 15-1994 requirements

Lighting System Study

- Performed study to determine a solution for the replacement of existing T12 lighting fixtures
- Developed alternatives based on existing site conditions, fixture performance, lighting power density, and cost
- Provided additional services for lighting fixture replacement project

Building Automation System Upgrade

- Performed design, construction administration and commissioning services to upgrade existing building automation controls.



H.F. LENZ
COMPANY

GSA Charleston
Charleston, West Virginia

NEW OFFICE BUILDING

Through a contract with the U.S. General Services Administration, H.F. Lenz Company provided the mechanical, electrical, plumbing, and fire protection engineering services for the design a two-story 19,427 sq.ft. office building in Charleston, West Virginia to house a federal agency. The facility includes forensic evidence labs, work and technology spaces, and vehicle service bays.



The building was designed with energy efficient systems and sustainable design criteria including water conservation, use of regionally manufactured materials, increased ventilation, use of renewable energy sources, and a pre-occupancy construction indoor air quality management plan. The project goal is to meet the requirements of LEED Silver (minimum) and attain an ENERGY STAR rating of 75 or above.

Features of the project include:

- Variable air volume HVAC system consisting of gas-fired rooftop air-handling units with DX cooling and energy recovery, supplemental cooling for specialty areas such as server rooms and areas with concentrated high heat loads. A separate air-handling unit for the mailroom area will minimize any airborne threats. Another HVAC security measure includes the strategic placement of outdoor air intakes to minimize the risk of contaminants being entrained into the building through the outdoor air intake.
- An electrical distribution system that will supply 10 watts/sq.ft. of power to the building, as well as an exterior 50kw standby/emergency generator that will serve the backup power needs.
- A complete data/communications system which includes separate telecommunications closets for the internal system servers that will be used to meet the function of the building. The system features include category 6A horizontal cabling, incoming optical fiber cabling, wire racks and bridal rings for wire management.
- A fire alarm system with a voice/alarm communication system
- An automatic sprinkler system designed to NFPA requirements
- The design of a wet lab area that includes a separate fume hood exhaust system
- Garage bays that are used to modify/examine vehicles
- Building commissioning

Design work was completed in 2010.

Construction Cost: \$6 million

Services: Mechanical, electrical, plumbing, and fire protection engineering services

Sq.Ft.: 19, 427



H.F. LENZ
COMPANY

*State of West Virginia
Clarksburg, West Virginia*

OFFICE BUILDING

H.F. Lenz Company provided the mechanical, electrical, plumbing and fire protection engineering services for the design of a new 85,250 sq.ft., five-story office building to house seven state agencies.

The building will be equipped with a central geothermal plant in the basement to serve a 4 pipe hot and chilled water piping distribution system in the building. The geothermal plant will extract and reject heat from the geothermal wellfield. This wellfield will contain (90) - 400' deep wells, spaced on 15' centers, installed under the parking areas.



The majority of the building will be served by three VAV modular air handling units located in the building penthouse. A Direct Digital Control (DDC) System will provide the control for the HVAC system. The system will be able to interface with the current system that the State of West Virginia uses to monitor its buildings from a remote location in Charleston, WV. It is anticipated that the HVAC system will perform at 20% better than baseline.

Lighting relay panels will provide 24/7 control of the lighting in the larger areas on the various floors. Relay panels will be installed on all floors except the basement. Vacancy (Occupancy) sensors will be installed in all areas not described above to provide automatic shut off lights. In areas subject to larger amounts of natural light, daylight harvesting sensors will be placed near windows to step-dim (reduce light output to 50%) local light fixtures in response to amount of sunlight present within the space and save energy.

A Main Telecommunications Room (MTR) will be provided and house all the service entrance equipment for signal system demarcation points as well as distribution equipment to provide the buildings signal infrastructure. Intermediate Telecommunications Rooms (ITR), feed from MTR, will be constructed on each floor and contain equipment to distribute signal systems to the end user.

Cameras shall be placed throughout the building to monitor all exits and other high traffic areas. Cameras shall be web-enabled and Power over Ethernet type, Cat 6 cable from camera shall terminate at ITR on appropriate floor. A network video recorder in the MTR will capture all the camera data and provide an output to view camera feeds locally and send a viewing signal to a remote location.

The project will be applying for Silver Certification under LEED standards.

This project was scheduled for bidding in 2012.

