State of West Virginia

Department of Administration
Purchasing Division

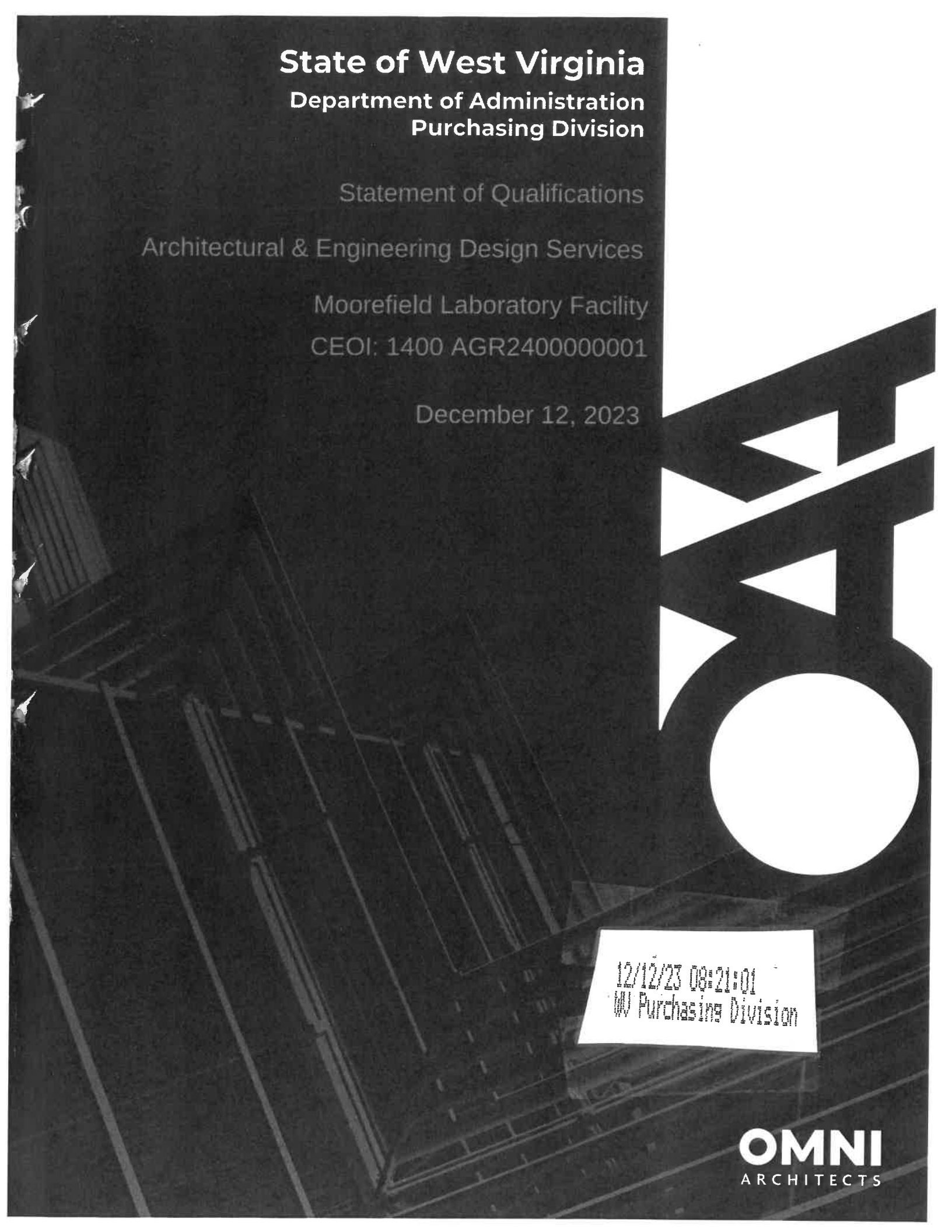
Statement of Qualifications

Architectural & Engineering Design Services

Moorefield Laboratory Facility

CEOI: 1400 AGR2400000001

December 12, 2023



OMNI
ARCHITECTS

EXPRESSION OF INTEREST
ARCHITECT AND ENGINEERING SERVICES
DEPARTMENT OF ADMINISTRATION
PURCHASING DIVISION

MOOREFIELD LABORATORY FACILITY

CEOI 1400 AGR 2400000001

DECEMBER 12, 2023

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REFERENCES

Richard Donovan, Senior Director of Facilities West Virginia
Community and Technical College System
1018 Kanawha Boulevard East, Suite 700
Charleston, WV 25301
(304) 558-2101

James L. Estep, President and CEO
High Technology Foundation
1000 Galliher Drive, Suite 1000
Fairmont, WV 26554
(304) 363-5482

Stephanie DeGroot
Construction Manager/MS4 Coordinator
Fairmont State University
109 Physical Plant, 1201 Locust Avenue
Fairmont, WV 26554
(304) 367-4401

TAB 1

LETTER OF INTEREST

OMNI
ARCHITECTS

December 12, 2023

Larry D. McDonnell
State of West Virginia
Purchasing Division
2019 Washington Street, East
Charleston, WV 25305

Dear Mr. McDonnell:

Omni-Associates Architects is pleased to submit our qualifications to provide professional architectural and engineering services for the Moorefield Lab Facility.

Over our 40+ year history as a firm, Omni has earned a reputation for design excellence by working intimately with our clients, listening to their needs and creating spaces that meet their needs and exceeds their expectations. Omni brings a deep portfolio of design experience that includes multiple projects for Federal, State and Local governmental agencies.

Our partners for the Moorefield Laboratory Facility include **H.F. Lenz Company,** who brings vast expertise in the design of specialized MEP/FP systems for strictly controlled laboratory and research environments. Our partnership is based on a shared culture and trusted relationships, structured in a fully integrated project approach. The final member of our team is **Barber & Hoffman, Inc.**, who will provide Structural Engineering services. We share a long history of successful project collaboration with these team members and each has been selected for their specific relevant project experience. We are a proven team uniquely qualified to offer you the following advantages:

- Innovative cost saving design approach to minimize building costs;
- Sustainable energy efficient systems to minimize operational costs;
- Flexible building design to address current and future needs;
- A realistic design and construction schedule to meet your needs.

Thank you for giving us the opportunity to present our credentials. We would greatly appreciate the opportunity to meet with the selection committee to further discuss our experience and qualifications.

Best regards,
OMNI ASSOCIATES – ARCHITECTS, INC.

Adam L. Rohaly, AIA, NCARB,
Principal

OMNI ASSOCIATES – ARCHITECTS, INC.
207 Jefferson Street • Fairmont, WV 26554
PHONE 304.367.1417 • FAX 304.367.1418
OMNI.DESIGN

TAB 2

APPROACH TO GOALS AND OBJECTIVES

PROJECT APPROACH

The project approach at Omni is to assemble the best team to address the challenges of a specific project. That team will be easily accessible under the single contact of our Principal Architect from the beginning of the project all the way through completion. Consistent correspondence and digital review will be maintained throughout the project.

ANALYZE

Omni Associates proposes commencing work with an in-depth evaluation of the existing facility through the review of the building's original construction drawings and subsequent design drawings. Our team will quickly move to developing a 3D REVIT Model of the building that will be utilized and up-dated throughout the design and construction process.

We will undertake a review of the proposed program elements to determine their alignment with the Project Goals and develop a plan tailored to each of the six (6) Objectives outlined in the EOI.

A successful evaluation will allow us to add any over-looked program, and prioritize hierarchies in elements.

CONCEIVE

Analyzation will result in distinct project goals and a clear program that allow the design team to develop design concepts. This phase would include presentation of many unique ideas. We might suggest more cost, energy efficient and aesthetic solutions relative to the Project Goals of completing certain life/safety elements; accommodating existing tenants and addressing sustainability through sensible life cycle cost oriented design.

Design Development- This phase is intended to develop the chosen schematic design in the direction of a finished set of bidding documents. De sign Development is to conclude with a drawing set at approximately 60% of completion.

This phase will include coordination of all building trades and shall begin to assemble project specifi cations. Material selections and finishes shall be coordinated at this stage as well. A more refined cost estimate shall be provided at the end of this phase.

Construction Documents- This phase includes full development of the technical aspects of the building renovation. All building systems will be coordinated, interior finishes shall be chosen and specifications will be fully developed. Any budget issues revealed at the culmination of Design Development shall be addressed during Construction Documents. Omni shall verify compliance with all required codes and review with all authorities having jurisdiction, specifically with the WV Fire Marshal's Office.

Bidding- During bidding Omni shall assist with the advertising, document interpretation and evaluation of bids. We anticipate responding to any questions from bidders that might arise during the bidding process. Lastly Omni will review all bids for compliance with the contract documents and check all contractor references necessary to help determine and award a contract for construction.

Construction Administration – Omni shall oversee the entire construction process to verify compliance with Contract Documents. We shall also evaluate the progress of the job to verify payment and schedule appropriate for success full completion of construction. This phase will include site visits, review of shop drawings and response to any questions arising during construction

PROJECT APPROACH cont'd.

Our team is not only charged with understanding the past and current status of the project, but with looking ahead in the process. By anticipating milestones and needs, we are able to direct the appropriate team members to take measures that will prepare them for these events. Recognizing issues and concerns in their infancy is the only way to diminish their potential negative effect on a project.

We achieve success through innovative thinking and reliance on a collaborative effort. Through partnering arrangements with our clients, consultants, contractors, and other stakeholders, we draw from the strength of each member and share equally in the goals, incentives, and responsibilities of a genuine team approach.

By leveraging expertise, Omni is able to provide the highest level of skills, resources, and technology for each scope of service required within a price structure that is advantageous to the entire team. Our technical design, documentation, and coordination is highly regarded in the industry. We are often complimented by consultants and subcontractors on the coordination, thoroughness, and accuracy of our design and construction documents and bid packages issued through the contractor and to the subs.

We have established documentation, specification, and quality assurance procedures to provide the quality of documents that this project requires. We also view the other consultants as valuable partners in this coordination effort and extend our team coordination to include them. Omni will assist our project team partners with the cross-consultant coordination that is required to achieve a final design that is both aesthetically pleasing and completely functional.

