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Header 1

List View

- General Information**
- Contact
- Default Values
- Discount
- Document Information
- Clarification Request

Procurement Folder: 1917106

Procurement Type: Central Purchase Order

Vendor ID: VS0000048173

Legal Name: Sixmo Companies

Alias/DBA: Sixmo Inc.

Total Bid: \$0.00

Response Date: 03/13/2026

Response Time: 10:15

Responded By User ID: pethornton

First Name: Patrick

Last Name: Thornton

Email: patrick@sixmocompanies.c

Phone: 2166474296

SO Doc Code: CEOI

SO Dept: 0603

SO Doc ID: ADJ2600000006

Published Date: 3/2/26

Close Date: 3/17/26

Close Time: 13:30

Status: Closed

Solicitation Description: General Instruction Building Design-Camp Dawson

Total of Header Attachments: 1

Total of All Attachments: 1



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

**State of West Virginia
 Solicitation Response**

Proc Folder: 1917106
Solicitation Description: General Instruction Building Design- Camp Dawson
Proc Type: Central Purchase Order

Solicitation Closes	Solicitation Response	Version
2026-03-17 13:30	SR 0603 ESR03132600000005938	1

VENDOR
 VS0000048173
 Sixmo Companies

Solicitation Number: CEOI 0603 ADJ2600000006
Total Bid: 0
Response Date: 2026-03-13
Response Time: 10:15:16
Comments: None.

FOR INFORMATION CONTACT THE BUYER
 David H Pauline
 304-558-0067
 david.h.pauline@wv.gov

Vendor Signature X **FEIN#** **DATE**

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

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	General Instruction Building Design-Camp Dawson				

Comm Code	Manufacturer	Specification	Model #
81101508			

Commodity Line Comments: Expression of interest attached.

Extended Description:

Provide professional architectural and engineering design services per the attached documentation.

Expression of Interest AITEC General Instruction Building Design — Camp Dawson

Prepared for:
Department of Administration
Purchasing Division
2019 Washington Street East
Charleston, West Virginia 25305-0130
Fax: 304-558-3970

Vendor Name: **DRS Architects**
Buyer: David H. Pauline (david.h.pauline@wv.gov)
Solicitation No.: CEOI 0603 ADJ2600000006
Bid Opening Date: March 17, 2026
Bid Opening Time: 1:30 pm EST
Fax Number: 216-767-5477

Date of Issue:
March 17, 2026



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Proposed Team
Our Experience
Understanding and Approach



March 17, 2026

Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, West Virginia 25305-0130
Buyer: David H. Pauline
304.558.0067
david.h.pauline@wv.gov

Re: Expression Of Interest—DRS Architects
AITEC General Instruction Building Design—Camp Dawson
Solicitation Number CEOI 0603 ADJ2600000006

Mr. Pauline,

We appreciate the opportunity to present you with this Professional Services Qualifications and Expression of Interest for the above referenced solicitation. Our team has the experience, expertise, and passion to fulfil the Agency’s objectives. We have carefully studied the information provided in your Centralized Expression of Interest in an effort to develop as thorough an understanding as possible regarding your needs. That understanding is expressed in this document.

This document is being presented by **DRS Architects** of One Gateway Center, 17th Floor, Pittsburgh, Pennsylvania. Our firm is a part of a larger family of firms, including Triumph Services and Sixmo Architecture serving the Midwest with offices throughout Ohio, Indiana, and Pennsylvania. Our family of firms has formed a comprehensive team that includes H.F. Lenz Co. to most effectively execute your work. The following document expands on our proposed team’s capabilities and organization.

I will serve as your primary point of contact through the selection phase. I am available any time to discuss our qualifications and capabilities. My contact information is provided below. We look forward to any opportunity to expand on our understanding, qualifications, and expertise.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Patrick E. Thornton'.

Patrick E. Thornton, AIA, MPE, LEED AP
President, DRS Architects
Partner, Head of Relationships | The Sixmo Companies
patrick@sixmocompanies.com
216-767-5400 Extension 100
1101 Auburn Avenue
Cleveland, Ohio 44113



SECTION I
PROPOSED TEAM



Our Team

We have formed a comprehensive team of professionals with a great deal of direct relevant expertise with a long history of collaboration. DRS Architects will serve as the Prime Consultant.

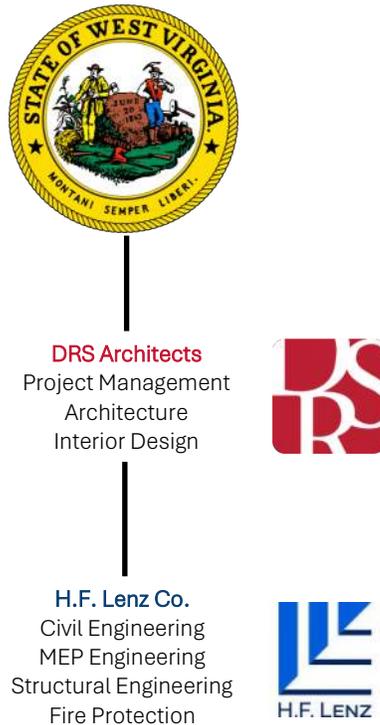
The team will consist of the following member firms:

- **DRS Architects**, providing Project Management, Architectural Services and Interior Design
- **H.F. Lenz Co.** providing Civil Engineering, Mechanical/HVAC Engineering, Plumbing Engineering, Electrical Engineering, Structural Engineering, and Fire Protection Design

H.F. Lenz Co. and DRS Architecture have a deep 30-year history of collaboration, specifically on projects similar to your own. An expression of this impressive relationship is further described later in this document.

Information regarding each member firm, as well as detailed resumes for each key individual, are included later in this section.

Below is a proposed firm organizational chart:



220+ Combined Support Staff



DRS Architects Firm Profile

Celebrating over 60 years of practice as one of the region's leading architectural, planning, and interior design firms, DRS Architects provides design services with a strong commitment to focus on our clients' needs and objectives. DRS provides architectural design, management of the design process, control of project costs and schedule, and we seek design excellence with every commission.

We are now in our sixth generation of firm leadership thanks to our acquisition in 2024 by the Sixmo Companies, strengthening our firm's position in the market and expanding on our service offerings.

Our firm leadership is:

- Patrick E. Thornton, President
- Jared S. Perry, Vice President

Some of our notable clients include:

- Pennsylvania Army National Guard
- Department of Energy, NETL
- Federal Bureau of Investigation
- Pennsylvania State Police
- Baltimore Corps of Engineers
- US Postal Service
- University of Pittsburgh
- Slippery Rock University
- Duquesne University
- Starbucks
- YMCA

We provide architectural design services, including:

- Facilities Evaluation
- Code Analysis
- Master Planning
- Site Analysis
- Facility Programming
- Feasibility Studies
- Interior Design
- Cost Estimating
- Contract Documents
- Contract Administration
- Post-occupancy Services

Our clients have relied on DRS to successfully deliver the design of new buildings and renovations for the last six decades. We attribute a large measure of our success to a methodical approach to design, applying thoughtfulness and experience to every project regardless of size, while recognizing that each project is a unique combination of client, program, and circumstance. At the heart of our design approach is the philosophy that the most successful designs are the result of a back-and-forth exchange of ideas, discussion, and understanding between the participants in the process.



We view each project with an eye towards sustainability and as an opportunity to improve the well-being of people by employing environmentally responsible design strategies, even when certification is not a requirement. With our LEED Accredited Professionals, our team brings knowledgeable experience to all our projects.





Firm History

DRS Architects' long and varied history has shaped our corporate culture. Officially founded in 1959, we look back on more than six decades of successful architecture, planning, and interior design, even as we look forward to more achievements in the future.

The first iteration of DRS was the firm Mitchell and Ritchey, a partnership of James Mitchell and Dahlen Ritchey, formed in 1953 to design Pittsburgh's Mellon Square and (as associate architect) the adjacent Alcoa Headquarters tower. These projects were quickly followed by the commission to design Pittsburgh's Civic Arena.

Mitchell left the partnership in 1957 to relocate out of state, and by 1959 Dahlen Ritchey had started a new practice with his good friend Russell Deeter to complete the Civic Arena project. The partnership quickly developed a reputation as an influential architecture firm in Pittsburgh with commissions to design a series of large-scale projects including Three Rivers Stadium, one of the first multi-purpose sports stadiums in the country; Allegheny Center, and multiple new higher-education buildings at the University of Pittsburgh and Carnegie Mellon University. When William Sippel was advanced to Principal from within the firm in 1964, the firm name was changed to Deeter-Ritchey-Sippel, eventually becoming DRS Architects.

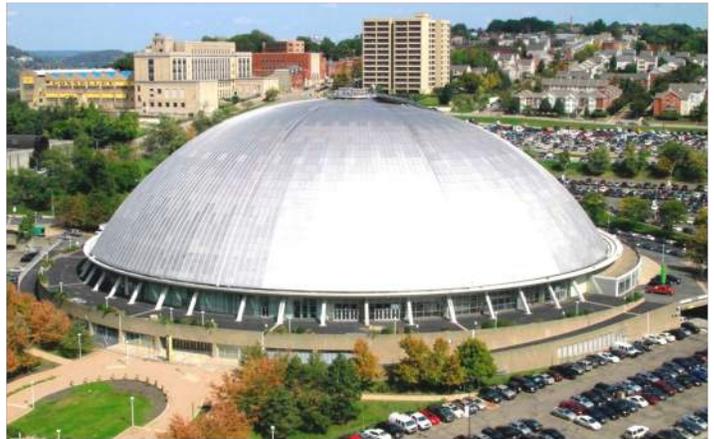
Over the course of the 1960's and 1970's, the firm continued to augment its portfolio of consequential projects in the region and around the country. By the 1980's the firm had grown to 60 people, reaching it's largest size.

The ownership of DRS transitioned from the fifth generation of principals to the sixth in 2024 with its acquisition by Sixmo Companies, a multi-discipline family of firms headquartered in Marietta, Ohio. The new partnership offered DRS access to resources not prior available to a firm of its size; provided for an expanded geographic footprint; brought in-house multi-discipline capabilities; and provided an exit transition for the fifth generation of leadership.

DRS continues to be one the region's most significant architectural firms and continues to grow and evolve with the times. We look forward to a promising future, but we always respect the path that led us to our current position.



