



240 Scott Ave, Suite #1  
Morgantown, WV 26508

Department of Administration  
Purchasing Division  
2019 Washington St. E.  
Charleston, WV 25305

SEALED BID: EOI Capitol Bldg Fire Protection and Sprinkler Design  
BUYER: Linda B. Harper, Buyer Supervisor  
Solicitation Number: CEOI 0211 GSD1800000003  
Bid Opening Date: 4/26/2018  
Bid Opening Time: 1:30 pm EST  
FAX NUMBER: 304-558-0468

04/26/18 12:46:55  
WV Purchasing Division



**Expression of Interest**  
**West Virginia - General Services Division**  
**EOI Capitol Bldg Fire Protection and Sprinkler Design**  
**CEOI 0211 GSD1800000003**  
**April 26, 2018**



**Department of Administration**  
**Purchasing Division**  
**2019 Washington Street East**  
**Charleston, WV 25305-0130**

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Travis Taylor, PE

Robert Angus

Jack Jamison

Joseph Machnik

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Jeff LaSalle, PE

David Klepitch, PE

Historic Building Architects, LLC

Annabell Radcliffe-Trenner

Megan Jenkins

Montum Architecture LLC

Tom Pritts, AIA

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## The Miller Engineering Difference



We are extremely pleased to submit our response for the WV State Capital Fire Protection Project. In many applications and areas, fire protection can be a “plug and chug” portion of a project. This is because the building type and the protection requirement have been repeated over and over by the consultants and contractors many times. Identifying, evaluating and addressing concerns in a building such as the Capital is the antithesis of a typical fire protection project.

MEI has elected to lead this effort, which may seem atypical. However, we’re not your typical MEP firm; we ensure our designs meet very specific, time-tested criteria, including but not limited to being constructible, operable and maintainable. We believe that our commitment to delivery and construction administration is ideal for the project. Our team members echo this philosophy and in the case of the Capital, the philosophy extends to the unique construction, condition, and historical nature of the building. Miller, Montum, LaSalle, Historic Building Architects, and Earth-Res are prepared to deliver the project with each expert shining in their area of expertise, while supporting one another and the greater effort.

Our team takes great pride in their constructability based backgrounds, which will allow us to visualize the project as it will be built, instead of just lines on paper. We won’t sit clients down and lecture to them about what they’re going to get; we listen to them so we can strive to deliver exactly what they want and need. It costs too much time and money (for both our clients and us) to not deliver exceptional service every single time, and we work tirelessly to keep projects on time and on budget. MEI’s change order percentage over the last 8 years is less than 0.1%, and that’s not just a statistic; it’s a proclamation of our commitment and determination to make sure things are done right the first time, every time.

Miller Engineering has completed several successful projects for WV General Services Division in the previous two years. We are just successfully finishing an HVAC renovation project at Building 22. We have experience with the requirements and processes of state procurement, and can deliver a successful project from design through close-out and warranty.

As a Charleston native, I “grew up” with the Capital building and fondly remembering playing on the lawn and seeking respite from the heat in the air conditioned corridors on summer weekends. As with so many West Virginians, I take great pride in the building; and in any work we perform on the Capital complex. I believe that our team has the proper blend of native talent and specialized national expertise to deliver the project in a manner appropriate to the importance of the building. We look forward to the opportunity to meet with you in an interview setting and discuss our plans to deliver your project.

Thank you for kind consideration,



Craig Miller  
President/Owner  
Miller Engineering, Inc.

## *YOUR PARTNERS FOR PROJECT SUCCESS*



Different by Design. Approach to design is rooted in constructability, operability and maintainability. Project delivery, both in design and construction, on-time and on-budget.



Expertise in Fire Protection Engineering and Code Consulting nationwide with key understanding of integration of fire safety systems with the building architectural features and an attention to detail.



Specializes in historic preservation architecture and materials conservation. Our collaborative investigative approach allows us to peel back the layers of the past, helping our clients understand, preserve, and interpret our shared cultural heritage.



Architecture...of the Mountains. Pragmatic designs that reflect the nature of the place and respond to the constraints of the project. Knowledgeable in state agency review processes and regulations.



Regional leader in Structural and Environmental Engineering. We are a team of engineers, geologists, and environmental specialists who put ourselves in your shoes and use our global experience and innovation to solve your unique challenges.



## TAB 1 – CONCEPT



## WV Capitol Fire Protection Project Approach

### EVALUATE:

The first step in addressing the Fire Protection concerns related to the State Capitol Building is detailed evaluation. The evaluation will incorporate several action areas with their basis in the minimum criteria set forth in section 4.3 of the EOI. These include: initial kick off discussions, plans review, archival document evaluation, review and validation of inspection reports, initial hazards evaluation, and a detailed physical evaluation of the building. Additionally, our process will include interviews with stakeholders such as General Services Division personnel, the WV Fire Marshal, WV State Historic Preservation, Capital Security, major space holders in the building, and local first responders.

The final determination of stakeholders will be made in initial consultation with GSD staff in the kick-off discussions. These will center on the Owner's concerns, thoughts, and goals, including phasing, for the project. This initial discussion sets the course for the evaluation. The reality is that the team must begin to consider the hazards, mitigation alternatives, operational impact, and public safety literally from day one. The evaluation will likely center on the following core concepts: inherent or existing hazards, detection, notification, evacuation, suppression, and incident response; within the context of a unique historical building which has security requirements.

Each team member will review all documentation relevant to their specialization in the project along with any supporting information they require. The value of this initial groundwork cannot be overstated. While we have no interest in becoming a think tank, it is imperative that we understand, to the greatest extent practical, the conditions faced by the project. The data acquired by the paper portion of the evaluation will be made accessible to the team through a secure server/ data storage site. Any privileged (secure or sensitive) information will be held locally by the team and not stored electronically on the data storage site.

As the data is gathered, the team will analyze it in the context of the Fire Code and the Existing Building Code and will mesh its collective experience to build a performance-based hazard/ condition/ detection/ notification matrix for the building. This is where we begin to ask "what do we need to do and how do we need to do it", allowing us to focus our efforts in the physical evaluation of the Capital and ensure practicality in our recommendations.

The physical evaluation of the building will require significant organized effort. This will begin as discussions with the GSD concerning operational issues, review of restrictions, and realities of the on-site evaluation of the building, the site, and building systems in general. These discussions will be formalized as planning sessions to organize the effort for efficiency versus disruption as the capital is the seat of government for the state. The evaluation is much more than just a walk-through. The team will utilize the real time evaluation as "pre-design" to begin to determine, as a team onsite, the physical realities we face in mitigating the hazards and meeting the goals for detection,

notification, and response, established in our initial meetings. This “boots on the ground” evaluation is where we gather the data and develop initial concepts and plans. We believe having the building scanned using visual and LIDAR (light detection and ranging) technology to create a three dimensional model of the building is in the best interests of the Owner for this and future projects. This model can then be used as the basis for studies and modeling in areas such as evacuation, smoke and fire propagation, suppression response, and notification systems. Information on such technology is included in the appendix of this proposal.

#### **STUDY:**

Once the team has a practical familiarity with the facility and site, we will meet with stakeholders to review and discuss their concerns and needs. These will be tracked and incorporated into our initial concepts and discussed in detail with GSD to arrive at a working plan for fire protection. The study will review and address all the concerns set forth in section 4.3 of the EOI and along with other concerns we may discover as we evaluate the building, its site, and infrastructure. The team will then study, and model as necessary, the capital in detail to determine a practical plan and course of action for the building. Our study efforts will be performed within a constraint matrix which keeps us mindful of the uniqueness of the building. The team will draw on its vast experience to balance the requirements for fire protection with the need to protect the long term interests of the Capital. We foresee a significant discussion related to timing, occupancy, and disruption to the normal flow of work, which may involve the need to utilize swing space concepts. We see this as an iterative process involving several interactive sessions with GSD and stakeholders. Cost estimating will be an ongoing process during the evaluation, less formal at first and becoming more and more structured as the report approaches finalization. We have not selected an independent estimator for the team at this time but will work with the Owner to add one should the necessity arise. The results of the study will be a plan and course of action, likely phased for implementation, which becomes the basis a Phase II set of project documents for bidding and construction administration.

#### **IMPLEMENT:**

In Phase II, the team will prepare documents for competitive bidding which set forth the requirements of the work, the details of how it will be accomplished, the requirements to protect the building, and the need to implement the project while allowing government to function. While there are always formal approvals required, we believe that by involving the stakeholders early, the approvals should be mostly done by the time we finalize the bidding documents.

The team will assist the Owner in bidding the project and conduct the technical portion of the pre-bid meeting. The team will answer all questions and develop addenda, and evaluate the bids as requested and will perform construction administration to implement the renovation.

The team will perform construction administration for the project as part of Phase II. As the local components of the team, Miller and Montum will be the boots on the ground for



the construction. Both have extensive experience with administering fire protection and historical projects in renovations. Our knowledge will allow us to be the day to day eyes of the team on site, with LaSalle and HBA available through technology to help resolve unexpected issues or concerns. Also, LaSalle and HBA will make routinely scheduled trips to the site for meetings and milestones. They would make unscheduled site visits if circumstances were to require their presence. The local component participation ensures that the team remains focused on the project and interacts with the Owner to make answers to RFIs and project concerns as "real time" as possible. Miller has developed a reputation with contractors for provide accurate, rapid response to such situations, allowing work to continue as smoothly as possible.

**SCHEDULE:**

The schedule for Phase I will be developed in conjunction with the Owner. The evaluation and study is a significant effort and we believe a more detailed project understanding is required to prepare a schedule. With that said, the team does believe in pressing forward as rapidly and effectively as possible



## TAB 2 –FIRM QUALIFICATIONS





## Firm Profile

MILLER ENGINEERING is a solely held (S) corporation owned by Craig Miller PE, President. The corporation maintains a Certificate of Authority with the WV State PE Board and has carried professional liability insurance since its inception. Neither the firm nor its professional engineers have ever faced disciplinary action in any form from the states in which they are registered.

Our engineered solutions involve a detailed assessment process: investigation, observation, communication with stakeholders, system analysis, building modeling and engagement from our entire team. We approach each and every project with this process and the guiding principle that buildings are designed to be livable and function in their intended purpose.

Over the past 14 years Miller Engineering, Inc. (MEI) has engineered solutions for over \$23.2M in MEP system upgrades, repairs and renovations for projects of all scopes and sizes, with clients ranging from private owners to local and state governments. With a strict attention to detail and commitment to delivering a job done well and done right the first time, every time, MEI has accumulated a change order percentage of less than 0.1% over the past 8 years.

Our team has unique skill-sets regarding engineered renovation solutions. Each member of the team has hands-on mechanical system experience including installation, construction, design and maintenance.

Miller Engineering takes pride in being **different by design**, and that difference shines through in all phases of our work and continued relationships with our clients.

- Experienced and Licensed Professional Engineers
- Quality, Value-Engineered Project Delivery
- Qualified Construction Representative on Staff
  - LEED-AP Certified
- Below Industry Change Order Status
  - Building Information Modeling
  - Emergency Facility Response



## Engineering Design and Consultation

- Mechanical
- Electrical
- Plumbing
- HVAC Design
- Renovation
- New Construction
- Building Information Modeling

### Aquatic Facility Design

- Public Pools & Areas
- ADA Compliance
- Indoor & Outdoor (air flow)
- Chlorination/Filtration

### Construction Administration

- Maintenance/Facility Improvement Plans
- Contract Administration
- Code Observation

### Communication System

- Intercomm & Public Address
- Voice/Data/CATV
- Urgent Response

### Energy

- Power Supply (main & backup)
- Green & Renewable Consulting
- Systems Utilization & Upgrades
- Sustainable Solutions

### Facility Utilization

- Systems Assessment & Solutions
- Adaptive Re-use
- Planning/Life-Cycle Control
- Engineered Replacement

### Life Safety Inspection/Design

- Fire Protection & Alarm Systems
- Access Control
- Fire & Electrical Investigation

### Industry Experience

- Education
- Local & State Government
- Commercial Development
- Healthcare



**B. Craig Miller, PE**

Craig founded Miller Engineering in 2003, and serves as President and Principal Engineer. He has more than 20 years experience in design, specification, operations and project management. During his employment with WVU, Craig was directly involved with approximately \$130 million in new capital construction and an equal value in infrastructure renovations. His experience with a wide range of projects including HVAC, electrical, plumbing, steam and chilled water central plants, infrastructure upgrades, building automation, energy efficiency and maintenance/renovation, among others,

allows him to serve in multiple capacities within a given project. Craig will serve as the main communication interface between the Owner, the design team, contractors, and end users.

**Project Role: Relationship Manager – Primary Point of Contact**

- Engineer in Responsible Charge
- Design and Project Management of Mechanical, Electrical, Plumbing Projects
- Concept and Construction Design
- Business Operations and Financial Management Oversight
- Quality Assurance and Control

**Professional Project Highlights**

- Morgantown High School Boiler Replacement/ HVAC Upgrades
- Graftek Steam System Improvements
- WVU Life Sciences Building and Student Recreation Center – Owner’s Engineer
- Hawks Nest/Twin Falls HVAC
- Mapletown High School HVAC Replacement Phase I & II
- Advanced Surgical Hospital
- WV State Building 25 HVAC Piping Replacement
- Cheat Lake Elementary & Middle School Renovations

**Professional History**

2003- Present	Miller Engineering, Inc.	President, Relationship Manager
2002-2003	Casto Technical Services	Existing Building Services Design Engineer
2001-2002	Uniontown Hospital	Supervisor of Engineering
1995-2001	West Virginia University	Staff Engineer
1990-1995	BOPARC	Caretaker – Krepps Park
1983-1988	University of Charleston	Electrician/HVAC Mechanic

**Education**

1995	West Virginia University	BS- Mechanical Engineering
1988	University of Charleston	BA- Mass Communications

**Licenses and Certifications**

- Professional Engineer (West Virginia, Pennsylvania, Maryland, and Ohio)
- Licensed Master Plumber
- LEED-AP Certified



### **Travis Taylor, PE**

Experience in project management facilitates Travis's ability to create and design constructible projects. Prior to joining the Miller Engineering team he was directly responsible for managing \$10 million in electrical construction budgets. His experiences encompass both new construction and renovation. Travis maintains professional competencies by attending seminars and continuing education classes. These include local ASHRAE classes in addition to classes on electrical systems, and also steam systems through Shippenburg Pump Company. As lead engineer he provides HVAC, mechanical, plumbing, and electrical design solutions and services for our clients. In addition, he is part of our team's complete assessment process in both planning and MEP design through construction administration.

