BULLITT COUNTY PUBLIC SCHOOLS

DEPARTMENT OF FACILITIES

DANNY CLEMENS, DIRECTOR
TRACY PARSLEY, MAINTENANCE SUPERVISOR
THOMAS STOKES, CUSTODIAL SUPERVISOR
GEORGE BROCK, ENERGY MANAGER

MEMO

TO: Dr. Jesse Bacon, Superintendent

FROM: Danny Clemens, Director of Facilities

Date: July 24, 2025

RE: Commissioning Agent Recommendation - BG 24-192/BG 25-145 DC

Studio Kremer Architects recommends CMTA Commissioning, Inc. (CMTA Cx) to provide commissioning services for the three physical science centers at Bullitt Central, Bullitt East and North Bullitt High Schools. The BG 24-192 post-bid revised BG-1 had an anticipated cost of $100,000.00 for code required commissioning of the HVAC and Lighting systems for North Bullitt and the cost of commissioning included in the initial BG-1 for the Bullitt Central and Bullitt East facilities was $100,000. Requests for Proposals were issued to three (3) companies, and two (2) proposals were provided as listed below:

Proposals were requested from the following companies:

CMTA Commissioning, Inc.: Proposal	$73,725.00 Combined Fee
Facility Commissioning Group Proposal	$102,340.00 Combined Fee
Paladin, KY: proposal.	Declined to provide a

.I recommend approval of this request.

1040 HIGHWAY 44 EAST, SHEPHERDSVILLE, KY 40165 (502)869-8022 (502)543-2106 DANNY.CLEMENS@BULLITT.KYSCHOOLS.US

Attached paperwork is listed below with *action items* noted for each:

- ***Studio Kremer Conditioning Recommendation***
- ***CMTA Proposal***
- ***Facility Commissioning Group proposal***

July 23, 2025

Commissioning Services Recommendation

TO: **Bullitt County Public Schools**
Danny Clemens, Director of Facilities
1040 Highway 44 East
Shepherdsville, KY 40165

REFERENCE: Commissioning Services for:
Physical Science Centers at North Bullitt, Bullitt Central and Bullitt East High Schools
Shepherdsville, Mt. Washington & Hebron, Kentucky
BG# 24-192 / BG# 25-145 | ska# 2023-50

Mr. Clemens,

We recommend **CMTA Commissioning, Inc. (CMTA Cx)** to provide commissioning services for the three physical science centers at Bullitt Central, Bullitt East and North Bullitt High Schools. The BG 24-192 post-bid revised BG-1 had an anticipated cost of $100,000.00 for code required commissioning of the HVAC and Lighting systems for North Bullitt and the cost of commissioning included in the initial BG-1 for the Bullitt Central and Bullitt East facilities was $100,000. Requests for Proposals were issued to three (3) companies, and two (2) proposals were provided as listed below:

Proposals were requested from the following companies:

1.) CMTA Commissioning, Inc.:	**$73,725.00 Combined** Fee Proposal
2.) Facility Commissioning Group	**$102,340.00 Combined** Fee Proposal
3.) Paladin, KY:	**Declined to provide a proposal.**

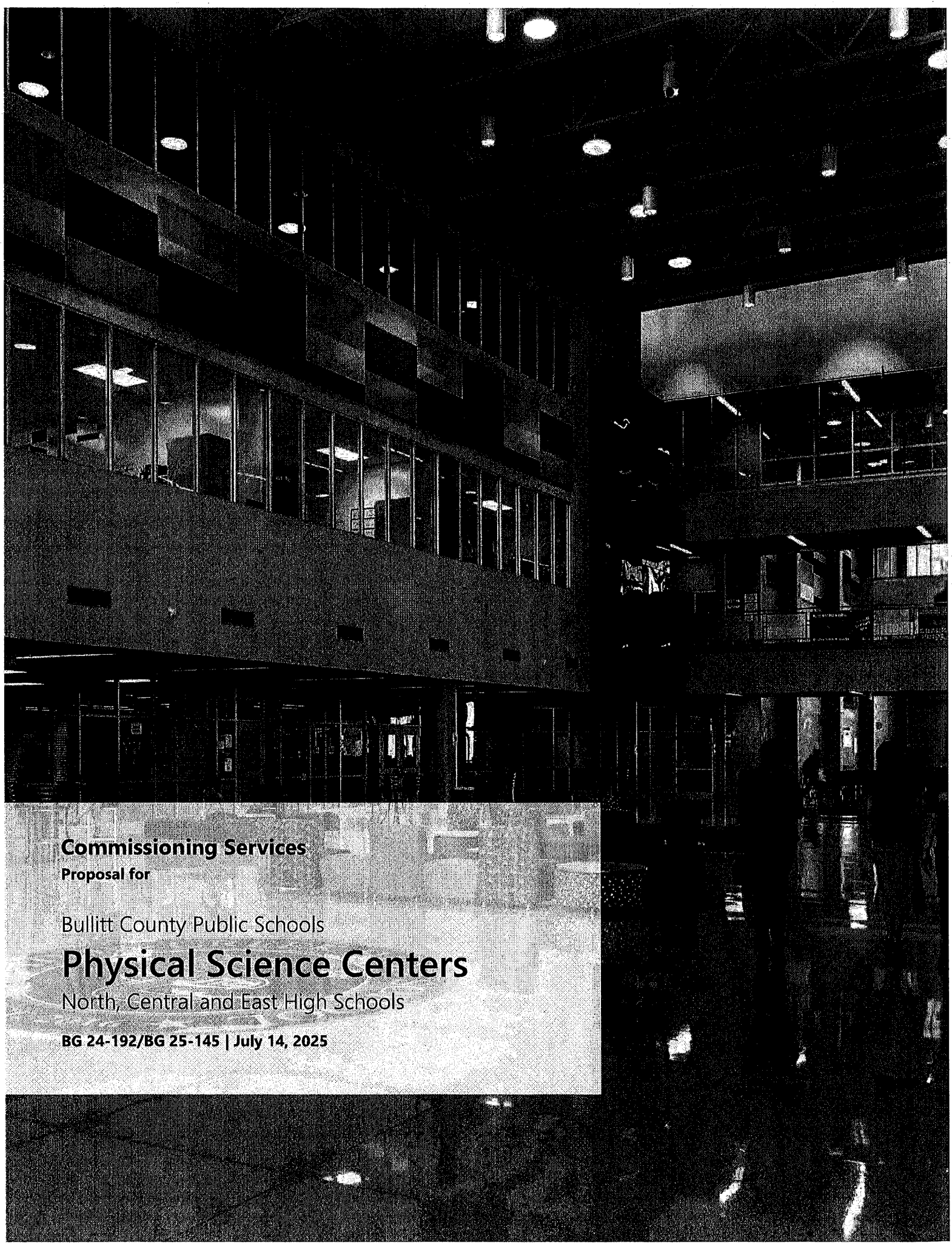
If you have any questions or comments, please do not hesitate to contact me.

Sincerely,
Studio Kremer Architects

Cate Noble Ward | AIA
Partner | Architect

enclosures – **(1) CMTA Commissioning, Inc. Proposal – Recommended**
(2) Facility Commissioning Group Proposal

studio kremer architects
1231 S Shelby St, Louisville, KY 40203
TEL 502.499.1100 FAX 502.499.1101



Commissioning Services

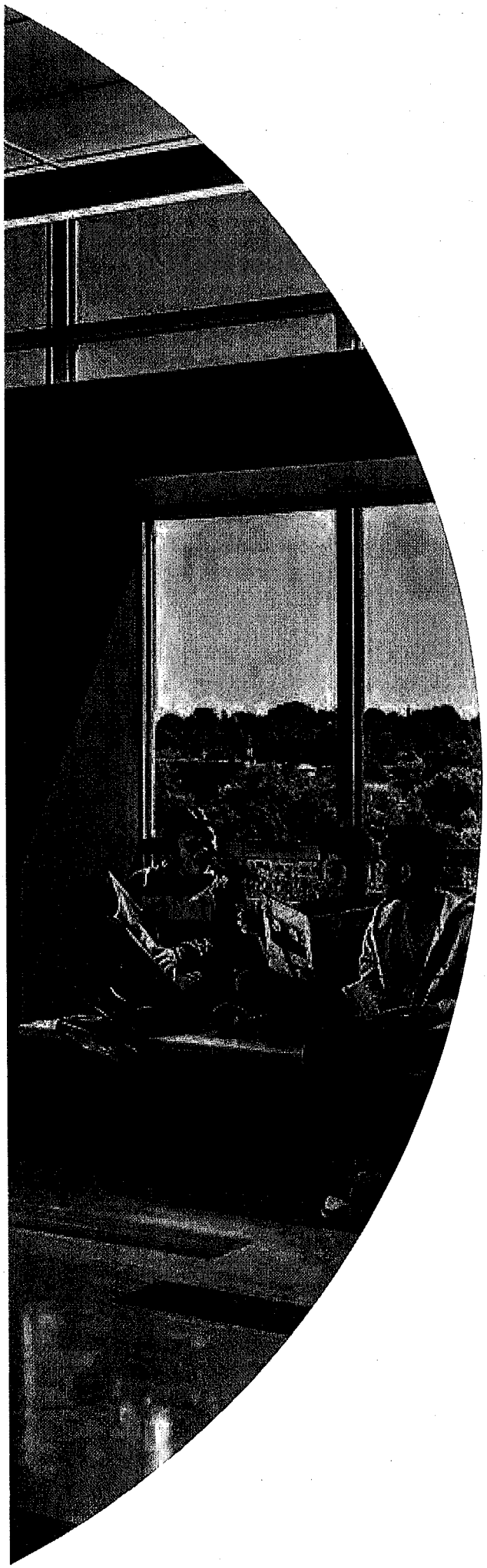
Proposal for

Bullitt County Public Schools

Physical Science Centers

North, Central and East High Schools

BG 24-192/BG 25-145 | July 14, 2025



Contents

CMTA

CMTA.COM

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Building Science Leadership

July 14, 2025

Danny Clemens
Director of Facilities
Bullitt County Schools
danny.clemens@bullitt.kyschools.us

Cate Noble Ward
Architect
Studio Kremer Architects
cate@studiokremer.com

Re: Cx Services for Bullit Physical Science Centers (North, East, Central High Schools) | BG 24-192/BG 25-145

Dear Mr. Danny Clemens,

We are excited for the opportunity to submit a proposal for professional MEP commissioning (Cx) consultant- HVAC, electrical, plumbing and life safety services for the Bullit Co Public Schools science centers project. For this engagement, CMTA would provide Cx project management and support from the Louisville headquarters office in Prospect, Kentucky.

CMTA is a nationally recognized expert in high-performance K-12 education design and commissioning, having delivered some of the most energy-efficient projects in the nation. Our industry expertise and ability to provide the top engineered systems in the building business even landed CMTA on CSE's Commissioning Giants list for 2024. As a results, our ideas for your team will be creative, proven, and grounded on data from our years of performance-based success.

We feel CMTA is uniquely qualified to support Bullitt County Schools (BCPS) by commissioning its projects for the following reasons:

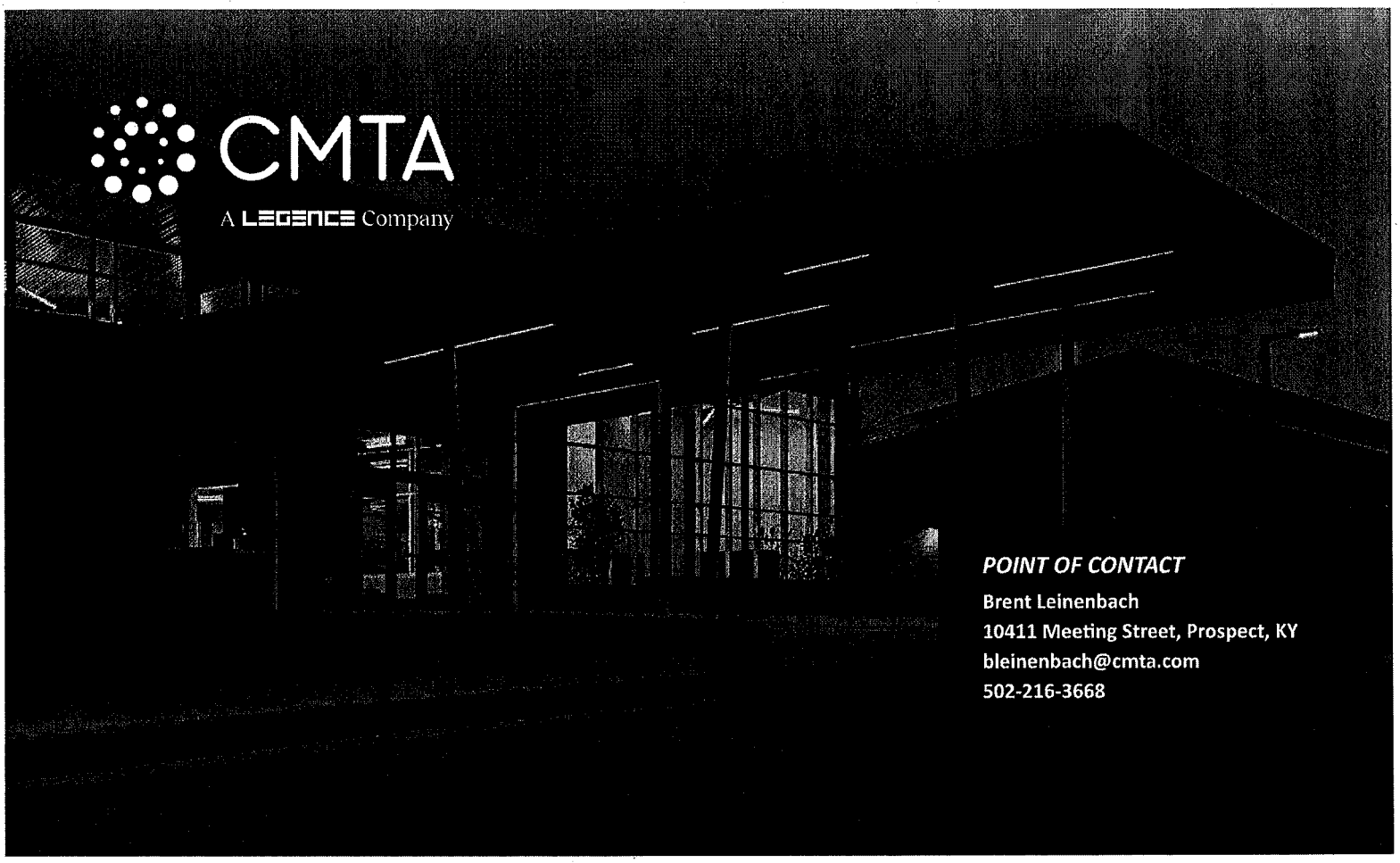
- *Proven Past Performance.* Our team brings over 20 years of commissioning experience and a history of more than 100 K-12 education projects performing at an EUI of less than 25 Kbtu/SF.
- *Successful Partnership.* CMTA has been a dedicated long-term partner to various greater Louisville area school districts for over 20 years. We understand Districts' concerns and have a long history of working collaboratively deliver some of the best-performing buildings in the nation.
- *Holistic Approach.* Our team of experts go beyond confirming operation to ensure that Bullitt County Schools deliver the expected high performance and energy savings.

Our primary goal is to deliver high-performance buildings to BCPS that reduce energy consumption and create cost savings so that the district can use more resources for students and education rather than operating buildings. We would be honored to work with your team and hope you will not hesitate to reach out if you have any questions or need additional information about our approach.

