

Request for Quote



Commissioning Agent Services

Elizabethtown Training Academy
Renovate Boiler Plant and Domestic/
Fire Protection Piping



Project No. DGS 304-15 Phase 2

May 20, 2022



SitelogIQ Consulting Engineers, Inc.
3300 North 3rd St.
Harrisburg, PA 17110



May 20, 2022

Paul Hadginski
Design Project Manager
PA Department of General Services
1800 Herr Street
Harrisburg, PA 17103

RE: Project No. DGS 304-15 Phase 2
Elizabethtown Training Academy – Renovate Boiler Plant and Domestic/Fire Protection Piping

Dear Mr. Hadginski:

SiteLogIQ Consulting Engineers, Inc. is pleased to have this opportunity to provide you with a proposal for design phase commissioning agent services, as well as an estimate for construction phase commissioning agent services for the renovation of Elizabethtown Training Academy Renovation.

When determining which firm to hire as your commissioning authority, we ask that you consider the following key points about SiteLogIQ:

- **Similar Project Experience** - Completed commissioning services for more than \$1.7 billion worth of construction since 1999, including many new and/or replacement projects involving boiler plants and MEP systems for the PA DGS, such as SCI Fayette, SCI Smithfield, SCI Waymart, SCI Coal Township, and SCI Somerset, as well as numerous Readiness Centers, healthcare facilities, and State Universities.
- **Responsibility to Commissioning** - Specializes in providing high-quality, independent building commissioning services to owners, and has done so for the past 23 years. This success is built on a strong team of engineering and commissioning professionals who provide owners with the highest level of service possible. As an independent commissioning agent, we provide the owner with an impartial view of their design, the construction, and overall operability of their completed facility.
- **Commitment to the Owner** - Every project awarded is taken seriously and we commit to performing to the very best of our abilities to meet an owner's needs. The most significant contribution we can make to helping Elizabethtown Training Academy achieve their mission is to work in conjunction with your design and construction teams to design and construct safe and high-quality facilities. **We are firmly committed to providing the services required by DGS.**

SiteLogIQ appreciates this opportunity to provide you with our Technical Component and Labor Effort. If you require additional information or have any questions, please feel free to contact David Hickey or Rose Fetter.

Sincerely,

SITELOGIQ CONSULTING ENGINEERS, INC.

David Hickey, PE, LEED AP, CEM, HFDP, CxA CCP
Vice President

Rose Fetter
Senior Business Consultant

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Contractor Prior Experience

Since 1999 SitelogIQ Consulting Engineers (SitelogIQ) has provided building commissioning, as well as HVAC, mechanical, electrical, plumbing, and fire protection engineering design services of the highest order. Our commissioning services include new building commissioning, re-commissioning, and retro-commissioning, as well as system design and verification.

Our team of professional engineers offers our clients practical, cost-effective, and efficient approaches to the commissioning of their facilities, whether a new building or one undergoing renovation. We work with owners to ensure that they have a complete understanding of all testing procedures as well as the proper training on all building systems and components.

In the past 23 years, we have provided services for more than \$2 billion in new and renovated construction throughout Pennsylvania, Maryland and Virginia. The projects with which we have been involved include higher education facilities, K-12 schools, office buildings, hospitals, central power plants, museums, high performance athletic facilities, technology intensive laboratory facilities, and correctional institutions.

During the last two decades, SitelogIQ has commissioned hundreds of projects. The following pages include examples of several projects that are similar in scope, size and building type to the Elizabethtown Training Academy in Elizabethtown, PA.





State Correctional Institute at Waymart

Waymart, PA

SitelogIQ was awarded a contract for building commissioning services for the renovation of an existing boiler plant at SCI Waymart in Wayne County.

The 4,000-square-foot boiler plant at the prison was constructed in 1955 with three Keeler traveling grate, coal-fired boilers with an 800Hp equivalent steam generation capacity each. With the expended service life of the coal boilers, DGS converted the coal plant with two, dual fuel (gas/oil) 500Hp water tube boilers, along with new master controls.