Experience with large projects has demonstrated that there is no substitute for face to face communication. When all team members understand that they have a stake in the successful outcome of a project component and have been afforded the opportunity to ask questions and obtain relevant data related to the effort, miscommunication is reduced and accuracy of documentation is measurably improved. This is achieved through regular, frequent status meetings; "in person" meetings to clarify changes; "internal coordination" methodology which resolves details before they become issues and coordination meetings centered on specific complex project components when needed.

Our proposed work process takes into account the natural progression of the design, moving from the big picture to the details, and from fixed elements to those that are designed to be flexible, to ensure that the architecture, engineering, technology and furnishings solutions align and that the Project Goals are not just met, but exceeded.

TAB 3

DESIGN TEAM QUALIFICATIONS

DESIGN TEAM QUALIFICATIONS

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 and experience 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 public safety 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 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 project team goes beyond our in-house staff however. Omni 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.

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.

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.

DESIGN TEAM QUALIFICATIONS cont'd

Omni Associates - Architects 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 your entire project in advance of bidding and work extensively with you to achieve alternates to program goals. Construction documents are prepared and bid to multiple general contractors to achieve competitive pricing. Omni has successfully negotiated with contractors to maintain changes and costs to a minimum and still achieve the initial time schedule.

Omni has also worked on "fast-track" and "multiple-prime" contract projects to achieve an accelerated building construction time schedule. 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

More and more owners and developers are 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 and has contracted with owners and with general contractors to achieve this streamlined method of project de livery for two West Virginia schools as well as numerous private Owners. Additionally, Senior Principal, Richard T. Forren is a member of the West Virginia Design Build Board.

Construction Administration

Omni has worked on projects for only 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.

DESIGN TEAM QUALIFICATIONS cont'd

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

BIM: Building Information Modeling

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

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

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

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

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

Omni is proud to show that we do not just use Revit software, but we are adept at utilizing it, and can provide skilled support as needed. Omni Project Manager, Reuben Losh is now an Autodesk Revit Architecture 2011 Certified Associate.

Electronic Submission of Project Documents

Since 2007, Omni has utilized a web-based solution for secure file storage and project team collaboration. The site employs a simple and intuitive interface, similar to social net working sites, that is much easier to navigate than an FTP site. This encourages communi cation among team members while leveraging the security of data encryption and con trolled access.

This tool supports building information model ing (BIM) workflows and can be used through out all phases of a project for such tasks as file storage, RFI and Shop Drawing management, and project milestone track ing. Since these processes are electronic, the time it would take to mail or fax documents is eliminated and project information is central ized. Project information is hosted on secure third-party servers, which means that it is available to team members from wherever they have internet access. The Owner and Architect work together to determine to whom and to what extent site access is given.

ORGANIZATIONAL CHART

OMNI architects

PRINCIPAL OWNERSHIP

Richard T. Forren, AIA, President

Adam L. Rohaly, AIA, Vice President

David A. Stephenson, Treasurer

John I. Rogers, III, Secretary

David E. Snider, AIA, Member

ARCHITECT EMERITUS

Stephen A. Barnum Founding Member | Est 1980

REVIT OPERATORS

Rich Greathouse

Greg Morris

Riley Tonkery

INTERN ARCHITECTS

Sarah Crumit

Mariah Falcon

INTERIORS

Catherine Testerman

PROJECT MANAGERS

Reuben Losh, BIM Manager

Dan Baldwin

PROJECT SUPPORT

Shelly McLaughlin-Snider, Project Administrator

Eileen Layman, CPA

Allison Paton, Accounting Manager

Katie Nunan, Administrative Assistant

H.F. LENZ
ENGINEERING

Firm Profile

Johnstown Headquarters
1407 Scalp Avenue
Johnstown, PA 15904
Phone: 814-269-9300
Fax: 814-269-9301
www.hflenz.com

H.F. Lenz Company

H.F. Lenz Co. was established 1946 in its present form, under the name H.F. Lenz Co., 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 $1.5 billion 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 170+ individuals, including 40 Licensed Professional Engineers and 15 LEED Accredited Professionals. Our headquarters is in Johnstown, Pennsylvania with branch offices in Pittsburgh and Lancaster, Pennsylvania; Conneaut, Ohio; and Middletown, Connecticut.

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)

H.F. Lenz Company has vast expertise in the design of specialized MEP/FP systems for strictly controlled laboratory and research environments for a wide variety of clients. Several of our projects have included multi-tenant/multi-use facilities. A few of our projects have included:

- Mylan Pharmaceuticals (approximately 20 projects completed with Omni Associates)
- Experience with government agencies, including multiple consecutive term contracts for CDC/NIOSH for work on the Morgantown and Pittsburgh campuses (approximately 20 projects completed with Omni Associates), and projects for USDA, DEA, DOE/NETL, GSA, the State of West Virginia and Pennsylvania Department of General Services (DGS)
- New PA State Police DNA Lab and New Headquarters Buildings - (PA DGS projects, multiple prime contracts, variety of lab spaces, offices and conference areas
- New Bolton Center - New 55,000 SF facility with multiple pathology labs, BSL 3 labs, mass spectrometers, necropsy suite and bioprocessor (PA DGS projects, multiple prime contracts, collaboration between the University of Pennsylvania and multiple government agencies)
- Penn State University, New 132,000 SF Erikson Food Science Building with pathogen labs, a working dairy, laboratory and classroom spaces (PA DGS projects, multiple prime contracts)
- Penn State and West Virginia University - Multiple Ag Science projects involving labs, greenhouses, classrooms and collaboration spaces
- Cellomics (now Thermo Fisher Scientific) - New 160,000 SF multi-tenant building with various labs, research areas and Class 10,000 clean rooms
- Evoqua Water Technologies - New 18,000 SF lab and office building
- University of Delaware, 12,000 SF addition to house two fMRIs and associated lab space
- Extensive healthcare experience including a variety of laboratories, autopsy and morgue spaces and decontamination units

Our team members for this project have been working together for an average of 15 years. H.F. Lenz Company has been working with Omni Associates for approximately 30 years. We are currently collaborating with Omni and HKS architects on renovations at Fairmont State University for their Health Sciences program.

FIRM OVERVIEW

FOUNDED
1934

HISTORY

Barber & Hoffman, Inc. (B&H) is a prominent **structural engineering** firm serving the Midwest and Mid-Atlantic regions since 1934. Founded in Cleveland by C. Merrill Barber, operations have expanded with firm growth within offices in Pittsburgh and Columbus. This vision coupled with the ongoing efforts of the firm leadership and dedicated staff has created a remarkable legacy of notable public and private landmarks.

B&H serves design and construction professionals, medical, commercial, and educational institutions, building owners and managers, government agencies, contractors, fabricators, and developers. Versatile professional engineers, designers, and technicians couple their experience and knowledge with the latest design techniques, materials technology, and engineering software to produce efficient and effective design solutions.

B&H combines its extensive experience with technical design/drawing software to develop creative and effective solutions. Leadership believes successful project management is accomplished through the collaboration and targeted client communication.

B&H is a professional corporation with various small business enterprise (SBE) certifications.

RELEVANT EXPERIENCE

WEST VIRGINIA UNIVERSITY Advanced Engineering Building	Morgantown, WV
BELMONT COLLEGE Health Science Center	St. Clairsville, OH
BLUFFTON UNIVERSITY Science Laboratory Building	Bluffton, OH
CLEVELAND CLINIC Pathology & Laboratory Medicine Institute	Cleveland, OH
CLEVELAND DIVISION OF POLICE Police Headquarters and Police SWAT *(In Design Phase)*	Cleveland, OH
CORNING, INC. Research, Lab, and Manufacturing Facility	Corning, NY
HIRAM COLLEGE Gerstacker Science Hall	Hiram, OH
JOHN CARROLL UNIVERSITY Dolan Center for Science & Technology	University Heights, OH
MANSFIELD UNIVERSITY Grant Science Center	Mansfield, PA
MOUNT ALOYSIUS UNIVERSITY Pierce Science Building Addition	Cresson, PA
THE OHIO STATE UNIVERSITY Biological Sciences Building 6th Floor Laboratory	Columbus, OH
OHIO UNIVERSITY Heritage College of Osteopathic Medicine: Phase I and Phase II	Athens, OH
UH AHUJA MEDICAL CENTER Sports Medicine Institute	Beachwood, OH
UNIVERSITY OF PITTSBURGH Chevron Science Center Annex Graduate School of Public Health Addition	Pittsburgh, PA

PERSONNEL

4 Principals
25 Engineers (16 Registered)
4 LEED AP Personnel
5 Technicians

CAPABILITIES

New Structures
Existing Structures
Parking Garages
Building Assessments
Restoration
Facades
Forensic

MARKET SECTORS

Education
Healthcare
Commercial
Institutional
Housing
Recreation
Parking Garages
Municipal
Civic
Design-Build

STATE REGISTRATIONS

Ohio
Pennsylvania
District of Columbia
Florida
Illinois
Indiana
Maryland
Michigan
New Jersey
New York
North Carolina
South Carolina
Missouri
Virginia
West Virginia
Texas

West Virginia University Advanced Engineering Research Building
Morgantown, WV

TAB 4

PROJECT TEAM

OMNI
ARCHITECTS

ADAM L. ROHALY, AIA, NCARB, LEED AP BD+C

PRINCIPAL - OWNER, VICE PRESIDENT

Adam joined Omni Associates—Architects in 2013 after a 10 year career with Stubs Muldrow Herin Architects in South Carolina. Adam became a Principal in 2015 and an Owner in the Company in 2018. Adam combines a strong technical background with a creative design experience portfolio includes health care, governmental, commercial office, retail, educational and recreation projects. Adam has served as a Principal In Charge and Project Architect on projects ranging from single tenant fit-outs to large multi-story structures.

