

REQUEST FOR QUOTE



pennsylvania
DEPARTMENT OF GENERAL SERVICES

**Commissioning Agent
Services**

**HOLLIDAYSBURG
VETERANS' HOME
NEW COMMUNITY
LIVING CENTER**

Project No. DGS 0969-0017-P1

Technical Submission



2400 Market Street
Philadelphia, PA 19103



May 3, 2022

Re: Commissioning Agent Services for DGS 0969-0017 P1, Hollidaysburg Veterans' Home New Community Center

To: Art Pfeiffer

We are pleased to respond and provide a proposal and cost estimate for Commissioning Agent Services during the pre-design and design phase stages of the Department of General Services Project No. DGS 0969-0017 Phase 1, Hollidaysburg Veterans' Home New Community Living Center.

Aramark is familiar with the DGS requirements for construction and has worked on many projects for DGS. Jeremy O'Roark is slated as the project manager for this project and has been specifically requested for DGS work in the past. He was the project manager for the SCI Benner project and was specifically requested for the SCI Phoenix project due to his performance, knowledge, and expertise with not only MEP systems but the DGS requirements as well. Additionally, Jeremy is not a stranger to healthcare as he has commissioned tens of thousands of square feet for both UPMC Altoona and Hershey Medical Center.

Jeremy and his support slated for this project are all located in Western/Central Pennsylvania with Jeremy and Matt Kolson residing in Windber, PA; Dave Bacco from Indiana, PA; and Kevin Barber from York, PA. They have worked together on many projects in the region and are very familiar with healthcare and long-term care requirements.

We look forward to continuing and strengthening our relationship with the Department of General Services. Should you have any questions, please do not hesitate to contact Matt Campise, Associate Director, at (724) 689-9449.

Sincerely,

Brian Lee, P.E.
Vice President, Engineering Solutions
Authorized Signatory of Aramark Management Services Limited Partnership



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A. CONTRACTOR PRIOR EXPERIENCE

For more than 35 years, Aramark Engineering Solutions has demonstrated proven expertise in developing and implementing energy management programs that promote sustainability and conserve energy. Whether we're working with higher or primary education clients, we bring a customized approach based on the individual drivers of each organization. Aramark is one of the largest third-party commissioning agents in the United States. Our unique operational expertise distinguishes our service from our competitors.

Our commissioning philosophy is guided by the following three tenets:

1. Provide a facility that operates to support the educational program
2. Verify systems achieve peak efficiency
3. Confirm building infrastructure is readily maintainable by the operators

Our services will further facilitate a seamless transition to the operations group and provide a technical resource to support building operations.

Experience At A Glance

Total Projects Commissioned: **900+**

Total GSF Commissioned: **70+ Million**

Constructed Value of Commissioned Projects: **\$11.2 Billion**

Select Aramark Commissioning Clients

- Allegheny Health Network
- Baylor University
- City University of New York
- Centenary College
- Edinboro University
- Franklin & Marshall College
- George Washington University
- Institute for Advanced Study
- Milton S. Hershey Medical Center
- NYS Office of Mental Health
- Ohio State University
- Penn State Health
- South County Hospital
- State of Pennsylvania (PADGS)
- University of Pittsburgh Medical Center
- University of Pennsylvania
- Washington College
- West Chester University
- West Virginia University

FACILITIES COMMISSIONED

- Hospitals & mission critical facilities
- Museums, libraries & cultural institutions
- Campus & performing arts centers
- Large classroom, academic, and computer facilities
- Recreation centers (athletic & aquatic)
- Science, research, vivarium, BSL3 and laboratory
- Residential halls
- K-12 Schools and Campuses
- Heating, cooling plants and major electric infrastructure
- Retro-commissioning of existing buildings and systems



UNIVERSITY OF PITTSBURGH MEDICAL CENTER - ALTOONA
VARIOUS PROJECTS - Altoona, PA

CONTACT: Jim DeStefano 814-889-2456 jdestefano@altoonaregional.org	CX SERVICES: Building Automation Installation Inspections Performance Verification Operations Training Testing and Balancing Coordination
CONSTRUCTION COST: \$20 Million	SCHEDULE: November 2010 - Ongoing
GROSS SQUARE FEET: 800,000	



The UPMC Altoona Campus consists of a 14-story main tower building, E & F Buildings of 6 stories each, G Building of 4 stories, a 6-story outpatient clinic, and Station Medical Center which is considered a medical mall.

In November 2010, UPMC Altoona reached out to Aramark to provide commissioning services for several combined projects that were either underway or in design. Since that time, Aramark has performed commissioning on over 12 projects throughout the Hospital complex, including the G Building, T-1 ED Expansion, T-3 Lab Expansion, T-6 Intensive Care Unit, OP-6 Administrative Offices, and 5th (pediatric) and 6th Floor Expansions.