#### **Project Role: Lead MEP Engineer**

- *Design of Mechanical, Electrical, and Plumbing Systems*
- *Building Information Modeling - Revit*
- *Constructible Materials Evaluation*
- *Site Evaluation and Mechanical System Review*
- *Submittal and RFP Review*
- *RFI Coordination, Review, and Response*
- *Construction Observation*

#### **Professional Project Highlights**

- Blackwater Falls Lodge Boiler Replacement
- MTEC Welding Shop
- North Elementary Boiler Replacement
- WV State Building 36 HVAC Upgrades
- WV State Building 25 HVAC Piping Replacement
- Graftek Steam Systems Evaluations and Modifications
- Bobtown Elementary School HVAC Upgrades
- Holly River State Park Primary Electric Service Replacements Phase I & II
- Pipestem Lodge McKeever Lodge HVAC Piping Replacement

#### **Professional History**

2011-Present	Miller Engineering, Inc.	Staff Engineer
2006-2011	Tri-County Electric, Co.	Project Manager
2006-2006	Schlumberger	Field Engineer Trainee - MWD

#### **Education**

2006 West Virginia University, BS – Mechanical Engineering

#### **Licenses and Certifications**

- Professional Engineer - State of West Virginia
- OSHA 10-hour Course: Construction Safety & Health



## **Robert Angus**

20 Years of maintenance, operations, and construction management precede Rob's engagement with Miller Engineering. Professional expertise of construction project management was gained as an owner of his own contracting company specializing in residential and commercial construction, electrical, plumbing, and HVAC projects. Rob's hands-on approach, common sense and valuable work history knowledge enables him to interface with construction personnel seamlessly alongside engineers and architects. He is adept at preventing and handling issues. Rob is involved at both the design and estimation phase to allow for continuity within the project's design and construction; at times working as a project designer.

### **Project Role: Construction Representative**

- *Construction Project Representation and Management*
- *Construction Administration*
- *Project Cost Estimation*
- *Submittal Review*
- *RFI, RFPCO Review and Response*

### **Professional Project Highlights**

- MTEC Welding Shop
- Blackwater Falls Boiler Replacement
- Morgantown High School Boiler Replacement/HVAC Upgrade
- North Elementary School Boiler/AC
- Mapletown Jr./Sr. High School HVAC/Boiler Upgrade
- 3<sup>RD</sup> Party Construction Observation – Canaan Valley Resort
- Hawks Nest/Twin Falls HVAC
- WVU Research Building Office Renovation

### **Professional History**

2009- Present	Miller Engineering, Inc.	Project Construction Representative
2000-2009	Angus Contracting, LLC	Owner/Operator
1991-2000	BOPARC	Director of Maintenance

### **Education**

2000	Monongalia County Technical Education Center	Heating, Cooling, and Refrigeration Certification
1996	West Virginia University	Recreation and Parks Administration

### **Licenses and Certifications**

- Licensed West Virginia General Contractor
- Licensed West Virginia HVAC Contractor
- Certified HVAC Mechanical Contractor
- Licensed West Virginia Journeyman Electrician
- Licensed West Virginia Master Plumber
- OSHA 10-Hour Construction Safety & Health

## Staff – Qualifications and Experience



### **Jack Jamison**

Jack brings 20 years as an electrical/building inspector and over 25 years of experience in the commercial electrical construction industry. His knowledge and experience are valuable resources to Miller’s complete assessment process.

#### **Project Role: Master Code Official**

- *Facility Review, Code Research, Field Observations, Issue Resolutions, and Project Evaluation*

### **Professional History**

2010- Present	Miller Engineering, Inc.	Code and Construction Specialist
1999-2010	Megco Inspections	Chief Inspector
1972-1998	Jamison Electrical Construction	Master Electrician

### **Education**

1971 Fairmont State College, BS-Engineering Technology-Electronics

### **Licenses and Certifications**

- Master Code Professional, IAEI Master Electrical Inspector, Class C Electrical Inspector – WV, PA, MD, & OH
- ICC Commercial Building, Building Plans, Commercial Plumbing, Residential Energy, and Accessibility Inspector/Examiner
- WV Master Electricians License
- NCPCCI-2B, 2C, 4B, 4C: Electrical & Mechanical General/Plan Review
- OSHA 30 Hour Course: General Industry
- NFPA Code Making Panel 14 – NEC 2014 Edition





## **Joseph Machnik**

Joe has experience with AutoCAD, MEP and Revit MEP. He provides design modeling, drafting and supervised design services and construction support for Miller Engineering.

### **Project Role: MEP Designer**

- *Revit/CADD Coordination of New Construction and Renovation Designs*
- *Building Information Modeling Specialist*

### **Professional Project Highlights**

- Bobtown Elementary HVAC
- WV State Building 25 HVAC Piping Replacement
- Blackwater Falls Boiler Replacement
- Suncrest Middle Gym HVAC
- North Elementary Gym HVAC
- Graftek Steam Systems Evaluations and Modifications
- WV State Building 36 HVAC Upgrades
- Pipestem Lodge HVAC Piping Replacement
- Westwood Middle Cooling Tower

### **Professional History**

2010 – Present Miller Engineering, Inc. MEP Designer

### **Education**

2008 Penn State – Fayette, AS - Building Engineering Systems Technology: *Building Environmental Systems Technology*

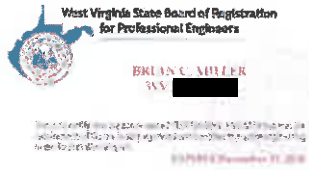
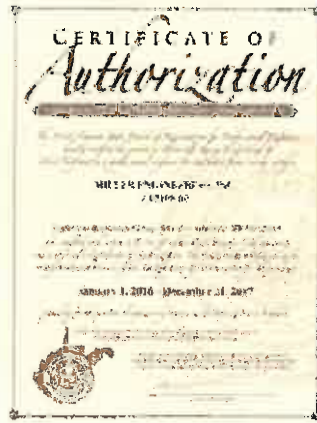
2007 Penn State – Fayette, AS - Building Engineering Systems Technology: *Architectural Engineering Technology*

### **Additional Training**

2016 – Shippenburg Pump Company – Steam Systems Training



# Licenses and Certifications



# LASALLE ENGINEERING, LLC

FIRE PROTECTION AND LIFE SAFETY ENGINEERING

1000 York Road  
Willow Grove, PA 19090

Phone: 215.658.1770  
Fax: 215.658.1772

## **LaSalle Engineering, LLC** **Firm Profile**

LaSalle Engineering, LLC is a consulting engineering firm specializing in fire protection and life safety engineering, code consulting, litigation support, and construction administration. Founded in June, 2004, the firm's performance philosophy is based on the following principles:

- Understanding our clients' problems, goals, and expectations.
- Developing solutions that achieve these goals in a cost-effective way.
- Creating an atmosphere of cooperation and respect with all team members.
- Focusing on practicality, maintainability, and reliability of systems and solutions.
- Recognizing the unique roles individuals play in fire and life safety solutions.
- Integrating engineering principles into a largely code-driven field of practice.

Although these principles may seem obvious, their successful implementation requires technical excellence, effective communication, respect for all viewpoints, and a desire to create a safer community.

LaSalle Engineering, LLC advocates a holistic approach to building fire safety based on engineering and systems-oriented principles. We believe in solving fire protection problems through the application of state-of-the-art fire engineering knowledge and technologies, education, and with a cooperative approach that recognizes the unique contributions of all stakeholders. We recognize that code compliance is important, but codes address neither the specific needs of building owners nor unique building designs. Appropriate, cost-effective building fire safety depends on an understanding of goals, the reliability and maintainability of the systems, and the roles of people in fire safety practice.

LaSalle Engineering's areas of expertise include:

- Fire Safety Strategic Planning
- Fire Suppression Systems Analysis & Design
- Fire Alarm Systems Analysis & Design
- Smoke Control Systems Analysis & Design
- Life Safety Analysis & Design
- Firestopping Systems Analysis & Design
- Combustible Gas Detection Systems
- Hydraulic Modeling & Water Supply Analysis
- Fire Modeling
- Building & Fire Code Consulting
- Building Accessibility Consulting
- Life Safety Code Consulting
- Project Management
- Construction Administration
- Fire Hazard Assessment
- Fire Risk Management
- Fire Safety Inspections/ Audits
- Systems Failure Analysis

### **TECHNICAL TEAM:**

#### **Jeffrey LaSalle, PE - Principal & Director of Engineering**

*M.S. in Fire Protection Engineering, Worcester Polytechnic Institute, October, 1988.*

*B.S. in Fire Science, John Jay College of Criminal Justice, NY, June, 1985*

**David L. Klepitch, PE – Senior Fire Protection Engineer**

*M.S. Fire Protection Engineering, University of Maryland at College Park, 2004*

*B.S. Fire Protection Engineering, University of Maryland at College Park, 1993*

*B.S. Physics, Frostburg State University, 1992*

**Steven Dupre – Fire Protection Engineer II**

*M.S. in Fire Protection Engineering, Worcester Polytechnic Institute, June, 2017*

*B.S. in Mechanical Engineering, University of Rhode Island, June, 2015*

**Bryan Baker – Fire Protection Technician**

*A.S. in Fire Protection Engineering Technology, DelTech, June, 2013*

**REPRESENTATIVE CLIENTS:**

<p><b><u>Architects/ Engineers:</u></b>                  GAI                  EwingCole                  Cannon Design                  Metcalfe Architects                  KSS                  RTKL                  Studio Agoos Lovera                  Whitman, Requardt &amp; Associates                  HB Engineers                  Bohler Engineering                  Precis Engineering</p>	<p><b><u>Owner/ Developer:</u></b>                  Philadelphia Regional Port Authority                  Smithsonian Institution                  Dranoff Properties                  Bok Building (Scout)                  Liberty Property Trust                  The Grande at Riverview                  General Services Administration                  Comcast                  Goldman Properties</p>
<p><b><u>College/University Facilities:</u></b>                  Virginia Tech                  University of Pennsylvania – Wharton School                  Lehigh University                  Pennsylvania State University                  Saint Joseph’s University                  Emory University/ Georgia Tech                  Haverford College</p>	<p><b><u>Sports and Entertainment Facilities:</u></b>                  Pennsylvania State University Bryce Jordan Center                  Allentown Arena                  Citizen’s Bank Park</p>
<p><b><u>Chemical/ Pharmaceutical/ Industrial Facilities:</u></b>                  DOW Chemical                  Regeneron                  Honeywell                  Cobham                  FPD                  Rinchem                  Polysciences</p>	<p><b><u>Health Care Facilities:</u></b>                  Penn Medicine - Lancaster General Health                  Washington Adventist                  Riverside Health                  Thomas Jefferson University                  Department of Veteran’s Affairs                  Bryn Mawr Hospital                  St. Luke’s Hospital                  Doylestown Hospital                  NAS Jacksonville</p>

**Summary of Experience by Facility and Building Type**

Activities	Facility and Building Types												
	Commercial	Health Care	Sports	Museum & Historic	Academic	College & University	Residential	Research & Development	Telecommunication	Industrial	Nuclear	Fossil Fuel	Petrochemical
Building fire protection audits	X	X	X	X	X	X	X	X	X	X		X	X
Fire hazard analysis	X	X		X				X	X	X		X	X
Code consulting	X	X	X	X	X	X	X	X	X				
Fire modeling	X	X	X	X			X		X				
Timed exit calculations	X		X	X									
Hydraulic modeling and water supply analysis	X	X	X	X	X	X	X	X			X		X
Fire alarm system analysis and design	X	X	X	X	X	X	X	X	X				
Fire protection system analysis and design	X	X	X	X	X	X	X	X	X	X			
Construction administration	X	X	X	X	X	X		X					
Systems failure analysis	X	X	X				X						
Performance-based design	X	X	X	X									X
Negotiation with AHJs	X	X	X	X	X	X		X					
Life safety design	X	X	X	X	X	X		X					
Structural fire protection design	X		X	X									
Risk-based Assessment				X								X	X
Smoke control system commissioning	X	X	X										
Firestopping design	X	X	X	X	X	X							
Litigation Support	X						X			X			
Fire Testing									X				

### ***Fire Protection Engineering and Fire Safety Systems Design:***

The Miller Engineering/ Montum Architecture team is supported by LaSalle Engineering (LE), a Willow Grove, Pennsylvania- based Fire Protection Engineering firm. The LaSalle FPEs are specially trained through their education and experience to deal with fire protection and life safety problems in a holistic manner. We focus on our clients' fire safety objectives and we develop solutions to achieve these objectives, which can be defined in terms of life safety, property protection, and continuity of operations. Our team possesses extensive experience in the analysis, engineering, and design of fire alarm and fire protection systems, in the interpretation and application of building and fire codes, and in specialized fire and hydraulic modeling.

The LaSalle Fire Protection Engineers focus on more than specifying sprinkler and fire alarm systems. We are trained to assess fire hazards and risks and we work to develop solutions that employ the entire building fire safety system and provide owners with maximum flexibility for building operations. This is especially important for historic facilities that have architectural features that challenge contemporary codes. When necessary due to the nature of the building, we focus on the integration of systems with the building architecture in a way that meets or exceeds our clients' expectations.

We always work closely with the relevant Authorities Having Jurisdiction (AHJ) throughout project design and construction. As stakeholders in the process their input is critical to the success of the project and the long-term reliability of systems. LaSalle Fire Protection Engineers understand, interpret, and apply building, fire, and life safety codes, but we also know that code requirements are minimum standards that often are insufficient in mitigating a building owner's unique risks. When a design challenges the strict requirements of the code we can develop creative performance-based solutions that meet code requirements in a cost-effective manner.