Sincerely,

Brent Leinenbach, CxA
Commissioning Manager
bleinenbach@cmta.com | c: 502.216.3668

Company Profile and Team



POINT OF CONTACT
Brent Leinenbach
10411 Meeting Street, Prospect, KY
bleinenbach@cmta.com
502-216-3668

About Us

CMTA is a multi-specialty firm that focuses on building systems engineering – designing and commissioning cost-effective, energy-efficient, high-performance buildings. We function as a trusted partner and guide for the owner and design team bringing energy reduction, decarbonization, and health and wellness goals to fruition. As CMTA strives to improve the built environment, we also invent products, set national goals, and work to transform the market to improve results for everyone.

CMTA is uniquely qualified to deliver buildings optimized for performance, drastically reducing utility costs and maintenance issues. As a result, our commissioned projects perform better repeatedly above and beyond those commissioned by others.

Commissioning Services

- Commissioning (Cx)
- Commissioning for LEED Certification
- Retro-Commissioning (RCx)
- Monitoring-Based Commissioning (MBCx)
- Design / Application Review
- Building Envelope Air Tightness (Pressure) Testing & Thermography Services
- Energy Dashboards & Advanced Sub-Load Metering

1126+
Employees

50
Offices Nationwide

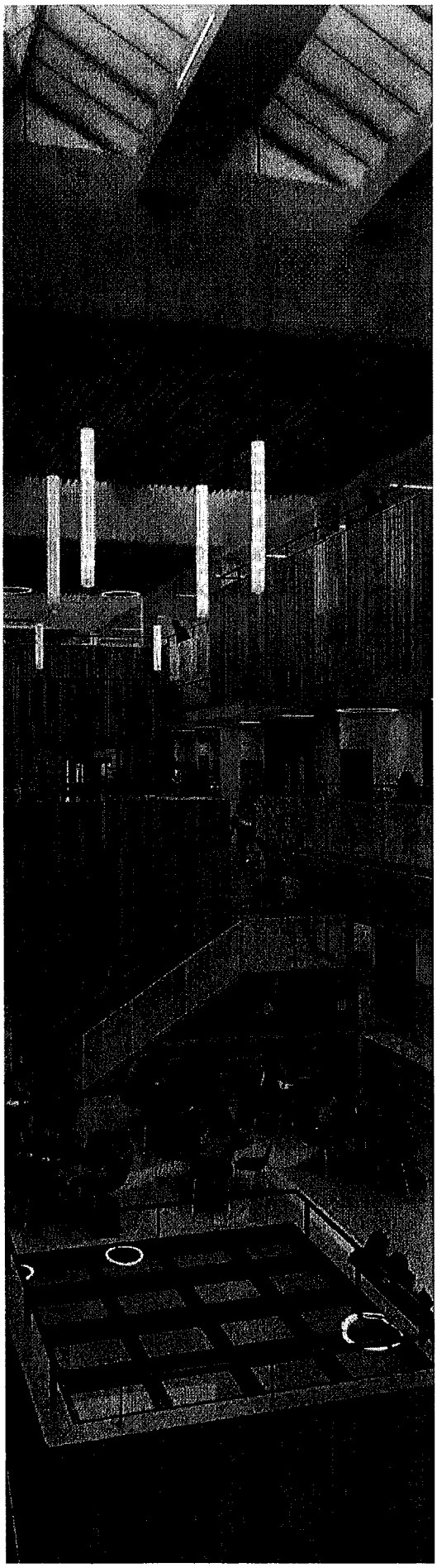
260
Professional Engineers

183
LEED APs

32
WELL APs

26
Commissioning Agents

Commissioning GIANTS 2024 **#18**



Commissioning Overview

The intent of commissioning services is to verify and document that a facility and its systems and assemblies are planned, designed, installed, tested, operated, and maintained to meet the owner's project requirements and design engineers' expectations. This is accomplished by properly setting goals that enhance the project's outcome.

Today's building owners demand the management of complex building systems. We have extensive experience designing and developing complex systems and sequences, which is crucial to successful building operations and energy management strategies that outperform the competition.

Our proactive approach promotes that, in addition to the efforts performed by onsite superintendents, effective QA/QC measures are implemented. As a result, we often identify new opportunities—whether specific to brands of equipment or unique building considerations—that were not apparent before the construction phase.

We see ourselves as the owner's eyes and ears, an onsite representative helping orchestrate the systems' successful implementation. We realize that attention to detail and construction scheduling organization are keys to quality commissioning and have lasting impacts that are realized throughout the life of a facility.

Cx Differentiators

- Knowledge of complex energy saving sequences of operations of equipment.
- Sampling method. High-performance requires all units to be tested and trended.
- Hands-on engineering approach to issues resolution.
- Advanced trending techniques for performance optimization (7-day + trends).
- Active Construction Management role. Prioritize/Expedite construction schedule items critical to avoid delays.
- Detailed owner/facilities staff training and occupancy phase follow-up.
- Accessibility to clients throughout the Commissioning process (ex: calls after hours, weekends, etc.).
- Team members of diverse experience/knowledge backgrounds.
- Historical Performance Database / Benchmarking.

Team Organization

The team for your project will be led, managed and supported out of our headquarters in Prospect, KY. We have allocated a deep bench of resources to perform this project ranging from senior engineering leaders, commissioning specialists, as well as technical design specialists. Our senior level staff possess diverse experience/knowledge backgrounds creating a more rounded team and better overall client experience.

CMTA
A LEGENCE Company

Brent Leinenbach
CxA
Principal-in-Charge /
Commissioning Team Leader

Zachary Schneider
PE, LEED AP, LC, CxA
Client Relations Manager

Sam Gordon
CxA, Level I Thermographer
Commissioning Project Manager

Chris Miller
Commissioning Controls
Specialist

Daniel Chesser
TBT, CxA
Commissioning TAB Specialist

Todd Givens
CxA
Mechanical Commissioning
Specialist

Brent Leinenbach CxA

Principal-in-Charge / Commissioning Team Leader

As principal-in-charge and commissioning team leader, Brent ensures that CMTA's commissioning approach is implemented on all projects. This focuses on minimizing energy consumption, reducing maintenance time, and increasing occupant comfort. Additionally, Brent ensures that the commissioning team has the internal support needed to be successful and will provide QAQC for all documents and deliverables. He is committed to the project for its entire duration.

Education

B.S., Electrical Engineering, University of Louisville, 2017

Registration

Certified Commissioning Agent, AABC/ACG

6 Years with firm

20 Years experience

Select Project Examples

- Bullitt County Schools, New Elementary School Cx and BPT; Mt. Washington, KY
- Bullitt County Schools, Bernheim Middle School Renovation; Shepherdsville, KY
- Oldham County Schools, North Oldham Middle School Cx; Crestwood, KY
- Fayette County Schools, Tates Creek High School Cx and BECx ; Lexington, KY
- Warren County Public Schools, Geothermal and Energy Optimization at multiple schools; Bowling Green, KY
- Owen County Schools, High School HVAC Renovation Cx; Owenton, KY

Sam Gordon CxA, AIRT

Commissioning Project Manager

As the commissioning project manager, Sam is responsible for monitoring the MEP construction installation progress and ensuring systems meet the construction document specification requirements and design intent. In addition, he works closely with mechanical test and balance contractors. His responsibilities include coordination and implementation of the commission process by working as a commissioning agent and ensuring resources and systems are working in accordance to construction documents so that projects are finished in a timely manner, within budget and meet critical quality criteria.

Education

Associate of Applied Science, Computer Science, Sullivan University, 1992

Registration

AIRT Level 1 Infrared Thermographer #1-1958

4 Years with firm

31 Years experience

Select Project Examples

- Bullitt County Schools, New Elementary School Cx and BPT; Mt. Washington, KY
- Bullitt County Schools, Bernheim Middle School Renovation; Shepherdsville, KY
- Shelby County Public Schools, Shelby County High School Cx; Shelbyville, KY
- Warren County Public Schools, Geothermal and Energy Optimization at multiple schools; Bowling Green, KY
- Fayette County Schools, Tates Creek High School BECx; Lexington, KY
- Arlington Public Schools, Gunston Middle School Renovation Cx; Arlington, VA

CMTA

Daniel Chesser TBT, CxA

Commissioning TAB Specialist

As the TAB Commissioning Specialist, Daniel will be responsible for monitoring the MEP construction installation progress and ensuring systems meet the construction document specification requirements and design intent. In addition, Daniel will work closely with mechanical test and balance contractors to ensure proper methodology and practices are followed.

Registration

Certified Commissioning Agent
OSHA Construction Safety and health
TBT- Testing & Balance Technician

6 Years with firm

11 Years experience

Select Project Examples

- Bullitt County Schools, New Elementary School Cx and BPT; Mt. Washington, KY
- Owensboro Independent School District, Cravens Elementary Cx; Owensboro, KY
- Owen County Schools, High School HVAC Renovation Cx; Owenton, KY
- Oldham County Schools, North Oldham Middle School Cx; Crestwood, KY
- Fayette County Schools, Tates Creek High School BECx; Lexington, KY

Zachary Schneider PE, LEED AP, LC, CxA

Client Relations Manager

As the client relations manager, Zac acts as the owner's advocate and works with the administration team to ensure the project systems and goals are met. To achieve project goals, Zac collaborates with the team to guarantee a seamless project from start to finish. This includes attending periodic OAC meetings, commissioning meetings, site visits in preparation for functional performance testing, assisting in functional testing, and deficiency resolution.

Education

B.S., Electrical Engineering, University of Louisville Speed Scientific School, 2005

Registration

Licensed Professional Engineer in KY (#28357), NC, TX and VI

22 Years with firm

22 Years experience

Select Project Examples

- Sheldon Indepenent School District, Garrett Road Elementary School; Houston, TX
- Alvin Independent School District, Pomona Elementary School; Manvel, TX
- Henry County Public Schools, High School Addition and Renovation; New Castle, KY
- Oldham County Schools, North Oldham Elementary; Goshen, KY
- Russell County Schools, Russell County Middle School Addition and Renovation; Russell Springs, KY

CMTA

Todd Givens CxA

Mechanical Commissioning Specialist

Todd has held various positions as an energy manager and director of facilities for a K-12 school district. He holds experience in energy efficiency, energy audits, building automation, photovoltaics, and HVAC systems. In addition, he has experience as a consulting mechanical engineer in HVAC design. Todd has designed air distribution, hydronic, geothermal, and heat recovery systems. In addition, he has done computer-building modeling for energy analysis. Todd has engineered projects for educational, health care, and hospitality facilities and is well-versed in industrial regulations, safety procedure requirements, and certifications.

Education

M.S., Mechanical Engineering, University of Louisville

Registration

Certified Commissioning Agent

3 Years with firm

14 Years experience

Select Project Examples

- Owen County Schools, High School HVAC Renovation Cx; Owenton, KY
- Oldham County Schools, North Oldham Middle School Cx; Crestwood, KY
- Shelby County Public Schools, High School Cx; Shelbyville, KY
- Fayette County Public Schools, Tates Creek High School Cx; Lexington, KY
- Katy Independent School District, Katy Elementary School Addition/Renovation Cx; Katy, TX

Chris Miller

Commissioning Controls Specialist

As a Commissioning Controls Specialist, Chris ensures the Building Management System is configured and programmed to meet critical design criteria so that systems operate effectively. He has extensive experience commissioning complex mechanical systems utilizing various software and programming languages. Additionally, he is committed and passionate to ensure building operators receive a building that is set up to maximize long-term operational efficiencies. Chris works closely with mechanical contractors, system integrators, and equipment manufacturers to deliver successful projects that meet the customers' budget, schedule, and performance requirements.

Education

Diploma, Crosby High School

1 Year with firm

18 Years experience

Select Project Examples

- Humble Independent School District, Guy M Sconzo Early College High School; Humble, TX
- Humble Independent School District, Pine Forest Elementart; Humble, TX
- Conroe Independent School District, Grand Oaks High School; Spring, TX
- Tomball Independent School District, Northpoint Intermediate School; Tomball, TX
- Fort Bend Independent School District; Hightower High School; Missouri City, TX

CMTA

Staff & Resources

Our assigned professionals are readily available and eager to undertake your projects. CMTA is a firm that includes over 900 employees across 44 offices with the capacity to handle complex and fast track projects. This project is led and managed from our Louisville office, which is staffed by 125+ employees and has a long relationship and history of successful work in the area and directly for the school system. We are available to meet the district's scheduling and timing demands with qualified personnel.

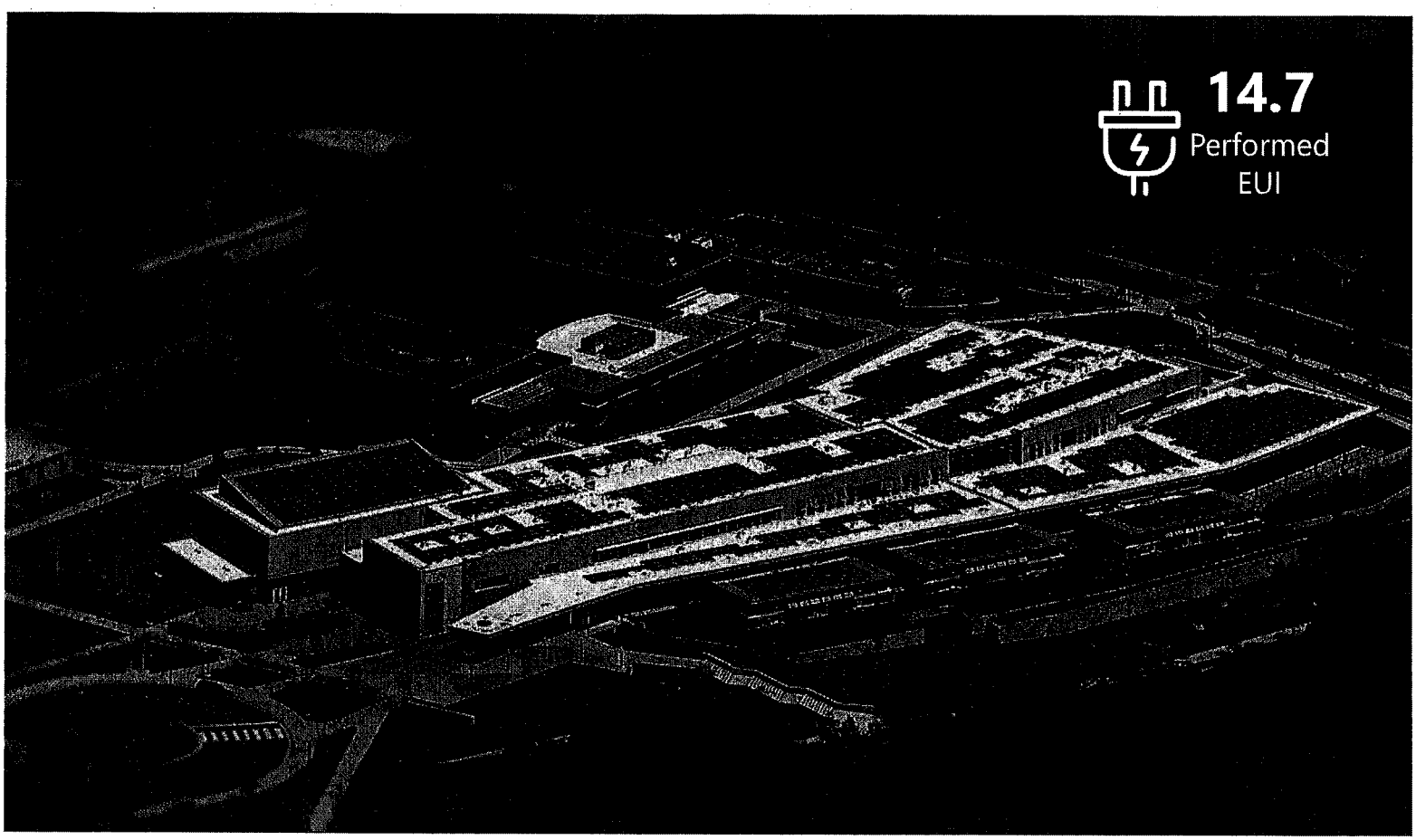
Brent Leinenbach will assemble the most appropriate and responsive team based on the identified scope of work. With weekly office planning, Brent will easily manage and accommodate greater project involvement as your project and client's needs grow. For instance, any of these team members could manage as much as 40-60% workload supporting this contract with short-term planning and support from the larger team.