- **G BUILDING** - Renovated to provide more convenient patient access and to consolidate Behavioral Health allowing better patient management. Includes inpatient (35 beds) and outpatient behavioral health; wound care; hyperbaric and ostomy services; a new classroom for community education programs; and houses IT staff for the campus and central scheduling. **Over 265 issues** were documented for this first commissioning project, indoctrinating contractors to the commissioning process.
- **T-1 EMERGENCY DEPARTMENT EXPANSION** - A massive 18-month ED enhancement project, \$11 million in renovations that changed virtually every aspect of the department from the lobby area to the flow of patient traffic to the number of beds. Thirteen beds were added to the existing 26 treatment rooms. Space also included a tomo/flouro room, magnetic resonance imaging room, 2 x-ray rooms, 1 chest x-ray room, 2 ultrasound rooms, and 2 CT imaging rooms. **Aramark documented 347 issues** that were addressed by the contractors prior to opening to patient care.
- **T-3 LAB EXPANSION** - Houses the cytology and histology departments, including cadaver storage, an autopsy table, chemistry labs, a specimen processing area, and 6 support offices. Issues with space overheating, pressure relationships, refrigeration capacities, and lower than design airflows for the autopsy table were found. After the contractors said they were finished, Aramark tested design capabilities and **found over 45 issues** that were corrected through contractor or design measures.
- **5-F AND 6-F RENOVATIONS** - The 5th floor spaces were arranged to 14 private rooms and one isolation room for Pediatrics, and 7-bay configurations housing four beds each on the 6th floor. Two isolation rooms were also configured on the 6th floor. **Aramark identified over 114 issues** that were addressed by the contractors and design team. Significant to this particular project, Aramark had a great impact on the prevention of mold within HVAC systems.
- **T-6 Intensive Care Unit** - Eight intensive care rooms on the 6th floor located in the tower were renovated and storage rooms and a nurse's station. Over 60 issues were identified including issues

caught during design reviews that would have prevented proper airflow and humidity control. These items were corrected on paper rather than after construction demonstrating the value of commissioning projects early in the design process.

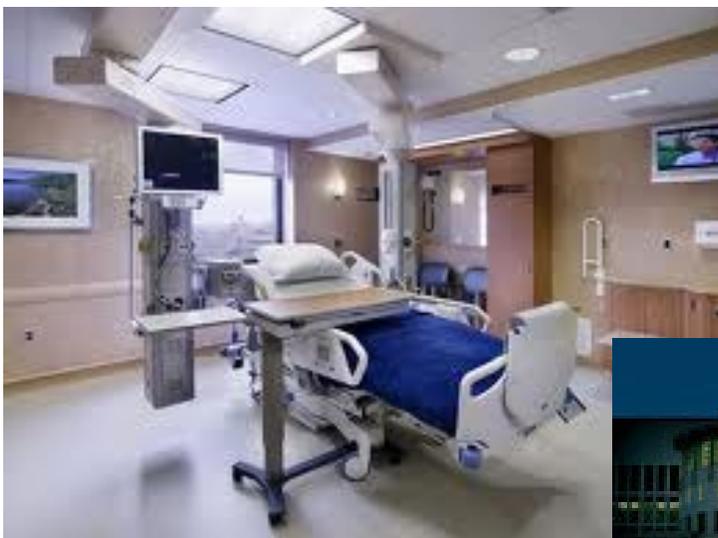
- **OP-6 Administrative Offices** - Located in the Campus Outpatient Building, the 6th floor was renovated for Hospital Administration, containing offices and conference rooms for the upper echelon of hospital administration. Due to decision making occupants, this space needed to be functional and operating flawlessly to allow for the relocation of the Hospital Administration. Temperature control was paramount, and many issues with the control of air handling units and variable volume terminal boxes were found.

COMMISSIONING SUCCESS:

Aramark has uncovered over 1,000 issues, saving UPMC over \$50K annually in energy savings, avoided 100's of thousands of dollars in potential collateral damages, decreased maintenance costs through verifying contractor accuracy, assured patient comfort, and prevented potential mold growth. This allows the Hospital to confidently go forward with its mission towards patient care.

CONTINUING OUR PARTNERSHIP - Aramark currently has four additional commissioning projects that are early in construction stages. These include upgrades to the Outpatient Center Linear Accelerator, the 2nd Floor Tower Central Sterile area, campus electrical infrastructure upgrades, and a Pharmacy Expansion which is currently in design.

Additionally, Aramark has recently completed an entire asset inventory of the Hospitals mechanical, electrical, plumbing, and fire protection equipment. This information was gathered and entered into a continuous monitoring management system that prepares work orders and tracks equipment history through preventative maintenance.



MILTON S. HERSHEY MEDICAL CENTER - VARIOUS PROJECTS – Hershey, PA



CONTACT:
 Michael Baron
 717-531-4525
 mbaron@hmc.psu.edu

CONSTRUCTION COST:
 \$300 Million

GROSS SQUARE FEET:
 400,000

CX SERVICES:
 Building Automation
 Installation Inspections
 Performance Verification
 Operations Training
 Testing and Balancing
 Coordination

SCHEDULE:
 2015 - Ongoing

In 1963, the Milton S. Hershey foundation donated \$50M to The Pennsylvania State University to establish a medical school and teaching hospital in Hershey, PA. The College of Medicine opened in 1967 and the Milton S. Hershey Medical Center accepted its first patients in 1970. Construction is ongoing at the facilities, and current funding exceeds \$1B for projects slated over the next three years.

Coat tailing a long-term relationship with Penn State, Aramark commissioning was selected to perform commissioning in 2015 on the Support Services Building at the Medical Center. Since that time, Aramark commissions all projects on campus in the main hospital as well as outpatient buildings. Aramark was selected as a result of the commissioning success that we have provided for over 50 projects within the Pennsylvania State University System.

