



## COVER LETTER

Ms. Becky Tomlinson, Procurement Specialist 3  
General Services | Energy & Resource Management  
403 North Office Building, 401 North Street  
Harrisburg, PA 17120

*RE: Response to Request for Quotes for a Guaranteed Energy Savings Project at Department of General Services Reading, Scranton, Harrisburg, Pennsylvania, Project Number GESA 2023-1 DGS GESA 2023-1*

Dear Ms. Tomlinson:

The Brewer-Garrett Company (BG) is pleased to respond to the Commonwealth of Pennsylvania, Department of General Services' request for quote for a guaranteed energy savings project at the Department of General Services Reading, Scranton, and Harrisburg, Pennsylvania facilities and is in receipt of all seven (7) bulletins. For over 63 years, we have used our expertise to provide customized solutions to reduce operating costs and improve the condition and value of facilities.

Our in-house team is uniquely suited to deliver exceptional solutions to your facilities. Our guaranteed energy savings agreements (GESAs) are complete, turn-key programs that offer guaranteed operational and maintenance costs as well as a guaranteed savings. We evaluate energy savings opportunities and develop customized engineering designs and specifications to best meet your needs.

Within this proposal, the BG team will clearly demonstrate to the Department of General Services (DGS), the site staff of the Reading, Scranton, and Harrisburg facilities, and Entech (energy consultant) that our vast experience in deploying guaranteed energy savings projects within the confines of state government facilities, paired with a commitment to your objectives, will drive the success of this project. Our promise is innovation that exceeds expectations!

We thank you for the opportunity and look forward to being the solution to your energy needs.

The primary contact person for this request for quote response is:

**Jeffrey Zellers, Vice President**

**The Brewer-Garrett Company** (PA Vendor# 0000522326; GESA ITQ Contract #4400016786)

6800 Eastland Road

Middleburg Heights, OH 44130

Phone: 440-243-3535

Fax: 440-243-9993

E-Mail: [jzellers@brewer-garrett.com](mailto:jzellers@brewer-garrett.com)

Very truly yours,

**The Brewer-Garrett Company**



Jeffrey L. Zellers, Vice President



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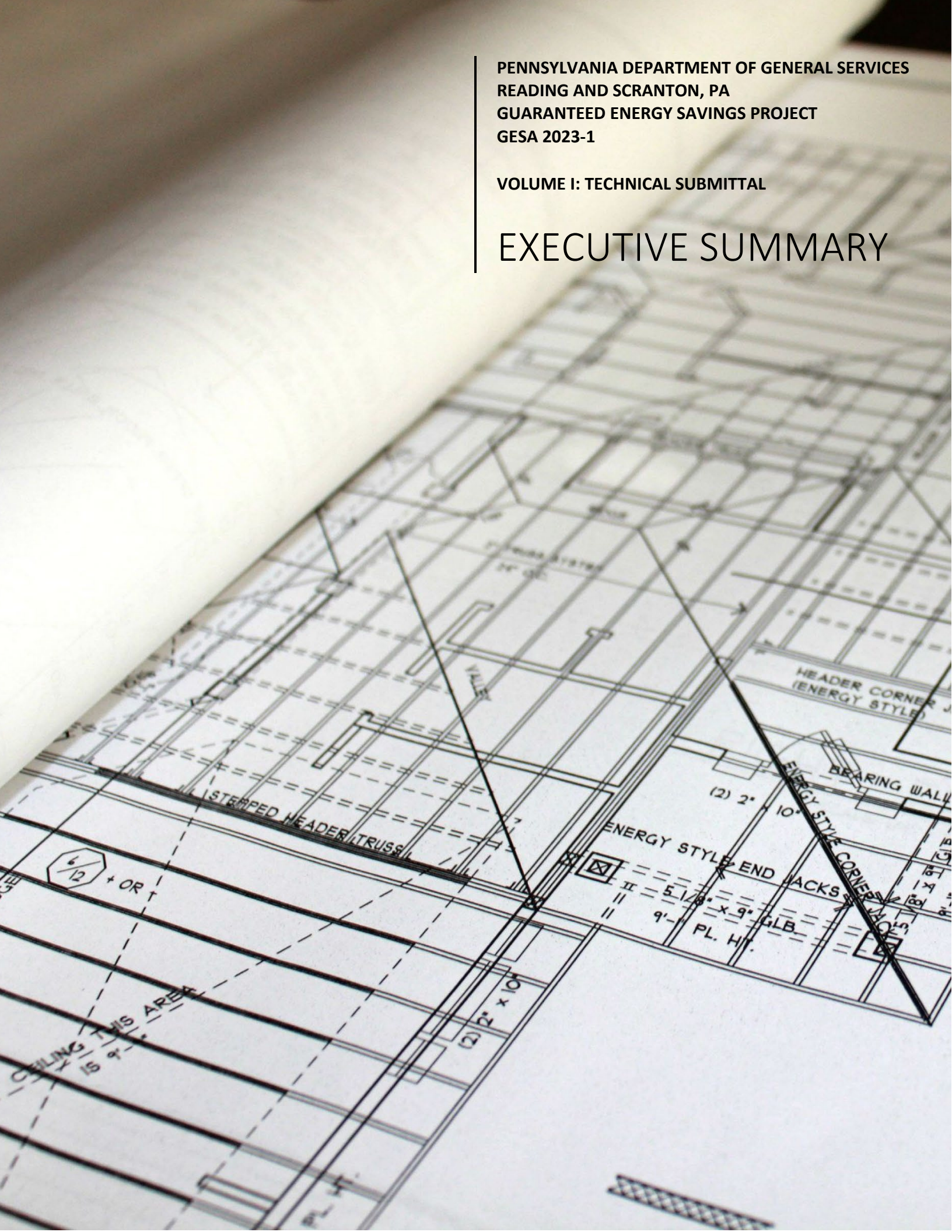
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PENNSYLVANIA DEPARTMENT OF GENERAL SERVICES  
READING AND SCRANTON, PA  
GUARANTEED ENERGY SAVINGS PROJECT  
GESa 2023-1

VOLUME I: TECHNICAL SUBMITTAL

# EXECUTIVE SUMMARY



## EXECUTIVE SUMMARY

BG is pleased to submit this proposal in response to the Department of General Services Reading, Scranton, Harrisburg, Pennsylvania Request for Quotes issued by the Pennsylvania Department of General Services for this Guaranteed Energy Savings Agreement (GESA) Project.

The Department of General Services Reading, Scranton, and Harrisburg, Pennsylvania GESA project is key to our growth strategy in Pennsylvania. Our aim is to show DGS and the staff at each facility why BG is the best suited firm to execute this project. As a company from Ohio, we must go above and beyond with our best team, most competitive pricing, and most creative solutions to earn your selection and partnership. Because our growth is built on reputation and references, a long-term partnership with DGS contributes to our success throughout the Commonwealth of Pennsylvania.

Throughout its history, BG's team has successfully implemented GESA projects in similar facilities throughout various industries and markets—in the last 10 years alone, BG has completed similar projects at 30 universities, 15 hospitals, and five (5) correctional institutions. Many of the management team and key personnel responsible for these projects have been assigned to the DGS GESA project team.

Additionally, throughout Pennsylvania BG is currently:

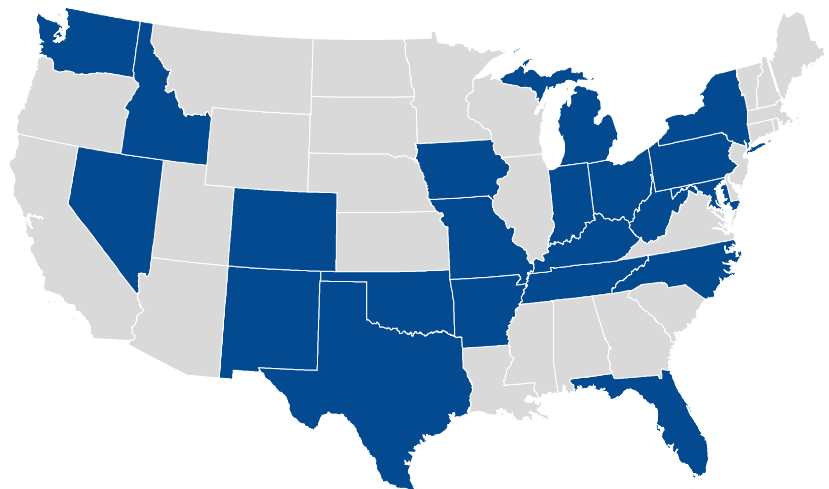
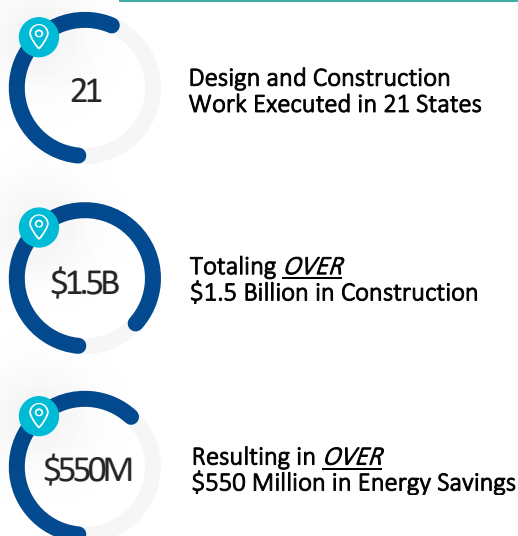
- Developing several energy projects for the United States Army Corps of Engineers (USACE)
- Finalizing an investment grade audit (IGA) for the GESA project at the Department of Corrections' SCI Frackville facility
- Under contract for a \$2.2 million multi-phase energy project at Brandywine Heights Area Schools
- Wrapping up construction on an \$8.5 million energy project at Shamokin Area Schools
- In negotiations for an energy project with Wilkes-Barre Area Schools

BG's value is in its dedicated staff of in-house professionals; we provide first-tier solutions with our customer's best interest in mind. We deliver direct engineering and construction project controls that safeguard quality, maximize performance, contain costs, and remove the middleman. This structure allows us to maximize the return on investment for our customers and enables us to guarantee cost effective solutions and on-time installations geared toward customer satisfaction.

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*“Since 1996, BG has successfully designed and implemented over 830 energy conservation projects totaling over \$1.5 billion for customers in 21 States.”*

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***Recognitions include:***

- NAESCO-Accredited Energy Service Company (ESCO)
- U.S. Department of Energy (DOE) Qualified ESCO
- U.S. Department of Energy (DOE) IDIQ ESPC Contract Holder (Generation 3)
- 1 of 21 ESCOs in the world qualified to execute work under this contract
- Five-time Ohio Governor’s Award for Excellence in Energy Efficiency
- Mechanical Service Contractor of America (MSCA) Green Star Award
- Ernst & Young Entrepreneur of the Year Award
- S.D Corp. Contractor of the Year Award
- MCAA Innovation Award
- ASHRAE Technology Award

BG is proud to present the DGS, facility staff, and Entech with an **Energy Only** solution that utilizes no operations & maintenance (O&M) savings or energy related cost savings (ERCS); *our intent is to provide the GESA Project Team with the outline of a project without leverage that can be built out during the IGA to include a number of additional ECMs based on the highest priority needs of the DGS.* A **Base** solution utilizing all core Energy Conservation Measures (ECMs) outlined in Appendix R. Lastly, we have also provided a **Recommended** solution that addresses most of the core ECMs outlined in Appendix R with some supplementary ECMs to provide additional opportunities.

***Our proposed projects will achieve the following goals identified in the request for quote:***

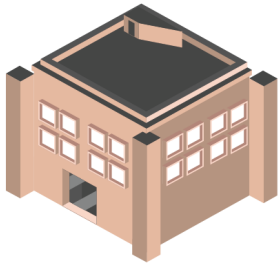
- |   |  |
|---|--|
| 1 Improving comfort conditions and indoor air quality       | 5 Collecting and managing building/facility information in real time |
| 2 Replacing and/or upgrading old and/or inefficient systems | 6 Minimizing financial and technical risk to the Commonwealth        |
| 3 Improving utilization of technology                       | 7 Establishing current base usage for all energy                     |
| 4 Upgrading air conditioning systems where applicable       | 8 Reducing energy usage  |
|   | 9 Reducing operating costs   |

***Note:*** BG intends to design, construct, and manage its own GESA project solutions. All developed solutions at this stage are representative of our preliminary assessment—no scope is finalized without conducting an investment grade audit (IGA) or without considerable input from the DGS, site staff, and energy consultant.



## COMMERCIAL & LOCAL GOVERNMENT EXPERIENCE

### NORTHEAST OHIO REGIONAL SEWER DISTRICT (NEORS D)



GUARANTEED  
SAVINGS

**\$7.1M**

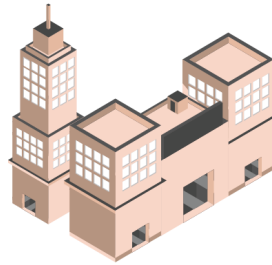
TOTAL COST

**\$6M**

**185,142** SQUARE  
FEET

PROJECT  
RELEVANCE: | De-Centralized  
Campus-Wide Steam Plant

### GALLERIA AND TOWER AT ERIEVIEW



GUARANTEED  
SAVINGS

**\$10M**

TOTAL COST

**\$7M**

**950,000** SQUARE  
FEET

PROJECT  
RELEVANCE: | Eliminated Reliance  
on District Steam

### CITY OF BROOK PARK



GUARANTEED  
SAVINGS

**\$8.4M**

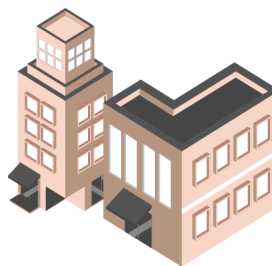
TOTAL COST

**\$9.5M**

**429,000** SQUARE  
FEET

PROJECT  
RELEVANCE: | Renovations to  
Consolidate City Hall

### CUYAHOGA COUNTY



GUARANTEED  
SAVINGS


**\$5M**

TOTAL COST

**\$5M**

**1,257,534** SQUARE  
FEET

PROJECT  
RELEVANCE: | Urban Area Construction  
in Occupied Buildings

A woman with red hair, wearing a black sleeveless top, is shown in profile from the chest up, writing on a whiteboard with a blue marker. The whiteboard has various handwritten notes in blue and black ink, including "APLs", "feedback platform", and "1.2". The background is a plain, light-colored wall.

PENNSYLVANIA DEPARTMENT OF GENERAL SERVICES  
READING AND SCRANTON, PA  
GUARANTEED ENERGY SAVINGS PROJECT  
GESa 2023-1

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## 2-5.1 PROJECT MANAGEMENT TEAM OVERVIEW



PENNSYLVANIA DEPARTMENT OF GENERAL SERVICES  
READING AND SCRANTON, PA  
GUARANTEED ENERGY SAVINGS PROJECT  
GES 2023-1

VOLUME I: TECHNICAL SUBMITTAL

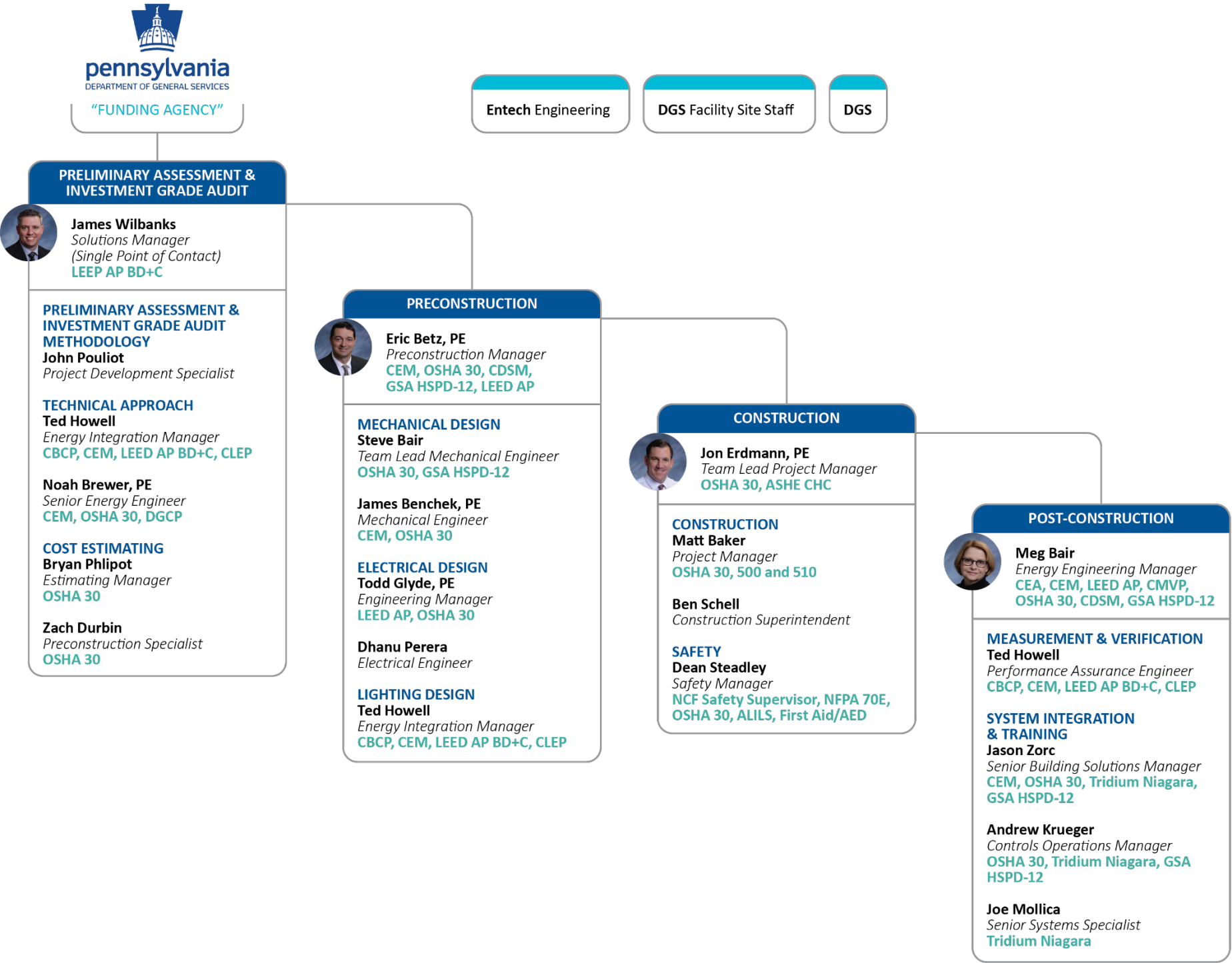
## A. ORGANIZATIONAL CHART





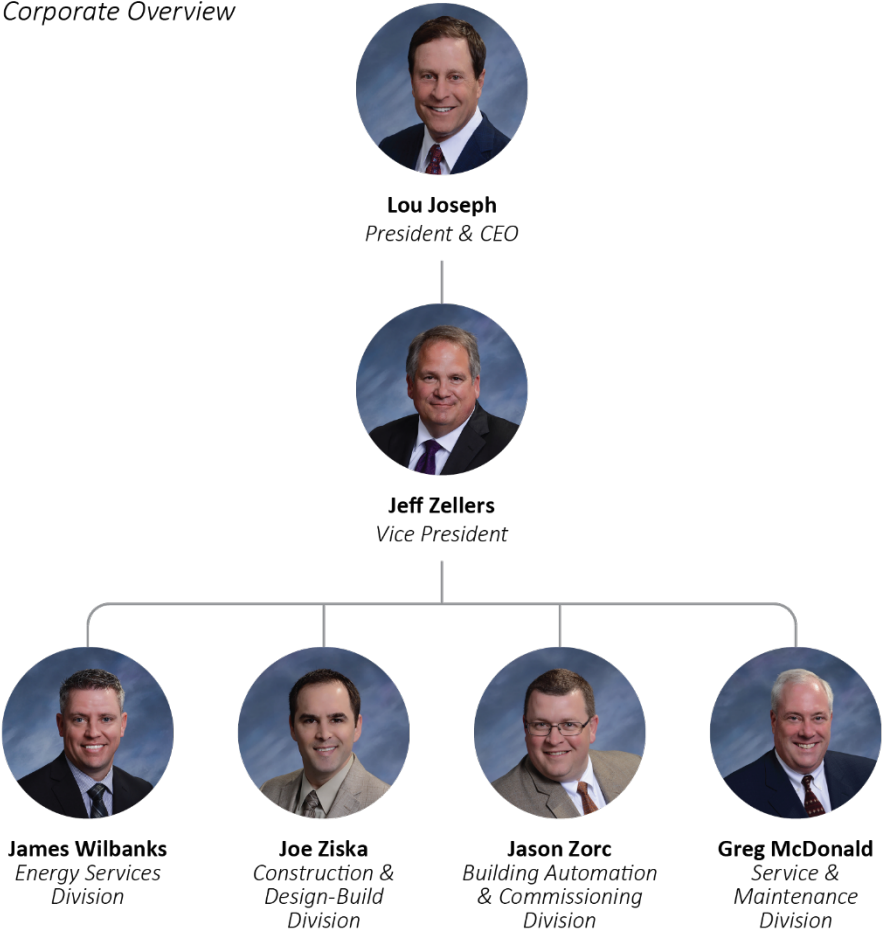
2-5.1. PROJECT MANAGEMENT TEAM OVERVIEW -  
A. Organizational Chart

A. Organizational chart clearly depicts hierarchy and reporting structure of Team members with specific individuals and their assigned roles. A.1. Personnel identified should include, as practical, executives, project managers, etc. down through field supervisors.



SUBCONTRACTOR LEGEND	
SBD Indicates Small Diverse Business Program Member	
FIRM	TRADE
LSI (SDB)	Lighting and Water Conservation
H2O (SDB)	Steam
ECM	Envelope
FirstMetrix (SDB)	Diversity, Inclusion, and Procurement

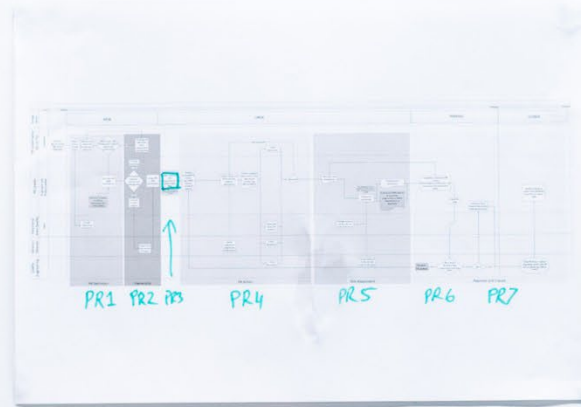
BREWER-GARRETT  
Corporate Overview



PENNSYLVANIA DEPARTMENT OF GENERAL SERVICES  
READING AND SCRANTON, PA  
GUARANTEED ENERGY SAVINGS PROJECT  
GES-2023-1

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B. KEY PERSONNEL  
RESPONSIBILITIES



Level 3 -  
Level 4



## *B. Key Personnel Responsibilities*

*B. Offeror described the assignment of responsibilities for major tasks, the interrelationship and management structure of overall Team, including history or working relationship between Offeror and selected Subcontractors on GESA projects, and the process utilized in selecting subcontractors.*

Our in-house team works together seamlessly from the start of a project through its completion. Each member plays a vital role in delivering a quality plan that will exceed your expectations. Highlights of each key team member and their project responsibilities are detailed below and on the following pages.

### EXECUTIVE SUPPORT



#### **Vice President**

**JEFFREY ZELLERS**

- 
- Executive oversight of entire project
  - Assembles team of in-house professionals who are best suited for each specific project
  - Coordinates efforts of engineering, energy services, construction, support service maintenance, and accounting
  - Focuses on contract execution and ensuring resource commitment throughout each project



## PRELIMINARY ASSESSMENT & IGA PHASE



### **Solutions Manager + Project Development Specialist** **JAMES WILBANKS + JOHN POULIOT**

---

- Serves as the main points of contact
- Surveys existing conditions
- Make a preliminary environmental assessment
- Experienced in working in a governmental environment and is sensitive to the challenges
- Coordinates team members and resources to deliver the IGA and final scope of work
- Oversees all facets of the project
- Collaborates with team members from each phase to ensure that project tasks are completed and that the project designed is the project installed



### **Energy Integration Manager** **TED HOWELL**

---

- Surveys existing conditions
- Designs GESA project
- Prepares schematic documents
- Prepares construction documents
- Confirms specifications
- Conducts lighting surveys
- Refines and communicates energy calculations and provides technical support
  - \*Will work in the **Preconstruction** Phase as the *Energy Integration Manager*
  - \*Will work in the **Post-Construction** Phase as the *Performance Assurance Engineer*



### **Senior Energy Engineer** **NOAH BREWER**

---

- Surveys existing conditions
- Makes a preliminary environmental assessment
- Develops multifaceted energy savings performance contracts
- Conducts energy surveys and develops state of the art solutions



### **Estimating Manager** **BRYAN PHILIPOT**

---

- Surveys existing conditions
- Identifies cost effective means and methods for each project
- Guarantees realistic cost estimates based on unique challenges of working in a governmental environment
- Develops accurate scheduling and manpower plans

## PRECONSTRUCTION PHASE



**Preconstruction Manager**  
**ERIC BETZ, PE**

- Conducts and emails monthly progress reports during design stage
- Has designs approved by funding agency
- Confirms and complies with PA Uniform Construction Codes
- Examines fuel source
- Prepares schematic and constructions documents
- Lists required permits
- Confirms specifications
- Manages the development, estimating, design, and commissioning of electrical and mechanical projects
- Designs and implements projects for new construction, buildouts, remodels, and retrofits



**Engineering Manager + Electrical Engineer**  
**TODD GLYDE, PE + DHANU PERERA**

- Designs GESA project
- Prepares schematic and construction documents
- Confirms specifications
- Limits spread of fire or products of combustion
- Responsible for creating the engineering and construction budget
- Performs jobsite inspections and power quality studies



**Team Lead Mechanical Engineer + Mechanical Engineer**  
**STEVE BAIR + JAMES BENCHEK, PE**

- Directs and oversees a team of designers and engineers to develop and maintain design and engineering standards
- Designs GESA project
- Confirms and complies with PA Uniform Construction Codes
- Examines fuel source
- Prepares schematic and construction documents
- Confirms specifications
- Performs construction estimates, jobsite inspections, and coordinates projects

## CONSTRUCTION PHASE



**Team Lead Project Manager**  
JON ERDMANN, PE

- Oversees all facets of design and construction
- Ensures the project that is designed is the project that is installed
- Has full decision making authority
- Obtains approval from local, state, and federal regulatory agencies
- Provides accurate and complete schedules
- Prepares and submit record of as-built drawings
- Holds regular bi-weekly meetings on site
- Submits record drawings within 90 days of final inspection
- Obtains certificate of occupancy
- Informs DGS legal unit that a utility easement/agreement must be developed
- Addresses hazardous materials that may impact the project
- Installations of emergency or standby generators
- Experienced in working in a secured and occupied environment, and is sensitive to scheduling challenges



**Project Manager (On-Site)**  
MATT BAKER

- Holds regular bi-weekly meetings on site
- Visits site at least bi-weekly during construction
- Addresses hazardous materials that may impact the project
- Ensures project tasks are completed on schedule and within the budget
- Provides on-site supervision throughout construction
- Experienced in working in a secured and occupied environment



**Construction Superintendent**  
BEN SCHELL

- Surveys Conditions
- Performs land surveys
- Holds regular bi-weekly meetings on site
- Visits site at least bi-weekly during construction
- Addresses hazardous materials that may impact the project
- Limits spread of fire and products of combustion

**POST-CONSTRUCTION**



**Energy Engineering Manager**  
**MEG BAIR**

- Oversees all energy engineering resources
- Responsible for the development and execution of M&V plans and annual audits
- Ensures saving estimates and projections are realistic and attainable
- Designs solutions creating significant reductions in energy consumption

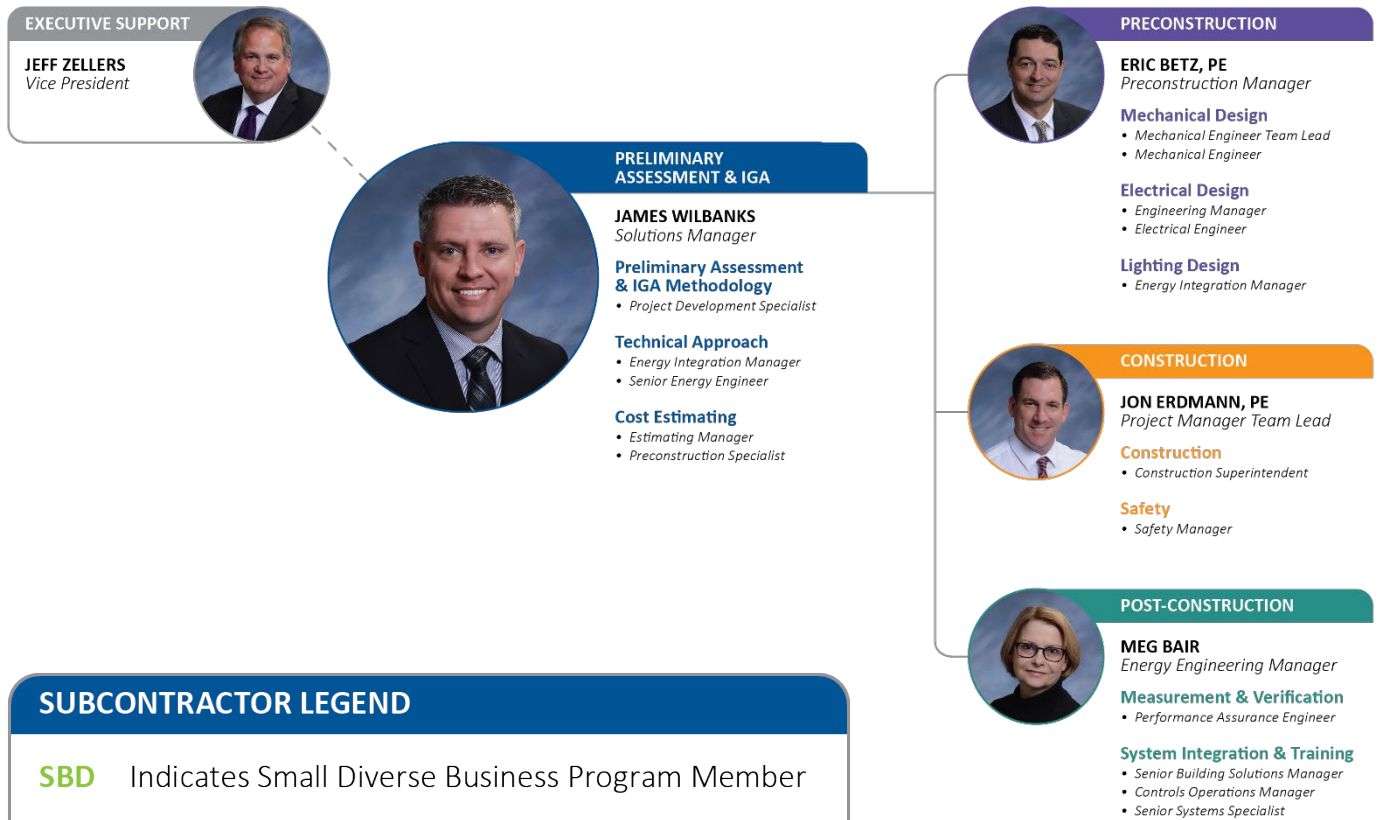


**Senior Building Solutions Manager**  
**JASON ZORC**

- Runs quality control tests
- Creates organized operation/maintenance manual
- Manages all aspects of energy management, automation, and temperature controls systems
- Drives cost effective and energy efficient solutions

## Interrelationship and Management Structure of Overall Team

Below is a graphical representation of the interrelationship and management structure of the overall team. BG's Solutions Manager, James Wilbanks, is the main point of contact for the preliminary assessment and IGA development. Once awarded and the IGA is complete, preconstruction begins and is managed by Engineering Manager, Todd Glyde. After preconstruction is complete and the schematic submission is approved by the funding agency and DGS, construction begins and is managed by the Team Lead Project Manager, Jon Erdmann. Lastly, once construction has concluded and a certificate of occupancy is obtained, post-construction begins and is managed by Energy Engineering Manager, Meg Bair.



### SUBCONTRACTOR LEGEND

**SDB** Indicates Small Diverse Business Program Member

FIRM	TRADE
LSI (SDB)	Lighting and Water Conservation
H2O (SDB)	Steam
ECM	Envelope
FirstMetrix (SDB)	Diversity, Inclusion, and Procurement

## Subcontractor Selection Process

At the foundation of BG's value driven approach is an open book, guaranteed maximum price (GMP). The overall benefit is any overages that occur would be the responsibility of BG with the client never paying more than the established GMP. Our approach ensures the highest achievable return on investment.



- **Competitive Bidding** – Once selected, BG solicits competitive bids for all major equipment and labor including pre-negotiated overhead and profit thresholds with BG being responsible for all professional services (i.e., engineering, project management, automation, etc.).
- **Risk Mitigation** – By establishing a GMP during the preliminary audit phase, BG assumes all risk of cost overruns throughout the construction of the project.

- **Additional Scope** – The value of any reduction in pricing achieved through competitive bidding processes is returned to the funding agency to allow for additional scope or use at their discretion.

The BG team strives for a high level of inclusion with all its projects. Understanding the Commonwealth places particular importance through its SDB/VBE program, BG has developed a specific subcontracting strategy to ensure maximization participation of small and diverse businesses.

### Small Diverse Business and Veteran Business Enterprise Participation Goal

BG commits to supporting SDB/VBE on every project, not only meeting, but exceeding client goals. Small and Veteran business partnerships are the core of BG's success.