A brief outline of our team's availability for this project is outlined below:

Estimated Workload Availability

Project Phase	Brent Leinenbach	Zac Schneider	Daniel Chesser	Chris Miller	Sam Gordon	Todd Givens
Construction	20%	5%	5%	5%	60%	5%
Acceptance & Post-Occupancy	20%	5%	5%	5%	60%	5%

Previous Experience



Discovery Elementary School

Arlington Public Schools | Arlington, Virginia

CMTA pushed the envelope on the client's goals to help them achieve zero-energy goals within the design budget — proving that an urban school can be zero-energy. As a result, a successful project has become one of the most energy-efficient schools in the country, operating at 14.7 kBtu/sf yr. As a result, this building requires less maintenance, provides healthier air, produces less run-off, and increases occupant productivity, all while saving Arlington County substantial amounts of money in operating costs. CMTA's immersive curriculum integration program, Sphere, integrates real-time data and STEM, energy, and sustainability examples throughout this school. To view the system, go to Discovery.CMTASphere.com

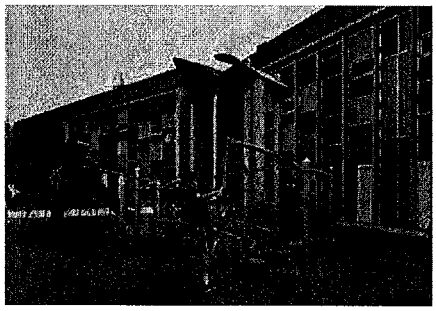
Project at a Glance

Completion: 2015
Size: 98,000 SF
Cost: $32,000,000
Awards / Certifications:

- LEED Zero
- LEED Gold
- ENERGY STAR Score: 100
- 2017 AIA COTE Award
- 2018 ASHRAE National Technology Award- First Place

Reference:

Cathy Lin
Director, Facilities and Operations
(571) 722-4473
cathy.lin@apsva.us



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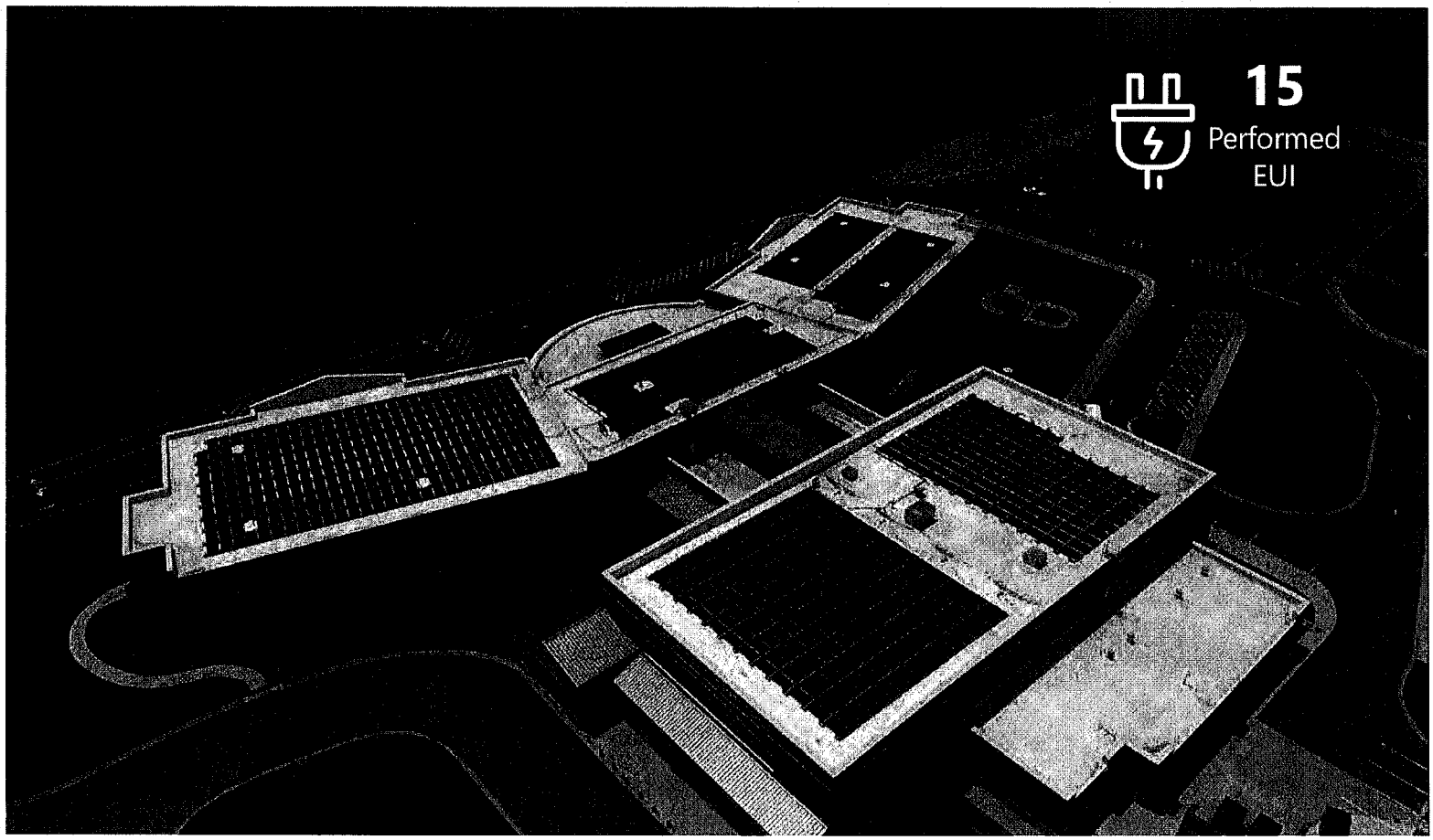


Jennings Creek Elementary School

Warren County Public Schools | Bowling Green, Kentucky

Warren County Public Schools takes pride in being a progressive school district, especially in energy-efficiency and zero energy buildings. According to Energy Star, the median elementary school's energy usage index (EUI) is 48.5. As of February 2020, Jennings Creek Elementary School operates at 15.0 EUI, representing an energy usage 69% below a typical facility, making it the most energy-efficient school in Kentucky and one of the most energy-efficient schools in the country.

The Data-Driven Design approach used to size the solar photovoltaic system resulted in a cost-efficient zero energy facility. Although it was not a part of the guaranteed savings, the net-meter solar design, combined with demand limiting control strategies, also offsets a portion of the facilities' electrical demand charges.

Jennings Creek's average monthly peak demand during a 30-minute period of time is 127 kW or 1.5 W/SF, which is ~25% less than similar facilities in Warren County.

Project at a Glance
Size: 88,472 Square Feet
Cost: $18,400,000
Completed: 2018
HVAC System: Geothermal
Zero Energy

Reference:
Jay Wilson
Energy Manager
(270) 781-5150
jay.wilson@warren.kyschools.us

"I would highly recommend the CMTA team to any entity looking to be blown away, and that desires proven results."

Chris McIntyre
CFO - Warren County Public Schools

Cardinal Elementary School

Arlington Public Schools | Arlington, Virginia

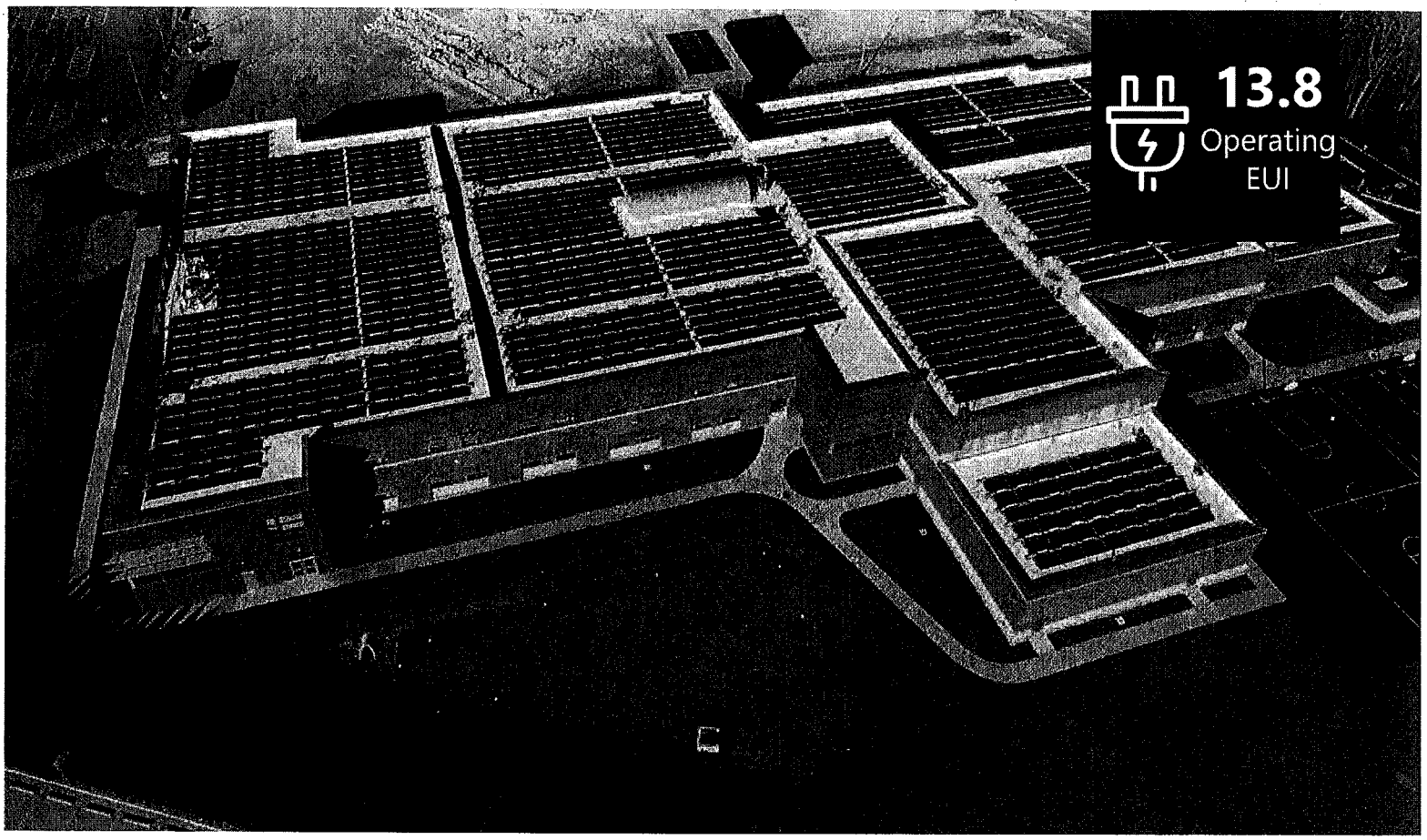
Cardinal Elementary School, CMTA's third net-zero school in Arlington, sets new standards for design excellence in sustainability, energy performance, and innovative learning environments for Arlington Public Schools.

Building on energy performance innovations and user feedback from previous projects, Cardinal Elementary raises the bar for students, teachers, and the community who know firsthand how Discovery has revolutionized the district – not only with award-winning learning spaces but also with the net-zero design that provides Arlington Public Schools with $117,000 of annual utility cost savings in comparison to a typical district school. This building is designed to require less maintenance, provides healthier air quality, and increase occupant productivity while planning to save Arlington County substantial amounts of money in operating costs.

CMTA provided MEP design, sustainability consulting, and commissioning services for the new school, which achieved 16.3 EUI.

Project at a Glance
Completion: 2021
Size: 111,000 SF
Cost: $42,600,000
HVAC System: Geothermal
Awards / Certifications:
Zero-energy Targeted
LEED Silver Targeted

Reference:
Cathy Lin
Director, Facilities and Operations
(571) 722-4473
cathy.lin@apsva.us



Wilde Lake Middle School

Howard County Public Schools | Columbia, Maryland

The Maryland Energy Association sought sustainable design and commissioning expertise for Wilde Lake Middle School. CMTA was tasked with contributing recent lessons learned in a net-zero focused design charette and providing LEED enhanced commissioning for the new Wilde Lake Middle School which was targeting and achieved Maryland's first zero-energy school.

CMTA's commissioning team performed an in-depth analysis of the advanced metering system, demand control ventilation system, geothermal HP compressor operation, and lighting control system to ensure we implemented known energy conservation measures. Once confirmed, CMTA dedicated time to fine-tuning and ensuring the systems operate per the designed sequence of operations. One year of building performance data indicates that Wilde Lake Middle School is performing at a 13.8 EUI, making it among the most energy-efficient school in the United States.

Project at a Glance
Completion: 2017
Size: 106,221 SF
Cost: $35,000,000
HVAC System: Geothermal WSHP
Pressure Testing Leakage Rate .101 cfm/SF
LEED Platinum
Certified Zero-Energy

Reference:
Scott Washington
(410) 313-6807
Scott_washington@hcpss.org

Graceland O'Donnell & Holabird Schools

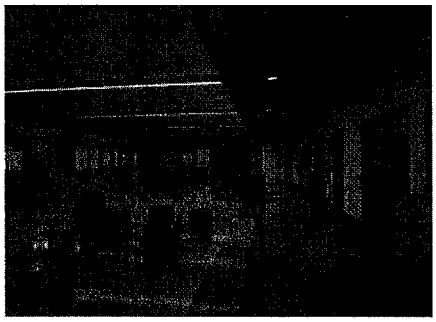
Baltimore City Public Schools | Baltimore, Maryland

Baltimore City Public Schools needed to replace two aging urban elementary/middle schools 5 miles apart and located close to the Baltimore Inner Harbor. The new prototype schools were required from the start to be "Zero Energy Ready". During the design process, CMTA worked closely with the BCPS and Grimm and Parker to challenge the previous ways that buildings were designed for the school district. Through our First 30 collaborative effort, we were able to drive down the energy usage in the building by challenging all energy sources within the building.

This drastic energy reduction, allowed BCPS to be awarded the Maryland Energy Authority Zero Energy Grant to purchase the renewable energy source for the project. The project bid within their original budget and the renewable energy cost only added 2.5% to the project budget. This has resulted in a 117,000 square foot Urban School Prototype that has been designed to achieve Zero Energy and LEED Platinum Certification within their traditional project budgets.

Project at a Glance
Completion: 2021
Cost: $64,000,000
Size: 117,000 SF
Project Type: New Construction
HVAC System: Geothermal WSHP w/DOAS, demand control ventilation system
Zero Energy
LEED Platinum

Reference:
Sonja Brookins Santelises, CEO
(443) 984-2000
CitySchoolsCEO@bcps.k12.md.us



Energy Performance Criteria

The following are five K-12 school projects where EUI upon completion of commissioning was 25 Kbtu/SF or less:

	School Name:	Wilde Lake Middle School, Columbia, MD | EUI: 13.8
A	**HVAC System Type:**	Geothermal WSHP
	Total Building Square Footage:	106,000 SF
	School Name:	Discovery Elementary, Arlington, VA | EUI: 15.8
B	**HVAC System Type:**	Geothermal WSHP
	Total Building Square Footage:	98,000 SF
	School Name:	Richardsville Elementary School, Bowling Green, KY | EUI: 18
C	**HVAC System Type:**	Geothermal WSHP
	Total Building Square Footage:	72,300 SF
	School Name:	Morgan County High School, Morgan City, KY | EUI: 19.0
D	**HVAC System Type:**	Geothermal WSHP
	Total Building Square Footage:	102,000 SF
	School Name:	Frederick Douglas High School, Lexington, KY | EUI: 18.0
E	**HVAC System Type:**	Geothermal WSHP
	Total Building Square Footage:	287,000 SF

Approach
Process

b. Total Building Square Footage:

Briefly describe the Approach/Process your firm will take in commissioning this facility. List challenges and thoughts to overcome. List your firm's commissioning goals for the project:

SEE FOLLOWING PAGES

3. PROPOSAL
   a. Fee Proposal. Cost for all services associated with Commissioning as outlined above.
   b. An estimated total of reimbursable expenses.
   c. Statement that CxA firm will comply with all Scope of Service items listed in RFP.