Below are some of the projects that we have completed since Aramark has been on campus:

- **35 Hope Drive Reproductive Endocrinology and Infertility** – construction included the development of a lab for infertility study, specimen room, embryo storage, and support spaces. Lab pressurization was of the utmost importance as well as back up emergency power for storage. The older spec building was not initially designed for pressure envelope of such a large lab space, and Aramark was involved in the identification and correction of several building envelope leaks within the facility.
- **Third Floor Inpatient Women’s Health Unit** – The renovations to the main hospital third floor included phased delivery of a nursery, 15 labor and delivery rooms, two C-section rooms, and support spaces. Working within an active women’s health unit, the project was done in five phases providing several rooms each month. Some of the more challenging aspects of which Aramark assisted with included the turn down of a new air handling unit serving only several rooms as it was brought online, rerouting of existing air handling systems serving areas adjacent to the construction, ICRA planning, rerouting and installation of double-walled piping over the nursery, and use of existing riser exhaust systems to provide proper air changes for new codes.
- **HVI Non Invasive Unit** –The Heart and Vascular Institute Non Invasive space was completed in six phases and included 12 imaging rooms, support spaces, and offices for

the Heart and Vascular Unit. Commissioning challenges within this space included ICRA planning, replacement of MEP infrastructure serving not only this space but several adjacent spaces, accessibility of a renovated area with limited ceiling heights, and several P-tube stations within the area.

- **First Floor Observation Unit** - This included the addition of 12 beds to provide protocol based care to patients with well-defined symptoms. This project was completed over a period of four months and was near the epicenter of the main hospital creating challenges for maintaining air distribution to other areas of the hospital as well as ICRA barrier maintenance. Commissioning of the space was instrumental to project schedule, proper air changes, routing of drain lines from the second floor, fire damper needs, and accessibility as these were all challenges that were solved during the commissioning process.
- **ED Expansion** - The ED Expansion project includes the addition of 24,000 SF of clinical and support space for the emergency department. The space is taken from an existing courtyard located over central sterile. This presented many challenges for plumbing routing to serve the new space as well as waterproofing over this critical area both during construction as well as the delivered product.



COMMISSIONING SUCCESS:

In just the Support Services Building project alone, there were 109 deficiencies documented - 42 during static inspections and pre-functional testing and over 67 in functional testing - translating to over \$98,000 in contractor corrective costs. Also, Aramark identified operating savings and participated in the correction of many items representing nearly \$30,000 in annual operational savings. More information can be provided upon request on other projects.

Additional projects within the past three years include:

- Radiology Prep and Recovery
- Radiology 3D Imaging
- AC-41 & 43 Replacement
- AC-33 Replacement

ALLEGHENY HOSPITAL NETWORK - VARIOUS RENOVATION PROJECTS - Pittsburgh, Monroeville, and Erie, PA

<p>CONTACT: Brian Mathie 412-330-5533 brian.mathie@ahn.org</p>	<p>GROSS SQUARE FEET: 15,000 GSF on Average</p> <p>SCHEDULE: 2018 - Ongoing</p>	<p>CX SERVICES: Building Automation Installation Inspections Performance Verification Operations Training Testing and Balancing Coordination</p>
<p>CONSTRUCTION COST: \$500 Million Across Various Projects</p>		



At any given moment, Aramark is actively commissioning over 30 renovation projects for the Allegheny Health Network system including Allegheny General, West Penn, Canonsburg, Allegheny Valley, Jefferson, and Saint Vincent Medical Center. Projects include USP 800 pharmacy upgrades, Urology, CT, MRI, LINAC, Perioperative, GI Lab, and ED Expansion. All of the projects are connecting to existing infrastructure and require careful coordination and scheduling, handled through the commissioning process.

COMMISSIONING SUCCESS:

Aramark has been selected as the sole commissioning provider for Allegheny Health Network and is involved in commissioning every project that has any form of mechanical, electrical, or plumbing upgrades. We are familiar with healthcare requirements and bring that experience to each of the design and construction teams through the commissioning process.



Aramark is invaluable to the construction process as well by identifying systems that could be affected by the renovation and assisting in shutdown planning and potential relocation. Aramark is also involved in ICRA planning and maintenance and joint commission inspection preparation.



In addition to the assistance listed above, we are providing traditional commissioning services that saves AHN tens of thousands of dollars including design recommendations, contractor remediation and energy savings through efficiency. Uncaptured in monetary amounts, we save our clients millions in litigation with our commissioning input including mold avoidance, life safety considerations, shutdown avoidance, ICRA maintenance, IAQ after construction and safety during construction.

PENN STATE HEALTH - HAMPDEN MEDICAL CENTER - Enola, PA



CONTACT:

Jim McPhilemy
215-665-7156

CONSTRUCTION COST:

\$151.6 Million

GROSS SQUARE FEET:

300,000

CX SERVICES:

Design Review
Installation Inspections
Performance Verification
Operations Training

SCHEDULE:

2018 - October 2021

Penn State Health is a multi-hospital health system serving patients and communities across central Pennsylvania. The Hampden Medical Center project is a new-build hospital approximately 300,000 square feet, with 20,000 square feet serving as an ambulatory component.