Mellon Square with the Alcoa Building in the background



The Civic Arena



Three Rivers Stadium



Design Awards

One of the ways we measure success is from the recognition of our peers. DRS Architects' work has been the recipient of numerous design and technical awards over our many years:

2018

Mellon Square Park and Alcoa Building
Timeless Award, 50 Years
AIA Pennsylvania Special Awards



2015

University of Pittsburgh, Salk Hall
Building Excellence Award for New Construction over \$25M
Master Builder Association of Western Pennsylvania

2014

Market Square Place
Charter Award of Merit for the Best Block, Global Awards
Program for Excellence in Urban Design
The Congress for New Urbanism

Slippery Rock University Robert M. Smith Student Center
Facility Design Award
Association of College Unions International

2013

Slippery Rock University Robert M. Smith Student Center
AIA Honor Award
Pittsburgh Chapter of the AIA

Slippery Rock University Robert M. Smith Student Center
Best Education Design
IIDA New England Interior Design Awards

Westmoreland County Transit Authority Maintenance Facility
Diamond Award Certificate
American Council of Engineering Companies of Pennsylvania



2012

BNY Mellon Center Exterior Rehabilitation
Building Excellence Award for Best Renovation Construction
over \$10M
Master Builder Association of Western Pennsylvania

2009

Duquesne University Power Center
Bronze Design Award
10,000 Friends of Pennsylvania

2005

Advanced Chemistry Lab, Aberdeen Proving Ground
Project Development Team of the Year Worldwide
Corps of Engineers



H.F. Lenz Company

H.F. Lenz Company was established 1946 in its present form, under the name H.F. Lenz Company, R.E., in 1953 the company was incorporated, as a Private Corporation, in Pennsylvania as H.F. Lenz Co. Our projects span the nation, with the heaviest concentration in the Northeast, and exceed \$1.5 billion in construction annually. Each market sector—government, corporate, health care, education, and industry—is served by a team of specialists who understand the unique needs of the clients we serve. Our staff consists of 200+ individuals, including 45 Licensed Professional Engineers and 15 LEED Accredited Professionals. Our headquarters is in Johnstown, PA with branch offices in Pittsburgh and Lancaster, PA; Conneaut, OH; and Middletown, CT.

Johnstown Headquarters

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

Pittsburgh Office

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

Lancaster Office

120 North Pointe Boulevard
Suite 203
Lancaster, PA 17601
Phone: 717-461-3916

Ohio Office

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

Connecticut Office

101 Centerpoint Drive
Suite 237
Middletown, CT 06457
Phone: 860-316-2124

Disciplines/services offered in-house include:

- Mechanical Engineering
- Electrical Engineering
- Data/Communications Engineering
- Fire Protection / Life Safety Engineering
- Structural Engineering
- Civil Engineering
- Surveying
- 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 provided engineering services for over \$100 million of construction for the Baltimore Corps of Engineers over the past 30 years including 7 indefinite delivery-type contracts and 11 new reserve centers, several of which were in West Virginia. Our experience also includes several recent projects for the Pennsylvania National Guard, including projects for Clearfield Readiness Center, Crane Readiness Center and New Castle Readiness Center. In addition, we have held six consecutive term contracts for Letterkenny Army Depot under which we have completed more than 100 projects requiring a variety of engineering expertise. **We previously provided the engineering services for the design of three new billeting facilities for WVANG at Camp Dawson.** We have extensive project experience in West Virginia, which includes over 400 projects in the past 30 years. Our also experience includes over 30 years of consistent projects for WVU, the new Mylan Park Aquatics Center, the new Bridgeport Sports Recreation Complex and The Highlands new indoor sports center for Ohio County Development Authority in West Virginia.

DRS Architects (Sixmo Companies) and H.F. Lenz Company have collaborated on hundreds of projects over the past 30+ years, which include projects for the PA National Guard, projects at Crane and New Castle Readiness Centers, a new regional maintenance building in Johnstown, PA; and projects under multiple term contracts for the U.S. Air Force - 911th Airlift Group; a confidential federal government agency in West Virginia; a nationwide term contract for NASA facilities; and 70+ projects for DOE/NETL campuses in West Virginia, Pennsylvania and Oregon.

LEED®

H.F. Lenz Company has been a member of the U.S. Green Building Council since 2000. Our experience includes 120+ projects that have attained various levels of LEED Certification, in total over 16 million SF of facilities.





Patrick E. Thornton, AIA

President, **DRS Architects**

Partner, Sixmo Companies, **Principal-in-Charge**



Sixmo Companies

1101 Auburn Avenue
Cleveland, Ohio 44113
216-767-5400
patrick@sixmocompanies.com

Patrick Thornton is a proud graduate of Kent State University with over thirty years of experience in the design and construction realm. Patrick has a passion for client relationship development and maintenance that he can demonstrate on a wide breadth of project types. Through a broad range of experience, he has developed problem-solving skills that can be applied to any market or client type, from residential to commercial, municipal to industrial. A drive to constantly improve as a professional inspired Patrick to become a Master Plans Examiner.

Professional Reference:

Mayor Paul Koomar
The City of Bay Village
440-899-3415
pkoomar@cityofbayvillage.com

Education:

Kent State University
Bachelor of Science in Architecture, 1996

Current Registrations:

- Architect, State of Connecticut
- Architect, State of Florida
- Architect, State of Illinois
- Architect, State of Indiana
- Architect, Commonwealth of Kentucky
- Architect, State of Maryland
- Architect, State of Michigan
- Architect, State of North Carolina
- Architect, State of Nebraska
- Architect, State of New York
- Architect, State of Ohio
- Architect, State of Oregon
- Architect, Commonwealth of Pennsylvania
- Architect, State of Utah
- Architect, Commonwealth of Virginia
- Architect, State of Wisconsin
- Architect, State of West Virginia**
- Combination Examiner, State of Ohio
- Commercial Building Official, State of Ohio
- Residential/Limited Commercial, State of Ohio
- Commercial Building Inspector, State of Ohio
- Residential Electrical Inspector, State of Ohio
- Building Code Plans Examiner, State of West Virginia**

Technical Organizations:

- American Institute of Architects (AIA)
- International Code Council (ICC)
- National Council of Architectural
Registration Boards (NCARB)
- US Green Building Council (USGBC)

Featured Representative Personal Experience:

- New Police Station /Firing Range | Bay Village, OH*
- New Satellite Fire Stations | Stow, OH*
- Municipal Service Facility | Chardon, OH*
- Belmont College Burn Building | St. Clairsville, OH
- Firing Range | City of Bedford Heights, OH

*Indicates a project that was completed while under the employment of another organization



David Bostak RA

Senior Architect, **Project Manager**



DRS Architects

One Gateway Center, 17th Floor
Pittsburgh, Pennsylvania 15222
412-391-4850
dbostak@drsarchitects.com

David returned to DRS in 2024 after a brief hiatus to provide studio leadership and to bring his technical expertise to bear on our projects. He is a champion of technology in our industry, ensuring our team is leveraging its value on each and every task. As an advanced BIM user, David manages standards and education within our organization.

David is also a strong designer, developing solutions and carefully coordinating with both his in-house teammates and external consultants. His understanding of modern building systems and emerging technologies in the construction industry are evident in his well-crafted technical solutions.

Education:

Virginia Polytechnic Institute and State University
Bachelor of Architecture, 1999
Anne Arundel Community College
Associate in Arts, Cum Laude Honors, 1994
Tau Alpha Pi National Honor Society

Current Registrations:

Architect, State of Pennsylvania
LEED Accredited Professional

Technical Organizations:

National Council of Architectural
Registration Boards (NCARB)
U.S. Green Building Council (USGBC)
Autodesk University (2011/2020/2021)

Featured Representative Personal Experience:

DGS Pennsylvania State Police DNA Facility
Greensburg, PA
University of Pittsburgh Salk Hall Renovations
Pittsburgh, PA
DOE/NETL Building 34 Advanced Alloy Facility
Albany, Oregon
DOE/NETL Building 30 Improvements
Albany, Oregon
DOE/NETL Building 94 Lab Renovations
Pittsburgh, PA
Clarion University Moore Hall
Clarion University Stevens Hall
Social Security Administration Tenant Improvements
Johnstown, PA
UPMC Children’s Hospital TV/Radio and Art Therapy
Pittsburgh, PA



Stephen G. Ponter, RA

Senior Architect



DRS Architects

One Gateway Center, 17th Floor
Pittsburgh, Pennsylvania 15222
412-391-4850
sponter@drsarchitects.com

Steve is a Registered Architect with over 30 years of experience working on projects in the healthcare, commercial, residential, higher education, and corporate sectors. He has a solid understanding of all aspects of the design and construction industry and is able to adapt and excel as new project challenges arise. Steve’s work ethic and strong sense of responsibility make him an asset to have on every project team.

Education:

University of Pittsburgh
Bachelor of Arts, Architectural Studies, 1986
Minor: Computer Science and Mathematics

Current Registrations:

Architect, State of Pennsylvania

Technical Organizations:

National Council of Architectural
Registration Boards (NCARB)

Featured Representative Personal Experience:

- Geneva College Welcome Center
Beaver Falls, PA
- UPMC Mercy Hospital Envelope and HVAC
Improvements | Pittsburgh, PA
- Allegheny Valley Hospital Imaging Department
Renovations | Natrona Heights, PA
- Garrett Memorial Hospital MRI Office Building
Addition and Renovations* | Oakland, MD
- Mountain Laurel Medical Center New 10K Office
Building* | Oakland, MD
- Fifth Third Bank Branch Offices*
Various Locations throughout PA
- The Fairfield Townhouses* | East Liberty, PA
- Phillips Resources 10K Office Addition*
Cranberry, PA
- ELDI/HACP Scattered Site Housing*
Pittsburgh, PA
- Green Acres Scattered Site Housing*
Kingswood, WV
- Pleasant View & Parkwood Scattered Site Housing*
Oakland, MD
- River Hill Elderly Housing Development*
Oakland, MD

*Indicates a project that was completed while under the employment of another organization



Education

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

Experience

H.F. Lenz Company - 2006 - present

Professional Registration / Certification

Licensed Professional Engineer in PA, CA, IN, MD, NC, NV, NJ, NY, MD, OH, OK, SD, VA and WV

Completion of PTW Software and Power Systems Application Courses through IEEE • Completion of Battery Technology and Battery Monitoring through Liebert Corporation

References

Monica Reed
Project Manager
The Pennsylvania State University
101N Office of Physical Plant
University Park, PA 16802
814-863-5765
mjr204@psu.edu

Todd Sanders
Project Manager
NASA Goddard Space Flight Center
8800 Greenbelt Road
Greenbelt, MD 20771
301-286-9199
todd.g.sanders@nasa.gov

Brian D. Schmidt, P.E.

Principal-in-Charge of MEP/FP Engineering

Mr. Schmidt is a Principal of the firm and an experienced Project Manager. He will serve as the main point of contact for the client and consultants for this project. His responsibilities include project scheduling, preparation of reports and cost estimates, coordination and supervision of project design teams, and other project management functions. Mr. Schmidt has over 19 years' experience in electrical engineering extensive experience in electrical system modeling and computer calculations (SKM Power Tools).