4. ADDITIONAL INFORMATION
   a. Provide any other relevant information and/or experience.

Commissioning Approach

CMTA takes a facilitator's approach to building commissioning. Commissioning should take a holistic approach reviewing how systems work together instead of running manufacturers' start-up programs on individual systems. Today's building owners demand the management of complex building systems. A consulting engineering and commissioning firm that understands these systems are crucial to successfully commencing building operations and energy management systems.

System Controls

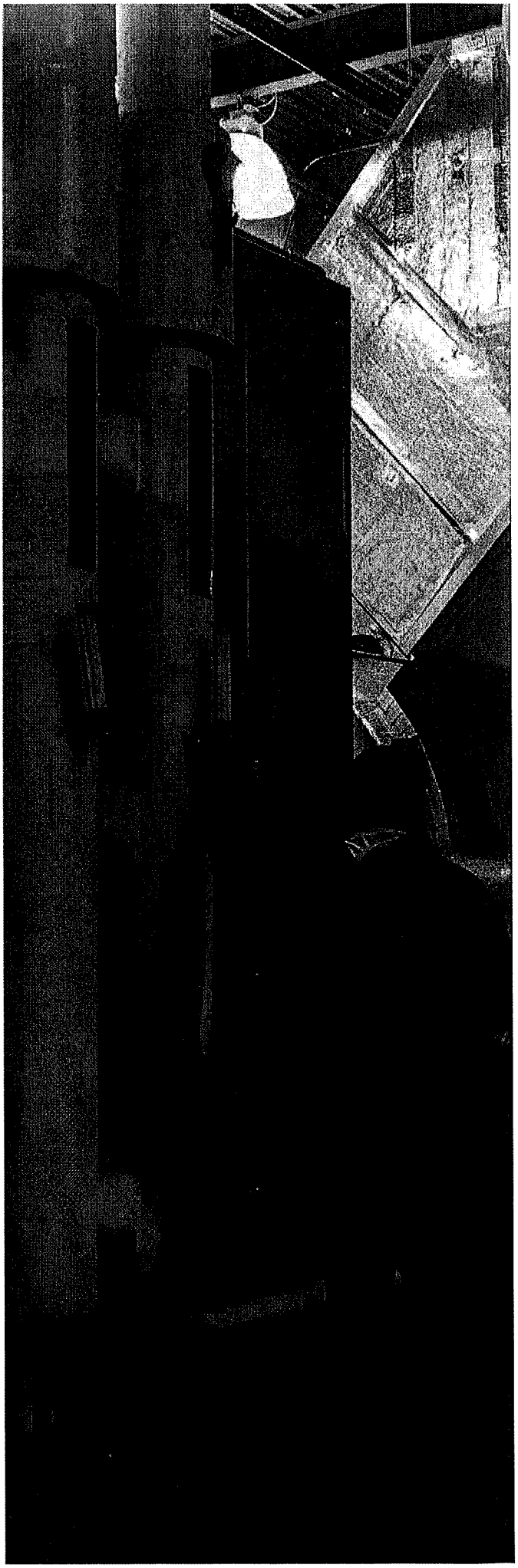
CMTA has a thorough understanding of the importance of controls. Controls are vital in getting a building to operate per the specifications, engineering intent controls, industry best practices, and Owner preference, simultaneously and synergistically working together.

Our experienced controls team thoroughly understands all aspects of controls: from design and application engineering through installation and programming to verification, Owner operations, maintenance, and system evolution over time. Most importantly, our controls team completely understands controls in an integrated building systems context. The building systems must be understood, accounted for, and functional and operational status must be factored in where no detail can be ignored. The controls system is the binding agent for sustainable building system operation.

Optimization

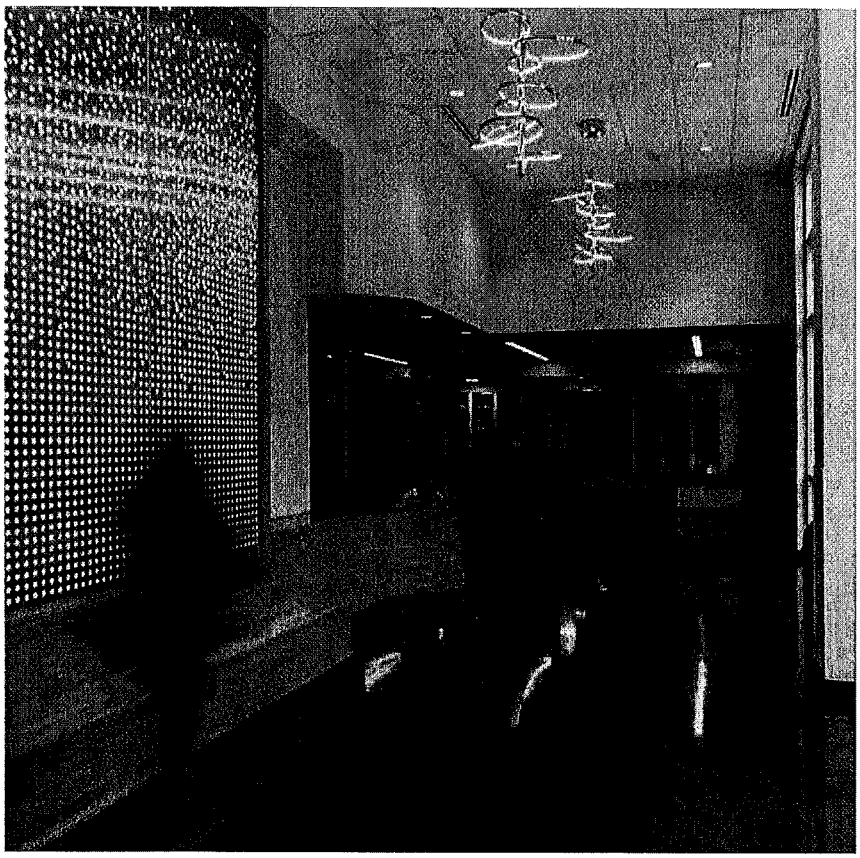
We understand that each building and its operation is unique. There is an optimization of the building that needs to occur after the building is occupied in order for the building to properly perform.

Our team's unique understanding of building science allows us to commission buildings better. Our ability to troubleshoot known trouble points means that the owners we work for can feel confident that their building is operating at optimal levels and reducing utility costs. Based on our experience, we firmly support the International Energy Code requirement for commissioning.



Cost Shifting

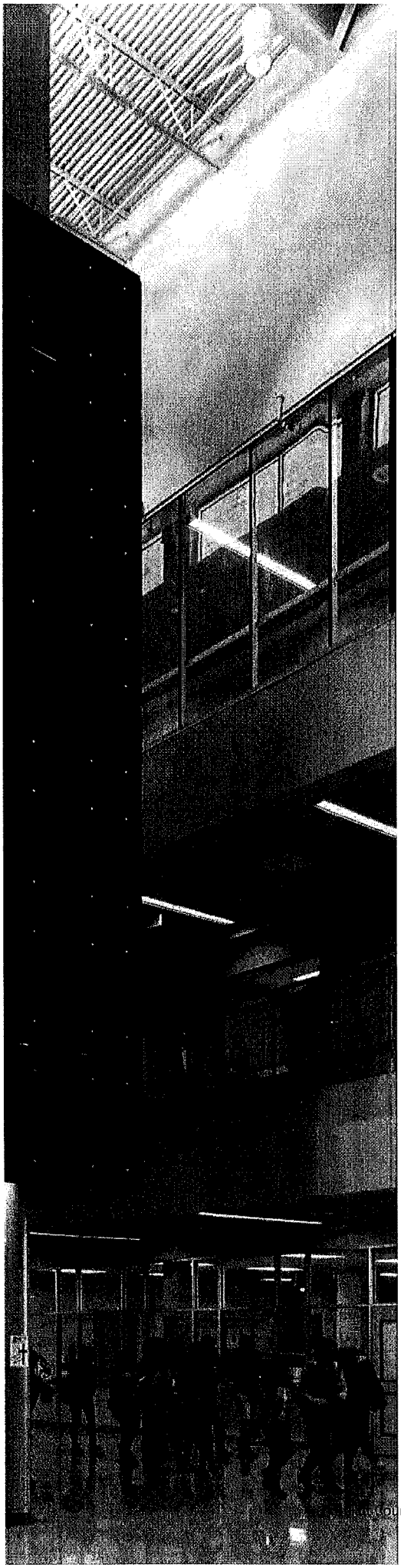
The life-cycle cost of high-performance buildings and systems will present itself as the obvious best choice during analysis and provide you with the best overall value. However, even in most cases, high-performance design can be accomplished with little, if any, additional first costs through cost shifting. For example, if we know that a building will have an excellent building envelope and includes envelope pressure testing, we can reduce our HVAC system sizing accordingly, shifting costs.



Occupant Wellness

CMTA's buildings are moving beyond energy efficiency and sustainability to lead the industry's focus on improving occupant health. Our team has a vast understanding of the building performance metrics and design strategies that enhance the built environment for occupant comfort and wellness. This knowledge allows us to successfully incorporate strategies to focus on the occupant's well-being while still maintaining budget and energy efficiency goals.

The International WELL Building Institute (IWBI), a public benefit corporation, is leading the movement to promote health and wellness in buildings. Their WELL Building Certification is the leading tool for advancing health and well-being in buildings globally. CMTA has embraced this new certification and has three buildings certified WELL Buildings, including our latest office building in Louisville, Kentucky. In addition, 22 of our staff engineers are WELL Accredited Professionals.



Working Within a Schedule

CMTA has an excellent reputation for delivering projects within a specified schedule. This success stems from careful coordination and establishing critical milestones with the Owner as early as possible in the planning and design process. Additionally, involving commissioning staff early in the process assists in the smooth transition between design and commissioning services. Once milestones are prioritized, projects are internally scheduled and coordinated with the firm's workload. Staff is then assigned as needed to meet the client's expectations.

Scheduling Approach

In general, the following sequential priorities are followed:

- Equipment is not temporarily started (for heating or cooling) until pre-functional checklist items and the entire manufacturer's pre-start procedures are completed and moisture, dust and other environmental and building integrity issues have been addressed.
- The controls system and equipment it controls are not functionally tested until all points have been calibrated and pre-functional testing completed.
- Testing, adjusting, and balancing (TAB) is not performed until the controls system has been operationally verified and approved by the Commissioning Authority for TAB work. TAB is not performed until the envelope is completely enclosed and ceiling complete.
- Functional testing is not begun until construction, start-ups and TAB is completed, for a given system.

Commissioning Milestones Project Schedule

The contractor updates and submits their schedule provided in accordance with project schedule to show commissioning milestone activities. Sufficient time is included to accommodate the requirements of this specification section. Regardless of the submitted schedule, the requirements of this specification section must be completed prior to system acceptance. The following activities are included in the project schedule:

- Pre-functional checklist submittal
- Performance verification tests
- Testing, adjusting, and balancing (TAB)
- TAB verification
- Functional performance testing
- Air barrier leakage testing
- Deficiency correction
- Re-testing
- Training
- Systems manual, maintenance plan, and service life plan submission

Sample Schedule Milestones & Timeline

Milestone	Schedule Time
Qualifications	Submitted with cost proposal.
Design Phase Commissioning Coordination Meeting	Prior to 65% design; held at site
Design Phase Commissioning Plan	Within 2 weeks following design commissioning coordination meeting
65% Design Review Comments	Within 2 weeks following receipt of 65% design.
100% Design Review Comments	Within 2 weeks following receipt of 100% design.
Construction Phase Commissioning Plan	Within 2 weeks following receipt of 100% design.
Corrected Final Design Review Back Check	Within 2 weeks following receipt of corrected final design.
Construction Phase Commissioning Coordination Meeting	30 days after construction. Held at site.
Progress Meetings	Ongoing through construction.
Project Schedule Review	Ongoing through construction.
Construction Submittal and Shop Drawing Reviews	Within 2 weeks after receipt of each submittal.
Pre-Functional Checklists Submitted by Construction Contractor	Within 2 weeks after receipt.
Pre-Functional Inspection	Following pre-functional checklist submittal by contractor and prior to functional performance testing.
Trend Log Review	At least 7 days prior to scheduled functional performance tests for HVAC systems. Review within 3 calendar days.
Functional Performance Testing	Following pre-functional inspection and all testing as required by specifications. Deficiencies reported within 1 week following test.
Training Plan Review	Within 2 weeks of receipt.
Systems Manual and Maintenance Plan Review	Within 2 weeks of receipt.
Commissioning Report	Within 1 week of completion of all activities except for deferred tests and post-construction activity.
Deferred Testing Commissioning Report Update	Within 1 week following deferred testing.
Trend Log Review	Monthly after construction up to 9 months. Review within 1 week after receipt.
Trend Log Addendum	Within 2 weeks after receipt of the final trend log.
Post-Occupancy Review	Concurrent with 9-month warranty walkthrough.
Post-Occupancy Addendum	Within 2 weeks following site visit.
Post-Occupancy Survey	9 months after construction completion (seasonal).

Fee Proposal

CMTA Commissioning

Building Science Leadership

July 14, 2025

Re: MEP Commissioning Services
BCPS - Physical Science Centers at North Bullitt, Bullitt Central and Bullitt East High Schools
Shepherdsville, Mt. Washington & Hebron, Kentucky
BG# 24-192 / BG#25-145 | ska# 2023-50

Dear Mr. Clemens,

CMTA is pleased to submit this proposal for providing Commissioning (Cx) Services for the **BCPS - Physical Science Centers at North Bullitt, Bullitt Central and Bullitt East High Schools** project in Kentucky. This proposal includes comprehensive commissioning (Cx) process activities for mechanical, electrical, and plumbing systems and assemblies for this facility.

Properly tuning the building systems are critical components to ensuring the building is operating in compliance with construction documents and design intention. We are excited to partner with you to offer this service. Please refer to the scope of services below for our detailed involvement.

I. Commissioning Scope

MEP Commissioning

Complete the following commissioning process (CxP) activities for mechanical, electrical, plumbing systems and assemblies in accordance with ASHRAE Guideline 0 and ASHRAE Guideline 1.1 for HVAC&R systems, as they relate to energy, water, indoor environmental quality, and durability. We propose to perform the following tasks:

1. Review the OPR, BOD, and project design.
2. Develop and implement a Cx plan.
3. Host regular Commissioning Meetings to coincide with Owner Progress Meetings
4. Review contractor submittals.
5. Development of pre-functional checklists and functional test sequences.
6. Conduct functional testing of the base building systems and equipment.
    a. The controls contractor shall manipulate the building controls system under the direction of the Owner & CxA to collect data and to demonstrate functionality of the systems per the designed functional test sequences.
7. Development and maintenance of a Commissioning Issues and Benefits Log (Deficiency List).
8. Verify operator and occupant training delivery and effectiveness.
9. Development of a Commissioning Report.
10. Review building operations 10 months after substantial completion or during seasonal testing window.
11. MBECx Analysis & Optimization:

a. Occupancy Phase testing and trend data review will be executed through the quarterly analysis of an MBCx plan. This approach allows for increased efficiency and eliminates disruptions to the daily operations of the facility by remotely analyzing the seasonal performance of critical systems over extended periods of time without having to manually simulate varying operational conditions on-site.
    i. This scope includes a MBCx kickoff meeting and quarterly meetings to review findings and track the implementation of recommendations and resolution of identified issues.
    ii. CMTA will provide the MBCx scope of work through the 12-month warranty period following substantial completion.
    iii. Further, building systems shall be optimized through the use of trending to ensure that actual system performance meets or exceeds energy model predictions.