The hospital consists of the following:

Level 1:

- Main entrance with a three-story main lobby and concourse.
- Admitting, waiting, lobby public toilets, gift shop, and dining
- Women's Clinic and Radiation Oncology
- Imaging, Non-Invasive Cardiology, and administrative services
- Emergency Department with dedicated walk-in and ambulance entrances

Level 2:

- Surgical services with 6 general ORs, 2 Cath Labs, and 24 Prep/PACU/ Phase II Recovery Bays
- A 12-bed Intensive Care Unit
- Respiratory Therapy team space, cleaning, and storage function
- Labor and Delivery, Post-partum, and Antepartum services

Level 3:

- (3) 24-bed patient care units consisting of 2 Med/Surg care units and 1 Intermediate care unit
- Inpatient rehab gym

Lower Level - Non-patient zone serving as the support backbone:

- The main Receiving loading dock with 6 loading bays
- Supply Chain/Materials Management area
- Sterile Processing Distribution
- Dietary Kitchen
- Pharmacy
- Support Services (plant operations, clinical engineering, etc.)

Central Utility Plant:

- Major mechanical, electrical equipment, and data center in a separate but adjacent building

COMMISSIONING SUCCESS:

Aramark is working through many issues with the construction team that are ensuring DAAC and DOH compliance. Our assistance in this process is critical to the full occupancy of the project.

NEMOURS CHILDREN'S HOSPITAL - BI-PLANE CARDIAC CATH LAB - Wilmington, DE

The project included a renovation of the Cardiac Cath lab in the Al DuPont Pavilion for approximately 2,000 square feet. This complete renovation of the existing treatment, equipment, and supply rooms incorporated a new Hybrid Bi-Plane Cath lab to operate as an independent lab while keeping the adjacent Cardiac Cath Lab operational during construction.

Throughout the commissioning project, Aramark worked collaboratively with the project team to identify and resolve issues in a timely manner to allow system completion prior to Cath lab operations equipment setup before the first planned surgery date. Trending was set up and coordinated with Tri-M so that Aramark can review operations of the air handler over winter, shoulder season, and summer modes of operations.

The semi-custom roof top unit is also part of the project which is well equipped with controls and a bypass duct that allows for OA control without the static drop created by coils. This leads to a complicated sequence which we tested in all modes of operation. Additionally, the Cath Lab pressurization is paramount, and we reviewed the room envelope to verify that the room will be able to hold the required pressures. Pressurization is very important to sequencing the air handling unit especially during economizer modes where the outside air is changing whereby the relief air also needs to track and change. This is especially paramount in a hospital due to general negative conditions of existing spaces including kitchens, central sterile, stack effects, and loading docks.

COMMISSIONING SUCCESS:

During functional testing of the air handling system, Aramark identified control devices that were faulty or had an incorrect application and required replacement. This prevented normal temperature, airflow, and pressure control; control loop tuning issues that were corrected; and fan failure operational and maintenance impacts that required modification for facilities operations.

A few of the higher priority issues identified and resolved include the following:

- Fan VFD operation - It was determined that de-energizing one fan VFD via the micro-switch de-energizes the entire fan array, and thus, not allowing redundant fan VFD to operate as required per design. Signage was added to disconnects and re-wiring interlock between the VFD and motor disconnects and retested.
- Humidifier control device issues - A failed aquastat device was identified that was later replaced and verified to be complete. Also, a high humidity limit sensor setting operation issue was resolved and retested for confirmation.

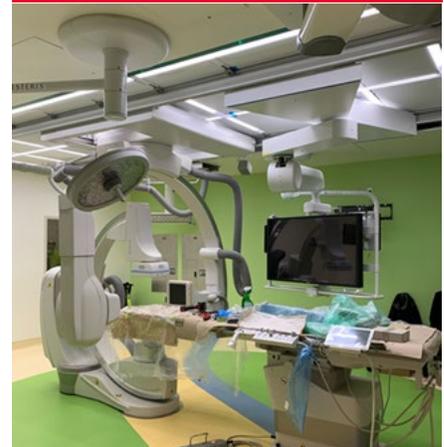
CONTACT:
Ronald Graff
302-298-7149
ronald.graff@nemours.org

CONSTRUCTION COST:
\$7 Million

GROSS SQUARE FEET:
2,000

CX SERVICES:
Installation Inspections
Performance Verification
Operations Training

SCHEDULE:
July 2020 - March 2021



B. PROJECT UNDERSTANDING

This project will reduce the number of beds on the campus from 424 to 200 beds with the construction of a new state-of-the-art facility. The intent of the project is to:

- Achieve increased operational efficiency for the HVH staff
- Decreased life cycle costs for the DMVA
- **Improved quality of life for veterans residing there and making it their home**

Aramark also understands that this project is undergoing new design management processes in the form of Lean Integrated Project Delivery. Aramark, and particularly our slated project team, is very familiar with this process and has finished two major projects at Penn State utilizing this format. We are also performing it currently on the Penn State West projects.

Our design phase pricing has been provided considering IPD and we have not included typical design phase reviews and follow up meetings. Instead, we have provided hours to become involved with the IPD team and will participate throughout the process reviewing design and providing input as the project progresses. We have updated our project work plan to detail this approach.

PRE-CONSTRUCTION PHASE - DESIGN PHASE

- Conduct Owner's Project Requirements (OPR) workshop and develop OPR
- Develop the Cx Plan
- Review and comment on design documents and BOD.
- Develop and provide Cx specs for all systems/assemblies being commissioned.