Systems included in the commissioning process were boilers and ancillary boiler equipment, fuel, HVAC equipment, boiler controls, electrical, and supervisory control and data acquisition.

Also, SitelogIQ completed commissioning for boiler plant replacements at SCI Coal Township, SCI Smithfield, and SCI Somerset. MEP Commissioning was also provided for new a prison in Fayette County back in 2007.

Owner

PA Department of General Services

Paul Hadginske, P.E.
Design Project Manager
717-787-6462

phadginske@pa.gov

Commissioning Services

- + Boilers
- + Boiler controls
- + HVAC
- + Electrical

Schedule

Completion i2022

Construction Cost

\$5,455,905 million



DMVA—Readiness Centers

Multiple Sites

SitealogIQ has successful experience in providing building commissioning services to Pennsylvania Department of Military and Veterans Affairs projects, including National Guard Stryker Brigade Readiness Centers throughout the central region of Pennsylvania as part of a statewide program. The program involved the design and construction of 26 facilities at 22 sites, which included new construction and/or renovations. These facilities provide space for the training of troops and the maintenance and storage of military vehicles. Locations where we provided commissioning services include the following:

- †Bradford
- †Carlisle
- †Chambersburg
- †Elizabethtown
- †Hanover
- †Huntingdon
- †Lebanon
- †Lewistown
- †Punxsutawney
- †South Mountain/Gettysburg
- †Williamsport
- †York

Owner

PA Department of General Services

Paul Hadginske, P.E.
Design Project Manager
717-787-6462
phadginske@pa.gov

Commissioning Services

- † HVAC
- † Building automation
- † Electrical
- † Domestic hot water
- † Fire suppression and alarm
- † Communications
- † Safety and security

Schedule

Completed in 2019

Construction Cost

\$9.2 million

Elizabethtown College, Bowers Center for Sports, Fitness and Wellness

Elizabethtown, PA

The new 81,900-square-foot Bowers Center for Sports, Fitness, and Wellness houses wellness programming, intramural and club sports, and intercollegiate athletics. It serves as a dynamic campus hub for fitness and wellness and is the college's largest new facility in two decades. The building achieved LEED Silver certification.

Owner

Elizabethtown College
 Matthew Aungst
 Project Manager
 717.361.1435
aungstm@etown.edu

Commissioning Services

- ✦ HVAC system
- ✦ Building automation
- ✦ Plumbing fixtures and equipment
- ✦ Fire alarm system
- ✦ Piping and duct systems
- ✦ Lighting controls
- ✦ Emergency power
- ✦ Building envelope
- ✦ Energy recovery units
- ✦ Rooftop units
- ✦ Variable frequency drives

Schedule

August 2017 to June 2020

Construction Cost

\$23.4 million



Pennsylvania State Police Barracks

Wormleysburg, PA

SitleogIQ was hired by the Pennsylvania Turnpike Commission to provide building commissioning services for the PA State Police Barracks at Everett Maintenance Facility project. The work included renovations and a small addition to the existing two-story masonry State Police Barracks. Construction phasing was required to keep the State Police in operation.

The existing masonry walls were insulated and new energy-efficient fixed aluminum windows were installed along with new mechanical, electrical, plumbing, and telecommunications systems. A new emergency generator, transformer, and chiller were added along with a new Energy Recovery Unit with roof screen. Rain water can be harvested and stored in underground tanks.

The project achieved LEED Silver certification from the U.S. Green Building Council.

Owner

Pennsylvania Turnpike
Commission

Chris David

Regional Facilities Manager

724-755-5168

cdavid@paturnpike.com

Commissioning Services

- + HVAC
- + Electrical
- + Chiller

Schedule

Completion in 2013

Construction Cost

\$10,000,000 million



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Understanding Project Requirements

SitelogIQ understands that the Department of General Services is requesting a commissioning agent, on behalf of the Elizabethtown Training Academy, for the systems associated with the renovations of the boiler plant and domestic/fire protection piping in Elizabethtown, Pennsylvania. The Department of Corrections Training Academy facility in Elizabethtown PA is the former State Hospital for Crippled Children, portions of which date to 1929. The campus is heated by steam. The existing, original coal boilers are obsolete and are in limited use status. Heat is currently provided by a trailer mounted boiler and is powered by natural gas with fuel oil as back-up. Cooling of the facility buildings is provided by a combination of DX, Chilled water, and window units.