Construction Cost: Approximately \$20 million

Services: Mechanical, electrical, plumbing, and fire protection engineering services

Sq.Ft.: 85,250



H.F. LENZ
COMPANY

Fifth Third Center
Charleston, West Virginia

NEW MULTI-TENANT OFFICE BUILDING

H.F. Lenz Company provided mechanical, electrical, plumbing, fire protection, telecommunications, and structural engineering services for this new 66,000 sq.ft. multi-tenant office building. The project followed a design, GMP, build process, and was delivered on time and budget. H.F. Lenz Company acted as a separate prime professional and owner's representative throughout the process.

The building ground floor is the Fifth Third downtown Charlestown branch bank and drive-thru.

The second floor is tenant space and Fifth Third Bank Regional Offices. The third and fourth floors house the law offices of the Robinson and McElwee, PLLC. The facility also includes an adjacent two-story parking garage.

The design included two DX/gas variable volume rooftop systems. A separate unit was provided for the bank space. Lighting systems included high-efficiency direct/indirect fixtures.

H.F. Lenz Company also provided the engineering services for various tenant fit-ups.

The \$10 million project was completed in 2004.





AMP Industries, Inc.
Harrisburg, Pennsylvania
Upgrade lighting and power distribution to approximately 20,000 sq.ft. of office space

AMP Industries, Inc.
Harrisonburg, Virginia
Renovation of existing building including office, manufacturing, and warehousing facilities

Brickstone Properties
Andover, Massachusetts
Two new speculative office buildings:
50 Minuteman Road, 155,000 sq.ft. and
200 Minuteman Road, 200,000 sq.ft.

Brickstone Square Office Park
Andover, Massachusetts
Renovation to a 1,000,000 sq.ft. multi-building office/industrial complex

**Byrne/Green Courthouse and
Federal Building**
Philadelphia, Pennsylvania
HVAC study and PCB transformer replacement

Colonial Penn Life Insurance
Philadelphia, Pennsylvania
Base building HVAC renovations and new DDC and fire alarm systems for a 120,000 sq.ft. office building; tenant fit-out of 70,000 sq.ft.



***FedEx Ground.** The new corporate headquarters contains a raised-floor computer area, an auditorium, a cafeteria, a media production studio, and a fitness center.*



***Brickstone Square Office Park.** This four-building facility near Boston is an adaptive reuse of the former American Woolen Mills Company.*

duPont Corporate Headquarters
Wilmington, Delaware
New 28,000 sq.ft. learning conference center, and renovations to office and function rooms within the historic Hotel duPont and mechanical/ electrical upgrade to 216 guest-rooms

Erie Civic Center
Erie, Pennsylvania
New Sea Wolves office building

Extrude Hone Corporation
Irwin, Pennsylvania
New 72,000 sq.ft. office building and manufacturing facility

FedEx Ground
Pittsburgh, Pennsylvania
New 350,000 sq.ft. corporate office facility for a courier delivery company

Frick Building
Pittsburgh, Pennsylvania
Evaluation and renovation of a 22-story, 330,000 sq.ft. historic high-rise office building

Gimbels Building
Pittsburgh, Pennsylvania
Base building modifications to convert a former department store to office and retail space



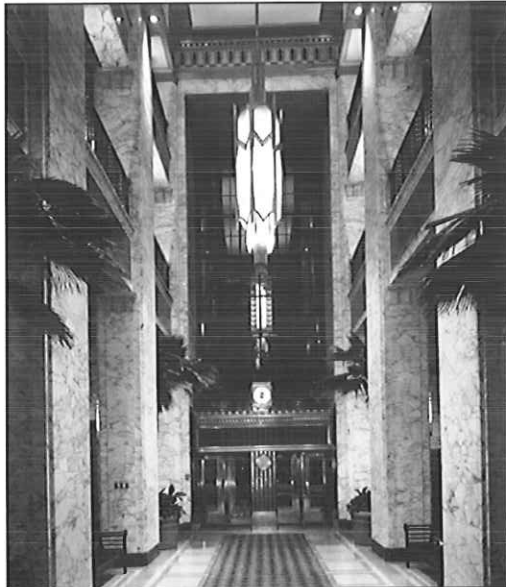
Grant Building
Pittsburgh, Pennsylvania
High-rise building evaluation and correction of deficiencies

Groupe Schneider
North Andover, Massachusetts
Fit-out of 170,000 sq.ft. of corporate office, training, and repair space and new 80,000 sq.ft. manufacturing facility