CONSTRUCTION PHASE

- Perform submittal review
- Attend construction meetings as needed
- Hold regular commissioning meetings
- Conduct construction observation and testing
- Develop and maintain issues and resolution log
- Develop Systems Manual
- Develop pre-functional test forms and functional performance tests and direct testing
- Review, pre-approve and verify training of personnel.
- Develop End of Warranty Cx Report
- Prepare Preliminary and Final Cx Report

SYSTEMS TO BE COMMISSIONED

- Building Assembly Systems including Building Shell, Exterior Wall Assemblies, and Roof Assemblies.
- Protective Systems including Fire Suppression and Fire Alarm Systems.
- Plumbing Systems including Domestic Hot Water Systems.
- Heating, Ventilating, Air Conditioning and Refrigeration Systems (HVAC) including Heat Generation, Refrigeration, Ventilation, and HVAC Control Systems.
- Electrical Systems including Power Distribution, Lighting, and Controls, and Emergency Generator Systems.
- Communications Systems including Voice/Data and Sound/Video Systems.
- Electronic Safety and Security Systems including Security, Alarm, and Detection Systems.

C. GEOGRAPHIC LOCATION

Jeremy O’Roark and Matt Kolson are located near Windber, PA and 33 miles from the Veterans’ Home. Travel time will not be required for reimbursement as travel will be performed on the employee’s time. Dave Bacco is located in Indiana, PA which is 49 miles from the Veterans’ Home. Travel time will not be necessary for reimbursement.

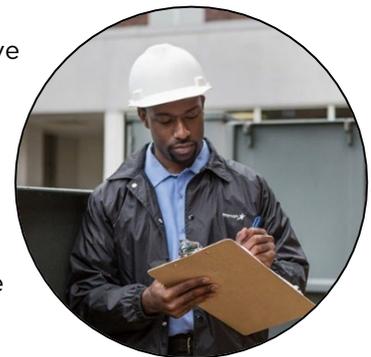
D. PROJECT WORK PLAN

I. SUMMARY AND PROJECT APPROACH

It is evident that in order to truly assist in the short- and long-term success of this project, our commissioning plan requires a unique and varied blend of technical, operational, and engineering expertise. The challenges involved in the construction of this project focus around:

1. Project schedule
2. Complex building systems
3. Increased integration of systems and components
4. MEP technical expertise
5. Project turnover and operations expectations

We are familiar with these significant challenges through our extensive commissioning, operations backgrounds, and experience with capital and operation teams. Our focus is to “bridge the gap” between the construction teams, design teams, project management, and operations groups. Our solution to these challenges is to develop and integrate a unique commissioning program that will provide collaboration between teams, verify that the design intent (installation and performance) is met, establish parameters for acceptance of the construction/end users, and integrate turnover/operations smoothly and effectively.



A summary of the solutions are outlined in the following bullets.

- Creating partnerships and leading collaboration within the project and construction teams
- Providing “on-site” representation to focus and coordinate the commissioning efforts
- Coordinating and integrating teams of professionals in supporting corrective actions
- Establishing parameters and testing requirements for system acceptance as opposed to component acceptance
- Exercising the systems throughout operating ranges, safety and emergency conditions

Aramark will develop a program specifically geared towards the Hollidaysburg Veterans’ Home New Community Living Center project. Aramark will work directly for the PADGS and provide an unbiased, objective view of the systems installation, operation, and performance. As part of the owner’s building systems commissioning process, Aramark will cooperate with and coordinate all commissioning activities with the project manager, design professionals, construction manager, and contractors. This process is not to take away or reduce the responsibility of the design team or installing contractors, but to provide a finished and fully operational product in accordance with design intent.

Our scope of services consists of the following focused efforts:

PRE-CONSTRUCTION PHASE – DESIGN PHASE

Past experience has demonstrated that collaboration, communication, and proper planning are the keys to verifying that the commissioning program is fully integrated into the normal design and construction process. This integration process for the program begins very early by initially employing a carefully

prepared kick-off meeting, commissioning plan, and schedule that will guide the effort in and around the construction schedule. The commissioning team leader will develop, organize, implement, observe, document, and lead the commissioning effort in a manner that furthers the success of the project. This effort will not only minimize the impact on project schedule, but also promote efficient system startup and turnover.

A summary of activities in this phase consists of:

- a. **Owner’s Project Requirements (OPR)** – Working with the DGS Design Project Manager, Design Professional, and the Client Agency facilities maintenance staff to develop and verify the project goals, measurable performance criteria, cost considerations, benchmarks, success criteria, and supporting information as it applies to the: a) primary purpose of Project, b) environmental and sustainability goals, c) energy efficiency goals, d) indoor environmental quality requirements, e) desired equipment/system quality, reliability, and maintenance requirements, f) facility operation and maintenance requirements including requisite personnel training and orientation.
- b. **Commissioning Plan (Cx Plan)** – Provide written document that outlines the overall process, organization, responsibilities, schedule, allocation of resources, and documentation requirements of the Commissioning Process to verify and document that the design, construction, and operation of the facility meet the Owner’s Project Requirements (OPR).
- c. **Design Review** – Provide a review and comments of the Professional’s design documents and Basis of Design (BoD) narrative for compliance with the Owner’s Project Requirements. Design review includes a back-check of Commissioning Design Review Comments at subsequent Design Submission.
- d. **Commissioning Specifications** – Provide Commissioning Specifications for all systems/assemblies being commissioned for inclusion within the Project Construction Documents.