Our specific experience in historic buildings and museums includes hazard analysis, existing sprinkler system analysis, hydraulic modeling to assess water supply adequacy, water flow testing, design of new self-contained fire protection water supply and distribution systems, negotiation with FM Global and local AHJs on appropriate design basis requirements for specialized hazard areas, specialized smoke detection system design (VESDA) for high-risk areas, design of smoke control systems for sensitive archive storage, and new and retrofit design of Fire / Emergency Voice Alarm Communications Systems (EVACS) and Mass Notification Systems (MNS). While many of these systems are required by applicable building/ fire codes others were solutions that derived from detailed hazard analysis and fire risk assessments that focused on specific owner objectives.

We understand the need for attention to detail in design and how systems maintenance affects reliability in fire protection. It's easy to specify a system to meet a code obligation, but it requires another level of focus to make sure that the solution is appropriate for the hazard, meets the owner's objectives, and can be built and maintained so that the systems' reliability remains high.



**LaSALLE ENGINEERING, LLC**

**Jeffrey LaSalle, PE**

**Summary:**

Mr. LaSalle has been a fire protection engineer and consultant since 1988 when he received a Master of Science in Fire Protection Engineering from Worcester Polytechnic Institute. Throughout his career, Mr. LaSalle has worked in a variety of roles across building and facility types including industrial, telecommunications, research & development, residential, health care, academic, museum, sports, and commercial facilities. His experience includes fire testing, fire hazard analysis, fire protection audits, life safety consulting and design, fire protection and alarm systems analysis and design, smoke control system analysis and design, systems failure analysis, fire investigation, systems commissioning, structural fire resistance and firestopping analysis, and construction administration.

Mr. LaSalle has experience in litigation support and fire modeling in support of case development. He has been deposed as an expert witness in Florida and Pennsylvania, and has supported litigation on behalf of plaintiffs and defendants. His areas of testimony include building and fire codes, systems design and failure analysis, human behavior in fire, fire spread, and systems response.

Mr. LaSalle's areas of expertise include:

- Fire Safety Strategic Planning
- Fire Suppression Systems Analysis & Design
- Fire Alarm Systems Analysis & Design
- Smoke Control Systems Analysis & Design
- Life Safety/ Egress Analysis & Design
- Building & Fire Code Consulting
- Life Safety Code Consulting
- Building Code & Fire Safety Audits
- Firestopping System Engineering Judgments
- Project Management
- AHJ Negotiations
- Structural Fire Resistance Analysis
- Hydraulic Modeling & Water Supply Analysis
- Fire Alarm System Audibility Studies
- SOC Life Safety Assessments
- Fire Safety Systems Commissioning
- Fire Hazard Assessment
- Fire Risk Management
- Systems Failure Analysis
- Litigation Support

**Professional Licensure:**

Registered Professional Engineer:

Pennsylvania, Maryland, Massachusetts, Virginia, New York, Georgia

Certified Fire and Explosion Investigator

**Education:**

M.S. in Fire Protection Engineering, Worcester Polytechnic Institute, October, 1988.

B.S. in Fire Science, John Jay College of Criminal Justice, NY, June, 1985



***Affiliations:***

Society of Fire Protection Engineers, Member  
SFPE Philadelphia Delaware Valley Chapter, President  
National Fire Protection Association, Member  
National Society of Professional Engineers, Member  
International Code Council, Member  
American Society for Healthcare Engineering, Member  
City of Philadelphia Board of Safety and Fire Prevention, Member  
Salamander Honorary Fire Protection Engineering Society, Gamma Chapter Member

***Employment History:***

***LaSALLE ENGINEERING, LLC***

June, 2004 – Present  
Principal

***EWINGCOLE (Formerly Ewing Cole Cherry Brott)***

April, 1997 – June, 2004  
Principal & Lead Fire Protection Engineer

***BRINJAC, KAMBIC & ASSOCIATES***

February, 1994 - April, 1997  
Fire Protection Engineer

***ROBSON LAPINA & ASSOCIATES***

July, 1996 – September 1998  
Forensic Engineer

***MAIDA ENGINEERING, INC.***

May, 1990 - February, 1994  
Fire Protection Engineer

***PROFESSIONAL LOSS CONTROL, INC.***

July, 1989 - May, 1990  
Fire Protection Consultant

***BELL COMMUNICATIONS RESEARCH (BELLCORE)***

July, 1988 - July, 1989  
Member of Technical Staff

***BOSTON FIRE DEPARTMENT, FIRE PREVENTION DIVISION***

August, 1986 - February, 1988  
Fire Protection Intern



***Papers and Presentations:***

"Sustainable Fire Protection Water Supply for the Smithsonian Environmental Research Center", Co-Presented with Michael Kilby, SFPE North America Conference & Expo, November 2015.

"Life Safety Communications Systems – Designing for Success", Silent Knight Seminar Philadelphia, PA, March 5, 2014

"Meeting Building Fire Safety Challenges in the 21<sup>st</sup> Century" Co-Presented with Kevin Kimmel, November 5, 2008, Design on the Delaware Conference, Philadelphia, PA

"What's at Risk?" *Consulting-Specifying Engineer*, September, 2005.

"Beyond Traditional Inspection and Testing of Fire Alarm Systems", *Consulting-Specifying Engineer*, May, 2004.

"Performance Based Fire Protection Design", The Thirty-Sixth Annual Safety & Education Seminar, Philadelphia Fire Department, June 10, 2004.

"It is a People Business: Developing a Design Process to Balance Concerns of Diverse Stakeholders in the Planning of Cultural Institution Facilities", Co-Presented with Walter Crimm, AIA, 2004 National Conference on Cultural Property Protection, Sponsored by the Smithsonian Institution, February 10, 2004.

"Avoiding Sprinkler Installation Surprises". Co-Presented with Gary Falasca, PE, ERAPPA 53<sup>rd</sup> Annual Conference, Philadelphia, 2003.

"The Future of Codes and Fire and Life Safety Design", Presentation to the Philadelphia Fire Department, December 14, 2001.

"Cultural Considerations on Fire Safety Design in the 21<sup>st</sup> Century", Second International Conference on Firesafety Design in the 21<sup>st</sup> Century, Worcester, MA, June, 1999.

"Performance-Based Codes" and "Performance Design & Fire Fundamentals", AIA Central Pennsylvania Seminar: Integrating Life Safety Concepts into Architecture, Part II, Lancaster, PA, April, 1997.

"Current Trends in Performance-Based Design", Hospital Engineers Association of Delaware Valley Trade Show and Seminar, April, 1997.

"The Use of a Risk-Based Engineering Method in the Analysis of Alternative Levels of Building Fire Safety", International Conference on Performance-Based Codes and Fire Safety Design Methods, September, 1996.

"Fundamentals of Smoke Production and Movement", Pennsylvania Facilities Managers





Association 1995 Fall Conference, October, 1995.

"Fire Dynamics Primer" and "Atrium Design Issues", AIA Central Pennsylvania Seminar: Integrating Life Safety Concepts into Architecture, Harrisburg, PA, June, 1995.

"Sprinkler System Conceptual Design", IFEMTA Risk Management Conference, King of Prussia, PA, September, 1993.

"Fundamentals of Fire Protection Systems", National Association of Women in Construction, Philadelphia, PA, October, 1990.



**La SALLE ENGINEERING, LLC**

**David Klepitch, PE**

**Summary:**

Throughout his career, Mr. Klepitch has worked in a variety of positions in fire protection encompassing many diverse industries including health care, residential, industrial, storage, colleges and universities, data centers, government, museum, hazardous materials and other commercial facilities. Mr. Klepitch’s experience includes fire hazard analysis, fire protection surveys and audits, fire protection and fire alarm systems analysis and design, building and fire code review and interpretation, water supply testing and analysis, life safety consulting and design, smoke control system analysis and modeling, fire suppression and fire alarm systems commissioning, and construction management and administration.

Mr. Klepitch also has experience with performance-based design. This work includes the development of equivalent methods for code compliant design using fire, smoke and egress modeling. The process includes developing methodology, technical report writing and presenting proposed concepts to code officials and authorities having jurisdiction.

Mr. Klepitch’s areas of expertise include:

- Fire Alarm Systems Analysis & Design
- Smoke Control Systems Analysis & Design
- Life Safety Analysis & Design
- Fire Suppression Systems Analysis & Design
- Mass Notification Systems Analysis & Design
- Hydraulic Modeling & Water Supply Analysis
- Performance-Based Design
- Fire & Smoke Modeling
- Project Management
- Construction Administration
- Fire Hazard Assessment
- Fire Risk Management
- Fire Safety Inspections/ Audits
- Building & Fire Code Consulting
- Fire Scene Investigation and Analysis

**Professional Licensure:**

Registered Professional Engineer, Maryland and Virginia

**Education:**

M.S. Fire Protection Engineering, University of Maryland at College Park, 2004  
B.S. Fire Protection Engineering, University of Maryland at College Park, 1993  
B.S. Physics, Frostburg State University, 1992

**Affiliations:**

National Fire Protection Association (NFPA)  
Society of Fire Protection Engineers (National Chapter)

### REPEAT CLIENTS

One of the highest recommendations for HBA's performance is when a client asks us to continue with a new phase of work. It speaks to their confidence in our ability to perform services on time, within budget and to the highest of standards. We have worked with many of our clients for 5 years or more and have completed numerous phases of work. Examples include 14 years and 4 phases of work at Iviswold Castle, Felician College, Rutherford, NJ, 4 Phases of work at Saint Francis de Sales, Philadelphia since 2007, 3 phases of work at The Museum of Early Trades and Crafts, Madison, NJ, and 3 phases of work at The Frazee House, Fanwood-Scotch Plains, NJ. The President of the Fanwood-Scotch Plains Rotary Club wrote: "It is your thorough guidance and perseverance as a professional team, including excellent consultants such as Silman that have helped guide us through this long and complicated process."

### THE PROJECT TEAM

Key to the success of any project is the continuity of the excellent long standing working relationships with our consultants and the ability to have a transparent clear communication path with both the design team and our clients. Vivian James, Director of the Museum of Early Trades and Crafts put it well when she wrote: "The firm is both highly professional, conscientious and has an excellent team of consultants who clearly enjoy working together and providing us with a clear understanding of the issues at hand."

### COMPREHENSIVE SUB-CONSULTANT SERVICES

Historic Building Architects has managed the work of large teams of specialists on many existing public building projects over the years. Megan Jenkins is an experienced Project Manager, who manages HBA's in-house team and will lead the coordination of the Project Design Team. The consultants are chosen to insure that the team as a whole is well prepared to deliver the professional services requested. HBA has a long history of successful collaboration with their consultants, many of whom they have worked with for more than 20 years.

### HISTORIC BUILDING ARCHITECTS AWARDS

- 2017 New Jersey State Historic Preservation Award for the John Buzby House (BAYADA Headquarters), Moorestown, NJ
- 2017 AIA NJ Merit Award for the John Buzby House (BAYADA Headquarters), Moorestown, NJ
- 2015 New Jersey Historic Preservation Award for Passaic County Court House and Annex National Register Nomination
- 2014 The Victorian Society of America National Award for Iviswold Castle, Felician College, Rutherford, NJ
- 2014 AIA NJ Merit Award for the Restoration & Adaptive Use at Felician College, Rutherford, NJ
- 2013 New Jersey Historic Preservation Award for the Interior Restoration & Adaptive Use at Felician College, Rutherford, NJ
- 2013 New Jersey Historic Preservation Award for the Phase I Restoration & Rehabilitation of Greenwood Gardens, Short Hills, NJ
- 2012 Preservation Alliance Grand Jury Award for the Phase I Rehabilitation Project at Saint Francis de Sales, Philadelphia, PA
- 2011 Faith & Form AIA National Merit Award for Architectural Restoration for the St. Bernard's Episcopal Church, Bernardsville, NJ
- 2011 New Jersey State Historic Preservation Award for the Kennedy-Martin-Stelle Farmstead, Basking Ridge, NJ
- 2010 New Jersey State Historic Preservation Award for the John Frederick Peto House and Studio, Island Heights, NJ
- 2010 New Jersey State Historic Preservation Award for the First Presbyterian Church on the Green, Bloomfield, NJ
- 2009 Sophia Jones, Assoc. AIA honored as Intern Architect of the Year by the American Institute of Architects, New Jersey Chapter
- 2007 New Jersey Historic Preservation Award for Felician College, Rutherford, NJ



### EXPERIENCE WORKING ON EXISTING PUBLIC BUILDINGS

Historic Building Architects, LLC (HBA), founded by Annabelle Radcliffe-Trenner in 1994, has one central mission: high-quality repair, renovation, and adaptive use of historic and existing public buildings. Over the past 20 years, HBA has earned a national reputation for completing significant renovation projects on time, within budget, and to high standards. The firm has guided the renovation of many significant public buildings, including the rehabilitation of Iviswold Castle, the main administration building at Felician College, Rutherford, NJ (\$10M); the interior and exterior masonry renovation of the Cadet Chapel at the United States Military Academy, West Point, NY (\$2.5M); the renovation of Greenwood Gardens, Short Hills, NJ (\$5.5M). One of the chief reasons that HBA has achieved a record of delivering excellent results is that we plan and perform thorough condition assessments that are customized for each building and believe in investing in detailed program studies so we understand fully the needs of our clients before developing layouts.

### QUALIFICATIONS IN HISTORIC PRESERVATION

The principal of Historic Building Architects, Annabelle Radcliffe-Trenner, and all other senior members of HBA's technical staff are qualified under the Federal Guidelines set out by the National Park Service in 36 CFR Part 61. In addition, HBA is highly familiar with *The Secretary of the Interior's Standards for Rehabilitation* because we apply these standards for the repair and renovation of the buildings we work on. In addition, HBA is also very familiar with the submission and review process at the State level for historic buildings because almost all of the buildings we work on are listed on the National Register of Historic Places. Since HBA was founded over 20 years ago, the firm has operated a materials conservation laboratory. Our lab, including a new portable lab enables us to conduct mortar analysis and replication, and paint analysis, and perform comprehensive material restoration testing, including the testing needed for cleaning masonry correctly. Our work is complemented by our consultant Non-Destructive testing. This approach means that we provide contractors with accurate information on how to repair materials and therefore receive more accurate bids because we remove the guess work from the bidding process.