BG has engaged FirstMetrix Corporation (FM) a woman-owned, small business to lead and manage SDB/VBE project participation for DGS' GESA project.

**Small Diverse Business and Veteran Business Enterprise Selection Process:** The foundation of the BG team's small, diverse business participation philosophy is to seek out, qualify, and hire SDB and VBE contractors that can deliver quality construction, at a competitive cost, and meet critical schedule deadlines without creating undo risk for successful implementation of the Department of General Services Reading, Scranton, Harrisburg, Pennsylvania project. The following criteria are used to pre-screen and qualify potential partners:

1. Registered with the Commonwealth of Pennsylvania BDISBO directory
2. Prequalified by evaluating past performance, key personnel resumes, and financial stability
3. Interviewed, analyzed, and sought proposals for specific core ECMs
4. Reviewed lowest and most responsive proposals for alignment of Project's ECM Goals
5. Confirmed commitment of resources and dedication to DGS project





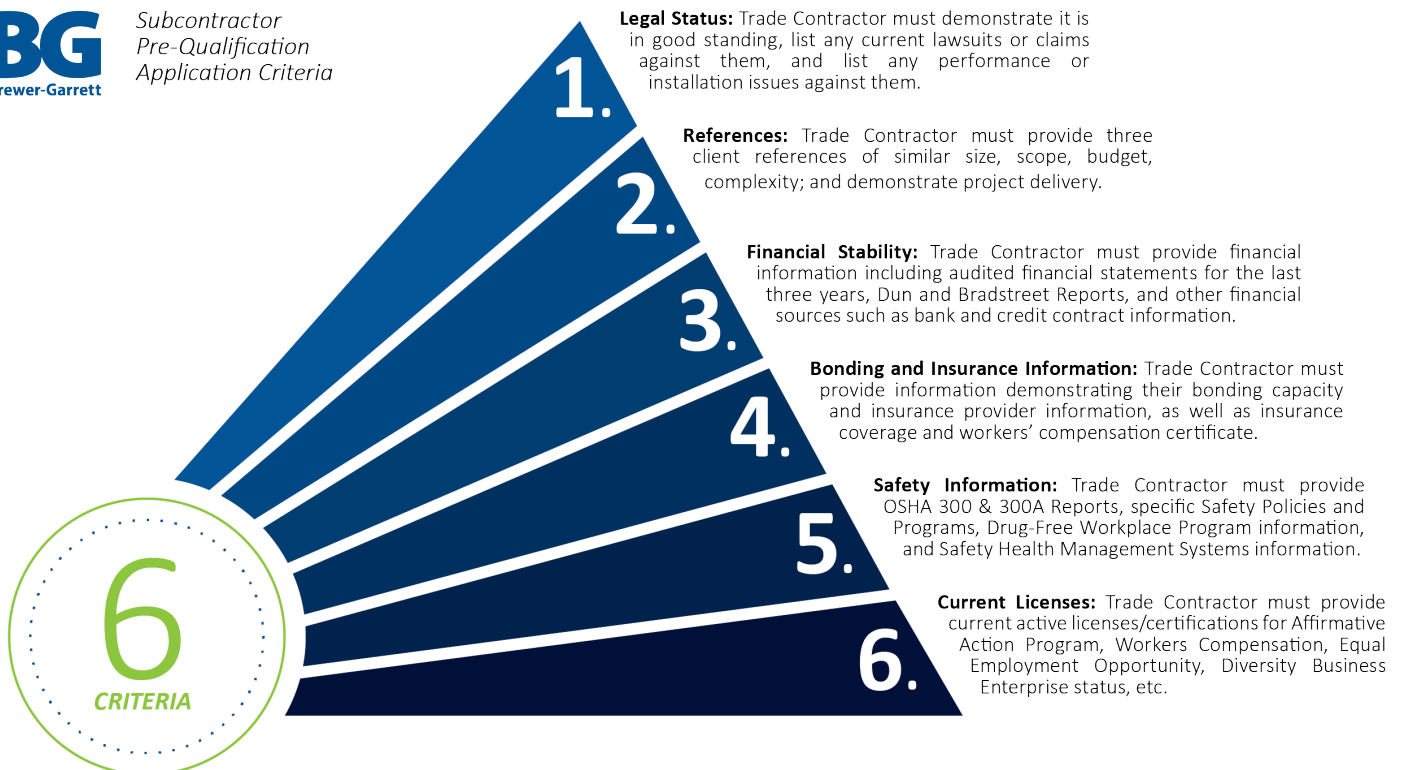


Working with the DGS, funding agency, site staff, and energy consultant to co-author an outcome-based measurement framework for SDB/VBE participation, we will establish a current state baseline. We will then formulate measurement and verification of project diversification and inclusion by focusing on objective, practical, and sustainable metrics. Also included will be a small business utilization report that will be produced during the construction phase by the on-site Project Manager, Matt Baker.

*Below is a graphical representation of the minimum criteria BG measures subcontractors against before considering further engagement:*



*Subcontractor  
Pre-Qualification  
Application Criteria*



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READING AND SCRANTON, PA  
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## C.1. KEY PERSONNEL FOR PROJECT TASKS






## C. Proposed Management Team

### C.1. Key Personnel for Project Tasks

*C.1. Offeror described assignment of responsibilities for various Project tasks for this Project to specific individuals.*

We have provided a table below to identify the assignment of responsibilities for various tasks for this project. The individual titles listed below directly correlate to the organization chart provided in the previous section. We did not include regular project meetings and coordination with the DGS, funding agency, site staff, or energy consultant as a project task.

		Solutions Manager + Project Development Specialist	Energy Integration Manager	Senior Energy Engineer	Estimating Manager	Engineering Manager	Electrical Engineering	Mechanical Engineering	Team Lead Project Manager	Project Manager (On-Site)	Construction Superintendent	Safety Manager	Energy Engineering Manager	Performance Assurance Manager	Building Solutions
<b>PRELIMINARY ASSESSMENT &amp; INVESTMENT GRADE AUDIT PHASE</b>															
Development of preliminary assessment & final IGA report	✓	✓	✓	✓	✓	✓	✓								
Establish IGA timeframe and lines of communication with DGS, site staff, funding agency, & energy consultant	✓														
Establish final baseline energy use and utility rates	✓	✓	✓										✓		
Review current lighting, mechanical, electrical, plumbing, & controls systems	✓	✓	✓	✓	✓	✓	✓	✓					✓		✓
Investigate physical site conditions including building envelope & general trades	✓	✓	✓	✓	✓	✓	✓	✓					✓		
Investigate rebate incentives	✓	✓	✓										✓		
Conduct equipment counts		✓	✓	✓			✓	✓					✓		
Review current drawings	✓	✓	✓	✓	✓	✓	✓	✓					✓		✓
Gather nameplate data		✓	✓	✓	✓	✓	✓	✓					✓		
Evaluate controls strategies	✓	✓	✓	✓	✓	✓	✓	✓					✓		✓
Develop final implementation costs per ECM	✓				✓	✓									
Develop final maintenance considerations per ECM	✓												✓		✓
Determine useful life of equipment/ life cycle cost analyses			✓		✓	✓							✓		
Develop final energy & cost savings per ECM	✓	✓	✓	✓	✓	✓	✓	✓					✓	✓	
Produce cash flow for project	✓	✓	✓	✓	✓	✓	✓	✓					✓	✓	
Initial site safety & security review									✓	✓	✓	✓			
Interview site staff	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓






	Solutions Manager + Project Development Specialist	Energy Integration Manager	Senior Energy Engineer	Estimating Manager	Engineering Manager	Electrical Engineering	Mechanical Engineering	Team Lead Project Manager	Project Manager (On-Site)	Construction Superintendent	Safety Manager	Energy Engineering Manager	Performance Assurance Manager	Building Solutions
<b>PRELIMINARY ASSESSMENT &amp; INVESTMENT GRADE AUDIT PHASE (continued)</b>														
Perform necessary core sampling or testing			✓									✓		
Review hazardous material management survey for site				✓				✓	✓	✓	✓			
Perform pre-retrofit measurements for each ECM, as needed with funding agency		✓	✓									✓	✓	✓
Develop final commissioning plan, M&V plan, & training curriculum		✓	✓								✓	✓	✓	✓
Acceptance of IGA from DGS, site staff, funding agency, & energy consultant	✓													
Contract negotiation & execution	✓													
Notice to proceed	✓													
<b>PRECONSTRUCTION PHASE</b>														
Preconstruction planning with DGS, site staff, funding agency, & energy consultant	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓
Perform constructability review of project scope				✓	✓	✓	✓	✓	✓	✓	✓			
Site specific safety and security planning with DGS, site staff, funding agency, & EC								✓	✓	✓	✓			
Perform MEP engineering (schematic design, design development, construction drawings)					✓	✓	✓							
Provide equipment submittals					✓	✓	✓							
Evaluate occupancy schedules per zones with DGS, site staff, funding agency, & EC	✓		✓	✓	✓	✓	✓					✓	✓	
Finalize project schedule with DGS, site staff, funding agency, & energy consultant	✓							✓	✓	✓	✓			
Coordinate site staff liaisons for site security and client safety								✓	✓	✓	✓			
Verify security measures like tool checks, client counts, daily space cleanup, other site-specific rules								✓	✓	✓	✓			
Develop site specific phasing plan of work identifying areas where work will be performed in relation to the project schedule								✓	✓	✓	✓			
Procurement of equipment (based on lead time)				✓	✓			✓	✓					
Execute subcontractor bidding & award process	✓			✓	✓			✓	✓					
Conduct permitting								✓	✓	✓	✓			
<b>CONSTRUCTION PHASE</b>														
Perform project management for installation phase								✓	✓	✓	✓			



	Solutions Manager + Project Development Specialist	Energy Integration Manager	Senior Energy Engineer	Estimating Manager	Engineering Manager	Electrical Engineering	Mechanical Engineering	Team Lead Project Manager	Project Manager (On-Site)	Construction Superintendents	Safety Manager	Energy Engineering Manager	Performance Assurance Manager	Building Solutions
<b>CONSTRUCTION PHASE (continued)</b>														
Manage Procore construction software system								✓	✓					
Execute safety & security plans with all on-site work										✓	✓			
Perform subcontractor installation oversight								✓	✓	✓	✓			
Complete final space cleaning								✓	✓	✓	✓			
Perform project closeout phase								✓	✓	✓	✓	✓		✓
Perform testing & balancing					✓			✓	✓					✓
Generate punch list of items								✓	✓					
Perform start-up & commissioning of systems installed					✓									✓
Complete closeout checklist with site staff								✓	✓					
Provide warranty documentation								✓	✓					
Update occupancy permits if needed								✓	✓					
Produce O&M manuals & as-built documents					✓			✓	✓					✓
Perform equipment training with funding agency & site staff														✓
<b>POST-CONSTRUCTION PHASE</b>														
Provide emergency service & repairs on installed systems during warranty phase												✓		
Perform M&V through reporting period												✓	✓	
Perform post retrofit measurements for each ECM, as needed with funding agency												✓	✓	
Calculate measured project benefits achieved during installation period to funding agency												✓	✓	
Generate annual report every 90 days												✓	✓	
Conduct site visits to verify proper operation of installed equipment								✓	✓			✓	✓	
Review controls strategies are functioning														✓
Review utility bills												✓	✓	
Document any change in use or conditions												✓	✓	
Provide calculations for variables that impact guarantee like time, weather, or events												✓	✓	
Provide on-going training as needed to funding agency & site staff												✓		✓

A man with short brown hair, wearing clear safety glasses and a dark blue button-down shirt, is focused on his work. He is looking down at a piece of machinery in the foreground. In the background, another person wearing a blue and black plaid shirt is visible, also working. The setting appears to be a modern industrial or manufacturing facility with bright overhead lighting.

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## C.2. KEY PERSONNEL PERCENTAGE OF TIME



## C.2. Key Personnel Percentage of Time

C.2 Offeror provided percentage of time key personnel are assigned to this Project.

**Project Manager (On-Site)**  
MATT BAKER



**100%**

*Total Commitment*

**Construction Superintendent**  
BEN SCHELL



**60%**

*Total Commitment*

**Energy Engineering Manager**  
MEG BAIR



**50%**

*Total Commitment*

**Performance Assurance Engineer**  
TED HOWELL



**45%**

*Total Commitment*

**Team Lead Project Manager**  
JON ERDMANN, PE



**40%**

*Total Commitment*

**Solutions Manager +  
Project Development Specialist**  
JAMES WILBANKS + JOHN POULIOT



**40%**

*Total Commitment*

**Estimating Manager**  
BRYAN PHILIPOT



**40%**

*Total Commitment*

**Senior Building Solutions Manager**  
JASON ZORC



**40%**

*Total Commitment*

**Electrical Engineers**  
TODD GLYDE, PE + DHANU PERERA



**35%**

*Total Commitment*

**Mechanical Engineers**  
STEVE BAIR + JAMES BENCHEK, PE



**35%**

*Total Commitment*

**Energy Integration Manager**  
TED HOWELL



**25%**

*Total Commitment*

**Engineering Manager**  
TODD GLYD, PE



**25%**

*Total Commitment*

**Safety Manager**  
DEAN STEADLEY



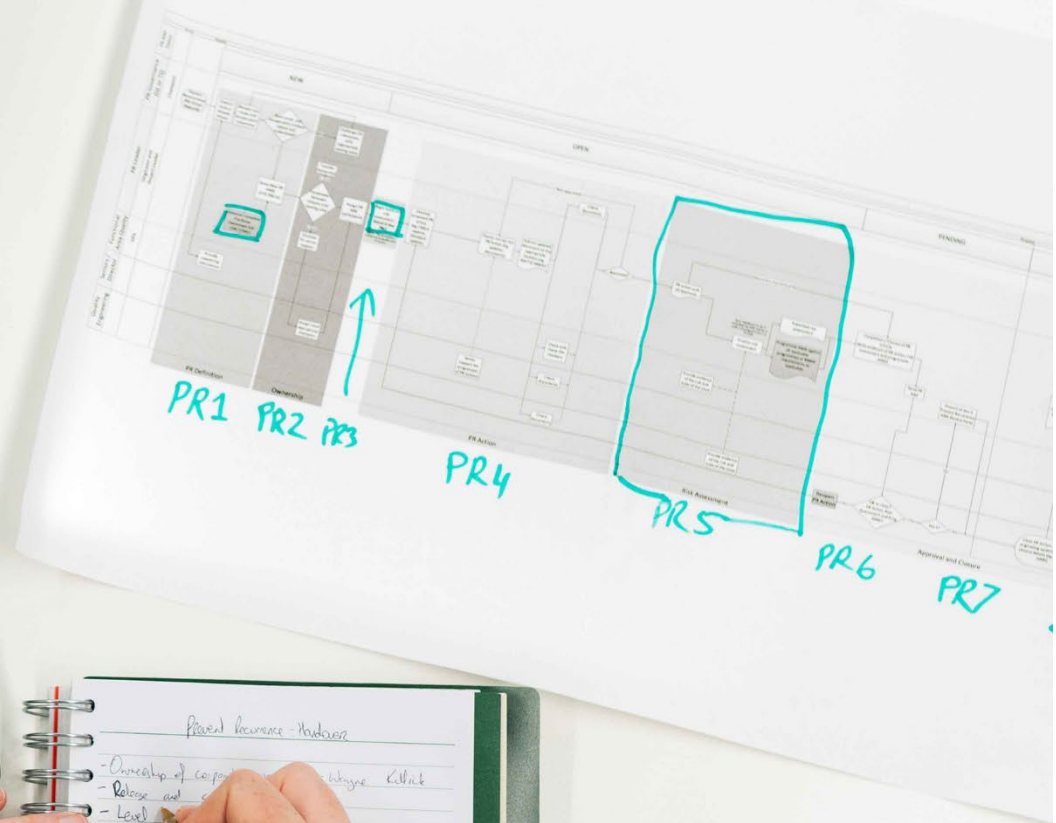
**15%**

*Total Commitment*

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C.3. MANAGEMENT  
CAPABILITIES



### C.3. Management Capabilities

*C.3. Offeror described ability to manage construction, repairs, regular service, and emergencies effectively.*

#### Manage Construction

Throughout the construction phase of this project, BG's in-house team will maintain a direct, on-site presence through our supervision and project management team. Jon Erdmann will be the Team Lead Project Manager and Matt Baker will be the on-site Project Manager. Ben Schell will be the Construction Superintendent, along with Dean Steadley as Safety Manager. This team will continually be deployed while work is being executed to provide a local staging area for all site activities. Their presence enables BG to effectively provide subcontractor management and coordinate subcontractor activities. This team will also work with site staff to coordinate and verify all security measures are followed including daily space cleanup, and other site-specific rules as defined by the site staff.



**Team Lead  
Project Manager**  
*Jon Erdmann, PE*

**23** years of  
experience



**Project Manager**  
*Matt Baker (On-site)*

**7** years of  
experience



**Construction  
Superintendent**  
*Ben Schell*

**22** years of  
experience



**Safety Manager**  
*Dean Steadley*

**12** years of  
experience

#### Manage Repairs

BG will be responsible for necessary repairs of installed systems during construction and post-construction during the manufacturer's warranty period. During construction, coordination of necessary repairs will be managed by the Team Lead Project Manager, Jon Erdmann. During post-construction, coordination of necessary repairs will be managed by the Energy Engineering Manager, Meg Bair.



BG has a dedicated phone number and web portal dedicated for all service accounts 24/7. Between the hours of 7:30 a.m. and 5:30 p.m. Monday through Friday, this line is answered by a BG customer service representative (1-800-686-6869 or 440-243-3535). Calls received after 5:30 p.m. and on the weekends are forwarded to our answering service, who dispatches the calls to appropriate staff.

After calls have been dispatched, site staff will receive a call from the customer service representative and will be given an estimated time of arrival for service.

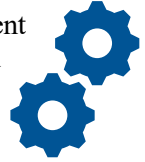
BG's in-house service team provides HVAC repair services daily to over 700 customers through our customized preventive maintenance programs. We use a total cost of ownership approach to identify the true cost to operate HVAC systems. This includes the cost of energy, downtime, repairs, parts and materials, administration, in-house staff, and capital replacement. Our team of qualified technicians and engineers perform monthly maintenance tasking, as well as any needed repairs, to ensure the HVAC systems are operating at optimal efficiency. This allows our customers to



focus on their core business. At the request of the site staff, BG's in-house service team can customize a preventative maintenance plan that can subsidize DGS' current maintenance objectives.

### Manage Regular Service

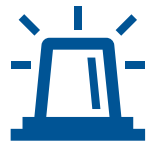
BG will be responsible for producing O&M manuals, as-built documents, and will perform equipment training with site staff on all newly installed systems per the manufacturer's recommendations and warranty guidelines. At the request of the site staff, BG's in-house service team can customize a preventative maintenance plan that can subsidize DGS' current maintenance objectives.



### Manage Emergencies

BG will be responsible for emergencies with installed systems during construction and post-construction during the manufacturer's warranty period. During construction, coordination of emergency services will be managed by the Team Lead Project Manager, Jon Erdmann. During post-construction, coordination of emergency services will be managed by the Energy Engineering Manager, Meg Bair.

BG has a dedicated phone number and web portal dedicated for all service accounts 24/7. Between the hours of 7:30 a.m. and 5:30 p.m. Monday through Friday, this line is answered by a BG customer service representative (1-800-686-6869 or 440-243-3535). Calls received after 5:30 p.m. and on the weekends are forwarded to our answering service, who dispatches the calls to appropriate staff.



After the calls have been dispatched, DGS' staff will receive a call from the customer service representative and will be given an estimated time of arrival for service.

BG's in-house service team provides HVAC emergency repair services daily to over 700 customers. We are staffed with qualified and experienced technicians, and a fully equipped fleet, to handle any emergency 24/7/365 within two hours of a request for emergency service. In the event an emergency repair requires parts for emergency services, BG's superior, nationwide supply and vendor partners will open their offices to accommodate any parts necessary to solve the problem. At the request of site staff, BG's in-house service team can customize a preventative maintenance plan that can subsidize DGS' current maintenance objectives, including emergency repairs.





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## D. STATEMENT OF STAFFING COMMITMENT



## *D. Statement of Staffing Commitment*

*D. If awarded a contract, the GESA Contractor shall not substitute personnel identified on the Project Management Team and shall not alter the structure of the Project Management Team organization chart without prior written authorization by the DGS.*

BG commits that personnel identified on the project management team will not be substituted and BG shall not alter the structure of the project management team without prior written authorization by the DGS.





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## 2-5.2-A. WORK PLAN



## 2-5.2-A. WORK PLAN

### A. Work Plan

# READING

		Energy ONLY	BASE	Recommended
ECM #	ECM Title			
ECM-01	LED lighting retro fit / replacement throughout the building.		✓	✓
ECM-02	Upgrade or replace AHUs. Consolidate where possible and add air-side economizer.		✓	
ECM-03	Replace VAV boxes and eliminate dual duct simultaneous heating and cooling. Include ultraviolet (UV) decontamination in AHUs. Provide supply air reset control. Equip AHUs with VFDs and twoway valves for variable volume pumping for heating and cooling. All chilled water valves should be the Belimo Energy Valve to combat low delta T syndrome in the building.		✓	✓
ECM-04	Replace the remaining chiller and associated pumps. Convert to variable volume pumping.		✓	
ECM-05	Provide VFD(s) and associated controls for cooling tower fan(s) or recommission existing.		✓	✓
ECM-06	Eliminate pneumatic controls; install a new building automation system (BAS).		✓	✓
ECM-07	Install a dedicated radon mitigation system for the basement to allow better control and scheduling of the heating, ventilation, and air conditioning (HVAC) and restore outdoor air to rates required for space occupancy.		✓	✓
ECM-08	Replace sewage pump(s).		✓	✓
ECM-09	Explore improvements for the lobby tinted/reflective window film and revolving doors for main entrance.		✓	
ECM-10	Implement water conservation for restrooms (new flush valves).	✓	✓	✓
ECM-11	Overall building weatherization.	✓	✓	✓
ECM-12	Evaluate replacement of electrical main distribution panel to 480V from 208V and eliminate step up transformers.		✓	

## SCRANTON

		Energy ONLY	BASE	Recommended
<b>ECM-13</b>	LED lighting retrofit / replacement throughout the building.	✓	✓	
<b>ECM-14</b>	Overall building weatherization.	✓	✓	✓
<b>ECM-15</b>	Upgrade or replace AHUs. Add air-side economizer. Include UV decontamination in AHUs. Equip AHUs with VFDs and two-way valves for variable volume pumping for heating and cooling. Provide supply air reset control. Replace existing VAV control boxes with new zone dampers and reheat for humidity control. All chilled water valves should be the Belimo Energy Valve to combat low delta T syndrome in the building.		✓	✓
<b>ECM-16</b>	Convert from electric resistance heat to hot water heating. Install a condensing boiler plant in the penthouse storage area and pipe to new hot water coils (included with new AHUs or added to existing in duct).		✓	✓
<b>ECM-17</b>	Replace or refurbish the cooling tower. Provide VFDs and associated controls for cooling tower fan or recommission existing.		✓	
<b>ECM-18</b>	Eliminate pneumatic controls. Extend direct digital controls (DDC) controls to new and remaining equipment. Add/reconfigure control zones to match existing space layout. Provide central control to perimeter baseboard for use as secondary heat for shell load on very cold days.		✓	✓
<b>ECM-19</b>	Convert electric DHW to natural gas or heat pump. Considering the new condition of the existing system and relatively low impact on energy use, this may not be a base ECM; however, gas service could be roughed in to prepare for future conversion.		✓	

## DGS ANNEX

		Energy ONLY	BASE	Recommended
<b>ECM-20</b>	LED lighting retro fit / replacement throughout the building.	✓	✓	✓
<b>ECM-21</b>	Overall building weatherization.	✓	✓	✓
<b>ECM-22</b>	Install gas boiler and cooling upgrades possible high efficiency heat pumps.		✓	
<b>ECM-23</b>	Explore the value of a possible geothermal system.		✓	
<b>ECM-24</b>	Eliminate pneumatic controls; install a new building automation system (BAS).		✓	✓
<b>ECM-25</b>	Building recommissioning.	✓	✓	✓



## NORTHWEST OFFICE

Energy ONLY

BASE

Recommended

ECM-26	Replace existing chillers with high efficiency chillers.		✓	✓
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## ALTERNATIVES

Energy ONLY

BASE

Recommended

ECM-27	Rooftop Solar Array.			✓
ECM-28	New High Performance 208V Chiller. (ECM #4 & #12 Alternate).			✓
ECM-29	Electric VAV.			✓
ECM-30	Gas Fired RTUs (ECM #22 Alternate).			✓
ECM-31	Steam Trap Repair.			✓
ECM-32	Building Envelope and Film.	✓		✓

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## A.1. UNDERSTANDING OF THE DESIGN PROCESS



## A.1. Understanding of the Design Process

*A.1. Demonstrate Offeror's understanding of the design process and if Project has Energy Consultant, how they will coordinate with Energy Consultant;*

**BG's in-house energy engineering team will complete the investment grade audit (IGA) and our in-house MEP engineering team will complete the MEP design for the DGS project utilizing the *GESA Project Design Manual* provided in *Section N* of the Request for Quote.**

In BG's history, our in-house energy engineering team has guaranteed \$550 million in energy savings for our customers. Our MEP engineering team rivals most consulting firms with 10 multi-state registered professional engineers that are qualified with extensive experience designing mechanical, electrical, controls, plumbing, and fire protection systems.

Based on our team's experience with executing engineering designs for office building facilities and working with state entities like the DGS, our team is confident in utilizing the procedures and standards set in place for the IGA and design of this project by DGS' GESA Project Design Manual.

Our design process is broken down into two distinct activities:

1. **Investment Grade Audit—BG's in-house energy engineering team** will provide a comprehensive report detailing current conditions, savings opportunities, guaranteed savings projections, and the guaranteed maximum price of ECMs.
2. **MEP Design—BG's in-house MEP engineering team** will produce schematic designs (SD), design development (DD), and construction drawings (CD) during the preconstruction phase.



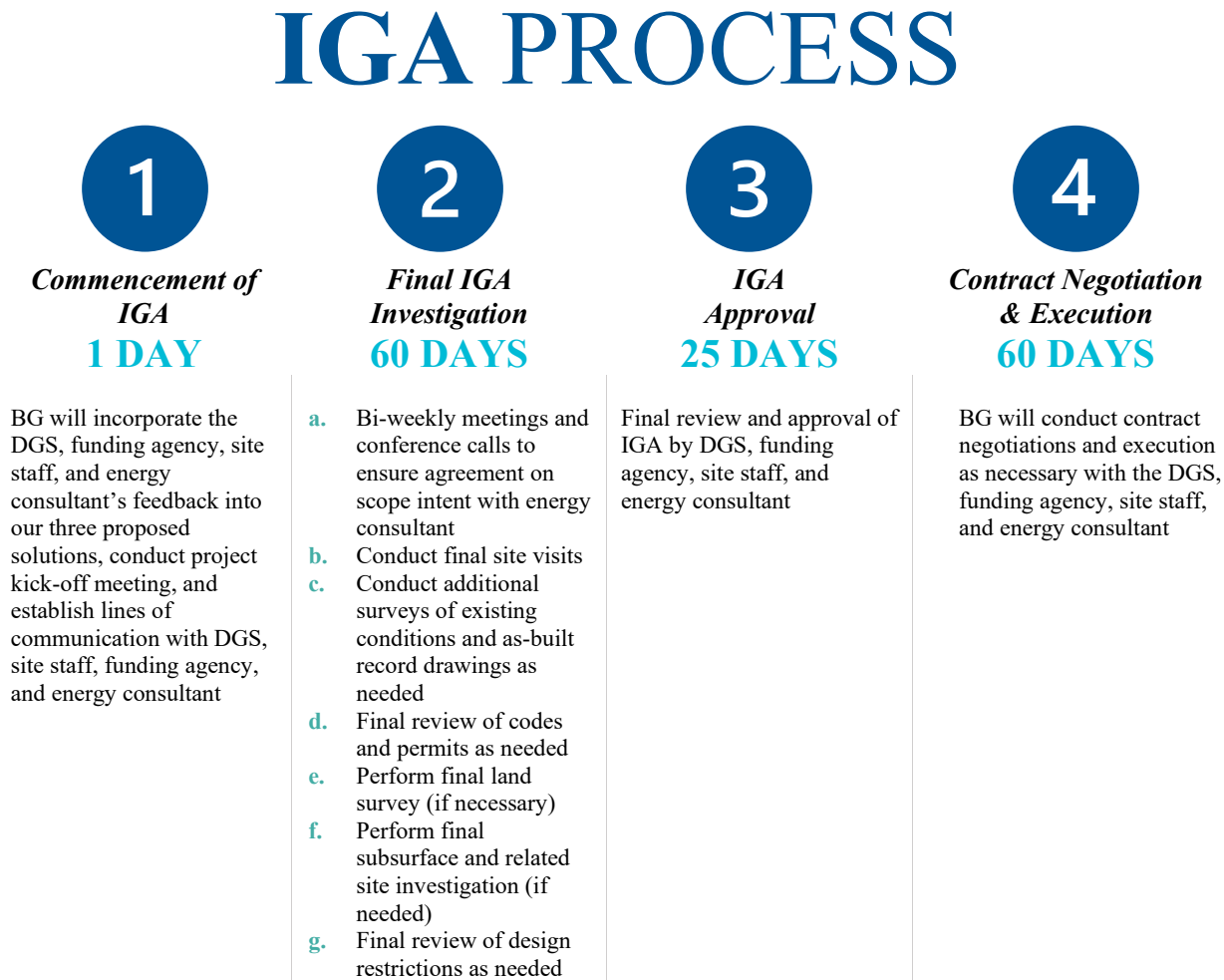


## Investment Grade Audit

Upon selection as the successful offeror, the IGA phase will commence to produce a final IGA report for review. This effort will be led by Solutions Manager, James Wilbanks; and supported by Energy Integration Manager, Ted Howell. Mr. Wilbanks has 24 years of experience and has successfully developed more than \$150 million in energy savings performance contracts. Mr. Howell has 38 years of experience in energy efficiency and projects similar to GESA across higher education, healthcare, correctional institutions, and many other markets.

BG energy engineers will provide the DGS, funding agency, site staff, and energy consultant with a comprehensive report detailing current conditions, savings opportunities, guaranteed savings projections, and the guaranteed maximum price of ECMs. Our in-house energy engineering and estimating resources allow for technical and financial review of multiple solutions to ensure the most functional and cost-effective solution is achieved. The diligence of BG's efforts to date will ensure the energy savings projected in the final scope of work will be + or - 95% of the savings projected in our quote, the actual ECM costs will be + or - 10% of the costs listed in the quote, and the project will be self-funded over the financial term of the project or a maximum term of 18 years.

Based on the initial review and feedback on our submitted base solution, base plus innovation solution, and alternate solution in the quote by the DGS, funding agency, site staff, and energy consultant, we will execute a co-authored final IGA report utilizing the process defined in the graphic below.



BG's investment grade audit will be conducted in concert with the DGS, funding agency, site staff, and energy consultant. Bi-weekly meetings and critical ECM workshops will be administered to gain input from facility personnel and the DGS representatives. Additional site visits will also be scheduled to verify preliminary assessment findings and more clearly define the scope and savings potential for each ECM.

- Establish final baseline energy use and utility rates
- Review current lighting, mechanical, electrical, plumbing, and controls systems
- Investigate physical site conditions including building envelope and general trades
- Conduct equipment counts
- Gather nameplate data
- Evaluate controls strategies

Design development will be at least 35% complete to correctly estimate implementation costs and calculate life cycle cost analyses so that final implementation costs per ECM are developed accurately.

Detailed energy savings calculations will be prepared and included with a complete measurement and verification plan, based upon the International Performance Measurement and Verification Protocol (IPMVP) v.12 developed by the Efficiency Valuation Organization with support for the U.S. Department of Energy. For all ECMs, a commissioning approach will be created with operations, maintenance, and training methodology considerations included.



## MEP Design Process

With notice to proceed, the preconstruction phase will commence, including the design process as defined in the graphic below. BG does not require an engineering firm on our team as we employ 15 MEP engineers in-house, 10 of which are licensed professional engineers. This allows for a more coordinated delivery and seamless transition from the IGA to the final design documents. We will engage the energy consultant to provide peer review of our design documents during the SD, DD, DC steps outlined below. Our project management team will meet with the assigned engineers on a regular basis throughout the project to communicate and troubleshoot project related issues. Concurrent to the design review, the project management team will thoroughly review the documents from a constructability, schedule, and budget perspective. This constructability review not only includes the BG project managers but will also be examined by the subcontractor team. The design engineer will continue to be involved with the project throughout construction and the final commissioning of the installation.