Many of the site utilities at the Training Academy are original to the facility and require significant repairs to restore full operation, specifically, the Domestic Water/Fire Protection site piping. Similarly, many of the HVAC systems are original to the buildings. Some HVAC systems within Elder Hall have been recently upgraded, however some systems, all controls, and the HVAC in other buildings, are old, and some require significant repairs/replacement due to age, being obsolete, no longer supported, lacking in centralized control/automation, and approaching planned end-of life.

In terms of commissioning, DGS will solicit in two phases—design phase and construction phase. This two-phase process allows for the negotiation of the construction stage fee based upon a substantially completed design and the actual type and number of equipment, systems, and assemblies to be inspected, started and tested. We have provided a budgetary estimate for construction phase services, which is included in our cost submission.

We understand that the renovations will include the following mechanical and electrical equipment:

- ✦ Heating and Ventilating Systems (HVAC) including Heat Generation, Ventilation, and HVAC Control Systems
- ✦ Electrical Systems including Power Distribution, Lighting, and Controls, and Emergency Generator Systems

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Geographic Location

Our commissioning services for this project will be offered out of our Harrisburg Office—3300 N. Third Street, Harrisburg, PA 17110, which is roughly 23 miles from the Training Academy. Similar to previous DGS projects, SitelogIQ does not bill travel time.



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Project Work Plan

Below, we have outlined the detailed description of our proposed work plan SitelogIQ will employ in providing building commissioning services for the HVAC and electrical systems for the renovations to the Elizabethtown Training Academy.

The anticipated number of hours required for completion of the work described below will be **86** hours for the design phase and **214** hours for the construction phase, please see Attachment B in our cost submission.

Design Phase Responsibilities

SitelogIQ will provide the following:

- ✦ **Owner's Project Requirements (OPR)** – Working with the DGS Design Project Manager, SitelogIQ and the Client Agency facilities maintenance staff conduct an OPR workshop early in the concept design stage to develop the project goals, measurable performance criteria, cost considerations, benchmarks, success criteria, and supporting information. Provide descriptions of the following: a) primary purpose of Project, b) environmental and sustainability goals, c) energy efficiency goals, d) indoor environmental quality requirements, e) desired equipment/system quality, reliability, and maintenance requirements, f) facility operation and maintenance requirements including requisite personnel training and orientation.
- ✦ **Commissioning Plan (Cx Plan)** – Provide written document that outlines the overall process, organization, responsibilities, schedule, allocation of resources, and documentation requirements of the Commissioning Process to verify and document that the design, construction, and operation of the facility meet the Owner's Project Requirements (OPR).
- ✦ **Basis of Design (BoD)** – Review written document provided by Design Professional that describes systems/assemblies to be commissioned, including design assumptions, applicable codes/standards, narrative descriptions, and performance criteria used to meet the Owner's Project Requirements (OPR).
- ✦ **Design Review** – Provide Commissioning Design Review Comments of Owner's Project Requirements (OPR), Basis of Design (BoD), and Design Documents concurrent with the Interim Construction and Construction Documents Submission, with back-check of Commissioning Design Review Comments for the final Bid Set Documents. CxA shall attend DGS Design Review meetings.
- ✦ **Commissioning Specifications** – Provide Commissioning Specifications for all systems/assemblies being commissioned for inclusion within the Project Construction Documents.