### EXPERIENCE WORKING ON OCCUPIED BUILDINGS

All the buildings that HBA work on are existing; so most of them are occupied. As a result, HBA is very familiar with identifying and solving the health, safety, noise, and access issues special to occupied buildings. We also have extensive experience working on museums that hold unique and valuable collections (for example, the Museum of Early Trades & Crafts, Madison NJ). In addition, we often work on large religious buildings that must be open for services. This has helped us develop expertise in protecting structures while construction activities are on going and then repeatedly reopening the buildings on weekends. Moreover, many of the buildings that we repair, restore, or adapt for new uses are within urban congested areas, we have developed strategies and processes for solving pedestrian access and parking problems. Another challenge we have learned to meet is the protection of existing finishes and furnishings. Because we have had to overcome the potential hazards of construction within occupied buildings so often, we know how to design architectural solutions that are realistic, practical, and appropriate in every given situation.





Timothy Hart, Division Director of Ocean County Cultural and Heritage Commission put it well after an on site investigation day at Cedar bridge Tavern.

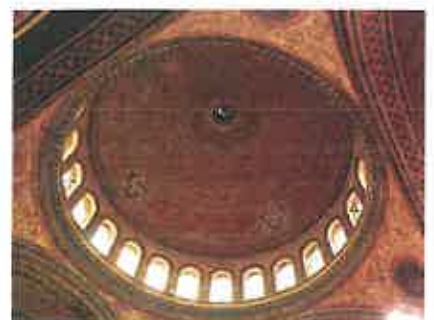
"I am writing to note how impressed I was with your professional and well organized operation yesterday at Cedar Bridge Tavern. At different levels I have been involved in several preservation plans and/or nominations. Over many decades of civic and professional involvement, I have been involved in many projects involved with consultants of various styles and levels of competency. The open, transparent and professional process you and your team demonstrated last Friday and yesterday was by far the most productive and amazing that I have ever experienced or witnessed. The best! I have never participated in any investigation to match this professional experience. You assembled a group of self evident, immanently qualified professionals, who were eager to collaborate in a focused investigation. You used technology to inform your research without becoming dominated by the gadget of the day!"

### INNOVATIVE ASSESSMENT TECHNOLOGY

The team at HBA is committed to a philosophy of safe and effective field assessment work that is efficient and accurate using technology to transpose data in the field directly into electronic documents. In addition, we use a Small Unmanned Aircraft System to document high-level areas using video documentation. This innovative technology allows us to take film and photographs and minimizes the use of a lift to access high-level inaccessible areas. Most recently we have developed software with waypoints that allows us to set the flying camera on a prescribed route, over roofs, and around towers. Looking down on conditions instead of up with binoculars gives us a better and more accurate perspective on weathered material conditions. Back at HBA we can review the video. These user-friendly assessments are also coordinated with the consultants information and integrated into one document making it user-friendly while addressing complex the inter dependent aspects of a building condition assessment. We are currently looking into animating these documents to allow you to use them interactively by touching the screen and accessing additional useful more detailed information as a supplement. The focus of HBA is to make sure that the technology used improves our field observation and allows us to develop more accurate documents.

### BROAD EXPERIENCE IN EMERGENCY MANAGEMENT

Over the years, Historic Building Architects has taken the lead in formulating and implementing successful repair solutions for emergency situations on several historic public buildings. Examples include the rebuilding of St. Bernard's Church (Bernardsville, NJ) after a devastating fire destroyed much of the church; the repair of failed and collapsed masonry on several large buildings; and the implementation of temporary emergency shoring and protection, for example, Saint Francis de Sales (Philadelphia, PA), including extensive interior scaffolding, to support The Frazee House (Scotch Plains, NJ). In addition, HBA has developed various mothballing plans in accordance with National Park Service Guidelines. HBA has worked on two projects that involve damaged properties in New Jersey: Cedar Bridge Tavern (Ocean County) and Hillsborough Reformed Church (Hillsborough, NJ). HBA is managing the coordination and review of the projects with the New Jersey State Historic Preservation Office. In summary, HBA offers very quick response times and partners with Silman, Structural Engineers, who are specialists in old buildings. Finally, Annabelle Radcliffe-Trenner is a Disaster Service Worker Volunteer and completed the State of California Safety Assessment Program in 2012.





# Historic Building Architects, LLC

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## ANNABELLE RADCLIFFE-TRENNER, AIA, RIBA, LEED AP

### FIRM PRINCIPAL AND PRESERVATION ARCHITECT

#### EDUCATION

2017 FAA Certified sUAS Pilot under FAA Part 105

2012 Safety Assessment Evaluator Certification with California Emergency Management Agency

2010, LEED AP Certified

1994, Certificate in Preservation Architecture, ICCROM, Rome, Italy

1986, Diploma in Architecture (Master of Architecture Equivalent), Edinburgh University, Scotland

1985, Master Class in Conservation (Architectural Preservation Course), Edinburgh University, Scotland

1983, Bachelor in Science in Architecture, Dundee University, Scotland

#### ARCHITECTURAL REGISTRATION

National Council of Architectural Registration Boards Certified, Pennsylvania, New Jersey, & Virginia and Architects' Registration Council, United Kingdom

#### EXPERIENCE AND QUALIFICATIONS

1994-Present, Annabelle Radcliffe-Trenner is the founding Principal of Historic Building Architects, LLC, Trenton, NJ, an award winning firm specializing in historic buildings in the public realm. She was trained as a preservation architect in Scotland and then at ICCROM in Rome, before moving to the United States in 1988. Her qualifications meet the Federal Standards for a Historic Architect 36 CFR Part 61 Appendix A (d). She has a keen interest in the long-term planning for and the ethics of intervention on historic buildings and the adaptive use of existing buildings. The use of innovative technology, including Non-Destructive Evaluation techniques and material science are part of the successful professional team collaboration that is the keystone to her project work. Eager to educate the public, she lectures on preservation issues internationally.

#### SELECTED PUBLIC LECTURES, TEACHING, AND PUBLICATIONS

NJ Historic Preservation Conference, Beyond the Tape Measure, Seton Hall 2016

Creating Strong Vision Plans for Our Vernacular Heritage, APTI '16 San Antonio

Application of sUAS on Preservation Projects, APTI Documentation Conference Philadelphia, PA 2016

NJN Life and Living Interview with Joanna Gaggis on The Iviswold Castle Renovation Rutherford NJ '15

Of Drones, Phones and the Future of Preservation Technology, College of Charleston, SC '15

Construction History Society of America 3rd Biennial Meeting '12, Detailing Guastavino Domes for Durability

Slate A Traditional Material with Modern Expectations. What can go wrong? APTI '10 Denver, CO

Post-Fire Investigation, St. Bernard's Church, NJ, SACoMaTiS '08, Varenna, Italy

Wood Workshop Instructor, APTI '07, Puerto Rico

Religious Property Maintenance, Episcopal Diocese of New Jersey Convention '05, Cherry Hill, NJ

Article: Holy Care of Holy Places Vestry Papers May/June 2005

Article: APT Bulletin Journal of Preservation Technology 36:2-3 2005 Wood Assessment and Repair of Gustav Stickley's Log House at Craftsman Farms, New Jersey

Wood Assessment and Repair at the Log House designed by Gustav Stickley - APTI '04, Galveston, TX

A Case Study in Traditional Limewash Coatings APTI '03, Portland, ME

Building Maintenance and Management, National Park Service Training Lecturer '03 Princeton University, NJ

#### PROFESSIONAL AWARDS

2000-2016 Received numerous National and New Jersey State Historic Preservation Awards

2000, Young Architect of the Year, AIA/NJ (American Institute of Architects/New Jersey Chapter)

#### PUBLIC SERVICE, SOCIETIES AND ORGANIZATIONS

English Speaking Union - Board Member, Treasurer

Association Preservation Technology International- Board Member, Chair of Membership Committee



## MEGAN JENKINS

### SENIOR DESIGNER & PROJECT MANAGER

#### EDUCATION

Master of Architecture, Certificate of Historic Preservation  
University of Cincinnati, Cincinnati, OH

Bachelor of Arts, Theatre and Italian Studies  
University of California, San Diego, CA

#### EXPERIENCE AND QUALIFICATIONS

Historic Building Architects, LLC, Trenton, NJ.

Megan's design background is unique, as it blends architecture with theater stage design. Her interest in craft and narrative to architecture developed from her experience as a professional costume designer. She realized early in her career that historic building preservation was her true creative passion. Megan has experience working in existing buildings in New Orleans, Washington, D.C., California, as well as in Europe. She also has experience with new construction both in the United States and in Europe. Megan has assisted with the numerous condition assessments, documentation projects, adaptive reuse and renovation designs, and emergency repairs at several National Historic Sites.

2013 – 2017 Architectural Resources Group, San Francisco, CA

Conducted surveys and condition assessments of historic properties, including National Historic Sites. Coordinated with consultants through all phases of the design process of historic projects, including stabilization, rehabilitation, and adaptive reuse.

2012 architrave p.c., architects, Washington, D.C.

Worked with several national-level museums and government buildings in upgrades, maintenance, and rehabilitation.

2010 D'Azzo Associati Architetti

Drafted designs for historic buildings. Also, worked on the schematic design phase of a large-scale hospitality project.

#### SOFTWARE PROFICIENCY

AutoCAD, Adobe Suite, Revit, SketchUp

#### MEMBERSHIPS

ASSOCIATE AIA

ASSOCIATION FOR PRESERVATION TECHNOLOGY INTERNATIONAL

ASSOCIATION FOR PRESERVATION TECHNOLOGY, WESTERN CHAPTER

MEMBER, DOCUMENTATION AND CONSERVATION OF BUILDINGS, SITES, AND NEIGHBORHOODS OF THE MODERN MOVEMENT (DOCOMOMO USA)



## **Montum Architecture**

Montum Architecture, LLC was founded in 2017 to provide architectural design services to clients in West Virginia and western Maryland. Staff includes one licensed architect performing all tasks and duties. This ensures the utmost coordination of building plans and specifications with minimal potential for miscommunication.

### Legal Organization

Montum Architecture is a Limited Liability Corporation initially filed in the State of West Virginia. The company is also registered in the State of Maryland as a foreign LCC.

### Communication

Tom Pritts will be the primary point of contact for Montum's architectural services.

### Project Budget

Previous work experience has shown a consistent +/-2% bid-to-budget ratio.

### Project Schedule

Montum will monitor and adjust the design tasks in order to complete the design work on the established timetables. They will also work diligently during project construction to maintain the contractual constraints placed as part of the contractor's bid.

### Design Software

Montum utilizes Autodesk Revit for all design projects incorporating three-dimensional modeling and parametric reporting.

### Applicable Experience

Montum has designed many interior renovations, including many that are driven by Mechanical, Electrical, and Plumbing needs. Tom has previous experience in specifying and designing projects for buildings on the National Historic Register. He has prepared Section 106 submissions to the WV State Historic Preservation Office.





### **Thomas Pritts, AIA, LEED-AP, CSI-CCS**

Tom founded Montum Architecture in 2017. He has more than 15 years experience in design, specification, and project management. During his former employment, Tom has designed and managed dozens of built projects. His experience encompasses a wide range of projects including K-12 and higher education facilities, financial Institutions, emergency services buildings, and automotive dealerships. A native of Mineral County, Tom is member of the West Virginia Chapter of American Institute of Architects and was involved in the establishment of the US Green Building Council's West Virginia chapter. He is highly skilled in the design of complex building systems, technical construction detailing and specifying, and construction contract administration. These skills were critical in the development and maintaining of many multi-year, multi-project relationships with Clients in his previous employment.

### **Project Role: Relationship Manager – Primary Point of Contact**

- Principal in Charge
- Design and Project Management
- Concept and Construction Design
- Quality Assurance and Control

### **Professional History**

2017- Present	Montum Architecture	Architect
2004-2017	Alpha Associates	Associate and Architect
2003	Marshall Craft Associates	Architectural Intern

### **Education**

2004	Virginia Tech	Bachelors of Architecture
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### **Licenses and Certifications**

- Licensed Architect (West Virginia, Maryland)
- NCARB Certificate
- Construction Specifier Institute – Certified Construction Specifier
- LEED-AP Certified
- 30-hour OSHA Card

### **Professional Project Highlights**

- Potomac State College – Bachelor of Nursing Renovation
- Wyoming East High School HVAC Renovation – Wyoming County Schools, WV
- Mountainview and MTEC HVAC Renovation – Monongalia County Schools, WV
- Berkeley Springs State Park – Pool Bathhouse Roof Replacement
- Berkeley Springs State Park – Old Roman Bath Renovation
- Blackwater Falls State Park – Boiler Room Renovation
- Our Lady of the Mountains Parish – Bathroom Renovation
- Mountain View Assembly of God – Rec Hall Ceiling Design