CONSTRUCTION PHASE



A pivotal aspect of our commissioning program is enabling team reviews and inspections of the systems in their area of expertise (i.e. mechanical, electrical, and plumbing). Deficiencies and outstanding issues are documented in the commissioning database. The intent of the database is to generate a comprehensive list for the project manager to distribute to the design and construction teams for response and action. Subsequent to each focused inspection, a progress report will be issued detailing the deficiencies, resolution actions, and status of each item. We will maintain a current status for each item on the deficiency list as well as document the resolution actions in the final report. The commissioning team leader will act

as the point person and bring up issues to the construction and design teams. The focus of the construction installation phase will include the following:

- a. **Submittal Review** – Identify and review Contractor submittals applicable to systems/assemblies being commissioned. Identify issues that might result in rework or change orders. Verify the following: a) conformance with Owner’s Project Requirements (OPR) and Basis of Design (BoD), b) achievement of operations and maintenance requirements, c) enablement of performance testing. All submittal reviews and correspondence will take place in eBuilder.
- b. **Job Construction Meetings** – CxA shall attend regular job construction meetings as necessary to ensure the systems are properly installed, operated, and tested, and are functioning correctly to meet the design intent.
- c. **Commissioning Meetings** – CxA shall hold regularly scheduled jobsite Commissioning Meetings with all project stakeholders to review important aspects of equipment, HVAC system, and Controls

System installation. Review and document necessary installation details, system testing procedures, and documentation requirements. Keep meeting minutes and include in the Cx Report.

- d. **Construction Observation and Testing** – Verify that the performance of the systems/assemblies being commissioned, as installed, meet the Owner’s Project Requirements (OPR), Sustainability Criteria, Basis of Design (BoD), and Contract Documents. Furnish test procedures and checklists prior to equipment installation. Produce a Pre-functional test for each test. Test procedures shall list the entities responsible for executing each test. Provide installation inspections. Direct, witness, and document tests. Evaluate test results and verify that installed systems/assemblies meet the criteria for the Project.
 - e. **Issues and Resolution Log** – Develop a commissioning issues log containing open and continuing items, status, and name of person/organization responsible for resolution.
 - f. **Systems Manual** – During the design and construction of the project, the design and construction documents should be assembled into the systems manual. This assembly of documents provides the details and history of the design and construction of the building and information needed to properly operate the building. The systems manual includes the project final OPR, BOD, construction record documents, submittals, completed startup, verification checklists, functional and performance checklists, verified sequence of operation, facility guide, training records, and commissioning report. The systems manual should be used in the initial and subsequent training of the building operations staff and occupants. The systems manual should be updated throughout the life of the building.
 - g. **Pre-Functional and Functional Performance Testing** – Confirm (but not necessarily witness) manufacturer’s startup of individual equipment components (Pre-Functional Performance Testing). Write, direct completion of, witness, and document full Functional Performance Testing of each system and system component. Confirm proper operation of all control sequences for each season operation. Document in Cx Report.
 - h. **Training Plans and Records** – Review, pre-approve, and verify (but not necessarily witness) training of the Client Agency personnel by the Contractor, to operate and maintain systems/assemblies being commissioned. Include attendance sheets, training plan, training materials, and records in final Systems Manual.
 - i. **End of Warranty Cx Report** – Provide post-occupancy operation commissioning, including incomplete, delayed, and seasonal testing, as well as warranty issues. Post-occupancy operations shall begin at Substantial Completion and shall continue through to the end of the warranty period.
 - j. **Preliminary and Final Cx Report** – A preliminary commissioning report should be prepared that shows the commissioning progress and equipment performance to date at the time the Certificate of Occupancy is issued. At the completion of the project, the final commissioning report should be assembled and provided to the owner and others as required by the OPR and local jurisdiction requirements. This report includes the final commissioning plan, copy of design and submittal review reports, all startup, inspection, verification, functional and performance test forms and reports, the verified sequence of operation, the final Issues and Resolutions log, and summary of the performance of commissioned systems.
- II. **Resources needed to complete the assignment including staff assignments, consultants, and reimbursements.**

Aramark will perform all commissioning activities with its own personnel. Staff assignments are indicated in the organizational chart. Reimbursements will be submitted for mileage only which is detailed in Section C above.

III. Inefficiencies or risks to successful implementation, and any planning efforts to mitigate issues such as travel distance, schedule conflicts and required coordination.

Aramark has no scheduling conflicts associated with performing the commissioning requirements of this project.

IV. The anticipated number of hours required for completion of the work described in the Scope of Work (Attachment A).

For the Pre-Design and the Design Phase, the estimated number of hours is 38. For the Construction Phase, hours are estimated to be 576.

SCHEDULE OF MILESTONES

DESIGN PHASE – AWARD OF PROJECT THROUGH MAY 2022

- Conduct Owner's Project Requirements (OPR) workshop and develop OPR
- Develop and provide the Cx Plan
- Review and comment on design documents and BOD
- Conduct design phase Cx meeting
- Develop and provide Cx specs for all systems/assemblies being commissioned.