Project Experience

Camp Dawson, U.S. Army National Guard, Kingwood, WV

- Three new billeting facilities designed to resemble small, upscale hotels including design of the heating, cooling, ventilation, lighting, power, fire alarm, telecommunications, fire protection, plumbing, and natural gas service

Pennsylvania Army National Guard, Anville, PA

- New 14,400 GSF Youth ChalleNGe Building a multi-purpose facility including a large assembly area and multimedia enabled classrooms

Letterkenny Army Depot - Baltimore District, Chambersburg, PA

- Building 320 upgrades and renovations

PA Army National Guard Readiness Center, New Castle, PA

- Renovation to 23,000 SF Readiness Center

Fort Detrick, U.S. Army Corps of Engineers, Frederick, MD

- Improvements/modifications to Buildings 1430, 1545, and 1546

U.S. Army Corps of Engineers Army Depot, Cumberland, PA

- Developed a project definition for a proposed new Army Depot three-story billeting facility

911 Airlift Wing, U.S. Air Force, Greater Pittsburgh International Airport, Coraopolis, PA

- Visiting Offices Quarters, Building 206, renovations

The Pennsylvania State University, Hazelton, PA

- Renovations to the 39,500 SF Kostos Building housing a mix of general-purpose classrooms, general use computer classroom, specialized teaching space, engineering technology classroom, computer classroom and engineering and physics labs space, general and organic chemistry labs and a biology lab

The Pennsylvania State University, Berks, PA

- New 62,000 SF Gage Technology and Business Innovation Lab/Classroom Building

Carnegie Mellon University, Pittsburgh, PA

- Classroom modernizations of the 217,000 SF Doherty Hall with new modern, technology enhanced classrooms
- College of Fine Arts Building



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

Mr. Deter has over 39 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 mixed-use developments, educational, health care, commercial, government, industrial, residential, and utility related facilities. Mr. Deter has extensive Department of Defense (DOD) project experience, and a long history of projects located in West Virginia.

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

References

Stephen Mariner, P.E.
Project Manager
NASA Wallops Flight Facility
Route 175, 175 Chincoteague Rd
Building J-20
Wallops Island, VA 23337
757-824-1363
stephen.a.mariner@nasa.gov

Allen Lichvar
Supervisory General Engineer
National Technology Laboratory
3610 Collins Ferry Road
Morgantown, WV 26507
304-285-4042
Allen.lichvar@netl.dow.gov

Project Experience

West Virginia Army National Guard Facilities

- Camp Dawson - Three new billeting facilities
- Weirton - 16,000 SF D/B Aviation Center
- Wheeling - 24,000 SF D/B Reserve Center

Pennsylvania Army National Guard Facilities

- Fort Indiantown Gap - New 11,000 SF Multi-purpose Building for the ChalleNge project and master plan and design for a new auditorium
- Crane - Renovation of 26,700 SF reserve center
- New Castle - Renovation of 23,000 SF Readiness Center
- Clearfield - Renovation of 49,760 SF Readiness Center
- Johnstown - New 23,560 SF Maintenance Facility

Maryland Army National Guard, Grantsville, MD

- New 15,300 SF training facility and maintenance shop

USACE, Aviation Center, Johnstown, PA

- New 120,000 SF multi-building reserve center

Letterkenny Army Depot, Baltimore District, Chambersburg, PA

- Seven consecutive Indefinite Delivery Contracts, over 100 projects throughout the base

The Pennsylvania State University, Berks, PA

- New 62,000 SF Gaige Technology and Business Innovation Lab/Classroom Building

The Pennsylvania State University, Hazelton, PA

- Renovations to the 39,500 SF Kostos Building housing a mix of general-purpose classrooms, general use computer classroom, specialized teaching space, engineering technology classroom, computer classroom and engineering and physics labs space, general and organic chemistry labs and a biology lab

The Pennsylvania State University, Abington, PA

- Woodland Building feasibility study and renovation of 20,000 SF of laboratories and classrooms

Hershey Medical Center, PSU College of Medicine, Hershey, PA

- Modernization of existing classrooms to create collaborative learning spaces



William A. Minahan, P.E.
Mechanical Engineer

Mr. Minahan has over 16 years' experience in the design of HVAC, plumbing, and fire protection systems. His responsibilities as Project Engineer include code compliance verification, schematic layout, calculations, equipment selection, control system selection, specification writing, coordination, life cycle cost analyses, cost estimating, as well as coordination with the client, the architect, regulatory agencies, and the engineering staff; project scheduling; and other project management functions.

Project Experience

Catherine Hershey School for Early Learning Center, Harrisburg, PA

- 46,963 SF Early Childhood Resource Center with state-of-the-art classrooms, Innovation Studio for hands on learning and STEAM exploration

Clearfield Readiness Center, Clearfield, PA

- Renovations and additions to a 49,760 SF, 25-acres Army National Guard Readiness Center

Pennsylvania State Police, Greensburg, PA

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

PA National Guard Fort Indiantown Gap - Youth Challenge Building, Annville, PA

- New 14,400 SF multi-purpose Youth Challenge Building with multimedia enabled classrooms

Loysville Youth Development Center, Perry County, PA

- Renovation to the 9,012 SF Zimmerman-Bingman (ZB) Cottage - Current DGS project

Elk Country Visitor Center, Benezette, PA

- Visitor Center Master Plan Implementation and Energy Modeling

National Energy Technology Laboratory (NETL), Various Locations

- Indefinite Delivery-Indefinite Quantity (IDIQ) contract for NETL facilities in Morgantown, WV, Bruceton, PA, and Albany, OR - Over 100 projects complete

The Pennsylvania State University, Hazelton, PA

- Renovations to improve functionality of the 39,500 SF Kostos Building containing a mix of general-purpose classrooms, general use computer classroom, specialized teaching space, engineering technology classroom, computer classroom and engineering and physics labs space, general and organic chemistry labs and a biology lab

Education

Bachelor of Science in Mechanical Engineering Technology, 2010, The University of Pittsburgh

Experience

H.F. Lenz Company 2010 – Present

Professional Registration / Certification

Licensed Professional Engineer in Pennsylvania

Professional Affiliations

ASHRAE – Johnstown, PA Chapter

References

Christopher L. Conroy, PE, CEM,
LEED APBD+C
Associate Director MEP
Carnegie Mellon University
Campus Design and Facility
Development
5000 Forbes Avenue
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412-268-3879
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Ryan Shank, AIA
Design Project Manager | Capitol and
Historic Division
DGS Capital Programs |Bureau of
Design Management Arsenal Bldg.
1800 Herr St. Harrisburg PA 17125
717-783-2593
ryshank@pa.gov



Eric L. Hoover, P.E. **Electrical Engineer**

Mr. Hoover is an established electrical engineer who has managed a wide variety of building construction projects. His experience covers a broad range of project sectors including airports, highrise commercial and residential, retail, cultural, higher education, and research laboratories. His skills include design of medium voltage and low voltage power distribution systems, emergency distribution systems, lighting and lighting control systems, fire alarm systems, and telecommunication distribution systems. He strives to collaborate with contractors, architects and owners to ensure that all project needs are met, and has a proven record of completing projects on time and within budget.

Education

Bachelor of Electrical Engineering,
Concentration in Power, University
of Pittsburgh 2013

Experience

H.F. Lenz Company 2020 – Present,
Buro Happold Engineering 2015-
2020 Bombardier Transportation
2013-2015

Professional Registration / Certification

Licensed Professional Engineer in
PA, AL, AR, DC, DE, IA, KS, KY, LA,
MA, MD, MI, MN, MS, MO, SC, TN
and UT

Professional Affiliations

IEEE

References

William H. Barnes
Director Capital Projects
Temple University
267-854-4155
william.barnes@temple.edu

Samuel J. Dell, P.E.
Design Project Manager
Department of General Services
717-836-4856
sadell@pa.gov

Project Experience* (*indicates previous experience)

Pennsylvania State Police, Greensburg, PA

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

Catherine Hershey School for Early Learning Center, Various, PA

Four Early Childhood Resource Centers with state-of-the-art classrooms, Innovation Studio for hands on learning and STEAM exploration

- Harrisburg facility is 46,963 SF
- Middletown facility is 51,731 SF
- Lancaster facility is 101,220 SF
- Elizabethtown facility is 48,000 SF

Community College of Allegheny County, Pittsburgh, PA*

- Workforce Development and Training Center - New multi-use educational building incorporating experiential classrooms and labs across multiple fields. Engineered power service for building including solar array sized to offset net consumption of power for the building. Designed lighting and fire alarm system

Hershey Medical Center, PSU College of Medicine, Hershey, PA

- Modernization of existing classrooms to create collaborative learning spaces. Designed reconfiguration of existing electrical distribution. Provided updated lighting and fire alarm design. upgraded telecom and AV systems

Temple University, Philadelphia, PA

- Paley Hall - Renovation to expand and modernize existing educational building to incorporate new classrooms, retail space, conference rooms, and faculty offices

Carnegie Mellon University, Pittsburgh, PA*

- ANSYS Hall - New 36,000 SF building for the College of Engineering featuring classrooms, offices and highbay makerspace. Developed design for electrical distribution system. Provided new lighting and fire alarm layouts



Gregory D. Rummel, CPD **Plumbing/Fire Protection Designer**

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

Education

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

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

Experience

H.F. Lenz Company 1989- Present

Newport News Ship Building 1984-1989

Professional Registration / Certification

Certified in Plumbing Design, ASPE

References

Todd Sanders
Project Manager
NASA Goddard Space Flight Center
8800 Greenbelt Road
Greenbelt, MD 20771
301-286-9199
todd.g.sanders@nasa.gov

Allen Lichvar
Supervisory General Engineer
National Technology Laboratory
3610 Collins Ferry Road
Morgantown, WV 26507
304-285-4042
Allen.lichvar@netl.dow.gov

Project Experience

Camp Dawson, U.S. Army National Guard, Kingwood, WV

- Three new billeting facilities designed to resemble small, upscale hotels including design of the heating, cooling, ventilation, lighting, power, fire alarm, telecommunications, fire protection, plumbing, and natural gas service

Pennsylvania Army National Guard Facilities

- Crane - Renovation of 26,700 SF Reserve Center
- New Castle - Renovation of 23,000 SF Readiness Center
- Clearfield - Renovation of 49,760 SF Readiness Center
- Johnstown - New 23,560 SF office and maintenance facility
- Annville -Ft. Indiantown Gap masterplan and new auditorium

Pennsylvania State Police, Greensburg, PA

- New 31,000 SF State Police Headquarters building

The Pennsylvania State University, Various Campuses

- Berks: New 62,000 SF Gaige Technology and Business Innovation Center with classroom spaces and various labs and
- Renovations to the 39,500 SF Kostos Building housing a mix of general-purpose classrooms, computer classrooms, specialized teaching space and a biology lab
- Woodland Building feasibility study and renovation of 20,000 SF of laboratories and classrooms

Hershey Medical Center, PSU College of Medicine, Hershey, PA

- Modernization of existing classrooms to create collaborative learning spaces. Designed reconfiguration of existing electrical distribution. Provided updated lighting and fire alarm design. upgraded telecom and AV systems

Carnegie Mellon University, Pittsburgh, PA

- Classroom modernizations of the 217,000 SF Doherty Hall with new modern, technology enhanced classrooms
- Classroom modernizations of the 8-story academic/laboratory Wean Hall

Catherine Hershey School for Early Learning Center, Harrisburg, PA

- 46,963 SF Early Childhood Resource Center with state-of-the-art classrooms and Innovation Studio



Keith A. Gindlesperger, P.E. Civil Engineer

Mr. Gindlesperger is a Senior Vice President of H.F. Lenz Company and leads our Civil Engineering Team. He has over 28 years' extensive experience in civil engineering, site planning and design for military bases, DOD projects and secure facilities. He is responsible for interfacing with the Client to review the program, budget, contractual matters, establish responsibilities and allocate personnel and firm resources. His responsibilities also include overseeing site design, site utilities, parking and traffic circulation, roadway design, stormwater management, erosion and sedimentation control and permitting.