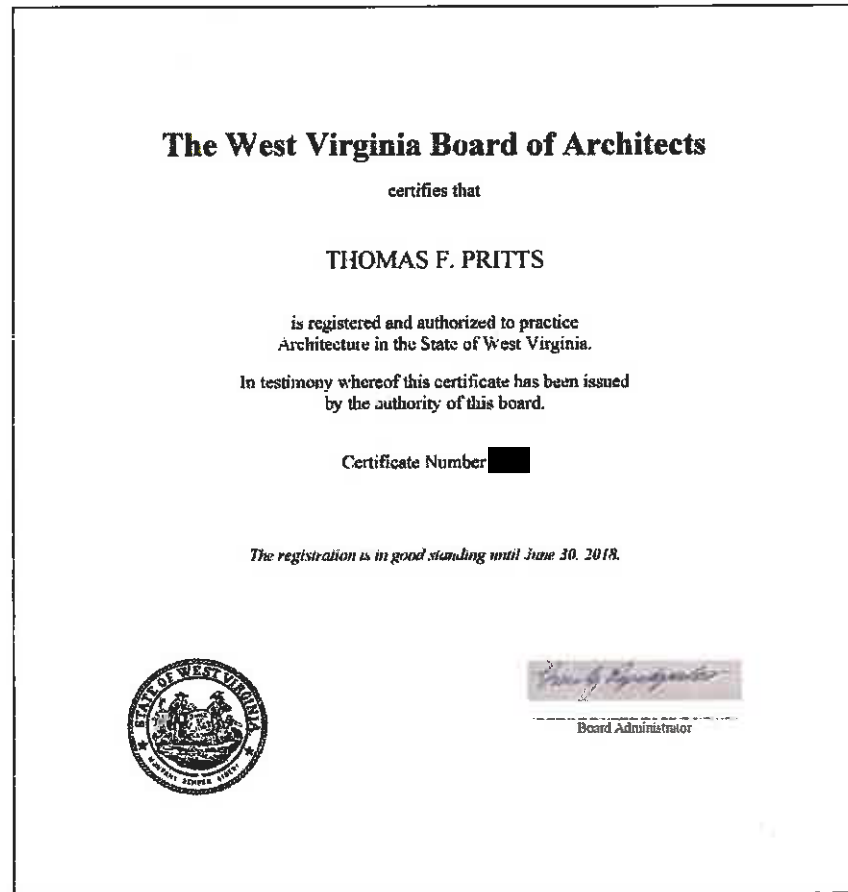
# Montum



## **Professional Project Highlights (former employment built projects)**

- Potomac State College – ADA Connector Building, Church-McKee Plaza, Shipper Library Façade
- WVU Engineering Sciences Building – East Wing Addition, 10<sup>th</sup> Floor Fit-Out, Basement Renovation
- WVU Engineering Research Building – G07 & G08 Renovation
- WVU Equine Education Center
- WVU College of Physical Activities and Sports Sciences/ Student Health Center
- WVU Center for Alternative Fuel Engines and Emissions
- WVU Colson Hall Water Infiltration Repairs
- WVU Mountainlair Water Infiltration Repairs
- WVU Chemistry Research Laboratories Fit-Out
- WVU Creative Arts Center Wheelchair Lift
- Alderson Broaddus University – Pyles Arena Deck Replacement
- Glenville State College – Morris Stadium Skybox
- Washington High School, Jefferson County Schools, WV
- Pineville Elementary School, Wyoming County Schools, WV
- Huff Consolidated School, Wyoming County Schools, WV
- Aurora School Addition, Preston County Schools, WV
- Riverview High Field House Design-Build, McDowell County Schools, WV
- Safe School Entries, Monongalia County Schools, WV
- Morgantown High Elevator, Monongalia County Schools, WV
- 2010 Comprehensive Education Facilities Plan- Monongalia County Schools, Wyoming County Schools
- Clear Mountain Bank Branches, Oakland, MD - Reedsville, WV - Kroger-Sabraton, WV
- Grant County Bank, Petersburg, WV
- Fairmont Federal Credit Union, Bridgeport, WV
- Freedom Ford, Kia, and Volkswagen Automotive Dealerships, Morgantown and Clarksburg, WV
- Jenkins Subaru Addition, Bridgeport, WV
- Elkins Fordland Renovation - Elkins Chrysler Dealership, Elkins, WV
- Harry Green Nissan Design-Build, Clarksburg, WV
- Cool Green Automotive Addition and Renovation, Shepherdstown, WV
- Veteran's Affairs – OI&T Office Fit-Out, Shepherdstown, WV
- OPM, Eastern Management Development Center Addition, Shepherdstown, WV
- National Energy Technology Laboratory – Building B-8 Roof Replacement, Morgantown, WV
- US Coast Guard – Conference Room Renovation, Martinsburg, WV
- Eastern Panhandle Transit Authority Addition, Martinsburg, WV
- Cacapon State Park – Old Inn HVAC and Interior Renovation
- WV National Guard - Armory Office Fit-out, Parkersburg, WV
- South Berkeley Fire Station, Inwood, WV
- Jefferson County Emergency Services Agency – New Headquarters
- Berkeley County Ambulance Authority – South Station Renovation and Addition
- Poolhouse Renovation, McMechen, WV
- Community Center, Ridgeley, WV
- Wastewater Treatment Plant Renovations, Martinsburg, WV
- Public Works Building, Fairmont, WV
- Oatesdale Park Little League Fields, Martinsburg, WV
- St. Luke Canopy Replacement, Morgantown, WV
- Freshwater Institute – Aquaculture Building, Shepherdstown, WV
- Clarion Hotel Renovation, Shepherdstown, WV
- Shenandoah Village Apartments – Façade and Deck Replacement, Martinsburg, WV
- Regional Eye Associates/ Surgical Eye Center, Morgantown, WV
- Bavarian Inn – Infinity Pool/ Pool Bar, Shepherdstown, WV

Montum Architecture – WV Board of Architects Registration



## **Noah Accord, PE**

Noah has more than 12 years experience in structural engineering, design, specification, and project management. During his employment with Alpha Associates and EarthRes Engineering, Noah provided structural design and managed multiple built projects. His experience encompasses a wide range of projects including K-12 and higher education facilities, financial Institutions, emergency services buildings, natural gas facilities, and automotive dealerships. A native of Braxton County, Noah is a Licensed Professional Engineer in Pennsylvania and West Virginia.

### **Project Role: Structural Engineer**

- Structural Engineering and Design
- Concept and Construction Design
- Quality Assurance and Control

### **Professional History**

2015- Present	EarthRes Engineering	Project Manager
2005-2015	Alpha Associates	Associate and Structural Engineer

### **Education**

2004	University of Pittsburgh	B.S Civil Engineering
2005	University of Pittsburgh	M.S Civil Engineering

### **Licenses and Certifications**

- Licensed Professional Engineer (West Virginia, Pennsylvania)

### **Professional Project Highlights**

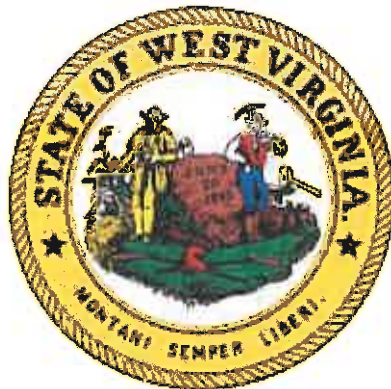
- Potomac State College – ADA Connector Building
- Potomac State College – Church-McKee Plaza
- Potomac State College – Shipper Library Façade
- WVU Engineering Sciences Building – East Wing Addition, 10<sup>th</sup> Floor Fit-Out, Basement Renovation
- WVU Engineering Research Building – G07 & G08 Renovation
- WVU College of Physical Activities and Sports Sciences/ Student Health Center
- WVU Center for Alternative Fuel Engines and Emissions
- Alderson Broaddus University – Pyles Arena Deck Replacement
- Glenville State College – Morris Stadium Skybox
- Washington High School, Jefferson County Schools, WV
- Pineville Elementary School, Wyoming County Schools, WV
- Huff Consolidated School, Wyoming County Schools, WV
- Aurora School Addition, Preston County Schools, WV
- Riverview High Field House Design-Build, McDowell County Schools, WV
- Safe School Entries, Monongalia County Schools, WV
- Morgantown High Elevator, Monongalia County Schools, WV
- Clear Mountain Bank, Oakland, MD
- Clear Mountain Bank, Reedsville, WV
- Clear Mountain Bank-Kroger, Sabraton, WV
- Fairmont Federal Credit Union, Bridgeport, WV
- Freedom Ford, Kia, and Volkswagen Automotive Dealerships, Morgantown, WV
- Jenkins Subaru Addition, Bridgeport, WV
- Elkins Fordland Renovation, Elkins, WV
- Elkins Chrysler Dealership, Elkins, WV
- Harry Green Nissan Design-Build, Clarksburg, WV
- Cool Green Automotive Addition and Renovation, Shepherdstown, WV

**Professional Project Highlights (continued)**

- OPM, Eastern Management Development Center Addition, Shepherdstown, WV
- US Coast Guard – Conference Room Renovation, Martinsburg, WV
- Eastern Panhandle Transit Authority Addition, Martinsburg, WV
- WV National Guard - Armory Office Fit-out, Parkersburg, WV
- South Berkeley Fire Station, Inwood, WV
- Jefferson County Emergency Services Agency – New Headquarters
- Berkeley County Ambulance Authority – South Station Renovation and Addition
- Community Center, Ridgeley, WV
- Wastewater Treatment Plant Renovations, Martinsburg, WV
- Public Works Building, Fairmont, WV
- Clarion Hotel Renovation, Shepherdstown, WV
- FBOP Hazelton Prison Medium Security Complex, Hazelton, WV
- Regional Eye Associates/ Surgical Eye Center, Morgantown, WV
- Bavarian Inn – Infinity Pool/ Pool Bar, Shepherdstown, WV



## TAB 3 – PROJECT ORGANIZATON



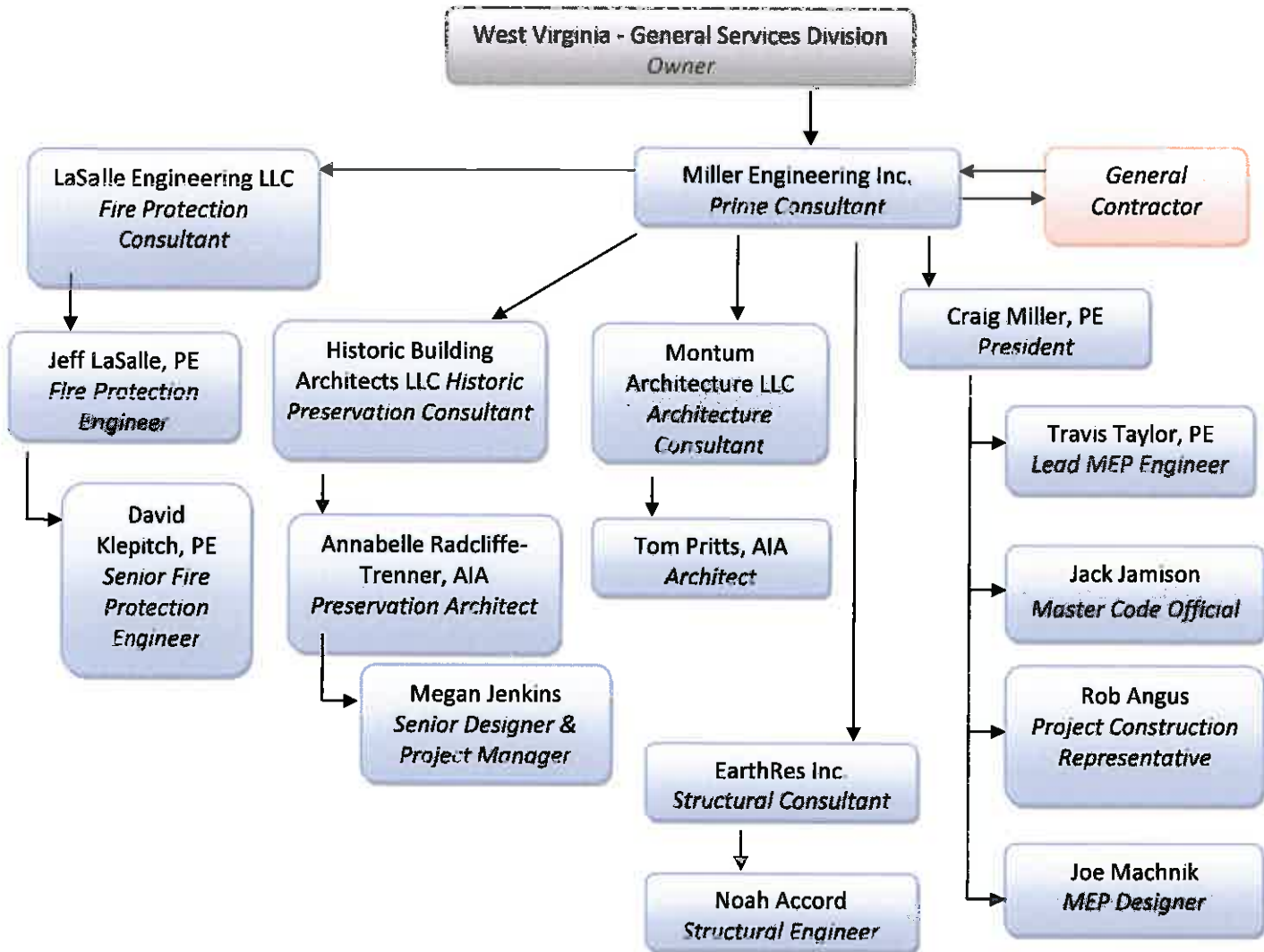


## Staff – Proposed Staffing Plan

<b>Team Leader, Primary Point of Contact, Engineer in Responsible Charge</b>	<b><i>Craig Miller, PE</i></b>	Miller Engineering
<b>Lead Fire Protection Engineer</b>	<b><i>Jeff LaSalle, PE</i></b>	LaSalle Engineering
<b>Lead MEP Engineer</b>	<b><i>Travis Taylor, PE</i></b>	Miller Engineering
<b>Historic Preservation Architect</b>	<b><i>Annabelle Radcliffe- Trenner, AIA</i></b>	Historic Building Architects LLC
<b>Architect</b>	<b><i>Tom Pritts, AIA</i></b>	Montum Architecture
<b>Structural Engineer</b>	<b><i>Noah Accord, PE</i></b>	EarthRes Engineering
<b>Senior Fire Protection Engineer</b>	<b><i>David Klepitch, PE</i></b>	LaSalle Engineering
<b>Historic Preservation Designer and Project Manager</b>	<b><i>Megan Jenkins</i></b>	Historic Building Architects LLC
<b>Master Code Official</b>	<b><i>Jack Jamison</i></b>	Miller Engineering
<b>Project Construction Representative</b>	<b><i>Robert Angus</i></b>	Miller Engineering
<b>Lead Designer/BIM Specialist/ BIM Coordinator</b>	<b><i>Joe Machnick</i></b>	Miller Engineering