CONSTRUCTION PHASE – OCTOBER 2022 THROUGH JUNE 2025

- Perform submittals review
- Conduct Cx kick-off meeting with contractors
- Attend construction meetings as needed
- Hold regular commissioning meetings
- Develop pre-functional test forms and provide to contractors
- Conduct construction observation and testing
- Develop and maintain issues and resolution log
- Witness start-up of Cx systems

ACCEPTANCE PHASE – JUNE 2025 THROUGH SEPTEMBER 2025

- Perform functional performance testing of Cx systems
- Conduct Cx meetings as needed
- Develop and deliver Systems Manual
- Review, pre-approve and verify training of personnel.
- Develop End of Warranty Cx Report
- Deliver final Cx Report

E. PROJECT PERSONNEL AND QUALIFICATIONS

All of Aramark’s engagements rely on our experienced professional staff to function as the catalyst for the success of the overall program. Our staffing strategy for managing this relationship expertly and efficiently is straightforward:

- Provide PADGS with a qualified commissioning agent to lead the overall program and serve as the primary contact person.
- Support PADGS with a core technical team comprised of individuals with the requisite technical experience and skill sets.
- Provide experienced “quality assurance” resources to verify that the highest level of quality services is provided.



The success of our approach has always been the quality and consistency of our senior leadership as well as the professionals that comprise the core technical team. The organizational chart illustrates the proposed team for this engagement. Biographies including experience with similar projects as well as overall expertise are included on the next pages.

Although the proposed staff will have primary responsibility for the proposed engagement, any of the more than 100 technical professionals within the Engineering and Asset Solutions group will be made available to PADGS if their skills, expertise, and/or availability will add incremental value to this engagement.

Aramark’s Engineering and Asset Solutions group consists of more than 100 technical professionals including: Professional Engineers (PE) Certified Commissioning Professionals (CCP), LEED Accredited Professionals (LEED AP) and other technical designations. We verify that each facility’s operating, maintenance, and program support requirements are met during construction and renovation.

- | | |
|---|---|
| (20) Professional Engineers (PE) | (13) LEED Accredited Professionals (LEED AP) |
| (22) Certified Energy Managers (CEM) | (6) LEED Green Associates |
| (4) Project Management Professionals | (2) Registered Architects/NCARB |
| (5) Certified Measurement Verification Professionals (CMVP) | (2) Certified Building Commissioning Professionals (CBCP) |



JEREMY O’ROARK

Cx Manager

- 5.5 Million GSF Commissioned
- 45 Commissioning Projects
- Penn State University Bachelor of Science Mechanical Engineering
- Fundamentals in Engineering

Mr. O’Roark possesses more than 18 years of experience in mechanical engineering. On behalf of Aramark, he provides commissioning services for clients throughout Pennsylvania and is serving as the project manager on several large high-profile projects within the Mid-Atlantic region. He is currently serving as commissioning project manager on several projects at Penn State University including the College of Engineering Research and Teaching Spaces West 1 & West 2 Buildings, Liberal Arts Research and Teaching Building, and Lasch Building Renovations.

Jeremy is slated as the Project Manager for the Hollidaysburg Veterans’ Home New Living Center project and will assist with functional testing of the mechanical systems. Matt’s primary responsibility as project manager is to ensure that all of the commissioning tasks as described within this response are completed. Other than electrical, his expertise offers him the ability to complete all of the tasks associated with the commissioning process individually.

MATTHEW CAMPISE

Associate Director

- 8.3 Million GSF Commissioned
- 70 Commissioning Projects (Project Manager)
- Washington and Jefferson College Bachelor of Arts Chemistry

Mr. Campise possesses more than 28 years of experience in building automation controls and commissioning and has been with Aramark for 14 years. Currently, Matt manages 12 direct reports who perform as commissioning managers primarily throughout the state of Pennsylvania. Matt serves as the Relationship Manager to our larger clients within the state including Penn State University, University of Pennsylvania, UPMC, and Allegheny Health Network. He also serves directly as project manager for several projects at Penn State Health and has completed commissioning for over 10 projects for this client in the past four years.

Matt will primarily be responsible for quality control as well as major issue resolution but will also assist Matt with static inspections of the mechanical installation, design the HVAC functional test documentation, and assist with functional testing of the mechanical systems.

ALLISON BAILEY, P.E.

Senior Cx Manager

- 4.2 Million GSF Commissioned
- 55 Commissioning Projects (Project Manager)
- Ohio State University Bachelor of Science Mechanical Engineering
- Professional Engineer (KY, OH, and WV)

Ms. Bailey possesses more than 22 years of experience in HVAC design, DDC control programming, HVAC system troubleshooting, project management, and project coordination.

Currently, Allison supports commissioning programs throughout the region and is involved in all design reviews as the design lead and mechanical systems reviewer. She is also project manager for several projects at Baylor University and has recently completed, as project manager, our largest commissioning project at the South Halls Residence Facilities for Ohio State University.

Allison is proposed in a support role for the Hollidaysburg Veterans’ Home New Living Center project. She will lead the design review team, provide design reviews of HVAC and plumbing systems, review all mechanical submittals, and design the pre-functional test forms for HVAC and plumbing systems. She will also develop the commissioning plan.



DAVID BACCO, E.I.T.

Cx Manager

- 5.3 Million GSF Commissioned
- 250 Commissioning Projects (Electrical Lead)
- University of Pittsburgh Bachelor of Science Electrical Engineering

Mr. Bacco possesses more than 27 years of electrical building design, project management, evaluations, and engineering experience. Currently, Dave supports all electrical commissioning programs throughout the region and has performed the same duties on all of the reference projects listed within this proposal. Many of the issues he presents in design review comments and static inspections are of the highest return on investments for our clients. Dave is proposed in a support role for the Hollidaysburg Veterans' Home New Living Center project. He will conduct design reviews of electrical systems, design the pre-functional and functional test forms for electrical systems, conduct electrical static inspections, and perform the electrical systems functional testing. Dave will also witness the fire alarm testing, security system testing, and the elevator testing.