# MEP DESIGN PROCESS

**1**

### **Preconstruction Planning 79 DAYS**

BG to define expectations for project goals, conduct project kick-off meeting, and establish lines of communication with DGS, site staff, funding agency, energy consultant

- a. BG to work with energy consultant to certify design concept, project schedule, and procurement plan are in line—BG to co-author/finalize with DGS, funding agency, site staff
- b. BG to perform constructability review with the project management team to eliminate surprises and take advantage of any openings to improve project schedule
- c. Bi-weekly meetings and conference calls to ensure agreement on scope intent with energy consultant
- d. Site specific safety planning with site staff & energy consultant
- e. Evaluate occupancy schedules per zones with site staff & energy consultant

**2**

### **Schematic Design & Design Development 35 DAYS**

Schematic Design (SD):  
**30% Complete**

Design Development (SD):  
**60% Complete**

BG to facilitate pre-design charrette comprised of SD & DD drawings  
**35 DAYS**


- a. Final review of schematic design submission including site plans, floor plans, elevations and sections, mechanical and electrical systems, and existing facilities by DGS, funding agency, energy consultant
- b. BG to perform Independent Design Review: a BG in-house senior engineer that is not involved with the project will complete an independent technical review of calculations and design documents established in the pre-design charrette  
**a & b occur simultaneously  
5 DAYS**

**3**

### **Construction Drawings 40 DAYS**

- a. All DGS, funding agency, and energy consultant requested changes are completed & design drawings are finalized (approvals are made)
- b. Provide construction documents submission package including specifications, site plan drawings, utility services report, regulatory approvals and permits
- c. Execute subcontractor bidding & award process
- d. Drawings stamped by the responsible licensed professional engineer, Todd Glyde, Engineering Manager, and submitted for permitting
- e. Equipment submittals & procurement (based on lead time)



A smiling woman with long, wavy red hair and freckles is sitting in a bright blue armchair. She is wearing a black sleeveless top with a scalloped neckline. In front of her is a silver laptop. On the back of the laptop, there is a circular orange sticker with the text "code first, girls" in white. The background is a blurred office or public space with large windows and modern decor.

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## A.2. POTENTIAL DESIGN ISSUES

## A.2. Potential Design Issues

### A.2. Offeror identified potential design issues.

Based on our team’s experience with executing engineering design for office building facilities, we have identified the following potential design issues and solutions to mitigate the challenges. By identifying potential design issues early in the process, BG can develop creative solutions in advance to limit any potential risk.

## CHALLENGES

1

*Configuration of the existing basement level mechanical rooms at the Reading State Office Building*

2

*Outdoor air sourcing at the Reading State Office Building*

3

*Airside economizer operations at the Scranton State Office Building*


## SOLUTIONS

The configuration of the existing basement level mechanical rooms will require a great deal of thought and preparation to ensure that mechanical and electrical equipment can be rigged into the spaces in an effective manner – access paths to these rooms are limited with elevator and door space constraints. Equipment must be designed and selected with these constraints in mind. The design team will work extensively with equipment manufacturers and riggers to facilitate the installation process. BG has extensive experience with installations of this type. The equipment installation challenges are surmountable only with proper planning from the beginning of the project design.

Airside economizer operation is an important source of energy savings in mechanical systems. The original outdoor air source for the air handling units was modified from the original design and installation. Outdoor air intakes for the basement air handling units were relocated to the second floor of the building. Unfortunately, the revised outdoor air intakes were not properly sized to provide full airside economizer operations. Establishing a pathway for the outdoor air volume required for full economizer operations will be a design challenge that requires full coordination between the design team, installation team, and building occupants to ensure a complete and proper operating system.

The existing installation does not have airside economizer operations. In this installation not only are the outdoor air intake louvers undersized, there is no pathway for relief air to leave the building when using airside economizers. BG has faced this issue head-on and has devised a method to provide full airside economizer operations within the confines of the existing mechanical rooms. This unique design will provide an effective fully functional airside economizer operation for the building.



A close-up, low-angle shot of a young man with short brown hair, wearing clear safety glasses. He is looking down and slightly to the left, focused on a task. The background is a blurred industrial or construction site with structural elements and bright light sources.

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## A.3. PROJECT MANAGEMENT AND EXECUTION



## A.3. Project Management and Execution

### A.3. Offeror described how the Team will manage and execute the Project.

The BG team operates with the philosophy that a successful project depends on a successful project execution plan. Our plan's foundation includes a dedicated in-house BG representative managing each phase of this project, as defined below. This dedicated core team is intimately involved throughout all phases of the contract and promotes increased communication and streamlined decision making. In addition to leading the preliminary assessment (PA) and investment grade audit (IGA) phase, James Wilbanks, Solutions Manager, will lead the dedicated core team and will be the single point of contact throughout the entire project.



*Solutions Manager*  
**JAMES WILBANKS**

### *PA & IGA PHASE*

- Deploys resources to develop PA
- Manages IGA contract execution
- Conducts IGA kick-off meeting with the DGS, funding agency, site staff, and energy consultant
- Deploys resources to develop IGA
- Co-author final concept, scope, scale and relationship of the project components
- Manages transition to preconstruction team

*PA further described in 2-5.1.C.1. Key Personnel for Project Tasks and IGA further described in 2-5.2.A.1. Understanding of the Design Process*



*Preconstruction Manager*  
**ERIC BETZ, PE**

### *Preconstruction PHASE*

- Conducts kick-off meeting with the DGS, funding agency, site staff, and energy consultant
- Manages preconstruction planning process
- Deploys MEP engineering resources to perform schematic design, design development, construction drawings
- Manages transition to construction team

*Further described in 2-5.2.A.1. Understanding of the Design Process*



*Team Lead Project Manager*  
**JON ERDMANN, PE**

### *Construction PHASE*

- Manages planning phase of construction
- Conducts construction kick-off meeting with the DGS, funding agency, site staff, and energy consultant
- Deploys resources for installation phase of construction
- Deploys resources to perform the close-out phase of construction
- Manages transition to post-construction team

*Further described in A.4 Phases of Construction*



*Energy Engineering Manager*  
**MEG BAIR**

### *Post-Construction PHASE*

- Manages emergency service & repairs on installed systems during warranty phase
- Manages performance of M&V through reporting period
- Deploys resources for on-going training as needed by funding agency

*Further described in ECM/Cost Quote – Proposed Measurement and Verification Plan*



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## A.4. CONSTRUCTION PACKAGES & LONG LEAD ITEMS



## A.4. Construction Packages & Long Lead Items

A.4. Offeror addressed early construction packages, long lead items and phases of construction.

### Potential Construction Packages

BG will breakout the proposed work per trade and include detailed scope packages and project schedules to each bidder.

Major Bid Package		Description
<b>1</b>	<b>LED Lighting Upgrades</b>	A complete package for providing and installing all the necessary LED interior and exterior lighting components throughout the facilities throughout the GESA.
<b>2</b>	<b>Air Handling Units (AHUs)</b>	A complete package for the AHUs and for providing and installing all the necessary mechanical and general trades components throughout the GESA.
<b>3</b>	<b>Building Envelope</b>	A complete package for providing and installation of building envelope improvements throughout the GESA.
<b>4</b>	<b>Boilers</b>	A complete package for providing and installing boilers as well as all the necessary mechanical and general trades components throughout the GESA.
<b>5</b>	<b>Chillers</b>	A complete package for providing and installing chillers as well as all the necessary mechanical and general trades components throughout the GESA.
<b>6</b>	<b>Electrical Service Upgrade</b>	A complete package for providing and installing all electrical gear and general trades necessary for the electrical service upgrade for ECM # 12.

We will utilize existing subcontractor relationships in the project area and seek out new, diverse firms to complete the work. We require that all our bidders provide a detailed scope with their bid packages and confirmation that they will perform the work within the time frame allocated in the master project schedule. The scopes will be reviewed internally by BG's Estimating Manager and Team Lead Project Manager, who are responsible for coordinating and scheduling all the individual project scopes of work. The project scopes are bid out, coordinated by BG, and will be performed in collaboration with the DGS, funding agency, site staff, and energy consultant.



## Long Lead Items

BG's IGA development strategy is structured to address and make allocations for required project phasing and long lead items by involving our in-house project management team in the IGA process. This involvement allows our project managers to identify phasing and procurement concerns during the IGA so the construction team can hit the ground running upon contract execution. We have developed the following table to identify long lead items.

ECM #	ECM Name	Equipment	Estimated Lead Time	Lead Time Risk
<i>ECM-1</i>	LED lighting retro fit / replacement throughout the building.	Lamps	6-8 Weeks	<i>NO RISK</i>
<i>ECM-2</i>	Upgrade or replace AHUs. Consolidate where possible and add air-side economizer.	AHUs	50 Weeks	<i>slight RISK</i>
<i>ECM-3</i>	Replace VAV boxes and eliminate dual duct simultaneous heating and cooling. Include ultraviolet (UV) decontamination in AHUs. Provide supply air reset control. Equip AHUs with VFDs and two-way valves for variable volume pumping for heating and cooling. All chilled water valves should be the Belimo Energy Valve to combat low delta T syndrome in the building.	VAV Boxes, VFDs	12-24 Weeks	<i>NO RISK</i>
<i>ECM-4</i>	Replace the remaining chiller and associated pumps. Convert to variable volume pumping.	N/A	N/A	<i>NO RISK</i>
<i>ECM-5</i>	Provide VFD(s) and associated controls for cooling tower fan(s) or recommission existing.	VFDs	12-24 Weeks	<i>NO RISK</i>
<i>ECM-6</i>	Eliminate pneumatic controls; install a new building automation system (BAS).	Automation Equipment, Wiring	2-3 Weeks	<i>NO RISK</i>
<i>ECM-7</i>	Install a dedicated radon mitigation system for the basement to allow better control and scheduling of the heating, ventilation, and air conditioning (HVAC) and restore outdoor air to rates required for space occupancy.	Radon Mitigation Equipment	4-8 Weeks	<i>NO RISK</i>

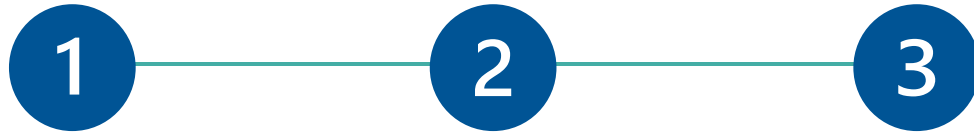
ECM #	ECM Name	Equipment	Estimated Lead Time	Lead Time Risk
<b>ECM-8</b>	Replace sewage pump(s).	Pumps	24 Weeks	<b>NO RISK</b>
<b>ECM-9</b>	Explore improvements for the lobby tinted/reflective window film and revolving doors for main entrance.	Window Film, Revolving Doors	3 Weeks	<b>NO RISK</b>
<b>ECM-10</b>	Implement water conservation for restrooms (new flush valves).	Flush Valves	6-8 Weeks	<b>NO RISK</b>
<b>ECM-11</b>	Overall building weatherization	Caulk, Weather Stripping	0 Weeks	<b>NO RISK</b>
<b>ECM-12</b>	Evaluate replacement of electrical main distribution panel to 480V from 208V and eliminate step up transformers.	Electrical Gear	65 Weeks	<b>high RISK</b>
<b>ECM-13</b>	LED lighting retrofit / replacement throughout the building.	Lamps	6-8 Weeks	<b>NO RISK</b>
<b>ECM-14</b>	Overall building weatherization	Caulk, Weather Stripping	0 Weeks	<b>NO RISK</b>
<b>ECM-15</b>	Upgrade or replace AHUs. Add air-side economizer. Include UV decontamination in AHUs. Equip AHUs with VFDs and two-way valves for variable volume pumping for heating and cooling. Provide supply air reset control. Replace existing VAV control boxes with new zone dampers and reheat for humidity control. All chilled water valves should be the Belimo Energy Valve to combat low delta T syndrome in the building.	AHUs, VFDs, VAVs	12-50 Weeks	<b>slight RISK</b>
<b>ECM-16</b>	Convert from electric resistance heat to hot water heating. Install a condensing boiler plant in the penthouse storage area and pipe to new hot water coils (included with new AHUs or added to existing in duct).	Boiler	20 Weeks	<b>NO RISK</b>

ECM #	ECM Name	Equipment	Estimated Lead Time	Lead Time Risk
<b>ECM-17</b>	Replace or refurbish the cooling tower. Provide VFDs and associated controls for cooling tower fan or recommission existing.	N/A	N/A	<b>NO RISK</b>
<b>ECM-18</b>	Eliminate pneumatic controls. Extend direct digital controls (DDC) controls to new and remaining equipment. Add/reconfigure control zones to match existing space layout. Provide central control to perimeter baseboard for use as secondary heat for shell load on very cold days.	Automation Equipment, Wiring	2-3 Weeks	<b>NO RISK</b>
<b>ECM-19</b>	Convert electric DHW to natural gas or heat pump. Considering the new condition of the existing system and relatively low impact on energy use, this may not be a base ECM; however, gas service could be roughed in to prepare for future conversion.	DHW Heaters	16 Weeks	<b>NO RISK</b>
<b>ECM-20</b>	LED lighting retro fit / replacement throughout the building.	Lamps	6-8 Weeks	<b>NO RISK</b>
<b>ECM-21</b>	Overall building weatherization.	Caulk, Weather Stripping	0 Weeks	<b>NO RISK</b>
<b>ECM-22</b>	Install gas boiler and cooling upgrades possible high efficiency heat pumps.	Boiler	20 Weeks	<b>NO RISK</b>
<b>ECM-23</b>	Explore the value of a possible geothermal system.	Piping	4 Weeks	<b>NO RISK</b>
<b>ECM-24</b>	Eliminate pneumatic controls; install a new building automation system (BAS).	Automation Equipment, Wiring	2-3 Weeks	<b>NO RISK</b>
<b>ECM-25</b>	Building recommissioning.	N/A	N/A	<b>NO RISK</b>
<b>ECM-26</b>	Replace existing chillers with high efficiency chillers.	Chiller	20-22 Weeks	<b>slight RISK</b>



## Phases of Construction

# CONSTRUCTION PHASES



### PLANNING

**Develop Project Execution Plan Based on Scope of Work**  
*(in conjunction with DGS, funding agency, site staff, energy consultant)*

- Develop subcontracting plan
- Perform constructability review of project scope
- Construct project schedule
- Develop site specific phasing plan of work identifying areas where work will be performed in relation to the project schedule
- Create site specific safety and security plan
- Coordinated phasing plan with site staff
- Identify equipment procurement plan and purchase long-lead equipment

### INSTALL

**Management of Project Work**

- Attain permits
- Manage installation of energy conservation measures
- Administer Procore Construction Software System
- Manage project communication via bi-weekly job conferences with DGS, funding agency, site staff, and energy consultant and provide bi-weekly status reports
- Oversee subcontractor installation

### CLOSE-OUT

**Manage Project Close-Out Activities**

- Generate punch list of items
- Perform start-up and commissioning of systems installed
- Perform testing and balancing
- Perform final cleaning of spaces
- Implementation of training programs with site staff
- Creation of operation and maintenance manuals
- Provide warranty documentation
- Update occupancy permits, if needed
- Complete final project close out activities (final inspection of work with funding agency)
- Conduct measurement and verification kick-off with DGS, site staff, energy consultant, funding agency

The background of the entire page is a close-up, high-angle photograph of a wooden ruler and a fountain pen nib resting on a sheet of graph paper. The ruler is positioned diagonally from the bottom left towards the top right. The pen nib is located on the right side of the page, pointing towards the center. The graph paper has a light gray grid pattern. The lighting is soft, creating a professional and technical atmosphere.

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## A.5. CRITICAL MATERIAL AND EQUIPMENT



## A.5. Critical Material and Equipment

*A.5. Offeror demonstrated understanding of critical material and equipment and why they are critical, timing/lead times for acquisition and how they will be managed.*

While BG views all equipment and materials as critical and impactful to the schedule, the majority of equipment for the base solution is readily available. With that said, we anticipate a longer lead time for the air handling units (AHUs) associated with this project. One of the benefits of BG's in-house engineering team is their ability to coordinate the selection of equipment prior to final engineering documentation. Our engineering team will work directly with the project managers to ensure that the selection and procurement of longer lead time items is executed in an efficient manner and does not create schedule delays.

Historically, lead times for AHUs have been approximately 12-16 weeks; however, current supply chain issues created by the pandemic have led to longer estimated lead times. Based on BG's recent procurement experience, we anticipate a 50-week lead time for AHUs. These supply chain issues have also increased lead times on items that, customarily, are readily available. BG's supply chain management team has been able to leverage its purchasing power to ensure that these short order material lead times are not impacted.





The background of the page is a close-up photograph of architectural blueprints. The blueprints show various floor plans, walls, and structural elements. Some labels like 'Cb' and 'Eb' are visible on the drawings. The text is overlaid on the right side of the image.

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## A.6. POTENTIAL CONSTRUCTION ISSUES

# A.6. Potential Construction Issues

*A.6. Offeror demonstrated understanding of construction challenges and proposed solutions.*

Based on our team’s experience with executing construction for office building facilities, we have identified the following potential construction issues and potential solutions to mitigate the challenges. By identifying potential construction issues early in the process, BG can develop creative solutions in advance to limit any potential risk.

## CHALLENGES

## SOLUTIONS

1

*Configuration of the existing basement level mechanical rooms at the Reading State Office Building*

The configuration of the existing basement level mechanical rooms will require a great deal of thought and preparation to ensure that mechanical and electrical equipment can be rigged into the spaces in an effective manner – access paths to these rooms are limited with elevator and door space constraints. Equipment must be designed and selected with these constraints in mind. The design team will work extensively with equipment manufacturers and riggers to facilitate the installation process. BG has extensive experience with installations of this type. The equipment installation challenges are surmountable only with proper planning from the beginning of the project design.

2

*Temporary power generation while replacing electrical equipment at the Reading State Office Building*

ECM # 12 of the Core ECMs asks offerors to evaluate the replacement of the main electrical distribution panel from 208V to 480V and eliminate the existing step-up transformers. During the demolition and construction of this ECM temporary power will be necessary to maintain building operations. This is something BG has experience with and has prepared for during our preliminary analysis of the building.

3

*Distance between construction sites*

Each project site has its own unique challenges but one of the largest challenges overall with this GESA project is that all 4 facilities are spread out across 3 different cities throughout eastern Pennsylvania. BG plans to complete construction in each of the 3 cities simultaneously, effectively treating each building as its own GESA project. Challenges can arise in the administration of project management between sites – keeping open lines of communication, especially regarding the schedule, will significantly reduce the impacts.

4

*Occupied buildings*

Working within an occupied facility always brings added challenges to construction projects. BG will minimize the amount of space needed on the site by utilizing off site staging, lay down areas, and just in time delivery. Work within client rooms can be scheduled during times when they are unoccupied – BG will utilize PM shifts to complete a large majority of this work to minimize construction impact. These options vary by facility and require coordination with DGS staff.



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## A.7. CONSTRUCTION PLAN

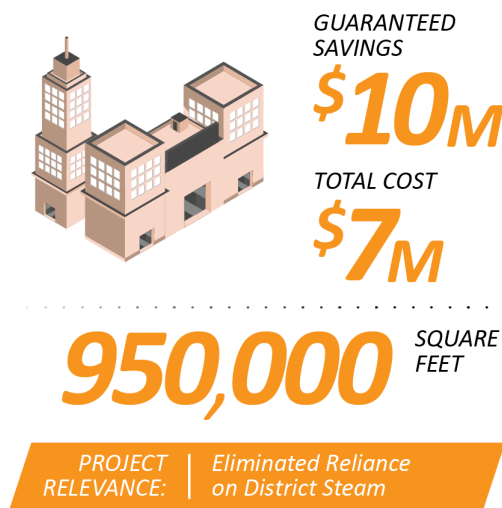




## A.7. Construction Plan

A.7. Offeror thoroughly described a construction plan, including site operations, logistics, lay down area, and included a detailed discussion on how the Offeror will accomplish the work within a fully occupied environment.

### GALLERIA AND TOWER AT ERIEVIEW



Communication with administration and staff at DGS facilities will be a vital component to our construction plan. We will work with the site staff to ensure we are carefully coordinating construction and confirming each department feels confident in their understanding of where work will be performed in the facility and when. Our project management team will communicate areas of work against the schedule at the regularly scheduled job conferences throughout construction to the DGS, site staff, funding agency and energy consultant.

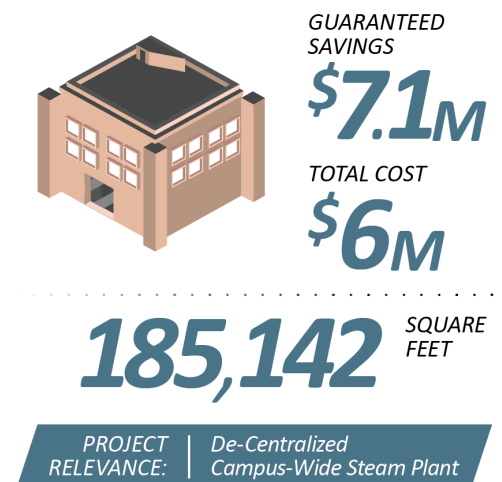
As previously stated, working within an occupied facility always brings added challenges to construction projects. We can minimize the amount of space needed on the site by utilizing off-site staging, lay down areas, and just-in-time delivery. Swing spaces are needed when working in specific areas, such as offices and client areas. Work within client rooms can be scheduled during times when they are not occupied, or empty rooms can be used to rotate clients as work is completed in a specific area. These options vary by facility and require coordination with security and site staff.

*We have attached logistics diagrams for this project (the following four (4) pages). The following is a summary of the logistics:*

- **Preliminary Logistics Plans:** Rough plans identifying potential areas for contractor parking, lay down area, contractor/equipment traffic, visitor parking, etc. These locations were chosen to minimize the impact on the day-to-day operations of the facilities.

There is flexibility with the chosen locations on each plan, and we will look for input from the site staff during the preconstruction planning phase. Additionally, all areas will be fully restored to their current state at the completion of the project. Part of our communication plan is to identify areas of work per ECM so the site staff can plan accordingly.

### NORTHEAST OHIO REGIONAL SEWER DISTRICT (NEORS D)
























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## A.8. CONSTRUCTION COORDINATION



## A.8. Construction Coordination

*A.8. Offeror explained how construction coordination & meetings will be carried out with the Funding Agency, the site(s) and DGS.*

BG has worked on multiple office building facilities, effectively utilizing local and diverse contractors and vendors to successfully implement and complete projects. Typically, BG rents a job trailer to serve as the on-site project office to maximize site presence and minimize downtime as well as potential coordination issues. Facilitating direct and unrestricted contact between BG project management staff, subcontractor foremen, and key personnel from the DGS, funding agency, site staff, and energy consultant is critical in establishing and managing a safe and productive construction site.



### Scheduled Meetings

To become familiar with the DGS, funding agency, site staff, and energy consultant's standard operating procedures, BG's construction team has thoroughly reviewed the provided information surrounding meetings in the "Administrative Procedures for GESA Contract" (Appendix M of the RFQ documentation).

To kick-off and coordinate construction throughout the life of the project, BG will initiate and uphold the following meetings with the DGS, funding agency, site staff, and energy consultant:

**Initial Job Conference:** During the initial job conference, the energy consultant and/or the DGS shall conduct the order of business and discuss specific requirements and particulars of project design and construction. The date of the initial design progress meeting, the projected start of on-site construction work, and the first regular job conference dates will all be established. **Frequency: Meeting will be conducted once.**



**Initial Design Progress Meeting:** During the initial design progress meeting, BG shall conduct the order of business. This meeting will provide the DGS, funding agency, site staff, and energy consultant with the GESA design manual including meeting minutes and correspondence; project schedule; submissions and reviews; project scope and changes; required DGS, funding agency, site staff, and energy consultant approvals; pre-design activities; preliminary and final submission requirements; and drawing specification and design standards to be met. The date of the next design progress meeting will be established. **Frequency: Meeting will be conducted once.**

**Regular Job Conference:** During the regular job conferences, BG will conduct the order of business. This meeting will provide the DGS, funding agency, and site staff with a general review of the previous job conference report, general discussion of job conditions, review of past due shop drawings, review of outstanding change orders, review of progress schedule, projected work for the next bi-weekly period, and delays. **Frequency: Meetings will be held bi-weekly at a minimum.**

Regarding subcontractor coordination, BG has found it useful for the institution to grant cell phone access to the BG project managers and the foreman of each crew to assist in effective real-time coordination of project issues.

Note that the coordination of the local utility, subcontractors, equipment suppliers, and funding agency facility personnel will be discussed in section A.3 below and all topics will be reported at the job conference.

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## A.9. PROJECT SAFETY





## A.9. Project Safety

A.9. Offeror discussed Project Safety Plan, Management and Monitoring.

*“Given that we will be executing major construction in a fully occupied and secured facility, safety is our priority.”*

**Occupied construction** is a delicate task and close attention to the minute detail is imperative. BG has worked flawlessly through the challenges of operating in multiple occupied facilities over a variety of industries including healthcare, education, and correctional institutions. We follow strict guidelines to ensure the safety and security of our employees, the facility’s staff, the clients, and our subcontractors. Housekeeping and communication will play key roles throughout the process. We take safety very seriously and our full-time safety manager is dedicated to upholding and enforcing our strict safety policy on this project.

### Housekeeping

- Scrap and debris will be removed prior to shift end
- Garbage cans will be placed in multiple locations during work
- Tools and equipment will be picked up, counted, and stored at the end of each day
- Housekeeping will be inspected at the end of every shift

### Communication

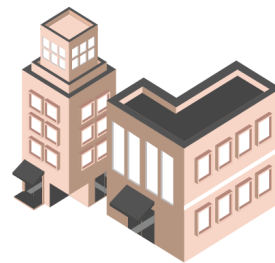
- Construction signage will be placed for full communication of construction activities
- Safety awareness will be communicated through signage, training, and embedded in subcontractor contracts
- Regular communication will be maintained with site staff to be cognizant of client occupancy and activities, as well as any other situations that may arise

### Company Goals and Objectives

On every construction jobsite, the BG safety manager, on-site project manager, and team lead project manager are accountable to the solutions general manager and executive officer/ vice president for the successful achievement of company safety and loss-control goals. BG’s project safety and loss-control goals are:

- **Protection** of employees
- **Zero** injuries, permanent disabilities, or fatalities
- **Avoidance** of injuries and illnesses
- **Prevention** of any fires, vehicle accidents, or property damage losses

### CUYAHOGA COUNTY



GUARANTEED  
SAVINGS

**\$5M**

TOTAL COST

**\$5M**

**1,257,534** SQUARE  
FEET

PROJECT RELEVANCE: | Urban Area Construction  
in Occupied Buildings

## Execution and Management of Safety Plan

**Team Lead Project Manager, Jon Erdmann, PE:**



**23**

*years of  
experience*

- Direct, motivate, and ensure accountability of the safety and loss control program
- Review and approve budget to fund the safety and loss-control program
- Ensures that the BG safety benchmarks and objectives are achieved by the safety manager and project manager
- Provide performance evaluations, holding the safety manager and project manager accountable for the success or failure in achieving specific targeted project safety performance and insurance cost-control goals
- Enforce the established BG incentive and disciplinary policies, ensuring a well-functioning safety program

**Project Manager (On-Site), Matt Baker:**



**7**

*years of  
experience*

- Responsible for the overall safety and loss-control of all employees, contractors, and temporary workers on the BG project
- Assist the safety manager, establishing project safety, health, first aid, fire prevention and protection, and site security
- Conduct weekly site safety inspections of the jobsite and document safety deficiencies for corrective actions
- Maintain and update safety data sheets (SDSs) on the jobsite
- Issue weekly toolbox safety talks to foreman to give their personnel training
- Return weekly toolbox safety talks to the safety manager upon completion
- Notify the safety manager and team lead project manager as soon as possible in the event of any accident/incident or OSHA inspection
- Ensure their jobsite has the required safety equipment, personal protective equipment (PPE), first aid supplies, and emergency telephone numbers posted

**Safety Manager, Dean Steadley:**



**12**

*years of  
experience*

- Provide office and jobsite administration of safety and loss-control activities in keeping with the BG safety program and objectives
- Administer the incentive and disciplinary actions required to encourage a highly functioning safety program
- In conjunction with the project manager formulate a site-specific safety and loss-control plan based upon pre-start site assessment
- Ensure that each associate, contractor, and temporary workers have a good working knowledge of the site-specific safety plan, governmental regulations, and BG's safety and loss-control requirements
- Conduct monthly site safety audits to evaluating each project's safety and insurance performance
- Conduct accident investigations, root cause analysis, and implement corrective actions and/or preventative controls
- Maintain and update required OSHA logs
- Provide all new associates safety and loss-control program training



## Monitoring of Safety Plan

### Associates, Contractors, and Temporary Workers

Each employee is expected, as a condition of employment, to work in a manner that will not inflict self-injury or cause injury to fellow workers. Oversight of associates, contractors, and temporary workers will be completed by Matt Baker and Dean Steadley. It is important that each employee understands that responsibility for their own safety is crucial to the project's success. Each employee will:

- Comply with all safety rules and regulations
- Report all accidents, injuries, or illnesses immediately to the project manager
- Use proper tools and personal protective equipment for the task to be completed
- Report any unsafe condition to the project manager
- Know what emergency telephone number to call in case an emergency
- Ensure housekeeping is completed to maintain a safe and clean work environment
- Participate in weekly toolbox safety talks and any other safety training
- Set a good example for others to follow



### Visitors in Working Areas:

Visitors in working areas including personnel from the DGS, funding agency, site staff, or energy consultant are responsible for safeguarding their own health and safety, and the safety of project workers. Each visitor will:

- Report to the project office before entering the jobsite
- Complying with all health and safety policies, procedures, and regulations under OSHA; the BG safety plan including site-specific policies, and any owner specific regulations
- Wearing adequate personal protective equipment
- Reporting any unsafe acts and/or unsafe conditions to the project manager
- Immediately report any injury sustained on the jobsite to the project manager



### Accountability

No phase of the project is of greater importance than accident prevention. All associates, contractors, and temporary workers must be aware of, and strive to achieve, the project safety and loss-control goals.

---

***“It is of utmost importance that proper planning will allow for safe work practices to be used.”***

---

BG will ensure all involved with the project are working safely, and it is the only acceptable way to complete the job. Every worker onsite shall be held accountable for their safety and loss-control performance.

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A.10. QA/QC PLAN





## A.10. QA/QC Plan –

*A.10 Offeror discussed an effective QA/QC Plan.*



An effective quality assurance/quality control plan (QA/QC) clearly defines how an offeror will control all areas of the project that are affected by quality including controlling materials, personnel, subcontractors, work procedures, inspections, and tests. BG's comprehensive QA/QC program is derived from our experience with the Department of Energy's (DOE) quality control requirements—the sensitive nature and increased security necessary to carry out work for the DOE translates well to the all marketplaces.

BG's proposed QA/QC program team will attend the project orientation meeting to familiarize themselves with the DGS, site staff, and funding agency and energy consultant's procedures, forms, and requirements necessary in order to deliver a tailored QA/QC program.

The following QA/QC program documents will be presented 30 days after contract:

- **Quality Control Plan (QCP)** – The QCP will identify personnel, procedures, control, tests, records and forms to be used. In addition, BG will request permission to use the QCP as an interim plan while waiting on acceptance of the QCP by the contracting officer (CO).
- **Design QCP (DQCP)** – The DQCP will address the BG management approach, management structure, list the submittals required, and the Designer of Record (DOR).

The DGS GESA project will be managed and provided by BG's QA/QC program team as shown below:

- **Design Quality Control Project Manager** – Todd Glyde, Engineering Manager
  - Sets quality control measures for the DQCP and reviews design project manager's work
- **Design Project Manager** – Steve Bair, Team Lead Mechanical Engineer
  - Responsible for leading the engineering team responsible for the project design
- **Quality Control System Manager** – Rodney Rouse, Senior Solutions Manager
  - Sets quality controls measures for the QCP
- **Project Manager** – Matt Baker, Project Manager
  - Manages overall day-to-day operations on site during construction
- **Construction Superintendent** – Ben Schell, Construction Superintendent
  - Monitors day-to-day operations on site during construction to ensure QCP is being met

Here is an outline detailing the key areas BG considers when tailoring a specific QA/QC program:



**1) PROJECT PERSONNEL**

- a. Each project needs a designated quality manager
  - i. We will designate a quality manager
  - ii. We will detail their responsibilities
  - iii. We will describe their qualifications as a quality manager
- b. Include Quality Superintendents
  - i. We will make an org chart if applicable

**2) QUALITY COMMUNICATIONS**

- a. Define the touch points we expect to have with the client
  - i. We will detail the type and frequency of meetings
  - ii. We will examine the necessary reports, test results, and/or inspections
  - iii. Use of checklists, etc.

**3) QUALITY ASSURANCE SURVEILLANCE**

- a. What we do to monitor and make sure that quality controls are running as they should
  - i. We will monitor on a weekly/monthly basis
  - ii. We will define and illustrate what are we reviewing
- b. We will demonstrate how we will stay on track

**4) SUBCONTRACTORS & SUPPLIERS**

- a. What key subs and suppliers will we be using
  - i. We will detail our criteria for selecting them
  - ii. We will list procedures followed for qualifying subs and suppliers
  - iii. We will list all subs and suppliers we are using
  - iv. We will supply a record of their qualifications

**5) PROJECT QUALITY SPECIFICATIONS**

- a. We will list building codes or industry standards that apply to the scope

**6) INSPECTIONS & TESTS**

- a. We will list all inspections and tests we expect to perform over the entire project
  - i. We will include forms and test reports we will use
  - ii. We will include procedures for conducting task inspections, i.e.,
    - 1. Make sure work is ready to begin
    - 2. Handle material receiving and inspections
    - 3. Monitor work in progress
    - 4. Verify completed work meets project specifications

**7) CONTROL OF NONCONFORMANCES**

- a. We will discuss how we will handle situations when things go wrong
  - i. How will we protect the overall quality of the project
  - ii. Discuss preventing coverups, corrective actions, records of incident, etc.

**8) PROJECT COMPLETION INSPECTION**

- a. We will discuss how we conduct inspections and close outs near the end of the project to assure all contracted work is completed to specifications



## QA/QC Proven Quality

BG has provided quality in service, design, and construction for over 63 years. Our delivery of quality assurance and quality control is best demonstrated by the loyalty of our customers. Several of our largest and longest-standing customers have completed multiple Guaranteed Energy Savings Projects across multiple locations and phases:

# OHIO DEPARTMENT OF REHABILITATION & CORRECTIONS (ODRC)



*Four* Guaranteed Energy Savings Projects Completed Across *Five* Correctional Institutions

## Security

We performed projects at five correctional institutions ranging from minimum to maximum security, including death row at Chillicothe Correctional Institution.