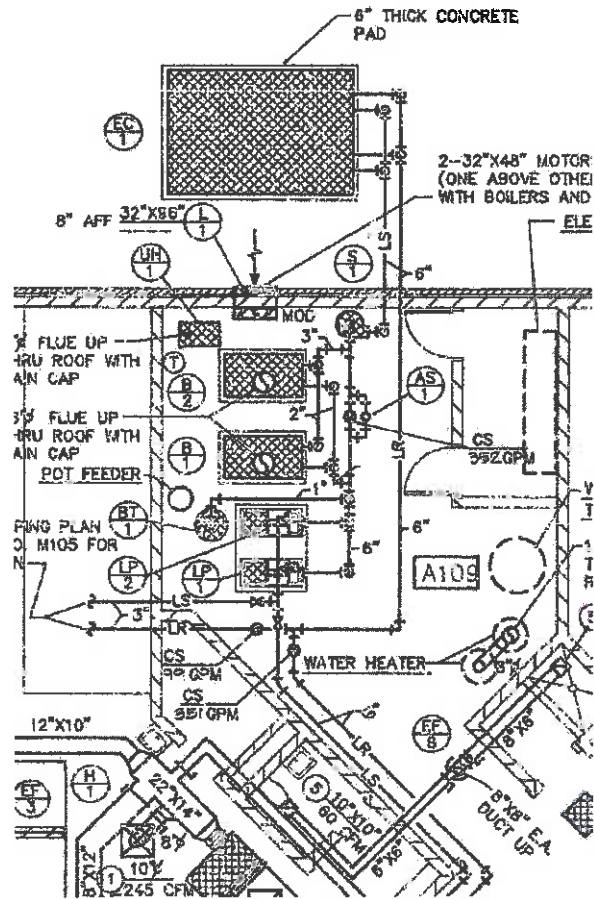
# Organization Chart







## TAB 4 – EXPERIENCE



## Descriptions of Past Projects Completed – New Construction

### Advanced Surgical Rehabilitation Hospital

#### Services Provided:

- Mechanical
- Electrical
- Plumbing
- Nurse Call
- Fire Protection/Alarm

**Estimated Budget: \$17M**

**Facility Area: 67,000 ft<sup>2</sup>**

**Owner: AOR Group**



Interactive collaboration with the physician owners and contractor was the guiding principle behind the success of this project. Each and every system within the hospital was designed for and met precise health care compliance standards. Specifications for ventilation, electric, plumbing, HVAC and medical gas safety were all applied to the constructible design. Quality assurance and design aspects were satisfied by many intensive site visits as well as consistent communication with the contractor. Real time answers and coordination enabled the client to meet a fast-paced construction deadline which if missed would have had severe government regulatory repercussions and detrimental business outcomes.

Project Contact:

*Rick Briggs*

*Lutz Myers & Associates, Inc.*

*(724) 758-5455*

## Project Experience: HVAC Upgrade

### Building 22 2nd Floor Upgrades

Charleston, WV

#### Services Provided:

- Mechanical
- Electric
- Telecommunications
- Construction Administration

**Estimated Budget: \$325k**

**Contract Amount: \$398k**

**Owner: State of West Virginia –  
General Services Division**



West Virginia State Building 22 required renovations to the 2nd floor, which houses the state tax office. New mail processing equipment which have cooling, power, and data requirements were purchased by the state and the floor plan needed modifications. Miller Engineering, along with Montum Architecture designed the renovations to the 2nd floor to accommodate the changes needed. The existing space was served by a fan powered VAV AHU. The existing air distribution was modified to meet the requirements of the new floor plan. The processing room and server rooms, which require year round cooling, are being served with computer-room air conditioning (CRAC) units. The revised floor plan called for modifications to the power and telecommunications layouts for the integrated furniture systems. The grounding and bonding systems for the server room were upgraded as well. The project is under construction and anticipated to be complete by April 2018.

Project Contact:  
*David Parsons, Operations and  
Maintenance Manager  
State Capitol, Room E-119  
(304) 957-7122*

## Project Experience: Elevators

### West Virginia State Capitol Complex

Charleston, WV

#### Services Provided:

- Mechanical
- Electrical
- Plumbing
- Fire Alarm
- Fire Protection

**Estimated Budget: \$3.5M**

**Facility Area: N/A**

**Owner: State of West Virginia**



The project was implemented in phases by priority, based on initial evaluation of systems for safety, availability of parts, maintainability and owner needs. Some systems had been condemned by the Department of Labor with mechanical and structural concerns requiring complete replacement. Some rope systems were replaced with a hydraulic system to alleviate structural concern. Upon completion of a facility review, Miller Engineering provided detailed evaluation of mechanical, electrical and plumbing systems which support elevator function in multiple buildings throughout General Services. MEP design, preparation of bid documents and construction administration for systems associated with the repair or replacement of the elevators was provided. All systems were successfully brought to current codes and standards including fire alarm and fire suppression. MEI worked as a sub consultant to the elevator consultant providing MEP, Fire and Sprinkler interfaces to the Elevators.

Project Manager:  
*Dennis Stewart*  
*WV General Services Division*



## Descriptions of Past Projects Completed – Fire Alarm

### Pipestem McKeever Lodge

Pipestem, WV

#### Services Provided:

- Electrical
- Fire Alarm

**Construction Amount: \$225k**

**Facility Area: 63,000 ft<sup>2</sup>**

**Owner: West Virginia Division of  
Natural Resources**

**Status: Complete**



The fire alarm at McKeever Lodge at Pipestem State Park was obsolete and having operational issues, particularly in the original lodge portion. Miller Engineering designed a complete fire alarm replacement of the lodge side, while interfacing with the conference center portion of the lodge, which had a more up to date fire alarm system. Previously, the lodge and conference systems operated separately, and MEI designed the systems to interface and monitor the lodge as one facility. The system was designed to interface with the conference side elevators, mechanical equipment, and kitchen hoods. Provisions for expansion were made for future upgrades to the lodge elevators. The lodge remained in operation during the entire replacement, with both the contractor and MEI coordinating with the DNR to minimize the amount of rooms taken out of service.

Project Contact:  
*Carolyn Mansberger, Project Manager*  
*State Parks Section*  
*(304) 558-2764*

## Descriptions of Past Projects Completed – HVAC Piping

### Pipestem McKeever Lodge

Pipestem, WV

#### Services Provided:

- HVAC
- Plumbing
- Electrical
- Accommodation of Existing Systems

**Estimated Budget: \$1.7M**

**Facility Area: 63,000 ft<sup>2</sup>**

**Owner: West Virginia Division of Natural Resources**



The original HVAC piping at McKeever Lodge had exceeded its lifespan and had been suffering from corrosion leading to multiple leaks, including one causing an electrical service outage. Miller Engineering was hired to investigate the existing piping, discovering all of the some 4,000 linear feet of piping required replacement. As this lodge is regularly occupied for larger conferences, the project had to be phased to minimize the amount of guest rooms taken out of service at one time. MEI also designed provisions to interconnect the lodge's two separate boiler/chiller plants so one plant could operate the entire lodge at a partial capacity while the other plant was replaced and re-piped. This interconnect also allows the lodge to operate in the event of a boiler or chiller outage.

Power was provided to new equipment, and motor control centers were added to control the building loop pumps. A new building controls system was installed to allow the plants to run at optimum efficiency while meeting the lodges heating and cooling needs.

#### Project Contact:

*Carolyn Mansberger, Project Manager  
State Parks Section  
(304) 558-2764*

## Descriptions of Past Projects Completed – Construction Admin

### Canaan Valley Resort

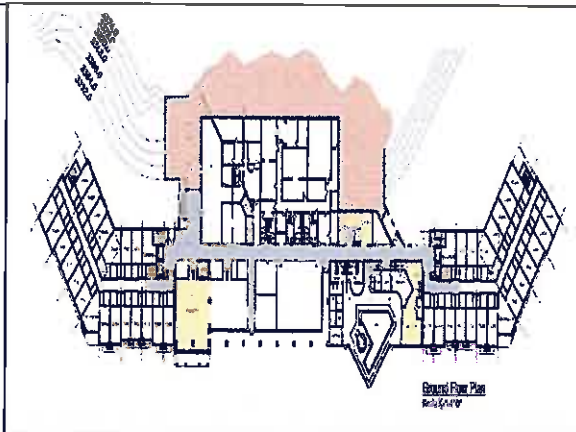
#### Services Provided:

- Electrical
- Plumbing
- HVAC
- Hydronic Pipe

**Estimated Budget: \$30M**

**Facility Area: 68,000 ft<sup>2</sup>**

**Owner: West Virginia Division of  
Natural Resources**



Part of keeping a large project on schedule is the ability of Miller Engineering Inc.'s staff to provide rapid and complete response to any contractor questions. MEI was brought in by the owner to provide MEP construction administration for quality assurance and 3<sup>rd</sup> party MEP design review. MEI's staff was very involved in keeping the project on schedule and in accordance with the construction documents. Detailed construction observation helps to minimize downtime and change orders. MEI's construction administration provided technical support for problem resolution throughout the project, warranty and issue support and quality of work evaluation during construction.

Project Contact:  
*Bradley S. Leslie, PE, Assistant Chief*  
State Parks Section  
Phone: (304) 558-2764



## Project Experience: HVAC Upgrade

### West Virginia State Building 25

Parkersburg, WV

#### Services Provided:

- Mechanical Piping
- Electric
- Construction Administration

**Estimated Budget: \$843k**

**Facility Area: 58,500 ft<sup>2</sup>**

**Owner: State of West Virginia –  
General Services Division**



The PVC piping system at Building 25 had a history of leaking, along with smaller piping sagging over time and breaking, prompting the owner to replace the entire system. The building was a logistic challenge to design due to offset multi-level mezzanines, resulting in low deck-to-deck heights in the lower levels. A new, rolled-groove piping system was installed, including a new cooling tower and supporting structure, and connected to the original boilers. To eliminate the problems associated with manganese, which forms solids and clogs piping, the system was converted from water to propylene glycol with the flow rates adjusted to accommodate the change. The water source heat pumps which serve the building were flushed and cleaned to prevent contamination of the new water. MEI designed a phased approach to accomplish the piping, which was adjusted in consultation with the owner and contractor during construction to minimize the impact on the building occupants, who remained in the building during the entire construction period. MEI worked on an almost daily basis with the contractor to accomplish the re-piping of the building, providing support and real-time answers to questions and to work around challenges.

Project Contact:  
*David Parsons, Operations and  
Maintenance Manager  
State Capitol, Room E-119  
(304) 957-7122*

## Project Experience: HVAC Upgrade

**West Virginia State  
Building 36 (1 Davis Sq.)  
Charleston, WV**

**Services Provided:**

- HVAC System Replacement
- Mechanical Piping
- Electric
- Construction Administration

**Estimated Budget: \$2.1M**

**Facility Area: 58,400 ft<sup>2</sup>**

**Owner: State of West Virginia –  
General Services Division**



The 30-plus year old chiller serving Building 36 failed in the spring of 2016. MEI was retained to design the installation of a temporary rental chiller, which remains in service at this time. MEI was then retained to design a full HVAC retrofit to the building due to the condition of the air handlers, ductwork, VAV boxes, and associated systems. The building presented unique challenges as it was originally two buildings in which the common space was later in filled to create one building. The deck to deck heights in some areas are very limited, resulting in the need for accurate evaluation, design, and detailing in the construction documents. MEI designed a phased approach to accomplish the project. The phasing was developed directly with the owner to minimize the impact on the building occupants; who had to relocate to swing space phase by phase. Instead of just replacing the existing system in-kind, MEI designed a system utilizing three rooftop units ducted vertically through the building, which eliminates the sole source failures that have plagued the system for several years. The project was bid and then cancelled by the Owner.

Project Contact:  
*David Parsons, Operations and  
Maintenance Manager  
State Capitol, Room E-119  
(304) 957-7122*

## Descriptions of Past Projects Completed – Fire Suppression

### FMW Composites Building

#### Services Provided:

- Electrical
- Plumbing
- HVAC
- Fire Protection
- Fire Alarm

**Estimated Budget: \$3.8M**

**Facility Area: 15,000 ft<sup>2</sup>**

**Owner: FMW Composite Systems**



The facility's production process utilizes explosive hydrogen and propane requiring electrical, HVAC and plumbing systems to be explosion-proof. The project required extensive review of air movement (supply, exhaust, room-to room) within and outside the facility. The processes also use chemicals which can emit vaporous hydrochloric acid, requiring emergency ventilation systems. An extensive code review process was performed as well as design of a foam-based fire suppression system. Process gasses flow from exterior bulk storage to the process equipment through a piping network. Significant complexity was added as the roof structure could not support any HVAC equipment and location, footprint and services were already established during building of the shell.