BOYD HOATS, JR

Project Manager

- University of Tennessee - Knoxville
- Bachelor of Architecture
- Luzerne County
- Community College
- Associates Degree in Architectural Engineering

Mr. Hoats is a project manager with 27 years of comprehensive project management experience. Currently, he is performing project management for Samsung Electronics and Thomas Jefferson University Hospital projects.

Mr. Hoats is also the architectural CPM with Aramark's Facility Condition Assessment and Commissioning teams, where he utilizes his extensive expertise in assessing building envelope conditions, recommending solutions to correct deficiencies, and insuring the proper implementation of the design documents. He is currently providing building envelope commissioning services to several of our clients in the PA area, including projects for Allegheny Health Network. He has also worked on projects for Penn State University and Penn State Health.

Boyd is proposed in a support role for the project. Boyd will provide input to the OPR and conduct design reviews, design the pre-functional and functional test forms, conduct static inspections, and perform functional testing for the building envelope.

MATT KOLSON

Cx Manager

- 1.5 Million GSF Commissioned
- 25 Commissioning Projects
- Penn State University Undergraduate Studies

Mr. Kolson is a building control systems professional with over 19 years of progressive experience as a software engineer. Matt has been transitioned into the commissioning role as a project manager and is primarily focused at Penn State. His current list of projects includes several residence halls, a major medical center, and student centers at two satellite campuses. With a strong mechanical background and a large amount of controls experience, Matt bridges the gap between controls and equipment and holistically commissions systems versus pieces of equipment.

Matt is proposed in a support role for the Hollidaysburg Veterans' Home New Living Center project and will assist with static inspections of the mechanical installation and functional testing of the mechanical and control systems

KEVIN BARBER

Cx Manager

- 4.0 Million GSF Commissioned
- 50 Commissioning Projects
- Penn State World Campus MiPS Certification Renewable Energy & Sustainability Systems - Solar Energy
- Penn State University Bachelor of Science Energy Engineering

Mr. Barber is an energy engineer with over five years' experience as a lead commissioning agent. On behalf of Aramark, Mr. Barber provides professional services to various clients in the Mid-Atlantic region while focusing on close collaboration and quality assurance with our Aramark team. Prior to joining Aramark, Mr. Barber successfully managed and/or supported the execution as the lead Commissioning Agent on Pennsylvania projects for Penn State University, State College Area School District, Allegheny Health Network, Geisinger, PA Air National Guard, PA Department of General Services, and the Defense Logistics Agency, as well as many other Mid-Atlantic region clients.

Kevin is proposed in a support role for the Hollidaysburg Veterans' Home New Living Center project and will assist with static inspections of the mechanical installation and will assist with functional testing of the mechanical and control systems.

CORY CALLIHAN

Cx Manager

- Pennsylvania College of Technology Bachelor of Science Building Automation Engineering Technology A.S - HVAC Technology

Mr. Callihan possesses more than 11 years of experience between HVAC, refrigeration, electrical, plumbing, and controls within the residential and commercial markets. Prior to Aramark Mr. Callihan was an HVAC controls technician for Automated Logic Controls out of the Pittsburgh branch. While with ALC, Cory worked for clients such as AHN, UPMC, CMU, PSU satellite campuses, and the University of Pittsburgh. Cory is proposed in a support role for the Hollidaysburg Veterans' Home New Living Center **project** and will assist with functional testing of the mechanical and control systems.



F. APPENDIX

Aramark Management Services Limited Partnership is pleased to submit the attached proposal to provide Commissioning Agent Services for the Hollidaysburg Veterans’ Home New Living Center project for the Pennsylvania Department of General Services (PADGS).

We would be honored to be selected to perform commissioning and appreciate the opportunity provided to build on our relationship with the PADGS. We would dedicate the appropriate resources to provide the highest quality services. We understand the importance of the integration and seamless operation of the building system infrastructure. Aramark is one of the largest third-party commissioning agents in the United States, and our unique operational expertise distinguishes our service from our competitors.

HISTORY

For more than 35 years, Aramark Engineering Solutions has demonstrated proven expertise in developing and implementing energy management programs that promote sustainability and conserve energy. We bring a customized approach based on the individual drivers of each organization.

Aramark is a national leader in providing complete facility management solutions in education. Our dedicated technical services include:

- Building Commissioning
- Building Retro-commissioning
- Energy Management
- Utility Master Planning
- Deferred Needs Assessment
- Engineering Design Review

Aramark has extensive experience and technical capacity to meet, and exceed, the required needs for commissioning the Hollidaysburg Veterans’ Home New Living Center project. Aramark has been commissioning buildings and their increasingly complex systems for more than three decades. We have commissioned more than \$11.2 billion and 70 million GSF of new and renovated facilities. Our technical credibility, operator’s perspective, and construction experience has and will continue to aid in the satisfaction of each commissioning project’s many objectives.

Our commissioning philosophy is guided by the following three tenets:

1. Provide a facility that operates to support the program
2. Verify systems achieve peak efficiency
3. Confirm building infrastructure is readily maintainable by the operators

Our services will facilitate a seamless transition to the operations group and provide a technical resource to support the building operations.