II. Systems to be Commissioned:

High Performance Integration and Verification Commissioning - Approach
We propose that for the High School Field House facilities (3 facilities at ~49,362 sf each) the systems to be commissioned include, but are not limited to the following:

HVAC Systems

1. Outside Air Units (DOAS)
2. Air Terminal Units (VAVs)
3. Air Handling Units
4. Geothermal Loop & Associated components
    a. Heat Pump Chillers, Hydronic Pumps, VFD's, Valves, etc.
5. Water Source Heat Pumps
6. Unit Heaters
7. Exhaust & Circulation Fans
8. Test & Balance Witness and Review
9. Fire Alarm system Integration to HVAC systems
10. DDC Controls
    a. DDC System Point Integration & Trending Compliance
    b. DDC System Graphics Compliance

Plumbing Systems

1. Domestic Hot Water System
    a. Water Heaters & associated pumps, components.

Electrical Systems

1. Lighting Controls – Interior/Exterior/Site
2. Emergency and Standby Power Systems
    a. Generator & ATS Equipment
    b. Power Monitoring & Metering System

III. Suggested Add Services

Suggested Add Service #1 – BPT/Thermography (Envelope Performance Testing Activity):

For newly constructed buildings, we recommend the commissioning agent perform Whole Building Envelope Airtightness Testing services. This is an HVAC and energy performance optimization service. If air leakage is found, which is likely, those leaks have a direct impact on energy efficiency, temperature and humidity control, and occupant comfort. If we find leaks that would result in moisture infiltration, and mold was to grow, it could have a big impact on occupant care and health. Please refer to the Add Service scope of services below for a more detailed explanation.

Whole Building Envelope Airtightness Testing – Building Pressure Testing per ASTM E779/E1827 Testing Methods Guideline. Testing to be provided by CMTA, scheduled and coordinated with owner and sub-contractors. CMTA will also utilize a thermal imaging camera to document thermal anomalies that are distinguishable during testing. CMTA shall provide a Building Envelope Commissioning Agent that owns and operates the required Orifice Blower Door Equipment.

IV. Proposed Fee:

Given the systems described above and the complexity in scheduling and testing these systems, CMTA shall perform the above scope of work for the fee breakdown listed below:

MEP Cx - Fee Breakout Description			
Phase	**Facility Description**	**Fee** (MEP Cx Services)	**Expenses**
I	**North Bullitt HS Physical Science Center** (49,362 sf.)	$ 24,575.00	included in fees listed.
II	**Bullitt Central HS Physical Science Center** (49,362 sf)	$ 24,575.00	included in fees listed.
III	**Bullitt East HS Physical Science Center** (49,362 sf)	$ 24,575.00	included in fees listed.
	Grand Total:	**$ 73,725.00**	
Notes: a) Expenses for trips to the site are included in the fees listed above. We will work with the owner group and the Contractor to schedule and prioritize work in an effort to maximize results.			

Suggested Add Services - Fee Breakout Description (Optional)			
Phase	**Facility Description**	**Fee** (Add Services)	**Expenses**
A	**Add Alternate #1 – Building Pressure Testing & Thermography Services - Add to Base Bid Fee (Optional)** (Final Test of Newly Constructed Buildings) This mobilization would involve testing each of the (3) buildings individually in (3) separate test events, after construction is significantly complete.	North HS – $ 12,250.00 Central HS – $ 12,250.00 East HS – $ 12,250.00	included in fees listed.

Functional Performance Testing Requirements:

1. The above lump sum fee includes one initial functional performance test for each system noted to be commissioned above.
2. If the Contractor has deficiencies that cannot be corrected at the time of functional testing, that part of the sequence will be retested at a later date at no additional charge. If the deficiency does not pass during the first retest and the retest requires an additional trip to the site, the Contractor will be billed for the commissioning personnel's return trip for each subsequent retest at a rate of $1,200 per trip. The owner group will not be billed in this circumstance. This does not consider a return trip for a second Building pressure test mobilization.

V. Exclusions

1. The following items/systems have been excluded from this proposal: (Note - A revised proposal to include these services is available upon request)
    a. Security/Access Control Systems Commissioning
    b. Telecommunications/LV Systems Commissioning
    c. AV Systems Commissioning
    d. Building Envelope Commissioning

Please contact us if you have any questions or would like to make any modifications to this proposal. Again, thank you for the opportunity.

Sincerely,

Brent Leinenbach
Commissioning Accounts Manager
bleinenbach@cmta.com, 502-216-3668

_____
Owner Representative

_____
Date

Additional Information

Additional K-12 Commissioning

Alvin High School Natatorium & Central Plant
Alvin Independent School District, Houston, Texas

CMTA provided commissioning and MEP services for Alvin High School's 23,459 SF natatorium and central plant. As a multi-building campus, Alvin High School expanded its central plant building to include the new natatorium and performing arts buildings. The natatorium building's exterior was designed to match the campus's clean aesthetic while incorporating glazing to bring natural light into the space. To ensure that programmed sequences met the designed series of operations, CMTA conducted field observations, above-ceiling punches, TAB reviews, and functional performance testing, including trending analysis and optimization services.

The Irsay Family Sports Center
Park Tudor Schools | Indianapolis, Indiana

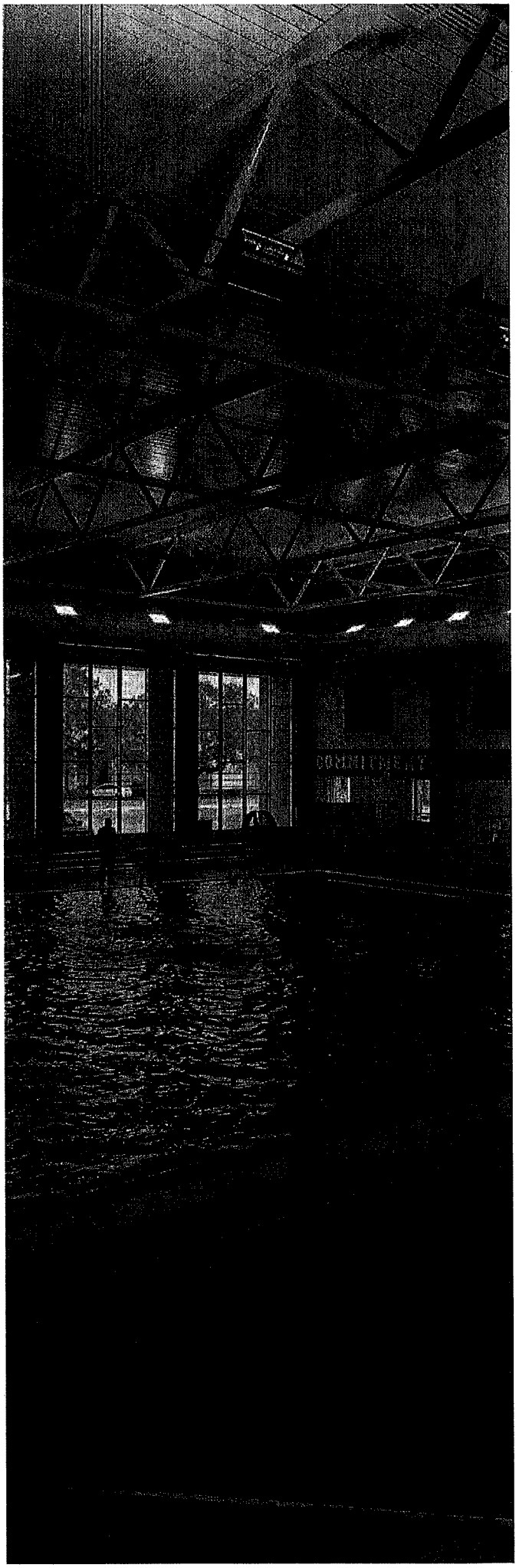
Gifted from the Irsay family, Park Tudor is spearheading construction for their new campus sports and wellness center. Named "The Irsay Family Sports Center for Health and Wellness," the center will serve as the new home for Park Tudor athletics and physical education. CMTA provided high-performance integration and verification Cx, including blower door testing and thermography. Systems commissioned included: Outside Air Unit, Split Systems, Exhaust/ Circulation Fans, Roof Top Units, VRF System, Lighting Controls, DDC System Integration and GUI Compliance.

Warren County Public Schools, Richardsville Elementary School, Bowling Green, Kentucky

CMTA provided Design and Construction phase commissioning for this new 72,300 SF elementary school, which became the first zero energy public school in teh United states. To make zero energy affordable, the design and commissioning focused on sweeping energy conservation measures, resulting in a 18 EUI.

Charlotte Mecklenburg Schools, New Pineville Elementary School, Charlotte, North Carolina

The new Pineville Elementary School opened for classes was first LEED-certified school in the 168-School Charlotte-Mecklenburg School Distric. CMTA was responsible for the LEED Fundamental and Enhanced Cx services for the new building.



acg
AABC Commissioning Group

hereby certifies that

Brent Leinenbach, CxA

CMTA Engineering Consultants

has met all prerequisites demonstrating independence and the technical, management, and communications skills required to implement the commissioning process in new and existing buildings, and passed the necessary examination to be awarded this certificate in recognition of their qualifications as an ACG

Certified Commissioning Authority

Registration number: 321-1894 . This certificate, valid effective 1/1/2025 and expiring on 12/31/2025 , is renewable on an annual basis upon meeting all requirements noted in the CxA Candidate Handbook.

Better Buildings RECOGNIZED PROGRAM MEETS U.S. DEPARTMENT OF ENERGY GUIDELINES

ANAB ACCREDITED

Scott A. Gordon, PE, CxA
Certification Council Chair

Ray Bert
ACG Executive Director

acg
AABC Commissioning Group

hereby certifies that

Sammy J. Gordon, CxA

CMTA Engineering Consultants

has met all prerequisites demonstrating independence and the technical, management, and communications skills required to implement the commissioning process in new and existing buildings, and passed the necessary examination to be awarded this certificate in recognition of their qualifications as an ACG

Certified Commissioning Authority

Registration number: 323-2090 . This certificate, valid effective 1/1/2025 and expiring on 12/31/2025 , is renewable on an annual basis upon meeting all requirements noted in the CxA Candidate Handbook.

Better Buildings RECOGNIZED PROGRAM MEETS U.S. DEPARTMENT OF ENERGY GUIDELINES

ANAB ACCREDITED

Scott A. Gordon, PE, CxA
Certification Council Chair

Ray Bert
ACG Executive Director

acg
AABC Commissioning Group

hereby certifies that

Zachary Schneider, CxA

CMTA Engineering Consultants

has met all prerequisites demonstrating independence and the technical, management, and communications skills required to implement the commissioning process in new and existing buildings, and passed the necessary examination to be awarded this certificate in recognition of their qualifications as an ACG

Certified Commissioning Authority

Registration number: 508-309 . This certificate, valid effective 1/1/2025 and expiring on 12/31/2025 , is renewable on an annual basis upon meeting all requirements noted in the CxA Candidate Handbook.

Better Buildings RECOGNIZED PROGRAM MEETS U.S. DEPARTMENT OF ENERGY GUIDELINES

ANAB ACCREDITED

Scott A. Gordon, PE, CxA
Certification Council Chair

Ray Bert
ACG Executive Director

acg
AABC Commissioning Group

hereby certifies that

Todd W. Givens, CxA

CMTA Engineering Consultants

has met all prerequisites demonstrating independence and the technical, management, and communications skills required to implement the commissioning process in new and existing buildings, and passed the necessary examination to be awarded this certificate in recognition of their qualifications as an ACG

Certified Commissioning Authority

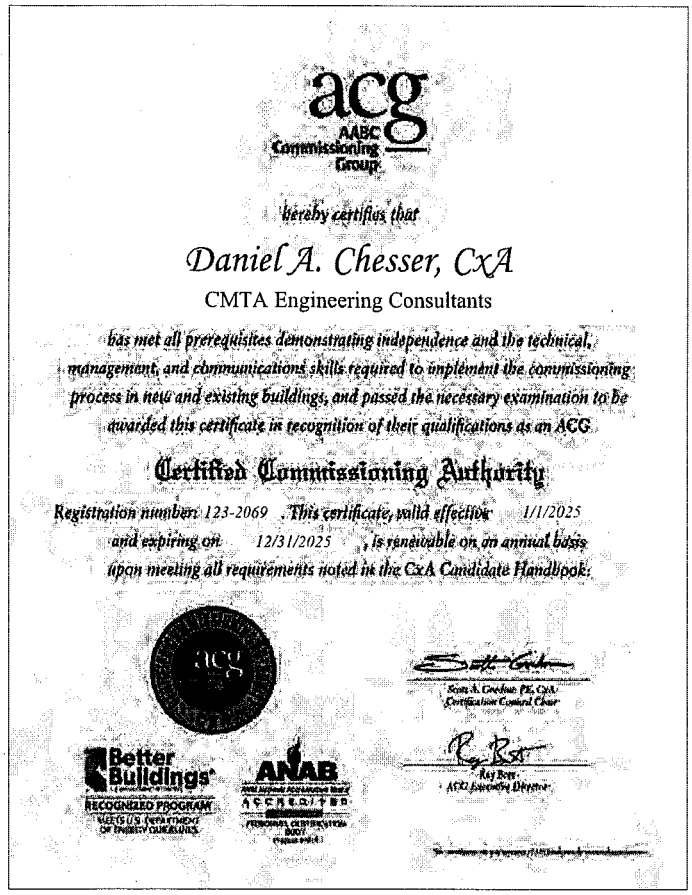
Registration number: 323-2082 . This certificate, valid effective 1/1/2025 and expiring on 12/31/2025 , is renewable on an annual basis upon meeting all requirements noted in the CxA Candidate Handbook.

Better Buildings RECOGNIZED PROGRAM MEETS U.S. DEPARTMENT OF ENERGY GUIDELINES

ANAB ACCREDITED

Scott A. Gordon, PE, CxA
Certification Council Chair

Ray Bert
ACG Executive Director



acg
AABC Commissioning Group

hereby certifies that

Daniel A. Chesser, CxA

CMTA Engineering Consultants

has met all prerequisites demonstrating independence and the technical, management, and communications skills required to implement the commissioning process in new and existing buildings, and passed the necessary examination to be awarded this certificate in recognition of their qualifications as an ACG

Certified Commissioning Authority

Registration number: 123-2069 . This certificate, valid effective 1/1/2025 and expiring on 12/31/2025 , is renewable on an annual basis upon meeting all requirements noted in the CxA Candidate Handbook.

Better Buildings RECOGNIZED PROGRAM

ANAB ACCREDITED

Scott A. Goodine, PE, CxA
Certification Council Chair

Ray Bets
ACG Executive Director

acg
AABC Commissioning Group

Annual Membership Certificate

Awarded to

CMTA Engineering Consultants

as a member in good standing of the AABC Commissioning Group for the year

2025

This company has met all requirements for membership and is entitled to all rights and privileges thereof. This certificate is renewable on an annual basis and expires December 31, 2025.