Construction Phase Responsibilities

SitelogIQ will provide the following:

- ✦ **Submittal Review** – Identify and review Contractor submittals applicable to systems/assemblies being commissioned. Identify issues that might result in rework or change orders. Verify the following: a) conformance with Owner’s Project Requirements (OPR) and Basis of Design (BoD), b) achievement of operations and maintenance requirements, c) enablement of performance testing. All submittal reviews and correspondence must take place in eBuilder.
- ✦ **Job Construction Meetings** – SitelogIQ will attend regular job construction meetings as necessary to ensure the systems are properly installed, operated, and tested, and are functioning correctly to meet the design intent.
- ✦ **Commissioning Meetings** – SitelogIQ will hold regularly scheduled jobsite Commissioning Meetings with all project stakeholders to review important aspects of equipment, HVAC system, and Controls System installation. Review and document necessary installation details, system testing procedures, and documentation requirements. Keep meeting minutes and include in the Cx Report.
- ✦ **Construction Observation and Testing** – Verify that the performance of the systems/assemblies being commissioned, as installed, meet the Owner’s Project Requirements (OPR), Sustainability Criteria, Basis of Design (BoD), and Contract Documents. Furnish test procedures prior to equipment installation. Test procedures shall list the entities responsible for executing each test. Provide installation inspections. Direct, witness, and document tests. Evaluate test results and verify that installed systems/assemblies meet the criteria for the Project.
- ✦ **Issues and Resolution Log** – Develop a commissioning issues log containing open and continuing items, status, and name of person/organization responsible for resolution.
- ✦ **Systems Manual** – During the design and construction of the project, the design and construction documents should be assembled into the systems manual. This assembly of documents provides the details and history of the design and construction of the building and information needed to properly operate the building. The systems manual includes the project final OPR, BOD, construction record documents, submittals, completed startup, verification checklists, functional and performance checklists, verified sequence of operation, facility guide, training records, and commissioning report. The systems manual should be used in the initial and subsequent training of the building operations staff and occupants. The systems manual should be updated throughout the life of the building and shall be furnished in addition to O&M manual submitted by Construction Contractor.
- ✦ **Pre-Functional and Functional Performance Testing** – Confirm (but not necessarily witness) manufacturer’s startup of individual equipment components (Pre-Functional Performance Testing). Write, direct completion of, witness, and document full Functional Performance Testing of each system and system component. Confirm proper operation of all control sequences for each season operation. Document in Cx Report.
- ✦ **Training Plans and Records** – Review, pre-approve, and verify training of the Client Agency personnel by the Contractor, to operate and maintain systems/assemblies being commissioned. Include training plan, training materials, and records in final Systems Manual.



- ✦ **End of Warranty Cx Report** – Provide post-occupancy operation commissioning, including incomplete, delayed, and seasonal testing, as well as warranty issues. Post-occupancy operations shall begin at Substantial Completion and shall continue through to the end of the warranty period.
- ✦ **Preliminary and Final Cx Report** – A preliminary commissioning report should be prepared that shows the commissioning progress and equipment performance to date at the time the Certificate of Occupancy is issued. At the completion of the project the final commissioning report should be assembled and provided to the owner and others as required by the OPR and local jurisdiction requirements. This report shall include the final commissioning plan, copy of design and submittal review reports, all startup, inspection, verification, functional and performance test forms and reports, the verified sequence of operation, the final Issues and Resolutions log, and summary of the performance of commissioned systems. Provide written description of system problematic areas, including those that were experienced in this commissioning process and their resolution, along with other possible issues that may arise during future system operations.