## Project Costs

In total, the four energy conservation projects cost over \$25 million in installation costs—Chillicothe, Southeastern, and Marion Correctional Institutions were all completed on schedule and on budget without incident. The Guaranteed Energy Savings Projects at London and Madison Correctional Institutions have been completed and were delayed during the covid shutdowns.

## Total Savings

Combined, BG has projected and guaranteed over \$33 million in total savings across all four Guaranteed Energy Savings Projects—to date all actual savings are exceeding original projections.

## Energy Conservation Measures (ECMs)

Hundreds of various measures ranging from lighting, automation, building envelope, water control & conservation, mechanical upgrades, green energy initiatives, and beyond have been implemented across all five correctional institutions.





## KENT STATE UNIVERSITY

*Six* Guaranteed Energy Savings Projects Completed Across *Five* Campuses In Ohio

### Buildings

We have upgraded and completed projects in 84 buildings varying from classrooms, labs, residence halls, kitchens, power plants, libraries, parking garages, and auxiliary buildings.

### Project Costs

In total, the six Guaranteed Energy Savings Projects cost over \$50 million in installation costs.

### Lifetime Savings

Combined, BG has **projected and guaranteed over \$170 million** in lifetime savings for Kent State University.

### Energy Conservation Measures (ECMs)

There are 175 various measures ranging from lighting, automation, building envelope, mechanical upgrades, green energy initiatives, and beyond that have been implemented.



*LED Lighting retrofit on  
Kent State University's Main Campus*





## CUYAHOGA COMMUNITY COLLEGE

*Five* Guaranteed Energy Savings Projects Completed Across *Five* Campuses Throughout Northeast Ohio

### Buildings

We have upgraded and completed projects in 20 buildings varying from classrooms, labs, kitchens, central plant, libraries, conference centers, and parking garages.

### Project Costs

In total, the five Guaranteed Energy Savings Projects cost over \$50 million in installation costs.

### Lifetime Savings

Combined, BG has guaranteed over \$50 million in lifetime savings for Cuyahoga Community College.

### Service Agreement

Since 1997, we have been successfully serving over 3,000 pieces of equipment across 20 buildings, and have exceeded projected energy savings by 20%.





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## A.11. CLOSEOUT PROCESS





## A.11. Closeout Process

*A.11. Offeror demonstrated understanding of the close out process for training of personnel, manuals, Occupancy Permits, commissioning and final closeout.*

BG will be a partner to the DGS, funding agency, and site staff through not only the completion of installation, but also throughout the life of the energy guarantee. This includes ensuring the DGS, funding agency, site staff, and energy consultant are satisfied with the installation of energy conservation measures. BG's closeout process is an important transition step from construction to post-construction. Our energy guarantee is based on the principle that the system designed is the system installed and that personnel are trained to maintain the new systems to maximize the energy efficiency of the facility.

We will provide written documentation during the project close-out to the funding agency of the system and installation, including but not limited to:

- a. Test results
- b. Equipment specifications
- c. Authority over all sequence of operations
- d. Multiple licenses and software
- e. Back-up copies of all software programming provided on non-magnetic media
- f. All documentation, maintenance manuals, and as-builts
- g. System configurations and equipment locations



## Training of Personnel

BG places a strong focus on training to ensure our customers have a full and complete understanding of their systems. Personnel training typically follows a successful system start-up and is conducted by BG staff and/or a manufacturer's representative if applicable. A training sign-in sheet is circulated for signatures to document those who attended, and typically an equipment demonstration form is presented to the funding agency for a signature to verify acceptance of the new equipment as evidenced below.

DGS staff training and skill development is an integral part of BG's approach to protect the project's savings guarantee. It is critical that all systems run as intended to generate the guaranteed savings. Our training will ingrain a strong customer orientation based upon the principles of flexibility, superior quality, and rapid response service. The following training is available for all BG partners:

Certification of Equipment Demonstration State of Ohio Standard Forms and Documents			
Demonstration Date	1/19/18	Contract Number	DRC-140087
Demonstration Time		Local Number	
Project Name	Energy Performance Contract	Contractor	The Brewer-Garrett Company
	Marion Correctional	Owner	ODRC
Equipment Item or System	Powerhouse - New Boiler Plant	Demonstrator Name	Rico
	Bryan Boilers (boilers #3, & #4)	Demonstrator Company	Roberts Mechanical
Observations and Comments (attach additional pages if necessary)			
<p><b>Owner Certification</b> As an authorized agent for the Owner, I certify that the equipment or system described above was operated in my presence and that its operating procedures were explained and demonstrated to my satisfaction. I acknowledge that a copy of the attendance sheet is attached.</p> <p>Name: <u>[Signature]</u> Date: <u>1-19-18</u></p> <p>Signature: _____ Date: _____</p> <p><b>Demonstrator</b> Name: <u>[Signature]</u> Date: <u>1-19-18</u></p> <p>Signature: _____ Date: _____</p> <p><b>Construction Manager</b> Name: <u>Alan Erdman</u> Date: <u>1-19-18</u></p> <p>Signature: <u>[Signature]</u> Date: _____</p>			

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- **Unlimited on-site sessions training** utilizing internal staff and subject matter experts from BG
- **Seasonal training** on heating and cooling systems
- Retraining of systems **90 days after initial training**
- Informal **"brown-bag" sessions** conducted by staff members of BG
- **Suppliers or vendor training** specific to facility's systems
- **Unlimited** virtual training
- **Building automation training** focused on optimal system operation
- Additional training **whenever requested** by the funding agency and site staff

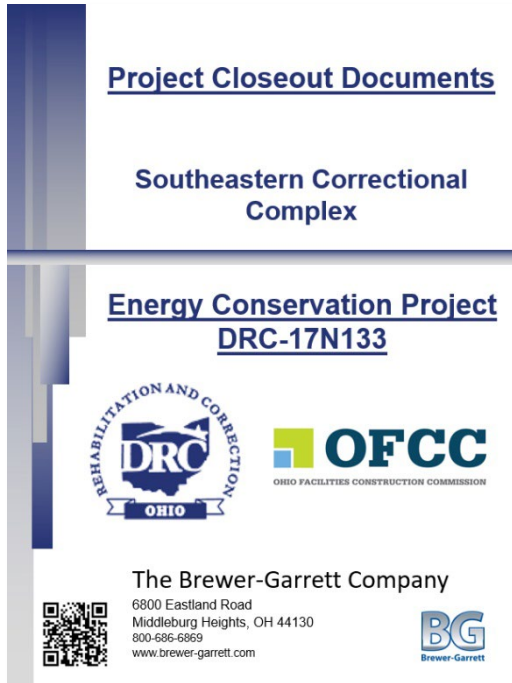


*We have provided additional information on our training programs in the ECM/Cost Submittal.*



## Manuals

Upon project completion, BG's contracting administrator will assemble a comprehensive operation and maintenance (O&M) manual(s), complete with all required project closeout documentation. The documentation provided in the O&M manual will be used as a tool during the site staff training to ensure maintenance staff is comfortable with supporting the new systems. The O&M manual for DGS will include the following at a minimum:



- Project as-built drawings
- Project warranties
- Training materials including training sign-in sheet and equipment demonstration form verifying acceptance of the new equipment
- Start-up and commissioning documents
- Punch list and final closeout checklist
- Approved project submittals
- Equipment operation manuals and specifications

## Occupancy Permits

BG will be a partner to the DGS, funding agency, and site staff through not only the completion of installation but also throughout the life of the energy guarantee. All systems designed and installed by BG will be thoroughly vetted for occupancy permit changes. We will ensure the PA Department of Labor & Industry has all the necessary paperwork and correctly completed application to ensure DGS is in compliance with the Fire and Panic Act and the Pennsylvania Construction Code Act (Uniform Construction Code).



## Commissioning of Installed Systems

As the project nears its conclusion, project manager, Matt Baker, along with BG's lead project engineer will perform a complete systems inspection and generate a punch list of any items requiring correction with the DGS, funding agency, site staff, and energy consultant. After corrections are made, and when systems are ready for start-up and commissioning, the BG team will utilize a functional testing checklist and generate a functional testing report to document proper system functionality, operation, and to perform testing and balancing. BG has an in-house commissioning division with five full-time commissioning agents that verify system design and performance on complex renovation projects every day. The commissioning team, along with our in-house maintenance team, created a functional testing checklist to be utilized during the project closeout phase. The testing checklist was created in tandem with the ASHRAE Guideline 1.1-2007 standards and USGBC-LEED standards. **We guarantee the system designed is the system installed.**



## Final Closeout

BG's project closeout process will transition the project from the construction team to the post-construction team and ultimately to the funding agency for full operational use. During the final closeout, we will ensure the work is completed in accordance with the contract documents and await a successful final inspection report prepared by the DGS, funding agency, or energy consultant. After a successful final inspection, a warranty period will commence and the post-construction phase will begin, managed by Energy Engineering Manager, Meg Bair—this will be marked by a measurement and verification kick-off meeting with the DGS, site staff, energy consultant, and the funding agency.





## Certification of Warranty Commencement



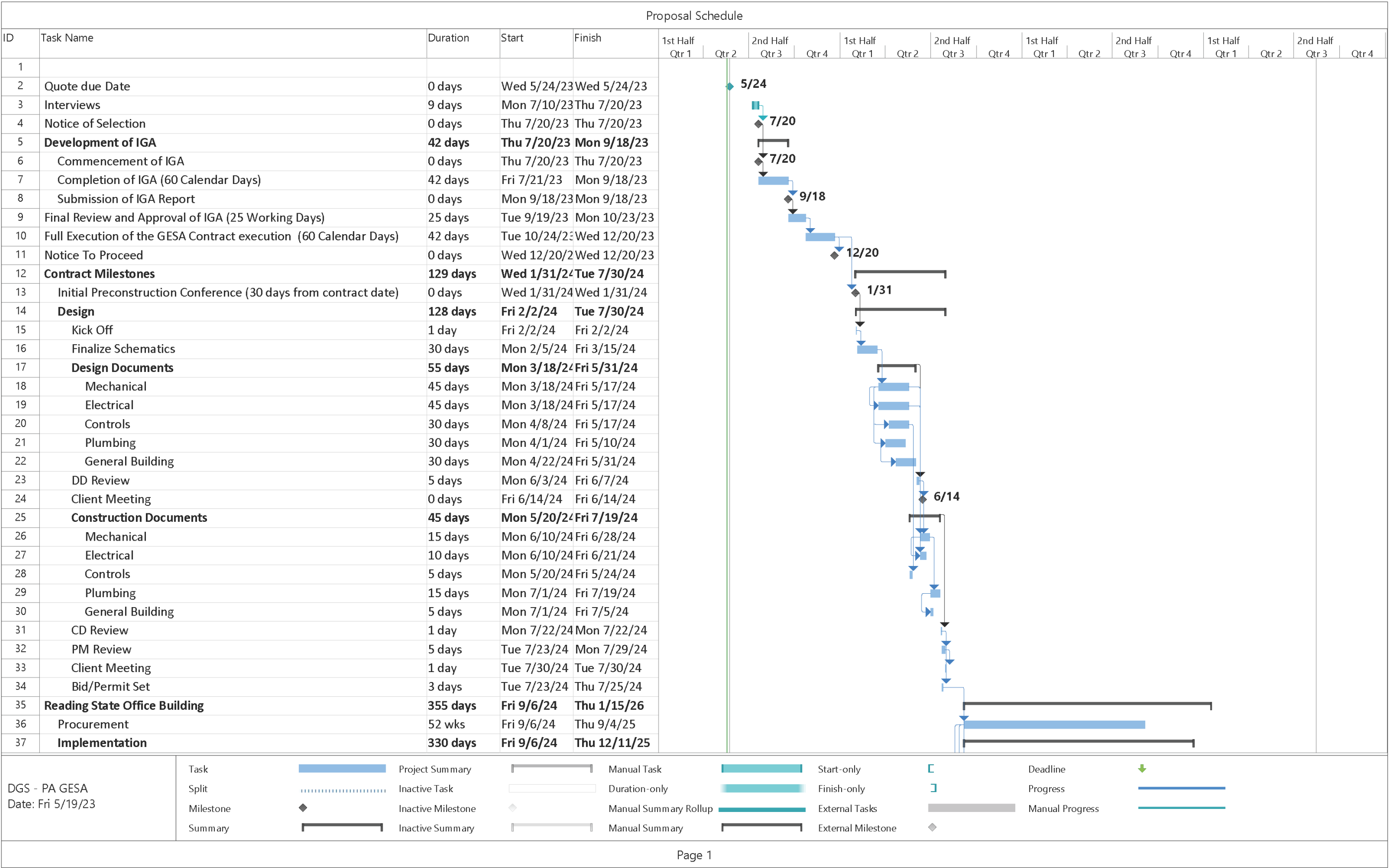
Customer Name	Marion Correctional Institute	Brewer-Garrett Job #	15045
Project Name	ECM 2.1i - OPI Replace Unit Heaters	Project #	DRC-140087
Project Location	OPI		

Equipment and materials included	Warranty start date	Warranty end date*
<u>General Construction Warranty:</u> The Brewer-Garrett Co. warrants all material, workmanship and equipment furnished by The Brewer-Garrett Co. to be free from defects and fully guaranteed for the period of ONE YEAR following owner acceptance.		
• Warranty Contact: Jon Erdmann, BG, 440-243-3535	11/1/2016	10/31/2017
<u>Dumpster Repair Heater:</u> Cambridge Engineering, Inc. ("Manufacturer") warrants that its products ("the Products") to be free from defects in material and workmanship. Manufacturer's S-Series Products shall be warranted for a period of 24 months from the date of shipment,	7/1/2016	6/30/2018
except that burner assemblies are warranted for five years from date of shipment. Cambridge Client Care 888-919-4779	7/1/2016	6/30/2021
<u>Comfortmaker Furnaces:</u> The warranty period is ten (10) years on the heat exchanger	11/1/2016	10/31/2026
and one (1) year on all other parts. For help, contact: International Comfort Products, Consumer Relations, P.O. Box 4808, Syracuse, New York, 13221, Phone 1-877-591-8908.	11/1/2016	10/31/2017
<u>REZNOR® Unit Heater PRODUCT LIMITED WARRANTY</u> Thomas & Betts Corporation warrants to the original owner-user that this Reznor product will be free from defects in material and workmanship. This warranty is limited to twelve (12) months from the date of original installation, whether or not actual use begins on that date, or eighteen (18) months from date of shipment by Thomas & Betts Corporation, whichever occurs first.		
Nortek Global HVAC LLC 8000 Phoenix Parkway O'Fallon, MO 63368 Tel. for General Sales & Support offices: (800) 695-1901	11/1/2016	10/31/2017
Models UDAP, UDAS, UDBP, UDBS, and UEAS — Extended nine (9)-year, non-prorated warranty on the heat exchanger, burner, and flue collection box assembly.	11/1/2016	10/31/2025
Extended four (4)-year, non-prorated warranty on all electrical and mechanical operating components (with the exception of blower belts on Models UDBP and UDBS).	11/1/2016	10/31/2020

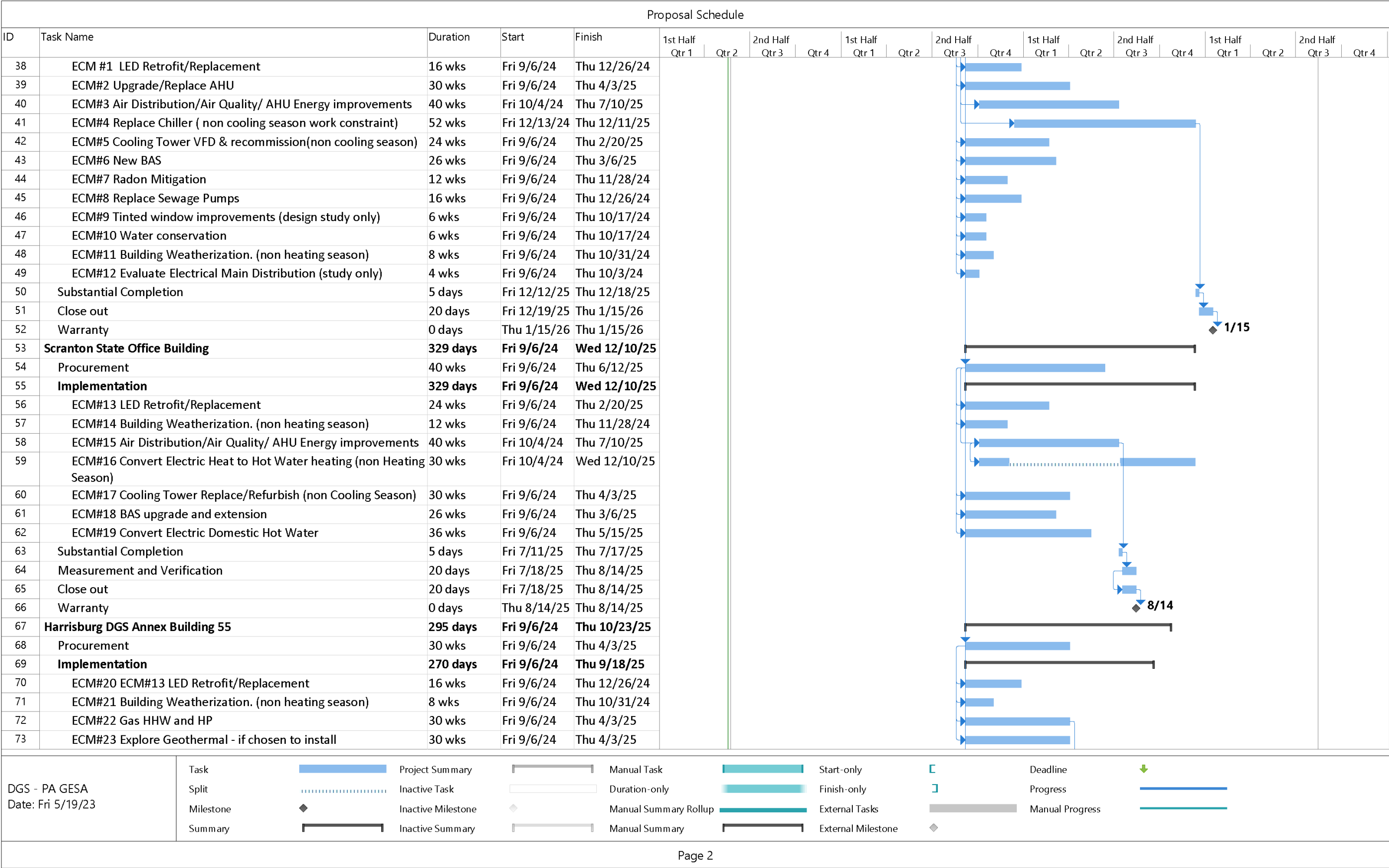
\*Date does not supercede or take precedence over Contract requirements.

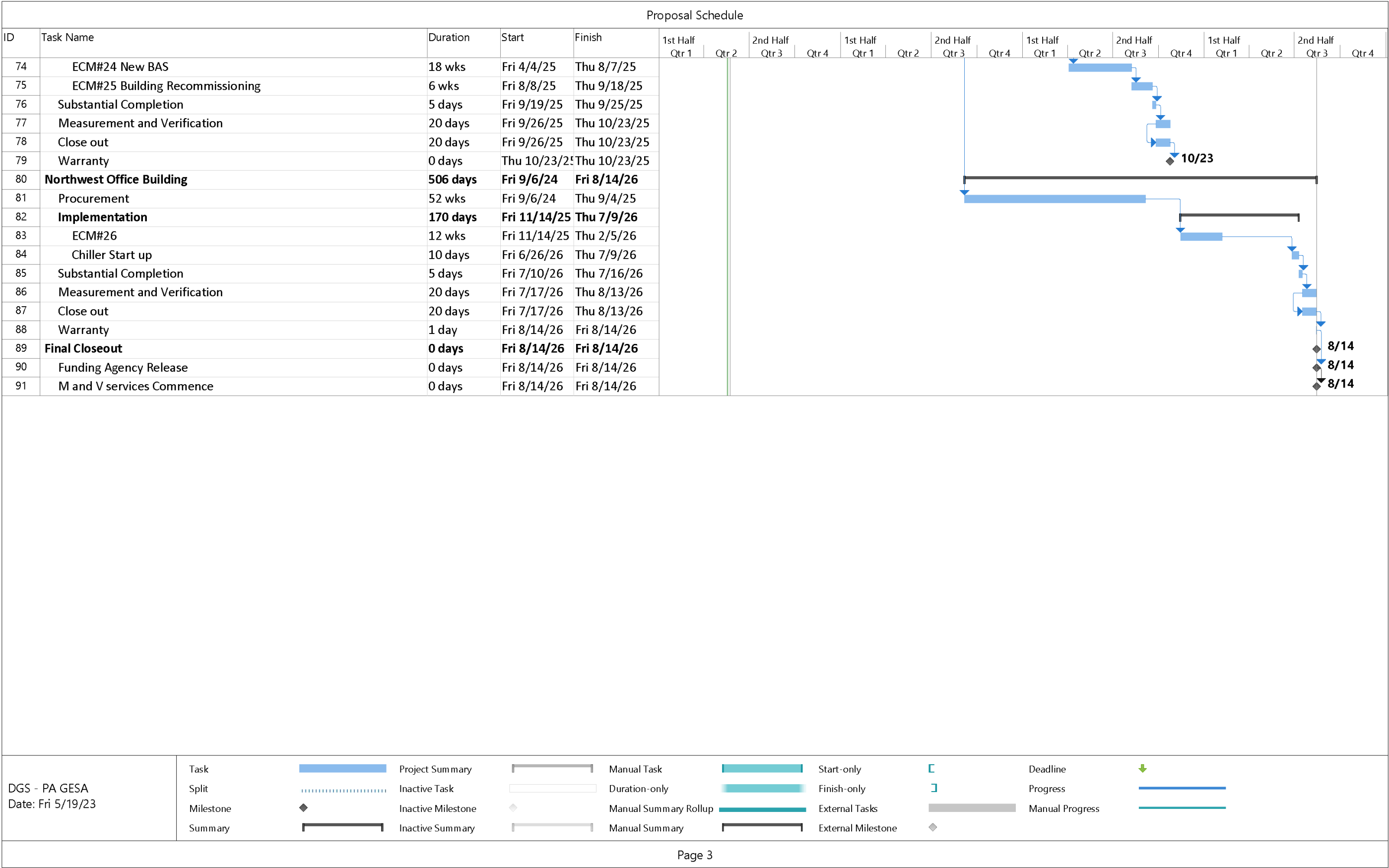
<b>Exceptions for each equipment and material</b> (Include terms and requirements to cure each exception listed, e.g., testing, maintenance, cleaning, etc.)	<b>Required completion date</b>
--	---------------------------------

_____	_____
_____	_____
_____	_____











A photograph of three men in a professional setting. In the foreground, a man with dark hair wearing a maroon sweater is looking intently at a computer screen. Behind him, two other men are standing and looking at the same screen. The man on the left is wearing a dark blue polo shirt with a white logo, and the man on the right is wearing a light blue t-shirt with a green logo. They are all smiling and appear to be collaborating.

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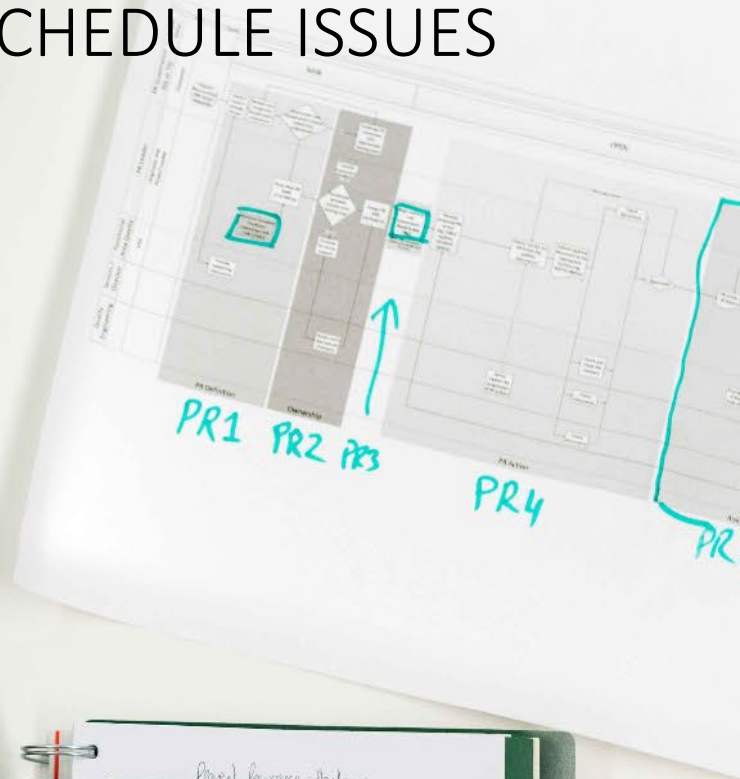
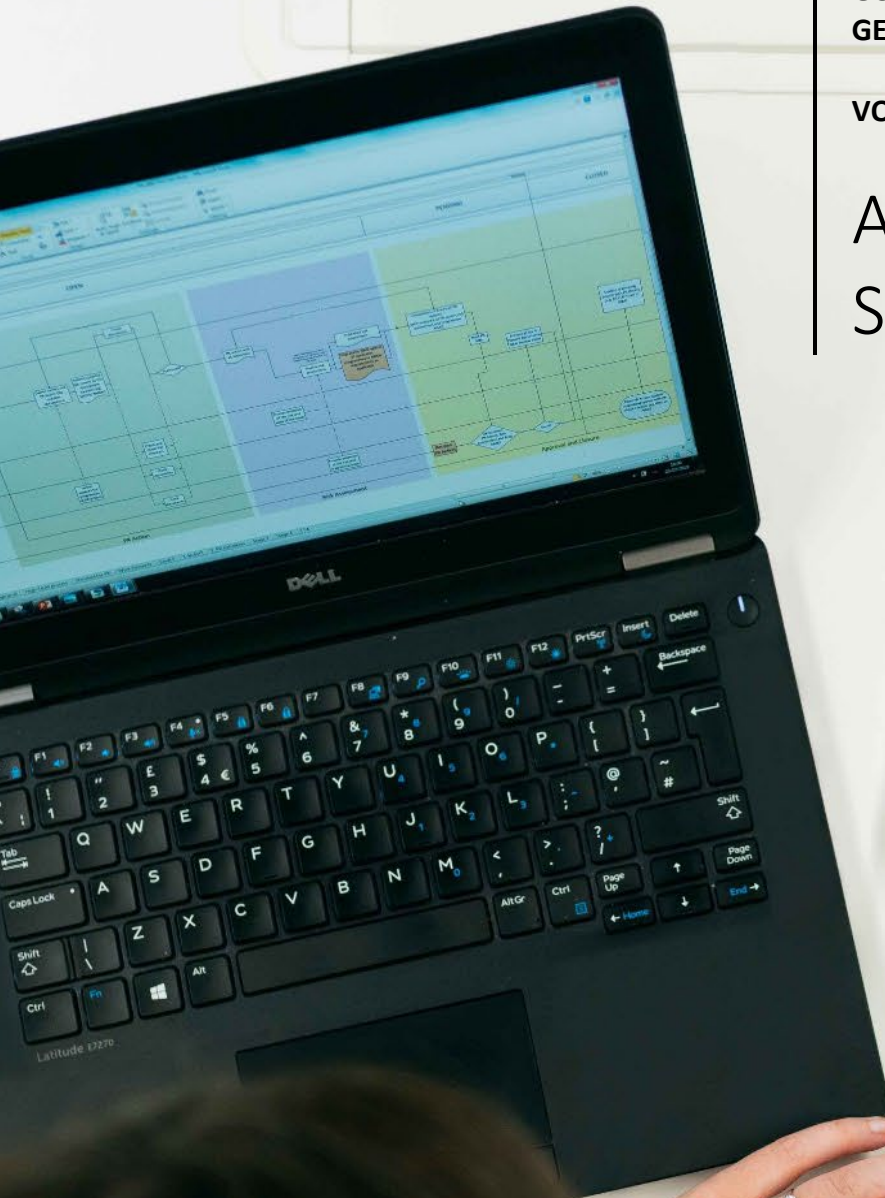
## 2-5.3-A. RFQ PROJECT SCHEDULE



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A.1. POTENTIAL  
SCHEDULE ISSUES





## 2-5.3-A. RFQ PROJECT SCHEDULE

*A. The Evaluation Committee will consider the degree to which the Quote addresses or discusses the following:*

### *A.1. Potential Schedule Issues*

*A.1. Narrative clearly identifies and discusses critical aspects of the schedule, associated risks, and the process to ensure achievement of critical milestones.*

Based on our team’s experience with executing projects for office building facilities, we have identified the following potential scheduling issues and potential solutions to mitigate the challenges. By identifying potential scheduling issues early in the process, BG can develop creative solutions in advance to limit any potential risk.

CHALLENGES	SOLUTIONS
1 Temporary power generation while replacing electrical equipment at the Reading State Office Building	ECM # 12 of the Core ECMs asks offerors to evaluate the replacement of the main electrical distribution panel from 208V to 480V and eliminate the existing step-up transformers. During the demolition and construction of this ECM temporary power will be necessary to maintain building operations, this can create issues for scheduling various operations during construction. This is something BG has experience with and has prepared for during our preliminary analysis of the building.
2 Distance between construction sites	Each project site has its own unique challenges but one of the largest challenges overall with this GESA project is that all 4 facilities are spread out across 3 different cities throughout eastern Pennsylvania. BG plans to complete construction in each of the 3 cities simultaneously, effectively treating each building as its own GESA project. Challenges can arise in the administration of project management between sites – keeping open lines of communication, especially regarding the schedule, will significantly reduce the impact.
3 Occupied buildings	Working within an occupied facility always brings added challenges to construction projects. BG will minimize the amount of space needed on the site by utilizing off site staging, lay down areas, and just in time delivery. Work within client rooms can be scheduled during times when they are unoccupied – BG will utilize PM shifts to complete a large majority of this work to minimize construction impact. These options vary by facility and require coordination with DGS staff.
4 Long lead times for critical equipment	With all key engineering and project management resources being in-house, BG’s IGA development strategy is structured to address and make allocation for required project phasing and long lead items by involving its project management team in the IGA process. This involvement allows our project managers to identify phasing and procurement concerns during the IGA, so the construction team can hit the ground running upon contract execution.

A close-up photograph of a person's hand pointing at a technical drawing on graph paper. The drawing includes a square, an arrow, and a series of curved lines. The text is overlaid on the right side of the image.

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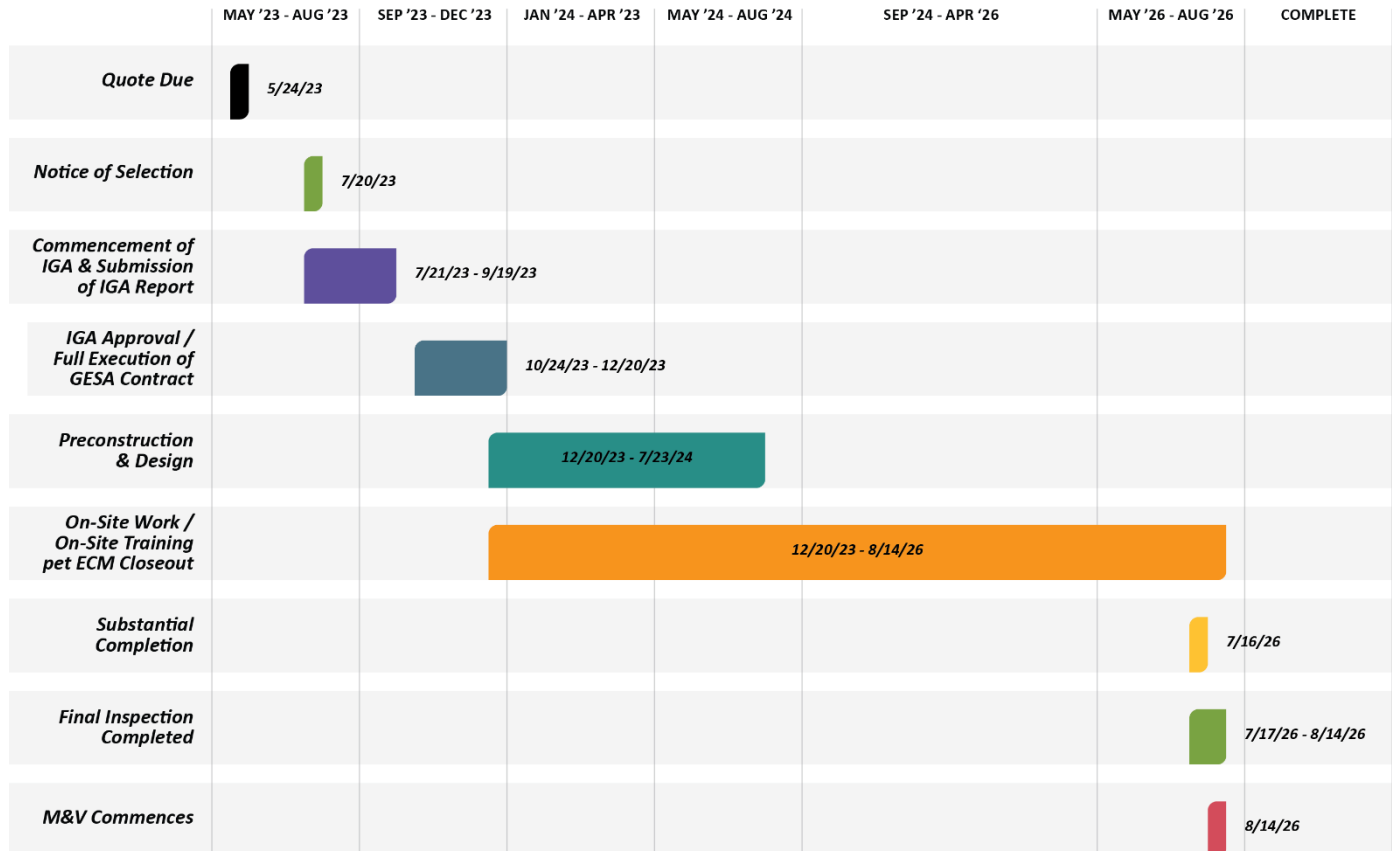
## A.2. PROJECT PRELIMINARY SCHEDULE



## A.2. Project Preliminary Schedule

A.2. Offeror sets forth a logical progression of critical path, including at least the Notice of Selection, duration and submission of the Investment Grade Audit, execution of GESA Contract, permit submission and approval dates, duration of on-site work, scheduling of start-up and testing of equipment, commissioning and training of personnel.