T: 304.367.1417 **M:** 304.816.2810 **E:** arohaly@omniassociates.com

RECENT AND NOTEABLE EXPERIENCE

Adam has been involved in the following projects:

City of Fairmont East Side Fire Station No. 2
Fairmont, West Virginia

WVU Athletic Performance Center
Morgantown, West Virginia

Middletown Commons
Fairmont, West Virginia

Mon Health Medical Park
Morgantown, West Virginia

Corduroy Inn
Snowshoe, West Virginia

Mountain Laurel Medical Clinic
Westernport, Maryland

Mon Health Heart & Vascular Center
Elkins, West Virginia

WV State Police Troop 1 Headquarters
Fairmont, West Virginia

East Marion Pool
Fairmont, West Virginia

Suncrest Town Centre Building 525
Morgantown, West Virginia

Tuscan Sun Spa
Canonsburg, Pennsylvania

** - Davis Science and Research Hall Completed while working for SMH Architects*

Glenville State University Athletic Facility Renovation
Glenville, West Virginia

Washington Jeep
Washington, Pennsylvania

WVU Golf Practice Facility
Bridgeport, WV

Curative Growth
Romney, WV

The Innovation Center
Fairmont, West Virginia

Preston Memorial Clinic Renovation and Expansion
Kingwood, West Virginia

Transformations Care
Martinsburg, West Virginia

Technocap Expansion
Weirton, West Virginia

Mountain Laurel Medical Center *Oakland, MD*

WV Relief

- *Buckhannon, West Virginia*
- *Clarksburg, West Virginia*
- *Elkins, West Virginia*
- *Martinsburg, West Virginia*

EDUCATION

University of Tennessee
Bachelor of Architecture: 2003

Cracow Technical University, Poland
Fairmont State College

REGISTRATIONS & AFFILIATIONS

American Institute of Architects, Member

American Institute of Architects—West Virginia, Member

LEED Accredited Professional

U.S. Green Building Council, Firm Membership

Associated Builders and Contractors, Firm Membership

Licensed General Contractor

International Council of Shopping Centers, Member

Registered in West Virginia, Maryland, Pennsylvania, North Carolina and South Carolina

OMNI ARCHITECTS

DAVID E. SNIDER, AIA, NCARB

PRINCIPAL - OWNER, PROJECT ARCHITECT

David joined Omni Associates in 1995 and became a Principal Architect in 2015. In 2022, David became an Owner in the firm.

David's practice has included diverse project types including primary, secondary, and higher-education facilities, office buildings, secure, mission critical facilities, health care facilities, commercial design, multifamily and single-family housing, and manufacturing facilities.

David has extensive experience with the preparation of construction documents, material specifications, and bidding documents as well as construction administration. Known as one of Omni's most effective project managers.

T: 304.367.1417 M: 304.844.0877 E: dsnider@omniassociates.com

RECENT AND NOTEABLE EXPERIENCE

David has been involved in the following projects:

Town of White Hall: Municipal & Public Safety Building
White Hall, WV

WV High Technology Foundation: White Collar Crime Offices
Fairmont, WV

WV High Technology Foundation: White Collar Crime Data Center
Fairmont, WV

Confidential Client: Secure Facility
Mid-Western United States

Northrup Grumman
Fairmont, West Virginia

West Fairmont Middle School
Fairmont, West Virginia

Robert C. Byrd Aerospace Center
Bridgeport, West Virginia

Confidential Secure Inspection Facility
Mid-Western, United States

Fairmont State University
Fairmont, West Virginia
- Wallman Hall Renovations
- Colebank Hall Renovations

United Technical Center
Clarksburg, West Virginia

Wardensville Community Center
Wardensville, West Virginia

Pendleton County Courthouse
Franklin, West Virginia

Morgantown Utility Board Office
Morgantown, West Virginia

Confidential R&D Facility
Northeastern, United States

EDUCATION

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

REGISTRATIONS & 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 Colorado, Ohio, Michigan and West Virginia

OMNI
ARCHITECTS

MARIAH FALCON

Project Manager

Mariah joined Omni Associates in May of 2021. Previously worked as an Intern Architect for the Mills Group. Prior to joining Omni Mariah worked as a BIM Application Specialist for MicroCAD providing training and detailed instruction for various architectural and engineering software including REVIT and CAD.

In her short time at Omni, Mariah has demonstrated the ability to quickly understand project development and management with a keen sense to think beyond the parameters of the task before her.

T: 304.367.1417 E: mfalcon@omniassociates.com

RECENT AND NOTEABLE EXPERIENCE

Mariah has been involved in the following projects:

- Moorefield Volunteer Fire Company:
  New Fire Station

  Moorefield, WV
- First Exchange Bank:
  Renovation of existing building for a new branch bank

  Morgantown, WV
- Mountain Laurel Medical Center:
  Renovation/addition to existing building for a new medical clinic

  Westernport, MD

EDUCATION

Master of Architecture: Lawrence Technological University 2017

Master of Architecture: University of North Carolina at Charlotte; 2012

B.S. Architecture: Fairmont State University; 2011

REGISTRATIONS & AFFILIATIONS

U.S. Green Building Council, Firm Membership

Associated Builders and Contractors Inc., Firm Membership

Steven J Gridley, P.E.

Project Mechanical Executive/Quality Control

Mr. Gridley, as Senior Vice President of the H.F. Lenz Company, has served as a Team Leader for complex laboratory and research facility projects for over 35 years. He is responsible for overseeing the master planning and design of these facilities for government agencies, colleges and universities, healthcare facilities and industrial facilities throughout the U.S. He specializes in the design of modern, flexible, energy efficient laboratory and research facilities for a wide variety of end users. With over 44 years of experience in Mechanical Engineering and over 35 years of experience in Project Management, Mr. Gridley will oversee the project design and provide QA/QC for our project team. He has a long resume of successful project experience and a strong personal commitment to remaining directly involved with his projects and his clients to foster long-term working relationships.

Education
Bachelor of Science, Architectural Engineering, 1979, Pennsylvania State University

Experience
H.F. Lenz Company 1979-Present

Professional Registration / Certification
Licensed Professional Engineer in all 50 States and the District of Columbia

Professional Affiliations
First Place, 1987 ASHRAE International Energy Award

National Society of Professional Engineers

Pennsylvania Society of Professional Engineers
American Society of Heating

Refrigerating and Air-Conditioning Engineers

Building Officials Code Administrators International

Professional Engineers in Private Practice

National Fire Protection Association

Project Experience

West Virginia University, Morgantown, WV
- PIC for over 120 projects in the past 25 years
- Ag Science Building addition and renovation
- New Forestry Greenhouse
- White Hall, renovation of the 95,000 SF Physics Lab Building

CDC/NIOSH Morgantown, West Virginia and Pittsburgh, PA
- Multiple laboratory renovation projects and infrastructure studies and upgrades under consecutive term contracts

Cellomics (now Thermo Fisher Scientific), Pittsburgh, PA
- New 160,000 SF headquarters and research facility and multiple fit-outs for tenant and lab spaces throughout the building

University of Pittsburgh, Pittsburgh, PA
- Renovation of the 400,000 SF Benedum Hall, Swanson School of Engineering building and new 42,000 SF Mascaro Center for Sustainable Innovation addition - LEED Gold
- Life Sciences Complex – renovations to various buildings and building systems for the 200,000 SF complex
- Grad School of Public Health - Master plan and renovations to the 173,600 SF Parran Hall and 63,900 SF Crabtree Hall buildings

Yale University and Yale School of Medicine, New Haven, CT
- Multiple laboratory renovation projects under several consecutive term contracts

Rutgers University, Piscataway, NJ
- Addition and renovations to the School of Engineering EP2, Fiber Optics Building

Ryan W. Buff, P.E., C.E.M.

Project Engineer/Mechanical Engineer

Mr. Buff is experienced in the master planning and design of research facilities, health care facilities including acute care hospitals, and medical office buildings. He is also experienced in the design of heating, ventilating, and air conditioning systems including steam, hot water, chilled water, refrigeration, and air distribution systems. Mr. Buff's involvement has encompassed field survey of existing conditions, engineering analyses, systems design, and the preparation of cost estimates. He has been involved in several energy conservation studies.

Education

Bachelor of Architectural Engineering, 2005,
The Pennsylvania State University

Experience

H.F. Lenz Company 2005-Present

Professional Registration / Certification

Licensed Professional Engineer
PA and OH

Certified Energy Manager, sponsored by the Association of Energy Engineers

Professional Affiliations

American Society of Heating, Refrigerating and Air-Conditioning Engineers

Pittsburgh Chapter - Pennsylvania Society of Professional Engineers

Project Experience

Yale University and Yale School of Medicine, New Haven, CT

- More than 15 Laboratory Projects including the following
- Wright Nuclear Structures Laboratory: study, cost estimates, and renovation of 52,000 SF lab and office space
- Electron Accelerator Laboratory: renovations of 65,000 SF of lab and office space
- W-ISTC EM Core: Renovate electron microscope lab facility
- W-ABC glass wash facility upgrade
- W-ABC Freezer Farm: cooling, monitoring, and exhaust system for 350 SF freezer and crygogen storage room
- W-SRC clean room - Class 10,000 clean room new build
- 300 George St. 2nd floor laboratory renovation: multi-discipline fit-out of entire 2nd floor for future lab tenant
- 300 George St. 6th floor laboratory renovation: multi-discipline fit-out of entire 6th floor lab tenant
- Greeley Memorial Laboratory: Chemistry Lab & Offices
- BCMM 437 Laboratory Microscope
- BCMM B03 Laboratory Microscope Rooms
- TAC NL MRI Upgrade

WVU Medicine, Ruby Memorial Hospital, Morgantown, WV

- Design of New 10,000 SF. Clinical lab - current project
- New 176,000 SF addition and 47,000 SF renovations and morgue

Veterans Affairs Medical Center, Philadelphia, PA

- Renovation of the clinical lab in 10 phases and maintain operations during construction

Allegheny Health Network (AHN) West Penn Hospital, Pittsburgh, PA

- New Melanoma/Skin Care Research Lab - current project
- Grossing and Histology Lab
- Evaluation of HVAC and electrical systems for upgrades

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

Mechanical Engineer

Mr. Stewart has over 39 years' experience in the design of HVAC, plumbing, and fire protection systems. His responsibilities include 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.