Troy N. Byers, PE, CxA, President

Ray Bets, Executive Director

Request For Proposal Response
For
Commissioning Services

Bullitt County Public Schools
Physical Science Centers at
North Bullitt, Bullitt
Central and Bullitt East High Schools

MOVING FORWARD

BULLITT COUNTY PUBLIC SCHOOLS

Attention: Danny Clemens
Director of Facilities
Bullitt County Schools

July 14, 2025

Facility
Commissioning
Group

facomgrp.com
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8355 Rockville Road, Suite 36 • Indianapolis, IN 46234 • Tel. (317) 536-2618

Facility Commissioning Group

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Request for Proposal for Commissioning Services Bullitt County Public Schools Physical Science Centers at North Bullitt, Bullitt Central and Bullitt East High Schools

TABLE OF CONTENTS

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COMMISSIONING POINT OF CONTACT

Facility Commissioning Group (FCG) appreciates this opportunity to respond to your request for commissioning proposals for Bullitt County Schools. FCG has prepared this proposal with a keen understanding of the unique characteristics of this project and the coordination required of commissioning services to assure delivery of a working and sustainable building.

The services proposed herein are to be wholly performed by FCG personnel, including licensed professional engineers. FCG provides commissioning services as our exclusive business, which distinguishes us from other firms and enhances the continuity and absence of conflicts in our owner advocacy approach. Our personnel are local, immediately available and highly motivated to provide outstanding customer service.

In investing efforts necessary to assist the Bullitt County Schools in expressing and realizing this projects various potential requirements, FCG maintains a consistent methodology approach to commissioning. We rely on any number of our FCG specialists as key agents for executing commissioning matched for their particular expertise.

The main point of contact during the RFP Process for this project will be:

V. Todd Yates, PE
President
158 Burt Road Lexington, KY 40503
859 533-5000 (Cell)
859 278-5552 (Office)
Todd@facomgrp.com

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FCG KEY LEADERSHIP

The commissioning provider team members noted below have experience in the systems and building type of this project, and all names listed below are experienced commissioning professionals.

PRINCIPAL IN CHARGE

Todd Yates, PE, TBE, CxA, LEED AP BD+C, President; Bachelor of Science degree from the University of Kentucky in Mechanical Engineering; licensed mechanical Professional Engineer in the Commonwealth of Kentucky (#20447), Indiana (#PE10001131), and Tennessee (#001906392); certified Test and Balance Engineer (TBE #97-06-34) with the Associated Air Balance Council (AABC) from 1991-2009, charter ACG Certified Commissioning Authority (#1004-042), and a USGBC LEED Accredited Professional (LEED AP). Todd is a member of ASHRAE. He is the lead commissioning agent for the Indianapolis Public Schools – Capital Improvements Program. Todd has performed mitigation commissioning for secondary schools in Kentucky and Indiana. Sample commissioning projects include IUPUI – Biotechnology Research and Training Center, IUS – Life Science Building and Library. Todd possesses extensive HVAC experience with schools, HVAC controls, and specializes in laboratory fume hood systems.

PROJECT MANAGER

Kim Kissick, CxA; Associate Degree in Electrical Engineering from University of Louisville. Kim has experience as a Certified Commissioning Authority (CxA) #609-512, ACG, OSHA 30-Hour Construction Safety and Health Course and has completed KSHE Safe Day One Training.
Kim Kissick has building systems operation, maintenance, and design experience since 1985. Kim's expertise includes central chiller plants, central steam plants, HVAC mechanical system & controls, clean rooms, electrical distribution systems, life safety systems, emergency power generator and automatic power transfer systems.
Prior industry experience includes 11 years as a Facility Engineer, Loss Control Manager and Maintenance Manager for Square D Company, three years as Facilities Manager for
Modine Manufacturer. Kim also has ten years of experience as an MEP Project Manager with Paladin, Inc.

PROFESSIONAL AND TECHNICAL STAFF

Jim Adams, PE, RCDD, EMP, CxA, LEED AP, Vice President; Bachelor of Science degree from the University of Kentucky in Electrical Engineering; licensed electrical Professional Engineer in the Commonwealth of Kentucky (#19845), and Ohio (#275323); ACG certified Commissioning Authority (CxA) #711-871; registered communications distributions designer (#140157), and is a USGBC LEED Accredited Professional (LEED AP). Jim is a member of the Building Industry Consulting Service International (BICSI) and ASHRAE. Jim has industry experience since 1991. Sample industry projects include Eastern State Hospital, Eastern Kentucky University – New Science Building and Western Kentucky University – College of Education & Behavioral Sciences. Mr. Adams provides commissioning support relating to

electrical distribution, lighting, life safety, emergency power generator and automatic power transfer systems as well as fire alarm and various low-voltage systems.

COMMISSIONING TECHNICIAN

Clay Kissick, CxT, ITC Level II Thermographer; Computer Engineering/Computer Science studies at University of Louisville; ACG Certified Commissioning Technician (CxT) #226-0322. Sample projects include Eastern State Hospital, UK Football Training Center, UK – Commonwealth Stadium Expansion/Renovation, and EKU – New Science Building. Clay provides technician services as needed to support the commissioning process at the direction of the project manager and principal in charge.

PROJECT ADMINISTRATOR

Brandon Moore, CxA, LEED GA, Vice President; Bachelor of Arts degree in Accounting from Transylvania University; ACG Certified Commissioning Authority (CxA) #518-1662 and USGBC LEED Green Associate #10797615. Brandon has administrative experience since 2008. Brandon's involvement in the following projects includes commissioning report production and distribution and file maintenance: Lucas Oil Stadium, Sweetwater Headquarters, Eastern State Hospital and Kenton County Middle Schools – Turkey Foot Middle School.

OUTLINE OF ANTICIPATED DUTIES

Todd will supervise commissioning project management and coordination of site activities. Todd Yates will provide professional engineering services to provide technical support related to HVAC and HVAC controls for the commissioning process. Todd will organize the commissioning provider group and will represent executive authority for document control and deliverables, and will serve as the HVAC/DHW project engineer and principal in charge for this project.

Kim Kissick will interact with the commissioning team as the primary commissioning project contact. Jim will be responsible for site supervision of the commissioning plan implementation and directing FCG field personnel execution of the Commissioning Plan and associated documentation provided by FCG and the installing contractors. Kim will be responsible for site project management, site visits and direction of the commissioning plan creation and site execution, directing field operations, developing commissioning protocols and document control.

Kim Kissick will be available to provide professional engineering services for lighting/daylighting controls design review and technical support, system verification and developing and performing Functional Performance Tests. Kim will also provide field support for the commissioning process for lighting and new electrical panelboard systems.

Brandon Moore will provide administration of this project, which includes document distribution, commissioning plan and report production and commissioning document administration. Brandon will provide communication support for the commissioning provider group and implement a professional approach to delivery of Facility Commissioning Group quality standards for the commissioning process.

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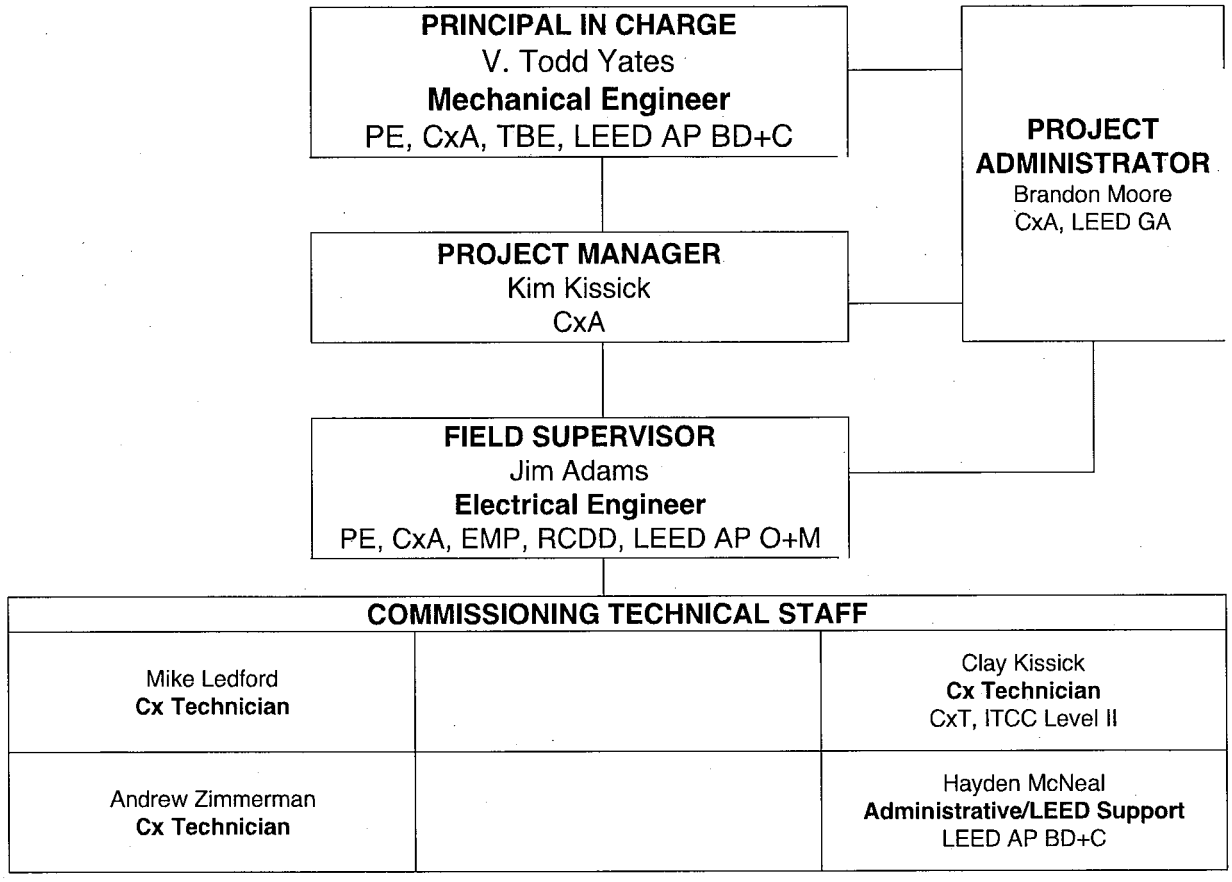
COMMISSIONING (Cx) ORGANIZATIONAL CHART



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V. TODD YATES, PE, CxA, TBE, LEED AP BD+C

Principal in Charge/Mechanical Engineer

WHY TODD?

- ✓ Todd has 33 years of Test and Balance and Commissioning experience. Todd is familiar with the tasks and roles of commissioning as he has dedicated his professional career to creating and delivering commissioning processes since 1998.
- ✓ Todd has vast experience in HVAC engineering and troubleshooting.
- ✓ Todd understands a wide variety of mechanical systems with first-hand experience as a Test and Balance Engineer
- ✓ Todd specializes in assessing building conditions and performance.

TODD'S ROLE

As project principal, Todd will oversee project direction as FCG's complete authority to make decisions, sign agreements, and commit company resources. Todd will use his vast interdisciplinary experience to implement and facilitate the commissioning process for this project and serve as the principal in charge for this project.

RELEVANT PROJECT EXPERIENCE

University of Kentucky - Expand/Renovate Student Center, Lexington, KY

The scope of this $201 million 362,000SF project included the preservation and complete renovation of the 1937/1938 Student Union and the 1924 Alumni Gymnasium, demolition of the 1963 and 1982 additions and construction of the new addition. Todd served as the Principal-In-Charge and as the Lead CxA for this project.

Purdue University - Mechanical Engineering Building, West Lafayette, IN

This $34,500,000, 84,000 SF addition included research labs, classroom to seat 120 students, faculty and graduate student offices, conference rooms, clerical office space, teaching labs and breakout rooms, undergraduate and graduate lounges, and a tech-atrium space for exhibits and departmental events. It was the first Purdue building constructed to achieve LEED certification (Gold-Certified) standards. Todd served as the Principal-In-Charge.

Indiana University Bloomington - Simon Hall, Bloomington, IN

$59.9 million 141,000SF multi-disciplinary science research building consisted of three generic laboratory models that are dedicated to the full spectrum of sciences that include biology, chemistry, cognitive science, physics, and biochemistry. Simon Hall's core facilities include a high field NMR facility, a BSL-3 facility which includes two suites for virology and bacteriology studies, an ISO 6 (formerly class 1,000) cleanroom, a high-resolution cryo-transmission electron microscope capable of nanoscale resolution, and an x-ray crystallography suite dedicated to crystal research. Todd served as the Principal-In-Charge.

Indianapolis Public Schools - Capital Improvements Programs, Indianapolis, IN

Todd served as the lead commissioning authority for this $693 million 6.5MSF project which included over 50 schools in a 10-year 3-phased period. Each project was commissioned individually involved providing existing buildings with adequate classrooms, modern media centers, access to technology, comfortable and healthy air circulation, better lighting, functioning restrooms, building safety, playgrounds, lunchrooms, and ADA compliance. Phase 3 of the schools pursued LEED Certification. FCG commissioned the HVAC, HVAC Controls, Domestic Hot Water, Electrical, and Lighting Controls Systems.

EDUCATION

University of Kentucky, Bachelor of Science, Mechanical Engineering, 1991

ACCREDITATIONS

Professional Engineer (PE) – KY, TN, IN, WV

CxA, #1004-042, ACG

TBE, #97-06-34, AABC

LEED Accredited Professional (LEED AP) #10269800

AFFILIATIONS

American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) member

Associated Air Balance Council (AABC)

AABC Commissioning Group (ACG)

American Society for Health Care Engineering (ASHE)

United States green Building Council (USGBC)

TENURE

Industry experience since 1991

SKILLS

- Mitigation Commissioning
- HVAC Controls
- Building Assessments
- Retro-commissioning

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KIM KISSICK, CxA | Project Manager

WHY KIM?

- ✓ Kim has experience in facility management and design engineering, which included as a Facility Engineer, Loss Control and Maintenance manager.
- ✓ Since joining FCG in 2009 Kim has significant experience in the commissioning of manufacturing facilities central heating & cooling plant systems and building envelope systems.
- ✓ Kim is skilled in building assessments and troubleshooting.

KIM'S ROLE

As project manager Kim will provide site work coordination focusing on MEP and Building Envelope systems to apply his maintenance/design experience towards this project through construction observations, functional performance testing, building systems diagnostic testing, and managing of field personnel. He has served as the project manager for all of the University of Louisville projects has commissioned.

EDUCATION

University of Louisville, AEE

ACCREDITATIONS

CxA, #609-512, ACG

OSHA 30-Hour Certified

AFFILIATIONS

AABC Commissioning Group (ACG)

Infrared Training Center (ITC)

TENURE

Industry experience since 1985

SKILLS

- Central Plant Commissioning
- HVAC Controls
- Clean Rooms
- Vivarium Experience
- Electrical Distribution
- Retro-commissioning
- Existing Building Assessment
- Emergency Power Systems
- Project Management
- Schedule & Planning Analysis

RELEVANT PROJECT EXPERIENCE

University of Louisville - JB Speed School Student Success Building Louisville, KY

This $90 million 4-story new construction building encompasses 115,000 SF that serves as the heart of the JB Speed School of Engineering. The state-of-the-art facility includes academic student support, student collaboration, classrooms, the Engineering Garage and competition spaces and research laboratories. Kim served as the lead Cx Project Manager on this project.

Eastern Kentucky University - New Science Building Phases 1 and 2 Richmond, KY

This $150 million new building includes a 390,000SF (Phase 1 – 230,000SF / Phase 2 – 160,000SF) educational facility that houses the Departments of Biological Sciences, Chemistry, Earth Sciences and Physics, and Astronomy. Classroom, instructional laboratory, research laboratory, office, meeting, student gathering, and community education, outreach spaces, and a vivarium are included in the facility. The building is fully networked for data transmission and instruction spaces support electronic media. It also includes advanced audiovisual systems and adds to the campus infrastructure with the addition of this new science building. Systems included AHU's, ERU's, VAV units, laboratory rooms (exhaust/supply air valves and hoods), hot/chilled water systems, lab exhaust fans, and other unitary equipment. Kim served as the lead Commissioning Authority on this project. The project timeline from initiation of Phase 1 to end Phase 2 was over a 12-year period realizing a long-term initiative for EKU to transform science teaching and research at the university. Kim served as the lead Cx Project Manager on this project.