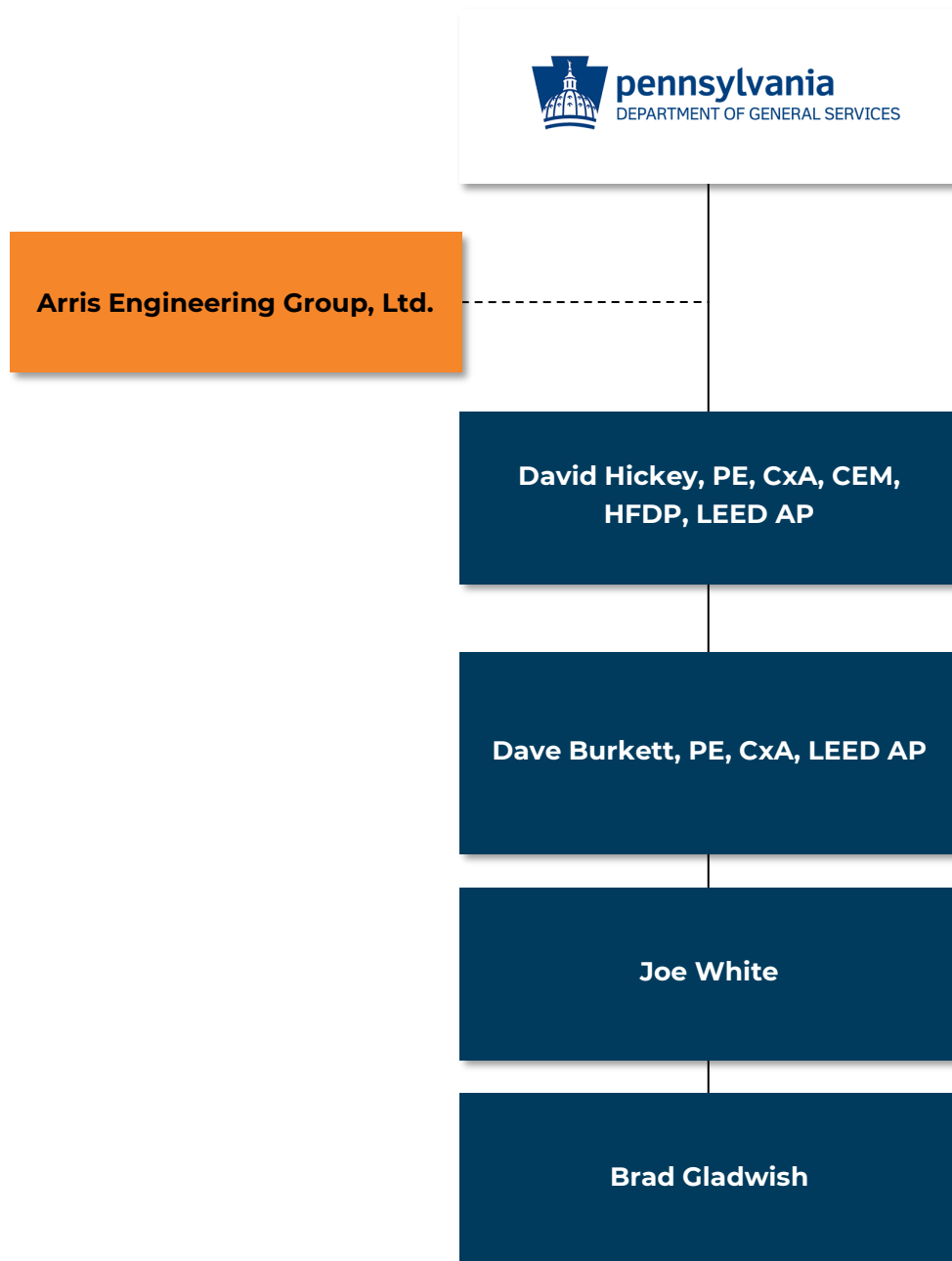


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Personnel and Qualifications

SitelogIQ has assembled a team of commissioning experts and professional engineers that will offer Bloomsburg University practical, cost effective, and efficient approaches to the commissioning of the HVAC equipment at the Center. We will work with the University to ensure that they have a complete understanding of all testing procedures as well as the proper training on all building systems and components. SitelogIQ is proposing to use staff whose qualifications and roles were submitted with our qualifications package.





David is a graduate of the Pennsylvania State University Architectural Engineering program. He is a licensed professional engineer and carries multiple certifications, including LEED AP, Certified Energy Manager, and Certified Commissioning Authority. David provides design and commissioning experience and expertise.

As Vice President, David is responsible for the management of all SitelogIQ's commissioning projects. He oversees the entire process, focusing on the creation and review of higher-level mechanical and electrical systems testing, training and coordination of meetings.