### Complete Schedule



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## A.3. CONSTRUCTION COORDINATION





## A.3. Construction Coordination

*A.3. Offeror integrates and coordinates construction with local utilities, subcontractors, equipment suppliers and Funding Agency facility personnel.*

Our project management team for this project was hand selected based on their experience managing and coordinating construction for multiple complex renovations in office building facilities. Our team will utilize Procore Construction software, a secure, cloud-based management application that stores all documents, drawings, submittals, and schedules received throughout the project in one central location. Having real time data at our fingertips helps mitigate costly delays and errors during project execution and simplifies our team's communication processes.



### Local Utility Coordination

Coordination with the local utility will be the responsibility of BG's project management team during construction with a **dedicated in-house resource to track all utility provider required upgrades**. Dale Rogers has 39 years of experience as a senior electrical estimator and electrical project manager and understands the process of coordinating construction with the local utility. Integrating Dale into the construction planning phase allows us to mitigate any schedule slippage or issues coordinating with the utility. Our experience has shown that working with the utility providers can have an extended timeframe. Should a power upgrade be required for this project, we have seen coordination with the local utility take upwards of 12 weeks to complete the upgrade. If this is not carefully planned and consistently monitored, it could delay the schedule of the entire project. Additionally, our energy engineering team will work with the local utility during the investment grade audit phase to establish utility rates and investigate any utility rebate incentives that may be available.

Note that construction coordination involving meetings is discussed above in section A.8 and all topics will be reported at the job conference.

### Subcontractor Coordination

Coordination with subcontractors will be the responsibility of BG's project management team during construction and is extremely important to the success of this project. Project Manager, Matt Baker, will be responsible for monitoring our subcontractors' progress, ensuring they are staffing the project accurately, and managing the quality control of their installation work. This direct oversight dedicated to subcontractors will ensure the project hits the schedule as agreed upon and there is no cost overrun. BG assumes all risk for scopes of work subcontracted for this project. In our current market, labor shortages are a concern. Our ability to lock in labor early in the preconstruction process and have MEP

focused on-site will allow project managers to eliminate any issues associated with labor allocation. We have the ability to self-perform the work on this project and can step in at any time if a subcontractor does not perform. This is another way we can protect the project schedule and budget.

Our subcontractor coordination relies on engaging all our subcontractors in a pull planning scheduling meeting. This method is adopted from the Lean Construction methodology. All stakeholders including the subcontractors, project managers, DGS, funding agency, site staff, and energy consultant meet to discuss the project in its entirety. They start with the project end goal and work backwards, milestone by milestone, toward the start date. This proven process has been effective to identify early projects risks and develop a plan to mitigate them.



## Equipment Suppliers Coordination

Coordination with equipment suppliers will be the responsibility of BG's project management team during construction. Team lead project manager, Jon Erdmann, will coordinate directly with equipment suppliers during the procurement phase and our on-site project manager, Matt Baker, will coordinate directly with equipment suppliers during the construction phase for timely delivery and location of delivery of equipment. BG is committed to providing the appropriate product for each specific scope of work. This commitment has led BG to remain product neutral and not be tied to any one product line or specific brand, ensuring that we develop strategic partnerships with multiple suppliers and vendors. We develop our solutions based on the very best option for our client's situation by thoroughly vetting the equipment provider, including their ability to deliver the equipment within the constraints of our project schedule.



## Funding Agency Facility Personnel

BG will conduct construction coordination with the funding agency initially during the orientation meeting, initial job conference, initial design progress meeting, regularly scheduled design progress meetings, and job conferences. This steady and scheduled coordination will be supplemented with regular contact between BG project management staff and the funding agency on-site to manage day-to-day issues as they arise.

Our experience with multiple office building facility projects has given us a keen understanding of the importance of client safety. This includes the cleanliness of the spaces we work in. All areas of work will be cleaned and sanitized following current CDC protocols, and our project managers will work side-by-side with the DGS staff to address any additional procedures deemed necessary to safeguard the health and safety of both the clients and staff alike.

In addition, our project managers will work diligently with the site staff to schedule and coordinate swing-stations to limit client disruption and to most effectively complete work in occupied areas. Having clear and continuous communication with the facility personnel is imperative to the successful implementation of the project and will ensure the safety and comfort of the DGS facility occupants.





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## 2-5.4. QUALIFICATION FORMS





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# 2-5.4.A-1. GESA CONTRACTOR QUALIFICATION FORM





## 2-5.4. QUALIFICATION FORMS

### 2-5.4.A. Qualified Personnel

#### 2-5.4.A-1. GESA Contractor Qualification Form

1. Provide clear and concise information that will demonstrate the following qualifications:

##### A-1.a. Management Team Individual Qualifications

A-1.a. Offeror provides Management Team Individual Qualifications (6 person limit) and describes Entity's experience with GESA projects.

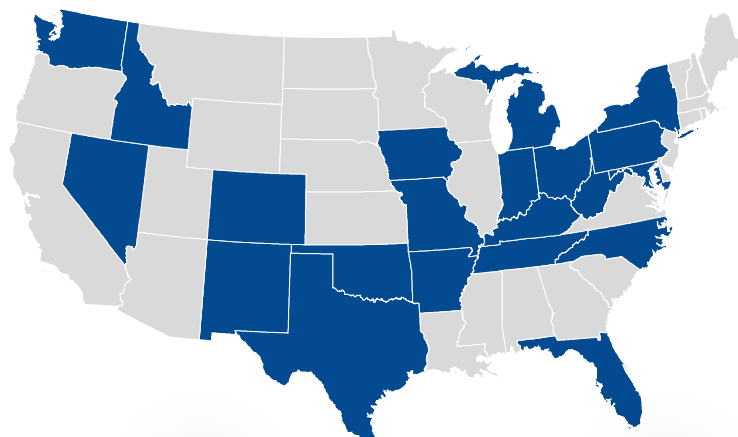
For over 25 years BG has been implementing successful GESA projects throughout the country—from correctional institutions to schools, to healthcare facilities and beyond. This management team was assembled because they are uniquely qualified to deliver this project to the DGS and the funding agency. With experience executing GESA projects at office building facilities, we understand the operational and financial realities of the state government environment. BG is currently developing four energy projects throughout the Commonwealth for the United States Army Corps of Engineers (USACE). Most recently, BG has entered into the preconstruction phase for an \$8.5 million energy project at Shamokin Area Schools.

BG's value is in its dedicated staff of in-house professionals; we provide first-tier solutions with our customer's best interest in mind. We deliver direct engineering and construction project controls that safeguard quality, maximize performance, contain costs, and remove the middleman. This structure allows us to maximize the return on investment for our customers and enables us to guarantee cost effective solutions and on-time installations geared toward customer satisfaction.

---

***“Since 1996, BG has successfully designed and implemented over 830 energy conservation projects totaling over \$1.5 billion for customers in 21 States.”***

---



Design and Construction  
Work Executed In 21  
States



Totaling Over \$1.5 Billion  
In Construction



Resulting In Over \$550  
Million In Energy  
Savings

The following individuals are BG’s in-house management and energy management key personnel.



**Vice  
President**  
*Jeff Zellers*

**41** *years of  
experience*



**Solutions Manager**  
*James Wilbanks*

**24** *years of  
experience*



**Energy Integration  
Manager**  
*Ted Howell*

**38** *years of  
experience*



**Estimating Manager**  
*Bryan Phlipot*

**10** *years of  
experience*



**Energy Engineering  
Manager**  
*Meg Bair*

**28** *years of  
experience*



**Senior Building  
Solutions Manager**  
*Jason Zorc*

**26** *years of  
experience*



## NORTHEAST OHIO REGIONAL SEWER DISTRICT

Cleveland, OH

District-Wide Energy Conservation & Management Project

[brewer-garrett.com](http://brewer-garrett.com)



### SCOPE

**Size:** 185,142 square feet

**Cost:** \$6,015,792

**Guaranteed Energy Savings:** \$7,189,113

**Guaranteed Period:** 15 Years

**Schedule Duration:** 9 & 16 Months  
(2 Phases)

- Scope:**
- Laboratory Upgrades
  - Air Handling Unit (AHU) Replacements
  - Controls System Integration
  - Lighting Retrofits
  - Occupancy Controls
  - HVAC Modifications
  - Heating Hot Water Boiler Plant Installation
  - Hot Water Boiler Installation
  - Air/Dirt Separator Upgrades
  - Single Duct Variable Air Volume (VAV) Installation
  - Variable Refrigerant Flow (VRF) Installation
  - Energy Recovery Ventilator Installation
  - Electric Duct Heater Installation
  - Low Ambient Mini Split Installation
  - Interior LED Lighting Upgrades

### SUMMARY

The Northeast Ohio Regional Sewer District (NEORS) is a public utility district that serves areas of northeast Ohio including Cuyahoga County as well as areas of Summit and Lorain counties. The district is comprised of three (3) wastewater treatment facilities and the Environmental and Maintenance Service Center (EMSC) and is responsible for maintaining the quality of water. The three treatment plants are Easterly, Westerly, and Southerly. During phase I, Brewer-Garrett (BG) was awarded the contract to perform a design and construction improvement project for NEORS. This project was designed to replace aging equipment at the facility, increase reliability of the systems, and reduce energy and operational cost.

BG designed, reconfigured, and replaced five (5) air handling units to ensure improved future operations and energy efficiency. The units were installed with full economized capability, code compliant filtration, high efficiency motors, and VFDs. All units were connected to a DDC system to offer full control and monitoring of each unit. Other improvements included upgrading and optimizing the exhaust and ventilation systems, installing two (2) high efficiency condensing boilers, and lighting retrofits.

After conducting upgrades at their EMSC, BG was selected to perform mechanical upgrades at each of the plant's main administrative buildings as well as the administrative headquarters for NEORS.

BG disconnected, demoed, and disposed of 72 existing fan powered VAV boxes at the George J. McMonagle (GJM) Building. A new, single duct VAV was installed and sized to appropriately fit the remaining ductwork. To save on materials costs, BG reconfigured the existing power to the VAV units by utilizing a step-down transformer to provide power to the new controls.

BG replaced three (3) existing boilers with two (2) new, near-condensing hot water boilers. The existing piping was demoed to install a primary-secondary arrangement with new pumps sized for the new boilers. All equipment was tied into the automation system.

# zero

CHANGE ORDERS

# 20%

REDUCTION

IN ENERGY USAGE WITHOUT  
JEOPARDIZING OUTPUT

## SINGLE DUCT VAV SYSTEM

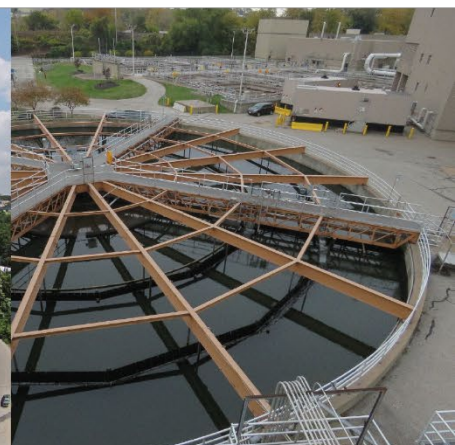
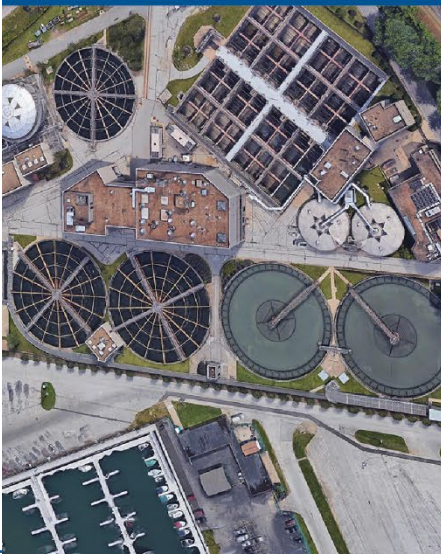
REPLACED 72 VAV BOXES

### REFERENCE

**Dan Pacek**

*Project Manager*

- a.** 3900 Euclid Ave, Cleveland, OH 44115  
**e.** [pacekd@neorsd.org](mailto:pacekd@neorsd.org)  
**p.** 216-881-6600 x6085



## GALLERIA & TOWER AT ERIEVIEW

Cleveland, OH

Energy Performance Contract Services

brewer-garrett.com



### SCOPE

**Size:** 955,000 square feet

**Cost:** \$7,023,380

**Guaranteed Energy Savings:** \$10,000,000

**Guaranteed Period:** 10 Years

**Schedule Duration:** 9 Months

**Scope:**

- Central Steam Boiler Plant Replacement
- Central Chiller Plant Replacement

### REFERENCE

**Andrew Evans**

*Property Manager*

**a.** 1301 E 9th St, Cleveland, OH 44114

**e.** andrew@erieviewtower.com

**p.** 216-861-4343

### SUMMARY

The Galleria and Tower at Erieview in Cleveland, Ohio is a combination of a two-story shopping center and a 40-story office building that resides a few blocks from the Rock and Roll Hall of Fame. The Tower was initially built as part of an urban renewal project in 1964 and the Galleria followed suit in 1987, which helped to ignite the revitalization of Cleveland that occurred in the 1990s.

In an effort to mitigate the challenges of higher operational costs and boiler/chiller equipment replacement costs, Brewer-Garrett (BG) was selected to design and build a new central boiler and chiller plant that would serve both the Galleria and Tower.

**BG** implemented an alternate solution to the thermal steam and chilled water systems and designed a program that not only reduced costs but created a new revenue source and increased the value of the property. This involved replacing the central plant without a disruption in service as the buildings were fully occupied throughout construction.

**BG** modernized the facility's system by installing an entirely new central chilled water plant with state of the art equipment and controls. Three (3) 1,100-ton centrifugal chillers were installed that use modern refrigerants and low kW/ton efficiencies.

**BG** replaced the steam heating system with a new central system that includes four (4) 225 hp boilers, a new deaerator feed-water system, surge tanks, softener system, boiler treatment system, and boiler sequence controller.

**BG** additionally provided an Integrated Facilities Services (IFS) contract to deliver maintenance services for HVAC, electrical, mechanical, plumbing, carpentry, locksmith, painting, subcontract management, and general facilities maintenance.

## INCREASED VALUE

OF PROPERTY WITH  
ON-SITE CENTRAL PLANTS

OVER  
**\$10M**

IN ENERGY SAVINGS ACHIEVED  
IN YEAR SIX OF TEN

## INTEGRATED FACILITIES SERVICES

ALLOWS CLIENT TO FOCUS ON  
DAY-TO-DAY OPERATIONS





## NORTHEAST OHIO REGIONAL SEWER DISTRICT

Cleveland, OH

District-Wide Energy Conservation & Management Project

[brewer-garrett.com](http://brewer-garrett.com)



### SCOPE

**Size:** 185,142 square feet

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(2 Phases)

- Scope:**
- Laboratory Upgrades
  - Air Handling Unit (AHU) Replacements
  - Controls System Integration
  - Lighting Retrofits
  - Occupancy Controls
  - HVAC Modifications
  - Heating Hot Water Boiler Plant Installation
  - Hot Water Boiler Installation
  - Air/Dirt Separator Upgrades
  - Single Duct Variable Air Volume (VAV) Installation
  - Variable Refrigerant Flow (VRF) Installation
  - Energy Recovery Ventilator Installation
  - Electric Duct Heater Installation
  - Low Ambient Mini Split Installation
  - Interior LED Lighting Upgrades

### SUMMARY

The Northeast Ohio Regional Sewer District (NEORS) is a public utility district that serves areas of northeast Ohio including Cuyahoga County as well as areas of Summit and Lorain counties. The district is comprised of three (3) wastewater treatment facilities and the Environmental and Maintenance Service Center (EMSC) and is responsible for maintaining the quality of water. The three treatment plants are Easterly, Westerly, and Southerly. During phase I, Brewer-Garrett (BG) was awarded the contract to perform a design and construction improvement project for NEORS. This project was designed to replace aging equipment at the facility, increase reliability of the systems, and reduce energy and operational cost.

BG designed, reconfigured, and replaced five (5) air handling units to ensure improved future operations and energy efficiency. The units were installed with full economized capability, code compliant filtration, high efficiency motors, and VFDs. All units were connected to a DDC system to offer full control and monitoring of each unit. Other improvements included upgrading and optimizing the exhaust and ventilation systems, installing two (2) high efficiency condensing boilers, and lighting retrofits.

After conducting upgrades at their EMSC, BG was selected to perform mechanical upgrades at each of the plant's main administrative buildings as well as the administrative headquarters for NEORS.

BG disconnected, demoed, and disposed of 72 existing fan powered VAV boxes at the George J. McMonagle (GJM) Building. A new, single duct VAV was installed and sized to appropriately fit the remaining ductwork. To save on materials costs, BG reconfigured the existing power to the VAV units by utilizing a step-down transformer to provide power to the new controls.

BG replaced three (3) existing boilers with two (2) new, near-condensing hot water boilers. The existing piping was demoed to install a primary-secondary arrangement with new pumps sized for the new boilers. All equipment was tied into the automation system.

# zero

CHANGE ORDERS

# 20%

REDUCTION

IN ENERGY USAGE WITHOUT  
JEOPARDIZING OUTPUT

## SINGLE DUCT VAV SYSTEM

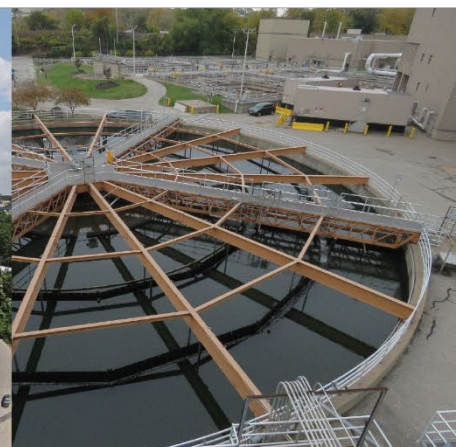
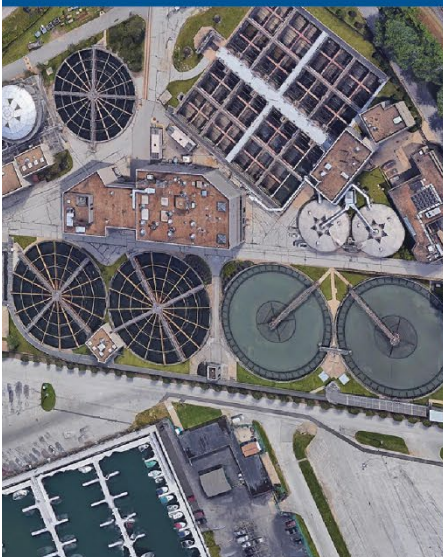
REPLACED 72 VAV BOXES

### REFERENCE

**Dan Pacek**

*Project Manager*

- a.** 3900 Euclid Ave, Cleveland, OH 44115  
**e.** [pacekd@neorsd.org](mailto:pacekd@neorsd.org)  
**p.** 216-881-6600 x6085



## CUYAHOGA COUNTY

Cleveland, OH

Ohio House Bill 300 | Energy Savings Performance Contract

[brewer-garrett.com](http://brewer-garrett.com)



### SCOPE

**Size:** 1,257,534 square feet

**Cost:** \$5,588,268

**Guaranteed Energy Savings:** \$5,531,845

**Schedule Duration:** 10 & 18 Months  
(2 Phases)

**Scope:**

- Building Automation System (BAS) Upgrades
- System Installations
- Interior & Exterior Lighting Retrofit
- Variable Frequency Drives (VFD) Installation
- Air-Cooled Chiller Upgrades
- Mechanical Upgrades
- Heat Pump Automation
- Chiller Control Optimization
- Retrocommissioning
- Restroom Ventilation Strategy and Exhaust Solution

### REFERENCE

**Gerard Salomon**

*Assistant Energy Manager*

**a.** 2079 E 9th St, Cleveland, OH 44115  
**e.** [gsalomon@cuyahogacounty.us](mailto:gsalomon@cuyahogacounty.us)  
**p.** 216-698-6257

### SUMMARY

The Department of General Services oversees the many facilities owned by Cuyahoga County. Faced with aging infrastructure, increased demands for space, and serious indoor air quality concerns, the county implemented the first of two phases of facility upgrades and used House Bill 300 to help finance it.

The Brewer-Garrett Company (BG) was selected to assist in a comprehensive energy conservation performance contract that incorporated county-wide facilities. It was an eighteen-month project that included over 1,257,534 square feet. One of the buildings was the Jane Edna Hunter building, a Health and Human Services facility, that had malfunctioning controls on the air handling units.

BG installed new cooling coils in the main air handling unit at the Juvenile Court. The manual valves that directly controlled the steam radiators were replaced with thermostatic radiator valves and economizers. These improvements directly impacted on the county's energy consumption. BG also improved the control schemes, designed and installed new ductwork to complement the building's exterior, and added new controls that enhanced the indoor air quality and energy performance.

BG continued performing massive upgrades when Phase II was introduced. In addition to the continuation of upgrades carried over from Phase I, heat pump automations were absorbed into a dedicated control system, and select chillers were optimized.

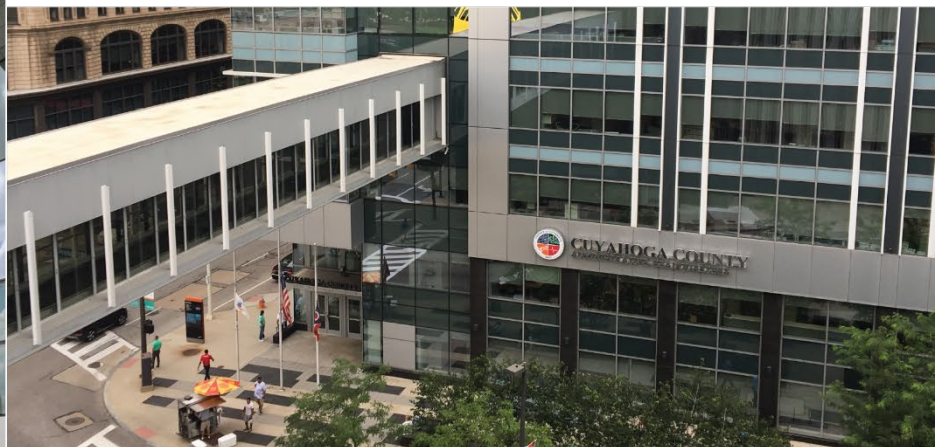
BG executed multiple lighting retrofits including in the county parking garage where existing HID fixtures were replaced with appropriate LED fixtures. Interior retrofits were also performed, and sensors were installed to automatically turn lights off when the space was unoccupied.

BG established a DDC building automation system to control all the new equipment and to interface with the old equipment. The existing pneumatic controls were renovated to interface with the new system. All building systems were retro commissioned.

### GOVERNOR'S AWARD

RECEIVED FOR EXCELLENCE IN  
ENERGY EFFICIENCY

**56%** INCREASE  
OVER ORIGINAL SAVINGS  
PROJECTIONS







JEFF ZELLERS  
Vice President

e. jzellers@brewer-garrett.com  
p. 440.243.3535  
a. 6800 Eastland Rd,  
Middleburg Heights, OH 44130

41  
years of experience

41  
YEARS w/ BG

EDUCATION  
BS Industrial  
Technology  
Ball State University

CERTIFICATIONS  
State of Ohio  
Contractor’s License:  
Heating, Ventilation,  
& Air Conditioning  
(HVAC),  
Refrigeration,  
Hydronics, &  
Plumbing  
  
General Services  
Administration  
Security Clearance,  
Homeland Security  
Presidential Directive  
12 (GSA HSPD-12)

ROLE RESPONSIBILITIES

Jeff focuses on contract execution and ensuring resource commitment throughout each project. He coordinates the efforts of engineering, energy services, construction support service maintenance, and accounting. Jeff assembles the team of in-house professionals who are best suited for each specific project and develops the correct and cost-effective solutions for customers. He ensures that BG projects not only meet but exceed the expectations of our clients.

PROJECTS

COMMERCIAL

- Beck Center for the Arts, Design-Build HVAC Upgrades
- Galleria & Tower at Erieview, Central Boiler, Chiller Plant, & Facilities Service Program
- Playhouse Square, Ohio, Allen, & Hanna Theatre Renovations, Design-Assist Services
- Terminal Tower, Alternative to District Energy Solution
- Westin Hotel, Design-Build & Energy Conservation Services

HEALTHCARE

- Fulton County HC, Comprehensive Infrastructure Improvement Project
- Hocking Valley Community Hospital, Energy Conservation Project
- Lutheran Hospital, Central Boiler & Chiller Plant Upgrades
- MedCentral Health System, Chilled Water Plant Renovation
- St. Vincent Charity Medical Center, Boiler Plant Renovation

HIGHER EDUCATION

- Case Western Reserve University, Maltz PA Center, Design-Assist for HVAC Services
- Central State University, Energy Conservation Program
- KSU, Campus Classroom, Lab., Auxiliary Buildings & Utility Assets ECP, Phases I & II
- Tri-C, Service & Energy Conservation Program, Phases I, II, III, & Amendment III
- The University of Akron, Energy Conservation Program

K-12

- CMSD, HB 153, Franklin D. Roosevelt Academy, Design-Build Project
- CMSD, HB 153, Wilbur-Wright & William Cullen Bryant, Design-Build Project
- Edison Local School District, HB 153, Design-Build Project
- Medina City School District, HB 264, Energy Conservation Program & Professional Services

LOCAL GOVERNMENT

- Chillicothe Correctional Institution, Energy Conservation Services
- City of Brooklyn, HB 300, Energy Conservation Program
- City of Kent, HB 300/420, Energy Conservation Program
- City of North Olmsted, Recreation Center, Lighting Retrofit
- Cuyahoga County, HB 300, Energy Conservation Program



## JAMES WILBANKS

*Solutions Manager*

*e.* jwilbanks@brewer-garrett.com

*p.* 440.243.3535

*a.* 6800 Eastland Rd,  
Middleburg Heights, OH 44130

**24**  
*years of experience*

**13**  
**YEARS w/ BG**

### EDUCATION

AS Mechanical  
Engineering  
*The University  
of Akron*

AS Design Engineering  
*Stark State College*

### CERTIFICATIONS

Leadership in Energy  
& Environmental  
Design Accredited  
Professional, Building  
Design & Construction  
(LEED AP BD+C)

## ROLE RESPONSIBILITIES

James collaborates with new and existing customers to develop innovative, customer-driven programs that conserve energy, reduce costs, and improve bottom line results. He utilizes BG's in-house engineering, design, construction, and service expertise to expand performance contracting services throughout the region. James assembles resources to configure and install programs that include lighting, HVAC systems, mechanical systems, building automation systems (BAS), water conservation, renewable energy, cogeneration and system assurance, process utilities, fire, and security systems.

## PROJECTS

### COMMERCIAL

- Beck Center for the Arts, Design-Build HVAC Upgrades
- Medical Mutual of Ohio, Alternative to District Energy Solution
- Playhouse Square, Alternative to District Energy Solution
- Playhouse Square, The Ohio Theatre Lobby, Design-Build HVAC Renovations
- Westin Hotel, Design-Build and Energy Conservation Services

### HEALTHCARE

- Aultman Hospital, Comprehensive Building Infrastructure Replacement Project
- Fulton County Health Center, Energy Performance Contract Services
- Hocking Valley Community Hospital, Energy Performance Contract Services
- MedCentral Health System, Comprehensive Building Infrastructure Improvements
- St. Vincent Charity Medical Center, Design-Build Boiler Plant Renovation

### HIGHER EDUCATION

- Ashland University, Comprehensive Energy Conservation Program
- Central State University, Campus-Wide Energy Conservation and Management Program
- Kent State University, Residence Halls, Energy Conservation Program
- Miami University, Campus-Wide Retro-Commissioning
- Youngstown State University, Energy Conservation Project

### K-12

- Conneaut Area City School District, Energy Conservation Project
- Medina City School District, Energy Conservation Program and Combined Heat & Power Project
- Medina City School District, Lighting Infrastructure Improvement Project

### LOCAL GOVERNMENT

- Chillicothe Correctional Institution, Guaranteed Energy Savings Project
- Cuyahoga County, Building Automation System Upgrades Amendment, Phase II
- Marion Correctional Institution, Guaranteed Energy Savings Project





TED HOWELL

Energy Integration Manager/  
Performance Assurance Engineer

e. [thowell@brewer-garrett.com](mailto:thowell@brewer-garrett.com)

p. 440.243.3535

a. 6800 Eastland Rd,  
Middleburg Heights, OH 44130

38

years of experience

8

YEARS w/ BG

EDUCATION

BS Mechanical  
Engineering  
Purdue University

BS Supervisory  
Technology  
Purdue University

CERTIFICATIONS

Certified Energy  
Manager (CEM)

Leadership in Energy  
& Environmental  
Design Accredited  
Professional, Building  
Design & Construction  
(LEED AP BD+C)

Certified Building  
Commissioning  
Professional (CBCP)

Certified Lighting  
Efficiency Professional  
(CLEP)

MEMBERSHIPS

Association of Energy  
Engineers (AEE)

ROLE RESPONSIBILITIES

Ted develops multifaceted energy savings performance contracts and works closely with customers to provide creative solutions to meet their needs. He possesses a broad range of expertise in lighting, mechanicals, automation, water conservation, auditing, and project delivery methods. Ted conducts energy surveys of buildings and industrial facilities and then develops state of the art solutions. He is responsible for the development of final project support or expansion of company service offerings. He oversees the production of project narratives and savings calculations and cultivates expert knowledge in a market segment or energy technology.

PROJECTS

HIGHER EDUCATION

- KSU, Campus Classroom, Lab., Auxiliary Buildings & Utility Assets ECP, Phase I
- KSU, Stark Campus, Energy Conservation Program
- Tri-C, Service & Energy Conservation Program, Phases I, II, III, & Amendment III

LOCAL GOVERNMENT

- City of South Euclid, Energy Conservation Program
- Cuyahoga County, HB 300, Energy Conservation Program
- London and Madison Correctional Institutions, Energy Conservation Project

K-12

- Cleveland Heights-University Heights, Green Apple Project Energy Savings Program
- Euclid City School District, Energy Conservation Project
- Evergreen Local School District, Green Apple Project Energy Conservation Program
- North Ridgeville City School District, Professional Services Project
- Western Reserve Local Schools, Green Apple Project Energy Conservation Program



BRYAN PHILIPOT

Estimating Manager

e. [bphilipot@brewer-garrett.com](mailto:bphilipot@brewer-garrett.com)

p. 440.243.3535

a. 6800 Eastland Rd,  
Middleburg Heights, OH 44130

10

years of experience

9

YEARS w/ BG

EDUCATION

BS Construction  
Engineering  
Technology  
*The University of  
Toledo*

CERTIFICATIONS

Infection Control  
Assessment  
(ICRA)

Occupational  
Safety & Health  
Administration: 30  
Hour (OSHA 30)

ROLE RESPONSIBILITIES

Bryan controls all matters pertaining to assigned projects and owner satisfaction. He creates as-built drawings, operation and maintenance manuals, and related documents that are required for project close-out, while ensuring the approval process of drawing and equipment submittals is timely. He is responsible for acquiring and coordinating BG labor, equipment, tools, inventory, and deliveries and for documenting any changes in scope of work, including energy related revisions, developing pricing, and gaining approval from the customer. Bryan conducts jobsite meetings, prepares meeting minutes, and monitors the work to maintain schedule and budget requirements.