Education

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

Experience

H.F. Lenz Company 1998 – Present

Professional Registration / Certification

Licensed Professional Engineer in PA, CO, FL, GA, ID, IN, MD, NV, OR, OK, TX, UT, VA, and WV

References

Tim Kirsch
Sr. Director, Capital Projects
Robert Morris University
1001 University Blvd.
Moon Township, PA 15108
412-397-6282

Andrew Schwartz
Environmental Planning and Design
100 Ross Street, Suite 500
Pittsburgh, PA 15219
421-261-6000
AndrewSchwartz@epd-pgh.com

Project Experience

Clearfield Readiness Center, Clearfield, PA

- Renovations and additions to a 49,760 SF, 25-acres Readiness Center

Pennsylvania State Police, Greensburg, PA

- New 31,000 SF Headquarters facility

City of Corry Property Assessment, Corry, PA

- Asset inventory and condition assessment of various city/municipal buildings within the City of Corry, PA

Letterkenny Army Depot - Baltimore District, Chambersburg, PA

- Seven consecutive IDIQ contracts at Letterkenny Army Depot for Civil Engineering throughout the base

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

- Various renovations and new construction under two term contracts

SAIA Motor Freight Line LLC, Various States

- Principal-in-Charge of multi-discipline engineering services for new and renovated trucking terminals across the U.S. including recent project at Parkersburg, West Virginia

Commerce Crossing Industrial Park, Westmoreland County, PA

- New 256-acre industrial park including design of the infrastructure and creation of pad-ready sites to support large industrial type structures

Hempfield Township Municipal Complex, Greensburg, PA

- Master plan and phase I design to consolidate municipal services and develop the Weatherwood recreational park, assisted in preparation of the RACP grant application

United Parcel Service, Various PA & WV Locations

- Master Paving & Concrete Rehabilitation Programs

National Energy Technology Laboratory (NETL), Various Locations

- Civil/site design for building renovations and utilities projects at NETL sites West Virginia and Pennsylvania



David A. Blackner, P.E.
Structural Engineer

Mr. Blackner is a Senior Vice President of H.F. Lenz Company and leads our Structural Engineering Team. He is responsible for the complete layout, design and detailing of building structural systems. He has diverse experience in the structural analysis and design of projects involving steel, engineered masonry, reinforced cast-in-place concrete, pre-cast/pre-stressed concrete and wood frame structures. He is proficient in multiple analysis platforms (STAAD, RAM Structural Systems, 3-D Analysis and Finite Elements). He also oversees structural coordination with other trades, as well as conducting periodic site visits related to the structural work.

Education

Associate, Mechanical Engineering Technology, 1988, Pennsylvania State University
Associate, Architectural Engineering Technology, 1988, Pennsylvania State University

Experience

H.F. Lenz Company 1998-Present

L. Robert Kimball & Associates 1995-1998

George D. Zamias Developer 1989-1995

Professional Registration / Certification

Licensed Professional Engineer in PA, AZ, CO, CT, DE, GA, ME, MD, MA, NY, and NC

References

Carl Rundquist, P.E.
PA DGS, Bureau of Pre-Construction
684 Lake Wilhelm Rd, Sandy Lake, PA 16145
717-346-5959
crundquist@pa.gov

Paul Rothgery
Project Manager
National Parks Service
12795 West Alameda Parkway
Denver, CO 80225
303-987-6685
Paul_Rothgery@nps.gov

Project Experience

Pennsylvania Army National Guard Facilities, Clearfield, PA

- Clearfield - Renovation of 49,760 SF Readiness Center

Letterkenny Army Depot - Baltimore District, Chambersburg, PA

- Seven consecutive IDIQ contracts at Letterkenny Army Depot

Johnstown Heritage Discovery Center, Johnstown, PA

- Renovations of an historic, five story building and the addition of a five-story stairwell in the existing building. The building serves as a cultural center with various exhibits, visitor areas, classrooms, offices and meeting spaces

U.S. Air Force, 911th Airlift Group/CE, Greater Pittsburgh International Airport - Coraopolis, PA

- Expansion of Building 130

Indiana University of Pennsylvania, Indiana, PA

- Fisher Auditorium renovation and addition including the addition to the existing boiler/chiller plant of approximately 3,700 gross SF

Carnegie Mellon University, Pittsburgh, PA

- Doherty and Wean Hall Classroom renovations

West Virginia University, Morgantown, WV

- New 54,000 SF Alumni Center - two-story facility features an upscale clubroom, a banquet hall, three conference rooms, a board room with its own food service, offices, a full service kitchen, 1,200 SF of retail space, a service corridor, locker area and storage rooms

Allegheny Co. Human Resources Development Center, Cumberland, MD

- New 20,000 SF two-story community center with fitness center, kitchen, spaces for various class and public activities - LEED Gold

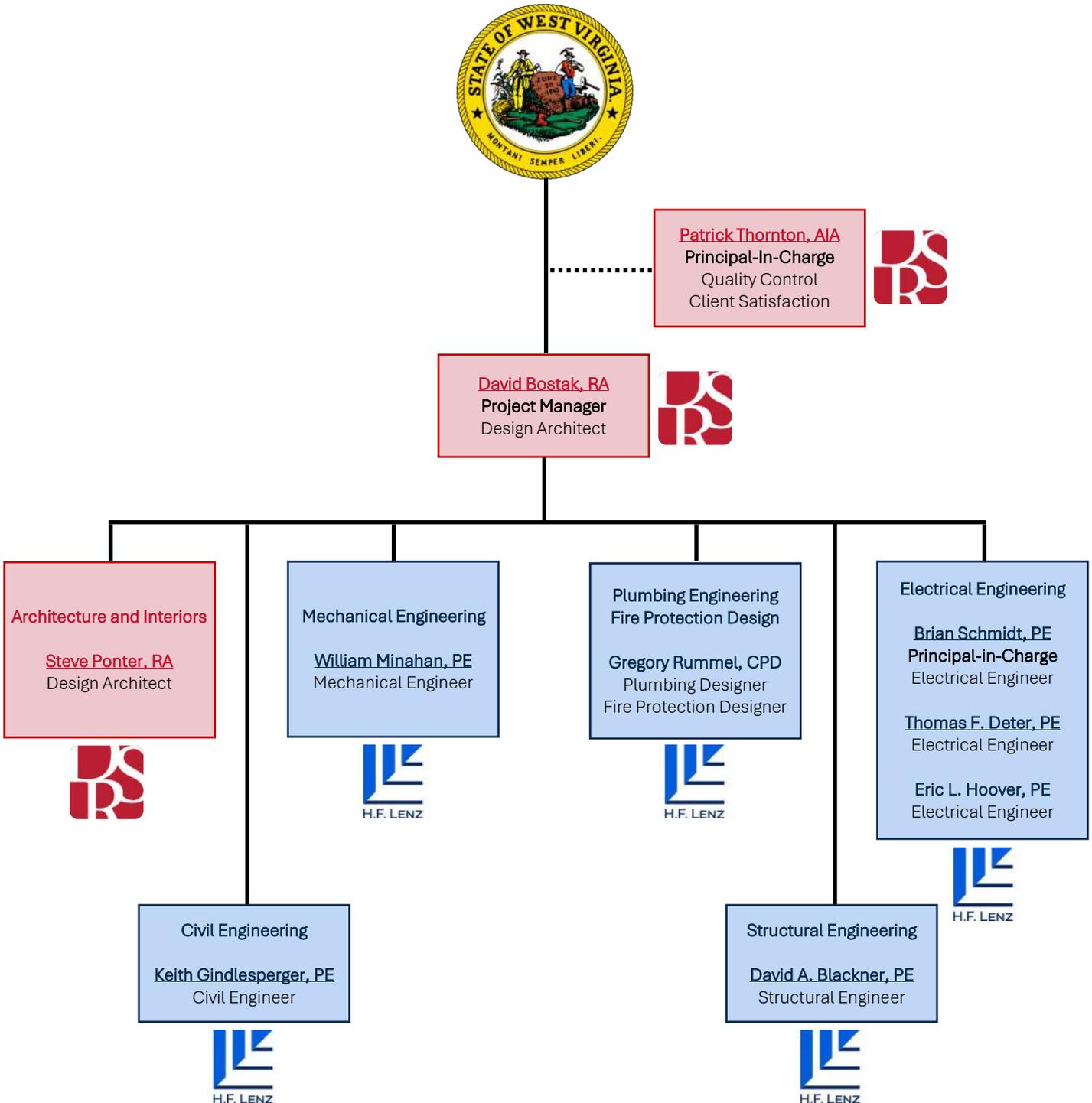
Pennsylvania State University, University Park, Pennsylvania

- Managed the structural design for the new 44,000 SF Career Services Building
- Preliminary cost estimates and cost comparisons for various framing system for the 132,000 SF new Berkey Dairy Food Science Building



Staffing Plan

The following diagram represents the staffing plan for the project, including lines of command and communication. David Bostak, RA from DRS Architects will serve as the Project Manager. Each sub-consulting firm will also assign a project manager to oversee their discipline—each of those individuals is listed first in the following diagram.





SECTION II
OUR EXPERIENCE



Relevant Projects

DRS Architects is one of the oldest practicing architectural and planning firms in the region; we have been located in Gateway Center in downtown Pittsburgh, Pennsylvania for over sixty years. The firm enjoys a long-standing reputation for design, management of the design process, control of project costs and schedules, and excellent service to our clients.

DRS has extensive experience in the design of Readiness Centers, Armories, and Reserve Centers, including designing and completing the recent renovations to the existing historic New Castle Readiness Center in New Castle, Pennsylvania—completed in 2019. Other similar projects include:

- Crane Avenue PA National Guard Readiness Center and Armory; Pittsburgh, Pennsylvania; Renovations and Addition
- Ford City Armory for the PA Army National Guard; Ford City, Pennsylvania; New Armory with Maintenance and Training
- Cambridge Springs Readiness Center and OMC for the PA National Guard; Cambridge Springs, Pennsylvania
- Johnstown Maintenance Facility for the PA Army National Guard; Johnstown, Pennsylvania
- Morgantown Army Reserve Center and OMS; Morgantown, West Virginia
- Elkins Army Reserve Center and OMS; Elkins, West Virginia
- Wheeling Army Reserve Center and OMS; Wheeling, West Virginia
- Kingwood Army Reserve Center and OMS; Kingwood, West Virginia
- Grantsville Army Reserve Center and OMS; Grantsville, West Virginia

Through the years the firm has enjoyed a solid reputation for design achievement having received over 50 design and technical awards including a national AIA award and numerous state and local awards.