Education

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

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

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

Experience

H.F. Lenz Company 1996 - 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 PA• Certified LEED Professional

Professional Affiliations

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

Project Experience

Pennsylvania State Police, Greensburg, PA

- New 31,000 SF State Police Headquarters building with forensics unit and various types of lab spaces
- New 50,000 SF DNA lab building

New Bolton Center, Chester County, PA

- New 55,000 SF facility with Microbiology Lab, a variety of Pathogen Labs, BSL 3 labs, PCR/Molecular Diagnostics and 20 mass spectrometers - current project

The Pennsylvania State University, Various Campuses

- Berks Campus: New 62,000 SF Gaige Technology and Business Innovation Center with Café and outdoor terrace with flexible collaboration spaces - LEED Gold
- University Park Campus - New 132,000 SF Erickson Food Science and The Creamery with outdoor terrace
- Ag Sciences Building renovations

U.S. Drug Enforcement Administration, Pittsburgh, PA

- New two-story, 50,000 SF office building

NETL (National Energy Technology Laboratory), Various Locations

- Indefinite Delivery-Indefinite Quantity (IDIQ) contract for NETL facilities in Morgantown, WV, Bruceton, PA, and Albany, OR - Over 100 projects completed and facilities include 81 buildings and 14 major research facilities on nearly 200 acres

Carnegie Mellon University, Pittsburgh, PA

- College of Fine Arts study and design for renovations
- Mellon Institute lab projects
  - Urban Lab, 1,800 SF, Biology Lab
  - Linstedt Lab, 1,400 SF, Biology Lab
  - Das Lab, 1,400 SF, Chemistry Lab
  - McCullough Lab, 1,200 SF, Biology Lab
  - MacBeth Lab, 4,000 SF, Biology Lab
  - Hinman Lab, 1,900 SF, Biology Lab
- Full MEP renovation of the 217,000 SF Doherty Hall chemistry lab building

University of Delaware, Newark, DE

- Life Sciences Complex addition for new MRI and lab spaces

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

Project Electrical Executive/Quality Control

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 PA, AR, ID, IL, IN, MD, NE, NJ, NC, OH, OK, OR, SD, VA, and WV

LEED Accredited Professional

Professional Affiliations

NSPE/PSPE
U.S. Green Building Council

Project Experience

Pennsylvania State Police, Greensburg, PA

- New 31,000 SF State Police Headquarters building with forensics unit and various types of lab spaces
- New 50,000 SF DNA lab building

New Bolton Center, Chester County, PA

- Feasibility study and engineering design for the 55,000 SF Center including Microbiology Lab, Large Animal Pathology Lab, Poultry Pathology Lab, Toxicology Lab, a Field Investigation Office, lab space convertible to Biological Safety Level 3 Facilities

The Pennsylvania State University, Various Campuses

- Altoona Campus: Feasibility study and conceptual design for Smith Hall including specialized laboratories
- Behrend Campus: New 179,000 SF Burke Research and Economic Development Center including various lab spaces
- Berks Campus: New 62,000 SF Gaige Technology and Business Innovation Center with Cafe - LEED Gold
- University Park Campus: New 132,000 SF Erickson Food Science facility with a variety of labs and a working dairy

U.S. Drug Enforcement Administration, Pittsburgh, PA

- New two-story, 50,000 SF office building

NETL (National Energy Technology Laboratory), Various Locations

- Indefinite Delivery-Indefinite Quantity (IDIQ) contract for NETL facilities in Morgantown, WV, Bruceton, PA, and Albany, OR - Over 100 projects completed and facilities include 81 buildings and 14 major research facilities on nearly 200 acres

Carnegie Mellon University, Pittsburgh, PA

- College of Fine Arts study and design for renovations
- Full MEP renovation of the 217,000 SF Doherty Hall chemistry lab building
- Mellon Institute lab projects
  - Urban Lab, 1,800 SF, Biology Lab
  - Linstedt Lab, 1,400 SF, Biology Lab
  - Das Lab, 1,400 SF, Chemistry Lab
  - McCullough Lab, 1,200 SF, Biology Lab
  - MacBeth Lab, 4,000 SF, Biology Lab
  - Hinman Lab, 1,900 SF, Biology Lab

Brian D. Schmidt, P.E.

Electrical Engineer

Mr. Schmidt has extensive experience in electrical system modeling and computer calculations (SKM Power Tools) for producing engineering drawings for various types of higher educational, commercial, institutional, and governmental facilities. His experience in the electrical field includes the design of generators, emergency lighting and power distribution systems; exterior high-voltage underground and overhead pole line distribution systems; medium-voltage switchgear building interior and exterior electrical power distribution systems; lightning protection systems; theatrical stage dimming systems; computer room grounding systems and signal reference grid systems; uninterruptible power supply systems; paralleling and synchronizing switchgear; interior and exterior building lighting systems; site utilities; grounding systems; and signal, communication, security, and fire alarm systems.

Education

Bachelor of Science, Electrical Engineering Technology, 2006, University of Pittsburgh at Johnstown

Experience

H.F. Lenz Company - 2006

Professional Registration / Certification

Licensed Professional Engineer in PA • Completion of PTW Software and Power Systems Application Courses through IEEE • Completion of Battery Technology and Battery Monitoring through Liebert Corporation

References

Ron Lincoski
Assistant Director of Trades
California University of Pennsylvania
724-938-5356
lincoski@calu.edu

Nathan Patrick
Project Manager
Pennsylvania State University
814-865-3640
NTP111@psu.edu

Project Experience

New Bolton Center, Chester County, PA

- Feasibility study and engineering design for the 55,000 SF Center including Microbiology Lab, Large Animal Pathology Lab, Poultry Pathology Lab, Toxicology Lab, a Field Investigation Office, lab space convertible to Biological Safety Level 3 Facilities

NETL (National Energy Technology Laboratory), Various Locations

- Indefinite Delivery-Indefinite Quantity (IDIQ) contract for NETL facilities in Morgantown, WV, Bruceton, PA, and Albany, OR - Over 100 projects completed and facilities include 81 buildings and 14 major research facilities on nearly 200 acres

Carnegie Mellon University, Pittsburgh, PA

- College of Fine Arts study and design for renovations
- Full MEP renovation of the 217,000 SF Doherty Hall chemistry lab building
- Mellon Institute lab projects
  - Das Lab, 1,400 SF, Chemistry Lab
  - McDonough lab renovation study
  - Hinman Lab, 1,900 SF, Biology Lab

The Pennsylvania State University, Various Campuses

- Altoona Campus: Feasibility study and conceptual design for Smith Hall including specialized laboratories
- Berks Campus: New 62,000 SF Gaige Technology and Business Innovation Center with Cafe - LEED Gold
- University Park Campus: Feasibility study for new resource lab
- College of Agricultural Sciences: Multiple renovations, infrastructure upgrades, laboratory spaces and greenhouse projects - Multiple sizes and budgets
- Beaver Campus: Baker Engineering and Sciences Building Feasibility Study and Harmony Building Feasibility Study
- Allegheny Campus: Ostermayer Lab Building study

Joel C. Shumaker, P.E., LEED AP

Electrical Engineer

Mr. Shumaker is responsible for client contact, project scheduling, preparation of reports and cost estimates, coordination and supervision of project design teams, and other project management functions. Mr. Shumaker is experienced in the design of electrical 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.

Education

Bachelor of Science, Electrical Engineering Technology 1993, University of Pittsburgh at Johnstown

Experience

H.F. Lenz Company 1985-Present

Professional Registration / Certification

Licensed Professional Engineer in PA, CT, DE, MD, NY, VT, VA and WV

Professional Affiliations

Pennsylvania Society of Professional Engineers, Johnstown Chapter Secretary

National Society of Professional Engineers

Keystone Chapter of Association of Physical Plant Administrators

International Society of Pharmaceutical Engineers (ISPE)

Project Experience

CDC/NIOSH Bruceton Research Center, Bruceton, PA

- Evaluation/assessment of the entire power distribution system for the 100+ acre campus with a total of 104 buildings
- Boiler study for 51 buildings and subsequent design for decentralization

CDC/NIOSH Morgantown, WV and Pittsburgh, PA

- Multiple laboratory renovation projects and infrastructure studies and upgrades under consecutive term contracts

U.S. Department of Agriculture, Morgantown, WV

- Tenant-fit out of approximately 40,000 SF of a GSA-leased building - LEED Certified

Evoqua Water Technologies, Pittsburgh, PA

- New 18,000 SF building with wet lab and office space

Mylan Pharmaceuticals, Morgantown, WV

- Multiple projects involving design of laboratories, clean rooms, warehouses, offices and storage space

University of Pittsburgh, Pittsburgh, PA

- Phased renovation of the 400,000 SF Benedum Hall and new 42,000 SF Mascaro Center for Sustainable Innovation building housing wet and dry lab - LEED Gold
- Life Sciences Complex – renovations to various buildings and building systems for the 200,000 SF complex
- Grad School of Public Health - Master plan and renovations to the 173,600 SF Parran Hall and 63,900 SF Crabtree Hall buildings

University of Pittsburgh at Johnstown, Johnstown, PA

- Engineering and Science Building renovations and addition and new chemical engineering building addition

Jeffrey L. Jarvis

Plumbing/Fire Protection Designer

Mr. Jarvis is highly experienced in all aspects of the design and commissioning of plumbing systems including medical gas systems, acid waste and vent, plumbing fixture requirements, decontamination chambers and complete plumbing system requirements for health care, correctional, institutional, industrial, educational, and commercial facilities. He also has several years of hands-on experience with a variety of field plumbing healthcare systems including laboratory, medical gas, and balancing return systems. Mr. Jarvis coordinates with other trades, municipal fire protection authorities, utility companies, and with the Project Engineer and project Architect.