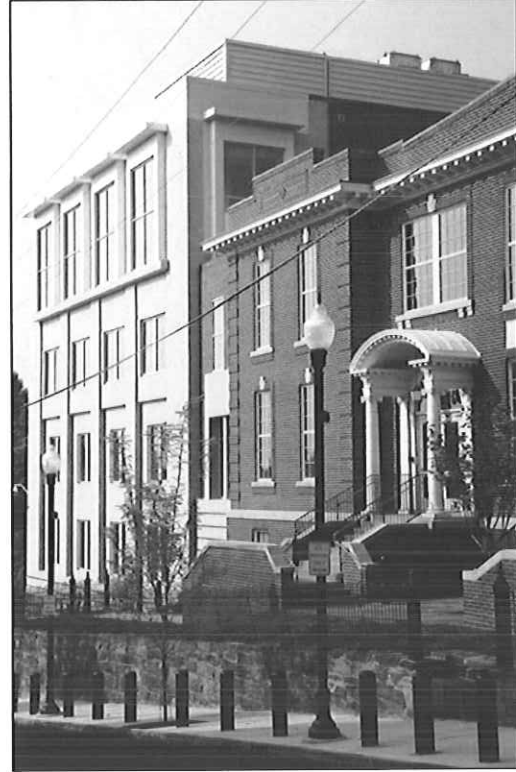
GSA Region 3 Offices
The Wanamaker Building
Philadelphia, Pennsylvania
Tenant fit-up of office space

IBM Office Building
Pittsburgh, Pennsylvania
Base building and tenant fit-up design of a new 240,000 sq.ft., 12-story office building

James H. Reed Building
Pittsburgh, Pennsylvania
Comprehensive evaluation and renovation of a nine-story, 190,000 sq.ft. building for the law offices of Reed Smith Shaw & McClay



Koppers Building. Renovation work in the lobby included the retrofit of historic lighting fixtures.



Lynchburg Courthouse. The project was designed to meet the anticipated space requirements of 2010 for the US District Court, US Bankruptcy Court, and several federal agencies, while also providing a new consolidated retail facility for the Postal Service.

Kee Federal Office Building and Courthouse
Bluefield, West Virginia
Mechanical and electrical renovations including building-wide HVAC; courtroom renovations and alterations

Koppers Building
Pittsburgh, Pennsylvania
Study of existing mechanical/electrical systems and base building renovations in a 34-story, 344,000 sq.ft. office building

Lynchburg Courthouse
Lynchburg, Virginia
New 65,000 sq.ft., five-story courthouse building and renovation of an existing three-story, 25,000 sq.ft. historic schoolhouse



**Robert F. Kennedy Department of Justice
Building**

Washington, D.C.

Phased renovation/retrofit of a 1.3 million sq.ft. occupied federal building

Major Insurance Company

Mid-Western United States

New 80,000 sq.ft. data center designed to 2N+2 criteria which maintains the facility's reliability level even during periods of system testing and maintenance

Major Insurance Company

Various Locations

H.F. Lenz Company is assisting this Major Insurance Company in improving the reliability of the critical engineering systems that support facility operations at various sites. The Facility Program is being carried out on a national scale, including facilities in Florida, New York, Texas, Arizona, California, Oregon and Colorado.

Major Insurance Company

Southern United States

New 1500-person call center, which will consolidate the operations of two existing call centers in the this area

Major Insurance Company

Western United States

New 322,000 sq.ft. call center, which was constructed on a 13-acre site



Confidential Insurance Company. The new South-Eastern United States call center building includes employee amenities such as food service, meeting rooms, and training facilities.



Confidential Insurance Company. The Western United States facility will be three stories and used for call center and general office functions.

Major Insurance Company

South-Eastern United States

New 280,000 sq.ft. call center, which was constructed on a 40.7-acre site

Market Street State Office Building

Harrisburg, Pennsylvania

New 16-story, 446,000 sq.ft. office building

Martin Marietta Corporation

Cherry Hill, New Jersey

Base building and tenant fit-up renovation for 72,000 sq.ft. office building

Mellon Bank Card Services Center

Wilmington, Delaware

New 80,000 sq.ft. Credit Card Service Center

Mellon Center

Philadelphia, Pennsylvania

Tenant fit-up of 14 floors of corporate office space in a new 54-story high-rise

Mellon Financial Corporation

Pittsburgh, Pennsylvania

Provided HVAC, plumbing, fire protection, electrical and telecommunications systems were designed and commissioned for the new 750,000 sq.ft. operations center, which also houses a data processing facility