- The firm received the very first Owens-Corning Fiberglass Award for Energy Conservation and also received national recognition with a High Honor Award for the design of the High Temperature Materials Laboratory at the Oak Ridge National Laboratory for the U.S. Department of Energy.
- DRS received a 2004 Citation Award from the American Association of School Administrators / American Institute of Architects / Council of Educational Facility Planners International for the Science, Technology & Cultural Center for Butler County Community College.

DRS Emphasizes strategies for sustainable design, site development, water savings, energy efficiency, materials selections and indoor environmental quality. DRS has completed multiple LEED certified projects.

On the following pages you will find individual examples of projects we designed that are relevant to your project. They also demonstrate a long history of work with federal and military clients.

Federal and Military Clients:

- Department of Energy / National Energy Technology Laboratories, Pittsburgh, Morgantown, and Albany (OR)
- Federal Bureau of Investigation, Pennsylvania and West Virginia
- 171st Air Refueling Wing, Pittsburgh, Pennsylvania
- 911th Air Wing / LGC, Pittsburgh International Airport
- Joint Armed Forces Aviation Facility, Johnstown, Pennsylvania
- US Army, Baltimore Corps of Engineers, Advanced Chemistry Lab, Aberdeen Proving Ground, Aberdeen, Maryland
- U.S. Drug Enforcement Administration, Pittsburgh, Pennsylvania and Milwaukee, Wisconsin
- Social Security Administration, Johnstown, Pennsylvania and McKeesport, Pennsylvania
- U.S. Postal Service, Western PA and West Virginia





Pennsylvania Army National Guard New Castle Readiness Center Renovation

New Castle, Pennsylvania

Construction Cost: \$2,200,000

Completed: 2018

This project was the renovation of the two-story, 23,000 square foot New Castle Readiness Center for the 107th Field Artillery Battalion, PA Army National Guard, completed through the Pennsylvania Department of General Services. The stone and brick building was built in 1938 and is listed in the National Register of Historic Places.

The project scope included exterior architectural improvements to repair the stone façade, door replacement, roof replacement over the barrel-vaulted Drill Hall, and other minor roof repairs. Site improvements included updated water and gas services, milling and repaving of the vehicle parking area and access drives, the addition of an accessible parking area, and replacement of the site perimeter fencing. Interior architectural improvements included a complete renovation and reconfiguration of the administrative areas, reconfiguration and upgrades to all the restrooms to modernize and bring them into compliance with current building codes, and improvements including minor space reconfigurations, painting, ceiling replacement, flooring replacement, and door replacements.

HVAC work included replacement of two existing steam boilers with two high-efficiency gas boilers; the addition of energy efficient air-conditioning systems for office, classrooms, fitness rooms and other areas; the addition of a new kitchen exhaust hood; and the integration of a new web-based DDC control system. All plumbing fixtures and piping systems throughout the building were replaced as part of the toilet facilities upgrade. Electrical work included upgrades to the distribution system; LED interior lighting throughout the building; new site lighting; replacement of branch panelboards, conduit, and feeders; and a new building wide addressable fire alarm system.

Contact

Matthew A. Dubovecky, EIT

Project Manager

PA Dept. of Military & Vet Affairs

814.533.2466

c-mdubovec@pa.gov



This project was completed
in collaboration with
H.F. Lenz Co.





Pennsylvania Army National Guard Crane Avenue Readiness Center Renovation

Pittsburgh, Pennsylvania
Construction Cost: \$3,100,000
Completed: 2018

This project involved renovations to the existing masonry armory building and site, and the design of a new unheated metal storage building. The main building was originally designed by DRS in 1965, and includes a two-bay maintenance shop, a drill hall, three Unit storage areas with adjacent weapons vaults, a kitchen, offices, restrooms, showers, and locker rooms. The renovation made improvements to the building's accessibility, including the addition of a new elevator in the center of the building and full renovations of the restroom and shower rooms. The roof was also replaced.

Since the number of military units assigned to this facility was being increased, additional storage space was a program requirement. The demand was solved through the construction of an unheated storage building placed adjacent to the existing cold-storage building.

Mechanical, plumbing, and electrical work mainly involved the replacement of existing systems, such as heating boilers, exhaust fans, maintenance shop vehicle source-capture exhaust reels, water heater, plumbing fixtures, emergency generator, and electrical distribution panels. New lighting was also provided in the office wing corridors resulting from the necessary abatement and replacement of the existing plaster ceilings in those areas.

The scope of site work included the replacement of security fencing around the military equipment parking area, the addition of a vehicle control gate, and the creation of an accessible path for the new accessible entry to the armory.

Contact

Matthew A. Dubovecky, EIT
Project Manager
PA Dept. of Military & Vet Affairs
814.533.2466
c-mdubovec@pa.gov



This project was completed
in collaboration with
H.F. Lenz Co.



Pennsylvania Army National Guard Cambridge Springs Readiness Center & OS

Cambridge Springs, Pennsylvania

Construction Cost: \$19,000,000

Completed: 2008

This facility includes two buildings—a two-story, 65,000 square foot Readiness Center and a 20,000 square foot Maintenance Facility.

The Readiness Center is designed to support the consolidation of three Units, totaling nearly 450 reservists. Each Unit has dedicated locker rooms, storage rooms, arms vaults, and administrative offices to allow independent operations. Facilities shared by the three Units include a medical clinic, a fitness room, an assembly hall with full-service kitchen, four large classrooms, break areas, general administrative offices, and a recruitment center. The building is designed for community use of the assembly hall and adjacent restrooms while locking out the remainder of the facility. The site development and building construction were designed to meet the Anti-Terrorism and Force Protection Level established for the facility.

The Maintenance Building is 20,000 square feet in area and is designed to provide field maintenance support for Unit vehicles and equipment. The facility consists of six maintenance bays, two of which are serviced by a 15-ton overhead crane (including a warm-up bay and a welding bay). The building also houses administrative, personnel, storage, and work areas. The maintenance bays are each 32' by 74' and designed as drive-through bays sized to accommodate the largest equipment assigned to the facility. This building also includes a wash rack, an exterior fuel storage and dispensing system, a controlled waste handling facility, and a separate building for miscellaneous storage. The work space is heated with an in-slab radiant hot water pipe system supplemented by gas-fired radiant heaters at the overhead doors. Each work bay is equipped with vehicle exhaust removal, compressed air service, an overhead power reel, and multiple 220v receptacles.

Both buildings are constructed with structural steel framing, concrete masonry unit walls, and a brick veneer. The Readiness Center was designed to achieve a SPIRiT bronze rating for energy and environmental design.

Contact

Mark Austin, Director





DOE/NETL

Building 26 Cafeteria

Morgantown, West Virginia
Construction Cost: \$440,000
Completed: 2017

DRS was selected to transform an existing campus' 25-year old main dining area into a dining and collaborative meeting space that would be available to their employees on a 24-hour basis.

The existing kitchen and dining area had been closed for nearly one year, and with its reopening the client wanted to both update the dining space and provide staff with a new environment that would encourage and stimulate collaboration.

The existing server and kitchen area, originally open to the dining space, were separated with a new partition that allowed visual access between the two spaces. New entry and exits were provided for the space to address egress requirements and encourage the rooms use during off-hours. The existing server received minor finish upgrades to coordinate with the new dining and collaborative meeting areas.

Working within a tight time frame and budget, the project moved from design development through construction completion within a 14-week period.

The original quarry tile floor was covered with a new LVT floor. Areas were highlighted with accent wood plank paneling in both the dining and entry to the server area. Using ceiling planes, specialty lighting, partial height walls, and a variety of fixed and flexible furniture styles smaller and more flexible seating areas were created. Power and technology were added to the space to aid in encouraging the use of the space by the employees.

DRS Services Provided

- Architectural Design
- Interior Design
- Project Management
- Engineering Coordination
- Construction Administration

Contact

Dean Stobbe
DOE/NETL
Dean.stobbe@netl.doe.gov





Thelma Lovette YMCA

Pittsburgh, Pennsylvania

Construction Cost: \$10,600,000

Completed: 2012

DRS was asked by the YMCA of Pittsburgh to provide complete architectural and interior design services for the construction of a new, state-of-the-art facility to serve the city's historic Hill District. For many generations Pittsburgh's Hill District fed our nation's cultural development just as the nearby steel mills fueled her industry. Important new directions in American music, painting, theater, and dance were rooted in this community until redevelopment in the 1960's and the collapse of the steel industry introduced an economic blight that has continued to this day.

Working closely with YMCA leadership, city agencies, local politicians, and community organizers, DRS designed a new three-story facility for this critical neighborhood intended to be a cornerstone of the area's carefully planned, long awaited renaissance.

A venue for both fitness activities and social services, this full-service YMCA includes a gymnasium, swimming pool, exercise rooms, indoor track, multi-purpose rooms, computer lab, daycare facility, outdoor playground, public plaza, offices and support spaces. Its design incorporates advanced environmental practices and exploits natural site conditions to enhance energy performance. Furthermore, the functional arrangement and expression of spaces provide urban design amenities consistent with the prescribed goals of the neighborhood master plan.

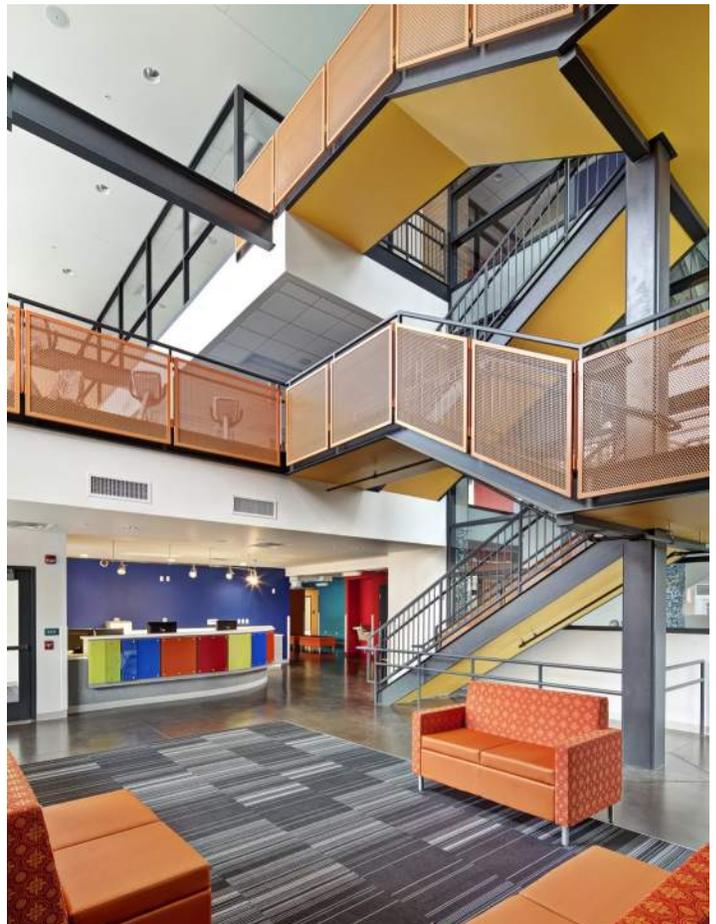
The building achieved LEED NC Silver accreditation.