Project Contact:  
*Richard Colebank, PE*  
*Alpha Associates*  
*Phone: (304) 296-8216*

# LASALLE ENGINEERING, LLC

FIRE PROTECTION AND LIFE SAFETY ENGINEERING

1000 York Road  
Willow Grove, PA 19090

Phone: 215.658.1770  
Fax: 215.658.1772

## Relevant Projects

<b>Client:</b>	General Services Administration (GSA)
<b>Project:</b>	Wheeling Federal Courthouse
<b>Timeframe:</b>	January 2017 - Present
<b>Services/ Relevance:</b>	<p>LaSalle Engineering (LE) serves as lead Fire Protection Engineer for the design of a replacement fire alarm/ mass notification system for the Federal Courthouse building located in Wheeling, West Virginia. The project delivery model is Design-Build; under the GSA model, bridging documents require the development of a complete system design concept, including strategy for replacement; full performance requirements; conceptual design drawings, and project specifications. LE will be responsible for confirming conformance with the design intent throughout construction.</p> <p>This project demonstrates LaSalle Engineering's expanding regional presence and our commitment to long-term relationships. We have been doing projects with GSA and the lead architect, WRA, for many years.</p>
<b>Construction Cost:</b>	\$1,500,000.00 (Estimated)
<b>Client Reference:</b>	<p>Mr. Jason Sherrer Contracting Officer's Representative General Services Administration Jason.sherrer@gsa.gov</p>
<b>Client:</b>	Virginia Tech
<b>Project:</b>	War Memorial Hall Renovation
<b>Timeframe:</b>	March 2017 - Present
<b>Services/ Relevance:</b>	<p>LaSalle Engineering serves as the lead Fire Protection Engineer as part of the project team for the renovation and upgrades to the Virginia Tech War Memorial Hall Building and McComas Hall. While not on a historic registry, the War Memorial Hall presents architectural challenges for upgrading in accordance with the Virginia Rehabilitation Code. LaSalle Engineering is responsible for developing all code compliance strategies for fire protection and life safety systems.</p> <p>This project demonstrates LaSalle Engineering's expanding regional presence and our commitment to long-term relationships. We have been doing projects with Cannon Design for many years.</p>
<b>Construction Cost:</b>	-
<b>Client Reference:</b>	<p>Mike Glaros, AIA, LEED AP BD+C Senior Vice President</p>

	Cannon Design Baltimore, Maryland 21201 T 443.320.4949
<b>Client:</b>	General Services Administration (GSA)
<b>Project:</b>	Baltimore Custom House Fire Alarm System Replacement
<b>Timeframe:</b>	May 2014 – December 2014
<b>Services/ Relevance:</b>	<p>LaSalle Engineering (LE) served as lead Fire Protection Engineer for the design of a replacement fire alarm/ mass notification system for the Baltimore Custom House Building, an historic building located in downtown Baltimore. The project delivery model was Design-Build; LE was responsible for developing bridging documents for the complete system design concept, including strategy for replacement, coordination of details for working in this historic building, full performance requirements; conceptual design drawings, and project specifications.</p> <p>This project demonstrates LE's capabilities working in historic buildings and developing solutions that allow modern fire safety systems to be integrated into these structures with minimal impact on historic fabric.</p>
<b>Construction Cost:</b>	\$700,000.00 for fire alarm system (Estimated)
<b>Client Reference:</b>	Ms. Susan Raab Vice President WRA sraab@wrallp.com
<b>Client:</b>	Smithsonian Institution
<b>Project:</b>	Museum Support Center Additions & Renovations
<b>Timeframe:</b>	April 2002 – May 2011
<b>Services/ Relevance:</b>	<p>The Museum Support Center (MSC) is a 400,000+ square foot facility with five Pods, which are essentially rack storage warehouses for collections. Mr. LaSalle, and subsequently LaSalle Engineering, has been involved with a number of projects for this facility since 2000. Services have included fire protection engineering, fire modeling, sprinkler system design, fire pump design, Maximum Foreseeable Loss (MFL) wall design and specification, complete facility fire alarm system design, combustible gas system design, smoke control for the collections storage areas, development of systems commissioning protocols and test supervision, and life safety systems design, including means of egress evaluation and preparation of Life Safety documents.</p> <p>This project, started with Mr. LaSalle's previous firm, demonstrates our ability to lead large, complex fire protection engineering projects. It also demonstrates our ability to develop and maintain a long-term</p>

	relationship with a specialized client. LaSalle Engineering continues to work with the Smithsonian Institution and enjoys an excellent working relationship with their team.
<b>Construction Cost:</b>	\$32,000,000.00
<b>Client Reference:</b>	Mr. Michael Kilby Associate Director for Fire Protection & Safety Smithsonian Institution 202-633-2628
<b>Client:</b>	Commonwealth of Pennsylvania
<b>Project:</b>	Capitol Complex Fire Protection and Life Safety Systems Upgrades
<b>Timeframe:</b>	February 1994 – April 1997
<b>Services/ Relevance:</b>	<p>During this period of time, Mr. LaSalle served as a member of the engineering and design team for the complete upgrade of fire protection and life safety systems for the Capitol Building and several other buildings within the Capitol Complex. These upgrades included complete sprinkler system installation, state-of-the-art networked fire alarm / Emergency Voice Alarm Communication Systems (EVACS) for individual buildings, upgrades to the Capitol Complex Emergency Communications Center, vertical opening enclosures; and means of egress improvements.</p> <p>This project, while older, demonstrates Mr. LaSalle's experience working in historic buildings. For over 25 years, Mr. LaSalle has been teaming with historic preservation architects on large and small projects to develop creative fire safety solutions.</p>
<b>Construction Cost:</b>	\$25,000,000.00 + (Estimated)
<b>Client Reference:</b>	-



New Jersey Office of Legislative Services Library Archive Storage Renovations, New Jersey State House Annex  
Trenton, NJ



Project Information

Completed 2014

Construction Cost-  
\$250,000

Size- 1,700 SF

Year Constructed- 1920's

Historic Designation- Listed  
on the National Register of  
Historic Places

Client

State of New Jersey  
Building Authority

Historic  
Building Architects, LLC

312 West State Street, Trenton, NJ 08618



New Jersey Office of Legislative Services Library and Archive Storage Renovations, New Jersey State House Annex  
Trenton, NJ



HBA worked with the State of New Jersey, Office of Legislative Services to design new archival storage space with shelving for their collection of rare books, journals, and newspapers. The OLS Library was completely refurbished with new finishes, lighting, and custom furniture. New interior storm windows with UV protective plexiglass were installed at the double height bronze framed windows. New lighting was designed to protect the collections and all new interior finishes and furniture were installed. The archival storage room was designed to meet the National Archival and Records Administration standards. New environmental controls were designed and installed for the archival storage room.



Historic  
Building Architects, LLC

312 West State Street, Trenton, NJ 08618

Cadet Chapel Renovation  
West Point, NY



Project Information

Completed 2015  
\$2.5M (Masonry)

Size- 22,000 SF  
Year Constructed- 1910

Historic Designation- Listed  
on the National Register of  
Historic Places as an NHL

Client  
United States Military  
Academy

Historic  
Building Architects, LLC

312 West State Street, Trenton, NJ 08618



Cadet Chapel Renovation  
West Point, NY



In 2014 renovations began on the chapel, which included a large-scale masonry restoration project. The interior and exterior masonry was cleaned, repointed and selective repairs completed. HBA assisted with the design and coordination of the interior protection of the chapel to ensure that the pipe organ, fixtures and furnishings remained undamaged. A catalogue of all interior fixtures and furnishings was completed, HBA prepared mortar analysis and replication in their material conservation laboratory and conducted on-site cleaning tests to identify the most effective cleaning methods and procedures that both cleaned and preserved the masonry. HBA is familiar with the complex logistics of renovating federally owned and occupied buildings and has worked closely with the United States Military Academy, the US Army Corps of Engineers, and the contractor to monitor work for quality control.

Historic  
Building Architects, LLC

312 West State Street, Trenton, NJ 08618

# Historic Building Architects, LLC

GREEK ORTHODOX CATHEDRAL OF SAINT GEORGE  
PHILADELPHIA, PA

## FEASIBILITY STUDY

The Greek Orthodox Cathedral of Saint George was designed and built as St. Andrew's Episcopal Church by John Haviland. At the time of its construction the new building was important enough to be described in detail by the 1823 edition of the guide book Picture of Philadelphia.

The Cathedral is designed in the Greek Revival style and is believed to be modeled on the Temple of Bacchus at Teos. It has a broad rectangular floor plan running east to west. The front portico faces east and is supported by six large wooden ionic columns. The walls of the building are constructed of load bearing brick that has been covered with scored stucco to imitate ashlar. Although constructed of brick and wood the exterior of the building was given the appearance of being done in white marble by the sanded finishes applied in the original construction.

HBA prepared a feasibility study to provide the congregation with a better understanding of the building conditions and their historic significance. The study included extensive historic research, mortar, plaster, paint, and wood analysis, an investigation of the edifice by structural, mechanical, and electrical engineers, conservators, as well as the architects. Phased recommendations were made to assist in maintenance planning for the next 10 years, and an estimated construction budget was provided.

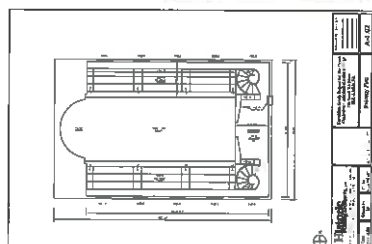
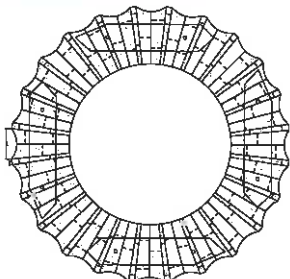
*Structural Engineers*  
Robert Silman Associates, PC

*Mechanical/Electrical Engineers*  
Princeton Engineering Group, LLC

*Wood Specialist*  
Anthony & Associates, Inc.

*Stained Glass Window Conservators*  
Femenella & Associates, Inc.

*Construction Cost Estimators*  
Daedalus Projects, Inc.





Saint Francis de Sales  
Philadelphia, PA



*The Restored Dome, new gutters and metal roofs improve the Church's stormwater management.*

Project Information

Phase I Rehabilitation-  
Completed 2012  
Construction Cost-  
\$2.7M

Phase's II and III-  
Completed 2014  
Construction Cost-  
\$760,000

Phase IV Building  
Rehabilitation Project-  
Completed 2016  
Construction Cost-  
\$1.2M

Size- 27,600 SF  
Year Constructed- 1907-  
1911

Historic Designation-  
Eligible to be listed on  
the National Register of  
Historic Places

Client

Saint Francis de Sales  
Parish and Most Blessed  
Sacrament Parish



*Interior view of the Main Dome*

Historic  
Building Architects, LLC

312 West State Street, Trenton, NJ 08618

Saint Francis de Sales  
Philadelphia, PA



Investigation Phase at Church Interior, (left) Thermal imaging detects trapped moisture (right)



A variety of decorative arts adorn the church inside & out

Henry D. Dagit, a leading Philadelphia architect, designed Saint Francis de Sales Roman Catholic Church in 1907, and Rafael Guastavino, the legendary Spanish architect and builder, designed a complex series of domes and vaults. The building is a stone load-bearing structure and all the domes are constructed with Guastavino tile.

The Phase I Rehabilitation Project focused on the repair and renovation of the roofing and rainwater conduction systems. Structural stabilization at the Lantern and Main Dome involved a complex "needling" together of the masonry walls. The Dome was painted with colors derived from Guastavino's original watercolors. The interconnecting roofs from the Lantern down to the square base at the Main Dome were replaced and new standing seam transept vaults roofs were installed. The first phase was recognized by the Preservation Alliance of Greater Philadelphia with a Preservation Achievement Award.



New standing seam metal roof



Limestone elevations repointed

Phase II included masonry restoration and rebuild at the 47th Street elevation and installation of a new cold liquid applied roof at the Basement South Roof. Phase III included raking out, repointing, and rebuilding masonry, new standing seam metal roofs at the Upper and Lower Sacristy roofs, rebuild and cleaning of the interior brick and Guastavino tiled arch above the alter.



Rebuilding the Springfield Avenue parapet

Phase IV included new cold liquid applied roofs at the Sacristy, Oratory, and North Basement roofs; raking out, repointing, and cleaning brick parapet walls, rebuilding the Springfield Avenue marble and limestone parapet, masonry repairs and pointing at the Nave North elevation.

## Budget and Timeline History

Project Name	Project Type	Budget	Cost	Notes
Bluestone State Park	Pool Replacement	\$1,000,000	\$935,600	On budget
West Virginia State	HVAC Piping Renovation	\$650,000	\$533,400	On budget
Canaan Valley Resort	Emergency Electrical Repairs	\$225,000	\$129,829	On budget
Holly Grove Manor	Renovation	\$885,000	N/A	On hold
Mapletown Jr/Sr High School	HVAC Renovation	\$1,050,000	\$1,105,900	5.19% over budget
Pipestem – McKeever Lodge	HVAC Piping Replacement	\$1,600,000	\$1,776,000	10.43% over budget
Tygart Lake State Park	Beach and Bathhouse	\$750,000	\$695,000	On budget



**= Delivered on budget/on time**



## Budget and Timeline History

Project Name	Project Type	Contract Length	Contract Delivery	Notes
Blackwater Falls State Park	Boiler Replacement	120 days	180 days*	*Extended 60 days due to equipment delivery issues
Bluestone State Park	Pool Replacement	180 days	180 days	Delivered on time
Canaan Valley Resort	Construction Administration	3.5 years	3.5 years	Long-term project with varying facets – no direct schedule
Twin Falls/Hawks Nest Lodge	HVAC Renovation	90 days	90 days*	*Expedited delivery
Mapletown Jr/Sr High School	Boiler/ HVAC Renovation	180 days	180 days	Delivered on time
Pipestem – McKeever Lodge	HVAC Piping Replacement	365 days	365 days	Delivered on time
Tygart Lake State Park	Beach and Bathhouse	270 days	270 days	Delivered on time



*What our satisfied customers have to say...*

“Hard working, do-whatever-it-takes, diligent team that provides excellent customer service is what you can expect from Miller Engineering.”

*--Chris Halterman*

“As a design/build team, working with Miller Engineering, our project involving a private surgical hospital together was a success – completed ahead of schedule and on budget. Miller worked with us throughout the project to consult, engineer and inspect the mechanical systems. Craig Miller, PE and his staff are working with us again, and are very important members of our design/build team. I highly recommend their services.

*--Richard J. Briggs*

**Brad Leslie, PE**  
*Assistant Chief  
 WV Division of Natural  
 Resources  
 State Parks Section  
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 South Charleston, WV 25303  
 (304) 558-2764 ext. 51823  
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**Bob Ashcraft**  
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 Monongalia County Schools  
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[rbashcraft@access.k12.wv.us](mailto:rbashcraft@access.k12.wv.us)*

**Mike Trantham**  
*Program Administrator Senior  
 WVU Environmental Health &  
 Safety  
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 975 Rawley Avenue  
 Morgantown, WV 26506  
 (304) 293-5785  
[Mike.Trantham@mail.wvu.edu](mailto:Mike.Trantham@mail.wvu.edu)*

**Richard J. Briggs**  
*Vice President  
 Lutz Briggs Schultz & Associates  
 Inc.  
 239 Country Club Drive  
 Ellwood City, PA 16117-5007  
 (724) 758-5455  
[lbsa@zoominternet.net](mailto:lbsa@zoominternet.net)*

*From Jonathan Miller, Mechanical Project Manager, Nitro Mechanical:*

“Miller Engineering is not your average engineering company; they work with the owner AND the contractor to solve all issues that arise throughout the project to make the process as fluid as possible.