**Mellon Financial Services
Riverview II Building
Cambridge, Massachusetts**
Conditions assessment and tenant fit-up for a new 18-story, 116,000 sq.ft. speculative office building

**Mellon Independence Center
Philadelphia, Pennsylvania**
Renovation of an historic 900,000 sq.ft. former retail building for Mellon Bank's regional data operations center and three levels of retail space

**Meridian Tower
Philadelphia, Pennsylvania**
Damage assessment and design development drawings for a 38-story, fire-damaged high-rise office building

**Merrill Lynch Headquarters
New York, New York**
Retrofit evaluation of a 2.2 million sq.ft., 50-story high-rise

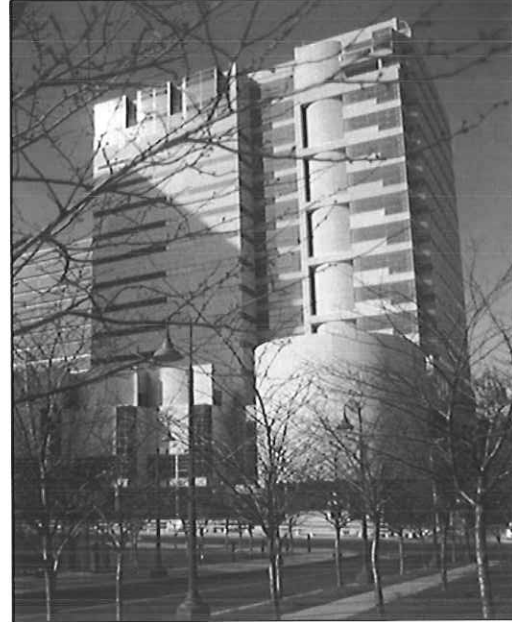
**National Drug Intelligence Center
Johnstown, Pennsylvania**
Complete build-out services for 76,000 sq.ft. of administrative and operational areas

**National Park Service Building
Martinsburg, West Virginia**
HVAC study and report

**One Mellon Center
Pittsburgh, Pennsylvania**
Various mechanical/electrical evaluation and renovation projects in a 55-story high-rise

**Pennsylvania State Capitol Complex
Harrisburg, Pennsylvania**
New 235,000 sq.ft. congressional office building and renovation of 400,000 sq.ft.

**Pennsylvania Electric Company
Corporate Headquarters
Johnstown, Pennsylvania**
350,000 sq.ft. of new and renovated office space



Market Street State Office Building. This 16-story high-rise houses Pennsylvania's Department of Environmental Protection and the Department of Conservation and Natural Resources.

**Philadelphia City Hall Annex
Philadelphia, Pennsylvania**
Evaluation of an historic 350,000 sq.ft. building for adaptive reuse

**PictureTel Corporation
100 Minuteman Road
Andover, Massachusetts**
Complete renovation and tenant fit-up design services for a 325,000 sq.ft. office facility

**Pittsburgh National Bank Headquarters
Pittsburgh, Pennsylvania**
Energy management study and retrofit of a 31-story, 670,000 sq.ft. high-rise

**PricewaterhouseCoopers
Philadelphia, Pennsylvania**
120,000 sq.ft. tenant fit-up of a 20-story high-rise office building and 30,000 sq.ft. tenant fit-up for a computer training center and software engineering center



SEPTA Corporate Headquarters
Philadelphia, Pennsylvania
Base building mechanical/electrical systems in a 20-story, 660,000 sq.ft. high-rise

Smith and Nephew
150 Minuteman Road
Andover, Massachusetts
New 112,000 sq.ft. corporate headquarters and demonstration facility

Social Security Administration
Data Operations Center
Wilkes-Barre, Pennsylvania
Complete multi-discipline engineering design for a new 250,000 sq.ft. office/computer center

Social Security Administration
Mid-Atlantic Program Center
Philadelphia, Pennsylvania
Life safety and control evaluation; PCB transformer replacement

Social Security Administration
Operations Building
Woodlawn, Maryland
Renovation of 1.2 million sq.ft. office building and data center

Staggers Federal Office Building
Morgantown, West Virginia
Extension of fire alarm system and addition of fireman's capture and recall to passenger elevators; parking garage structural investigation



SSA Data Operations Center. Operational flexibility is enhanced by a perimeter radiant ceiling heating system and underfloor wire management.