Education

Associate Degree, Specialized Technology, Mechanical Drafting, 1988, Hiram G. Andrews Center, Johnstown, PA

Experience

H.F. Lenz Company 1989-Present

L. Robert Kimball and Associates, 03/89 – 09/89, US Government, The Pentagon, 06/85 – 08/85

Professional Registration / Certification

ASSE 6005 Certified Medical Gas Specialist

American Society of Plumbing Engineers, Medical Gas Professional Healthcare Organization

Project Experience (*indicates previous experience)

WVU Medicine, Ruby Memorial Hospital, Morgantown, WV
- Design of New 10,000 SF. Clinical lab (current project)
- New 176,000 SF addition and 47,000 SF renovations and morgue

Children's National Medical Center, Washington, DC
- New 150,000 SF addition and 5,200 SF renovations to create a new Animal Research including BSL-1and BSL-2 spaces

MetroHealth, Cleveland, OH
- New GMP (Good Manufacturing Practice) Cleanroom Facility

UPMC Altoona, Altoona, PA
- 600 SF morgue relocation
- T3 clinical lab renovation
- T2 pharmacy renovation with both hazardous and non-hazardous clean rooms
- Laboratory expansion and renovation, CSR expansion and renovation, surgical suite expansion

Veterans Affairs Medical Center, Philadelphia, PA
- Full Dental Clinic renovation, which required a temporary dental lab to be built prior to the demolition of the old lab

Pennsylvania Department of Labor, Pittsburgh Job Corps, Pittsburgh, PA
- New Medical/Dental Building including simulation labs

University of Pittsburgh, Pittsburgh, PA
- Various projects involving research labs, office facilities, and conference spaces at the main and branch campuses

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, ASPE

Gregory D. Rummel, CPD

Plumbing/Fire Protection Systems Designer

Mr. Rummel has designed complete plumbing and fire protection systems for hotels, resorts, 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.

Project Experience

PA State Police, Greensburg, PA
- New DNA Laboratory Building
- New 31,000 SF Headquarters

New Bolton Center (NBC) Feasibility Study, Chester County, PA
- Feasibility study and design services for a new 55,000 SF, facility to provide diagnostic, forensic, and research support services to the PA Dept of Agriculture through the PA Animal Diagnostic Laboratory System (PADLS) and the PA Equine Toxicology and Research Laboratory (PETRL)

DOE/NETL - Morgantown, WV, Pittsburgh, PA and Albany, OR
- Multiple laboratory renovation projects and infrastructure studies and upgrades under consecutive term contracts

U.S. Drug Enforcement Agency, Pittsburgh, PA
- New 50,000 SF office building and parking garage –LEED Certified

The Pennsylvania State University, University Park, PA
- College of Agricultural Sciences - Multiple renovations, infrastructure upgrades, laboratory spaces and greenhouse projects
- New 132,000 SF Erikson Food Science Building
- Swine Research facility renovations
- NARCO Building – Steady Thermal Aero Research Turbine (START) Lab
- Nano Tech Modular Clean Room Lab

University of Delaware, Newark, DE
- New 12,000 SF addition to the Life Sciences building to house two MRIs and 5,000 SF of associated lab space

Carnegie Mellon University, Pittsburgh, PA
- Mellon Institute - various infrastructure upgrades and fit-outs for a variety of lab spaces in the 350,000 SF lab building

MICHAEL R. MILLER, PE

ROLE: Structural Project Manager

Joined the Firm
1990

Mr. Miller is a Principal in Charge and Project Manager on commercial, institutional, medical, research and restoration projects. He is experienced in structural analysis and design of new structures; investigation, restoration/renovation and reuse of existing structures; building masonry facade investigation, remediation/restoration; preparation of feasibility studies; contract documents and specifications.

In addition, Mr. Miller's collaborative design approach has allowed his clients to develop and incorporate unique, but practical solutions on their projects. His project structural systems capabilities encompass; steel, composite steel, steel joist and joist girder, wood, timber, masonry, reinforced concrete and precast concrete. Foundation systems design includes conventional spread footings, drilled piers (caissons), auger cast concrete piles and slab-on-grades on expansive soils, as well as performance specifications for concrete underpinning and soil nailing.

BARBER & HOFFMAN, INC.
Consulting Engineers

REPRESENTATIVE EXPERIENCE

★ = Projects completed with Omni Associates.

CITYNET CENTER ★The Bridge Sports Complex	Bridgeport, WV
FAIRMONT FEDERAL CREDIT UNION ★Drive Through Bank	Fairmont, WV
HARRISON COUNTY SCHOOLS ★Additions and Renovations	Bridgeport, WV
OHIO COUNTY SCHOOLS ★Additions and Renovations	Wheeling, WV
WEST VIRGINIA UNIVERSITY Advanced Engineering Building	Morgantown, WV
GLENVILLE STATE COLLEGE Science Building Renovations	Glenville, WV
GRAND VUE PARK ★Tree Top Villas	Pittsburgh, PA
UH AHUJA MEDICAL CENTER Sports Medicine Institute	Beachwood, OH
UPMC EAST HOSPITAL AND PARKING GARAGE	Monroeville, PA
UPMC LEMIEUX SPORTS COMPLEX	Cranberry Twp., PA
CARNEGIE MELLON UNIVERSITY Ansys Hall and Doherty Hall Additions (Phases 1 and 2)	Pittsburgh, PA
UNIVERSITY OF PITTSBURGH Biomedical Science Tower Infrastructure Chevron Science Center Annex Graduate School of Public Health Addition	Pittsburgh, PA
MOUNT ALOYSIUS UNIVERSITY Pierce Science Building Addition	Cresson, PA

Education

Cleveland State University, 1996
Master of Science in Civil Engineering

The Pennsylvania State University, 1990 Bachelor of Architectural Engineering (Structural)

Registration: [redacted]

Ohio
Pennsylvania
Maryland
New Jersey
New York
Virginia
West Virginia

Professional Affiliations

Structural Engineers Association of Ohio

Code Management Review Board for City of Butler, PA

American Institute of Steel Construction

First Sergeant (retired)
Pennsylvania Army National Guard

University of Pittsburgh Chevron Science Center
Pittsburgh, PA

OMNI
ARCHITECTS

CDC / NIOSH

National Institute for Occupational Safety and Health

SERVICES PROVIDED
Architectural Design

YEAR COMPLETED
2005-2010
2011-2015

Omni Associates – Architects was selected from among many national firms for an open-ended agreement to design laboratory additions and renovations for the Morgantown, WV and Pittsburgh, PA CDC/NIOSH facilities. This was part of the Federal "Set-Aside" procurement process for Small Business Concerns.

Omni worked jointly with Karlsberger and H.F. Lenz to provide comprehensive laboratory and Mechanical, Electrical, Plumbing Engineering.

Omni Associates — Architects was required to perform a minimum of 50 percent of the work as a part of the contract agreement. The 5 year agreement was implemented through individual work scope assignments that entailed on-site evaluations, program feasibility, construction documents, and construction administration. Omni Associates' close proximity to both sites made the implementation of design criteria easier to coordinate with the CDC/NIOSH personnel.

OMNI
ARCHITECTS

MYLAN PHARMACEUTICALS

Research & Development Center

SERVICES PROVIDED
Architectural Design

DELIVERY METHOD
Design-Build

PROJECT SIZE
153,000 SF

PROJECT COST
$14.8 million

YEAR COMPLETED
2009

Mylan Pharmaceuticals 14.8 million dollar Research and Development facility was constructed to help the expanding generic drug manufacturer grow by moving many non production functions into a separate state-of-the-art building. The existing plant was in need of more room but was unable to grow due to its confined site. The new building was sited several miles away on a sloping riverside area. Along with research and laboratory programs, the new building holds the sales and marketing teams, the accounting and information system departments and an expansive warehouse.

The site, due to its severe slope to the river, had to be excavated down twenty feet to create enough area for the 153,000 square foot building; the footprint being nearly one acre. The main entrance is located on the Third floor. Functionally, the building is divided by its program. The upper floor has research labs (Pharmacokinetics, Analytical Chemistry and Material Management) and a prototype production plant to manufacturer samples of new research. Teleconference and executive office space keep the research members near the work at hand as well as Mylan's other facilities and offices.

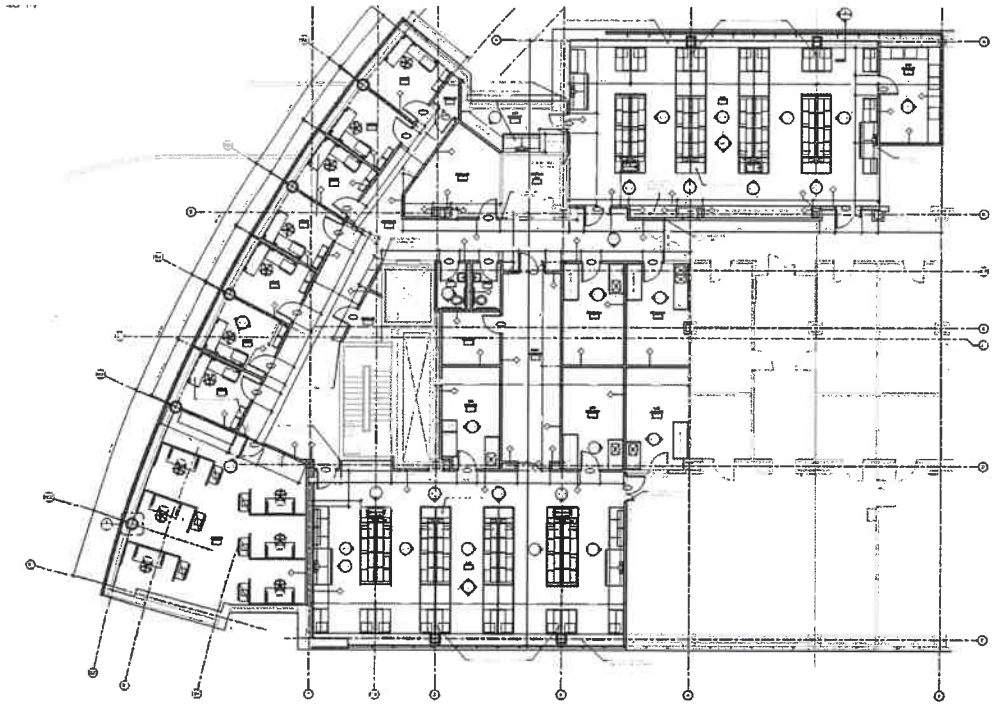
The Second floor is shared by Information Systems and Accounting. This floor also contains the building's lunch room and has the company's wellness center, good health being a company mission. The First floor has executive offices and a training center for sales and marketing. The bulk of this lower floor is designated for a materials warehouse. Raw materials and equipment for the research facility above is received, tested and quarantined.

