ENSURING BUILDING SYSTEMS MEET THE OWNER’S EXPECTATIONS

The Albert Einstein College of Medicine (AECOM) is one of the nation’s premier institutions for medical education, basic research, and clinical investigation. The Michael F. Price Center for Genetic and Translational Medicine is the centerpiece of the scientific advances at the Albert Einstein College of Medicine. The new 201,000 square-foot building houses 40 state-of-the-art research laboratories, 10 specialized scientific facilities, and a 100-seat auditorium. The laboratories and specialized facilities enable AECOM to bring together world-class scientists and the most advanced technology to uncover the origins of health and disease at the molecular level.

Aramark’s commissioning effort was focused on providing the College with an independent review of the essential building systems, with the intent of documenting system performance criteria and identifying opportunities to improve system performance, stability, energy efficiency, and maintainability. Additionally, Aramark ensured and documented the final performance and stability of the building systems under various modes of operation.

During the design review, Aramark identified and presented more than 160 issues that were corrected during the design phase and resulted in approximately $1.5 million in cost avoidance. Through static inspections and functional testing, Aramark identified, and brought to the College’s attention, an additional 776 issues. The issues identified translated into more than $169,000 in contractor corrective costs. In addition to corrective costs, Aramark assisted in the avoidance of over $20,000 in corrective action costs associated with the unnecessary repair or replacement of items identified including sound attenuators and associated ductwork.

“Aramark exceeded our expectations in the overall quality of their work, going beyond the scope of the commissioning task, and the level of cooperation Aramark demonstrated not only with the owner but with the design team, contractors and construction manager.”

Steve Kerch, Albert Einstein College of Medicine, Engineering Department
Challenges

Provide a building that is conducive to scientific research

Aramark worked collaboratively with the College’s project and operations team, design team, and the construction team to implement and document the performance validation of the Price Center’s building systems. Aramark ensured that the College’s goals were met by verifying that the heating, ventilating and air conditioning systems, air quality, and electrical services were properly functioning to provide a safe environment that is conducive to scientific research.

Throughout the commissioning process, the College’s engineering staff looked to Aramark to be their advocate during the project’s construction phase. Additionally, the engineering staff depended on Aramark’s expertise to help solve any complex installation issues.

Provide onsite expertise to assist in deficiency resolution

Aramark’s original scope of work, to provide commissioning services, increased significantly to include intensive diagnostic support as well as deficiency resolution to assist the construction/design team and the College’s staff to overcome major obstacles encountered during construction. These major obstacles included the inability to provide N+1 airflow redundancy to the labs, failed UPS power supplies, and smoke purge sequencing.

The N+1 redundancy was accomplished as a result of Aramark identifying heat wheel airflow leakage, improperly sized sound attenuators, and incorrect VAV control programming. The failed UPS power supplies were identified by Aramark to be the result of a loose neutral connection at the service panel. Aramark also worked extensively with the fire alarm vendor to checkout and test the complex sequence of operations needed to accomplish smoke purge.

Maintain communication and collaboration

A key component of the commissioning process is the collaboration, communication, and proper planning that the commissioning process is fully integrated in the normal design and construction process. Aramark ensured this collaboration through the use of our web-based commissioning software, which provided instant and simultaneous access for the AECOM staff, contractors, and Aramark’s commissioning agents. This platform allowed Aramark to effectively centralize, integrate and communicate the commissioning process, providing accurate, up-to-date information, ensuring that priorities were identified and resolved.

Solutions & Results

Did You Know?

Aramark provided technical support to assist the college staff in the resolution of major deficiencies identified during commissioning.

Aramark’s web-based commissioning software provided collaboration and communication among all project participants.