DRS Services Provided

- Architectural Design
- Interior Design
- Project Management
- Construction Administration

Contact

Aaron Gibson, Executive Director
Thelma Lovette YMCA of Greater Pittsburgh
412.227.3800
agibson@ymcapgh.org





North Fayette Township Community Center

Oakdale, Pennsylvania
Construction Cost: \$4,500,000
Completed: 2016

The New Community Center provides residents of a growing North Fayette Township with a much needed public recreation center and gathering place. This 30,000 square foot, state-of-the-art facility includes a gymnasium, elevated indoor running track, exercise room, children's education center, community rooms, administrative offices, locker rooms, lounges, support spaces, and an upper floor banqueting suite with an adjoining roof terrace.

Designed to accommodate nearly 200 guests, the banqueting suite overlooks the outdoor activity fields in the surrounding community athletic complex. The combined resources of this new facility have been tailored to meet a strict budget and the present demands of the community for services. However, should circumstances change in the future, the building has been planned to accommodate a 50% expansion, including an additional full size gymnasium.

DRS Services Provided

- Architectural Design
- Interior Design
- Project Management
- Construction Administration

Contact

Robert Grimm, Township Manager
North Fayette Township
724.693.3103
rgrimm@north-fayette.com





WEST VIRGINIA ARMY NATIONAL GUARD - CAMP DAWSON

New Billeting Facilities

Kingwood, WV

Services

Mechanical,
Electrical, Plumbing
and Fire Protection

Completed

2009

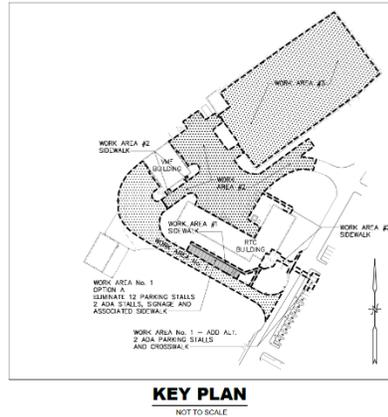
Cost

\$1 million

H.F. Lenz Company provided mechanical, electrical, plumbing and fire protection engineering services for the design of three new billeting facilities for West Virginia Army National Guard, Camp Dawson. The facilities were designed to resemble small, upscale hotels. Each facility consisted of eight sleeping rooms with full baths, a common gathering area with fire place, and a full kitchen. The project included the design of the heating, cooling, ventilation, lighting, power, fire alarm, tele-communications, fire protection, plumbing, and natural gas service. Each sleeping room had individual heating and cooling control.

The construction budget for this project was \$1,000,000, which did not include site work.

Design services were completed in 2002.



USMC - MARINE RESERVE TRAINING CENTER

Building Renovation, Paving, Sidewalk, ADA Improvements

Johnstown, PA

Services

Civil Engineering

Square Feet

130,000

Completed

2021

Cost

\$1.5 million

Reference

Nicholas M. Ritzer
Vice President
Ritz Construction
550 Highland Street,
Suite 215D
Frederick, MD 21701
301-253-2779
nmr@ritzbuilds.com

This project involved an 8A design-build approach to provide all-inclusive A/E design and construction administration services to the Army Corps of Engineers (USACE) for the renovation of the United States Marine Reserve Training Center, support buildings and associated parking areas at the Johnstown-Cambria County Airport Facility.

The Project Included:

- Building renovation involved interior improvements to include removal and replacement of gymnasium tile flooring with epoxy flooring system, locker room access/egress door alterations and tile repair
- Complete painting of all interior painted surfaces within RTC building to include walls, doors, frames, ductwork, and steel railings
- Concrete floor repairs in Vehicle Maintenance Facility (VMF) and painting of steel storage building
- Building exterior renovations of brick and block crack repair, cleaning and masonry sealant application
- Relocation of accessible parking spaces to front of building to provide required building standoff distance from access roads, to include new concrete hardscape, curbing, accessible route and ramp to building entrance
- Paving of over 130,000 SF of access drives, garage aprons, service areas and secure fenced military vehicle storage lot.
- Adjustments to existing stormwater inlets and concrete curbing repairs for drainage enhancements

Fast-track project with work completed while active facility was occupied by utilizing low occupancy days to schedule key area renovations.



NAVAL AIR STATION JACKSONVILLE (NAVFAC SOUTHEAST) P-8A Integrated Training Center

Jacksonville, FL

Services

Mechanical, Electrical,
Plumbing/Fire Protection

Square Footage

165,665

Completed

2011

Cost

\$48.6 million

Reference

Mr. Adam Hocutt
NAVFAC Southeast
904-542-6115
adam.hocutt@navy.mil

This Design/Build project consisted of the design and construction of a \$48.6 million multi-story, 165,665 SF Operational Training Center in Jacksonville, Florida for the next generation Command and Control multi-mission aircraft (MMA)/P-8A. The P-8A will replace the aging P-3 when deployed.

The P-8A was designed around a modified Boeing 737-800ERX airframe. This airframe coupled with the next generation of electronics and sensors dramatically improves the Navy's Anti-Submarine Warfare capabilities.

The P-8A Integrated Training/Simulation Center contains the most advanced state-of-the-art computational facility to support 40 instruction environments and 19 multi-million dollar simulation trainers. The facility also houses the US Navy's P-8A's program mission design command within a classified Secure Compartmented Information Facility (SCIF).

H.F. Lenz Company provided all of the HVAC, electrical and plumbing, and Computer Room engineering design for this new facility. The project incorporates best practices for energy efficiency and sustainable design.

The project is LEED Gold certified.

Training Features:

- Ten Operational Flight Simulators
- Eight Weapons Trainers
- Seven Raised Floor Computer Rooms for Simulator Equipment
- Class Rooms
- Briefing Rooms
- Mechanical, plumbing and electrical demolition

Building Features:

- Two 4,000A 480Y/277V Electrical Main Services
- Dedicated Outdoor Air Handling System with Energy Recovery Wheel
- Diesel Emergency Generator
- Central Chilled Water Plant
- UPS Systems for all Simulator Equipment
- Overhead Crane in Simulator Bays
- Photovoltaic Parking Shades



PENNSYLVANIA NATIONAL GUARD FORT INDIANTOWN GAP

New Youth Challenge Building

Annville, PA

Services

Mechanical,
Electrical, Plumbing,
Fire Protection

Square Footage

14,400

Completed

2023

Cost

\$4 million

Reference

Captain Eric Knight
TPNG/DMVA
717-861-8430
c-erknight@pa.gov

The National Guard Youth Challenge Program (NGYCP) was established in 1993. The 22-week residential program is open to Pennsylvania students, ages 16 to 18-years-old, who may need more discipline or are falling behind in school. It's intended to give teens a second chance to learn leadership, self-discipline, and finish their education. The program is a joint effort between the PA Department of Military and Veterans Affairs and the National Guard Bureau in consultation with the PA Department of Education.

H.F. Lenz Company is currently providing the MEP/FP engineering services for a new 14,400 GSF multi-purpose facility to provide students an area for dining, physical fitness training, recreational sports and activities, and a large assembly area for student graduations. Additionally, there will be two multimedia enabled classrooms for academics and extracurricular activities. The building will include the following spaces:

- Large multipurpose area
- Two smaller multipurpose areas
- Kitchen
- Male and female restrooms
- Classroom space
- Medical support area
- Storage
- Mechanical/electrical room

For this type of a multi-use space, the MEP systems must be flexible and able to accommodate the varying uses. The design includes AHUs with DX cooling/gas-fired/energy recovery for the multipurpose areas, for the medical clinic and for the classroom, dining, bathrooms, and storage area. The systems are being designed to accommodate durability issues associated with basketball, volleyball, and other sporting activities. An LED lighting and a digital control system is also being designed.

The facility will also house a modern, commercial grade kitchen meeting all applicable building codes and standards and designed to accommodate feeding and storing food for 150 students, 3 meals a day and 7 days per week.

The project was developed with Core and Cluster Groups.

We are also currently providing the engineering services for a new auditorium for the facility.



PENN STATE HEALTH MILTON S. HERSHEY MEDICAL CENTER

Education Space Optimization Plan

Hershey, PA

Services

Mechanical,
Electrical, Plumbing,
Fire Protection

Completed

2023

Cost

\$23 million

Reference

Duncan McIlvaine
Director of Facilities
Planning and
Construction at
Penn State College
of Medicine
717-531-4525
dhm5166@psu.edu

H.F. Lenz Company provided the engineering services for an Education Space Optimization plan for Penn State University College of Medicine's Milton S. Hershey Medical Center (HMC) campus. The goal of the project was to improve education space in the facility through a highly-targeted plan to renovate and enhance existing learning spaces.

The study primarily targeted to five tiered-floor lecture halls with fixed seating. Today's pedagogical methods do not rely heavily on large lecture-format instruction. The College of Medicine desired to renovate one or more of these original 1970s-vintage lecture halls into state-of-the-art learning space that is better-aligned with contemporary and future needs.

As part of our services, we analyzed the relative viability of renovating five existing, underutilized spaces to meet needs identified as highest-priority. Considering structural, operational, and other factors, by process of elimination, we determined which two or three existing spaces offer the best potential return on investment. We then developed detailed space programs and design narratives for each of the spaces recommended for renovation. For each space determined to be viable candidates for renovation, we then generated and analyzed two Schematic Design options, with corresponding cost estimates.

Key Objectives:

- Apply innovative and creative approaches to use existing learning spaces more efficiently and effectively, and to support new pedagogies, through changes to space configuration, technology, and scheduling.
- Increase the flexibility of learning spaces, transforming single-purpose spaces into multifunctional spaces.
- Incorporate lessons learned during the COVID-19 pandemic, with emphasis on resiliency/adaptability and the growth of distributed small-group learning through virtual webinars.
- Integrate best practices and innovative approaches to education space planning and design, informed by the consultant's expertise and broad knowledge of state-of-the-art education spaces.

While primarily focused on optimizing existing learning spaces in the near term, the Education Space Optimization Plan is also intended to guide the College toward achieving longer-term goals that will be outlined in the forthcoming PSU College of Medicine Strategic Plan.