Education

Bachelor of Architectural Engineering, Mechanical Emphasis, Penn State, 1995

Certifications/Registrations

Professional Engineer: PA, VA
 LEED Accredited Professional (LEED AP), Green Building Institute, 2001
 Certified Energy Manager (CEM), Association of Energy Engineers, 2009
 Healthcare Facility Design Professional (HFDP), American Society of Heating, Refrigerating & Air-Conditioning Engineers, 2008
 Certified Commissioning Authority (CxA), AABC Commissioning Group, 2016
 Certified Commissioning Professional (CCP), Building Commissioning Certification Board, 2017
 Healthcare Construction Certificate, American Society for Healthcare Engineering, 2008

Project Experience

Bucknell University, Lewisburg, PA
 Elizabethtown College, Elizabethtown, PA
 Millersville University, Millersville, PA
 Penn State University, University Park, PA
 Pennsylvania Department of General Services, Harrisburg, PA
 Benton Area School District, Benton, PA
 Bristol Township School District, Levittown, PA
 Carnegie Library of Pittsburgh, Pittsburgh, PA
 Eastern York School District, Wrightsville, PA
 Grove City Area School District, Grove City, PA
 Hanover Public School District, Hanover, PA
 Harrisburg University, Harrisburg, PA
 Hempfield Area School District, Greensburg, PA
 Laurel Health System, Wellsboro, PA
 Lower Merion School District, Ardmore, PA
 Milton Hershey School, Hershey, PA
 Mount Pleasant Area School District, Mount Pleasant, PA
 Northern Lebanon School District, Fredericksburg, PA
 Owen J. Roberts School District, Pottstown, PA
 Penn State Health-Holy Spirit Hospital, Camp Hill, PA
 Penn State Milton S. Hershey Medical Center, Hershey, PA
 Pennsylvania Housing Finance Agency, Harrisburg, PA
 Peters Township School District, McMurray, PA
 Philadelphia City School District, Philadelphia, PA
 Slippery Rock Area School District, Slippery Rock, PA
 University of Pittsburgh, Pittsburgh, and Bradford PA
 UPMC Memorial Hospital, York, PA
 UPMC West Shore Hospital, Mechanicsburg, PA
 UPMC York Ambulatory Care, York, PA
 Warrior Run School District, Turbotville, PA



With over 38 years of experience and a commissioning authority certification, Dave knows the importance of attention to detail. He excels at sniffing out inconsistencies and providing solutions to problems, and always seeks to keep operating costs in check for his clients.

As Senior Mechanical Engineer/Commissioning Associate, Dave oversees the entire commissioning process for all projects and participates in and reviews higher-level mechanical and electrical systems testing. He is responsible for overseeing all commissioning activities, particularly testing, training, and coordination of meetings.

Education

Bachelor of Science, Mechanical Engineering Technology, University of Pittsburgh at Johnstown, 1983

Certifications/Registrations

Professional Engineer: PA, MD

LEED Accredited Professional, 2004

Certified Commissioning Authority (CxA), AABC Commissioning Group, 2016

Project Experience

Bucknell University, Lewisburg, PA
Bucks County Community College, Newtown, PA
Elizabethtown College, Elizabethtown, PA
Harrisburg University, Harrisburg, PA
Millersville University, Millersville, PA
Morgan State University, Baltimore, MD
Thomas Jefferson University, Philadelphia, PA
University of Pittsburgh, Johnstown and Bradford, PA
Pennsylvania Department of General Services, Harrisburg, PA
Bristol Township School District, Levittown, PA
Central Bucks School District, Doylestown, PA
Community College of Philadelphia, Philadelphia, PA
Downingtown Area School District, Downingtown, PA
Grove City Area School District, Grove City, PA
Lancaster City School District, Lancaster, PA
Lansdale Borough, Lansdale, PA
Lancaster Country Day School, Lancaster, PA
Lower Merion School District, Ardmore, PA
Manheim Township School District, Lancaster, PA
Northern Lebanon School District, Fredericksburg, PA
Oxford Area School District, Oxford, PA
Penn State Milton S. Hershey Medical Center, Hershey, PA
Pennsylvania Turnpike Commission, Harrisburg, PA
Peters Township School District, McMurray, PA
Philadelphia City School District, Philadelphia, PA
Warrior Run School District, Turbotville, PA
York City School District, York, PA



Joe has spent 10 years with SitelogIQ, developing prefunctional and functional testing and witnessing start-up and function of electrical equipment.