All of the laboratories, production rooms and offices are design and equipped with the latest technologies from computer systems to room finishes. The Research and Development Center has enabled Mylan Pharmaceuticals to create new products and expand its manufacturing.

OMNI
ARCHITECTS

BLANCHETTE ROCKEFELLER NEUROSCIENCES INSTITUTE (BRNI)

Laboratory Fit Out



SERVICES PROVIDED
Architectural Design

DELIVERY METHOD
Design-Build

PROJECT SIZE
Vivarium: 1,727 SF
Lab: 9,288 SF

PROJECT COST
$2.8 million

YEAR COMPLETED
2014

Omni Associates was selected to provide architectural and engineering services for the interior fit-out of unfinished spaces of the Blanchette Rockefeller Neurosciences Institute (BRNI) at West Virginia University. The spaces consist of 1,727 square feet of vivarium animal research rooms and working space for an electron microscope on the ground floor as well as 9,288 square feet of laboratory, office and conference room space on the first floor, including a multifunctional work space in the entrance lobby.

Because the building was partially occupied, special conditions were required during construction. All access to the building was through the exterior window system. In addition to the staffing working environment remaining intact, it was critical that animal research not be disturbed. Consequently, the timing of the project became a design element as there is only a two week period allotted for cutting and demolition work when animal research was between cycles.

The project included laboratory casework and some custom furniture millwork. The laboratory case-work is custom designed and allows for multiple functions within the lab. Likewise, the conference room and support offices had custom furniture millwork designed to accommodate the specific needs and geometries of those spaces. Modifications to the existing HVAC ductwork, electrical system, plumbing system, sprinkler system, generator connection and life safety systems will be provided as needed to support the newly finished spaces.

OMNI
ARCHITECTS

Engineering Sciences Building—Lab G85

West Virginia University

The lab in G85 was one of the final spaces in the College of Engineering's Lane Innovation HUB to be updated. The existing space received minor adjustments to walls to improve the layout of the main fabrication lab, create an enlarged interior room for finishing and layout from a small office, and to improve the separation of the mezzanine storage and the electrical equipment areas from the main fabrication floor. Selected ceilings were removed and new lighting installed to increase the height of the space and improve visibility when working on detailed projects. Bright finishes enhanced the light throughout the lab, relocated electrical service provided single access to service panels, a new shop floor provided a slip resistant and chemical resistant surface, and improved separation of spaces allowed for more hazardous activities to occur adjacent to non-hazardous fabrication work.

SERVICES PROVIDED
Architectural Design

DELIVERY METHOD
Design-Bid-Build

PROJECT SIZE
4,900 SF

PROJECT COST
$422,000

YEAR COMPLETED
2022

H.F. LENZ ENGINEERING

Relevant Experience

NEW BOLTON CENTER

Feasibility Study and Design Services for New Facility

Chester County, PA

Services
Mechanical, Electrical, Plumbing and Fire Protection

Square Feet
55,000

Completed
2019

Cost
$55 million - Construction
$37,320 - Study

Reference
Kim Kopple
University of Pennsylvania
School of Veterinary Medicine
Penn Vet Facilities
3800 Spruce Street
Philadelphia, PA 19104
215-898-4228
kkopple@vet.upenn.edu

H.F. Lenz Company provided a feasibility study for the 55,000 SF New Bolton Center (NBC). We were subsequently retained to provide the MEP/FP design services for the project, which is currently in progress. The NBC will provide diagnostic, forensic, and research support services in various agencies including the Pennsylvania Department of Agriculture through the Pennsylvania Animal Diagnostic Laboratory System (PADLS) and the Pennsylvania Equine Toxicology and Research Laboratory (PETRL).

The existing facilities are scattered, outmoded and inadequate to effectively meet the needs of the laboratories providing diagnostic and forensic services. Consolidating the facilities in one building will greatly facilitate work flow, and create efficiencies and opportunities for collaboration. The study provided detailed cost estimates for all options, breaking out specialized building and mechanical systems costs, and projected operating costs. The new facility will connect to the bioprocessor that was sited per the first phase of the master plan. The necropsy suite will be adjacent to the bioprocessor.

Spaces in the new facility will include Microbiology Lab, Large Animal Pathology Lab, Poultry Pathology Lab, Toxicology Lab, a Field Investigation Office, lab space convertible to Biological Safety Level 3 Facilities, PCR/Molecular Diagnostics and 20 mass spectrometers. Both the PADLS and PETRL Departments need safe, efficient, and effective labs. Our study addressed these goals through performing a risk assessment and addressing both the primary and secondary containment. Space pressurization is key as well as designing air intake and exhaust systems to avoid re-entrainment of hazardous air.

The new facility will also include a large conference room, pharmacy, robotic sample prep area, human sample testing area, refrigerators and freezers for samples and a bio-safety cabinet.

The principles of the Labs21 Program are being incorporated into the design. Lab spaces are designed to provide user friendly access to utilities, equipment, fume hoods, etc. Lighting of spaces incorporates the use of daylighting and appropriate controls to maintain its usage.

The study was completed in 2019. The estimated construction cost for the facility is $55 million. The project is currently in design.

H.F. LENZ
ENGINEERING

Relevant Experience



CELLOMICS, INC.

New Biotechnology Facility

Pittsburgh, PA

Services
Mechanical, Electrical, Plumbing, Fire Protection and Civil Engineering

Square Footage
160,000

Reference
Amanda Weaver
Community Manager and Activation Specialist
Collaborative Real Estate
100 Technology Drive
Pittsburgh, PA 15219
PH: 412-357-5577
aweaver@ccollabre.co

Located in what is now Bridgeside Point, Cellomics Inc. was founded to utilize technology from Carnegie-Mellon University and produce instruments, software and reagents for use in drug discovery applications. That legacy is now part of Thermo Fisher Scientific.

The H.F. Lenz Company provided the MEP/FP and civil engineering services for Cellomic's original 160,000 SF corporate headquarters and research facility.

The high-tech facility contains approximately 30 fume hoods and three Class 10,000 Clean Rooms. The hoods were integrated with the building automation system to ensure that the amount of conditioned make-up air entering the lab space was controlled and a proper pressure differential to the adjoining spaces was maintained.

The exhaust system consisted of four laboratory exhaust fans mounted on the roof. In an effort to increase the efficiency of the heating and cooling system, heat exchangers were designed to be installed into the exhaust stream.

The plumbing system consisted of providing a separate distilled water system, a natural gas distribution system, a vacuum system, and a lab air system. The distilled water produced here will be used not only for the research being conducted at this facility, but it will also be sold to customers to be utilized as a reagent in the systems already in use.

The building is now utilized by multiple tenants. We have continued to provide engineering services for a variety of lab and office spaces through out the building.

Recent additional projects in the facility have included:

- Gross Anatomy Third Floor Renovations
- Fit-out of second and fourth floors
- Tenant fit out laboratory space
- McGowan Institute Cell Sorter Changes
- Rousseau Lab Third Floor Renovation
- Third Floor Occupational Therapy Space
- Emergency Power Study

H.F. LENZ ENGINEERING

Relevant Experience

PENNSYLVANIA STATE POLICE

New DNA Lab and State Police Headquarters

Greensburg, PA

Services
Mechanical, Electrical, Plumbing and Fire Protection

Square Feet
50,000 DNA Lab
35,000 State Police Headquarters

Completed
2021 DNA Lab
2022 State Police Headquarters

Cost
$22.5 million DNA Lab
$15 million State Police Headquarters

Reference
James Danner
Facility Director
PA State Police
Facilities Management Division
3rd Floor, Department Headquarters
1800 Elmerton Avenue
Harrisburg 17110
717-705-0845
jamdanner@pa.gov

Through separate contracts with the Pennsylvania Department of General Services, H.F. Lenz Company provided the MEP/FP engineering for a new 50,000 SF DNA Lab Building and a new 35,000 SF State Police Headquarters building.

The **DNA Lab** building includes DNA Lab space, Lab Offices, Administration Offices, Evidence Storage and Evidence Control. Lab spaces include fixed and movable casework, chemical fume hoods, and biosafety cabinets, as well as administrative offices, conferences rooms, library, breakrooms, training rooms, wellness center, maintenance storage and loading docks. The facility is designed to accommodate 100 scientists and personnel.

Security and confidentiality of what goes on within this building must comply with special standards required for an accredited law enforcement lab. Special consideration is given to security of evidence.

The 35,000 SF **State Police Headquarters** building includes the following areas:

Headquarters
- Command staff
- Criminal investigation
- Forensic services unit
- Vice/intelligence
- Patrol section
- Collision analysis
- Commercial vehicle enforcement Motor carrier enforcement Vehicle fraud investigation
- Communications desk
- Records
- Staff services
- Troop administration

Lab
- Scientific services
- Drug identification Serology
- AFIS
- Ballistics
- Fire Marshal
- Polygraph

Space Requirements include:
- Headquarters building 31,000 SF
- Evidence storage (inside HQ) approximately 2,500 SF
- Impound yard approximately 10,000 SF
- Radio tower 150 SF

H.F. LENZ
ENGINEERING

Relevant Experience


EVOQUA WATER TECHNOLOGIES

New Lab and Office Building

Pittsburgh, PA

Services
Mechanical, Electrical, Plumbing and Fire Protection

Square Footage
18,000

Completed
2021

Cost
$3.5 million

Reference
Frank Sassaman
Pittsburgh Lab Manager
Evoqua
210 Sixth Ave #3300
Pittsburgh, PA 15222
724-772-0044
frank.sassaman@evoqua.com

Evoqua Water Technologies provides water and wastewater treatment solutions to industries such as Centers for Disease Control and Prevention in Western Pennsylvania. H.F. Lenz Company provided mechanical, electrical, plumbing and fire protection engineering design for the interior fit-out of approximately 18,000 SF of wet lab and office space located in the Tech Forge Building in Pittsburgh, Pennsylvania.