THE PENNSYLVANIA STATE UNIVERSITY

New Gaige Technology and Business Innovation Laboratory/Classroom Building

**Berks Campus,
Reading, PA**

Services

Mechanical, Electrical,
Plumbing, Fire
Protection

Square Footage
62,000

Completed
2012

Cost
\$25.6 million

Accreditation
LEED Gold

Reference
Mark D. Dawson
Interim Director,
Business Services
Penn State Berks
610-396-6373
mxd318@psu.edu

H.F. Lenz Company provided engineering services for a new \$25.6 million, 62,000 SF building that provides space for collaboration between several of the campuses programs.

The first floor also holds seven labs, three classrooms, a design studio and a lecture hall.

The second floor houses six labs, five classrooms and 28 faculty offices; four conference rooms, a classroom, 27 faculty areas and the chancellor's office. The facility also houses a café that accommodates a retail area and a hotel, restaurant and institutional management lab, as well as an outdoor terrace.

The building houses engineering and computer labs including:

- Electrical Lab
- Electronics Lab
- Prototype Lab
- Project Lab
- Measurement Lab
- Design/PC Hardware Lab
- Engineering Automation Lab

Project Features Included:

- A lighting control system was utilized for classrooms, computer classrooms, conference rooms, and other spaces which require multiple lighting levels.
- A daylighting control system was provided to sense the daylighting conditions and dim or turn off selected fixtures. This approach is also utilized in corridors, stair towers, classrooms and other spaces which might be applicable



THE PENNSYLVANIA STATE UNIVERSITY

Woodland Building Feasibility Study and Renovation

Abington Campus
Montgomery County, PA

Services

Mechanical, Electrical,
Plumbing, Fire Protection

Square Footage

25,000 - Feasibility Study
20,000 - Phase 1
15,000 - Phase 2

Completed

2014 - Feasibility Study
2014 - Phase 1
2015 - Phase 2

Cost

\$5.7 million - Phase 1
\$2.3 million - Phase 2

Reference

Mr. Kurt Coduti
814-865-3789

Woodland Building Feasibility Study

H.F. Lenz Company provided the engineering services for a feasibility study to infill the area between the northeast and southwest segments of the Woodland Building. The addition included approximately 25,000 SF of space while improving the way finding and aesthetic appearance of the overall building façade from both the campus and parking lot sides.

Woodland Building Renovations Phase 1

Subsequently, we were retained to provide the engineering services for renovations which included approximately 20,000 SF of laboratories and classrooms. Some of the concerns addressed in the renovation design were a lack of collaborative spaces, outdated lab layouts with poor sight lines, dark and narrow corridors, unclear building functions, potential facade renovations, hazardous materials abatement, ADA compliance, and potential phasing plans. The existing Physics, Chemistry & Organic Chemistry labs and support spaces, along with a general purpose classroom were demolished to allow for new modern lab spaces and classroom that are accessible for all students and have the latest technology. Six existing toilet rooms on the three floors were demolished and renovated to meet ADA accessibility. The existing east window wall system was removed and a new curtain wall facade with high efficiency glazing and sunshades was incorporated into the new design.

Woodland Building Renovations Phase 2

We were also then retained to provide the renovations including approximately 15,000 SF of classrooms. The classroom spaces, adjacent to the Phase 1 renovation area, had experienced significant and ongoing water damage at the roof and through the façade and structure along the east wall. The renovation replaced the roof and provided a new window wall matching the Phase 1 renovations. One media classroom was changed into a small art gallery.



THE PENNSYLVANIA STATE UNIVERSITY

Kostos Building Renovation

Hazleton, PA

Services

Mechanical,
Electrical,
Plumbing and
Fire Protection
Engineering

Completed
2015

Cost
\$9.5 million

Reference

Kyle Hollick
Project Manager
The Pennsylvania
State University
814-865-3789
kwh121@psu.edu

In late 2012, the University identified the Kostos Building as one of several buildings system-wide that were in need of capital improvements. The building, constructed in 1969, has not been substantially improved since it originally opened.

The building is a four-story 39,500 GSF structure that is the main instructional building on the Hazleton Campus. The building exterior features a brick veneer exterior with pre-cast concrete accents. The interior is mainly comprised of painted concrete block walls, acoustic tile ceilings and vinyl composition tile floors, most of which are original to the building.

The existing building contains several general-purpose classrooms and faculty offices along with laboratories and teaching space for chemistry, biology, physics, and engineering.

The focus of this project is to enhance the functionality of the program areas as well as improve the overall appearance and energy efficiency of the facility.

The ground floor includes a waiting space outside the lecture hall and an accessible route to the front of the lecture hall. The first floor houses a learning center, lounge, meeting rooms, engineering projects space, entry vestibule, and an existing server room. The second floor houses a mix of general-purpose classrooms, specialized teaching space, engineering technology classroom, computer classroom and engineering and physics labs. The third floor houses a general-purpose classroom space, general use computer classroom, general and organic chemistry labs and a biology lab.

The HVAC, electrical, and plumbing systems for the building had reached the end of their useful life. This project replaced all HVAC, electrical, plumbing, and fire protection systems to support the renovated building. Some of the key aspects of the system selection will be energy efficiency, flexibility, safety, and comfort. Systems were selected to support the varying uses of the building. A new air handler with heat pipe heat recovery systems serves the wet chemistry areas and dry labs. The auditorium, general classrooms, and office spaces are served by smaller fan coil systems with a dedicated outdoor air unit. The challenge of this project was introducing modern, efficient systems into a building that was originally designed with perimeter unit ventilators.



LETTERKENNY ARMY DEPOT (LEAD), BALTIMORE DISTRICT

Indefinite Delivery Contracts

Chambersburg, PA

Services

Mechanical, Electrical, Plumbing/Fire Protection, Civil, Structural

Square Footage

Various

Completed

2013-Present

Reference

Brandon R. Kohler
717-267-8853

H.F. Lenz Company has provided the MEP/FP, civil and structural engineering services for over \$100 million of construction for the Baltimore Corps of Engineers over the past 30 years through 6 IDIQ contracts.

Projects Completed Under the IDIQ Contracts Included:

- Building 12 - DISA/CSC Office Renovation - Renovate the existing warehouse to office space for Defense Information Systems Agency (DISA)/Computer Science Corporation (CSC)
- Building 3 - Defense Data Center - Retrofit central chilled water plant
- Building 1 - HVAC System Upgrade - Replace the existing office HVAC system including distribution and control systems
- Building 2360 - Ammunition Area Central Boiler Plant - Renovate the interior/exterior including replacement of oil-fired boilers
- Building 1 - Office and Warehouse Building - Sprinkler modifications
- Building 7 - Warehouse Building - Renovate lighting
- Building 14 - Repairs - Architectural modifications and replacement of HVAC system
- Building 521 - Addition - Civil, structural, mechanical, and electrical design of a 1,400 SF addition to the security headquarters
- Building 663 - Renovate facilities engineering building
- Building 3812 - Replace boiler/AHU
- Building 350 - Upgrade lighting, improve HVAC systems, Combat Vehicle Maintenance Shop
- Building S234 - Post Cafeteria Renovation and Expansion - Design of complete renovation and an addition to the Depot's Post Cafeteria including a conference/training area
- Master Planning Services - Working with our Master Planning consultant, an assessment of existing conditions and development of requirements analysis were prepared in accordance with AR 210-20, Real Property Master Planning for Army Installations and in the Master Planning Instructions
- Programming Documents, 1391 Preparation - Working with the Depot's Master Planner, we provided services related to the development of 1391's for various MCA projects
- Building 3 - Upgrade Fire Alarm System
- Command Flag Area Improvements - Renovate the commander's site entrance area to include walks, grass, sitting areas, flag poles, and the inclusion of the original LEAD iron gates
- Building 349 - Boiler plant modifications and roof replacement
- Building 1 - Restroom Renovations - Renovate and upgrade the restroom area including a new floor plan to accommodate ADA requirements, new plumbing fixtures, ventilation, and architectural finishes
- Child Development Center - Sanitary sewer expansion
- Phase 1 Environmental Site Assessment of Adjacent Property
- Reasonably Available Technology (RACT) Analysis - A Reasonably Available Technology RACT Analysis was conducted for the acid wash primer utilized in the painting operations to determine the feasibility of installing additional VOC emission controls. The RACT Analysis will be performed in accordance with the U.S. Environmental Protection Agency and PA DEP guidelines

- Building 397 - Renovation and Addition - Renovation to use as generator/compressor rebuild shop. Upgrade electric, fire sprinklers, lighting, and all interior and exterior finishes
- Building 321 - Demolition and Reconstruction - Demolish the existing structure and replace with a new building for Mine Resistant Ambush Protected (MRAP) process line
- Building 330 - Renovation and Upgrade - Enclose and renovate a portion of the south end of the building to provide workspace for storage operations
- Building 331 - Renovation and Upgrade - Enclose and renovate a portion of the north end of the building to provide workspace for storage operations
- Building 330 and 331 - Dock 2 Shipping and Receiving Office - Construct administrative space to coordinate shipping and receiving functions
- Building 320 - Renovation of vehicle restoration building - New finishes, lighting, HVAC, fire protection, electrical distribution, plumbing, roof, garage doors, wash bay, and emergency generator

H.F. Lenz Company has held multiple IDIQ Term Contracts for this agency as both Prime Consultant and Subconsultant.



SECTION III
UNDERSTANDING AND APPROACH



Understanding

The West Virginia Army National Guard, Construction and Facilities Office intends to undertake the development of a new AITEC General Instruction Building on the Camp Dawson garrison in Kingwood, West Virginia. The project will involve the design and construction of a new permanent building designed to house classrooms, a learning center, restrooms, offices, and administrative and general-purpose areas. Supporting site improvements such as roads, aprons, pads, sidewalks, parking, and utilities will also be included in the project. Cost effective and energy conserving building systems should be considered to reduce construction and operational costs. As such, the design should prioritize sustainable, economical, and low-maintenance systems and materials. The design, delivery, and construction processes should also include compliance with physical security, DOD compliance, force protection, and Army regulations as prime design considerations.

The objective of the design services is to provide comprehensive professional services from the project initiation through the completed construction, including all disciplines necessary to execute the task as efficiently and effectively as possible.

Our Approach

As architects, our job is to guide the design process, not to impose one-sided solutions on a given project. We use our experience and knowledge to provide information that will allow participants to make informed decisions, while working creatively to solve problems in a thoughtful way.

At each stage of the design process, we aim to foster a collaborative environment where ideas can flourish and evolve organically. By nurturing a dialogue that builds upon previous discussions, we ensure that every iteration of the design is continuously refined and improved from the last. The ideal result is a final design that resonates with all involved, evoking a sense of satisfaction and pride from the collaborative contribution to its evolution.