PROJECTS

COMMERCIAL

- Beck Center for the Arts, Design-Build Project, HVAC Upgrades
- OpenText, Echo Pod Critical Cooling, Design-Build Project
- Playhouse Square, Ohio, Allen, & Hanna Theatre Renovations, Design-Assist Services
- Xellia Pharmaceuticals, Chiller Replacement, Design-Build Project

FEDERAL GOVERNMENT

- Tampa VA Building, Research Laboratory Renovation, Design-Build Project

HIGHER EDUCATION

- KSU, Campus Classroom, Lab., Auxiliary Buildings, & Utility Assets, ECP, Phases I & II
- Tiffin University, VRF System for Kirk & Zahn Dorms, Design-Build Project

K-12

- Cleveland Metropolitan School District, Franklin D. Roosevelt Academy, HB 153, D-B Project
- Eastpointe Community Schools, Boiler Replacements, Design-Build Project
- Edison Local School District, HB 153, Design-Build Project
- Euclid High School, North Athletic Complex Renovation, Design-Build Project
- Shamokin Area School District, Energy Performance Project

LOCAL GOVERNMENT

- Chillicothe Correctional Institution, Energy Conservation Project
- London and Madison Correctional Institutions, Energy Performance Project
- NEORSD, District-Wide Energy Performance Project
- NEORSD, Southern Campus Heat Boiler System Upgrade, Design-Build Project
- RK-66 RFK Bridge, Remote Steam Boiler Building, Plan-Spec





MEG BAIR  
Energy Engineering Manager

e. mbair@brewer-garrett.com  
p. 440.243.3535  
a. 6800 Eastland Rd,  
Middleburg Heights, OH 44130

28  
years of experience

27  
YEARS w/ BG

EDUCATION  
University of  
Southern Colorado

CERTIFICATIONS  
Certified Energy  
Manager (CEM)

Certified Energy  
Auditor (CEA)

Certified  
Measurement  
& Verification  
Professional (CMVP)

Leadership in Energy  
& Environmental  
Design Accredited  
Professional (LEED  
AP)

Occupational  
Safety & Health  
Administration:  
30 Hour (OSHA 30)

Certified Demand  
Side Manager (CDSM)

Cardiopulmonary  
Resuscitation (CPR)  
Training

ROLE RESPONSIBILITIES

Meg successfully spreadheads the development of energy savings performance contracts and ongoing energy audit contracts. Her responsibilities include all energy aspects of the Energy Engineering Team. Documents produced by the team are reviewed by her to ensure quality and adherence to BG’s design standard. She oversees the quality and engineering budgets of team project assignments, while organizing design and engineering effort and assigns tasks to engineers.

PROJECTS

COMMERCIAL

- Galleria & Tower at Erieview, Central Boiler, Chiller Plant, & Facility Services Program
- Playhouse Square, Alternative to District Energy Solution
- Stambaugh Building, Design-Build Services
- Terminal Tower, Alternative to District Energy Solution

HEALTHCARE

- Fulton County Health Center, Infrastructure Improvement Project
- Hocking Valley Community Hospital, Energy Performance Contract Services
- Lutheran Hospital, Central Boiler & Chiller Plant Upgrades Program
- MedCentral Health System, Chilled Water Plant Renovation
- St. Vincent Charity Medical Center, Design-Build Boiler Plant Renovation

HIGHER EDUCATION

- Ashland University, Comprehensive Energy Conservation Program
- Central State University, Campus-Wide Energy Conservation Program
- Hiram College, Comprehensive Energy Conservation Project
- Otterbein University, Energy Conservation Project
- Youngstown State University, Design-Build & Energy Conservation Project

K-12

- Columbus City Schools, “Operation: Fix It,” Design-Build, Phases I, II, IV, VII, & North HS
- Euclid City School District, House Bill 264, Energy Conservation Program
- Frontier Local School District, Professional Services, Energy Conservation Program
- Medina City School District, Energy Conservation Program & Combined Heat & Power Project
- North Ridgeville City School District, Professional Services, Energy Conservation Project

LOCAL GOVERNMENT

- Chillicothe Correctional Institution, Energy Conservation Services
- Cuyahoga County, House Bill 300, Energy Conservation Program
- Marion Correctional Institution, Energy Conservation Program



JASON ZORC  
*Building Solutions Manager*

e. jzorc@brewer-garrett.com  
p. 440.243.3535  
a. 6800 Eastland Rd,  
Middleburg Heights, OH 44130

26  
years of experience

21  
YEARS w/ BG

EDUCATION  
BS Electrical  
Engineering  
Technology  
*University of Dayton*

CERTIFICATIONS  
Certified Energy  
Manager (CEM)

Occupational Safety &  
Health Administration:  
30 Hour (OSHA 30)

General Services  
Administration  
Security Clearance,  
Homeland Security  
Presidential Directive  
12 (GSA HSPD-12)

Tridium Niagara AX

MEMBERSHIPS  
Association of Energy  
Engineers (AEE)

ROLE RESPONSIBILITIES

Jason manages all aspects of the energy management and temperature control systems. He is responsible for overseeing third party commissioning groups and spearheads the software development and data analytics initiatives. He oversees the controls department by providing sales, estimating, engineering, technical, and project management support. Jason acts as a key team member on the development of award-winning energy conservation programs.

PROJECTS

COMMERCIAL

- Playhouse Square, Alternative to District Energy Solution
- Terminal Tower, Alternative to District Energy Solution
- Westin Hotel, Design-Build, Energy Conservation Services

HEALTHCARE

- Hocking Valley Community Hospital, Energy Conservation Project

HIGHER EDUCATION

- Central State University, Energy Conservation Program
- Cuyahoga Community College, Energy Conservation Program, Phases I, II, & III
- Kent State University, Energy Conservation Program
- The University of Akron, Energy Conservation Program
- Youngstown State University, Design-Build, Energy Conservation Project

K-12

- Medina City School District, HB 264, Energy Conservation Program

LOCAL GOVERNMENT

- Chillicothe Correctional Institution, Energy Conservation Services
- City of Brooklyn, HB 300, Energy Conservation Program
- City of Kent, HB 300/420, Energy Conservation Program
- City of South Euclid, Energy Conservation Program
- Cuyahoga County, HB 300, Energy Conservation Program



## A-1.b. Offeror's Financial Ability to Provide Guarantee

*A-1 b. Offeror's financial ability to provide guarantee.*

### Financial Stability

BG has been exceeding customer expectations through successful projects for over 63 years. Our financial strength and long-term viability are evidenced by solid and ongoing operating results, strong liquidity, and capital adequacy. BG is a privately held company and as such is very circumspect regarding its financial information. We have attached a separate sealed packet containing summarized data prepared by a certified public accounting firm located in the proposal marked "Original." If more detailed information is required you may contact our Controller, Billy Lawless, at any time at 440-243-3535. BG's Federal Tax ID number is 34-0836142.

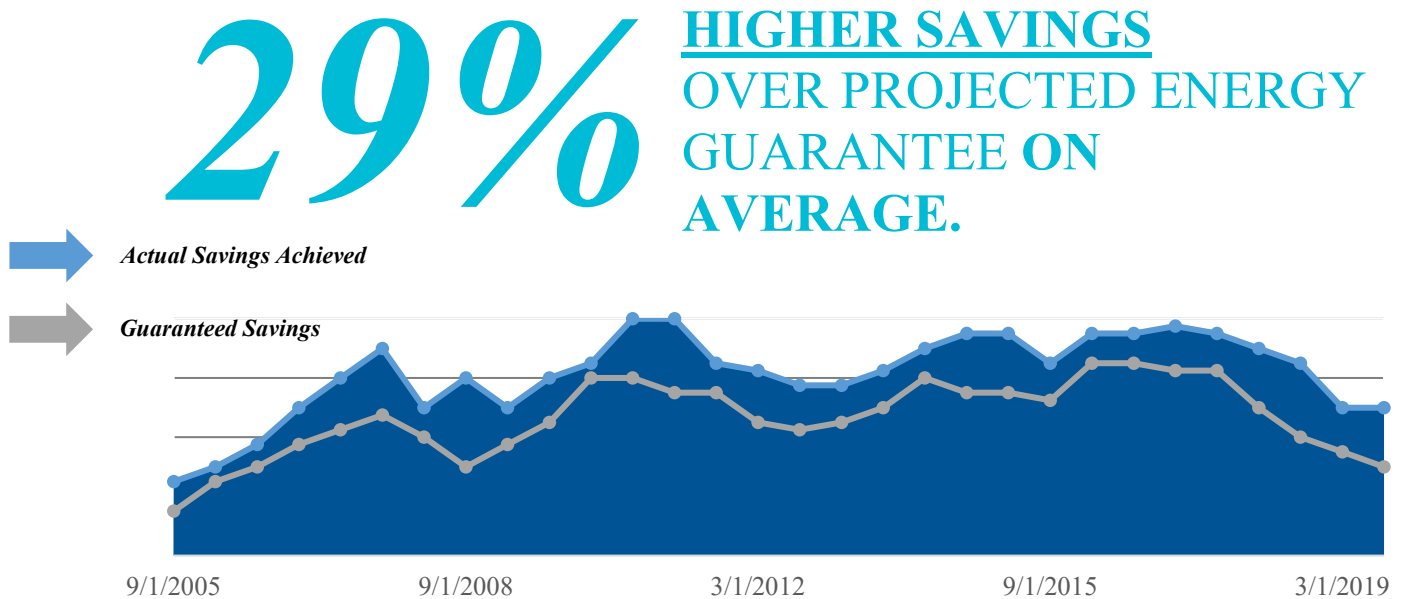
### Ability to Provide Guarantee

BG's in-house energy engineering team has successfully developed and implemented over \$550 million of energy conservation projects and energy guarantees, of which \$430 million has been satisfied to date. Since the 1990s, BG has designed and installed over 830 energy conservation projects across 21 states. Our energy services division maintains a staff of certified energy managers that are highly experienced in the energy services field, certified lighting professionals, MEP engineers, and energy engineers/auditors, comprised of certified measurement and verification professionals, with capabilities utilizing Metrix™ software to measure and ensure energy cost savings.

<i>Project/Customer</i>	<i>Project Value</i>	<i>Guaranteed Energy Savings*</i>	<i>Guaranteed Savings to Actual Savings %</i>
<i>Aultman Hospital</i>	<i>\$18,600,000</i>	<i>\$10,874,713</i>	<b>104%</b>
<i>Central State University</i>	<i>\$16,165,560</i>	<i>\$14,553,291</i>	<b>101%</b>
<i>Southeastern Correctional Institution</i>	<i>\$2,437,140</i>	<i>\$3,410,273</i>	<b>110%</b>
<i>Otterbein University</i>	<i>\$4,640,031</i>	<i>\$5,015,065</i>	<b>103%</b>
<i>Northeast Ohio Regional Sewer District (NEORS D)</i>	<i>\$2,376,167</i>	<i>\$2,920,305</i>	<b>300%</b>
<i>Kent State University Main Campus Phase I</i>	<i>\$24,816,900</i>	<i>\$33,762,090</i>	<b>291%</b>

\*Figures only include energy savings

BG's savings guarantee methodology is based on projecting realistic and achievable guarantees. By being conservative in our projections of guaranteed savings, our customers typically exceed the expected savings, as shown in the graph below.



### Bonding Information

BG's bonding company is Cincinnati Insurance. This A+XV carrier is one of the most highly rated bonding companies in the country. BG's largest financed and guaranteed energy conservation program in the last five years was \$42 million. In over 63 years of providing premier energy services, engineering, and design-build construction, BG has never had a bond invoked. In addition, the company has never been denied a bond. Our total bonding capacity is \$55 million. The following page contains a surety letter from Hotaling & Associates Agency, Inc.

#### **Name of Bonding Agent:**

Hotaling & Associates Agency, Inc.  
8803 Brecksville Road, Suite 7-211  
Brecksville, Ohio 44141  
216.447.1004

### Insurance Information

BG has provided our Certificate of Insurance on the following page. The Certificate of Insurance showing commercial general liability insurance in amount not less than \$1,000,000 each occurrence, comprehensive automotive liability insurance in amount not less than \$1,000,000 and workers compensation insurance in accordance with Worker's Compensation Act of the Commonwealth of Pennsylvania, is included below. In addition, Contractor's Professional Liability insurance coverage requirements for engineering design work in the Commonwealth of Pennsylvania, \$5,000,000 Per Claim and \$5,000,000 Aggregate, is included on this certificate.





8803 Brecksville Road | Suite# 7-211 | Brecksville, Ohio 44141 | 216-447-1004 | www.hotalingassoc.com

May 3, 2023

Ms. Becky Tomlinson  
Commonwealth of Pennsylvania  
Department of General Services  
403 North Office Bldg.  
401 North Street  
Harrisburg, PA 17120

**Re: Contractor:** *The Brewer-Garrett Company*  
**Project Number:** *2023-1*  
**Project:** *Guaranteed Energy Savings Project-Dept of General Services*  
**Surety:** *The Cincinnati Insurance Company/2022 A. M. Best Rating: A+ XV*

Dear Ms. Tomlinson:

By way of introduction, the associates of Hotaling & Associates Agency, Inc. have been servicing the Risk Management and Surety requirements of The Brewer-Garrett Company for the past 32 years. We have genuinely enjoyed an excellent relationship over that period, and we highly recommend our contractor/client for your favorable consideration of any project that you may propose.

The Brewer-Garrett Company has successfully completed numerous multi-million-dollar projects and we are both impressed and confident in the scope of their expertise. The Brewer-Garrett Company's Surety, The Cincinnati Insurance Company, (2022 A.M. Best Rating A+, XV) has been providing surety bonds for The Brewer-Garrett Company since 1991. The Cincinnati Insurance Company has written various Performance & Payment/Contract Bonds and Energy Savings Guaranty Bonds for The Brewer-Garrett Company covering specific projects more than \$40,000,000 with work programs more than \$70,000,000 and bid bonds for projects as large as \$90,000,000. As of this writing, the client/principal remains in excellent standing with Cincinnati Insurance Company.

Should a Performance & Payment Bond and/or Energy Savings Guaranty Bond be required on any projects, The Cincinnati Insurance Company would be more than willing to consider same. Any specific request for bonds is between The Brewer-Garrett Company and their Surety and will be underwritten on its own merit, subject to review and satisfaction of the construction contract as well as evidence of complete financing. Cincinnati Insurance Company has approved and written surety bonds like the ones required in this scope/RFQ.

Should you have any questions, please feel free to contact the undersigned individual.

Respectfully yours,

*Robert T. Hotaling*

Robert T. Hotaling  
President - Hotaling & Associates Agency, Inc.  
Attorney-In-Fact – The Cincinnati Insurance Company

RTH/ch



## CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)  
05/03/2023

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT:** If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

<b>PRODUCER</b> Hotaling & Associates Agency, Inc. 8803 Brecksville Road, Suite 7-211 Brecksville, OH 44141	<b>CONTACT NAME:</b> Robert Hotaling <b>PHONE (A/C, No, Ext):</b> 216 447-1004 <b>FAX (A/C, No):</b> <b>E-MAIL ADDRESS:</b> hotaling_r@hotmailgassoc.com														
<b>INSURED</b> The Brewer-Garrett Company 6800 Eastland Road  Middleburg Heights OH 44130	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">INSURER(S) AFFORDING COVERAGE</th> <th style="text-align: left;">NAIC #</th> </tr> <tr> <td>INSURER A: Liberty Mutual Fire Insurance Company</td> <td>23035</td> </tr> <tr> <td>INSURER B: First Liberty Insurance Corporation</td> <td>33588</td> </tr> <tr> <td>INSURER C: Liberty Insurance Corporation</td> <td>42404</td> </tr> <tr> <td>INSURER D: Pacific Insurance Company, LTD</td> <td>10046</td> </tr> <tr> <td>INSURER E:</td> <td></td> </tr> <tr> <td>INSURER F:</td> <td></td> </tr> </table>	INSURER(S) AFFORDING COVERAGE	NAIC #	INSURER A: Liberty Mutual Fire Insurance Company	23035	INSURER B: First Liberty Insurance Corporation	33588	INSURER C: Liberty Insurance Corporation	42404	INSURER D: Pacific Insurance Company, LTD	10046	INSURER E:		INSURER F:	
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INSURER B: First Liberty Insurance Corporation	33588														
INSURER C: Liberty Insurance Corporation	42404														
INSURER D: Pacific Insurance Company, LTD	10046														
INSURER E:															
INSURER F:															

### COVERAGES

### CERTIFICATE NUMBER:

### REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> Underground <input type="checkbox"/> incl. XCU GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input checked="" type="checkbox"/> LOC OTHER:			TB7-Z51-291519-023	01/01/23	01/01/24	EACH OCCURRENCE \$ 2,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 300,000 MED EXP (Any one person) \$ 10,000 PERSONAL & ADV INJURY \$ 2,000,000 GENERAL AGGREGATE \$ 4,000,000 PRODUCTS - COMP/OP AGG \$ 4,000,000
B	<b>AUTOMOBILE LIABILITY</b> <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY			AS6-Z51-291519-013	01/01/23	01/01/24	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
C	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED \$ RETENTION \$			TH7-Z51-291519-043	01/01/23	01/01/24	EACH OCCURRENCE \$ 15,000,000 AGGREGATE \$ 15,000,000 \$
A	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b> ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below		N/A	WC2-Z51-291519-033 All States Workers Comp, incl. PA	01/01/23	01/01/24	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTHER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
D	<b>Contractor's Professional Design E&amp;O &amp; Pollution Liability</b>			45 CPI GA 9947	01/01/23	01/01/24	\$5,000,000 per claim/\$10,000,000 aggregate/\$25,000 SIR - E&O \$5,000,000 per claim/\$5,000,000 agg \$25,000 SIR - Pollution

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

With respect to: Guaranteed Energy Savings Project - Department of General Services; Reading, Scranton & Harrisburg Project No. GESA-2023-1

Additional Insured status and any other required coverages can be designated upon award of contract  
90 Days Written Notice of Cancellation/10 days Written Notice of Cancellation for Non Payment

### CERTIFICATE HOLDER

### CANCELLATION

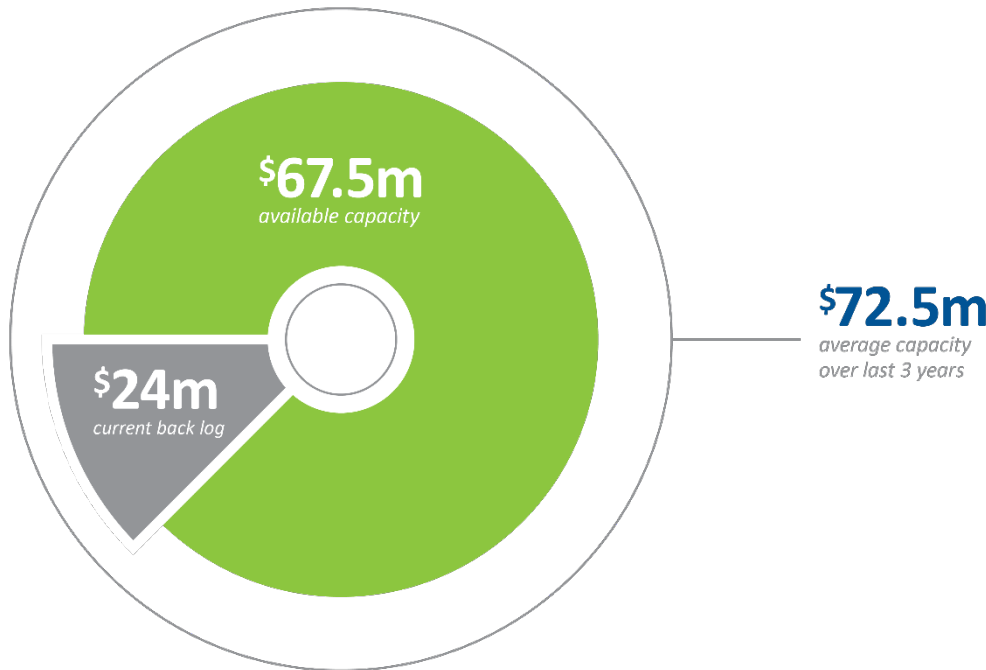
The Commonwealth of Pennsylvania Department of General Services 403 North Office Bldg. 401 North Street Harrisburg, PA 17120	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.  AUTHORIZED REPRESENTATIVE <i>Robert T. Hotaling</i>
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**A-1.c. Offeror’s Resource Availability**

*A-1.c. Offeror’s Resource Availability*



Last 3 Years Average Gross Sales	\$67,500,000
Next 3 Years Average Committed Backlog	\$5,000,000
Capacity	\$72,500,000

**A-1.d. Offeror’s Statement of Readiness and Commitment of Resources**

*A-1.d. Offeror’s Statement of Readiness and Commitment of Resources per the RFQ Project Schedule.*

BG confirms the persons identified in the RFQ response are available and will be committed to the project for the time period(s) referenced in the above RFQ schedule and that the resource availability, reported above, is committed to the project as referenced in the RFQ project schedule and work plan.

**A-1.e. Offeror’s Notification of Default and Debarment**

*A-1.e. Offeror’s Notification of Default or Debarment.*

BG certifies that it has not had any contracts under default or debarment within the last five years.

PENNSYLVANIA DEPARTMENT OF GENERAL SERVICES  
READING AND SCRANTON, PA  
GUARANTEED ENERGY SAVINGS PROJECT  
GESa 2023-1

VOLUME I: TECHNICAL SUBMITTAL

## 2-5.4.A-2. DESIGN- CONSULTANT QUALIFICATION FORM





## 2-5.4.A-2. Design-Consultant Qualification Form

### A-2.a. Entity's Experience on GESA Projects

*A-2.a. Entity's experience with GESA projects.*

BG intends to design its own GESA project solutions in a collaborative approach with the DGS, funding agency, site staff, and energy consultant—by **eliminating a design consultant** and working directly with our own in-house engineering team there is **no middleman** to complicate the schematic submission process.


**BG's design culture is built on collaboration.** Often operating in a “design-assist” format, our engineering approach combines the strengths and expertise of essential trade contractors, along with the DGS, funding agency, site staff, and energy consultant, to develop design and construction documents. This approach **allows for input from all stakeholders** while addressing coordination issues early in the process—minimizing delays associated with requests for information and limiting obstacles such as costly change orders.

Our in-house energy engineering team has designed and guaranteed over \$550 million in energy savings for our customers in our firm's history. Our MEP engineering team rivals many consulting firms with 10 multi-state registered professional engineers that are qualified and have extensive experience designing mechanical, electrical, controls, plumbing, and fire protection systems.

Based on our team's experience with executing engineering designs for **multiple office building facilities** and working with state entities similar to the DGS, our team is confident in utilizing the procedures and standards set in place for the IGA and design of this project by the DGS.

The following pages provide highlights of key details on project scope and relevance for several office building GESA projects executed by BG. Our in-house engineering team designed the MEP solutions for each of the projects showcased.

**PRECONSTRUCTION**



**Eric Betz, PE**  
*Preconstruction Manager*  
**CEM, OSHA 30, CDSM,  
GSA HSPD-12, LEED AP**

**MECHANICAL DESIGN**

**Steve Bair**  
*Team Lead Mechanical Engineer*  
**OSHA 30, GSA HSPD-12**

**James Benchek, PE**  
*Mechanical Engineer*  
**CEM, OSHA 30**

**ELECTRICAL DESIGN**

**Todd Glyde, PE**  
*Engineering Manager*  
**LEED AP, OSHA 30**

**Dhanu Perera**  
*Electrical Engineer*

**LIGHTING DESIGN**

**Ted Howell**  
*Energy Integration Manager*  
**CBCP, CEM, LEED AP BD+C, CLEP**

## CITY OF BROOK PARK

Brook Park, OH

ORC 307.041 | Energy Efficiency Project

brewer-garrett.com



### SCOPE

**Size:** 429,000 square feet

**Cost:** \$9,517,323

**Guaranteed Energy Savings:** \$8,475,447

**Energy Savings:** \$11,501,243 over 20 years

**Duration:** Currently in Construction Phase

- Scope:**
- Interior & Exterior LED Lighting Retrofit
  - Building Automation System (BAS) Installation
  - Rooftop Unit (RTU) Replacements
  - Roof Replacement
  - Office Space Renovations
  - Retrocommissioning
  - Chiller Control Optimization

### SUMMARY

The City of Brook Park is located in Northeast Ohio, within 15 minutes from Cleveland, Ohio. Their recreation center, built in 1967, is roughly 100,000 square feet. and is the community's most popular gathering place. The space was already home to many athletic features such as two (2) gyms, a pool, locker room, weight room, juice bar, and a daycare center, but was in need of major facility upgrades and renovations. In addition to completing a facility assessment, the City of Brook Park asked Brewer-Garrett (BG) to develop a solution to relocate the City Hall and City Council offices within the recreation center.

**BG** retrofit both the interior and exterior lighting throughout the entire facility, delivering over 75% in savings. Interior lighting was upgraded from T12 florescent lamps to LED technology providing more uniform lighting, and occupancy sensors were installed in the bathrooms to reduce lighting run hours and energy consumption. The exterior fixtures were also converted to LEDs, which emit a high-quality white light, increasing light distribution and security. These retrofits reduced energy consumption by over 50% and saved on maintenance costs.

**BG** replaced the roof of the facility with a new spray polyurethane foam (SPF) roof system providing additional insulation and waterproofing for the recreation center. Sections of the roof were tapered to eliminate the pooling of water, which had previously been an issue for the city. BG also replaced the rooftop units as they were in poor condition, and installed a building automation system allowing seamless control of all zones of the facility.

**BG** redesigned and renovated underused space to incorporate the relocation of the City Hall and Council offices. The addition of these offices allowed the city to save municipal dollars on the maintenance required to maintain multiple buildings and enabled the city to make the recreation center a true community center that meets many of the needs of the community under one roof.

**\$8.5M**  
IN GUARANTEED ENERGY SAVINGS

**29%**  
SAVINGS  
ACHIEVED BY RETROFITTING  
INTERIOR & EXTERIOR LIGHTING

**SAVED  
MUNICIPAL  
MONEY**  
ON MAINTENANCE COSTS  
FOR MULTIPLE FACILITIES

### REFERENCE

**Edward Orcutt**

Mayor / Acting Safety Director

a. 6161 Engle Rd, Brook Park, OH 44142

e. info@cityofbrookpark.com

p. 216-433-1300





## GALLERIA & TOWER AT ERIEVIEW

Cleveland, OH

Energy Performance Contract Services

brewer-garrett.com



### SCOPE

**Size:** 955,000 square feet

**Cost:** \$7,023,380

**Guaranteed Energy Savings:** \$10,000,000

**Guaranteed Period:** 10 Years

**Schedule Duration:** 9 Months

**Scope:**

- Central Steam Boiler Plant Replacement
- Central Chiller Plant Replacement

### REFERENCE

**Andrew Evans**

Property Manager

a. 1301 E 9th St, Cleveland, OH 44114  
e. andrew@erieviewtower.com  
p. 216-861-4343

### SUMMARY

The Galleria and Tower at Erieview in Cleveland, Ohio is a combination of a two-story shopping center and a 40-story office building that resides a few blocks from the Rock and Roll Hall of Fame. The Tower was initially built as part of an urban renewal project in 1964 and the Galleria followed suit in 1987, which helped to ignite the revitalization of Cleveland that occurred in the 1990s.

In an effort to mitigate the challenges of higher operational costs and boiler/chiller equipment replacement costs, Brewer-Garrett (BG) was selected to design and build a new central boiler and chiller plant that would serve both the Galleria and Tower.

BG implemented an alternate solution to the thermal steam and chilled water systems and designed a program that not only reduced costs but created a new revenue source and increased the value of the property. This involved replacing the central plant without a disruption in service as the buildings were fully occupied throughout construction.

BG modernized the facility's system by installing an entirely new central chilled water plant with state of the art equipment and controls. Three (3) 1,100-ton centrifugal chillers were installed that use modern refrigerants and low kW/ton efficiencies.

BG replaced the steam heating system with a new central system that includes four (4) 225 hp boilers, a new deaerator feed-water system, surge tanks, softener system, boiler treatment system, and boiler sequence controller.

BG additionally provided an Integrated Facilities Services (IFS) contract to deliver maintenance services for HVAC, electrical, mechanical, plumbing, carpentry, locksmith, painting, subcontract management, and general facilities maintenance.

## INCREASED VALUE

OF PROPERTY WITH  
ON-SITE CENTRAL PLANTS

OVER  
**\$10M**

IN ENERGY SAVINGS ACHIEVED  
IN YEAR SIX OF TEN

## INTEGRATED FACILITIES SERVICES

ALLOWS CLIENT TO FOCUS ON  
DAY-TO-DAY OPERATIONS



## NORTHEAST OHIO REGIONAL SEWER DISTRICT

Cleveland, OH

District-Wide Energy Conservation & Management Project

[brewer-garrett.com](http://brewer-garrett.com)



### SCOPE

**Size:** 185,142 square feet

**Cost:** \$6,015,792

**Guaranteed Energy Savings:** \$7,189,113

**Guaranteed Period:** 15 Years

**Schedule Duration:** 9 & 16 Months  
(2 Phases)

- Scope:**
- Laboratory Upgrades
  - Air Handling Unit (AHU) Replacements
  - Controls System Integration
  - Lighting Retrofits
  - Occupancy Controls
  - HVAC Modifications
  - Heating Hot Water Boiler Plant Installation
  - Hot Water Boiler Installation
  - Air/Dirt Separator Upgrades
  - Single Duct Variable Air Volume (VAV) Installation
  - Variable Refrigerant Flow (VRF) Installation
  - Energy Recovery Ventilator Installation
  - Electric Duct Heater Installation
  - Low Ambient Mini Split Installation
  - Interior LED Lighting Upgrades

### SUMMARY

The Northeast Ohio Regional Sewer District (NEORS) is a public utility district that serves areas of northeast Ohio including Cuyahoga County as well as areas of Summit and Lorain counties. The district is comprised of three (3) wastewater treatment facilities and the Environmental and Maintenance Service Center (EMSC) and is responsible for maintaining the quality of water. The three treatment plants are Easterly, Westerly, and Southerly. During phase I, Brewer-Garrett (BG) was awarded the contract to perform a design and construction improvement project for NEORS. This project was designed to replace aging equipment at the facility, increase reliability of the systems, and reduce energy and operational cost.

BG designed, reconfigured, and replaced five (5) air handling units to ensure improved future operations and energy efficiency. The units were installed with full economized capability, code compliant filtration, high efficiency motors, and VFDs. All units were connected to a DDC system to offer full control and monitoring of each unit. Other improvements included upgrading and optimizing the exhaust and ventilation systems, installing two (2) high efficiency condensing boilers, and lighting retrofits.

After conducting upgrades at their EMSC, BG was selected to perform mechanical upgrades at each of the plant's main administrative buildings as well as the administrative headquarters for NEORS.

BG disconnected, demoed, and disposed of 72 existing fan powered VAV boxes at the George J. McMonagle (GJM) Building. A new, single duct VAV was installed and sized to appropriately fit the remaining ductwork. To save on materials costs, BG reconfigured the existing power to the VAV units by utilizing a step-down transformer to provide power to the new controls.

BG replaced three (3) existing boilers with two (2) new, near-condensing hot water boilers. The existing piping was demoed to install a primary-secondary arrangement with new pumps sized for the new boilers. All equipment was tied into the automation system.

# zero

CHANGE ORDERS

# 20%

REDUCTION

IN ENERGY USAGE WITHOUT  
JEOPARDIZING OUTPUT

## SINGLE DUCT VAV SYSTEM

REPLACED 72 VAV BOXES

### REFERENCE

**Dan Pacek**

Project Manager

- a. 3900 Euclid Ave, Cleveland, OH 44115  
e. [pacekd@neorsd.org](mailto:pacekd@neorsd.org)  
p. 216-881-6600 x6085





## CUYAHOGA COUNTY

Cleveland, OH

Ohio House Bill 300 | Energy Savings Performance Contract

[brewer-garrett.com](http://brewer-garrett.com)



### SCOPE

**Size:** 1,257,534 square feet

**Cost:** \$5,588,268

**Guaranteed Energy Savings:** \$5,531,845

**Schedule Duration:** 10 & 18 Months  
(2 Phases)

**Scope:**

- Building Automation System (BAS) Upgrades
- System Installations
- Interior & Exterior Lighting Retrofit
- Variable Frequency Drives (VFD) Installation
- Air-Cooled Chiller Upgrades
- Mechanical Upgrades
- Heat Pump Automation
- Chiller Control Optimization
- Retrocommissioning
- Restroom Ventilation Strategy and Exhaust Solution

### REFERENCE

**Gerard Salomon**

*Assistant Energy Manager*

**a.** 2079 E 9th St, Cleveland, OH 44115  
**e.** [gsalomon@cuyahogacounty.us](mailto:gsalomon@cuyahogacounty.us)  
**p.** 216-698-6257

### SUMMARY

The Department of General Services oversees the many facilities owned by Cuyahoga County. Faced with aging infrastructure, increased demands for space, and serious indoor air quality concerns, the county implemented the first of two phases of facility upgrades and used House Bill 300 to help finance it.

The Brewer-Garrett Company (BG) was selected to assist in a comprehensive energy conservation performance contract that incorporated county-wide facilities. It was an eighteen-month project that included over 1,257,534 square feet. One of the buildings was the Jane Edna Hunter building, a Health and Human Services facility, that had malfunctioning controls on the air handling units.

BG installed new cooling coils in the main air handling unit at the Juvenile Court. The manual valves that directly controlled the steam radiators were replaced with thermostatic radiator valves and economizers. These improvements directly impacted on the county's energy consumption. BG also improved the control schemes, designed and installed new ductwork to complement the building's exterior, and added new controls that enhanced the indoor air quality and energy performance.

BG continued performing massive upgrades when Phase II was introduced. In addition to the continuation of upgrades carried over from Phase I, heat pump automations were absorbed into a dedicated control system, and select chillers were optimized.

BG executed multiple lighting retrofits including in the county parking garage where existing HID fixtures were replaced with appropriate LED fixtures. Interior retrofits were also performed, and sensors were installed to automatically turn lights off when the space was unoccupied.