The Wanamaker Building. Nearly 900,000 sq.ft. of former retail space was adapted for modern office space. An additional 200,000 sq.ft. is now under design.

State Street Corporation
Boston, Massachusetts
Project Management and engineering design of mechanical system improvements and site/security upgrades at its Westborough, Massachusetts Data Center

Straumann USA
60 Minuteman Road
Andover, Massachusetts
New 140,000 sq.ft. corporate headquarters and manufacturing facility

The Wanamaker Building
Philadelphia, Pennsylvania
Evaluation and design of base building systems for the conversion of over 1 million sq.ft. of space in an historic retail building to Class A office space

The Weightman Group
Philadelphia, Pennsylvania
Tenant fit-up for 60,000 sq.ft. of Class A office space in an historic section of the Wanamaker Building



Three Mellon Center
Pittsburgh, Pennsylvania
Evaluation and retrofit of a 900,000 sq.ft.,
41-story office building and computer center

Two Mellon Center
(Union Trust Building)
Pittsburgh, Pennsylvania
Evaluation and renovation of a 650,000 sq.ft.,
11-story historic building for Class A office
space

U.S. Army Corps of Engineers
District Office
Philadelphia, Pennsylvania
Tenant fit-up of 100,000 sq.ft. of office space
within the historic Wanamaker Building

U.S. Coast Guard Building
Martinsburg, West Virginia
HVAC study and report for a 38,000 sq.ft.
office building

U.S. Courthouse and Federal Building
Williamsport, Pennsylvania
Building renovations

U.S. Drug Enforcement Agency
Pittsburgh, Pennsylvania
New 50,000 sq.ft., two-story building, with
24,000 sq.ft. of office space on the upper floor
with the ground floor serving as a garage

U.S. Federal Building and Courthouse
Wheeling, West Virginia
Renovation and addition; boiler replacement;
courtroom renovation; parapet rehabilitation

U.S. Federal Office Building
Harrisburg, Pennsylvania
Passenger elevator controls and cab upgrades

U.S. Federal Office Building
Huntington, West Virginia
Plumbing and electrical system improvements

U.S. Federal Office Building
Martinsburg, West Virginia
HVAC renovation study and design/build
construction document package; toilet room
modernization



Three Mellon Center. This high-rise was retrofit in the mid-1980's and is currently undergoing a phased modernization program to provide an increased level of reliability for computer operations.

U.S. Post Office and Courthouse
Eric, Pennsylvania
Renovation of a federal building, an historic
library building, and construction of a new
50,000 sq.ft. connecting structure

U.S. Post Office and Courthouse
Pittsburgh, Pennsylvania
New fire alarm system; thermal storage and
lighting analyses; structural modifications, new
fitness center; schematic design for tenant fit-
up of IRS Training Center; U.S. Marshals
tenant fit-out study; U.S. Marshals firing range



**U.S. Post Office and Courthouse
Scranton, Pennsylvania**

New four-story, 120,000 sq.ft. courthouse annex, connecting atrium, and renovation of existing courthouse

**USX Headquarters
Pittsburgh, Pennsylvania**

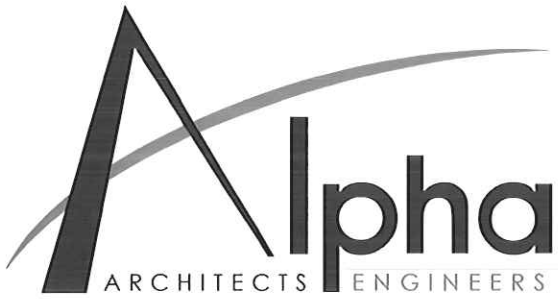
Retrofit evaluation of a 64-story, 2.8 million sq.ft. high-rise

**William S. Moorhead Federal Building
Pittsburgh, Pennsylvania**

HVAC, plumbing, and fire service improvements; fire alarm feasibility study; thermal energy storage; lobby and toilet room renovations



Scranton Courthouse. The project included renovation design for two federal district courts in the existing building.



REFERENCES

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Every aspect and detail of your planning, coordination, and completed projects have been exceptional and outstanding in every regard.

Robert Hammel, Former Director
Morgantown Municipal Airport

The entire staff at Alpha has always been responsive, professional, creative, and practical. Most importantly, they are always concerned about our needs as a client. They quickly respond to challenges that arise during construction.

Brian Thomas, President
Clear Mountain Bank