The proposed design process and project management for the Parkersburg Readiness Center will follow this approach, moving the project from start to finish through the milestones and submissions outlined in the Expression of Interest.

Phase 1 - Planning (35% Design)

Our process will begin with a series of meetings with the using Agency to verify current program and goals of the project, and to assess other requirements established for the project. DRS

Architects and HF Lenz Engineers will attend these meetings as needed. Although some important design decisions will occur later in the project, such as interior design, some of the basic decisions for the project will be explored and assessed in these early stages - such as the appropriate siting of building on the property, building massing as effected by the site choice, and selection of major mechanical and electrical systems. The design team will meet stakeholders to discuss the goals for the project, the requirements for each element, and learn how the facility will be used. Even though the government may have established standards for design of this facility type, we have found that every project presents some unique circumstances.

H.F. Lenz Engineers will search for ways to provide long-term operating benefits, such as ease of systems maintenance, redundancy, and effective life-cycle costing. They will also explore any sustainability or green building objectives beyond those required by the International Energy Conservation Code.

The project team will also study the existing site conditions during this phase, including undertaking geotechnical investigations and studies; collecting site development information such as utility availability and capacity; surveying and documenting site conditions (if that information is not already made available by the Agency); and developing a thorough understanding of any relevant or governing land development codes, restrictions, or requirements.





Approximately half-way through this Phase 1 (around 15% of the total project), the team will compile a written report of all findings to this point and issue for review by all stakeholders to confirm accuracy of assumptions and findings. Adjustments will be made prior to progressing to the next stage. This report will:

- Describe the project and program in detail
- Describe each element planned for the facility
- Explain the needs of each space as understood by the design team
- Review the applicable building codes to determine how they may affect the design and construction of the facility
- Indicate a direction for initial major decisions, such as building placement and what the general arrangement of the floor plan may be
- Serve as a record to guide the balance of the design process

Once the intermediate report has been accepted, essentially establishing a benchmark for design, the team will continue the design process for the balance of Phase 1. This effort begins by translating the information gathered to date into floor plan diagrams and drawings that define the priorities of the project and summarize the primary ideas discussed with the participants of the process. The diagrams will typically offer various options.

The purpose of these diagrams is not to solve the design immediately, but rather to act as seeds for conversation on the advantages and disadvantages of each option, and to identify the limitations and opportunities for the facilities and site. This conversation, usually occurring over the course of a meeting or two as plan options are refined, will help the design team develop a deeper understanding of the priorities and goals of the project.

The design team's engineers and consultants will be key participants in the process at this early stage. They will develop general strategies for the way various systems will work in the building and determine the effect those systems will have on the design. We will discuss the requirements for mechanical, electrical, plumbing, fire protection, and data/comm systems. The team will evaluate the proposed plan options and adjust them accordingly to address the goals of the project.

Over the course of this phase the team should reach an understanding of what should be included in the design, what may or may not fit on the site or in the budget, and what elements should be included as possible base bid options if needed.

The next stage of the work is the development of the design to a point at which reliable financial models can be built for the project. The design will be refined in a process that moves from larger challenges to smaller ones.

In meetings with the stakeholders and users of the facility, we will:

- Examine the location of the building on the site and refine the placement of the building footprint and surrounding elements.
- Look at the way the interior spaces will be used and how they each should interrelate, one room at a time, and determine how best to embody use patterns in design.
- Examine the effect MEP/FP systems will have on the design and how best to incorporate them.
- Begin researching and selecting the appropriate materials and products to use in the new facility, as well as potential construction methods
- Begin refining decisions on the structural and civil (site) designs





The result of this process (Phase 1) is a 35% complete design package (including estimated costs to execute the programmed work) that is sufficient for the Agency to secure funding for the entire project. This package will include 35% completion level design drawings such as site layouts, floor plans, exterior elevation, and detailing necessary to ascertain the cost of such work. It will also include our opinion of probable costs including suitable for the establishment of a complete project budget. Finally, the bound deliverable will include a summary of the process to date.

The document will be presented to the agency initially in draft form for final review, and any necessary modifications will be made prior to finalization. At the end of this phase the design team and the Agency should have reached a collective consensus on a single conceptual design that best expresses the goals of the project, physical and financial.

At this stage of the process, while the Agency utilizes the data we have provide to secure the funding to advance the project, our team will carefully catalog our findings, process, and all the collateral collected in a sort of “mothballing” of data in an effort to preserve the knowledge we have collected to survive any potential delay between the conclusion of the Phase 1 35% effort and the receipt of direction from the Agency to initiate Phase 2.

Phase 2 - Execution (Construction Documents through Construction)

Upon receipt from the Agency of directive to proceed with Phase 2 of the project, our team will arrange a re-initiation conference to review the current goals and objectives with all stakeholders. This will ensure a complete understanding amongst all players—including any new individuals that have entered the process during the time span between phases.

Based on the approved Phase 1 designs, the design team will work to resolve any outstanding items as well as any deviations resulting from the funding approval process. This initial sub-phase will consist mainly of cleaning up loose ends, making changes necessary to meet new agency requirements, and making adjustments dictated by budget. All the information preceding this point in the process is then compiled into a set of conformed construction documents, suitable for procurement, permitting, and construction.

The process of developing the final construction documents will involve a great deal of coordination between disciplines, coordination between the design team and Agency and user, and coordination between the design team and any related outside vendors that the Agency assigns. The ability to communicate as a team is essential in this part of the process. From common software platforms to communication systems—every aspect that simplifies communication results in a higher quality deliverable. That equates to fewer surprises along the way. Our project team has a great deal of experience collaborating on projects.

This phase is not executed in a vacuum. The team will hold periodic design meetings that engage the Agency and user in the detailed design decision processes. Intermediate check sets will be distributed and page turns will be held to ensure progress is meeting the objectives of the project and that the designs are continuously improved in a manner that results in a successful project. Milestone check sets will be distributed for review and comment at 65% and 95% completion points. Comments will be integrated into the design, and estimates will be revisited. At what we will call 99%, a final set will be distributed for final approval, upon which the documents will be buttoned up and prepared for the permitting and procurement processes.





Permitting

Our team of professionals will be responsible to foster any permitting processes that are necessary, including zoning, planning, design review, and building code compliance. We will review recommended revisions to the documents necessary for permitting approvals with the Agency so that decisions can be made in the best interest of the project. Once all AHJ's have been satisfied and approvals acquired, the document set will be consolidated into a conformed 100% complete set, distributed to the team for approval to move into the procurement sub-phase.

Procurement

Throughout the procurement process the entire DRS team will be available—led by the project manager—to respond to proposing firms (bidder) questions and inquiries to ensure that each bidder has a complete understanding of the projects technical details as well as the Agency's objectives. As clarifications may be necessary, supplemental information will be developed and assimilated into the construction documents prior to construction.

Construction Administration Phase

Our team of professionals will administer the construction phase of the work, providing services including:

- Participate in Project Kick-off Conference
- Participate in periodic OAC meetings (field meetings)
- On-site observation (full or part time)
- Review of shop submittals / shop drawings
- Responses to Contractor written requests for information
- Manage the change process
- Review payment applications
- Provide documentation of the entire construction administration process
- Develop punch-list / facilitate substantial completion walk-through

The leadership for construction administration will be from the nearest office of the project team to ensure quick response time to field issues.



Project Management and Communication

The key to a successful project for all stakeholders is management and communication. Each project is managed from the viewpoints of design, technical excellence, and administration. DRS uses several management concepts to achieve these goals:

- Principal leadership
- Establishment of design and technical criteria and standards
- Quality control
- Project planning and scheduling
- Internal checking of project progress and budgets
- Coordination within DRS
- Coordination with outside consultants

The design and construction process is collaborative, so clear and regular communication is vital to a successful project. A communication plan is established at the beginning of each of our projects, usually following the flow of the organizational chart of the team. The project manager is the funnel through which all communication is channeled, whether it is from the client to the design team, the team to the client, consultant to client, and so forth.

We typically identify at least one other member of the DRS team to be included on all electronic communication, of the sake of redundancy should the project manager become unavailable for any period of time, to assure that the needs of the project are continuously covered.

Within the design team, communication is regular and fully integrated, as needed. Internal design team meetings are held between DRS team members and consultants, at intervals throughout the process, to make sure the various design disciplines are coordinated and questions are answered.

As projects proceed and relationships develop, clients become comfortable communicating directly with the design team consultants. We encourage this, as long as the DRS project manager is included in the conversations or correspondence. Not every issue that arises will need an architectural solution or architectural involvement. Often, issues that are initially thought to be purely technical can have an effect on the project beyond just solving the issue at hand. This is why every discussion needs the participation of the project manager. The project manager will be looking at the issue from a larger perspective, and will be able to determine what influence any solution might have on the project objectives.



Quality Control

DRS uses a regimented quality control program throughout the project to make sure projects are completed on time and within budget. We ascribe to a vertically integrated project delivery system, where the same group of architects and engineers are responsible for all project tasks from the start of the project to the finish.

Although the design team routinely checks and coordinates the design documents at intervals through the process, we use an Independent Technical Review (ITR) Team on many of our projects. The members of the review team are purposely chosen from outside the projects team. The reason for this is to have a fresh set of eyes looking at the project design, documents, and decisions. They are more likely to spot an anomaly that the design team, focused on documenting design decisions, might not otherwise identify.

The ITR team reviews the documents at stages as the project develops, and is typically comprised of senior members of the design firms encompassing all disciplines. This approach has worked well for our projects, including those with a high degree of complexity.

QC Review Procedure

Quality Control reviews will be undertaken by the ITR prior to each design submission—including prior to the issuance of the Phase 1 deliverables, and again at 65%, 95% and 100% milestones during the Phase 2 process. The ITR will review the documents of the applicable disciplines to determine the submission's ability to convey the intent of the systems and assemblies shown. The review will also assess the appropriateness and reasonableness of information noted in the documents based upon the design submission requirements. During this process, drawings from the various disciplines are reviewed simultaneously, and comparisons are made between building systems and building architecture. Recognizing potential problems at these early stages will help to avoid changes during construction.

The review shall address, but not be limited to:

- Accuracy, completeness, clarity and consistency
- Identification of deficiencies, ambiguities, errors, and omissions
- Delineation of contract scope, including identification of bid packages, alternates, and items not in the contract (NIC)

Interdisciplinary Coordination Review (ICR)

The design team will use standard design checklists to assist with the reviews. These checklists will help focus on interface points between the various design disciplines, and help uncover inconsistencies or coordination discrepancies between or among disciplines. The ICR shall also look at the typical sequences of construction to see if the design may effect the way the project is constructed or phased.

Design Submission Reviews

DRS is familiar with peer reviews at milestone submissions. Face-to-face meetings will be held after the submissions, if needed, to address comment items. The review and follow-up meetings ensure compliance with technical requirements and quick response to the concerns of the User.





Additional Information

Learn more about our team of professionals by visiting our websites:

www.DRSArchitects.com
www.HFLenz.com