The project focused on a section approach of working in the front of the building first then moving to the back of the building. Phase one focused on creating 100% buildout for a working lab with added fire safety systems in the front. Phase two was focused heavily on MEP, electrical, and plumbing systems in the back of the building. The new state-of-the-art facility will enable further advancement and development of cutting-edge and sustainable water treatment technologies critical to addressing emerging water trends, including water and climate risks, connectivity, and health and safety.

The 18,000 SF facility houses a hands-on demonstration and training area, pilot testing environment, and a state-of-the-art laboratory to grow Evoqua's analytical and feasibility study capacity. The collaborative workspace is designed to provide strategic and timely technical capabilities, illustrating the company's commitment to delivering excellence to its customers.

Additional features included:

- Private wastewater sump pump collection system to collect, process and clean the wastewater material
- HVAC venting
- Air and Water plumbing system
- Spill protection
- Sustainable rooftop

Relevant Project Examples

VAMC Philadelphia

Philadelphia, PA

Third Floor Research Lab

H.F. Lenz Company provided the mechanical, electrical, plumbing/fire protection, and structural engineering services for the $4 million renovation of the Third Floor Research facility to accommodate researchers from the University of Pennsylvania completing research under grants from the Veterans Administration and various government agencies. The research space was designed to be capable of handling most types of research except radiological contaminants. The project scope included renovating the entire third floor into distinct and separate labs for BSL-1, 2, and 3 level research.

The existing primary air systems remained and new distribution, monitoring, and control systems were provided. The lab systems were designed for maximum flexibility so that simple changes can be made as research is completed and new projects are brought in. The area contains approximately fifteen (15) biosafety or fume hoods with future space for additional hoods, tissue culture labs, autoclave, microscopy, and large rooms for refrigerators and freezers. A separate controlled temperature room and instrument room with support spaces are also located on the floor.

Code Violations in the existing exhaust systems and building shafts were identified early in the project, thus the scope of work was expanded to complete an HVAC system distribution master plan to identify corrective actions. The corrective actions are integrated into the third floor renovations.

The existing plumbing and medical gas systems were renovated to support the new requirements. A new instantaneous hot water generation and distribution system was also design for the entire building.

Clinical Lab Renovations

H.F. Lenz Company provided Design and Commissioning Services for an 18,000 SF renovation of the Primary Clinical Lab, Building 2. The areas renovated include the Chemistry Lab, Histology, Microbiology, Sequencing Lab, Toxicology, Molecular, Blood Bank, and offices.

The project involved extensive coordination with the laboratory equipment planner and the architect. Designed in 6 phases, it required temporary and permanent utilities for each phase. The temporary lab required exhaust for fume hoods and supply make up air. The temporary air handling unit was provided during the replacement of the existing air handling unit. HVAC was maintained during all phases to maintain ventilation rates, air movement, and cooling requirements.

Relevant Experience

METROHEALTH

GMP Cleanroom Facility

Cleveland, OH

Services
Mechanical, Electrical

Cost
$3 million

Reference
Debra Ann DeCapite, CHC
Sr. Owner's Rep Facilities Management/Construction
MetroHealth
2500 MetroHealth Drive
FM-01
Cleveland, OH 44109-1998
216-778-5835
ddecapite@metrohealth.org

H.F. Lenz Company provided concept design services for a new GMP (Good Manufacturing Practice) Cleanroom Facility. The concept plan was developed as a prototypical space, with no specific existing building envelope or parameters to consider. The project goal was to establish a "prototypical model" in an effort to generate a probable cost of construction in order to secure the proper amount of funding for a future project. This will also establish best practices within the GMP facility for future consideration.

Concept Design plans for the area identified the following breakdowns of program space:

- Positive pressure cleanroom
- Negative pressure cleanroom
- Varying pressure cleanroom
- Changing room
- Storage and supply areas
- Office space
- Lab spaces (non-cleanroom)

The intent of this concept design narrative was to define the engineering systems proposed for use on this project. Close communication with facility representatives was maintained to aid in the continued process of design. Close review of this document was encouraged to ensure that all parties were aware of decisions made toward the design and engineering intent moving forward. The design incorporated sound sustainability practices, quality practice and design strategies that provide healthy, productive environments for staff while providing a secure setting for the occupants of the project area.

The design was incorporated into the new state-of-the-art vector and cellular Good Manufacturing Practice (GMP) facility, which opened in March of 2023. With this new facility, MetroHealth became the first safety-net hospital in the United States to offer in-house viral vector and cellular production for a wide spectrum of medical treatments.

Project Experience

Federal Agency Examples

General Services Administration (GSA), Charleston, WV

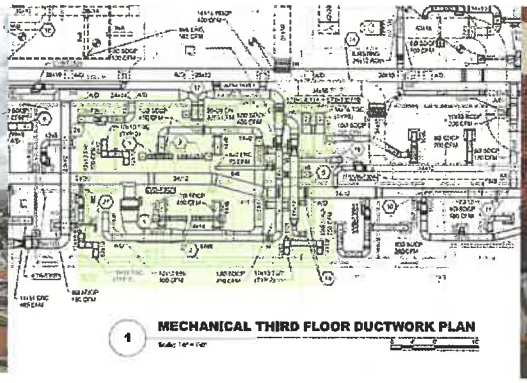
- H.F. Lenz Co. provided MEP/FP engineering services for the design of a new, two-story 19,427 SF office building to house an agency of the intelligence community offices. The facility includes GSA/FBI forensic evidence labs, investigators' work and technology spaces, and service bays to modify surveillance vehicles
- 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 was to meet the requirements of LEED Silver (minimum) and attain an ENERGY STAR rating of 75 or above. The $4.5 million project was completed in 2010.
  - Project Owner Representative: Mr. Nick Colasante, Glenmark Holding, LLC, 1399 Stewartstown Road, Suite 200, Morgantown, WV 26505, 304-599-3369 ,info@glenmarkholding.com

U.S. Drug Enforcement Administration, Pittsburgh, PA

- H.F. Lenz Company provided mechanical, electrical, plumbing, fire protection/life safety and structural engineering services as part of a design/build team selected by the U.S. General Services Administration for the delivery of a new office building for the Drug Enforcement Administration located in the Pittsburgh area. The two-story, 50,000 SF building has office space on the upper floor with the ground floor serving as a garage and storage space.
- The building systems also included specialized exhaust systems for carbon monoxide removal from the garage and filtration of exhaust system associated with drug evidence storage rooms. Multiple split systems supplement critical cooling applications throughout the building. Plumbing systems included shower facilities for the workout and clean lab prep areas and penal fixtures in holding cells.
- The building was designed and constructed to obtain a LEED Certified rating.
  - Project Owner: Robert Manns, Former Manager for GSA 412-432-4357, Robert.Manns@ic.fbi.gov

U.S. Department of Agriculture, Morgantown, WV

- H.F. Lenz Company provided MEP/FP engineering services for the tenant-fit out of approximately 40,000 SF of a GSA-leased building to be utilized by the U.S. Department of Agriculture. The fit-out space consists mainly of offices, conference areas, lobbies, mailroom, credit union, computer center, storage space and a loading dock.
- The project incorporated several sustainable concepts and was designed to attain LEED™ Certification.
  - Project Owner: John Pettit, Executive Office, Farm Service Agency, U.S. Department of Agriculture, 1550 Earl Core Road, Suite 102, Morgantown, WV 26505, 304-284-4881



UPMC ALTOONA

T-3 Clinical Lab Expansion and Morgue Relocation

Altoona, PA

Services
Mechanical, Electrical, Plumbing, Fire Protection and Structura

Square Feet
7,000

Completed
2015

Cost
$1.9 million

Reference
Randy Isenberg
Facility Director
UPMC Altoona
620 Howard Avenue
Altoona, PA 16601
814-889-2456
isenbergrs@upmc.edu

T-3 Clinical Lab Expansion

H.F. Lenz Company provided the MEP/FP and structural engineering services for the 7,000 SF renovation of the T-3 clinical lab. The project included demolition of a portion of partitions, ceilings and floor finishes on T-3 and installation of new rooms configurations, ceilings, lights, finishes, equipment and specialties in order to expand the laboratory.

The project included selective demolition of existing MEP/FP systems. The new MEP/FP design included:

- Modifications an extension of the ductwork systems
- New exhaust systems
- Extension of the DDC Controls
- Modifications and extension of the hot water piping system
- Extension of the medical gas system
- Modifications and extension of the domestic water and sanitary system
- Modifications and extension of the fire protection system
- New lighting, power, data, and security

The project was phased to minimize disruptions to any activities in the facility and completed on time and within budget with no change orders related to errors and omissions.

Morgue Relocation

H.F. Lenz Company provided the MEP/FP engineering services for the relocation of the 600 SF morgue. The project included routing special exhaust via mixed flow fan to prevent re-entrainment of exhaust air to outside air intakes.