University of Kentucky - Chemistry/Physics 3rd Floor Renovation, Lexington, KY

$59 million project underwent a two-phase construction project that resulted in a renovation of the third floor, as well as a completely new exterior façade of the building, including a three-story entrance/atrium. The project relocated 30 offices, renovated/relocated classrooms, and relocated labs. This project encompassed approximately 46,000 SF. Kim served as the lead Cx Project Manager on this project.

JIM ADAMS, PE, CXA, EMP, RCDD, CPTED, LEED AP O+M

Electrical Engineer/Field Supervisor

WHY JIM?

- ✓ Jim works directly with clients reviewing designs, specifications, budget estimates, and construction phase support work. Jim joined FCG in 2011 and leads commissioning of a wide variety of electrical and life safety systems.
- ✓ Jim has significant experience working with clients in the Kenton County/Northern Kentucky area.
- ✓ Jim has first-hand experience in design, existing building maintenance and troubleshooting, building systems integrations, and project specific owner requirements and interfaces.

JIM'S ROLE

As the project's electrical engineer. Jim will coordinate and participate in on site electrical commissioning activities calling on 13 years of direct commissioning experience and 20 years of design and building maintenance experience.

His professional engineering services included project review and technical support, system verification checklists and developing and performing functional performance tests to provide field support for the commissioning process for electrical systems.

RELEVANT PROJECT EXPERIENCE

University of Kentucky - Renew/Modernize Facilities Frazee Hall, Lexington, KY

This $15 million project included the rehabilitation of and an addition to Frazee Hall for the University of Kentucky. This historic building built in 1907 is used for offices and conference rooms for student services comprised of a 3-story facility with basement at 18,071GSF. There was a selective demolition phase that included the removal of non-contributing elements and abate hazardous materials. There was a separate bid package for the Core & Shell of the building which completed with a bid package interior fitup of offices, conference rooms and associated support space for student service departments. The modernization revitalized the facility by providing new mechanical, electrical and other building systems. Jim served as the lead Cx Project Manager on this project.

University of Kentucky - Expand/Renovate/Upgrade Law Building, Lexington, KY

$70 million full renovation of the existing 101,000GSF facility, plus the addition of approximately 35,000GSF of new space. The expanded facility includes the law library, large and small courtrooms, administration spaces, signature student spaces, classrooms, faculty offices, and student organizations' spaces. It includes a conference area and outdoor balcony, as well as a central hall for student collaboration. This project provides the college with a state of the art facility which further enhances the college's status as the premier College of Law in the Commonwealth of Kentucky. Jim served as the field supervisor/electrical engineer on this project.

University of Kentucky – Expand/Renovate Student Center, Lexington, KY

The scope of this $201 million 362,000SF project included the preservation and complete renovation of the 1937/1938 Student Union and the 1924 Alumni Gymnasium, demolition of the 1963 and 1982 additions and construction of the new addition. Jim served as the electrical Commissioning Engineer/Electrical Field Supervisor.

EDUCATION

University of Kentucky, Bachelor of Science, Mechanical Engineering, 1991

ACCREDITATIONS

Professional Engineer (PE) – KY, TN, IN, WV

CxA, #1004-042, ACG

TBE, #97-06-34, AABC

LEED Accredited Professional (LEED AP) #10269800

AFFILIATIONS

American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) member

Associated Air Balance Council (AABC)

AABC Commissioning Group (ACG)

American Society for Health Care Engineering (ASHE)

United States green Building Council (USGBC)

TENURE

Industry experience since 1991

SKILLS

- Mitigation Commissioning
- HVAC Controls
- Building Assessments
- Retro-commissioning

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CLAY KISSICK, CxT, ITC Level II | Cx Technician

WHY CLAY?

- ✓ Clay has been a commissioning technician for 11 years and has served on over 100+ commissioning projects since joining FCG.
- ✓ Has provided building envelope commissioning services and diagnostic testing on over 50+ projects with FCG and is a certified thermographer.

CLAY'S ROLE

As Commissioning Technician he will support the team at the direction of the project manager and field supervisor through site review, functional performance tests, and TAB verification. This will include being involved in Building Envelope Diagnostic Testing and Thermal Imaging.

RELEVANT PROJECT EXPERIENCE

University of Kentucky – Commonwealth Stadium Expansion/Renovation, Lexington, KY

$125 million 478,646SF project to improve the stadium's function and aesthetic appearance thus improving the overall fan experience on game day. Specific goals focus on improving the quality of the fan amenities, team facilities, press/stadium operation areas, and seating areas. Seating area improvements include premium seating, general seating and accessible seating. New suites were added to the upper deck. Served as a Commissioning Technician and performance testing of Building Envelope/Thermography.

Eastern State Hospital, Lexington, KY

$129 million 323,000SF for the Commonwealth of Kentucky/UK was a 3-story replacement facility, with four (4) separate 12,616SF two-story Personal Care Homes and a central utility plant. The project consisted of 168 adult psych beds, 25 forensic beds, 25 geriatric beds, 12 acquired brain injury beds and 64 personal care beds. FCG completed comprehensive commissioning in accordance with LEED v2.2 requirements. Additional commissioning included E-Power, security and access control, building envelope systems and assisting UK's PPD department in populating of equipment data and maintenance procedures into UKMCPPD's CMMS system. Served as a Commissioning Technician and performance testing of Building Envelope/Thermography.

University of Kentucky – Baseball Stadium Facility, Lexington, KY

$49 million New baseball stadium construction that features permanent seating for nearly 2,500 fans with additional space on grass berms to accommodate a total of more than 4,000 fans for regular-season games. Beyond the outfield wall, temporary bleachers can be installed for NCAA Tournament games to bring the seating capacity to more than 7,000. Fan amenities include suites and a new club area. The new stadium will feature a team lounge, locker room, training area, indoor hitting and pitching areas, and coaching offices, as well as a recruiting room. Served as a Commissioning Technician and performance testing of Building Envelope/Thermography.

EDUCATION

University of Louisville, Computer Engineering/Computer Science Studies

ACCREDITATIONS

CxT, #226-6322, ACG

Level II Thermographer, #172009, ITC

OSHA 10-Hour Certified

AFFILIATIONS

AABC Commissioning Group (ACG)

TENURE

Industry experience since 2013

SKILLS

- HVAC Controls
- Functional Performance Tests Support
- Building Envelope Site Inspections
- Building Envelope Diagnostic Testing
  - Air Barrier / Pressurization
  - Thermal Imaging
  - Spray Leakage
  - Smoke/Tracer Testing

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MICHAEL LEDFORD | Cx Technician

WHY MIKE?

- ✓ Mike has experience as an HVAC service technician and project engineer since 2014 prior to joining FCG.
- ✓ Mike has been a commissioning technician with FCG for 1 year and has previous experience as an HVAC installer and project manager for commercial construction.

MIKE'S ROLE

As Commissioning Technician he will support the team at the direction of the project manager and field supervisor through site review, functional performance tests, and TAB verification. This will include being involved in Building Envelope Diagnostic Testing.

RELEVANT PROJECT EXPERIENCE

University of Kentucky - Renew/Modernize Facilities Frazee Hall, Lexington, KY
This $15 million project included the rehabilitation of and an addition to Frazee Hall for the University of Kentucky. This historic building built in 1907 is used for offices and conference rooms for student services comprised of a 3-story facility with basement at 18,071GSF. There was a selective demolition phase that included the removal of non-contributing elements and abate hazardous materials. There was a separate bid package for the Core & Shell of the building which completed with a bid package interior fitup of offices, conference rooms and associated support space for student service departments. The modernization revitalized the facility by providing new mechanical, electrical and other building systems. Mike served as the lead Cx Technician on this project.

University of Kentucky - Jacobs Science Building Improvements, Lexington, KY
$15 million 34,000SF for the Commonwealth of Kentucky/UK was a project that included fit-out of approximately 34,000 gross square feet of space within Don & Cathy Jacobs Science Building. The project will transform shelled space to include classroom fit ups on the first and second floor and research lab space on the 3rd floor as well as associated HVAC work to accommodate lab space. Mike served as the lead Cx Technician on this project.

EDUCATION

East Coast Polytechnic Institute,
Associates Degree in Mechanical Engineering

ACCREDITATIONS

OSHA 10-Hour Certified

KY HVAC Journeyman Mechanic

TENURE

Over 10 years of industry experience

SKILLS

- HVAC Controls
- Plumbing
- Functional Performance Tests Support
- Commissioning Meeting Support
- Site Observations

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ANDREW ZIMMERMAN | Cx Technician

WHY ANDREW?

✓ Andrew has been a commissioning technician for 2 years at FCG and has become a proficient commissioning team member at the direction of the project manager to perform observations and functional testing of HVAC, Lighting Controls, and Low-Voltage systems

ANDREW'S ROLE

As Commissioning Technician he will support the team at the direction of the project manager and field supervisor through site review, functional performance tests, and TAB verification. This will include being involved in Building Envelope Diagnostic Testing.

RELEVANT PROJECT EXPERIENCE

Shelby County High School Renovation/Addition - Shelbyville, KY

$60,000,000 project included the renovation of an existing 210,910 S.F. high school. The project will feature a 17,420 addition. The building was provided with a new geothermal wellfield and majority of the HVAC system replaced. This included water source heat pumps, outside air handling units, exhaust fans, ductwork systems, temperature control systems, etc. Served as a Commissioning Technician.

Kenton County Schools - Scott High School Phase V, Taylor Mill, KY

$35 million 275,000SF a fifth-phase of construction on this building that included renovation of existing auditorium, renovation of existing gymnasium and construction of a new practice gym, and demolition of existing swimming pool and construction of a new districtwide Aquatic Center. This additionally included minor renovations and upgrades to Woodland Middle School and Taylor Mill Elementary School. Served as a Commissioning Technician.

EDUCATION

University of Kentucky, Mechanical Engineering Studies

ACCREDITATIONS

OSHA 10-Hour Certified

AFFILIATIONS

TENURE

Industry experience since 2022

SKILLS

- HVAC/HVAC Controls
- Lighting Controls
- Data/Communication
- Low-Voltage
- Functional Performance Tests Support
- Building Envelope Diagnostic Testing
  - Air Barrier / Pressurization

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BRANDON MOORE, CxA, LEED GA | Cx Administrator

WHY BRANDON?

- ✓ Brandon is an accomplished Commissioning Administrator with 15 years of acquired construction and commissioning experience on over 600+ projects to serve as FCG's Document Group Manager.
- ✓ Brandon's professional niche is coordinating office administration with technical personnel in the field to pursue project deliverables.
- ✓ Brandon has experience in facilitating project communications through technical knowledge of building systems commissioning and by coordinating documentation with an interdisciplinary team field staff.
- ✓ Brandon has served as liaison between FCG field staff and project owners and stakeholders.

EDUCATION

Transylvania University, Bachelor of Arts, Accounting

ACCREDITATIONS

CxA, #518-1662, ACG

LEED Green Associate

(LEED GA)

AFFILIATIONS

AABC Commissioning Group (ACG)

United Stated Green Building Council (USGBC)

TENURE

Industry experience since 2008

SKILLS

- File Distribution & Maintenance
- Document Review
- Project Reports
- Project Management
- Retro-commissioning
- Data Logging and Trending
- Schedule & Planning Analysis
- Estimating & Financial Management

BRANDON'S ROLE

As Project Administrator Brandon will direct document control and assure redundant electronic storage of project information. His role will include to provide timely acquisition and continuous management of documents and cohesive communications spanning and interconnecting owner staff, vendors, designers, contractors, suppliers, and through all their communication and document distribution platforms.

RELEVANT PROJECT EXPERIENCE

UK Improve Student Center Space 1 – Harris Ballroom, Lexington, KY

UK Improve Student Center Space 2 – Dining Facilities Expansion, Lexington, KY

Brandon served as project administrator to support the commissioning of Space 1 a $6 million fit up of the 17,000GSF Harris Ballroom within the finished Student Center. The work included fit up of a ballroom, warming kitchen, pre-function mezzanine with art gallery, restrooms, IT/AV, and storage areas. Space 2 required a $25 million expansion of the dining to accommodate the needs of the student population due record growth in student enrollment. This project encompassed 34,861GSF in a 3-story building with penthouse to increase the dining capacity by 350 seats at the lower level and added office space.

Western Kentucky University - The Commons at Helm Library, Bowling Green, KY

Brandon served as project administrator to support the commissioning of renovation work encompassing approximately 85,193SF at a the cost of $35,000,000. The Commons at WKU includes the complete renovation and upgrades of Margie Helm Library. The renovations involved the introduction of new interior monumental stairs, and the exposure of the original roof/trusses to improve visible and physical connections through the building. The renovation program included new food service space including commercial cooking, food preparation and storage with a new dedicated loading dock, dining and study spaces, offices, classrooms, academic support spaces, and new restrooms.

Western Kentucky University - Downing Student Union Reno., Bowling Green, KY

Brandon served as project administrator to support the commissioning of this two-year $49 million renovation project for the main student center on campus. The facility includes features such as the use of local and/or sustainable materials, energy efficient systems, and daylight harvesting. The renovation included all new building systems (mechanical, electrical, and plumbing), a new recreation area, study area and enhanced meeting rooms, a WKU store, new offices for staff and student organizations, upgraded food services area, and retail/bookstore space.

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HAYDEN MCNEAL, LEED AP BD+C | Cx Administrator

WHY HAYDEN?

- ✓ Hayden has diverse commissioning experience for 3 years with multidisciplinary projects and LEED administration.
- ✓ Hayden's professional niche is coordinating office administration with technical personnel in the field to pursue project deliverables.
- ✓ Hayden has experience in facilitating project communications through technical knowledge of building systems commissioning and by coordinating documentation with an interdisciplinary team field staff.
- ✓ Hayden has served as liaison between FCG field staff and project owners and stakeholders.

EDUCATION

University of Kentucky, Bachelor of Music in Music Education

ACCREDITATIONS

LEED Accredited Professional (LEED AP)

BD+C

#11586437-AP-BD+C

OSHA 10-Hour Certified

AFFILIATIONS

United Stated Green Building Council (USGBC)

TENURE

Industry experience since 2022

SKILLS

- File Distribution & Maintenance
- Document Review
- Project Reports
- Project Management
- Retro-commissioning
- Data Logging and Trending
- Schedule & Planning Analysis
- Estimating & Financial Management

HAYDEN'S ROLE

As Assistant Project Administrator Hayden will coordinate document control and assure redundant electronic storage of project information. His role will include scheduling and organizing field staff as well as acting as supporting administration to owner's representatives and stakeholders. Hayden has experience in contract management, ensuring project team scheduling availability and awareness of project milestones relevant to the LEED scope of work.

RELEVANT PROJECT EXPERIENCE

University of Kentucky - Renew/Modernize Facilities Frazee Hall, Lexington, KY

This $15 million project included the rehabilitation of and an addition to Frazee Hall for the University of Kentucky. This historic building built in 1907 is used for offices and conference rooms for student services comprised of a 3-story facility with basement at 18,071GSF. There was a selective demolition phase that included the removal of non-contributing elements and abate hazardous materials. There was a separate bid package for the Core & Shell of the building which completed with a bid package interior fitup of offices, conference rooms and associated support space for student service departments. The modernization revitalized the facility by providing new mechanical, electrical and other building systems.