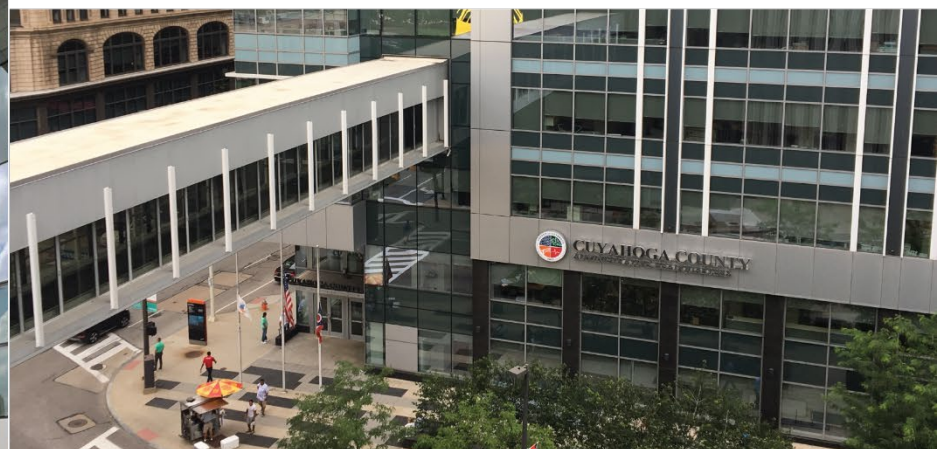
BG established a DDC building automation system to control all the new equipment and to interface with the old equipment. The existing pneumatic controls were renovated to interface with the new system. All building systems were retro commissioned.

### GOVERNOR'S AWARD

RECEIVED FOR EXCELLENCE IN  
ENERGY EFFICIENCY

**56%**  
INCREASE

OVER ORIGINAL SAVINGS  
PROJECTIONS



## A-2.b. Individual Qualifications

### A-2.b. Individual Qualifications (4 person limit)

The following individuals are BG’s in-house preconstruction key personnel.

#### Preconstruction



**Preconstruction  
Manager**  
Eric Betz, PE

**25** years of  
experience

#### Electrical Engineering



**Engineering  
Manager**  
Todd Glyde, PE

**24** years of  
experience

#### Mechanical Engineering



**Team Lead  
Mechanical Engineer**  
Steve Bair

**33** years of  
experience

#### Energy Engineering



**Energy Integration  
Manager**  
Ted Howell

**38** years of  
experience

## A-2.c. Entity’s Statement of Readiness and Commitment of Resources

### A-2.c. Entity’s Statement of Readiness and Commitment of Resources per the RFQ Project Schedule

BG confirms that the persons identified in the RFQ response are available and will be committed to the project for the time period(s) referenced in the above RFQ schedule and that the resource availability, reported above, is committed to the project as referenced in the RFQ project schedule and work plan.

## A-2.d. Offeror’s Notification of Default and Debarment

### A-2.d. Entity’s Notification of Default or Debarment.

BG certifies that it has not had any contracts under default or debarment within the last five years.





## ERIC BETZ, PE

*Preconstruction Manager*

*e.* ebetz@brewer-garrett.com  
*p.* 440.243.3535  
*a.* 6800 Eastland Rd,  
Middleburg Heights, OH 44130

**25**  
*years of experience*

**17**  
**YEARS w/ BG**

### ROLE RESPONSIBILITIES

Eric Betz will lead the engineering teams, estimating manager, and preconstruction project managers to guide the execution of projects from development through hand off to the operations team. He will confirm all solutions meet the requirements of the customer, codes, and standards; and will ensure all estimates, reports, and drawings are delivered in a timely manner. He will coordinate the work effort and development of projects with the operations team and will negotiate contracts with subcontractors and vendors.

### PROJECTS

#### EDUCATION

**BS** Electrical  
Engineering & Applied  
Sciences  
*Case Western  
Reserve University*

#### CERTIFICATIONS

Professional  
Engineer (**PE**)  
  
Certified Energy  
Manager (**CEM**)  
  
Leadership in Energy  
& Environmental  
Design Accredited  
Professional (**LEED  
AP**)  
  
Certified Demand  
Side Manager (**CDSM**)

Occupational Safety &  
Health Administration:  
30 Hour (**OSHA 30**)

General Services  
Administration  
Security Clearance,  
Homeland Security  
Presidential Directive  
12 (**GSA HSPD-12**)

#### COMMERCIAL

- Beck Center for the Arts, Design-Build HVAC Upgrades
- Galleria & Tower at Erieview, Central Boiler, Chiller Plant, & Facility Services Program
- Playhouse Square, Alternative to District Energy Solution & Service Program
- Swagelok, Global Headquarters, Design-Build Project
- Terminal Tower, Alternative to District Energy Solution

#### HEALTHCARE

- Fulton County Health Center, Infrastructure Improvement Project
- MedCentral Health System, Chilled Water Plant Renovation
- St. Vincent Charity Medical Center, Design-Build Boiler Plant Renovation

#### HIGHER EDUCATION

- Ashland University, Comprehensive Energy Conservation Program, Phase I
- Central State University, Campus-Wide Energy Conservation Program
- Hiram College, Comprehensive Energy Conservation Project
- Otterbein University, Energy Conservation Project
- Youngstown State University, Design-Build, Energy Conservation Performance Project

#### K-12

- Akron Public Schools, House Bill (HB) 264, Commissioning Services
- Cleveland Metropolitan School District, HB 264, Commissioning Services
- Medina City School District, HB 264, Professional Services, Energy Conservation Program
- North Ridgeville City School District, Professional Services, Energy Conservation Project
- Strongsville City School District, HB 264, Energy Conservation Services

#### LOCAL GOVERNMENT

- Cuyahoga County, HB 300, Energy Conservation Program
- Marion Correctional Institution, Energy Conservation Program



## TODD GLYDE, PE

*Engineering Manager*

*e.* [tglyde@brewer-garrett.com](mailto:tglyde@brewer-garrett.com)  
*p.* 440.243.3535  
*a.* 6800 Eastland Rd,  
Middleburg Heights, OH 44130

**24**

*years of experience*

**10**

**YEARS w/ BG**

### EDUCATION

**BS** Electrical  
Engineering  
*The University of  
Cincinnati*

### CERTIFICATIONS

Professional Engineer  
(**PE**): Ohio, Colorado,  
Florida, New Mexico,  
Pennsylvania, Texas,  
& Washington, DC

Leadership in Energy  
& Environmental  
Design Accredited  
Professional (**LEED  
AP**)

Occupational Safety &  
Health Administration:  
30 Hour (**OSHA 30**)

Fire Protection  
License (**FPL**): Ohio

### ROLE RESPONSIBILITIES

Todd Glyde will plan and direct engineering and design activities within the organization. He will ensure all engineering projects, initiatives, and processes conform with BG's established policies and objectives. This includes the selection, development, training, and supervision of staff. Key functions include selecting correct design concepts and technology for new products and reviewing and analyzing submitted proposals to determine if benefits derived and possible applications justify expenditures. Todd will supervise the team leads for mechanical and electrical engineering.

### PROJECTS

#### COMMERCIAL

- Beck Center for the Arts, Design-Build HVAC Upgrades
- Galleria & Tower at Erieview, Central Boiler, Chiller Plant, & Facilities Services
- Stambaugh Building, Design-Build HVAC Upgrades
- Terminal Tower, Alternative to District Energy Solution
- Westin Hotel, Design-Build & Energy Conservation Services

#### HEALTHCARE

- Fulton County HC, Comprehensive Infrastructure Improvement Project
- Hocking Valley Community Hospital, Energy Conservation Project

#### HIGHER EDUCATION

- Central State University, Energy Conservation Program
- KSU, Campus Classroom, Lab., Auxiliary Buildings & Utility Assets, EPC, Phase II
- Tri-C, Service & Energy Conservation Program, Phases I, II, III, & Amendment III
- The University of Akron, Energy Conservation Program
- Youngstown State University, Design-Build, Energy Conservation Performance Project

#### K-12

- CMSD, HB 153, Franklin D. Roosevelt Academy, Design-Build Project
- Columbus City SD, "Operation: Fix-It," HB 153, Design-Build, Phases I, II, IV, VII, & North HS
- Edison Local School District, Design-Build Project
- Euclid City School District, HB 264, Energy Conservation Program
- North Ridgeville City School District, Professional Services, Energy Conservation Program

#### LOCAL GOVERNMENT

- Chillicothe Correctional Institution, Energy Conservation Services
- City of North Olmsted Recreation Center, Lighting Retrofit
- City of South Euclid, Energy Conservation Program
- London and Madison Correctional Institutions, Energy Conservation Services
- Marion Correctional Institution, Energy Conservation Services





# STEVE BAIR

*Team Lead Mechanical Engineer*

*e.* sbair@brewer-garrett.com  
*p.* 440.243.3535  
*a.* 6800 Eastland Rd,  
Middleburg Heights, OH 44130

**36**  
*years of experience*

**22**  
**YEARS w/ BG**

## ROLE RESPONSIBILITIES

Steve directs and oversees the work of team designers and engineers and assists in developing and maintaining design and engineering standards. He schedules manpower and assures the successful completion of all assigned projects and task by reviewing all drawings produced by the team to ensure quality and adherence to BG's design standards. Steve utilizes engineering practices, mathematics, computer programming, materials, and other physical sciences to complete drawings. He also performs construction estimates, jobsite inspection, and coordinates projects.

## PROJECTS

### EDUCATION

**BS Mechanical Engineering**  
*The University of Akron*

### CERTIFICATIONS

Occupational Safety & Health Administration:  
30 Hour (**OSHA 30**)

General Services Administration  
Security Clearance,  
Homeland Security  
Presidential Directive  
12 (**GSA HSPD-12**)

### COMMERCIAL

- Cleveland Public Theatre, Design-Build HVAC Upgrades
- Playhouse Square, Alternative to District Energy Solution & Service Program
- Renaissance Cleveland Hotel, HVAC Upgrades/Skyline Cleveland Renaissance
- Stambaugh Building, Design-Build Services
- Westin Hotel, Design-Build & Energy Conservation Services

### HEALTHCARE

- Hocking Valley Community Hospital, Energy Conservation Project
- MedCentral Health System, Chilled Water Plant Renovation
- St. Vincent Charity Medical Center, Design-Build Boiler Plant Renovation

### HIGHER EDUCATION

- Cleveland State University, House Bill 251, Energy Conservation Program
- Hiram College, Comprehensive Energy Conservation Program
- Kent State University, Five (5) Satellite Campuses, Energy Conservation Program
- The University of Akron, Energy Conservation Program
- Youngstown State University, Design-Build Services & Energy Conservation Program

### K-12

- Cardinal Local School District, House Bill 264, Energy Conservation Program
- Euclid City School District, House Bill 264, Energy Conservation Program
- Frontier Local School District, Professional Services, Energy Conservation Program
- North Ridgeville City School District, Professional Services, Energy Conservation Program
- Strongsville City School District, House Bill 264, Energy Conservation Program

### LOCAL GOVERNMENT

- The City of South Euclid, Energy Conservation Program



## TED HOWELL

*Energy Integration Manager/  
Performance Assurance Engineer*

*e.* [thowell@brewer-garrett.com](mailto:thowell@brewer-garrett.com)

*p.* 440.243.3535

*a.* 6800 Eastland Rd,  
Middleburg Heights, OH 44130

**38**  
*years of experience*

**8**  
**YEARS w/ BG**

### EDUCATION

**BS Mechanical  
Engineering**  
*Purdue University*

**BS Supervisory  
Technology**  
*Purdue University*

### CERTIFICATIONS

**Certified Energy  
Manager (CEM)**

**Leadership in Energy  
& Environmental  
Design Accredited  
Professional, Building  
Design & Construction  
(LEED AP BD+C)**

**Certified Building  
Commissioning  
Professional (CBCP)**

**Certified Lighting  
Efficiency Professional  
(CLEP)**

### MEMBERSHIPS

**Association of Energy  
Engineers (AEE)**

### ROLE RESPONSIBILITIES

Ted develops multifaceted energy savings performance contracts and works closely with customers to provide creative solutions to meet their needs. He possesses a broad range of expertise in lighting, mechanicals, automation, water conservation, auditing, and project delivery methods. Ted conducts energy surveys of buildings and industrial facilities and then develops state of the art solutions. He is responsible for the development of final project support or expansion of company service offerings. He oversees the production of project narratives and savings calculations and cultivates expert knowledge in a market segment or energy technology.

### PROJECTS

#### HIGHER EDUCATION

- KSU, Campus Classroom, Lab., Auxiliary Buildings & Utility Assets ECP, Phase I
- KSU, Stark Campus, Energy Conservation Program
- Tri-C, Service & Energy Conservation Program, Phases I, II, III, & Amendment III

#### LOCAL GOVERNMENT

- City of South Euclid, Energy Conservation Program
- Cuyahoga County, HB 300, Energy Conservation Program
- London and Madison Correctional Institutions, Energy Conservation Project

#### K-12

- Cleveland Heights-University Heights, Green Apple Project Energy Savings Program
- Euclid City School District, Energy Conservation Project
- Evergreen Local School District, Green Apple Project Energy Conservation Program
- North Ridgeville City School District, Professional Services Project
- Western Reserve Local Schools, Green Apple Project Energy Conservation Program



PENNSYLVANIA DEPARTMENT OF GENERAL SERVICES  
READING AND SCRANTON, PA  
GUARANTEED ENERGY SAVINGS PROJECT  
GES-2023-1

VOLUME I: TECHNICAL SUBMITTAL

2-5.4.A-3.

CONSTRUCTION KEY  
SUBCONTRACTORS  
QUALIFICATION FORM





## 2-5.4.A-3. Construction Key Subcontractors Qualification Form

### A-3.a.1. Each Key Subcontractor's Experience on GESA Projects

*A-2.a. (1). Each Key Subcontractor's Experience on GESA Projects greater than \$5 million.*

The BG team operates with the philosophy that a successful project depends on a comprehensive execution plan. The foundation of our construction execution plan lies in our experienced, in-house BG representatives that are involved with the project from the very conception through project closeout. This dedicated, core team is intimately involved throughout all phases of the project and promotes increased communication. Their experience in the office building environment provides the project with safety and streamlined decision making.

Exceptional subcontractor engagement, selection, and management is key to a successful project that is delivered on time and on budget. BG's approach is to provide the funding agency, DGS, site staff, and energy consultant with an open book, guaranteed maximum price (GMP) during contract negotiation. This strategy provides advanced transparency and control for subcontractor selection by involving the funding agency, DGS, site staff, and energy consultant but places the risk with BG. By establishing a GMP, BG assumes all risk of cost overruns throughout the construction of the project.

Once selected, BG's construction team and our committed diversity and inclusion partner, First Metrix, will begin the subcontractor selection process, outlined in Section 2-5.1 B.

Ultimately, management of construction and project delivery lies with BG; the following pages provides highlights of key details on several relevant office building guaranteed energy savings projects where BG has successfully implemented and carried out this subcontractor selection strategy.

**CONSTRUCTION**

**Jon Erdmann, PE**  
Team Lead Project Manager  
OSHA 30, ASHE CHC

**CONSTRUCTION**  
**Matt Baker**  
Project Manager  
OSHA 30, 500 and 510

**Ben Schell**  
Construction Superintendent

**SAFETY**  
**Dean Steadley**  
Safety Manager  
NCF Safety Supervisor, NFPA 70E,  
OSHA 30, ALILS, First Aid/AED



## CITY OF BROOK PARK

Brook Park, OH

ORC 307.041 | Energy Efficiency Project

brewer-garrett.com



### SCOPE

**Size:** 429,000 square feet

**Cost:** \$9,517,323

**Guaranteed Energy Savings:** \$8,475,447

**Energy Savings:** \$11,501,243 over 20 years

**Duration:** Currently in Construction Phase

- Scope:**
- Interior & Exterior LED Lighting Retrofit
  - Building Automation System (BAS) Installation
  - Rooftop Unit (RTU) Replacements
  - Roof Replacement
  - Office Space Renovations
  - Retrocommissioning
  - Chiller Control Optimization

### SUMMARY

The City of Brook Park is located in Northeast Ohio, within 15 minutes from Cleveland, Ohio. Their recreation center, built in 1967, is roughly 100,000 square feet and is the community's most popular gathering place. The space was already home to many athletic features such as two (2) gyms, a pool, locker room, weight room, juice bar, and a daycare center, but was in need of major facility upgrades and renovations. In addition to completing a facility assessment, the City of Brook Park asked Brewer-Garrett (BG) to develop a solution to relocate the City Hall and City Council offices within the recreation center.

**BG** retrofit both the interior and exterior lighting throughout the entire facility, delivering over 75% in savings. Interior lighting was upgraded from T12 florescent lamps to LED technology providing more uniform lighting, and occupancy sensors were installed in the bathrooms to reduce lighting run hours and energy consumption. The exterior fixtures were also converted to LEDs, which emit a high-quality white light, increasing light distribution and security. These retrofits reduced energy consumption by over 50% and saved on maintenance costs.

**BG** replaced the roof of the facility with a new spray polyurethane foam (SPF) roof system providing additional insulation and waterproofing for the recreation center. Sections of the roof were tapered to eliminate the pooling of water, which had previously been an issue for the city. BG also replaced the rooftop units as they were in poor condition, and installed a building automation system allowing seamless control of all zones of the facility.

**BG** redesigned and renovated underused space to incorporate the relocation of the City Hall and Council offices. The addition of these offices allowed the city to save municipal dollars on the maintenance required to maintain multiple buildings and enabled the city to make the recreation center a true community center that meets many of the needs of the community under one roof.

**\$8.5M**

IN GUARANTEED ENERGY SAVINGS

**29%**

SAVINGS

ACHIEVED BY RETROFITTING  
INTERIOR & EXTERIOR LIGHTING

**SAVED  
MUNICIPAL  
MONEY**

ON MAINTENANCE COSTS  
FOR MULTIPLE FACILITIES

### REFERENCE

**Edward Orcutt**

Mayor / Acting Safety Director

**a.** 6161 Engle Rd, Brook Park, OH 44142

**e.** info@cityofbrookpark.com

**p.** 216-433-1300



## GALLERIA & TOWER AT ERIEVIEW

Cleveland, OH

Energy Performance Contract Services

brewer-garrett.com



### SCOPE

**Size:** 955,000 square feet

**Cost:** \$7,023,380

**Guaranteed Energy Savings:** \$10,000,000

**Guaranteed Period:** 10 Years

**Schedule Duration:** 9 Months

**Scope:**

- Central Steam Boiler Plant Replacement
- Central Chiller Plant Replacement

### REFERENCE

**Andrew Evans**

Property Manager

a. 1301 E 9th St, Cleveland, OH 44114  
e. andrew@erieviewtower.com  
p. 216-861-4343

### SUMMARY

The Galleria and Tower at Erieview in Cleveland, Ohio is a combination of a two-story shopping center and a 40-story office building that resides a few blocks from the Rock and Roll Hall of Fame. The Tower was initially built as part of an urban renewal project in 1964 and the Galleria followed suit in 1987, which helped to ignite the revitalization of Cleveland that occurred in the 1990s.

In an effort to mitigate the challenges of higher operational costs and boiler/chiller equipment replacement costs, Brewer-Garrett (BG) was selected to design and build a new central boiler and chiller plant that would serve both the Galleria and Tower.

**BG** implemented an alternate solution to the thermal steam and chilled water systems and designed a program that not only reduced costs but created a new revenue source and increased the value of the property. This involved replacing the central plant without a disruption in service as the buildings were fully occupied throughout construction.

**BG** modernized the facility's system by installing an entirely new central chilled water plant with state of the art equipment and controls. Three (3) 1,100-ton centrifugal chillers were installed that use modern refrigerants and low kW/ton efficiencies.

**BG** replaced the steam heating system with a new central system that includes four (4) 225 hp boilers, a new deaerator feed-water system, surge tanks, softener system, boiler treatment system, and boiler sequence controller.

**BG** additionally provided an Integrated Facilities Services (IFS) contract to deliver maintenance services for HVAC, electrical, mechanical, plumbing, carpentry, locksmith, painting, subcontract management, and general facilities maintenance.

## INCREASED VALUE

OF PROPERTY WITH  
ON-SITE CENTRAL PLANTS

OVER  
**\$10M**

IN ENERGY SAVINGS ACHIEVED  
IN YEAR SIX OF TEN

## INTEGRATED FACILITIES SERVICES

ALLOWS CLIENT TO FOCUS ON  
DAY-TO-DAY OPERATIONS





## NORTHEAST OHIO REGIONAL SEWER DISTRICT

Cleveland, OH

District-Wide Energy Conservation & Management Project

[brewer-garrett.com](http://brewer-garrett.com)



### SCOPE

**Size:** 185,142 square feet

**Cost:** \$6,015,792

**Guaranteed Energy Savings:** \$7,189,113

**Guaranteed Period:** 15 Years

**Schedule Duration:** 9 & 16 Months  
(2 Phases)

- Scope:**
- Laboratory Upgrades
  - Air Handling Unit (AHU) Replacements
  - Controls System Integration
  - Lighting Retrofits
  - Occupancy Controls
  - HVAC Modifications
  - Heating Hot Water Boiler Plant Installation
  - Hot Water Boiler Installation
  - Air/Dirt Separator Upgrades
  - Single Duct Variable Air Volume (VAV) Installation
  - Variable Refrigerant Flow (VRF) Installation
  - Energy Recovery Ventilator Installation
  - Electric Duct Heater Installation
  - Low Ambient Mini Split Installation
  - Interior LED Lighting Upgrades

### SUMMARY

The Northeast Ohio Regional Sewer District (NEORS) is a public utility district that serves areas of northeast Ohio including Cuyahoga County as well as areas of Summit and Lorain counties. The district is comprised of three (3) wastewater treatment facilities and the Environmental and Maintenance Service Center (EMSC) and is responsible for maintaining the quality of water. The three treatment plants are Easterly, Westerly, and Southerly. During phase I, Brewer-Garrett (BG) was awarded the contract to perform a design and construction improvement project for NEORS. This project was designed to replace aging equipment at the facility, increase reliability of the systems, and reduce energy and operational cost.

BG designed, reconfigured, and replaced five (5) air handling units to ensure improved future operations and energy efficiency. The units were installed with full economized capability, code compliant filtration, high efficiency motors, and VFDs. All units were connected to a DDC system to offer full control and monitoring of each unit. Other improvements included upgrading and optimizing the exhaust and ventilation systems, installing two (2) high efficiency condensing boilers, and lighting retrofits.

After conducting upgrades at their EMSC, BG was selected to perform mechanical upgrades at each of the plant's main administrative buildings as well as the administrative headquarters for NEORS.

BG disconnected, demoed, and disposed of 72 existing fan powered VAV boxes at the George J. McMonagle (GJM) Building. A new, single duct VAV was installed and sized to appropriately fit the remaining ductwork. To save on materials costs, BG reconfigured the existing power to the VAV units by utilizing a step-down transformer to provide power to the new controls.

BG replaced three (3) existing boilers with two (2) new, near-condensing hot water boilers. The existing piping was demoed to install a primary-secondary arrangement with new pumps sized for the new boilers. All equipment was tied into the automation system.

# zero

CHANGE ORDERS

# 20%

REDUCTION

IN ENERGY USAGE WITHOUT  
JEOPARDIZING OUTPUT

## SINGLE DUCT VAV SYSTEM

REPLACED 72 VAV BOXES

### REFERENCE

**Dan Pacek**

Project Manager

- a. 3900 Euclid Ave, Cleveland, OH 44115  
e. [pacekd@neorsd.org](mailto:pacekd@neorsd.org)  
p. 216-881-6600 x6085



## CUYAHOGA COUNTY

Cleveland, OH

Ohio House Bill 300 | Energy Savings Performance Contract

[brewer-garrett.com](http://brewer-garrett.com)



### SCOPE

**Size:** 1,257,534 square feet

**Cost:** \$5,588,268

**Guaranteed Energy Savings:** \$5,531,845

**Schedule Duration:** 10 & 18 Months  
(2 Phases)

**Scope:**

- Building Automation System (BAS) Upgrades
- System Installations
- Interior & Exterior Lighting Retrofit
- Variable Frequency Drives (VFD) Installation
- Air-Cooled Chiller Upgrades
- Mechanical Upgrades
- Heat Pump Automation
- Chiller Control Optimization
- Retrocommissioning
- Restroom Ventilation Strategy and Exhaust Solution

### REFERENCE

**Gerard Salomon**

*Assistant Energy Manager*

**a.** 2079 E 9th St, Cleveland, OH 44115  
**e.** [gsalomon@cuyahogacounty.us](mailto:gsalomon@cuyahogacounty.us)  
**p.** 216-698-6257



### SUMMARY

The Department of General Services oversees the many facilities owned by Cuyahoga County. Faced with aging infrastructure, increased demands for space, and serious indoor air quality concerns, the county implemented the first of two phases of facility upgrades and used House Bill 300 to help finance it.

The Brewer-Garrett Company (BG) was selected to assist in a comprehensive energy conservation performance contract that incorporated county-wide facilities. It was an eighteen-month project that included over 1,257,534 square feet. One of the buildings was the Jane Edna Hunter building, a Health and Human Services facility, that had malfunctioning controls on the air handling units.

BG installed new cooling coils in the main air handling unit at the Juvenile Court. The manual valves that directly controlled the steam radiators were replaced with thermostatic radiator valves and economizers. These improvements directly impacted on the county's energy consumption. BG also improved the control schemes, designed and installed new ductwork to complement the building's exterior, and added new controls that enhanced the indoor air quality and energy performance.

BG continued performing massive upgrades when Phase II was introduced. In addition to the continuation of upgrades carried over from Phase I, heat pump automations were absorbed into a dedicated control system, and select chillers were optimized.

BG executed multiple lighting retrofits including in the county parking garage where existing HID fixtures were replaced with appropriate LED fixtures. Interior retrofits were also performed, and sensors were installed to automatically turn lights off when the space was unoccupied.

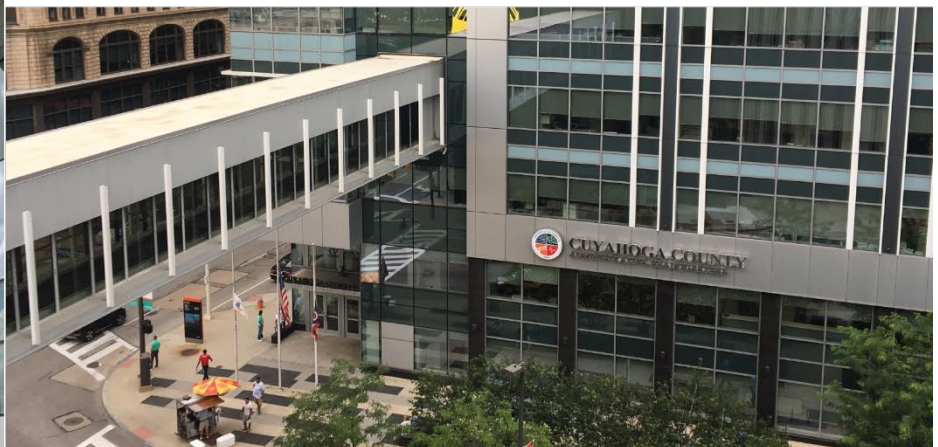
BG established a DDC building automation system to control all the new equipment and to interface with the old equipment. The existing pneumatic controls were renovated to interface with the new system. All building systems were retro commissioned.

### GOVERNOR'S AWARD

RECEIVED FOR EXCELLENCE IN  
ENERGY EFFICIENCY

**56%**  
INCREASE

OVER ORIGINAL SAVINGS  
PROJECTIONS





### A-3.a.2. Each Key Subcontractor’s Superintendent’s Qualifications

*A-3.a.2. Superintendent Qualifications (4 person limit).*

The following individuals are BG’s in-house construction key personnel.



**Team Lead  
Project Manager**  
*Jon Erdmann, PE*

**23** years of  
experience



**Project Manager**  
*Matt Baker (On-site)*

**7** years of  
experience



**Construction  
Superintendent**  
*Ben Schell*

**22** years of  
experience



**Safety Manager**  
*Dean Steadley*

**12** years of  
experience

### A-3.a.3. Each Key Subcontractor’s Statement of Readiness and Commitment of Resources per the Project Master Schedule

*A-3.a.3. Entity’s Statement of Readiness and Commitment of Resources per the RFQ Project Schedule.*

BG confirms the persons identified in the RFQ response are available and will be committed to the project for the time period(s) referenced in the above RFQ schedule and that the resource availability, reported above, is committed to the project, as referenced in the RFQ project schedule and work plan.

**A-3.a.4. Each Key Subcontractor’s Workman’s Compensation Experience Modification Rating**

*A-3.a.4. Each Entity’s Workman’s Compensation Rating for 2019, 2020, and 2021.*

**BG’s EMR HISTORY**



**A.3.a.5. Each Key Subcontractor’s Notification of Default or Debarment**

*A-3.a.5. Entity’s Notification of Default or Debarment.*

BG certifies that it has not had any contracts under default or debarment within the last five years.





JON ERDMANN, PE  
Team Lead Project Manager

e. jerdmann@brewer-garrett.com  
p. 440.243.3535  
a. 6800 Eastland Rd,  
Middleburg Heights, OH 44130

23  
years of experience

11  
YEARS w/ BG

EDUCATION

MBA

Cleveland State  
University

BS Mechanical  
Engineering  
Purdue University

CERTIFICATIONS

Professional  
Engineer (PE): OH

Occupational Safety &  
Health Administration:  
30 Hour (OSHA 30)

American Society for  
Health Care  
Engineering  
Certified Health Care  
Constructor  
(ASHE CHC)

ROLE RESPONSIBILITIES

Jon manages design-build projects that specialize in energy and utility savings that are calculated in advance and guaranteed post-installation via metering and auditing. He assembles bid packages, hires subcontractors, supervises construction, provides budget oversight, resolves design issues, commissions systems, and closes out projects. Jon masterfully creates conceptual/schematic plans and drawings, scopes of work, schedules, and budgets; and develops planning studies based on a myriad of conditions and standards.

PROJECTS

COMMERCIAL

- Alcoa, Heat Treat Process Water Recirculation, Utility Savings Project
- American Red Cross, Akron, Chiller Replacement
- Brewer-Garrett, Corporate HQ, Renovation with Energy-Saving Improvements
- Nordson, HVAC & Variable Air Volume (VAV) Replacements
- Rhodes Tower, Columbus, Infrastructure Replacement

HIGHER EDUCATION

- Cuyahoga Community College, HVAC Infrastructure Upgrades
- Hiram College, Energy Conservation Program, Performance Contract
- Kent State University, College of Podiatric Medicine, Energy Conservation Services
- Kent State University, Phase II, AHU Refurbishments & New Chiller
- University of Akron, Energy Conservation Program

K-12

- Dayton Public Schools, Service Building, HVAC & Building Automation System (BAS) Updates
- Medina City School District, Lighting Retrofit

LOCAL GOVERNMENT

- Chillicothe Correctional Institution, Energy Conservation Services
- City of North Olmsted, Recreation Center, Lighting Retrofit
- London and Madison Correctional Institutions, Energy Conservation Services
- Marion Correctional Institution, Energy Conservation Services
- Southeastern Correctional Institution, Energy Conservation Services



MATT BAKER

Project Manager

e. mbaker@brewer-garrett.com

p. 440.243.3535

a. 6800 Eastland Rd,  
Middleburg Heights, OH 44130

7

years of experience

1

YEARS w/ BG

EDUCATION

BS Civil Engineering  
Penn State University

CERTIFICATIONS

Occupational  
Safety & Health  
Administration: 30 Hour  
(OSHA 30)

American Society for  
Health Care Engineering  
Certified Health Care  
Constructor  
(ASCE CHC)

SERVICE

United States Army

ROLE RESPONSIBILITIES

Matt controls all matters pertaining to assigned projects and owner satisfaction. He creates as-built drawings, operation and maintenance manuals, and related documents that are required for project close-out, while ensuring the approval process of drawing and equipment submittals is timely. He is responsible for acquiring and coordinating BG labor, equipment, tools, inventory, and deliveries and for documenting any changes in scope of work, including energy related revisions, developing pricing, and gaining approval from the customer. Matt conducts jobsite meetings, prepares meeting minutes, and monitors the work to maintain schedule and budget requirements.

RELEVANT WORK EMPLOYMENT

Company: Mowery Construction  
(Lindt Chocolate, Carlisle PA)

- Refurbished 400,000 square feet of warehouse space for Lindt Chocolate
- Included installing insulated metal panels around entire perimeter and a new glycol chiller to refrigerate space

Company: Poole Anderson Construction  
(Winter Visual Arts Center, Lancaster PA)

- Ground up construction of the Winter Visual Arts Center at Franklin and Marshall College
- Radiant heating and cooling throughout structure by tying into existing chilled water and steam lines
- Energy recovery ventilators and variable air volume systems in all rooms
- Automated systems tied into skylights to autonomously open and close dependent upon interior/exterior temperatures as well as precipitation

PROJECTS

K-12 EDUCATION

- Brandywine Heights Are School District, Energy Conservation Project
- Shamokin Area School District, Energy Conservation Project

LOCAL GOVERNMENT

- State Correctional Institution, Energy Conservation Project





**BEN SCHELL**  
*Construction Superintendent*

e. bschell@brewer-garrett.com  
p. 440.243.3535  
a. 6800 Eastland Rd,  
Middleburg Heights, OH 44130

**21**  
years of experience

**20**  
YEARS w/ BG

**EDUCATION**  
Trained through  
Pipefitters Local 120  
Labor Union

**ROLE RESPONSIBILITIES**

Ben is responsible for overseeing and coordinating all of the activities of a construction site according to project blueprints and schedule plans. He ensures materials and equipment are distributed for a seamless delivery. On-site, Ben ensures jobsite safety is a top priority.