As Electrical Commissioning Associate, Joe is responsible for pre-functional and functional testing of the project's electrical systems to make sure they perform within the designated ranges. He also is responsible for reviewing the installation, required testing, and participates in the O&M training.

Education

Bachelor of Science, Electrical Engineering, University of Dayton, 1985

Project Experience

- Bucknell University, Lewisburg, PA
- Elizabethtown College, Elizabethtown, PA
- Harrisburg University, Harrisburg, PA
- University of Pittsburgh, Pittsburgh and Bradford, PA
- Pennsylvania Department of General Services, Harrisburg, PA
- Abington Heights School District, Abington, PA
- Arlington Public Schools, Arlington, VA
- Baltimore City Schools, Baltimore, MD
- Bristol Township School District, Levittown, PA
- Central Bucks School District, Doylestown, PA
- Grove City Area School District, Grove City, PA
- Lancaster Country Day School, Lancaster, PA
- Laurel Health System, Wellsboro, PA
- Lower Merion School District, Ardmore, PA
- Marple Newtown School District, Newtown Square, PA
- Milton Hershey School, Hershey, PA
- Montgomery County Public Schools, Rockville, MD
- Northern Lebanon School District, Fredericksburg, PA
- Owen J. Roberts School District, Pottstown, PA
- Pennsylvania Turnpike Commission, Harrisburg, PA
- Peters Township School District, McMurray, PA
- Philadelphia City School District, Philadelphia, PA
- Philadelphia Gas Works, Philadelphia, PA
- Southeast Delco School District, Sharon Hill, PA
- UPMC West Shore Hospital, Mechanicsburg, PA
- UPMC Memorial Hospital, York, PA
- UPMC York Ambulatory Care, York, PA
- Upper Bucks County Technical School, Perkasie, PA
- Warrior Run School District, Turbotville, PA
- Woodland Hills School District, Pittsburgh, PA
- York City School District, York, PA



As a National Environmental Balancing Bureau certified technician, Brad is qualified in proper methods and procedures for testing building systems for optimum performance. He has coordinated projects ranging from simple standard systems to large systems with complex controls to ensure that they meet the customer's requirements.

As a Performance Assurance Specialist, Brad is responsible for pre-functional and function testing of the project's systems to make sure they perform within the designated ranges. He reviews the installation, required testing, and participates in the O&M training.

Education

Associate of Applied Science, Metal Fabrication/Welding Technology, Thaddeus Stevens College of Technology, 2007

Certifications/Registrations

Certified Commissioning Authority (CxA), AABC Commissioning Group, 2021

NEBB Certified Technician, Air & Hydronic Systems, 2009

30-Hour OSHA Training

Architectural Technician Training

First Aid Certificate

Project Experience

- Pennsylvania Department of General Services, Harrisburg, PA
- Bristol Township Public Schools, Levittown, PA
- Centennial School District, Warminster, PA
- Central Bucks School District, Doylestown, PA
- Lancaster Country Day School, Lancaster, PA
- Lower Merion School District, Ardmore, PA
- Juniata County School District, Mifflintown, PA
- Montgomery County Department of General Services, Rockville, MD
- Northern Lebanon School District, Fredericksburg, PA
- Palmyra Area School District, Palmyra, PA
- Philadelphia City School District, Philadelphia, PA
- Philadelphia Gas Works, Philadelphia, PA
- UPMC West Shore Hospital, Mechanicsburg, PA
- UPMC York Ambulatory Care, York, PA
- Warrior Run School District, Turbotville, PA