Additional Relevant Experience

CDC/NIOSH, Pittsburgh, PA

- Design of the Mine Rescue and Escape Training Laboratory (MRET), which occupies 180 acres and serves as one of two focal points for federal mine safety and health research. The project included design of a 360° Immersive Training Environment. Researchers utilize 3D technology to develop a supplemental tool, the BG 4 Benching Trainer Software, used to assist mine rescue personnel in learning and retaining knowledge of the process of benching (inspecting, assembling, and testing) a Draeger BG 4 breathing apparatus. The facility includes small and large specialized labs where researchers study heavy machinery, mechanical and electrical systems, ergonomic and biomechanic challenges, geological stresses, explosions, illumination, chemistry, dust control, and a host of other mining safety and health challenges.
  - Project Owner Representative: Mr. Ronald Cummings, NIOSH/CDC, Office of Administrative and Management Services, 626 Cochrans Mill Road, Pittsburgh, PA 15236 PH: 412-386-6681
- **Building 141 Renovation** - Multi-discipline renovation of interior spaces into functional office and laboratory spaces in Building 141. Task 1 project involved creating a new three-story structure inside of the high-bay Room 158 to house the dry lab and office space. Task 2 included design of of 8 to 12 fume hoods within the laboratories being constructed within Rooms 148 and 151. Construction Cost: $8 million
  - Project Owner Representative: Mr. William L. Porter, MS, FMP, NIOSH/CDC, 626 Cochrans Mill Road, Pittsburgh, PA 15236 PH: 412-386-5222

University Projects

Pennsylvania State University, Various Campuses

- Berks Campus – New 62,000 SF Gaige Technology and Business Innovation Building with engineering and tech labs, hands-on simulation labs, various shop spaces, vehicle labs, high bay area, computer labs, as well as collaboration spaces and a cafe – LEED Gold
  - Project Owner Representative: Mr. Scott W. Rhoads, Penn State University, Engineering Services, 155C Physical Plant Building, University Park, PA 16802 PH: 717- 865-1287
- Behrend Campus – New Burke Research and Economic Development Center (REDC), a 179,000 SF facility with engineering and tech labs, including the largest plastics lab in the U.S., various shop spaces and a high bay area. The building also houses classrooms, lecture halls, meeting spaces and a cafe and is home to several of the college's outreach programs
  - Project Owner Representative: Mr. Marcus Marasco, Penn State University, Engineering Services, 155C Physical Plant Building, University Park, PA 16802 PH: 814-865-6197

H.F. LENZ
ENGINEERING

Project Experience

- Altoona Campus – Feasibility Study and conceptual design for Smith Hall which included student services, classroom and research spaces with engineering labs and several robotics areas, high bay area, a learning resource center, offices and lounge. The project included specialized laboratories focused on manufacturing, including systems used to weld and cut steel including research in thermal fluid control: sensing and control applications related to gases, liquids, reacting flows (flames), plasmas (electric arcs) and a dune buggy lab
  - Project Owner Representative: Mr. Douglas Wenger, Project Manager, Penn State University, 0325 The 328 Building, University Park, PA 16802
    PH: 814-863-9622
- NARCO – Steady Thermal Aero Research Turbine (START Lab) which focuses on innovating turbine cooling using true-scale engine hardware, developing sensors and instrumentation for smart turbines, advancing additive manufacturing for turbine applications, and integrating and embedding sensors through additive manufacturing.
  - Project Owner Representative: Dwayne Rush, Penn State University, Engineering Services, 155C Physical Plant Building, University Park, PA 16802
    PH: 814-865-6475

University of Pittsburgh, Pittsburgh, PA

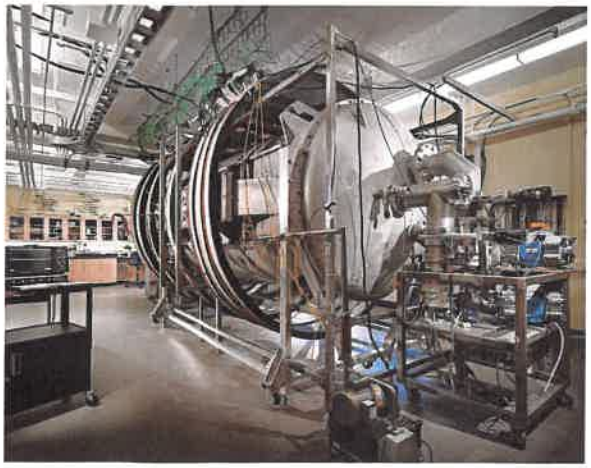
- Benedum Hall Renovations - Phased renovation of the 419,000 SF Benedum Hall, home to the Swanson School of Engineering and contains classrooms, laboratories, offices, conference and seminar rooms, and libraryProject is LEED Gold
- Mascaro Center for Sustainable Innovation - New 42,000 SF building housing wet and dry; features adaptable lab spaces and offices with large frosted windows for natural light; Project is LEED Gold
  - Project Owner Representative: Project Manager (Canard S. Grigsby, Jr.) is no longer with the University, current contact: Mr. Chris Niemann II, Facilities Manager, University of Pittsburgh, Facilities Management, 3400 Forbes Avenue, Pittsburgh, PA 15260 PH: 412-624-9529

University of Pittsburgh at Johnstown, Johnstown, PA

- Engineering and Science Building – Renovation of the 66,000 SF building that houses various types of engineering labs including Fluids and Hydraulics, Measurements, Soils, Electronics, and Power Labs, and a nuclear magnetic resonance (NMR) magnet that required special engineering criteria such as controlled airflow and vibration considerations, as well as classroom and collaboration spaces and an auditorium.
- New 26,000 SF, two-story Nursing/Health Science Facility with chemistry and biology labs as well as Nursing Simulation Labs with SimMan patient simulators to provide a wide range of signs and symptoms to teach the students how to react to various situations and control room. LEED Gold
  - Project Owner Representative: Mr. Dennis Heller, Director of Facilities, University of Pittsburgh at Johnstown, 450 Schoolhouse Road, Johnstown, PA 15904 PH: 814-269-7130

H.F. LENZ
ENGINEERING

Project Experience



Yale University, New Haven, CT

- Wright Nuclear Structure Laboratory - Renovation of 42,000 SF of Physics Laboratory and office space
  - Project Owner Representative: Ms. Kari Nordstrom, Director of Project Architecture and Design, Yale University, 2 Whitney Avenue, New Haven, CT 06510 PH: 203-432-8405
- Electron Accelerator Laboratory - This 6,620 SF comprehensive renovation converted previous laboratory and non-laboratory spaces into new physics research laboratory facilities with associated office spaces, conference room and lounge.
  - Project Owner Representative: Ms. Sheri Miller, Director of Planning and Project Management, Yale University, 2 Whitney Avenue, New Haven, CT 06510 PH: 203-432-8885
- W-SRC Clean Room Core Facility - Engineering services for planning study and project formulation for both refurbishment of an existing Class 10,000 clean room and a new build Class 10,000 clean room at West Campus. Provided construction documentation services as the prime consultant for a new 2,500 SF. Class 10,000 clean room and office suite.
  - Project Owner Representative: Ms. Sheri Miller, Director of Planning and Project Management, Yale University, 2 Whitney Avenue, New Haven, CT 06510 PH: 203-432-8885

West Virginia University, Morgantown, WV

- White Hall – Phased renovation and life safety upgrades to the 95,500 SF Physics lab building with laboratories, classrooms, offices and a 175-seat auditorium. With the researchers' expanding use of lasers, and the technologies associated with them, the need to design the project with low vibration creating equipment and high-power capacity was a top priority. Due to the constantly changing research and researchers, the labs were designed with maximum flexibly for multiple uses.
  - Project Owner Representative: Mr. John Sommers, Sr. Construction Project Manager, West Virginia University, 979 Rawley Lane, Morgantown, WV 26506 PH: 304-293-2856

University of Delaware, Newark, DE

- New 12,000 SF addition to the Life Sciences building to house two MRIs and 5,000 SF of associated lab space. The new facility supports the research needs from many departments from multiple colleges and provides the structural imaging necessary for muscular skeletal studies (Physical Therapy, Biomedical Science), research on normal and cancerous tissue (Biology, Agricultural Studies) and research on the properties of materials (Chemistry, Biochemistry and Engineering). The facility also provides functional imaging essential to neuroscience research in both animal and human cognition and emotion (Psychology, Economics).
  - Project Owner Representative: John Davis, Project Engineer, University of Delaware, Real Estate & Auxiliary Services, PH: 302-831-1182

H.F. LENZ ENGINEERING

Relevant Experience



THE PENNSYLVANIA STATE UNIVERSITY

New Rodney A. Erickson Food Science Buidling

University Park, PA

Services
Mechanical, Electrical, Structural and Surveying

Square Footage
132,000

Completed
2005

Cost
$36 million

Reference
Richard Riccardo, AIA
Physical Plant Building
University Park
814-865-7190
rar7@psu.edu

H.F. Lenz Company provided full-service mechanical, electrical, and structural engineering and surveying services to assist Penn State University with their pursuit to construct the Berkey Dairy Food Science Building which is a symbolic statement by the College and Administration concerning the importance of Food Science as a Department and an academic program. This $36 million, 132,000 SF research and laboratory facility contributes to the Department's effectiveness in recruiting undergraduate and graduate students, retaining the best faculty members and staff, and allows the College of Agricultural Sciences to remain current with researchers in food science departments in the Big Ten Conference and the Northeast.

The Berkey Dairy Food Science Building is a truly unique building in that it contains all of the following components under one roof for one using agency:

- Teaching Laboratories
- A Dairy manufacturing facility
- Flexible, modern, ever-changing Pilot-Scale processing plants
- Research Laboratories
- Classrooms
- Academic offices
- The Creamery retail sales area with outdoor dining terrace

No other Food Science Department across the country operates a full-scale manufacturing plant.

A food sensory laboratory in which foods are sampled for taste is also included in the building.

Some of the specific laboratories include chemistry, food safety, and micro-biology. The pathogens lab is designed for bio-safety Level 2. Also, a food sensory laboratory in which foods are sampled for taste is included.

The pilot-scale processing plants are used to further develop research and manufacturing ideas. Research is initiated on a bench-top (laboratory) scale, and then tested on an intermediate scale (the "pilot scale") before full-scale manufacturing is performed.

B&H PROJECT EXPERIENCE

CITYNET CENTER — Bridgeport, WV
- ★The Bridge Sports Complex

DICK'S SPORTING GOODS — Moon Township, PA
- ★Day Care Facility

FAIRMONT FEDERAL CREDIT UNION — Fairmont, WV
- ★Drive Through Bank

GRAND VUE PARK — Pittsburgh, PA
- ★Tree Top Villas

HARRISON COUNTY SCHOOLS — Bridgeport, WV
- ★Additions and Renovations

OHIO COUNTY SCHOOLS — Wheeling, WV
- ★Additions and Renovations

PRO FOOTBALL HALL OF FAME — Canton, OH
- ★Hall of Fame Hotel

PROMEDICA HEADQUARTERS — Toledo, OH
- ★Renovation and Adaptive Reuse

UH AHUJA MEDICAL CENTER — Beachwood, OH
- ★Medical Office Building
- ★Sports Medicine Institute