# **LASALLE**

## **ENGINEERING, LLC**

FIRE PROTECTION AND LIFE SAFETY ENGINEERING

1000 York Road  
Willow Grove, PA 19090

Phone: 215.658.1770  
Fax: 215.658.1772

### ***Testimonials***

It is extremely rare for me to ever endorse or recommend any fire protection engineering consultant, but at this time I will unhesitatingly make an exception for Jeff LaSalle and his fire protection engineering consulting firm LaSalle Engineering, LLC, located in Willow Grove, Pennsylvania. LaSalle Engineering has been working with the Smithsonian Institution on several projects since June 2004. Jeff... and his staff have thus far shown themselves to be extremely competent and professional, meeting or exceeding all our expectations with regard to technical expertise, customer support, and quality of service.

Until I see anything to change my opinion, I can recommend LaSalle Engineering without reservation.

J. Andrew Wilson  
Associate Director for Fire Protection & Safety (Retired)  
Smithsonian Institution

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LaSalle Engineering has been working with Lancaster General Hospital since June 2004, and Jeff LaSalle has been providing consulting services for us since 1997.

During this time, Jeff and his team have met or exceeded our expectations with regard to technical expertise, customer support, and quality of service. We rely on them for code consulting, fire safety systems design, and for maintaining our facility life safety plans.

I would recommend LaSalle Engineering without reservation.

John Hartman  
Senior Director of Construction and Facilities  
Lancaster General Hospital

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LaSalle Engineering has been working with our organization on several projects since June 2004. During this time, they have met or exceeded our expectations with regard to technical expertise, customer support, and quality of service.

I would also note that many of these projects have been large and technically complex in nature. Throughout all of these engagements I and my colleagues in addition to our clients have found Jeff and his team to be responsive, creative and thorough.

I strongly recommend LaSalle Engineering without reservation.

John Capelli  
Principal, EwingCole






NAVVIS M6 INDOOR MOBILE MAPPING SYSTEM

# NEXT-GENERATION REALITY CAPTURE

Fast, all-in-one mobile scanning  
images and point clouds without  
quality




## SPEED ...

NavVis brings all-in-one reality capture to even the largest indoor environments. The NavVis M6 indoor mobile mapping system is designed for large-scale scanning projects where data quality matters. You can now automatically capture point clouds, 360° immersive imagery, and sensor data at the speed of walking through a building.

-  Scan up to 30x faster than with stationary scanners and devices
-  Capture up to 30,000 square meters per day
-  Adapt to complex indoor environments while continuously scanning

## ... MEETS ACCURACY ...

Fast data capture does not have to mean compromising on quality. The Navvis M6 combines a mobile LiDAR system with our innovative mapping software to facilitate survey-grade scans. At the same time, the multi-camera head captures dense 360° imagery.

-  All-in-one capture: photorealistic point clouds, 360° imagery, Bluetooth beacons, Wifi signals, magnetic field data
-  6D SLAM: The M6 accurately maps changes in elevation and uneven surfaces in 6 degrees-of-freedom
-  High accuracy and low drift: The new 6D SLAM system includes our renowned Precision SLAM technology to reduce drift error

# SURVEY-GRADE RESULTS

The algorithms powering our device were developed with a focus on providing survey-grade point clouds even while you move. Take accuracy to the next level by including "SLAM anchor" surveying markers. "SLAM anchors" are ground control points compatible with NavVis technology that will increase accuracy and automate geo-referencing during data processing.



The M6 is made to go with you, wherever you need to scan. Take it apart and put it into the four custom cases that have been designed to go where you need to scan. Take them in the trunk of a car or as checked in luggage on your flight.

## EXAMPLES

# HOW IS NAVVIS TECHNOLOGY BEING USED?



Every industry that uses, manages or builds indoor space benefits from digital building information and models. Find out more about our innovative solutions below or get in touch to discuss your specific needs.

### SOLUTIONS FOR YOUR INDUSTRY



**SURVEYING**



**DIGITAL FACTORY**

## NAVVIS INDOORVIEWER

# TRY IT

Click play to get started. Once you are in the instance, click on any of the white location markers to start moving around the 360° images. You can view point clouds by clicking on the "grid" button located at the top of your screen and choosing "show point cloud" in the drop-down menu. To try out additional functions such as measurement, routing and searching and editing information, visit the download section below to get an instance.



## M6 DATA OUTPUT



## **New Indoor Mobile Mapping System from NavVis Marks Breakthrough in Data Quality**

*NavVis M6 is a next-generation indoor mobile mapping system designed to overcome the scale and quality constraints of today's reality capture technology*

**18 April 2018** – NavVis, a global leader in mobile indoor mapping, visualization, and navigation, announces the launch of M6, a next-generation indoor mobile mapping system that overcomes the scalability and data quality constraints of today's reality capture technology. Surveyors and AEC professionals can now use reality capture technology for demanding applications, such as large-scale indoor mapping projects, factory planning, creating and updating as-built BIM models and construction monitoring.

The NavVis M6 is an all-in-one system that captures 360 degree immersive imagery, photorealistic point clouds, Bluetooth beacons, WIFI signals and magnetic field data. The NavVis M6 features a mobile LiDAR system that lets it scan up to 30 times faster than stationary devices, letting users capture up to 30,000 square meters in a day. What truly sets M6 apart is the cutting-edge 6D simultaneous localization and mapping (SLAM) technology, which significantly improves the quality of data captured. Thanks to 6D SLAM, M6 continuously scans even the most complex indoor environments, including uneven surfaces or changing elevations, such as ramps, open spaces or long corridors without compromising the quality of the data.

M6's innovative software is complemented by hardware features designed to improve the quality of data and ease of capture: four laser scanners with a range of up to 100 meters are arranged to maximize scan coverage, while six cameras automatically take high-resolution images during mappings. The innovative design of the M6 includes camera placement that keeps the operator in a blind spot.

It is the perfect device for surveyors and AEC professionals who need to be able to capture large properties to update or create floorplans or as-built BIM models. At the same time, NavVis IndoorViewer software provides added value by giving every stakeholder access to the scanned environment through an interactive virtual building in their browser.

**Dr. Felix Reinshagen, CEO of NavVis, said:**

*"The NavVis M6 marks a quantum leap in indoor mobile mapping. Anyone who needs to scan large properties, run repeated scans or would like to move into the field of reality capture will profit from the groundbreaking data quality. With M6, users can now quickly capture large, complex indoor environments for typical tasks such as updating floorplans, documenting construction progress or creating as-built BIM models. At the same time, M6 captures the data needed to provide customers with additional deliverables such as browser-based immersive walkthroughs and indoor navigation."*

Please view the NavVis M6 video at [https://youtu.be/0m6\\_vW\\_NNO0](https://youtu.be/0m6_vW_NNO0).

**For more information, please contact:**

**Munich Office:** T: (+49) 89 7169 250 20

Viktoria Langley E: [press@navvis.com](mailto:press@navvis.com)

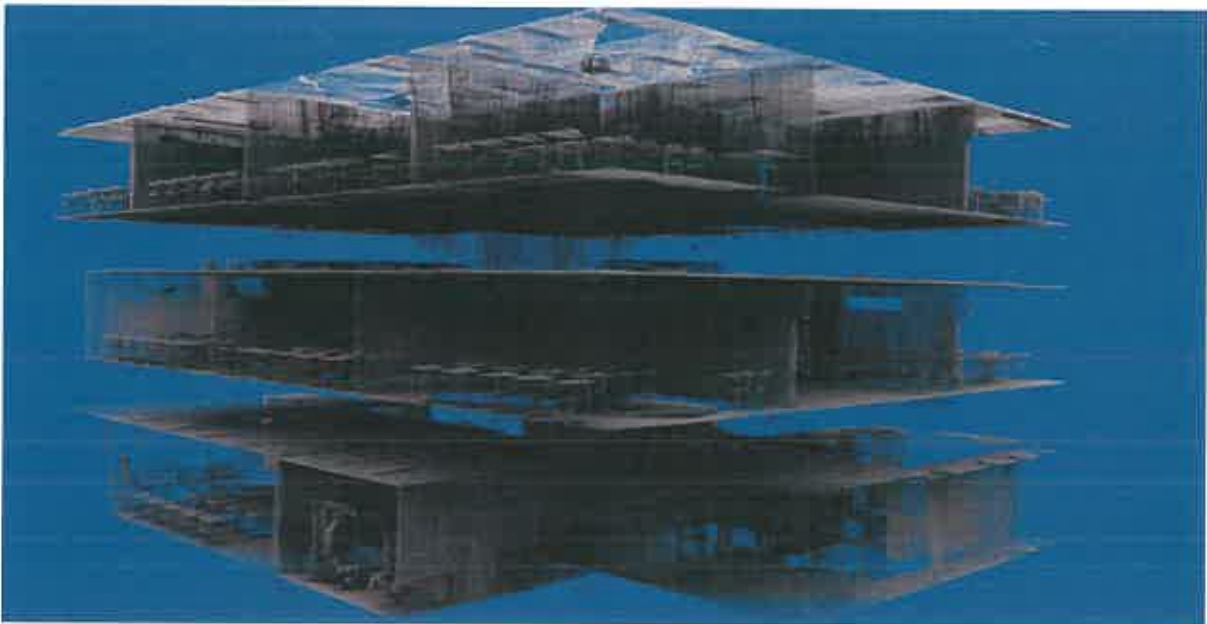
**New York Office:** T: (+1) (646) 714-7016

Evan McPhee E: [press@navvis.com](mailto:press@navvis.com)

**About NavVis:**

NavVis is a leading provider of high-end digital building technology for large commercial and industrial properties. Our cutting edge indoor mapping, visualization and navigation technology is being applied in every industry that uses, manages or builds indoor space. Digital building technology is benefitting everything from construction monitoring, facility management, and manufacturing, to transportation hubs and multi-channel retailing. Visit [www.navvis.com](http://www.navvis.com).

## Viametris IMS3D









## TAB 5 – PROJECT FORMS





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

State of West Virginia  
 Centralized Expression of Interest  
 02 - Architect/Engr

Proc Folder: 435826

Doc Description: EOI: Capitol Bldg Fire Protection and Sprinkler Design

Proc Type: Central Purchase Order

Date Issued	Solicitation Closes	Solicitation No	Version
2018-03-30	2018-04-26 13:30:00	CEOI 0211 GSD1800000003	1

**BID RECEIVING LOCATION**

BID CLERK  
 DEPARTMENT OF ADMINISTRATION  
 PURCHASING DIVISION  
 2019 WASHINGTON ST E  
 CHARLESTON WV 25305  
 US

**VENDOR**

Vendor Name, Address and Telephone Number:

**FOR INFORMATION CONTACT THE BUYER**

Linda B Harper  
 (304) 558-0468  
 linda.b.harper@wv.gov


Signature: 

FEIN # 86-1081386

DATE April 25, 2018

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

**DESIGNATED CONTACT:** Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

  
\_\_\_\_\_  
(Name, Title)

Craig Miller, Owner

\_\_\_\_\_  
(Printed Name and Title)

240 Scott Ave, Suite 1, Morgantown, WV 26508

\_\_\_\_\_  
(Address)

304-291-2234

\_\_\_\_\_  
(Phone Number) / (Fax Number)

cmiller@millereng.net

\_\_\_\_\_  
(email address)

**CERTIFICATION AND SIGNATURE:** By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

Miller Engineering, Inc.

\_\_\_\_\_  
(Company)

  
\_\_\_\_\_  
(Authorized Signature) (Representative Name, Title)

Craig Miller, Owner

\_\_\_\_\_  
(Printed Name and Title of Authorized Representative)

April 25, 2018

\_\_\_\_\_  
(Date)

304-291-2234

\_\_\_\_\_  
(Phone Number) (Fax Number)

**ADDENDUM ACKNOWLEDGEMENT FORM**  
**SOLICITATION NO.: CEOI GSD1800000003**

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

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

**Addendum Numbers Received:**  
*(Check the box next to each addendum received)*

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

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

Miller Engineering, Inc.

Company

Authorized Signature

April 25, 2018

Date

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



STATE OF WEST VIRGINIA  
Purchasing Division  
**PURCHASING AFFIDAVIT**

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

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

**DEFINITIONS:**

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

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

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

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

**WITNESS THE FOLLOWING SIGNATURE:**

Vendor's Name: Miller Engineering, Inc.

Authorized Signature: [Signature] Date: April 25, 2018

State of West Virginia

County of Taylor, to-wit:

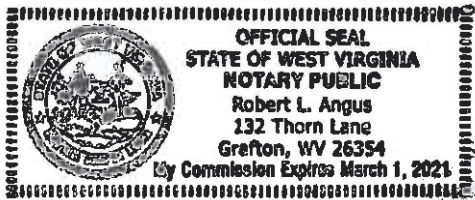
Taken, subscribed, and sworn to before me this 25 day of April, 2018

My Commission expires March 1, 2021.

**AFFIX SEAL HERE**

**NOTARY PUBLIC** [Signature]

*Purchasing Affidavit (Revised 07/01/2012)*



**ACKNOWLEDGEMENT:**

MEI understands that the work product will become the property of the agency and may be used or shared. It is also our understanding that, with WV state law, such use results in indemnification of our firm for any outcomes related to use in this manner.

MEI has never had a vendor complaint filed against it. In the history of Miller Engineering, there have been no adverse professional regulatory assertions or actions against our firm. We have never been terminated from a contract, had any debarments, suspensions or sanctions from any state Board governing our services. MEI has been involved as a defendant in one litigation since its inception in 2003. The claim related to an asserted HVAC design deficiency which was never proven. The matter was settled by our insurance carrier; whose professional witnesses found our design to be in accordance with professional design standards.



Craig Miller PE  
President  
Miller Engineering, Inc