**PROJECTS**

**COMMERCIAL**

- Beck Center for the Arts, Design-Build HVAC Upgrades
- Cleveland Public Theatre, Design-Build HVAC Upgrades
- Playhouse Square, Ohio, Allen, & Hanna Theatre Renovations, Design-Assist Services
- Renaissance Cleveland Hotel, HVAC Upgrades/Skyline Cleveland Renaissance
- Westin Hotel, Design-Build & Energy Conservation Services

**HEALTHCARE**

- Lutheran Hospital, Central Boiler & Chiller Plant Upgrades

**HIGHER EDUCATION**

- Hiram College, ECP, Performance Contract with D-B, Constr., Commissioning, & Audits
- KSU, Campus Classroom, Lab., Auxiliary Buildings, & Utility Assets, ECP, Phases I & II
- Malone University, Library, Energy Conservation Program
- The University of Akron, Energy Conservation Program

**K-12**

- Cleveland Metropolitan School District, HB 153, Franklin D. Roosevelt Academy, D-B Project
- Cleveland Metropolitan School District, HB 153, Wilbur-Wright, Design-Build Project
- Cleveland Metropolitan School District, HB-153, William Cullen Bryant, Design-Build Project

**LOCAL GOVERNMENT**

- City of Brook Park Recreation Center, Energy Conservation Project



## DEAN STEADLEY

*Safety Manager*

*e.* dsteadley@brewer-garrett.com

*p.* 440.243.3535

*a.* 6800 Eastland Rd,  
Middleburg Heights, OH 44130

12

years of experience

3

YEARS w/ BG

### EDUCATION

BS Business  
Administration  
*American Military  
University*

### CERTIFICATIONS

Occupational  
Safety & Health  
Administration: 30  
Hour (OSHA 30)

Naval Construction  
Force (NCF) Safety  
Supervisor

First Aid,  
Cardiopulmonary  
Resuscitation (CPR),  
& Automated External  
Defibrillator (AED)

Ladder Safety  
*American Ladder  
Institute (LSALI)*

Respiratory Protection  
Program Manager

NFPA 70E Train the  
Trainer Certification  
through CurrentSAFE

### MEMBERSHIPS

Cleveland Southwest  
Safety Council

## ROLE RESPONSIBILITIES

Dean develops and implements site-specific safety plans and audits jobsites for compliance with OSHA, federal, state, and local regulations. He provides required training for specific tasks and develops weekly toolbox talks that are distributed to all required employees. Dean maintains BG's health and safety manual to ensure compliance with all current OSHA regulations.

## RELEVANT WORK EXPERIENCE

### US NAVY: Orphanage Renovation (Gabon, Africa)

- Implemented specific safety plan to renovate & improve the conditions of an orphanage for Gabonese children

### US NAVY: Marine Corps Instructor Catwalk (Kaneohe Bay, Hawaii)

- Formulated the safety plan to construct a 450-foot catwalk that suspended above a close quarter tactical drill training facility used by the US Marine Corps to train personnel how to clear rooms by eliminating, capturing, & forcing the enemy to withdrawal from their position

### US NAVY: Seal Delivery Vehicle Team 1 Headquarter Office Space Addition & Renovation (Pearl Harbor, Hawaii)

- Devised the safety plan to demolish & construct approximately 1,000 square feet of office spaces for the leaders of the SDV Team 1

### US NAVY: RIMPAC Joint Base Pearl Harbor Hickam (Honolulu, Hawaii)

- Assisted in the construction of a tension fabric structure on an aircraft carrier that would hide the location of ally aircraft & other sensitive mission critical equipment from enemy detection by aircraft

### US NAVY: Blast Shelter, Marine Corps Base (Kaneohe, Hawaii)

- Created the safety plan for construction of a blast shelter located on the side of a mountain

### US NAVY: Joint Training Compound (Amman, Jordan)

- Developed safety plan to retrofit lighting & renovate living quarters for Jordanian & U.S. military forces

### US NAVY: Calibration Facility (Rota, Spain)

- Facilitated the safety plan for a two-story, heavily reinforced, all poured concrete floors & walls calibration facility for the US Navy's Sixth Fleet

## PROJECTS

### HIGHER EDUCATION

- Kent State University, College of Podiatric Medicine, Energy Conservation Project
- Lorain County Community College, Energy Conservation Project

### LOCAL GOVERNMENT

- London and Madison Correctional Institutions, Energy Conservation Project



BG’s Key Subcontractor Qualifications

We have provided qualifications for our key construction subcontractors on the following pages.

SUBCONTRACTOR LEGEND	
<b>SDB</b> Indicates Small Diverse Business Program Member	
FIRM	TRADE
LSI <b>(SDB)</b> H2O <b>(SDB)</b> ECM FirstMetrix <b>(SDB)</b>	Lighting and Water Conservation Steam Envelope Diversity, Inclusion, and Procurment



## FIRSTMETRIX CORPORATION

Diversity, Inclusion, and Procurement Consultant

Brewer-Garrett has included FirstMetrix Corporation on our team. FirstMetrix Corporation is a private consulting corporation dedicated to creating value for clients through program and process improvements, and cost savings on engagements related to energy conservation and management, quality, operating, and finance, in both public and private, profit and non-profit environments. FirstMetrix is a Woman Owned Small Business Enterprise registered company.

### 1. LIST OF ALL GUARANTEED ENERGY SAVINGS PROJECTS YOU HAVE WORKED ON IN THE PAST WITH THE FOLLOWING INFORMATION FOR EACH:

#### London and Madison Correctional Institutions Guaranteed Energy Savings Project

- a. Date: 2020-2021
- b. Owner: Ohio Department of Rehabilitation and Correction
- c. ESCO: The Brewer-Garrett Company
- d. Amount: \$6,207,376
- e. Description: FirstMetrix was a key subcontractor to BG for this project. The services provided included financial services, small business participation, project coordination, and equipment procurement.
- f. Status: Estimated completion end of 2021

#### Southeastern Correctional Institution Guaranteed Energy Savings Project

- a. Date: 2018-2019
- b. Owner: Ohio Department of Rehabilitation and Correction
- c. ESCO: The Brewer-Garrett Company
- d. Amount: \$2,437,140
- e. Description: FirstMetrix was a key subcontractor to BG for this project. The services provided included financial services, small business participation, project coordination, and equipment procurement.
- f. Status: Completed

#### Central State University Guaranteed Energy Savings Project

- a. Date: 2013-2015
- b. Owner: Central State University
- c. ESCO: The Brewer-Garrett Company
- d. Amount: \$16,165,560
- e. Description: FirstMetrix was a key subcontractor to BG for this project. The services provided included financial services, small business participation, project coordination, and equipment procurement.
- f. Status: Completed

#### Otterbein University Guaranteed Energy Savings Project

- a. Date: 2014-2015
- b. Owner: Otterbein University
- c. ESCO: The Brewer-Garrett Company
- d. Amount: \$4,640,031
- e. Description: FirstMetrix was a key subcontractor to BG for this project. The services provided included financial services, small business participation, project coordination, and equipment procurement.
- f. Status: Completed



**2. SUPERINTENDENT QUALIFICATIONS:**

- a. We have attached a resume for Janet A. Mann, President of FirstMetrix Corporation.

**3. STATEMENT OF READINESS AND COMMITMENT OF RESOURCES:**

- a. FirstMetrix confirms the persons identified in the RFQ response are available and will be committed to the project for the time period(s) referenced in the RFQ schedule and that the resource availability reported above is committed to the project, as referenced in the RFQ Project Schedule and Work Plan.

**4. WORKMAN'S COMPENSATION EXPERIENCE MODIFICATION RATING:**

- a. 2020: 1.0
- b. 2021: 1.0
- c. 2022: 1.0

**5. ENTITY'S NOTIFICATION OF DEFAULT OR DEBARMENT:**

- a. FirstMetrix certifies that it has not had any contracts under default or debarment within the last five years.

**6. PENNSYLVANIA SUPPLIER CERTIFICATIONS:**

- a. Certified Small Business (546545-2021-05-SB)
- b. Certified Small Diverse Business (546545202105-SDB-W)

**7. EXPERIENCE WORKING WITH BREWER-GARRETT:**

- a. BG and FirstMetrix have a 40+ project history of successful collaboration spanning more than a decade.



## JANET MANN

*President*

**FIRSTMETRIX**  
CORPORATION  
A Janet Mann Company

*e.* jmann@firstmetrix.com

*p.* 216.870.3123

*a.* 9740 Hobart Rd,  
Willoughby, OH 44094

**32**

*years of experience*

### EDUCATION

**MBA** Case Western  
Reserve University

**BA** Miami University

### CERTIFICATIONS

Certified Performance  
Contracting & Funding  
Professional (**PCF**)

Certified Management  
Accountant (**CMA**)

Lean Six Sigma

Baldrige Criteria

### MEMBERSHIPS

Association for the  
Advancement of  
Sustainability in  
Higher Education  
(**AASHE**)

Financial Executives  
International (**FEI**)

Institute of  
Management  
Accountants (**IMA**)

### ROLE RESPONSIBILITIES

Janet is the president of FirstMetrix Corporation and is BG's EDGE partner. She has been the operating executive with over 30 years of experience in business development and strategic planning, operational and financial administration, and economic analysis in multi-operation, global business environments. Janet received her MBA from Case Western Reserve University and is also certified in Lean Six Sigma and Baldrige Criteria. She has served as the financial partner to senior operating management and interface to senior corporate management and governing boards, both in the public and private sectors.

### PROJECTS

The Brewer-Garrett Company and FirstMetrix have a 30-project history of successful collaboration spanning more than a decade. Successful design-build projects include:

#### HIGHER EDUCATION

- Central State University,  
Energy Conservation Program
- Cuyahoga Community College,  
Service & Energy Conservation  
Program, Phases I, II, III, & III +  
Amendment
- Kent State University,  
Five (5) Satellite Campuses,  
Energy Conservation Program
- Northeast Ohio Medical  
University (NEOMED),  
Energy Conservation Program
- The University of Akron,  
Energy Conservation Project

#### LOCAL GOVERNMENT

- Chillicothe Correctional Institution,  
Energy Conservation Project
- Marion Correctional Institution,  
Energy Conservation Services

*\*FirstMetrix Corporation is in the process of applying for renewal of the Small Diverse Business Verification Form.*

## NOTICE OF SMALL DIVERSE BUSINESS VERIFICATION



The Department is pleased to announce that

### **FIRSTMETRIX CORPORATION**

has successfully completed the Pennsylvania Department of General Services' process for self-certification as a small business under the Commonwealth's Small Business Contracting Program, and is verified as a Small Diverse Business with the following designation(s):

**BUSINESS TYPE(s):**

**Procurement Services**

**CERTIFICATION NUMBER:** 546545202105-SDB-W

**CERTIFICATION TYPE:** SMALL DIVERSE BUSINESS

**ISSUE DATE:** 05/24/2021

**EXPIRATION DATE:** 05/04/2023

**RECERTIFIED DATE:**

A handwritten signature in black ink that reads "Kerry L. Kirkland". The signature is written in a cursive, flowing style.

Kerry L. Kirkland, Deputy Secretary  
Bureau of Diversity, Inclusion & Small Business Opportunities



*\*FirstMetrix Corporation is in the process of applying for renewal of the Small Business Self-Certification Form.*

## NOTICE OF SMALL BUSINESS SELF-CERTIFICATION



The Department is pleased to announce that

### **FIRSTMETRIX CORPORATION**

has successfully completed the Pennsylvania Department of General Services' process for self-certification as a small business under the Commonwealth's Small Business Contracting Program, with the following designation:

**BUSINESS TYPE(s):**

**Procurement Services**

**CERTIFICATION NUMBER:** 546545-2021-05-SB

**CERTIFICATION TYPE:** SMALL BUSINESS

**ISSUE DATE:** 05/04/2021

**EXPIRATION DATE:** 05/04/2023

**RECERTIFIED DATE:**

A handwritten signature in black ink that reads "Kerry L. Kirkland". The signature is written in a cursive style.

Kerry L. Kirkland, Deputy Secretary  
Bureau of Diversity, Inclusion & Small Business Opportunities



## **H2O Applied Technologies LLC**

Turnkey water and energy conservation retrofits of existing buildings

Since 1995, H2O Applied Technologies (H2O) has been providing water and steam conservation assessments and design/build services to ESCOs. We consider ourselves the leader in water and steam conservation, having researched and developed many of the best practices used today. Performance and sustainability are keys to H2O's successful water and steam conservation methods and recommended solutions: H2O understands the importance of designing systems for reliable and sustainable performance, preconstruction planning, structured implementation, and ease of operation and maintenance once installed.

### **1. LIST OF ALL GUARANTEED ENERGY SAVINGS PROJECTS YOU HAVE WORKED ON IN THE PAST WITH THE FOLLOWING INFORMATION FOR EACH:**

#### **Philadelphia Housing Authority Water Conservation, Lighting Retrofits and Weatherization**

- a.* Date: 2021-22
- b.* Owner: Philadelphia Housing Authority
- c.* ESCO: Johnson Controls, Inc.
- d.* Amount: \$4.97 million
- e.* Description: Low flow plumbing fixtures, lighting retrofits, building weatherization
- f.* Status: Completed

#### **PA DCNR Water Conservation, Lighting Retrofits, and Water Line Replacement**

- a.* Date: 2021
- b.* Owner: Pennsylvania Department of Conservation and Natural Resources
- c.* ESCO: McClure Company
- d.* Amount: \$1.1 million
- e.* Description: Low flow plumbing fixtures, lighting retrofits, water line replacement
- f.* Status: Completed

#### **SCI Muncy Water Conservation and Steam System Upgrades**

- a.* Date: 2020
- b.* Owner: SCI Muncy
- c.* ESCO: Energy Systems Group, LLC
- d.* Amount: \$1.3 million
- e.* Description: Low flow plumbing fixtures, steam traps, thermostatic radiator valves, mechanical insulation
- f.* Status: Completed

**2. SUPERINTENDENT QUALIFICATIONS:**

- a.* **Name:** Justin Clark, CEM
  - b.* **Position:** Senior Project Engineer
  - c.* **Tenure with Firm:** 17 years
  - d.* **Overall Experience:** Mr. Clark has developed over 120 water and energy conservation projects (\$75 million). His experience includes site audits, utility rate and use analysis, savings modeling, cost estimation, and measurement and verification.
  - e.* **Qualifications:** Bachelor of Science, Mechanical Engineering, Worcester Polytechnic Institute
  - f.* **Affiliations:** AEE, ASHRAE
- 
- a.* **Name:** James Allen Hurley
  - b.* **Position:** Senior Project Manager
  - c.* **Tenure with Firm:** 9 years
  - d.* **Overall Experience:** Mr. Hurley has been the Project Manager for over 75 water and energy conservation projects (\$60 million). He is responsible for project management functions including validation, administration, planning, execution, closeout, and change management on energy performance projects. Mr. Hurley is accountable for the P&L on all assigned projects. He is also H2O's Safety Director.
  - e.* **Qualifications:** Licensed electrician, North Carolina; I-CON Systems, Inc. certified installer; Red Cross certified instructor (First Aid, CPR, AED, Infant and Child CPR, Bloodborne Pathogens); OSHA 30-hour safety certification
  - f.* **Affiliations:** AEE, ASHRAE

**3. STATEMENT OF READINESS AND COMMITMENT OF RESOURCES:**

- a.* H2O Applied Technologies LLC (H2O) team members identified are available and will be committed to the project for the time period referenced in the RFQ Project Schedule.

**4. WORKMAN'S COMPENSATION EXPERIENCE MODIFICATION RATING:**

- a.* Effective 06/30/2020: .89
- b.* Effective 06/30/2021: .89
- c.* Effective 06/30/2022: .86
- d.* Effective 06/30/2023: .84

**5. ENTITY'S NOTIFICATION OF DEFAULT OR DEBARMENT:**

- a.* H2O has not defaulted on any of its contracts and has never been debarred.

**6. STATE SUPPLIER CERTIFICATIONS:**

- a.* Pennsylvania Department of General Services Certification Number 322574202108-SDB-W (Small Diverse Business – Woman Owned). Issue date 9/29/2021, expiration date 8/11/2023.



## 7. EXPERIENCE WORKING WITH BREWER-GARRETT:

Project Name	H2O Project No.	Year	Market Sector	Contract Amount		H2O Lead Developer	H2O Project Mgr
Kent State - Podiatric Campus	51563	2021	Higher Ed	\$	58.5K	Clark, J	Craig, M
London and Madison Correctional Institutions	51532	2020	Correctional	\$	123.5K	Cox, D	Johnson, R
Lorain County Community College	51490	2020	Higher Ed	\$	146.7K	Clark, J	Shumski, P
Reno VA Audit	51416	2018	Federal	\$	11.1K	Clark, J	Clark, J
Southeastern Correctional	51349	2018	Correctional	\$	390K	Clark, J	Hurley, A
Chillicothe Prison	51283	2017	Correctional	\$	1.1M	Clark, J	Johnson, R
Kent State University - Phase 3	51276	2017	Higher Ed	\$	1.0M	Darlington, A	Johnson, R
Marion Correction Institution	51185	2017	Correctional	\$	1.2M	Clark, J	Sorci, G
Hocking Valley Hospital	51271	2016	Healthcare	\$	35K	Hurley, A	Johnson, R
Cuyahoga Community College	51184	2015	Higher Ed	\$	114.6K	Darlington, A	Johnson, R
University of Akron	51070	2015	Healthcare	\$	1.6M	Darlington, A	Johnson, R
Hiram College	51003	2014	Higher Ed	\$	539.8K	Cox, D	Johnson, R
Central State University	51024	2013	Higher Ed	\$	357.3K	Darlington, A	Kowalski, J
Kent State University Phase 2	50896	2013	Higher Ed	\$	299.3K	Clark, J	Kowalski, J
Kent State Phase 1A	50972	2012	Higher Ed	\$	70.1K	Darlington, A	Botts, D
Kent State University	50786	2010	Higher Ed	\$	165K	Darlington, A	Botts, D



## Lighting Services, Inc.

Lighting and Water Conservation

*Please provide a brief description of your company (Up to 150 words)*

Lighting Services is a comprehensive lighting and water conservation company founded in 1998 to serve the needs of commercial and industrial customers, and the ESCO community. Our mission is to reduce our customers operating costs while improving facility environments.

### **1. LIST OF ALL GUARANTEED ENERGY SAVINGS PROJECTS YOU HAVE WORKED ON IN THE PAST WITH THE FOLLOWING INFORMATION FOR EACH:**

#### **GESA 2017-2 DOC SCI Muncy**

- a. Date: 2020
- b. Owner: PA DOC
- c. ESCO: ESG
- d. Amount: N/A
- e. Description: More than 5,200 Interior and exterior light fixtures
- f. Status: Complete

#### **GESA 2019-3 PA Fish & Boat**

- a. Date: 2022
- b. Owner: PA Fish and Boat Commission
- c. ESCO: ESG
- d. Amount: N/A
- e. Description: More than 4,300 interior and exterior light fixtures
- f. Status: Completed

#### **GESA 2019-2 (Rebid) DGS Capitol Complex**

- a. Date: 2022
- b. Owner: PA DGS
- c. ESCO: McClure Company
- d. Amount: N/A
- e. Description: More than 40,000 interior and exterior light fixtures
- f. Status: Complete

### **2. SUPERINTENDENT QUALIFICATIONS:**

- a. Name: Michael Rohm
- b. Position: Supervisor
- c. Tenure with Firm: 22 years
- d. Overall Experience: NALMCO CLEP certification, Portland Lakes Career Center, US Army – Sergeant Infantry
- e. Qualifications: Supervise field personnel, handle material and equipment logistics, oversight of installation work, project reporting and project close-out.
- f. Affiliations: N/A

**3. STATEMENT OF READINESS AND COMMITMENT OF RESOURCES:**

- b.* All Lighting Services Inc. personnel identified are available and will be committed to the project for the time period referenced in the RFP Project Schedule.

**4. WORKMAN'S COMPENSATION EXPERIENCE MODIFICATION RATING:**

- a.* 2022 – 0.92
- b.* 2021 – 0.91
- c.* 2020 – 0.93

**5. ENTITY'S NOTIFICATION OF DEFAULT OR DEBARMENT:**

- b.* Lighting Services Inc. has not been debarred and is not in default of any contract.

**6. STATE SUPPLIER CERTIFICATIONS:**

- b.* SDB

**7. EXPERIENCE WORKING WITH BREWER-GARRETT:**

- a.* Marion Correctional Institution
- b.* Southeast Correctional Institution
- c.* Chillicothe Correctional Institution
- d.* London and Madison Correctional Institutions
- e.* Hocking Valley Community Hospital
- f.* KSU Phase 7
- g.* Kent State University Residential and Academic
- h.* Central State
- i.* North Central State
- j.* Northeast Ohio Regional Sewer District
- k.* Malone University
- l.* Medina Schools





PENNSYLVANIA DEPARTMENT OF GENERAL SERVICES  
READING AND SCRANTON, PA  
GUARANTEED ENERGY SAVINGS PROJECT  
GESA 2023-1

VOLUME I: TECHNICAL SUBMITTAL

## APPENDIX A - QUOTE SIGNATURE PAGE

## *Appendix A – Quote Signature Page*

We have attached our completed Quote Signature Page.

## **APPENDIX A**

### **Quote Signature Page**



### Quote Signature

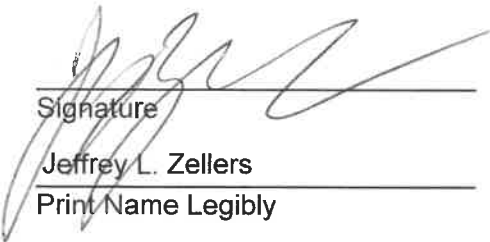
**Offeror's Representations and Authorizations.** Offeror by signing on the signature page and submitting its Quote understands, represents, acknowledges, and certifies that:

1. All information provided by, and representations made by, the Offeror in the Quote are material and important and will be relied upon by the Issuing Office in awarding the contract(s). Any misstatement shall be treated as fraudulent concealment from the Issuing Office of the true facts relating to the submission of this Quote. A misrepresentation shall be punishable under 18 Pa. C.S. § 4904.
2. No attempt has been made or will be made to induce any firm or person to refrain from submitting a Quote on this contract, or to submit a Quote higher than this Quote, or to submit any intentionally high or noncompetitive Quote or other form of complementary Quote.
3. The Quote is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any firm or person to submit a complementary or other noncompetitive Quote.
4. To the best knowledge of the person signing the Quote for the Offeror, the Offeror, its affiliates, subsidiaries, officers, directors, and employees are not currently under investigation by any governmental agency and have not in the last four (4) years been convicted or found liable for any act prohibited by State or Federal law in any jurisdiction, involving conspiracy or collusion with respect to bidding or proposing on any public contract, except as disclosed by the Offeror in its Quote.
5. To the best of the knowledge of the person signing the Quote for the Offeror and except as otherwise disclosed by the Offeror in its Quote, the Offeror has no outstanding, delinquent obligations to the Commonwealth including, but not limited to, any state tax liability not being contested on appeal or other obligation of the Offeror that is owed to the Commonwealth.
6. The Offeror is not currently under suspension or debarment by the Commonwealth, or any other state, or the federal government. If the Offeror has received, within three years of the issuance of this RFQ, a Notice of Default from the Commonwealth, other state or the federal government, then the Offeror shall submit, as part of the Technical Submission, seven copies of a written explanation of why such Notice of Default was issued. This written explanation shall not exceed 1 sheet (2 pages) and shall not count towards the sheet and page limit established for the Technical Submission of the Quote.
7. The Offeror has not, under separate contract with the Issuing Office, made any recommendations to the Issuing Office concerning the need for the services described in the Quote or the specifications for the services described in the Quote.
8. Each Offeror, by submitting its Quote, authorizes all Commonwealth agencies to release to the Commonwealth information related to liabilities to the Commonwealth including, but not limited to, taxes, unemployment compensation, and workers' compensation liabilities.

9. Until the awarded GESA Contractor receives a fully executed and approved written contract from the Issuing Office there is no legal and valid contract, in law or in equity, and the GESA Contractor should not begin to perform.
10. The total energy savings projected in the final scope of work will be at least 95% of the savings projected in the Quote and that the project will be self-funded over the financial term of the project (maximum term of 18 years.)
11. Offeror agrees and certifies in accordance with the enclosed Commonwealth of Pennsylvania:
  - Nondiscrimination/Sexual Harassment Clause
  - Tax Liability Certification
  - Americans Disabilities Act
  - GESA Contractor Integrity Provisions
  - GESA Contractor Responsibility Provisions
  - Environmental Statement
  - Compliance with State and Federal Statutes, Rules and Regulations
  - Non-Collusion Affidavit

I am authorized to sign this Quote on behalf of the Offeror, and I agree and state that

The Brewer-Garrett Company (Name of Firm) understands and acknowledges that the above representations are material and important and will be relied upon by the Department of General Services in awarding the contract(s) for which this Quote is submitted. I understand, and my firm understands, that any misstatement shall be treated as fraudulent concealment from the Department of General Services of the true facts relating to the submission of this Quote.

  
\_\_\_\_\_  
Signature

Jeffrey L. Zellers

\_\_\_\_\_  
Print Name Legibly

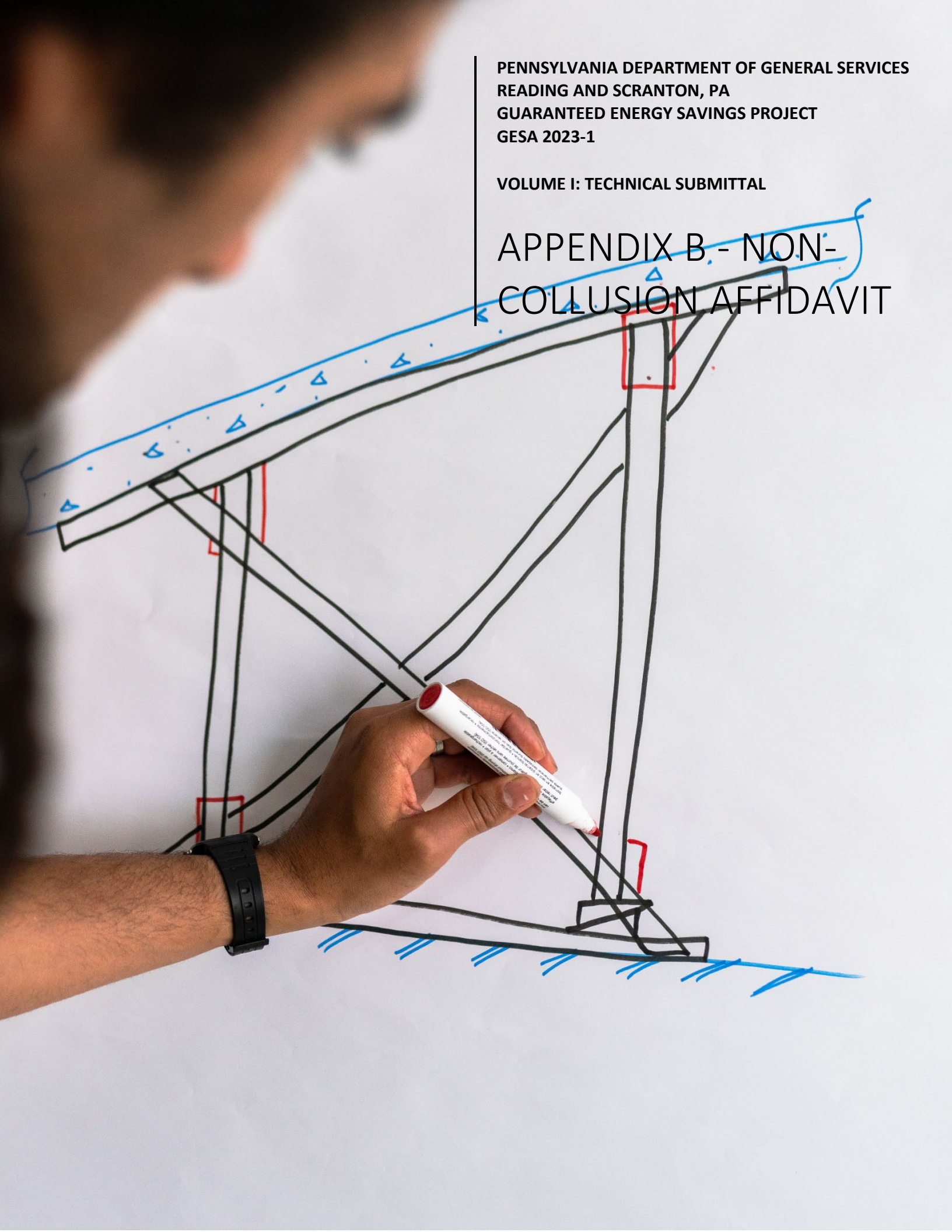
Vice President

\_\_\_\_\_  
Title

PENNSYLVANIA DEPARTMENT OF GENERAL SERVICES  
READING AND SCRANTON, PA  
GUARANTEED ENERGY SAVINGS PROJECT  
GESA 2023-1

VOLUME I: TECHNICAL SUBMITTAL

# APPENDIX B - NON- COLLUSION AFFIDAVIT





## *Appendix B – Non-Collusion Affidavit*

We have attached our completed Non-Collusion Affidavit.

## **APPENDIX B**

### **Non-Collusion Affidavit**

#### **INSTRUCTIONS FOR NONCOLLUSION AFFIDAVIT**

1. This Noncollusion Affidavit is material to any contract awarded pursuant to this Quote. According to §4507 of the Commonwealth Procurement Code, 62 Pa.C.S. §4507, governmental agencies may require Noncollusion Affidavits to be submitted with Quotes.
2. This Noncollusion Affidavit must be executed by the member, officer, or employee of the Offeror who makes the final decision on prices and the amount quoted in the Quote.
3. Bid rigging and other efforts to restrain competition, and the making of false sworn statements in connection with the submission of Quotes are unlawful and may be subject to criminal prosecution. The person who signs the affidavit should examine it carefully before signing and assure himself or herself that each statement is true and accurate, making diligent inquiry, as necessary, of all other persons employed by or associated with the Offeror with responsibilities for the preparation, approval, or submission of the Quote.
4. In the case of a Quote submitted by a joint venture, each party to the venture must be identified in the Quote documents and an affidavit must be submitted separately on behalf of each party to the joint venture.
5. The term “complementary Quote” as used in the affidavit has the meaning commonly associated with that term in the Quote process and includes the knowing submission of Quotes higher than the Quote of another firm, any intentionally high or noncompetitive Quote, and any other form of Quote submitted for the purpose of giving a false appearance of competition.
6. Failure to submit an affidavit with the Quote in compliance with these instructions may result in disqualification of the Quote.

# NONCOLLUSION AFFIDAVIT

DGS Project Number: GESA 2023-1

State of Ohio :

County of Cuyahoga : s.s.

I state that I am the Vice President (Title) of The Brewer-Garrett Company (Name of Firm) and that I am authorized to make this affidavit on behalf of my firm, and its owners, directors, and officers. I am the person responsible in my firm for the prices(s) and the amount of this Quote.

I state that:

1. The price(s) and amount of this Quote have been arrived at independently and without consultation, communication or agreement with any other contractor, Offeror, or potential Offeror.
2. Neither the price(s) nor the amount of this Quote, and neither the approximate price(s) nor approximate amount of this Quote, have been disclosed to any other firm or person who is an Offeror or potential Offeror, and they will not be disclosed before the Quote submission date.
3. No attempt has been made or will be made to induce any firm or person to refrain from proposing on this contract, or to submit a Quote higher than this Quote, or to submit any intentionally high or noncompetitive Quote or other form of complementary Quote.
4. The Quote of my firm is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any firm or person to submit a complementary or other noncompetitive Quote.
5. The Brewer-Garrett Company (Name of Firm) its affiliates, subsidiaries, officers, directors, and employees are not currently under investigation by any governmental agency and have not in the last four years been convicted or found liable for any act prohibited by state or federal law in any jurisdiction, involving conspiracy or collusion with respect to proposing and/or bidding on any public contract, except as follows:  

---

I state that The Brewer-Garrett Company (Name of Firm) understands and acknowledges that the above representations are material and important and will be relied upon by the Department of General Services in awarding the contract(s) for which this Quote is submitted. I understand, and my firm understands, that any misstatement in this affidavit is and shall be treated as fraudulent concealment from the Department of General Services of the true facts relating to the submission of this Quote.

(Signature)

Jeffrey L. Zellers, Vice President

(Signatory's Printed Name)

Notary Public  
Vice President

(Signatory's Title)

SWORN TO AND SUBSCRIBED

BEFORE ME THIS 15 DAY OF May,  
2023.



My Commission Expires no expiration

MICHAEL K. PROVENZA, ATTORNEY  
NOTARY PUBLIC • STATE OF OHIO  
My commission has no expiration date  
Section 147.03 O.R.C.

Appendix-B





**Brewer-Garrett**  
brewer-garrett.com



#### **Corporate Headquarters**

6800 Eastland Rd  
Middleburg Hts, OH 44130

#### **Columbus**

6037 Frantz Rd, Ste 105  
Columbus, OH 43017

#### **Dayton/Xenia**

1400 Brush Row Rd  
Wilberforce, OH 45384

#### **Little Rock**

1301 Westpark Dr  
Little Rock, AR 72204

**The Brewer-Garrett Company** promises innovation that will exceed your expectations. For 60 years, we've used our in-house expertise to develop customized solutions for our customer's unique facility needs.

We attribute our excellence in customer service to three distinct assets: we have the best people, programs, and technology.

First and foremost, our highly experienced team makes our company as great as it is. We make a point to hire people who inspire and innovate, and we're sure you'll be convinced of that when you work with us. Our associates are constantly searching for the most efficient solutions to benefit both you and the environment.

And because of the ongoing training we offer, those talented associates are always improving. We provide extensive in-house programs to keep our team members up-to-date about emerging methods and new techniques so they come ready to face any and every challenge your project poses.

Finally, we only use state-of-the-art technology. We embrace change because we know every challenge requires a unique response. With our custom, comprehensive solutions, you'll find that all your needs are addressed, and you'll see results both immediately and in the long term.