Maker's Mark - Lakeside Tasting Facility, Loretto, KY

This $5 million project included the construction of a tasting facility constructed of limestone from the property, recycled wood from warehouse repairs and is topped with a green roof. The facility serves as a tasting room for Maker's private selection program. Hayden served as a LEED administrator for this project for commissioning and the overall project.

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PROJECTED COMMITMENT/AVAILABILITY

FCG operates with a staff of over twenty commissioning professionals dedicated solely to providing commissioning services. We are managed to meet and exceed our project commitments. In addition to our in-house electrical and mechanical capabilities, FCG has a vast wealth of specialized professionals who enable us to deliver comprehensive whole building commissioning services. We are nationally recognized as leaders in the commissioning industry. For this project, Facility Commissioning Group utilizes the expertise and services of designated commissioning provider group members who possess the expertise and the manpower to handle the scope of work in an efficient and expedient manner. FCG is currently below our baseline backlog workload with our current workload not affecting our team's availability or workload commitment to this project, which means we would be immediately available to perform the services within the sequence deadlines. FCG takes pride in accomplishing our work in an efficient timely manner – the success of commissioning depends on it. The workflow for this project has been entered into our planning and scheduling model and analyzed to determine that FCG has the indicated resources available to carry out the assignments requested.

Kim Kissick is an accomplished commissioning provider and will be the lead commissioning authority and point of contact for this project. Kim will have immediate availability to serve for the projects' durations as the lead CxA.

Construction Phase

- Construction Phase staffing commitment ratio based on project personnel submitted in the RFP response is estimated to be:
  - 45% for Lead Commissioning Authority
  - 10% for Commissioning Engineer
  - 45% for Commissioning Technical Staff/Administrator

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CxA's PREVIOUS PROJECT EXPERIENCE

1. KENTON COUNTY PUBLIC SCHOOLS – FORT WRIGHT, KY

Rob Haney, Chief Operations Officer
Kenton County School District
Ft. Wright, KY 41017
859 344-1531
Rob.Haney@kenton.kyschools.us

Scott High School Phases 1 to 4 Renovations
The first two phases of this project included a two-story classroom addition, stadium, fieldhouse, softball field and new secure entry school entrance. Phase 3 was $17 million of construction including new relocated science classrooms, kitchen, cafeteria and media center. Phase 4 is conducted in two phases which included renovation of classrooms in lower/upper levels, band/support spaces, auditorium and gymnasium.
These renovations encompasses replacing all HVAC, electrical, plumbing, lighting, fire protection systems, and interior finishes. FCG provided Comprehensive Commissioning services for the HVAC, HVAC controls, domestic hot water, lighting controls, low voltage (security/access control, data/comm) and electrical (power distribution/emergency power) systems.

Turkey Foot Middle School
New 133,000 SF high performance sustainable design middle school that includes 39 classrooms, choral room, technical education room, art room, media center, cafeteria, gymnasium to accommodate 1,100 students (grades 6-8) and the largest photo voltaic array in the state of Kentucky. The project includes the following features that reduce energy consumption: Natural daylight harvesting, solar tube day-lighting for interior space, rainwater harvesting, vegetated roof, and photovoltaic systems.
FCG performed commissioning services for HVAC, Domestic Hot Water, Rain Water Catchment, Electrical, Exterior Enclosure, Low-Voltage Communications Technology, Audio/Visual Wiring Systems and at the time Kentucky's largest solar photovoltaic system (407 kW PV system).

FCG has completed over 20 projects for Kenton County Schools that also include:
Kenton County School District - Scott High School Site Improvements
Kenton County School District - Beechgrove Elementary School
Kenton County School District - Fort Wright Elementary School Addition & Renovation
Kenton County School District - Hinsdale Elementary School Secure Entry Addition Phase 1
Kenton County School District - Simon Kenton High School
Kenton County School District - Dixie Heights High School Phases II and III
Kenton County School District - Kenton County Middle School (Twenhofel)

2. CLARK COUNTY PUBLIC SCHOOLS – WINCHESTER, KENTUCKY

Paul D. Christy, Superintendent (Current Superintendent – Dustin Howard)
Clark County Board of Education
1600 West Lexington Ave., Winchester, KY 40391
(859) 744-4544

New Clark County High School Phase I and II (George Rogers Clark)
New 230,000 SF building to serve 1,900 students that contains standard classrooms to serve grades 9 to 12, specialized classrooms including Art, Band, Chorus, Orchestra, Agriculture, Business Education, Family & Consumer Science, Industrial Arts, JROTC, Library, Computer Classrooms, Multipurpose Rooms, an Auxiliary Gym, Kitchen/Cafeteria and Administration Offices. A 15,000 SF, 600-seat auditorium was added to the project's Base Bid.
Facility Commissioning Group performed commissioning services for the HVAC, HVAC Controls, Domestic Hot Water, Electrical, Electronic Safety and Security and Communications systems.

3. INDIANAPOLIS PUBLIC SCHOOLS – INDIANAPOLIS, INDIANA

Debra Kunce
J.S. Held
429 Pennsylvania St, Suite 304
Indianapolis, IN 46204
(317) 981-7257
dkunce@jsheld.com

Indianapolis Public Schools Capital Improvements Program Phases I to III
$650,000,000 of bond issued in three phases over 12 years renovated, improved and added K-12 facilities in 50 Indianapolis Public Schools. These projects were commissioned as individual projects by Facility Commissioning Group (FCG) serving various project team compositions program managed by Schmidt Associates (Deb Kunce). The projects consisted of 6,500,000 SF, which included multiple school buildings that started in 2002. FCG was commissioning agent for Phase I to Phase III, with Phase III of the IPS Capital Improvements Program renovating 27 schools, providing adequate classrooms, modern media centers, access to technology, comfortable and healthy air circulation, better lighting, functioning restrooms, building safety, playgrounds, lunchrooms and compliance with the Americans with Disabilities Act. Every school in the $245 million bond funded Phase III renovation projects pursued LEED certification. Phase III completion dates ranged from 2013 to the Summer of 2014. The majority of these projects included library space that were served by dedicated HVAC units.
Facility Commissioning Group performed comprehensive commissioning, which included HVAC, HVAC controls, domestic hot water, electrical, and lighting control systems. Todd Yates and Matt Adams led a commissioning provider group composed of FCG employees operating as interdisciplinary professionals working with multiple project teams simultaneously.

4. BOYD COUNTY PUBLIC SCHOOLS – ASHLAND, KENTUCKY

Tim Black, Facilities and Operations Staff Director (New Current director is Bob Higginbotham)
Boyd County Board of Education
12308 Midland Trail Road
Ashland, KY 41102
(606) 928-7124
bob.higginbotham@boyd.kyschools.us

Boyd County High School

New construction of approximately 144,477 square feet; Boyd County High School was constructed on existing school district property with a budget of approximately $28 million and replaced the existing school currently in operation. Design of the new high school is tailored around the needs of the students. Wings are devoted to specific academies while other areas of the building have been designed to meet the needs of the remaining programs and technology labs for various departments have been incorporated into the new building. The new Boyd County High School is one of the most technologically advanced schools in the state. FCG provided comprehensive commissioning services for the electrical systems (emergency generator and lighting controls) and mechanical systems of this new facility.

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Bullitt County Public Schools
Physical Science Centers at North Bullitt, Bullitt Central and Bullitt East High Schools
Bullitt County, KY

COMMISSIONING FEE PROPOSAL

COMMISSIONING SERVICES (No Sampling Rates)

North Bullitt High School Physical Science Center
1. Lump Sum Commissioning Fee..... $ 30,080.00

Bullitt Central High School Physical Science Center
2. Lump Sum Commissioning Fee..... $ 39,210.00

Bullitt East High School Physical Science Center
3. Lump Sum Commissioning Fee..... $ 33,050.00

Commissioning (Cx) Fee Total..... $ 102,340.00

Reimbursable Expenses

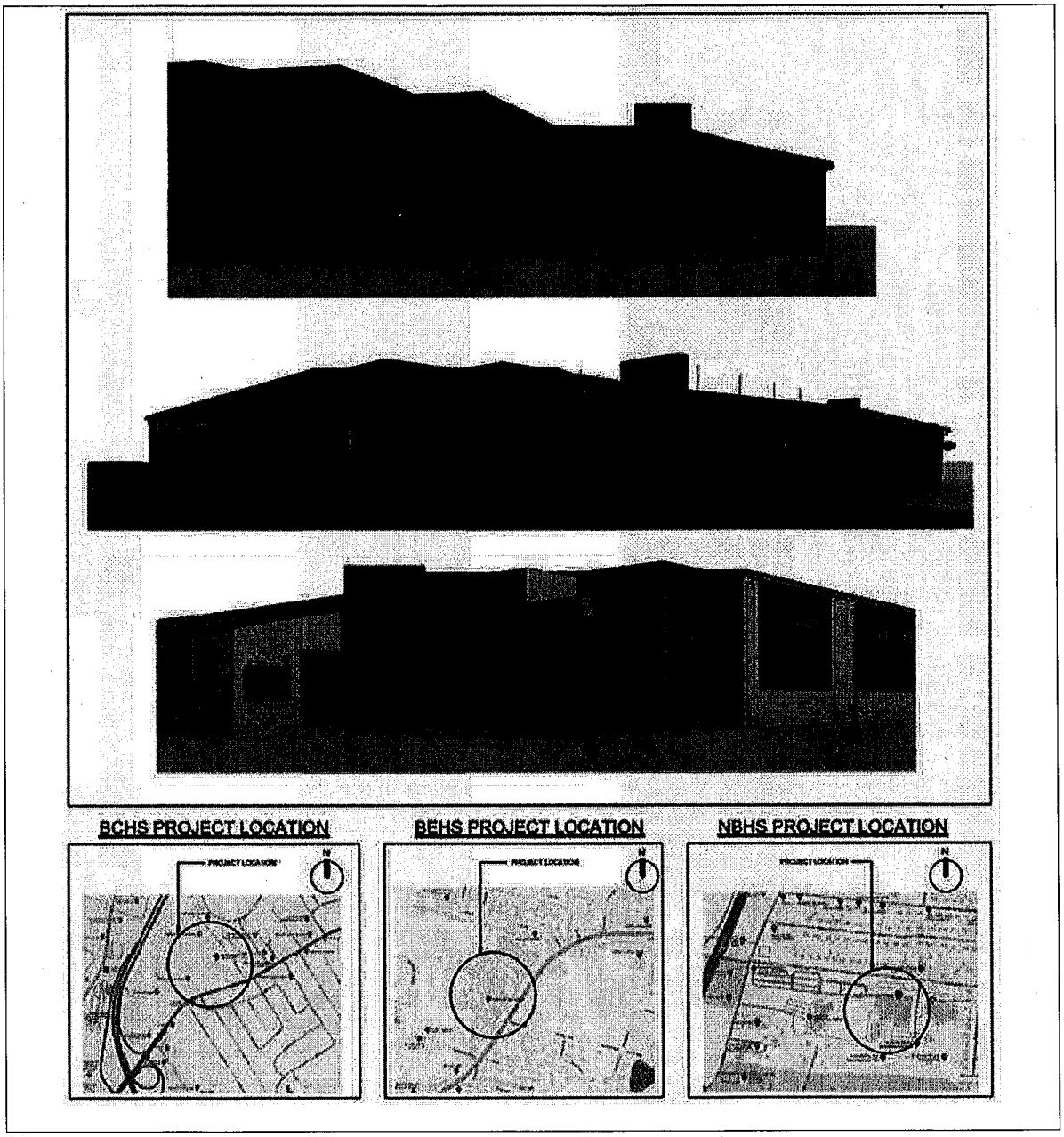
Due to our Kentucky office location and staffing, FCG does not anticipate reimbursable expenses for this project.

TIMELINE FOR COMPLETION OF COMMISSIONING (Cx)

Facility Commissioning Group is immediately available to start this project upon notification to proceed. Commissioning services will be provided in sequence with completion of installations based on close coordination with contractors and the construction schedule to provide verified and tested systems at the point of building turnover.

PAYMENT SCHEDULE

Facility Commissioning Group will bill on a 30-day calendar period based on the proposal breakdown relative progress, or as negotiated with Bullitt County Public Schools.



Response Deadline (Proposals Due): Proposals shall be submitted via email on or before **July 14, 2025 by 3:00pm**, Please note, firms will be notified electronically regarding selection results.

Proposed Lump Sum Fee:
Please provide a lump sum fee for MEP Commissioning Services for each building identified in the project description and Schedule Summary:

North Bullitt HS Physical Science Center	$ 30,080.00
Bullitt Central HS Physical Science Center	$ 39,210.00
Bullitt East HS Physical Science Center	$ 33,050.00

iv. Energy Performance Criteria
   1. On the bid form below, the prospective commissioning agent shall list and briefly describe 5 completed K- 12 School projects where the EUI (Energy Usage Intensity) upon completion of commissioning is 25 kbtu/SF or less:
      a. Include description of HVAC system type
      b. Include total building square footage
   2. On the bid form below, the prospective commissioning agent shall briefly describe their overall approach to the commissioning of the Middle School Renovation project for Bullitt County. List any prospective challenges and outline your firm's goals for the project.

Following are five (5) K-12 school projects where EUI upon completion of commissioning was 25 Kbtu/SF or less:

A. School Name: Kenton County School District - Turkey Foot Middle School (Net Zero Ready School)

   a. HVAC System Type:
   Geothermal heat pumps, water-to-water heat pumps, photovoltaic array.

   b. Total Building Square Footage:
   139,000 SF

B. School Name: Howard County Public Schools - New Wilde Lake Middle School (Net Zero Ready School)

   a. HVAC System Type:
   Geothermal heat pumps, ERU's, water-to-water heat pumps, photovoltaic array.

   b. Total Building Square Footage:
   71,743 SF

C. School Name: Wayne County Board of Education - Ceredo-Kenova Elementary School (Kenova, WV)

   a. HVAC System Type:
   VRV with Energy Recovery Units, Water-to-Water Heat Pumps

   b. Total Building Square Footage:
   63,349 SF

D. School Name: Wayne County Board of Education - Crum Elementary School (Crum, WV)

   a. HVAC System Type:
   Geothermal Heat Pumps, VRV System, Water-to-Water Heat Pumps, and Energy Recovery Units

   b. Total Building Square Footage:
   64,656 SF

E. School Name: Perry County Board of Education - West Perry Elementary Phase 1

   a. HVAC System Type:
   VRV with Energy Recovery Units

b. Total Building Square Footage:
76,360 SF

Briefly describe the Approach/Process your firm will take in commissioning this facility. List challenges and thoughts to overcome. List your firm's commissioning goals for the project:

FCG's goal is always functioning systems, that work efficiently and can be maintained by operating staff. To do this we take a hands on approach throughout the project using our decades of experience to avoid problems rather than fight them when they occur by leveraging technology to manage documentation and communicate quickly and efficiently. We are then able to avoid and resolve issues in a timely fashion by working towards the best interests of the owner and working with the designers, contractors and suppliers to deliver a working facility. We utilize a provider group made up of experienced mechanical/electrical engineers, controls technicians, and architects to provide the level of expertise required for large complex projects. We use Sharepoint and mobile devices to organize project documents and information between specialists in our provider group and the project team.

Challenges include tight startup and turnover schedules, strict requirements regarding turnover dates, and by treating commissioning as a process rather than an event at the end of the project we leverage the commissioning process to ensure timely testing of building systems and complete corrective action prior to occupancy.

FCG's goals for this project include fully functional commissioned systems, efficient function with low energy usage, functional front end controls, respective and productive collaboration between designer, contractor and Cx provider.

3. PROPOSAL
   a. Fee Proposal. Cost for all services associated with Commissioning as outlined above.
   b. An estimated total of reimbursable expenses.
   c. Statement that CxA firm will comply with all Scope of Service items listed in RFP.

4. ADDITIONAL INFORMATION
   a. Provide any other relevant information and/or experience.